ERROR CODE TABLES

[Controller Software : Ver.2.9.*]

How to refer to error codes

In an error code with eight digits, the upper two digits may change as described below. Therefore, when you search an error code from the error code table, use the lower six digits.

Error code system

abcccccc

a [The first digit from the left]	The first one digit will be used to distinguish robots when two or more robots are controlled. The error code table attached to this manual includes errors that start from eight. 8: A master robot. A robot if only one robot is used. 9: The first robot in slave robots. A: The second robot in slave robots. B: The third robot in slave robots.
b [The second digit from the left]	This digit expresses an error level from 0 to 5. Note that the same error may be different error levels in normal tasks and supervisory tasks. The error code table attached to this manual expresses the errors in normal tasks only.
c [The third or lower from the left]	These digits express the error content.

Example)

Error code "8150006B"

8: Robot is a "Master".

1: Error level is "Level 1".

50006B: The error content is "Command isn't executable while program is edited".

Error Level

The controller issues 6 levels of errors. Each level has different action of the controller.

Error Level	Description	Robot Motion	Tasks	Motor Power	I/O
Error level 0	Minor error (warning)	Normal	Normal	Status quo	None
Error level 1	Minor error (Recoverable error by error handling)	Pause	Pause all tasks	Status quo	Output warning
Error level 2	Warning in robot	Pause	Pause all tasks	Status quo	Output warning
Error level 3	Abnormal condition in robot	All stop	Reset-stop all tasks	OFF	Anomalous power
Error level 4	E-STOP error	All stop “E-STOP”	Reset-stop all tasks	OFF	Anomalous power
Error level 5	Catastrophic failure	All stop “E-STOP”	Reset-stop all tasks	OFF	Anomalous power

RC7 code

RC7 codes listed on the error code table show codes which are used when outputting an error number by a dedicated I/O.

For detail, refer to the System Input/Output Signals Manual, ″Error Readout (0100)″ in Standard Mode or ″Error number (output)″ in RC3 compatible mode.

An empty cell is convert to ″230*″(″*″ shows error level) when output.

Error code [81608FFF]

[81608FFF] is an error code that occurs when running a program with providers. This error code indicates an error that is not supported in RC8 series has been issued.

For details, see ″Provider Errors″ in ″PROVIDER GUIDE″.

How to output error codes to I/O

Mode	Output timing	Destination	Output area and format
Standard mode	Executing "Error Read (0100)", which is an IO command, will output an error code.	RC7 code (16bits output)	On the status area of the system output, an RC7 Code will be displayed. You can check an RC7 Code in the Error Code Tables. In the Error Code Table, if an outputted error's RC7 Code cell is empty, 230* will be issued (the asterisk represents an error level).
		RC8 series code (32bits output)	When an error occurs, an error code written in the Code column in the Error Code Table will be outputted to the user output area you have specified.
RC3 Compatible mode	Output automatically when an error occurs.	RC7 code (12bits outputs)	The lower 12-bit of the RC7 Code in the Error Code Table will be outputted to the error area of the system output. (Example: 0x2187 >0x187) In the Error Code Table, if an outputted error's RC7 Code cell is empty, 30* will be issued (the asterisk represents an error level)
		RC8 series code (32bits output)	When an error occurs, an error code written in the Code column in the Error Code Table will be outputted to the user output area you have specified.

To use an RC8 series Code (32-bit output), you need to specify the output area beforehand.

For details, refer to "32bit Error Code Output IO No" in the "Displaying and Changing I/O Parameters" under the OPERATION GUIDE.

Code	RC7 Code	Message	Level	Description	Remedy
80800001		Operation panel main page (Main.pns) is not found.	0	The main page (Main.pcs) necessary for TP panel display is not found.	Send main page from WINCAPS3.
85800010		Failed to start teach pendant communication software.	5	Catastrophic failure occurred during TP communication software startup.	Reboot robot controller and motor driver power supply. If the error still occurs, contact DENSO WAVE service.
85800011		Failed to initialize Teach pendant.	5	Catastrophic failure occurred during TP software startup.	Restart robot controller and motor driver power supply. If the error still occurs, contact DENSO WAVE service.
82800012		Failed to initialize 3DView.	2	Failed to initialize 3D display function. 3D function is disabled.	Confirm whether the hardware is compatible with 3D display function. Use 3D-compatible hardware and restart robot controller.
85800013		No valid license.	5	No valid license.	Please register a license, when it already has a license. Please contact DENSO WAVE service, when you do not have a license.
85800014		Failed to initialize application.	5	Failed to initialize application.	Restart robot controller and motor driver power supply. If the error still occurs, contact DENSO WAVE service.
85800015		Failed to create CaoEngine.	5	Failed to create CaoEngine.	Restart robot controller and motor driver power supply. If the error still occurs, contact DENSO WAVE service.
85800016		Failed to connect VRC.	5	Failed to connect VRC.	Restart robot controller and motor driver power supply. If the error still occurs, contact DENSO WAVE service.
85800017		Failed to initialize controller.	5	Failed to initialize controller.	Restart robot controller and motor driver power supply. If the error still occurs, contact DENSO WAVE service.
85800018		Failed to load language DLL.	5	Failed to load language DLL.	Restart robot controller and motor driver power supply. If the error still occurs, contact DENSO WAVE service.
85800019		Failed to load DLL.	5	Failed to load DLL.	Restart robot controller and motor driver power supply. If the error still occurs, contact DENSO WAVE service.
8080001A		Failed to initialize screen saver.	0	Failed to initialize screen saver.	Restart robot controller and motor driver power supply. If the error still occurs, contact DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
81800100		Impossible to display MsgBox without Teach Pendant.	1	MsgBox is displayed only in the Teach pendant.	Connect TeachPendant.
81800101		Impossible to display MsgBox while TP is disconnected.	1	Impossible to display MsgBox when TP is disconnected.	Connect TeachPendant.
81800102		The maximum number that can be displayed in MsgBox is exceeded.	1	Exceeded the number of displayable MsgBoxes at one time.	Reduce the number to display the MsgBox.
81800103		MsgBox source task execution has not been started.	1	Impossible to display MsgBox when the source task is not running.	Start the task where MsgBox runs.
81800104		Impossible to display MsgBox without RemoteTP or VirtualTP.	1	MsgBox is displayed only in RemoteTP or VirtualTP.	Use of RemoteTP or VirtualTP is necessary.
81800200		Failed to connect DENSO Robot Imaging Library.	1	Failed to connect DENSO Robot Imaging Library.	
80800201		An error occurred during the execution of the Software Trigger.	0	An error occurred during the execution of the Software Trigger.	
80800202		An error occurred during the execution of the Image Refresh.	0	An error occurred during the execution of the Image Refresh.	
81800203		Failed to initialize DENSO Robot Imaging Library.	1	Failed to initialize DENSO Robot Imaging Library.	
80800204		An error occurred in the preservation of the built-in visual data.	0	An error occurred in the preservation of the built-in visual data.	
85800205		Failed to connect to Teach pendant normally.	5	Communication between the teach pendant and the controller failed. The following causes are likely. 1. Broken, short-circuited or contact-failed teach pendant cable. 2. Teach pendant failure.	Check the following items first. Connect the teach pendant, and then reboot the controller. If the problem still occurs, contact to DENSO WAVE service. 1. The pendant cable isn't damaged or short-circuited, and properly connected to the teach pendant. 2. Teach pendant isn't damaged.
83800206		Failed to connect to Teach pendant normally. (2)	3	Communication between the teach pendant and the controller failed. The following causes are likely. 1. Broken, short-circuited or contact-failed teach pendant cable. 2. Teach pendant failure.	Check the following items first. Connect the teach pendant, and then reboot the controller. If the problem still occurs, contact to DENSO WAVE service. 1. The pendant cable isn't damaged or short-circuited, and properly connected to the teach pendant. 2. Teach pendant isn't damaged.
83600001		There is no procedure to start.	3	The task entry procedure Sub Main is not defined.	Revise the program and create Sub Main procedure.

Code	RC7 Code	Message	Level	Description	Remedy
83600002		Invalid procedure name.	3	Specified procedure name is not defined.	Revise the program and specify the existing procedure name.
83600003		Invalid procedure arguments.	3	The number or the type of the procedure argument is invalid.	Revise the number or the type of the argument to meet with the definition of the procedure.
83600004		Unmatching arguments count.	3	The number of the arguments of the function or the procedure does not match.	Revise the program and specify the correct number of arguments.
83600005		The procedure that has ByRef argument is not allowed to be called.	3	It is impossible to pass arguments with ByRef attribute because the value may be variable when referred.	Change the attribute of the argument from ByRef to ByVal, or use a global variable to pass the value.
80600006		Invalid line number to start.	0	Specified line number is incorrect.	Revise the program to specify an executable line.
81600007		Argument is incorrect	1	Specified argument is incorrect.	Revise the number or the type of the argument to meet with the specification.
81600008		Short of arguments	1	The number of the arguments of the function or the procedure is not enough.	Revise the program and specify the correct number of arguments.
81600009		Too much arguments	1	The number of the arguments of the function or the procedure is too much.	Revise the program and specify the correct number of arguments.
8160000A		The first argument is incorrect	1	The value or the variable of the 1st argument is incorrect.	Revise the value range or the variable type of the argument, and correct it.
8160000B		The second argument is incorrect	1	The value or the variable of the 2nd argument is incorrect.	Revise the value range or the variable type of the argument, and correct it.
8160000C		The third argument is incorrect	1	The value or the variable of the 3rd argument is incorrect.	Revise the value range or the variable type of the argument, and correct it.
8160000D		The 4th argument is incorrect	1	The value or the variable of the 4th argument is incorrect.	Revise the value range or the variable type of the argument, and correct it.
8160000E		The 5th argument is incorrect	1	The value or the variable of the 5th argument is incorrect.	Revise the value range or the variable type of the argument, and correct it.
8160000F		The 6th argument is incorrect	1	The value or the variable of the 6th argument is incorrect.	Revise the value range or the variable type of the argument, and correct it.
81600010		The 7th argument is incorrect	1	The value or the variable of the 7th argument is incorrect.	Revise the value range or the variable type of the argument, and correct it.
81600011		The 8th argument is incorrect	1	The value or the variable of the 8th argument is incorrect.	Revise the value range or the variable type of the argument, and correct it.
81600012		The 9th argument is incorrect	1	The value or the variable of the 9th argument is incorrect.	Revise the value range or the variable type of the argument, and correct it.
81600013		The 10th argument is incorrect	1	The value or the variable of the 10th argument is incorrect.	Revise the value range or the variable type of the argument, and correct it.

Code	RC7 Code	Message	Level	Description	Remedy
83600014	2003	Value is out of range	3	The argument value is out of range.	Revise the program to assign the argument value within its range.
83600015		Fig is out of range	3	Fig value is out of range.	Revise the program to assign the fig value within its range.
83600016		Failed to run task	3	Specified task is not executable, or not created.	Revise the program of specified task and save it so that it can be executed solely.
80600017		This line can't be setup.	0	Non-executable line is specified.	Revise the execution line
83600018		Internal error: Failed to access variable	3	Unexpected process was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
81600019		Reached to the limit.	1	Impossible to create a new object because the number of object have reached the maximum.	Limit the number of the objects which can be created simultaneously.
8160001A		Not executable on error condition.	1	Mutex object is in error state.	Please remove the error factor of the task which the error raised during exclusive operation execution. Or please reset the error condition of the mutex object by ResetMutex statement.
8160001B		Invalid ID.	1	An object corresponding to the specified ID is not found.	Specify a correct ID.
8360001C		Stack overflowed.	3	The stack size reached the maximum.	Revise the loop process. If it runs as you planned, increase the VM stack size.
8360001D		Stack underflowed.	3	Stack count went below zero.	Revise the loop process. If it runs as you planned, increase the VM stack size.
8360001E		Pass start displacement distance is out of range.	3	Pass start displacement distance is out of range.	Revise the program so that the Pass start displacement distance will be within the available range.
8160001F		Program stopped during provider running.	1	Program stopped during provider running due to stop processing. (Emergency-stop, Error occurred, mode switching, Protective-stop, Enable-auto Signal, etc.)	Start the program again.
83600020		Robot Index is out of range	3	Robot Index value is out of range.	Revise the program to assign the Robot Index value within its range.
81600021		Reached to the limit.	1	Impossible to create a new object because the number of object have reached the maximum.	Please limit the number of the objects which can be created.
81600022		Invalid ID.	1	An object corresponding to the specified ID is not found.	Specify a correct ID.
81600023		Reached to the limit of Queue.	1	Impossible to appeand a new element because the number of Queue have reached the maximum.	Reduce the element count of Queue.

Code	RC7 Code	Message	Level	Description	Remedy
80600024		Specified Hand number is not effective.	0	Hand number is invalid.	Revise the program or validate the hand number.
83601001		* Missing End If corresponding to If	3	End If statement is missing, or, not declared after If <condition> Then statement.	Revise the correspondence of "If <condition> Then" and "End If".
83601002		* Missing End If corresponding to ElseIf	3	End If statement is missing, or, not declared after ElseIf <condition> Then statement.	Revise the correspondence of "ElseIf <condition> Then" and "End If".
83601003		* Missing End If corresponding to Else	3	End If statement is missing, or, not declared after Else statement.	Revise the correspondence of "Else" and "End If".
83601004		* Missing Next corresponding to For	3	Next statement is missing, or, not declared after For statement.	Revise the correspondence of For and Next.
83601005		* Missing Wend corresponding to While	3	Wend statement is missing, or, not declared after While statement.	Revise the correspondence of While and Wend.
83601006		* Missing Loop corresponding to Do	3	Loop statement is missing, or, not declared after Do statement.	Revise the correspondence of Do and Loop.
83601007		* Missing End Select corresponding to Select	3	End Select statement is missing, or, not declared after Select statement.	Revise the correspondence of "Select Case" and "End Select".
83601008		* Procedure * declares different argument type	3	The type of the argument passed to the function or the procedure is not matching with the declaration.	Confirm the declaration of the function or the procedure, and specify the correct argument type.
83601009		* Procedure table registration failure	3	Memory is insufficient to register new table.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
8360100A		* Array index number for argument * must be constant	3	The index of the array declaration is incorrect.	Use a constant value for array declaration index.
8360100B		* Argument * is already registered	3	The same name argument is already registered.	Don't use duplicated name for argument declaration.
8360100C		* Procedure * is already registered	3	It is impossible to register the procedure because the name duplicates the existing procedure name.	Check the procedure definition and use a non-duplicated name.
8360100D		* Specify index of array with constant	3	The index of the array declaration is incorrect.	Use a constant value for array declaration index.
8360100E		* Index of array must be more than zero.	3	The index of the array declaration is incorrect.	Revise the array declaration and use the value of 0 or more for the index.
8360100F		* Variable * is already registered	3	Variable declaration is duplicated.	Check the variable declaration and use non-duplicated name.
83601010		* Label * is already registered	3	Label name is duplicated.	Check the label declaration and use non-duplicated name.

Code	RC7 Code	Message	Level	Description	Remedy
83601011		* Label * is not defined	3	Specified label is not found.	Revise the program and declare the specified label definition.
83601012		* Specify start port number of defio with a constant	3	DefIO start port number is not specified with a constant.	Check the Defio declaration and use a constant value for start port number.
83601013		* Mask must be a constant	3	DefIO mask is not specified with a constant.	Check the Defio declaration and use a constant value for mask.
83601014		* Variable definition of Variable * is incorrect.	3	Variable declaration syntax error.	Revise the variable declaration to meet with syntax specification.
83601015		* Invalid initial value of variable * .	3	Invalid initial value is assigned to the variable declaration.	Revise the variable declaration and assign the appropriate constant for the variable type.
83601016		* Array variable * can not be initialized with initial value.	3	Invalid array declaration.	Delete initial value assignment in the array declaration, and initialize the array value with value assignment code.
83601017		* Impossible to use due to Reserved name(*).	3	The name is reserved word.	Use non-reserved name.
83601018		* Syntax error *	3	Unrecognizable syntax is used in the program.	Revise the program to eliminate the syntax error.
83601019		* * Value of parameter is out of range.	3	Specified parameter is incorrect.	Revise the parameter value and specify the value within the expected range.
8360101A		* File size is out of range.	3	File size is too big.	Divide the program so that each file size does not exceed its upper limit.
8360101C		* Invalid variable. You can't use the type of * for static attribute.	3	This variable type can't be static.	Change the variable type to I, F, D, V, P, J, T or S.
8360101D		* Variable * is used before definition	3	The variable is used before its declaration.	Declare the variable before it is used.
8360101E		* Can't allocate Static variable.	3	You cannot register static variable anymore.	Please delete unnecessary global variables and other static variables.
83601020		The initial value assignment of the array is incorrect.	3	Can't specify arrays that have more than two dimensions as initial values at the declaration.	Initialize the value of two or more dimensions array by an executable code.
83601021		The number of elements of the initial values of the array is incorrect.	3	Too many elements of the initial values.	Confirm the number of elements or the initial values of the array.
83601022		The initial value assignment of the variable is incorrect.	3	Can't specify an array in the initial value. This variable is not the array.	Confirm the format of the initial value.
83601023		* Type name(*) is invalid.	3	Invalid type is assigned in the variable declaration.	Confirm the format of the variable type.
83601025		* Robot* is not specified.	3	Robot is not specified.	Specify a robot.

Code	RC7 Code	Message	Level	Description	Remedy
83601FFB		Internal error: Complie error occurred.	3	Unexpected operation was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
83601FFC		Internal error: Complie error occurred.	3	Unexpected operation was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
83601FFD		Internal error: Complie error occurred.	3	Unexpected operation was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
83601FFE		Internal error:Embedded object registration failed.	3	Unexpected operation was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
83601FFF		Internal error: Complie error occurred.	3	Unexpected operation was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
83602001		* String operation is not supported	3	Specified operator is not applicable to strings.	Revise the program and use an appropriate operator.
83602002		* Only VECTOR, POSITION or TRANS type are allowed.	3	Specified variable type is not applicable.	Revise the variable type and change to the appropriate type.
83602003		* Only POSITION type is allowed.	3	Specified variable type is not applicable.	Revise the variable type and change to the appropriate type.
83602004		* Only POSITION or TRANS type are allowed	3	Specified variable type is not applicable.	Revise the variable type and change to the appropriate type.
83602005		* Only TRANS type is allowed	3	Specified variable type is not applicable.	Revise the variable type and change to the appropriate type.
83602006		* Only JOINT type is allowed	3	Specified variable type is not applicable.	Revise the variable type and change to the appropriate type.
83602007		* This operation is not available to String.	3	Specified operator is not applicable to strings.	Revise the program and use an appropriate operator.
83602008		* Invalid operation	3	Specified operator is not applicable.	Revise the program and use an appropriate operator.
83602009		* String cannot be evaluated as a formula.	3	String is invalid as a formula.	Revise the string so that it can be evaluated as a formula.
8360200A		* Internal error:Popped operation node	3	Unexpected operation was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
8360200B		* Variable * is not defined	3	Specified variable is not found.	Revise the program and declare the specified variable.
8360200C		* Procedure * does not return a value.	3	Sub procedure can't return a value.	Revise the program. If return value is required, change the program to Function procedure.
8360200D		* Unmatching element number	3	Specified element number is wrong.	Check if the number of element matches the specification of the used variable type (V, P, J, T).
8360200E		* Internal error:Popped CElementNode	3	Unexpected operation was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
8360200F		* Internal error:Popped CSValueNode	3	Unexpected operation was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
83602010		* Invalid format to reference type argument	3	Specified value or variable can't be handled as a reference type (ByRef)	Revise the argument type and dimension counts that are passed to the procedure so that it satisfies the definition.
83602011		* Unmatching argument type	3	Argument type is incorrect.	Revise the argument type. Specify an argument type from the defined ones.
83602012		* Internal error: Reference type variable is for local only.	3	Unexpected operation was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
83602013		* Internal error:Undefined variable type is used.	3	Unexpected operation was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
83602014		* Function * is undefined.	3	Specified function or procedure name is not found.	Revise the program and specify the existing function or procedure name.
83602015		* Substitution to function * is not possible .	3	Grammatically wrong sentence is described.	Revise the program and change the sentence to satisfy the language specifications.
83602016		* Object * is not defined.	3	Specified object is not found.	Revise the program and define the specified object variable.
83602017		* Internal error:Non-object data is registered in object node	3	Unexpected operation was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
83602018		* Internal error:Popped object function node	3	Unexpected operation was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
83602019		* Internal error:Can't specify robot number	3	Unexpected operation was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
8360201A		* Invalid robot number (ID: *)	3	Invalid robot number is specified.	Check the available robot number, and then change the specified robot number to appropriate one.
8360201B		* Internal error:Popped Arm object node	3	Unexpected operation was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
8360201C		* Unmatching argument number	3	The number of arguments do not match.	Revise the specifications and specify appropriate number of arguments.
8360201D		* Argument type is not allowed	3	Invalid value or variable type is used.	Revise the program and specify appropriate variable or the value for type.
8360201E		* Internal error:Popped function node	3	Unexpected operation was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
8360201F		* Internal error:Popped LBound/Ubound node	3	Unexpected operation was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
83602020		* Only IO type is allowed.	3	Invalid variable type is specified.	Revise the variable type and change to the appropriate type.
83602021		* Only integer or real type are allowed.	3	Invalid variable type is specified.	Revise the variable type and change to the appropriate type.
83602022		* Array dimension is invalid	3	Invalid variable type is specified.	Revise the variable declaration and specify an array variable with appropriate dimensional counts.
83602023		* * is not array type	3	Invalid variable type is specified.	Revise the variable declaration and specify array type variable.
83602024		* Fig is out of range	3	Fig value is not within the possible range.	Revise the program and change the value of Fig into the possible range.
83602025		* * is not defined	3	Specified name of function or variable is not found.	Revise the program and define a function or a variable with the specified name.
83602026		* Array element is invalid	3	Invalid variable type is specified.	Revise the variable declaration and specify appropriate numbers of elements variable.
83602027		* Internal error:Popped Hand object node	3	Unexpected operation was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
83602028		* Internal error:Popped Pass node	3	Unexpected operation was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
83602029		* The operation of a vector is illegal	3	To calculate the vector and scalar, specify vector on the left, scalar on the right.	Revise the variable declaration and specify array type variable.
8360202A		* Right-hand side of + operation: typename of the immediate value is not specified.	3	Typename of (element1, element2,...) is not omittable.	Revise the immediate value type's typename that is omitted. Correct the typename.
8360202D		Incorrect syntax. '[' cannot be specified.	3	The specified brackets are incorrect.	Check the available bracket types. Use appropriate brackets.
8360202E		Incorrect syntax. '(' cannot be specified.	3	The specified brackets are incorrect.	Check the available bracket types. Use appropriate brackets.
8360202F		This command is not available in CC8.	3	This command is not available in CC8.	Revise the program.
83603001		* Unmatching argument type	3	The argument type is incorrect.	Revise the argument type and specify the type matching the declaration.
83603002		* Only VECTOR, POSITION or TRANS type are allowed.	3	Invalid variable type is specified.	Revise the variable type and change to the appropriate type.
83603003		* Assigned value must be an integer or a real	3	Invalid value is specified.	Change assign value to integer or real type.

Code	RC7 Code	Message	Level	Description	Remedy
83603004		* Only POSITION type is allowed.	3	Invalid variable type is specified.	Revise the variable type and change to the appropriate type.
83603005		* Only POSITION or TRANS type are allowed.	3	Invalid variable type is specified.	Revise the variable type and change to the appropriate type.
83603006		* Joint number must be an integer or an real	3	Invalid joint number is specified.	Revise the joint number and specify the appropriate value.
83603007		* Only JOINT type is allowed.	3	Invalid variable type is specified.	Revise the variable type and change to the appropriate type.
83603008		* Assigned value must be a VECTOR type	3	Invalid variable type is specified.	Revise the variable type and change to the appropriate type.
83603009		* Only TRANS type is allowed.	3	Invalid variable type is specified.	Revise the variable type and change to the appropriate type.
8360300A		* This operation is not available to String.	3	The specified operator is not applicable to strings.	Revise the program and use an appropriate operator.
8360300B		* String can't be assigned	3	Invalid variable type is specified.	Revise the variable type and change to the appropriate type.
8360300C		* ElseIf has no corresponding If	3	If statement is missing or not properly declared.	Revise the correspondence of "If <condition> Then" and "ElseIf", and correct the grammar of the sentence.
8360300D		* Else has no corresponding If	3	If statement is missing or not properly declared.	Revise the correspondence of "If <condition> Then" and "Else", and correct the grammar of the sentence.
8360300E		* End If has no corresponding If	3	If statement is missing or not properly declared.	Revise the correspondence of "If <condition> Then" and "End If", and correct the grammar of the sentence.
8360300F		* Next has no corresponding For	3	For statement is missing or not properly declared.	Revise the correspondence of "For" and "Next", and correct the grammar of the sentence.
83603010		* Exit For is at the outside of For-Next	3	For – Next statement is missing or not properly declared.	Revise the correspondence of "For" and "Next", and describe "For Exit" at the inside of the For – Next loop.
83603011		* Wend has no corresponding While	3	While statement is missing or not properly declared.	Revise the correspondence of "While" and "Wend", and correct the grammar of the sentence.
83603012		* Loop has no corresponding Do	3	Do statement is missing or not properly declared.	Revise the correspondence of "Do" and "Loop", and correct the grammar of the sentence.
83603013		* Both Do and Loop have respective conditional expressions.	3	Do – Loop statement is grammatically not correct.	Set a conditional expression for "Do" or for "Loop".

Code	RC7 Code	Message	Level	Description	Remedy
83603014		* Exit Do is at the outside of Do–Loop	3	Do – Loop statement is missing or not properly declared.	Revise the correspondence of "Do" and "Loop", and write "Do Exit" at the inside of the For – Next loop.
83603015		* Case has no corresponding Select	3	Select statement is missing or not properly declared.	Revise the correspondence of "Select" and "Case", and correct the grammar of the sentence.
83603016		* Operator of the Case statement is wrong	3	The operator can't be used in Case statement.	Revise the "Case" statement and specify appropriate operator.
83603017		* Case–Else has no corresponding Select	3	Select statement is missing or not properly declared.	Revise the correspondence of "Select" and "Case Else", and correct the grammar of the sentence.
83603018		* End Select has no corresponding Select	3	Select statement is missing or not properly declared.	Revise the correspondence of "Select" and "End Select", and correct the grammar of the sentence.
83603019		* Syntax error. Use Exit Sub.	3	Exit Sub is used by mistake in "Function – End Function" statement.	Check the definition of the procedure and correct the "Exit" statement.
8360301A		* Syntax error. Use Exit Function.	3	Exit Function is used by mistake in "Sub – End Sub" statement.	Check the definition of the procedure and correct "Exit" statement.
8360301B		* Only 0 or label name are allowed.	3	Jump destination of GoTo statement is not correctly specified.	Specify GoTo 0 or <Label Name>
8360301C		* Internal error: Failed to calculate a plane from the specified three points	3	Unexpected process was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
8360301D		* Only POSITION type is allowed.	3	Invalid variable type was specified.	Revise the variable type and change to the appropriate type.
8360301E		* Assigned values must be IO type	3	Invalid variable type was specified.	Revise the variable type and change to the appropriate type.
8360301F		* Event procedure must have the following form Sub * (ByVal Sender As Object, ByVal Args As Variant)	3	Event procedure definition is incorrect.	Check the event procedure definition.
83603020		* Only VECTOR type is allowed.	3	Invalid variable type is specified.	Revise the variable type and change to the appropriate type.
83603021		* Only JOINT type is allowed.	3	Invalid variable type is specified.	Revise the variable type and change to the appropriate type.
83603022		* Argument is incorrect	3	Specified argument is incorrect.	Revise the value, type and range of the parameter, and then change it to the appropriate value.
83603023		* Short of arguments	3	The number of argument is incorrect.	Revise the specification. Enter appropriate numebr of arguments.

Code	RC7 Code	Message	Level	Description	Remedy
83603024		* Too much arguments	3	The number of argument is incorrect.	Revise the specification. Enter appropriate numebr of arguments.
81603025		* Pass Start Displacement is incorrect.	1	Pass Start Displacement is not correctly specified.	Revise the specification and correct Pass Start Displacement.
81603026		* Extended-joint Option is incorrect.	1	Extended-joint Option is not correctly specified.	Revise the specification and correct Extended-joint Option.
83603027		* Too much arguments of SPEED Option.	3	The number of argument is incorrect.	Revise the specification. Enter appropriate numebr of arguments.
83603028		* Too much arguments of ACCEL Option.	3	The number of argument is incorrect.	Revise the specification. Enter appropriate numebr of arguments.
83603029		* Too much arguments of SYNC Option.	3	The number of argument is incorrect.	Revise the specification. Enter appropriate numebr of arguments.
8360302A		* SYNC Option is incorrect.	3	Invalid Option (SYNC) is specified.	Revise the specification. Enter an appropriate option.
8360302B		* Robot Index is duplicated.	3	Specified Robot Index is incorrect.	Revise the value of Robot Index of the specified Follower and Leader and then change it to the appropriate value.
8360302C		* The Option is incorrect.	3	Invalid Option is specified.	Revise the specification. Enter an appropriate option.
8360302D		* Only IO type is allowed to specify Mode option.	3	Invalid variable type is specified to apply Mode.	Revise the variable type and change to the appropriate type.
8360302E		* The Mode Option value is out of range.	3	Invalid value is specified.	Revise the specification and assign an appropriate value.
8360302F		* NEXT Option is incorrect.	3	Invalid Option (NEXT) is specified.	Revise the specification. Enter an appropriate option.
83603030		* Cannot specify target positions consecutively.	3	The number of argument is incorrect.	Revise the specification. Enter appropriate numebr of arguments.
83603031		* Pass Start Displacement is incorrect.	3	For three or more cooperative motion, you can not specify anything other than @0,@e,@c.	Revise the specification. Enter an appropriate option.
83603032		* Cannot specify PTP motion together with SyncMove option.	3	In the case of use SyncMove option, cannot specify PTP motion.	Revise the specification. Enter an appropriate interpolation method or motion option.
83604FFF		* Syntax error, unexpected ' * ' .	3	Unrecognizable syntax is used.	Revise and correct the grammar of the error line to comply with the language specifications.
83605001		* Real is out of range	3	Specified value is incorrect.	Revise the specification and assign an appropriate value.
83605002		* Integer is out of range	3	Specified value is incorrect.	Revise the specification and assign an appropriate value.
83605003		* String is unclosed	3	String format is incorrect.	Revise the correspondence of '"' and '"' to match two of them.

Code	RC7 Code	Message	Level	Description	Remedy
83605004		* End of file in the middle of string	3	String format is incorrect.	Revise the correspondence of '"' and '"' to match two of them.
83605005		Can't open file: *	3	Specified file is not exist or is not accessible.	Revise the file name and specify the existing file name.
83605101		* Cannot open Include file: *	3	Specified file is not exist or is not accessible.	Revise the file name and specify the existing file name.
81605102		* Macro name is defined with over 64 characters.	1	Macro name length exceeds the upper limit.	Define the macro name within 64 characters.
83605103		* * Macro is already defined	3	Macro definition is duplicated.	Revise macro definition and use non-duplicated name.
83605104		* Can not open Import file: *	3	Specified file is not exist or is not accessible.	Revise the file name and specify the existing file name.
83605105		* Can not evaluate macro : *	3	Specified macro is undefined or not evaluable by pre-processor.	Revise macro definition and define as a constant.
83605106		* Can not divide by zero	3	Division by zero occurred.	Revise macro definition and eliminate division by zero.
83605109		* Macro * is defined recursively, or too many macro definitions are applied continuously.	3	Macro definition is reentrant or exceeds the upper limit.	Revise the macro definition.
8360510B		* #Elif, #ElseIf has no corresponding #If, #Ifdef, #Ifndef	3	#If, #Ifdef, #Ifndef statement is missing or not properly declared.	Revise the correspondence of "#If, #Ifdef, #Ifndef <condition>" and "#Elif, #Elseif", and correct the grammar of the sentence.
8360510C		* #Else has no corresponding #If, #Ifdef, #Ifndef	3	#If, #Ifdef, #Ifndef statement is missing or not properly declared.	Revise the correspondence of "#If, #Ifdef, #Ifndef <condition>" and "#Else", and correct the grammar of the sentence.
8360510D		* #Endif has no corresponding #If, #Ifdef, #Ifndef	3	#If, #Ifdef, #Ifndef statement is missing or not properly declared.	Revise the correspondence of "#If, #Ifdef, #Ifndef <condition>" and "#Endif", and correct the grammar of the sentence.
8360510E		* Missing #Endif corresponding to #If	3	#Endif statement is missing, or, not declared after #If <condition> statement.	Revise the correspondence of "#If <condition>" and "#Endif".
8360510F		* Missing #Endif corresponding to #Elif, #Elseif	3	#Endif statement is missing, or, not declared after #Elif, #Elseif <condition> statement.	Revise the correspondence of "#Elif, #Elseif <condition>" and "#Endif".
83605110		* Missing #Endif corresponding to #Else	3	#Endif statement is missing, or, not declared after #Else statement.	Revise the correspondence of "#Else" and "#Endif"
83605111		* Missing #Endif corresponding to #Ifdef	3	#Endif statement is missing, or, not declared after #Ifdef <condition> statement.	Revise the correspondence of "#Ifdef <condition>" and "#Endif".

Code	RC7 Code	Message	Level	Description	Remedy
83605112		* Missing #Endif corresponding to #Ifndef	3	#Endif statement is missing, or, not declared after #Ifndef <condition> statement.	Revise the correspondence of "#Ifndef <condition>" and "#Endif".
836051FF		Internal error: Complie error occurred.	3	Unexpected operation was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
83605201		* Robot number is out of range	3	Invalid robot number is specified.	Check the available robot number, and then change the specified robot number to appropriate one.
83605202		* Hand number is out of range	3	Invalid hand number is specified.	Check the available hand number, and then change the specified hand number to appropriate one.
83605203		* Integer is out of range	3	Specified value is incorrect.	Revise the specification and assign an appropriate value.
83605204		* IO variable index is out of range	3	Specified value is incorrect.	Check the I/O assignment range, and change to the appropriate index number.
83605205		* Global variable index is out of range	3	Specified value is incorrect.	Check the number of global variables, and specify the appropriate number.
83605206		* Undefined global variable	3	Unexpected operation was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
83605207		* Real is out of range	3	Specified value is incorrect.	Revise the specification and assign an appropriate value.
83605208		* Invalid character code for identifier exists.	3	Invalid character code is included in the program.	Revise the program, and then remove invalid character codes.
83605209		* String is unclosed	3	String format is incorrect.	Revise the correspondence of '"' and '"' to match two of them.
8360520A		* File was closed in the middle of string	3	String format is incorrect.	Revise the correspondence of '"' and '"' to match two of them.
8160520B		* Label name is defined with over 64 characters.	1	Label definition is invalid.	Define the label name within 64 characters.
8360520C		Can't open Include file: *	3	Specified file does not exist or is not accessible.	Revise the file name and then specify the existing file name.
8160520D		* Syntax error. ElseIf should not include a space.	1	Description of ElseIf statement is incorrect.	Remove a space between Else and If.
8160520E		* Syntax error. EndIf need to include a space.	1	Description of End If statement is incorrect.	Insert at least one space character between End and If.
8360520F		* Robot number is out of range	3	Invalid robot number is specified.	Check the available robot number, and then change the specified robot number to appropriate one.

Code	RC7 Code	Message	Level	Description	Remedy
81608FFF		Exception occurred.	1	Invalid process is executed.	Revise the operation and specified parameters, and then perform appropriate operation and parameter assignment.
81608001		Invalid parameter.	1	Specified parameter is invalid.	Revise the value, type and range of the parameter, and change it to the appropriate value.
81608002		Access denied.	1	Invalid process is executed.	Revise the operation and specified parameters, and then perform appropriate operation and parameter assignment.
81608003		No interface was supported.	1	Specified parameter is invalid.	Revise the value, type and range of the parameter, and change it to the appropriate value.
81608004		Unknown interface.	1	Specified parameter is invalid.	Revise the value, type and range of the parameter, and change it to the appropriate value.
81608005		Member not found.	1	Specified parameter is invalid.	Revise the value, type and range of the parameter, and change it to the appropriate value.
81608006		Parameter not found.	1	Specified parameter is invalid.	Revise the value, type and range of the parameter, and change it to the appropriate value.
81608007		Type mismatch.	1	Specified parameter is invalid.	Revise the value, type and range of the parameter, and change it to the appropriate value.
81608008		Unknown name.	1	Specified parameter is invalid.	Revise the value, type and range of the parameter, and change it to the appropriate value.
81608009		No named arguments	1	Specified parameter is invalid.	Revise the value, type and range of the parameter, and change it to the appropriate value.
8160800A		Wrong variable type	1	Specified parameter is invalid.	Revise the value, type and range of the parameter, and change it to the appropriate value.
8160800B		Out of range	1	Specified parameter is invalid.	Revise the value, type and range of the parameter, and change it to the appropriate value.
8160800C	2003	Invalid index	1	Specified parameter is invalid.	Revise the value, type and range of the parameter, and change it to the appropriate value.
8160800D		Unknown language	1	Specified parameter is invalid.	Revise the value, type and range of the parameter, and change it to the appropriate value.
8160800E		Memory is locked	1	Specified parameter is invalid.	Revise the value, type and range of the parameter, and change it to the appropriate value.
8160800F		Invalid number of parameters	1	Specified parameter is invalid.	Revise the value, type and range of the parameter, and change it to the appropriate value.
81608010		Parameter is not optional	1	Specified parameter is invalid.	Revise the value, type and range of the parameter, and change it to the appropriate value.

Code	RC7 Code	Message	Level	Description	Remedy
81608011		Invalid callee.	1	Specified parameter is invalid.	Revise the value, type and range of the parameter, and change it to the appropriate value.
81608012		Does not support a Collection	1	Specified parameter is invalid.	Revise the value, type and range of the parameter, and change it to the appropriate value.
81608013		Divided by zero	1	Specified parameter is invalid.	Revise the value, type and range of the parameter, and change it to the appropriate value.
81608014		Buffer is too small	1	Specified parameter is invalid.	Revise the value, type and range of the parameter, and change it to the appropriate value.
81608015		Timeout occurred.	1	Failed to finish the process within prdetermined time.	Revise the process, and set timeout duration longer, if necessary.
81608016		Not implemented.	1	Unexpected operation was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
81608017		Run out of memory	1	The used memory in the controller reached the upper limit.	Take the following actions. 1. Delete unnecessary tasks. 2. Reduce local variable number. 3. Reduce VM stack size setting, and restart the task.
81608018		The data necessary to complete this operation is still unavailable.	1	You cannot execute the process before the data preparation completes.	Save the program and recreate task. If the error still occurs, reboot the controller.
81608019		Invalid pointer.	1	Unexpected operation was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
8160801A		Invalid handle.	1	Unexpected operation was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
8160801B		Operation aborted.	1	Processing operation was forcibly aborted.	If an error occurs, clear the error. Reboot the controller.
8160801C		Unspecified error.	1	General error was reported from the inside of the system.	Revise the operation and specified parameters, and then perform appropriate operation and parameter assignment.
8160801D		Catastrophic error.	1	Unexpected operation was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
8160801E		Connection failed.	1	Failed to establish communication.	Make sure that the connection parameters and communication settings are correct, cables are connected properly, the specified port number has not used already. After that, reboot the controller.
8160801F		Transmit aborted.	1	Processing operation was aborted.	If an error occurs, clear the error. Reboot the controller.

Code	RC7 Code	Message	Level	Description	Remedy
83608020		You cannot start program because a syntax check is not done.	3	The program before the syntax check cannot be started.	Perform syntax check, and restart the program.
81608021		Specfied Public variable is not found.	1	The public variable is not found in the task.	Revise the program and declare the public variable in the specified task.
81608022		A designated task is not started.	1	The task declaring the public variable has not been started yet.	Compile the specified task.
81608023		Impossible to access because it is not Public attribute.	1	You cannot access specified variable because it is not declared as Public.	Revise the program and declare the variable as Public type.
81608024		The number of the dimensions in arrays are different.	1	Public variable array count does not match the argument array count.	Revise the program and match the array count of Public variable and argument.
83608025		Panel task can't be started directly.	3	Panel task is started automatically by opening the panel screen.	Open the corresponding panel screen to start the panel task.
83608026		No license.	3	License information is not registered.	Please register a license if you already have it. If not, please contact DENSO WAVE service.
81608027		Communication connection is not established.	1	Communication connection is not established.	Check the communication status with Com.State function.
81608028		Specified communication connection is already used.	1	Specified value is incorrect.	Revise the number, type and value range of the argument, and then correct argument.
81608029		Not enough memory available to restore static variables. Memory is insufficient to restore static variables.	1	Static memory area is insufficient.	Secure enough static memory area, for example, by deleting unused global variables.
8160802A		The number of elements for each dimension of the array is different.	1	The number of elemets for each dimension of the Public variable array does not match the number of elements for each dimension of the argument.	Revise the program so that the element counts on each dimensions of Public variable arrays matches with the element counts on each dimensions of argument arrays.
8360802B		Trace code does not exist.	3	Impossible to restart the program from the current line because the trace code is OFF	Please run the program from the top.
8160802C		Teach pendant is not connected.	1	You cannot execute without connecting a Teach pendant.	Execute after connecting a Teaching peandant.
8160802D		Teach pendant or Mini pendant is not connected.	1	You cannot execute without connecting a Teach pendant or a Mini pendant.	Execute after connecting a Teaching or Mini peandant.
8560802E		Too much number of dimensions	5	Stack overflow.	Revise the program and then restart the controller. If the error still occurs, please contact to DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
8160802F		Calling of StackRepair statement is illegal.	1	StackRepair was called without executing StackMemorize.	Call StackMemorize before executing StackRepair.
85609FFF		FRAM exception occurred.	5	Unexpected operation was executed while accessing FRAM data area.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
85609001		Inconsistency of FRAM data area was detected.	5	FRAM data might not be properly saved while controller power was shutdown.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
85609002		FRAM data area is uninitialized or broken.	5	Inconsistency was found in FRAM data area.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
83609003		Variable buffer is insufficient.	3	Specified numbers of variables can't be set because of insufficient variable area.	Revise the numbers of variables so that the total variable size does not exceed the upper limit.
83609004		The number of variables exceeded the maximum limit.	3	Variable number range is from 0 to 2147483647	Specify the value within the range.
83609005		The variable is locked.	3	Access was denied because the variable area is in use.	Please access after the variable area size is changed.
83609101		Static variable related error occurred.	3	A static variable related error occurred in the controller system.	Revise the operation and specified parameters, and then perform appropriate operation and parameter assignment.
85609102		Failed to initialize static variables.	5	An error occurred in static variable area initialization.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
85609103		Failed to terminate the static variables.	5	An error occurred in static variable termination process.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
83609104		Failed to get the reserved area size of static variables.	3	An error occurred while calculating static variable reserved area size.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
83609105		Failed to get the free area size of static variables.	3	An error occurred while calculating static variable free area size.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
83609106		Impossible to allocate Static variable.	3	You cannot register static variable anymore.	Please delete unnecessary global variables and other static variables.
83609107		Failed to release static variables.	3	An error occurred while releasing static variables.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
83609108		Failed to write static variables.	3	An error occurred while writing static variables.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
83609109		Failed to read static variables.	3	An error occurred while reading static variables.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
8360910A		Failed to get static variable reservable ID.	3	An error occurred while acquiring the minimum static variable ID.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
8360910B		Failed to optimize static variables.	3	An error occurred while optimizing static variables.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
8360910C		Failed to output map file.	3	An error occurred while outputting static variable map file.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
8360910D		Failed to get map file name.	3	An error occurred while getting static variable map file name.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
8360910E		Failed in pre-processing of source initialization for static variables.	3	An error occurred while pre-processing source code initialization for static variables.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
8360910F		Failed in post-processing of source initialization for static variables.	3	An error occurred while post-processing source code initialization for static variables.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
83609110		Failed in compile pre-processing for static variables.	3	An error occurred in compile pre-process for static variables.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
83609111		Failed in compile post-processing for static variables.	3	An error occurred in compile post-process for static variables.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
83609112		Failed in post-processing of source delete for static variables.	3	An error occurred in source deletion pre-process for static variables.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
83609113		Failed in directory delete post-processing for static variables.	3	An error occurred in source deletion post-process for static variables.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.

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83609114		Failed in post-processing of source name change for static variables.	3	An error occurred in source name change pre-process for static variables.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
83609115		Failed in post-processing of directory name change for static variables.	3	An error occurred in source name change post-process for static variables.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
83609116		Failed in pre-processing of program execution for static variables.	3	An error occurred in program execution pre-process for static variables.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
83609117		Failed in post-processing of program execution for static variables.	3	An error occurred in program execution post-process for static variables.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
83609118		Failed to get static variable information.	3	An error occurred while getting static variable information.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
83609119		Failed to check the existence of static variables.	3	An error occurred in static variable existence check.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
8360911A		Failed to search public variables.	3	An error occurred while searching public variables.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
8360911B		Failed to update static variables.	3	An error occurred while updating static variables.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
8360911C		Failed to load static variables.	3	An error occurred while loading static variables area.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
8360911D		Failed to save static variables.	3	An error occurred while saving static variables area.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
8360911E		Failed to save static variables to FRAM.	3	An error occurred while saving static variables area to FRAM.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
8360911F		Failed to create backup data.	3	An error occurred while creating static variables area backup data.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
83609120		Failed to restore from backup data.	3	An error occurred while restoring static variables area backup data.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
83609121		Failed to get static variables name list.	3	An error occurred while getting static variables name list.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
83609122		Failed to get static variable value.	3	An error occurred while getting static variable value.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
83609123		Failed to set static variable value.	3	An error occurred while setting static variable value.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
83609124		Failed to request update from $Next folder.	3	An error occurred while requesting static variable area from $Next folder in project transfer.	Restart the controller, or initialize the Static variable area. If the error still occures, please contact DENSO WAVE service.
83609125		Failed to clear static variables.	3	An error occurred while clearing static variable area and deleting map file.	Restart controller. If the error still occures, please contact DENSO WAVE service.
83609126		Invalid parameter.	3	Specified parameter is invalid.	Revise the value, type and range of the parameter, and change to the appropriate value.
83609127		The total data size of all varaibles exceeded the upper limit.	3	Specified numbers of variables can't be set because of insufficient variable area.	Revise the numbers of variables so that the total variable size does not exceed the upper limit.
81609128		Run out of memory	1	The used memory in the controller reached the upper limit.	Take the following actions. 1. Delete unnecessary tasks. 2. Reduce local variable number. 3. Reduce VM stack size setting, and restart the task.
81609129		Out of available range.	1	Specified parameter is invalid.	Revise the value, type and range of the parameter, and change it to the appropriate value.
8160912A		The length of the string exceeds 255 bytes.	1	You entered 256 bites or larger in String type's static varaibles.	Revise the program so that 256 bites or larger are not enered in String type's static varaibles.
8160912B		Available memory area is insufficinet to restore static variables.	1	Static memory area is insufficient.	Secure enough static memory area, for example, by deleting unused global variables.
83581001		No lisence.	3	No lisence.	Register the license if you have it. If not, contact us.
83581004		No Image.	3	Failed to retrieve a camera image or image in the memory.	Check that a camera is set and connected properly. Check that the specification of image ID is appropriate.

Code	RC7 Code	Message	Level	Description	Remedy
83581007		Specified EVP Project File is not exist.	3	Specified EVP project file name is not exist.	Check the EVP project file name.
83581008		Failed to read EVP Project File.	3	The parameter in the EVP project file is an abnormal value.	Create an EVP project file and transfer it again.
83581009		EVP Project File is not specified.	3	Project file is not specified by the argument of AddController or LoadFile is not invoked.	Specify an EVP project file.
8358100A		Failed to read EVP Project File.	3	There is no template image specified by EVP project file.	Create an EVP project file and transfer it again.
8358100B		Failed to read EVP Project File.	3	The format of the template image specified by EVP project file is abnormal.	Create an EVP project file and transfer it again.
8358100D		Failed to read EVP Project File.	3	EVP project file version is newer than the EVP provider version.	Create an EVP project file by using EVP Guidance corresponding to RC8 version, and transfer it again.
83581051		No lisence.	3	No lisence.	Register the license if you have it. If not, contact us.
83581054		No Image.	3	Failed to retrieve a camera image or image in the memory.	Check that a camera is set and connected properly. Check that the specification of image ID is appropriate.
83581056		No lisence(1).	3	No lisence(1).	Please contact DENSO WAVE service with error number and error message.
83581057		Failed to activate EVP2.	3	The EVP2 license file was not found.	Send the EVP2 license file.
83581058		Failed to activate EVP2.	3	The EVP2 USB dongle key is not inserted.	Insert the EVP2 USB dongle key.
83581059		Invalid parameter.	3	Specified parameter is invalid.	Revise the value, type and range of the parameter, and change it to the appropriate value.
8358105A		Specified EVP2 Project File is not exist.	3	Specified EVP2 project file name is not exist.	Check the EVP2 project file name.
8358105B		Failed to read EVP2 Project File.	3	The parameter in the EVP2 project file is an abnormal value.	Create an EVP2 project file and transfer it again.
8358105C		EVP2 Project File is not specified.	3	Project file is not specified by the argument of AddController or LoadFile is not invoked.	Specify an EVP2 project file.
8358105D		Failed to read EVP2 Project File.	3	There is no template image specified by EVP project file.	Create an EVP2 project file and transfer it again.
8358105E		EVP2 Project File is not loaded.	3	Project file is not specified by the argument of AddController or LoadFile is not invoked.	Invoke after specifying an EVP2 project file by the argument of AddController or LoadFile.
8358105F		Failed to read EVP2 Project File.	3	EVP2 project file version is newer than the EVP2 provider version.	Create an EVP2 project file by using EVP2 Guidance corresponding to RC8 version, and transfer it again.
8358107B		The image ID you try to set has been used already.	3	The specified image ID has been used already. Please specify different image ID.	Specify different image ID.

Code	RC7 Code	Message	Level	Description	Remedy
83581083		Search time out.	3	Model search timeout for EVP2 project. The model size may be too large or the parameters may be incorrect.	Revise the parameters of the EVP2 project.
83585000		ElectricGripper0:Unexpected board error	3	Unexpected electric gripper board error occurred.	Reboot the robot controller and the motor driver power supply. If the error still occurs, please contact DENSO WAVE service.
83585001		ElectricGripper1:Unexpected board error	3	Unexpected electric gripper board error occurred.	Reboot the robot controller and the motor driver power supply. If the error still occurs, please contact DENSO WAVE service.
83585002		ElectricGripper2:Unexpected board error	3	Unexpected electric gripper board error occurred.	Reboot the robot controller and the motor driver power supply. If the error still occurs, please contact DENSO WAVE service.
83585003		ElectricGripper3:Unexpected board error	3	Unexpected electric gripper board error occurred.	Reboot the robot controller and the motor driver power supply. If the error still occurs, please contact DENSO WAVE service.
83585004		ElectricGripper4:Unexpected board error	3	Unexpected electric gripper board error occurred.	Reboot the robot controller and the motor driver power supply. If the error still occurs, please contact DENSO WAVE service.
83585005		ElectricGripper5:Unexpected board error	3	Unexpected electric gripper board error occurred.	Reboot the robot controller and the motor driver power supply. If the error still occurs, please contact DENSO WAVE service.
83585006		ElectricGripper6:Unexpected board error	3	Unexpected electric gripper board error occurred.	Reboot the robot controller and the motor driver power supply. If the error still occurs, please contact DENSO WAVE service.
83585007		ElectricGripper7:Unexpected board error	3	Unexpected electric gripper board error occurred.	Reboot the robot controller and the motor driver power supply. If the error still occurs, please contact DENSO WAVE service.
83585010	2A10	ElectricGripper0:overload	3	An overload (motor overload) occurred. The following causes are likely. 1. Motor defect 2. Parameter defect 3. Insufficient power line capacity 4. Significant friction in electric gripper mechanism	Please take the following measures according to the possible cause number. 1. If armature resistor is too small or motor shaft is too heavy to rotate by hand, replace electric gripper. 2. Set actuator type again. 3. Check power supply capacity, and if the capacity is insufficient, replace it to the higher capacity type. 4. Check mechanical moving part, and if the part doesn't move smoothly, readjust it.

Code	RC7 Code	Message	Level	Description	Remedy
83585011	2A10	ElectricGripper1:overload	3	An overload (motor overload) occurred. The following causes are likely. 1. Motor defect 2. Parameter defect 3. Insufficient power line capacity 4. Significant friction in electric gripper mechanism	Please take the following measures according to the possible cause number. 1. If armature resistor is too small or motor shaft is too heavy to rotate by hand, replace electric gripper. 2. Set actuator type again. 3. Check power supply capacity, and if the capacity is insufficient, replace it to the higher capacity type. 4. Check mechanical moving part, and if the part doesn't move smoothly, readjust it.
83585012	2A10	ElectricGripper2:overload	3	An overload (motor overload) occurred. The following causes are likely. 1. Motor defect 2. Parameter defect 3. Insufficient power line capacity 4. Significant friction in electric gripper mechanism	Please take the following measures according to the possible cause number. 1. If armature resistor is too small or motor shaft is too heavy to rotate by hand, replace electric gripper. 2. Set actuator type again. 3. Check power supply capacity, and if the capacity is insufficient, replace it to the higher capacity type. 4. Check mechanical moving part, and if the part doesn't move smoothly, readjust it.
83585013	2A10	ElectricGripper3:overload	3	An overload (motor overload) occurred. The following causes are likely. 1. Motor defect 2. Parameter defect 3. Insufficient power line capacity 4. Significant friction in electric gripper mechanism	Please take the following measures according to the possible cause number. 1. If armature resistor is too small or motor shaft is too heavy to rotate by hand, replace electric gripper. 2. Set actuator type again. 3. Check power supply capacity, and if the capacity is insufficient, replace it to the higher capacity type. 4. Check mechanical moving part, and if the part doesn't move smoothly, readjust it.
83585014	2A10	ElectricGripper4:overload	3	An overload (motor overload) occurred. The following causes are likely. 1. Motor defect 2. Parameter defect 3. Insufficient power line capacity 4. Significant friction in electric gripper mechanism	Please take the following measures according to the possible cause number. 1. If armature resistor is too small or motor shaft is too heavy to rotate by hand, replace electric gripper. 2. Set actuator type again. 3. Check power supply capacity, and if the capacity is insufficient, replace it to the higher capacity type. 4. Check mechanical moving part, and if the part doesn't move smoothly, readjust it.

Code	RC7 Code	Message	Level	Description	Remedy
83585015	2A10	ElectricGripper5:overload	3	An overload (motor overload) occurred. The following causes are likely. 1. Motor defect 2. Parameter defect 3. Insufficient power line capacity 4. Significant friction in electric gripper mechanism	Please take the following measures according to the possible cause number. 1. If armature resistor is too small or motor shaft is too heavy to rotate by hand, replace electric gripper. 2. Set actuator type again. 3. Check power supply capacity, and if the capacity is insufficient, replace it to the higher capacity type. 4. Check mechanical moving part, and if the part doesn't move smoothly, readjust it.
83585016	2A10	ElectricGripper6:overload	3	An overload (motor overload) occurred. The following causes are likely. 1. Motor defect 2. Parameter defect 3. Insufficient power line capacity 4. Significant friction in electric gripper mechanism	Please take the following measures according to the possible cause number. 1. If armature resistor is too small or motor shaft is too heavy to rotate by hand, replace electric gripper. 2. Set actuator type again. 3. Check power supply capacity, and if the capacity is insufficient, replace it to the higher capacity type. 4. Check mechanical moving part, and if the part doesn't move smoothly, readjust it.
83585017	2A10	ElectricGripper7:overload	3	An overload (motor overload) occurred. The following causes are likely. 1. Motor defect 2. Parameter defect 3. Insufficient power line capacity 4. Significant friction in electric gripper mechanism	Please take the following measures according to the possible cause number. 1. If armature resistor is too small or motor shaft is too heavy to rotate by hand, replace electric gripper. 2. Set actuator type again. 3. Check power supply capacity, and if the capacity is insufficient, replace it to the higher capacity type. 4. Check mechanical moving part, and if the part doesn't move smoothly, readjust it.
83585020	2A1C	ElectricGripper0:overcurrent	3	An overcurrent condition occurred. The following causes are likely. 1.24V power supply OFF 2. Motor defect 3. Gripper control board defect 4. Parameter defect	Please take the following measures according to the possible cause number. 1. Turn ON 24V power supply. 2. Confirm cabling. 3. Replace the electric gripper. 4. Replace the electric gripper control board. 5. Reconfigure the actuator type.

Code	RC7 Code	Message	Level	Description	Remedy
83585021	2A1C	ElectricGripper1:overcurrent	3	An overcurrent condition occurred. The following causes are likely. 1.24V power supply OFF 2. Motor defect 3. Gripper control board defect 4. Parameter defect	Please take the following measures according to the possible cause number. 1. Turn ON 24V power supply. 2. Confirm cabling. 3. Replace the electric gripper. 4. Replace the electric gripper control board. 5. Reconfigure the actuator type.
83585022	2A1C	ElectricGripper2:overcurrent	3	An overcurrent condition occurred. The following causes are likely. 1.24V power supply OFF 2. Motor defect 3. Gripper control board defect 4. Parameter defect	Please take the following measures according to the possible cause number. 1. Turn ON 24V power supply. 2. Confirm cabling. 3. Replace the electric gripper. 4. Replace the electric gripper control board. 5. Reconfigure the actuator type.
83585023	2A1C	ElectricGripper3:overcurrent	3	An overcurrent condition occurred. The following causes are likely. 1.24V power supply OFF 2. Motor defect 3. Gripper control board defect 4. Parameter defect	Please take the following measures according to the possible cause number. 1. Turn ON 24V power supply. 2. Confirm cabling. 3. Replace the electric gripper. 4. Replace the electric gripper control board. 5. Reconfigure the actuator type.
83585024	2A1C	ElectricGripper4:overcurrent	3	An overcurrent condition occurred. The following causes are likely. 1.24V power supply OFF 2. Motor defect 3. Gripper control board defect 4. Parameter defect	Please take the following measures according to the possible cause number. 1. Turn ON 24V power supply. 2. Confirm cabling. 3. Replace the electric gripper. 4. Replace the electric gripper control board. 5. Reconfigure the actuator type.
83585025	2A1C	ElectricGripper5:overcurrent	3	An overcurrent condition occurred. The following causes are likely. 1.24V power supply OFF 2. Motor defect 3. Gripper control board defect 4. Parameter defect	Please take the following measures according to the possible cause number. 1. Turn ON 24V power supply. 2. Confirm cabling. 3. Replace the electric gripper. 4. Replace the electric gripper control board. 5. Reconfigure the actuator type.

Code	RC7 Code	Message	Level	Description	Remedy
83585026	2A1C	ElectricGripper6:overcurrent	3	An overcurrent condition occurred. The following causes are likely. 1.24V power supply OFF 2. Motor defect 3. Gripper control board defect 4. Parameter defect	Please take the following measures according to the possible cause number. 1. Turn ON 24V power supply. 2. Confirm cabling. 3. Replace the electric gripper. 4. Replace the electric gripper control board. 5. Reconfigure the actuator type.
83585027	2A1C	ElectricGripper7:overcurrent	3	An overcurrent condition occurred. The following causes are likely. 1.24V power supply OFF 2. Motor defect 3. Gripper control board defect 4. Parameter defect	Please take the following measures according to the possible cause number. 1. Turn ON 24V power supply. 2. Confirm cabling. 3. Replace the electric gripper. 4. Replace the electric gripper control board. 5. Reconfigure the actuator type.
83585030	2A11	ElectricGripper0:Machine reference over	3	The encoder Z-phase position has shifted from the initial value. The following causes are likely. 1. The electric gripper was replaced. 2. The fingers were replaced at the origin close side. 3. Encoder Z-phase wire damage or fault	Please take the following measures according to the possible cause number. 1. Execute machine reference clear. 2. Execute machine reference clear. Set the origin to the open end. 3. Replace the electric gripper.
83585031	2A11	ElectricGripper1:Machine reference over	3	The encoder Z-phase position has shifted from the initial value. The following causes are likely. 1. The electric gripper was replaced. 2. The fingers were replaced at the origin close side. 3. Encoder Z-phase wire damage or fault	Please take the following measures according to the possible cause number. 1. Execute machine reference clear. 2. Execute machine reference clear. Set the origin to the open end. 3. Replace the electric gripper.
83585032	2A11	ElectricGripper2:Machine reference over	3	The encoder Z-phase position has shifted from the initial value. The following causes are likely. 1. The electric gripper was replaced. 2. The fingers were replaced at the origin close side. 3. Encoder Z-phase wire damage or fault	Please take the following measures according to the possible cause number. 1. Execute machine reference clear. 2. Execute machine reference clear. Set the origin to the open end. 3. Replace the electric gripper.

Code	RC7 Code	Message	Level	Description	Remedy
83585033	2A11	ElectricGripper3:Machine reference over	3	The encoder Z-phase position has shifted from the initial value. The following causes are likely. 1. The electric gripper was replaced. 2. The fingers were replaced at the origin close side. 3. Encoder Z-phase wire damage or fault	Please take the following measures according to the possible cause number. 1. Execute machine reference clear. 2. Execute machine reference clear. Set the origin to the open end. 3. Replace the electric gripper.
83585034	2A11	ElectricGripper4:Machine reference over	3	The encoder Z-phase position has shifted from the initial value. The following causes are likely. 1. The electric gripper was replaced. 2. The fingers were replaced at the origin close side. 3. Encoder Z-phase wire damage or fault	Please take the following measures according to the possible cause number. 1. Execute machine reference clear. 2. Execute machine reference clear. Set the origin to the open end. 3. Replace the electric gripper.
83585035	2A11	ElectricGripper5:Machine reference over	3	The encoder Z-phase position has shifted from the initial value. The following causes are likely. 1. The electric gripper was replaced. 2. The fingers were replaced at the origin close side. 3. Encoder Z-phase wire damage or fault	Please take the following measures according to the possible cause number. 1. Execute machine reference clear. 2. Execute machine reference clear. Set the origin to the open end. 3. Replace the electric gripper.
83585036	2A11	ElectricGripper6:Machine reference over	3	The encoder Z-phase position has shifted from the initial value. The following causes are likely. 1. The electric gripper was replaced. 2. The fingers were replaced at the origin close side. 3. Encoder Z-phase wire damage or fault	Please take the following measures according to the possible cause number. 1. Execute machine reference clear. 2. Execute machine reference clear. Set the origin to the open end. 3. Replace the electric gripper.
83585037	2A11	ElectricGripper7:Machine reference over	3	The encoder Z-phase position has shifted from the initial value. The following causes are likely. 1. The electric gripper was replaced. 2. The fingers were replaced at the origin close side. 3. Encoder Z-phase wire damage or fault	Please take the following measures according to the possible cause number. 1. Execute machine reference clear. 2. Execute machine reference clear. Set the origin to the open end. 3. Replace the electric gripper.
83585040	2A12	ElectricGripper0:Power supply voltage low	3	Power supply voltage drops below 80% of the rated value.	Check the power supply capacity, and if the capacity is insufficient, replace it to the higher capacity type. (Electric power is required most at the calibration by pressing gripper to stopper, at the start of the motion mechanism, or accelerating/decelerating.)

Code	RC7 Code	Message	Level	Description	Remedy
83585041	2A12	ElectricGripper1:Power supply voltage low	3	Power supply voltage drops below 80% of the rated value.	Check the power supply capacity, and if the capacity is insufficient, replace it to the higher capacity type. (Electric power is required most at the calibration by pressing gripper to stopper, at the start of the motion mechanism, or accelerating/decelerating.)
83585042	2A12	ElectricGripper2:Power supply voltage low	3	Power supply voltage drops below 80% of the rated value.	Check the power supply capacity, and if the capacity is insufficient, replace it to the higher capacity type. (Electric power is required most at the calibration by pressing gripper to stopper, at the start of the motion mechanism, or accelerating/decelerating.)
83585043	2A12	ElectricGripper3:Power supply voltage low	3	Power supply voltage drops below 80% of the rated value.	Check the power supply capacity, and if the capacity is insufficient, replace it to the higher capacity type. (Electric power is required most at the calibration by pressing gripper to stopper, at the start of the motion mechanism, or accelerating/decelerating.)
83585044	2A12	ElectricGripper4:Power supply voltage low	3	Power supply voltage drops below 80% of the rated value.	Check the power supply capacity, and if the capacity is insufficient, replace it to the higher capacity type. (Electric power is required most at the calibration by pressing gripper to stopper, at the start of the motion mechanism, or accelerating/decelerating.)
83585045	2A12	ElectricGripper5:Power supply voltage low	3	Power supply voltage drops below 80% of the rated value.	Check the power supply capacity, and if the capacity is insufficient, replace it to the higher capacity type. (Electric power is required most at the calibration by pressing gripper to stopper, at the start of the motion mechanism, or accelerating/decelerating.)
83585046	2A12	ElectricGripper6:Power supply voltage low	3	Power supply voltage drops below 80% of the rated value.	Check the power supply capacity, and if the capacity is insufficient, replace it to the higher capacity type. (Electric power is required most at the calibration by pressing gripper to stopper, at the start of the motion mechanism, or accelerating/decelerating.)
83585047	2A12	ElectricGripper7:Power supply voltage low	3	Power supply voltage drops below 80% of the rated value.	Check the power supply capacity, and if the capacity is insufficient, replace it to the higher capacity type. (Electric power is required most at the calibration by pressing gripper to stopper, at the start of the motion mechanism, or accelerating/decelerating.)

Code	RC7 Code	Message	Level	Description	Remedy
83585060	2A13	ElectricGripper0:Position deviation over	3	A position deviation over error occurred. The following causes are likely. 1. Mechanical lock 2. A collision occurred while moving in acceleration/deceleration movement mode. 3. Motor wire damage, incorrect wiring 4. Incorrect parameter	Please take the following measures according to the possible cause number. 1. Check that the moving part of mechanism is not locked. 2. Revise the motion mode. 3. Check that the motor cable and encoder signal cable are connected. 4. Set the actuator type again.
83585061	2A13	ElectricGripper1:Position deviation over	3	A position deviation over error occurred. The following causes are likely. 1. Mechanical lock 2. A collision occurred while moving in acceleration/deceleration movement mode. 3. Motor wire damage, incorrect wiring 4. Incorrect parameter	Please take the following measures according to the possible cause number. 1. Check that the moving part of mechanism is not locked. 2. Revise the motion mode. 3. Check that the motor cable and encoder signal cable are connected. 4. Set the actuator type again.
83585062	2A13	ElectricGripper2:Position deviation over	3	A position deviation over error occurred. The following causes are likely. 1. Mechanical lock 2. A collision occurred while moving in acceleration/deceleration movement mode. 3. Motor wire damage, incorrect wiring 4. Incorrect parameter	Please take the following measures according to the possible cause number. 1. Check that the moving part of mechanism is not locked. 2. Revise the motion mode. 3. Check that the motor cable and encoder signal cable are connected. 4. Set the actuator type again.
83585063	2A13	ElectricGripper3:Position deviation over	3	A position deviation over error occurred. The following causes are likely. 1. Mechanical lock 2. A collision occurred while moving in acceleration/deceleration movement mode. 3. Motor wire damage, incorrect wiring 4. Incorrect parameter	Please take the following measures according to the possible cause number. 1. Check that the moving part of mechanism is not locked. 2. Revise the motion mode. 3. Check that the motor cable and encoder signal cable are connected. 4. Set the actuator type again.

Code	RC7 Code	Message	Level	Description	Remedy
83585064	2A13	ElectricGripper4:Position deviation over	3	A position deviation over error occurred. The following causes are likely. 1. Mechanical lock 2. A collision occurred while moving in acceleration/deceleration movement mode. 3. Motor wire damage, incorrect wiring 4. Incorrect parameter	Please take the following measures according to the possible cause number. 1. Check that the moving part of mechanism is not locked. 2. Revise the motion mode. 3. Check that the motor cable and encoder signal cable are connected. 4. Set the actuator type again.
83585065	2A13	ElectricGripper5:Position deviation over	3	A position deviation over error occurred. The following causes are likely. 1. Mechanical lock 2. A collision occurred while moving in acceleration/deceleration movement mode. 3. Motor wire damage, incorrect wiring 4. Incorrect parameter	Please take the following measures according to the possible cause number. 1. Check that the moving part of mechanism is not locked. 2. Revise the motion mode. 3. Check that the motor cable and encoder signal cable are connected. 4. Set the actuator type again.
83585066	2A13	ElectricGripper6:Position deviation over	3	A position deviation over error occurred. The following causes are likely. 1. Mechanical lock 2. A collision occurred while moving in acceleration/deceleration movement mode. 3. Motor wire damage, incorrect wiring 4. Incorrect parameter	Please take the following measures according to the possible cause number. 1. Check that the moving part of mechanism is not locked. 2. Revise the motion mode. 3. Check that the motor cable and encoder signal cable are connected. 4. Set the actuator type again.
83585067	2A13	ElectricGripper7:Position deviation over	3	A position deviation over error occurred. The following causes are likely. 1. Mechanical lock 2. A collision occurred while moving in acceleration/deceleration movement mode. 3. Motor wire damage, incorrect wiring 4. Incorrect parameter	Please take the following measures according to the possible cause number. 1. Check that the moving part of mechanism is not locked. 2. Revise the motion mode. 3. Check that the motor cable and encoder signal cable are connected. 4. Set the actuator type again.
83585070	2A14	ElectricGripper0:Internal communication error	3	Data transfer/reception between elements on the electric gripper control board was interrupted at a certain period of time.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
83585071	2A14	ElectricGripper1:Internal communication error	3	Data transfer/reception between elements on the electric gripper control board was interrupted at a certain period of time.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83585072	2A14	ElectricGripper2:Internal communication error	3	Data transfer/reception between elements on the electric gripper control board was interrupted at a certain period of time.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83585073	2A14	ElectricGripper3:Internal communication error	3	Data transfer/reception between elements on the electric gripper control board was interrupted at a certain period of time.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83585074	2A14	ElectricGripper4:Internal communication error	3	Data transfer/reception between elements on the electric gripper control board was interrupted at a certain period of time.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83585075	2A14	ElectricGripper5:Internal communication error	3	Data transfer/reception between elements on the electric gripper control board was interrupted at a certain period of time.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83585076	2A14	ElectricGripper6:Internal communication error	3	Data transfer/reception between elements on the electric gripper control board was interrupted at a certain period of time.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83585077	2A14	ElectricGripper7:Internal communication error	3	Data transfer/reception between elements on the electric gripper control board was interrupted at a certain period of time.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83585080	2A15	ElectricGripper0:No 24V power supply OFF	3	The motor 24 VDC power supply is not ON.	Please check the following items. 1. Turn ON 24V power supply. 2. Confirm cabling.
83585081	2A15	ElectricGripper1:No 24V power supply OFF	3	The motor 24 VDC power supply is not ON.	Please check the following items. 1. Turn ON 24V power supply. 2. Confirm cabling.
83585082	2A15	ElectricGripper2:No 24V power supply OFF	3	The motor 24 VDC power supply is not ON.	Please check the following items. 1. Turn ON 24V power supply. 2. Confirm cabling.
83585083	2A15	ElectricGripper3:No 24V power supply OFF	3	The motor 24 VDC power supply is not ON.	Please check the following items. 1. Turn ON 24V power supply. 2. Confirm cabling.
83585084	2A15	ElectricGripper4:No 24V power supply OFF	3	The motor 24 VDC power supply is not ON.	Please check the following items. 1. Turn ON 24V power supply. 2. Confirm cabling.

Code	RC7 Code	Message	Level	Description	Remedy
83585085	2A15	ElectricGripper5:No 24V power supply OFF	3	The motor 24 VDC power supply is not ON.	Please check the following items. 1. Turn ON 24V power supply. 2. Confirm cabling.
83585086	2A15	ElectricGripper6:No 24V power supply OFF	3	The motor 24 VDC power supply is not ON.	Please check the following items. 1. Turn ON 24V power supply. 2. Confirm cabling.
83585087	2A15	ElectricGripper7:No 24V power supply OFF	3	The motor 24 VDC power supply is not ON.	Please check the following items. 1. Turn ON 24V power supply. 2. Confirm cabling.
83585090	2A16	ElectricGripper0:System fault1	3	An electric gripper control board system fault occurred.	Please check the following items. 1. Avoid electric noise by placing the noise source away. 2. Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83585091	2A16	ElectricGripper1:System fault1	3	An electric gripper control board system fault occurred.	Please check the following items. 1. Avoid electric noise by placing the noise source away. 2. Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83585092	2A16	ElectricGripper2:System fault1	3	An electric gripper control board system fault occurred.	Please check the following items. 1. Avoid electric noise by placing the noise source away. 2. Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83585093	2A16	ElectricGripper3:System fault1	3	An electric gripper control board system fault occurred.	Please check the following items. 1. Avoid electric noise by placing the noise source away. 2. Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
83585094	2A16	ElectricGripper4:System fault1	3	An electric gripper control board system fault occurred.	Please check the following items. 1. Avoid electric noise by placing the noise source away. 2. Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83585095	2A16	ElectricGripper5:System fault1	3	An electric gripper control board system fault occurred.	Please check the following items. 1. Avoid electric noise by placing the noise source away. 2. Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83585096	2A16	ElectricGripper6:System fault1	3	An electric gripper control board system fault occurred.	Please check the following items. 1. Avoid electric noise by placing the noise source away. 2. Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83585097	2A16	ElectricGripper7:System fault1	3	An electric gripper control board system fault occurred.	Please check the following items. 1. Avoid electric noise by placing the noise source away. 2. Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
835850A0	2A17	ElectricGripper0:Feedback error1	3	Unable to control motor power. The following causes are likely. 1. The excitation position and encoder position do not match due to an initial processing defect when the power is turned ON. 2. Incorrect encoder count due to external noise, etc.	Please take the following measures according to the possible cause number. 1. Reboot the gripper power first, and then confirm that the external power is not applied to the gripping part. Calibrate the gripper. 2. Avoid electric noise by placing the noise source away.

Code	RC7 Code	Message	Level	Description	Remedy
835850A1	2A17	ElectricGripper1:Feedback error1	3	Unable to control motor power. The following causes are likely. 1. The excitation position and encoder position do not match due to an initial processing defect when the power is turned ON. 2. Incorrect encoder count due to external noise, etc.	Please take the following measures according to the possible cause number. 1. Reboot the gripper power first, and then confirm that the external power is not applied to the gripping part. Calibrate the gripper. 2. Avoid electric noise by placing the noise source away.
835850A2	2A17	ElectricGripper2:Feedback error1	3	Unable to control motor power. The following causes are likely. 1. The excitation position and encoder position do not match due to an initial processing defect when the power is turned ON. 2. Incorrect encoder count due to external noise, etc.	Please take the following measures according to the possible cause number. 1. Reboot the gripper power first, and then confirm that the external power is not applied to the gripping part. Calibrate the gripper. 2. Avoid electric noise by placing the noise source away.
835850A3	2A17	ElectricGripper3:Feedback error1	3	Unable to control motor power. The following causes are likely. 1. The excitation position and encoder position do not match due to an initial processing defect when the power is turned ON. 2. Incorrect encoder count due to external noise, etc.	Please take the following measures according to the possible cause number. 1. Reboot the gripper power first, and then confirm that the external power is not applied to the gripping part. Calibrate the gripper. 2. Avoid electric noise by placing the noise source away.
835850A4	2A17	ElectricGripper4:Feedback error1	3	Unable to control motor power. The following causes are likely. 1. The excitation position and encoder position do not match due to an initial processing defect when the power is turned ON. 2. Incorrect encoder count due to external noise, etc.	Please take the following measures according to the possible cause number. 1. Reboot the gripper power first, and then confirm that the external power is not applied to the gripping part. Calibrate the gripper. 2. Avoid electric noise by placing the noise source away.
835850A5	2A17	ElectricGripper5:Feedback error1	3	Unable to control motor power. The following causes are likely. 1. The excitation position and encoder position do not match due to an initial processing defect when the power is turned ON. 2. Incorrect encoder count due to external noise, etc.	Please take the following measures according to the possible cause number. 1. Reboot the gripper power first, and then confirm that the external power is not applied to the gripping part. Calibrate the gripper. 2. Avoid electric noise by placing the noise source away.

Code	RC7 Code	Message	Level	Description	Remedy
835850A6	2A17	ElectricGripper6:Feedback error1	3	Unable to control motor power. The following causes are likely. 1. The excitation position and encoder position do not match due to an initial processing defect when the power is turned ON. 2. Incorrect encoder count due to external noise, etc.	Please take the following measures according to the possible cause number. 1. Reboot the gripper power first, and then confirm that the external power is not applied to the gripping part. Calibrate the gripper. 2. Avoid electric noise by placing the noise source away.
835850A7	2A17	ElectricGripper7:Feedback error1	3	Unable to control motor power. The following causes are likely. 1. The excitation position and encoder position do not match due to an initial processing defect when the power is turned ON. 2. Incorrect encoder count due to external noise, etc.	Please take the following measures according to the possible cause number. 1. Reboot the gripper power first, and then confirm that the external power is not applied to the gripping part. Calibrate the gripper. 2. Avoid electric noise by placing the noise source away.
835850B0	2A18	ElectricGripper0:Feedback error2	3	Unable to control motor power. The following causes are likely. 1. Encoder signal wire damage 2. The slide block is secured.	Please take the following measures according to the possible cause number. 1. Check that the encoder signal cable is connected. 2. Release the slide block lock.
835850B1	2A18	ElectricGripper1:Feedback error2	3	Unable to control motor power. The following causes are likely. 1. Encoder signal wire damage 2. The slide block is secured.	Please take the following measures according to the possible cause number. 1. Check that the encoder signal cable is connected. 2. Release the slide block lock.
835850B2	2A18	ElectricGripper2:Feedback error2	3	Unable to control motor power. The following causes are likely. 1. Encoder signal wire damage 2. The slide block is secured.	Please take the following measures according to the possible cause number. 1. Check that the encoder signal cable is connected. 2. Release the slide block lock.
835850B3	2A18	ElectricGripper3:Feedback error2	3	Unable to control motor power. The following causes are likely. 1. Encoder signal wire damage 2. The slide block is secured.	Please take the following measures according to the possible cause number. 1. Check that the encoder signal cable is connected. 2. Release the slide block lock.
835850B4	2A18	ElectricGripper4:Feedback error2	3	Unable to control motor power. The following causes are likely. 1. Encoder signal wire damage 2. The slide block is secured.	Please take the following measures according to the possible cause number. 1. Check that the encoder signal cable is connected. 2. Release the slide block lock.

Code	RC7 Code	Message	Level	Description	Remedy
835850B5	2A18	ElectricGripper5:Feedback error2	3	Unable to control motor power. The following causes are likely. 1. Encoder signal wire damage 2. The slide block is secured.	Please take the following measures according to the possible cause number. 1. Check that the encoder signal cable is connected. 2. Release the slide block lock.
835850B6	2A18	ElectricGripper6:Feedback error2	3	Unable to control motor power. The following causes are likely. 1. Encoder signal wire damage 2. The slide block is secured.	Please take the following measures according to the possible cause number. 1. Check that the encoder signal cable is connected. 2. Release the slide block lock.
835850B7	2A18	ElectricGripper7:Feedback error2	3	Unable to control motor power. The following causes are likely. 1. Encoder signal wire damage 2. The slide block is secured.	Please take the following measures according to the possible cause number. 1. Check that the encoder signal cable is connected. 2. Release the slide block lock.
835850C0	2A19	ElectricGripper0:Abnormal voltage	3	An overvoltage condition occurred. The following causes are likely. 1. Power supply voltage rise caused by regeneration 2. Incorrect motor power supply voltage	Please take the following measures according to the possible cause number. 1. Reduce the mechanical part motion duty cycle. 2. Check the motor driver power supply voltage.
835850C1	2A19	ElectricGripper1:Abnormal voltage	3	An overvoltage condition occurred. The following causes are likely. 1. Power supply voltage rise caused by regeneration 2. Incorrect motor power supply voltage	Please take the following measures according to the possible cause number. 1. Reduce the mechanical part motion duty cycle. 2. Check the motor driver power supply voltage.
835850C2	2A19	ElectricGripper2:Abnormal voltage	3	An overvoltage condition occurred. The following causes are likely. 1. Power supply voltage rise caused by regeneration 2. Incorrect motor power supply voltage	Please take the following measures according to the possible cause number. 1. Reduce the mechanical part motion duty cycle. 2. Check the motor driver power supply voltage.
835850C3	2A19	ElectricGripper3:Abnormal voltage	3	An overvoltage condition occurred. The following causes are likely. 1. Power supply voltage rise caused by regeneration 2. Incorrect motor power supply voltage	Please take the following measures according to the possible cause number. 1. Reduce the mechanical part motion duty cycle. 2. Check the motor driver power supply voltage.

Code	RC7 Code	Message	Level	Description	Remedy
835850C4	2A19	ElectricGripper4:Abnormal voltage	3	An overvoltage condition occurred. The following causes are likely. 1. Power supply voltage rise caused by regeneration 2. Incorrect motor power supply voltage	Please take the following measures according to the possible cause number. 1. Reduce the mechanical part motion duty cycle. 2. Check the motor driver power supply voltage.
835850C5	2A19	ElectricGripper5:Abnormal voltage	3	An overvoltage condition occurred. The following causes are likely. 1. Power supply voltage rise caused by regeneration 2. Incorrect motor power supply voltage	Please take the following measures according to the possible cause number. 1. Reduce the mechanical part motion duty cycle. 2. Check the motor driver power supply voltage.
835850C6	2A19	ElectricGripper6:Abnormal voltage	3	An overvoltage condition occurred. The following causes are likely. 1. Power supply voltage rise caused by regeneration 2. Incorrect motor power supply voltage	Please take the following measures according to the possible cause number. 1. Reduce the mechanical part motion duty cycle. 2. Check the motor driver power supply voltage.
835850C7	2A19	ElectricGripper7:Abnormal voltage	3	An overvoltage condition occurred. The following causes are likely. 1. Power supply voltage rise caused by regeneration 2. Incorrect motor power supply voltage	Please take the following measures according to the possible cause number. 1. Reduce the mechanical part motion duty cycle. 2. Check the motor driver power supply voltage.
835850D0	2A1A	ElectricGripper0:System fault2	3	An electric gripper control board system error occurred.	Please check the following items. 1. Avoid electric noise by placing the noise source away. 2. Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
835850D1	2A1A	ElectricGripper1:System fault2	3	An electric gripper control board system error occurred.	Please check the following items. 1. Avoid electric noise by placing the noise source away. 2. Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
835850D2	2A1A	ElectricGripper2:System fault2	3	An electric gripper control board system error occurred.	Please check the following items. 1. Avoid electric noise by placing the noise source away. 2. Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
835850D3	2A1A	ElectricGripper3:System fault2	3	An electric gripper control board system error occurred.	Please check the following items. 1. Avoid electric noise by placing the noise source away. 2. Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
835850D4	2A1A	ElectricGripper4:System fault2	3	An electric gripper control board system error occurred.	Please check the following items. 1. Avoid electric noise by placing the noise source away. 2. Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
835850D5	2A1A	ElectricGripper5:System fault2	3	An electric gripper control board system error occurred.	Please check the following items. 1. Avoid electric noise by placing the noise source away. 2. Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
835850D6	2A1A	ElectricGripper6:System fault2	3	An electric gripper control board system error occurred.	Please check the following items. 1. Avoid electric noise by placing the noise source away. 2. Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
835850D7	2A1A	ElectricGripper7:System fault2	3	An electric gripper control board system error occurred.	Please check the following items. 1. Avoid electric noise by placing the noise source away. 2. Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
835850E0	2A1B	ElectricGripper0:Feedback error3	3	Unable to control the motor power. Motor wire damage or incorrect connection are the likely causes.	Check the motor cable connection.
835850E1	2A1B	ElectricGripper1:Feedback error3	3	Unable to control the motor power. Motor wire damage or incorrect connection are the likely causes.	Check the motor cable connection.
835850E2	2A1B	ElectricGripper2:Feedback error3	3	Unable to control the motor power. Motor wire damage or incorrect connection are the likely causes.	Check the motor cable connection.
835850E3	2A1B	ElectricGripper3:Feedback error3	3	Unable to control the motor power. Motor wire damage or incorrect connection are the likely causes.	Check the motor cable connection.
835850E4	2A1B	ElectricGripper4:Feedback error3	3	Unable to control the motor power. Motor wire damage or incorrect connection are the likely causes.	Check the motor cable connection.
835850E5	2A1B	ElectricGripper5:Feedback error3	3	Unable to control the motor power. Motor wire damage or incorrect connection are the likely causes.	Check the motor cable connection.
835850E6	2A1B	ElectricGripper6:Feedback error3	3	Unable to control the motor power. Motor wire damage or incorrect connection are the likely causes.	Check the motor cable connection.
835850E7	2A1B	ElectricGripper7:Feedback error3	3	Unable to control the motor power. Motor wire damage or incorrect connection are the likely causes.	Check the motor cable connection.
83585200	2A20	ElectricGripper0:Software limit over	3	A position outside the software limit was specified while jogging, direct teaching, or during teaching playback.	Please check the following items. 1. Revise the destination position. 2. Revise the software limit setting.
83585201	2A20	ElectricGripper1:Software limit over	3	A position outside the software limit was specified while jogging, direct teaching, or during teaching playback.	Please check the following items. 1. Revise the destination position. 2. Revise the software limit setting.
83585202	2A20	ElectricGripper2:Software limit over	3	A position outside the software limit was specified while jogging, direct teaching, or during teaching playback.	Please check the following items. 1. Revise the destination position. 2. Revise the software limit setting.
83585203	2A20	ElectricGripper3:Software limit over	3	A position outside the software limit was specified while jogging, direct teaching, or during teaching playback.	Please check the following items. 1. Revise the destination position. 2. Revise the software limit setting.

Code	RC7 Code	Message	Level	Description	Remedy
83585204	2A20	ElectricGripper4:Software limit over	3	A position outside the software limit was specified while jogging, direct teaching, or during teaching playback.	Please check the following items. 1. Revise the destination position. 2. Revise the software limit setting.
83585205	2A20	ElectricGripper5:Software limit over	3	A position outside the software limit was specified while jogging, direct teaching, or during teaching playback.	Please check the following items. 1. Revise the destination position. 2. Revise the software limit setting.
83585206	2A20	ElectricGripper6:Software limit over	3	A position outside the software limit was specified while jogging, direct teaching, or during teaching playback.	Please check the following items. 1. Revise the destination position. 2. Revise the software limit setting.
83585207	2A20	ElectricGripper7:Software limit over	3	A position outside the software limit was specified while jogging, direct teaching, or during teaching playback.	Please check the following items. 1. Revise the destination position. 2. Revise the software limit setting.
83585230	2A21	ElectricGripper0:Origin return unfinished	3	You cannot run a motion command before executing the origin return.	Perform the origin return.
83585231	2A21	ElectricGripper1:Origin return unfinished	3	You cannot run a motion command before executing the origin return.	Perform the origin return.
83585232	2A21	ElectricGripper2:Origin return unfinished	3	You cannot run a motion command before executing the origin return.	Perform the origin return.
83585233	2A21	ElectricGripper3:Origin return unfinished	3	You cannot run a motion command before executing the origin return.	Perform the origin return.
83585234	2A21	ElectricGripper4:Origin return unfinished	3	You cannot run a motion command before executing the origin return.	Perform the origin return.
83585235	2A21	ElectricGripper5:Origin return unfinished	3	You cannot run a motion command before executing the origin return.	Perform the origin return.
83585236	2A21	ElectricGripper6:Origin return unfinished	3	You cannot run a motion command before executing the origin return.	Perform the origin return.
83585237	2A21	ElectricGripper7:Origin return unfinished	3	You cannot run a motion command before executing the origin return.	Perform the origin return.
83585240	2A22	ElectricGripper0:Motor power OFF	3	You cannot execute a motion command while the motor power is OFF.	Turn ON motor power.
83585241	2A22	ElectricGripper1:Motor power OFF	3	You cannot execute a motion command while the motor power is OFF.	Turn ON motor power.
83585242	2A22	ElectricGripper2:Motor power OFF	3	You cannot execute a motion command while the motor power is OFF.	Turn ON motor power.
83585243	2A22	ElectricGripper3:Motor power OFF	3	You cannot execute a motion command while the motor power is OFF.	Turn ON motor power.

Code	RC7 Code	Message	Level	Description	Remedy
83585244	2A22	ElectricGripper4:Motor power OFF	3	You cannot execute a motion command while the motor power is OFF.	Turn ON motor power.
83585245	2A22	ElectricGripper5:Motor power OFF	3	You cannot execute a motion command while the motor power is OFF.	Turn ON motor power.
83585246	2A22	ElectricGripper6:Motor power OFF	3	You cannot execute a motion command while the motor power is OFF.	Turn ON motor power.
83585247	2A22	ElectricGripper7:Motor power OFF	3	You cannot execute a motion command while the motor power is OFF.	Turn ON motor power.
83585250		ElectricGripper0:Interlock	3	You cannot issue a command while INTERLOCK is activated.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83585251		ElectricGripper1:Interlock	3	You cannot issue a command while INTERLOCK is activated.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83585252		ElectricGripper2:Interlock	3	You cannot issue a command while INTERLOCK is activated.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83585253		ElectricGripper3:Interlock	3	You cannot issue a command while INTERLOCK is activated.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83585254		ElectricGripper4:Interlock	3	You cannot issue a command while INTERLOCK is activated.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83585255		ElectricGripper5:Interlock	3	You cannot issue a command while INTERLOCK is activated.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83585256		ElectricGripper6:Interlock	3	You cannot issue a command while INTERLOCK is activated.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83585257		ElectricGripper7:Interlock	3	You cannot issue a command while INTERLOCK is activated.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83585260	2A24	ElectricGripper0:Emergency-stop is ON	3	Emergency stop (emergency stop contact open) is now on.	Clear the Emergency-stop by short-circuiting the Emergency-stop input.
83585261	2A24	ElectricGripper1:Emergency-stop is ON	3	Emergency stop (emergency stop contact open) is now on.	Clear the Emergency-stop by short-circuiting the Emergency-stop input.

Code	RC7 Code	Message	Level	Description	Remedy
83585262	2A24	ElectricGripper2:Emergency-stop is ON	3	Emergency stop (emergency stop contact open) is now on.	Clear the Emergency-stop by short-circuiting the Emergency-stop input.
83585263	2A24	ElectricGripper3:Emergency-stop is ON	3	Emergency stop (emergency stop contact open) is now on.	Clear the Emergency-stop by short-circuiting the Emergency-stop input.
83585264	2A24	ElectricGripper4:Emergency-stop is ON	3	Emergency stop (emergency stop contact open) is now on.	Clear the Emergency-stop by short-circuiting the Emergency-stop input.
83585265	2A24	ElectricGripper5:Emergency-stop is ON	3	Emergency stop (emergency stop contact open) is now on.	Clear the Emergency-stop by short-circuiting the Emergency-stop input.
83585266	2A24	ElectricGripper6:Emergency-stop is ON	3	Emergency stop (emergency stop contact open) is now on.	Clear the Emergency-stop by short-circuiting the Emergency-stop input.
83585267	2A24	ElectricGripper7:Emergency-stop is ON	3	Emergency stop (emergency stop contact open) is now on.	Clear the Emergency-stop by short-circuiting the Emergency-stop input.
83585270	2A25	ElectricGripper0:Gripper moving	3	You cannot execute a motion command while the electric gripper is running.	Motion command cannot be executed while the electric gripper is running. Execute when the electric gripper is not running, by waiting until BUSY signal (gripper moving flag) turn OFF.
83585271	2A25	ElectricGripper1:Gripper moving	3	You cannot execute a motion command while the electric gripper is running.	Motion command cannot be executed while the electric gripper is running. Execute when the electric gripper is not running, by waiting until BUSY signal (gripper moving flag) turn OFF.
83585272	2A25	ElectricGripper2:Gripper moving	3	You cannot execute a motion command while the electric gripper is running.	Motion command cannot be executed while the electric gripper is running. Execute when the electric gripper is not running, by waiting until BUSY signal (gripper moving flag) turn OFF.
83585273	2A25	ElectricGripper3:Gripper moving	3	You cannot execute a motion command while the electric gripper is running.	Motion command cannot be executed while the electric gripper is running. Execute when the electric gripper is not running, by waiting until BUSY signal (gripper moving flag) turn OFF.

Code	RC7 Code	Message	Level	Description	Remedy
83585274	2A25	ElectricGripper4:Gripper moving	3	You cannot execute a motion command while the electric gripper is running.	Motion command cannot be executed while the electric gripper is running. Execute when the electric gripper is not running, by waiting until BUSY signal (gripper moving flag) turn OFF.
83585275	2A25	ElectricGripper5:Gripper moving	3	You cannot execute a motion command while the electric gripper is running.	Motion command cannot be executed while the electric gripper is running. Execute when the electric gripper is not running, by waiting until BUSY signal (gripper moving flag) turn OFF.
83585276	2A25	ElectricGripper6:Gripper moving	3	You cannot execute a motion command while the electric gripper is running.	Motion command cannot be executed while the electric gripper is running. Execute when the electric gripper is not running, by waiting until BUSY signal (gripper moving flag) turn OFF.
83585277	2A25	ElectricGripper7:Gripper moving	3	You cannot execute a motion command while the electric gripper is running.	Motion command cannot be executed while the electric gripper is running. Execute when the electric gripper is not running, by waiting until BUSY signal (gripper moving flag) turn OFF.
83585290	2A27	ElectricGripper0:Origin return error	3	Failed to find Z-phase during the origin return. The following causes are likely. 1. Actuator type input mistake 2. Z-phase signal wire damage	Please take the following measures according to the possible cause number. 1. Set the actuator type again. 2. Replace the motor cable.
83585291	2A27	ElectricGripper1:Origin return error	3	Failed to find Z-phase during the origin return. The following causes are likely. 1. Actuator type input mistake 2. Z-phase signal wire damage	Please take the following measures according to the possible cause number. 1. Set the actuator type again. 2. Replace the motor cable.
83585292	2A27	ElectricGripper2:Origin return error	3	Failed to find Z-phase during the origin return. The following causes are likely. 1. Actuator type input mistake 2. Z-phase signal wire damage	Please take the following measures according to the possible cause number. 1. Set the actuator type again. 2. Replace the motor cable.
83585293	2A27	ElectricGripper3:Origin return error	3	Failed to find Z-phase during the origin return. The following causes are likely. 1. Actuator type input mistake 2. Z-phase signal wire damage	Please take the following measures according to the possible cause number. 1. Set the actuator type again. 2. Replace the motor cable.

Code	RC7 Code	Message	Level	Description	Remedy
83585294	2A27	ElectricGripper4:Origin return error	3	Failed to find Z-phase during the origin return. The following causes are likely. 1. Actuator type input mistake 2. Z-phase signal wire damage	Please take the following measures according to the possible cause number. 1. Set the actuator type again. 2. Replace the motor cable.
83585295	2A27	ElectricGripper5:Origin return error	3	Failed to find Z-phase during the origin return. The following causes are likely. 1. Actuator type input mistake 2. Z-phase signal wire damage	Please take the following measures according to the possible cause number. 1. Set the actuator type again. 2. Replace the motor cable.
83585296	2A27	ElectricGripper6:Origin return error	3	Failed to find Z-phase during the origin return. The following causes are likely. 1. Actuator type input mistake 2. Z-phase signal wire damage	Please take the following measures according to the possible cause number. 1. Set the actuator type again. 2. Replace the motor cable.
83585297	2A27	ElectricGripper7:Origin return error	3	Failed to find Z-phase during the origin return. The following causes are likely. 1. Actuator type input mistake 2. Z-phase signal wire damage	Please take the following measures according to the possible cause number. 1. Set the actuator type again. 2. Replace the motor cable.
83585320	2A29	ElectricGripper0:Invalid data	3	Entered value is out of the data input range.	Check the input data.
83585321	2A29	ElectricGripper1:Invalid data	3	Entered value is out of the data input range.	Check the input data.
83585322	2A29	ElectricGripper2:Invalid data	3	Entered value is out of the data input range.	Check the input data.
83585323	2A29	ElectricGripper3:Invalid data	3	Entered value is out of the data input range.	Check the input data.
83585324	2A29	ElectricGripper4:Invalid data	3	Entered value is out of the data input range.	Check the input data.
83585325	2A29	ElectricGripper5:Invalid data	3	Entered value is out of the data input range.	Check the input data.
83585326	2A29	ElectricGripper6:Invalid data	3	Entered value is out of the data input range.	Check the input data.
83585327	2A29	ElectricGripper7:Invalid data	3	Entered value is out of the data input range.	Check the input data.
83585330	2A1D	ElectricGripper0:Invalid parameter	3	Parameter setting failed at the electric gripper control board initialization when the power-ON. Following causes are likely. 1. Actuator type is not set. (If electric gripper control board was purchased separately, this error occurs every time because actuator type is not set yet.) 2. Incorrect parameter value is set	Set the actuator type again.

Code	RC7 Code	Message	Level	Description	Remedy
83585331	2A1D	ElectricGripper1:Invalid parameter	3	Parameter setting failed at the electric gripper control board initialization when the power-ON. Following causes are likely. 1. Actuator type is not set. (If electric gripper control board was purchased separately, this error occurs every time because actuator type is not set yet.) 2. Incorrect parameter value is set	Set the actuator type again.
83585332	2A1D	ElectricGripper2:Invalid parameter	3	Parameter setting failed at the electric gripper control board initialization when the power-ON. Following causes are likely. 1. Actuator type is not set. (If electric gripper control board was purchased separately, this error occurs every time because actuator type is not set yet.) 2. Incorrect parameter value is set	Set the actuator type again.
83585333	2A1D	ElectricGripper3:Invalid parameter	3	Parameter setting failed at the electric gripper control board initialization when the power-ON. Following causes are likely. 1. Actuator type is not set. (If electric gripper control board was purchased separately, this error occurs every time because actuator type is not set yet.) 2. Incorrect parameter value is set	Set the actuator type again.
83585334	2A1D	ElectricGripper4:Invalid parameter	3	Parameter setting failed at the electric gripper control board initialization when the power-ON. Following causes are likely. 1. Actuator type is not set. (If electric gripper control board was purchased separately, this error occurs every time because actuator type is not set yet.) 2. Incorrect parameter value is set	Set the actuator type again.

Code	RC7 Code	Message	Level	Description	Remedy
83585335	2A1D	ElectricGripper5:Invalid parameter	3	Parameter setting failed at the electric gripper control board initialization when the power-ON. Following causes are likely. 1. Actuator type is not set. (If electric gripper control board was purchased separately, this error occurs every time because actuator type is not set yet.) 2. Incorrect parameter value is set	Set the actuator type again.
83585336	2A1D	ElectricGripper6:Invalid parameter	3	Parameter setting failed at the electric gripper control board initialization when the power-ON. Following causes are likely. 1. Actuator type is not set. (If electric gripper control board was purchased separately, this error occurs every time because actuator type is not set yet.) 2. Incorrect parameter value is set	Set the actuator type again.
83585337	2A1D	ElectricGripper7:Invalid parameter	3	Parameter setting failed at the electric gripper control board initialization when the power-ON. Following causes are likely. 1. Actuator type is not set. (If electric gripper control board was purchased separately, this error occurs every time because actuator type is not set yet.) 2. Incorrect parameter value is set	Set the actuator type again.
83585FF0		ElectricGripper0:Unexpected board error	3	Unexpected electric gripper board error occurred.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83585FF1		ElectricGripper1:Unexpected board error	3	Unexpected electric gripper board error occurred.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83585FF2		ElectricGripper2:Unexpected board error	3	Unexpected electric gripper board error occurred.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83585FF3		ElectricGripper3:Unexpected board error	3	Unexpected electric gripper board error occurred.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
83585FF4		ElectricGripper4:Unexpected board error	3	Unexpected electric gripper board error occurred.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83585FF5		ElectricGripper5:Unexpected board error	3	Unexpected electric gripper board error occurred.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83585FF6		ElectricGripper6:Unexpected board error	3	Unexpected electric gripper board error occurred.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83585FF7		ElectricGripper7:Unexpected board error	3	Unexpected electric gripper board error occurred.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586000		ElectricGripper0:Unexpected system error	3	Unexpected electric gripper system error occurred.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586001		ElectricGripper1:Unexpected system error	3	Unexpected electric gripper system error occurred.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586002		ElectricGripper2:Unexpected system error	3	Unexpected electric gripper system error occurred.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586003		ElectricGripper3:Unexpected system error	3	Unexpected electric gripper system error occurred.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586004		ElectricGripper4:Unexpected system error	3	Unexpected electric gripper system error occurred.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586005		ElectricGripper5:Unexpected system error	3	Unexpected electric gripper system error occurred.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586006		ElectricGripper6:Unexpected system error	3	Unexpected electric gripper system error occurred.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586007		ElectricGripper7:Unexpected system error	3	Unexpected electric gripper system error occurred.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
83586010	2A1E	ElectricGripper0:Watchdog error	3	An error occurred during the watchdog monitoring of the robot controller and the electric gripper control board.	Please check the following items. 1. Avoid electric noise by placing the noise source away. 2. Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586011	2A1E	ElectricGripper1:Watchdog error	3	An error occurred during the watchdog monitoring of the robot controller and the electric gripper control board.	Please check the following items. 1. Avoid electric noise by placing the noise source away. 2. Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586012	2A1E	ElectricGripper2:Watchdog error	3	An error occurred during the watchdog monitoring of the robot controller and the electric gripper control board.	Please check the following items. 1. Avoid electric noise by placing the noise source away. 2. Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586013	2A1E	ElectricGripper3:Watchdog error	3	An error occurred during the watchdog monitoring of the robot controller and the electric gripper control board.	Please check the following items. 1. Avoid electric noise by placing the noise source away. 2. Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586014	2A1E	ElectricGripper4:Watchdog error	3	An error occurred during the watchdog monitoring of the robot controller and the electric gripper control board.	Please check the following items. 1. Avoid electric noise by placing the noise source away. 2. Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586015	2A1E	ElectricGripper5:Watchdog error	3	An error occurred during the watchdog monitoring of the robot controller and the electric gripper control board.	Please check the following items. 1. Avoid electric noise by placing the noise source away. 2. Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
83586016	2A1E	ElectricGripper6:Watchdog error	3	An error occurred during the watchdog monitoring of the robot controller and the electric gripper control board.	Please check the following items. 1. Avoid electric noise by placing the noise source away. 2. Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586017	2A1E	ElectricGripper7:Watchdog error	3	An error occurred during the watchdog monitoring of the robot controller and the electric gripper control board.	Please check the following items. 1. Avoid electric noise by placing the noise source away. 2. Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586020	2A1F	ElectricGripper0:Internal access error	3	An error occurred when the robot controller accessed the electric gripper control board.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586021	2A1F	ElectricGripper1:Internal access error	3	An error occurred when the robot controller accessed the electric gripper control board.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586022	2A1F	ElectricGripper2:Internal access error	3	An error occurred when the robot controller accessed the electric gripper control board.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586023	2A1F	ElectricGripper3:Internal access error	3	An error occurred when the robot controller accessed the electric gripper control board.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586024	2A1F	ElectricGripper4:Internal access error	3	An error occurred when the robot controller accessed the electric gripper control board.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586025	2A1F	ElectricGripper5:Internal access error	3	An error occurred when the robot controller accessed the electric gripper control board.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586026	2A1F	ElectricGripper6:Internal access error	3	An error occurred when the robot controller accessed the electric gripper control board.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586027	2A1F	ElectricGripper7:Internal access error	3	An error occurred when the robot controller accessed the electric gripper control board.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
83586030	2A2C	ElectricGripper0:Internal time out	3	A timeout occurred when the robot controller accessed the electric gripper control board at the electric gripper motion command execution.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586031	2A2C	ElectricGripper1:Internal time out	3	A timeout occurred when the robot controller accessed the electric gripper control board at the electric gripper motion command execution.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586032	2A2C	ElectricGripper2:Internal time out	3	A timeout occurred when the robot controller accessed the electric gripper control board at the electric gripper motion command execution.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586033	2A2C	ElectricGripper3:Internal time out	3	A timeout occurred when the robot controller accessed the electric gripper control board at the electric gripper motion command execution.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586034	2A2C	ElectricGripper4:Internal time out	3	A timeout occurred when the robot controller accessed the electric gripper control board at the electric gripper motion command execution.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586035	2A2C	ElectricGripper5:Internal time out	3	A timeout occurred when the robot controller accessed the electric gripper control board at the electric gripper motion command execution.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586036	2A2C	ElectricGripper6:Internal time out	3	A timeout occurred when the robot controller accessed the electric gripper control board at the electric gripper motion command execution.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586037	2A2C	ElectricGripper7:Internal time out	3	A timeout occurred when the robot controller accessed the electric gripper control board at the electric gripper motion command execution.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586040	2A1D	ElectricGripper0:Command time out	3	The operation didn't complete within the timeout period specified by the electric gripper motion command in the electric gripper library.	Revise timeout setting.
83586041	2A1D	ElectricGripper1:Command time out	3	The operation didn't complete within the timeout period specified by the electric gripper motion command in the electric gripper library.	Revise timeout setting.
83586042	2A1D	ElectricGripper2:Command time out	3	The operation didn't complete within the timeout period specified by the electric gripper motion command in the electric gripper library.	Revise timeout setting.
83586043	2A1D	ElectricGripper3:Command time out	3	The operation didn't complete within the timeout period specified by the electric gripper motion command in the electric gripper library.	Revise timeout setting.

Code	RC7 Code	Message	Level	Description	Remedy
83586044	2A1D	ElectricGripper4:Command time out	3	The operation didn't complete within the timeout period specified by the electric gripper motion command in the electric gripper library.	Revise timeout setting.
83586045	2A1D	ElectricGripper5:Command time out	3	The operation didn't complete within the timeout period specified by the electric gripper motion command in the electric gripper library.	Revise timeout setting.
83586046	2A1D	ElectricGripper6:Command time out	3	The operation didn't complete within the timeout period specified by the electric gripper motion command in the electric gripper library.	Revise timeout setting.
83586047	2A1D	ElectricGripper7:Command time out	3	The operation didn't complete within the timeout period specified by the electric gripper motion command in the electric gripper library.	Revise timeout setting.
83586060		ElectricGripper0:Initialization error	3	Failed to initialize the electric gripper control board.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586061		ElectricGripper1:Initialization error	3	Failed to initialize the electric gripper control board.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586062		ElectricGripper2:Initialization error	3	Failed to initialize the electric gripper control board.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586063		ElectricGripper3:Initialization error	3	Failed to initialize the electric gripper control board.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586064		ElectricGripper4:Initialization error	3	Failed to initialize the electric gripper control board.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586065		ElectricGripper5:Initialization error	3	Failed to initialize the electric gripper control board.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586066		ElectricGripper6:Initialization error	3	Failed to initialize the electric gripper control board.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.
83586067		ElectricGripper7:Initialization error	3	Failed to initialize the electric gripper control board.	Reboot the robot controller and motor driver power supply, and try again. If the error still occurs, please contact DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
83586070		ElectricGripper0:Invalid parameter	3	Command parameter is out of range.	Revise the input parameter.
83586071		ElectricGripper1:Invalid parameter	3	Command parameter is out of range.	Revise the input parameter.
83586072		ElectricGripper2:Invalid parameter	3	Command parameter is out of range.	Revise the input parameter.
83586073		ElectricGripper3:Invalid parameter	3	Command parameter is out of range.	Revise the input parameter.
83586074		ElectricGripper4:Invalid parameter	3	Command parameter is out of range.	Revise the input parameter.
83586075		ElectricGripper5:Invalid parameter	3	Command parameter is out of range.	Revise the input parameter.
83586076		ElectricGripper6:Invalid parameter	3	Command parameter is out of range.	Revise the input parameter.
83586077		ElectricGripper7:Invalid parameter	3	Command parameter is out of range.	Revise the input parameter.
83587010		ElectricGripper0:Board didn't found	3	Failed to identify the electric gripper control board.	The electric gripper board activated is not recognized properly. Install the electric gripper board. If you do not intend to install the electric gripper, deactivate it.
83587011		ElectricGripper1:Board didn't found	3	Failed to identify the electric gripper control board.	The electric gripper board activated is not recognized properly. Install the electric gripper board. If you do not intend to install the electric gripper, deactivate it.
83587012		ElectricGripper2:Board didn't found	3	Failed to identify the electric gripper control board.	The electric gripper board activated is not recognized properly. Install the electric gripper board. If you do not intend to install the electric gripper, deactivate it.
83587013		ElectricGripper3:Board didn't found	3	Failed to identify the electric gripper control board.	The electric gripper board activated is not recognized properly. Install the electric gripper board. If you do not intend to install the electric gripper, deactivate it.
83587014		ElectricGripper4:Board didn't found	3	Failed to identify the electric gripper control board.	The electric gripper board activated is not recognized properly. Install the electric gripper board. If you do not intend to install the electric gripper, deactivate it.
83587015		ElectricGripper5:Board didn't found	3	Failed to identify the electric gripper control board.	The electric gripper board activated is not recognized properly. Install the electric gripper board. If you do not intend to install the electric gripper, deactivate it.
83587016		ElectricGripper6:Board didn't found	3	Failed to identify the electric gripper control board.	The electric gripper board activated is not recognized properly. Install the electric gripper board. If you do not intend to install the electric gripper, deactivate it.
83587017		ElectricGripper7:Board didn't found	3	Failed to identify the electric gripper control board.	The electric gripper board activated is not recognized properly. Install the electric gripper board. If you do not intend to install the electric gripper, deactivate it.
83587020		ElectricGripper0:Invalid access parameter	3	Failed to set or get electric gripper parameter.	Reboot the robot controller, and try again. If the error still occurs, please contact DENSO WAVE service.
83587021		ElectricGripper1:Invalid access parameter	3	Failed to set or get electric gripper parameter.	Reboot the robot controller, and try again. If the error still occurs, please contact DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
83587022		ElectricGripper2:Invalid access parameter	3	Failed to set or get electric gripper parameter.	Reboot the robot controller, and try again. If the error still occurs, please contact DENSO WAVE service.
83587023		ElectricGripper3:Invalid access parameter	3	Failed to set or get electric gripper parameter.	Reboot the robot controller, and try again. If the error still occurs, please contact DENSO WAVE service.
83587024		ElectricGripper4:Invalid access parameter	3	Failed to set or get electric gripper parameter.	Reboot the robot controller, and try again. If the error still occurs, please contact DENSO WAVE service.
83587025		ElectricGripper5:Invalid access parameter	3	Failed to set or get electric gripper parameter.	Reboot the robot controller, and try again. If the error still occurs, please contact DENSO WAVE service.
83587026		ElectricGripper6:Invalid access parameter	3	Failed to set or get electric gripper parameter.	Reboot the robot controller, and try again. If the error still occurs, please contact DENSO WAVE service.
83587027		ElectricGripper7:Invalid access parameter	3	Failed to set or get electric gripper parameter.	Reboot the robot controller, and try again. If the error still occurs, please contact DENSO WAVE service.
83587030		ElectricGripper0:Execution failed	3	Failed to execute an electric gripper motion command.	Confirm that no other command is running while electric gripper is moving.
83587031		ElectricGripper1:Execution failed	3	Failed to execute an electric gripper motion command.	Confirm that no other command is running while electric gripper is moving.
83587032		ElectricGripper2:Execution failed	3	Failed to execute an electric gripper motion command.	Confirm that no other command is running while electric gripper is moving.
83587033		ElectricGripper3:Execution failed	3	Failed to execute an electric gripper motion command.	Confirm that no other command is running while electric gripper is moving.
83587034		ElectricGripper4:Execution failed	3	Failed to execute an electric gripper motion command.	Confirm that no other command is running while electric gripper is moving.
83587035		ElectricGripper5:Execution failed	3	Failed to execute an electric gripper motion command.	Confirm that no other command is running while electric gripper is moving.
83587036		ElectricGripper6:Execution failed	3	Failed to execute an electric gripper motion command.	Confirm that no other command is running while electric gripper is moving.
83587037		ElectricGripper7:Execution failed	3	Failed to execute an electric gripper motion command.	Confirm that no other command is running while electric gripper is moving.
83587040		ElectricGripper0:Failed to get variable	3	Failed to get electric gripper variables.	Reboot the robot controller, and try again. If the error still occurs,please contact DENSO WAVE service.
83587041		ElectricGripper1:Failed to get variable	3	Failed to get electric gripper variables.	Reboot the robot controller, and try again. If the error still occurs,please contact DENSO WAVE service.
83587042		ElectricGripper2:Failed to get variable	3	Failed to get electric gripper variables.	Reboot the robot controller, and try again. If the error still occurs,please contact DENSO WAVE service.
83587043		ElectricGripper3:Failed to get variable	3	Failed to get electric gripper variables.	Reboot the robot controller, and try again. If the error still occurs,please contact DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
83587044		ElectricGripper4:Failed to get variable	3	Failed to get electric gripper variables.	Reboot the robot controller, and try again. If the error still occurs,please contact DENSO WAVE service.
83587045		ElectricGripper5:Failed to get variable	3	Failed to get electric gripper variables.	Reboot the robot controller, and try again. If the error still occurs,please contact DENSO WAVE service.
83587046		ElectricGripper6:Failed to get variable	3	Failed to get electric gripper variables.	Reboot the robot controller, and try again. If the error still occurs,please contact DENSO WAVE service.
83587047		ElectricGripper7:Failed to get variable	3	Failed to get electric gripper variables.	Reboot the robot controller, and try again. If the error still occurs,please contact DENSO WAVE service.
83587050		ElectricGripper0:Failed to set variable	3	Failed to set electric gripper variables.	Reboot the robot controller, and try again. If the error still occurs, please contact DENSO WAVE service.
83587051		ElectricGripper1:Failed to set variable	3	Failed to set electric gripper variables.	Reboot the robot controller, and try again. If the error still occurs, please contact DENSO WAVE service.
83587052		ElectricGripper2:Failed to set variable	3	Failed to set electric gripper variables.	Reboot the robot controller, and try again. If the error still occurs, please contact DENSO WAVE service.
83587053		ElectricGripper3:Failed to set variable	3	Failed to set electric gripper variables.	Reboot the robot controller, and try again. If the error still occurs, please contact DENSO WAVE service.
83587054		ElectricGripper4:Failed to set variable	3	Failed to set electric gripper variables.	Reboot the robot controller, and try again. If the error still occurs, please contact DENSO WAVE service.
83587055		ElectricGripper5:Failed to set variable	3	Failed to set electric gripper variables.	Reboot the robot controller, and try again. If the error still occurs, please contact DENSO WAVE service.
83587056		ElectricGripper6:Failed to set variable	3	Failed to set electric gripper variables.	Reboot the robot controller, and try again. If the error still occurs, please contact DENSO WAVE service.
83587057		ElectricGripper7:Failed to set variable	3	Failed to set electric gripper variables.	Reboot the robot controller, and try again. If the error still occurs, please contact DENSO WAVE service.
83587060		ElectricGripper0:Failed to initialize parameter	3	Failed to initialize the electric gripper parameter.	Set the electric gripper parameter
83587061		ElectricGripper1:Failed to initialize parameter	3	Failed to initialize the electric gripper parameter.	Set the electric gripper parameter
83587062		ElectricGripper2:Failed to initialize parameter	3	Failed to initialize the electric gripper parameter.	Set the electric gripper parameter
83587063		ElectricGripper3:Failed to initialize parameter	3	Failed to initialize the electric gripper parameter.	Set the electric gripper parameter
83587064		ElectricGripper4:Failed to initialize parameter	3	Failed to initialize the electric gripper parameter.	Set the electric gripper parameter
83587065		ElectricGripper5:Failed to initialize parameter	3	Failed to initialize the electric gripper parameter.	Set the electric gripper parameter

Code	RC7 Code	Message	Level	Description	Remedy
83587066		ElectricGripper6:Failed to initialize parameter	3	Failed to initialize the electric gripper parameter.	Set the electric gripper parameter
83587067		ElectricGripper7:Failed to initialize parameter	3	Failed to initialize the electric gripper parameter.	Set the electric gripper parameter
81587070		ElectricGripper0:Grip failure	1	Grip motion was executed but the gripper arrived at the destination position with no object gripped.	Please check the following items. 1. Check that the workpiece is placed within the gripping-available range. 2. Check that the gripper can hold a workpiece at the gripper destination position.
81587071		ElectricGripper1:Grip failure	1	Grip motion was executed but the gripper arrived at the destination position with no object gripped.	Please check the following items. 1. Check that the workpiece is placed within the gripping-available range. 2. Check that the gripper can hold a workpiece at the gripper destination position.
81587072		ElectricGripper2:Grip failure	1	Grip motion was executed but the gripper arrived at the destination position with no object gripped.	Please check the following items. 1. Check that the workpiece is placed within the gripping-available range. 2. Check that the gripper can hold a workpiece at the gripper destination position.
81587073		ElectricGripper3:Grip failure	1	Grip motion was executed but the gripper arrived at the destination position with no object gripped.	Please check the following items. 1. Check that the workpiece is placed within the gripping-available range. 2. Check that the gripper can hold a workpiece at the gripper destination position.
81587074		ElectricGripper4:Grip failure	1	Grip motion was executed but the gripper arrived at the destination position with no object gripped.	Please check the following items. 1. Check that the workpiece is placed within the gripping-available range. 2. Check that the gripper can hold a workpiece at the gripper destination position.
81587075		ElectricGripper5:Grip failure	1	Grip motion was executed but the gripper arrived at the destination position with no object gripped.	Please check the following items. 1. Check that the workpiece is placed within the gripping-available range. 2. Check that the gripper can hold a workpiece at the gripper destination position.

Code	RC7 Code	Message	Level	Description	Remedy
81587076		ElectricGripper6:Grip failure	1	Grip motion was executed but the gripper arrived at the destination position with no object gripped.	Please check the following items. 1. Check that the workpiece is placed within the gripping-available range. 2. Check that the gripper can hold a workpiece at the gripper destination position.
81587077		ElectricGripper7:Grip failure	1	Grip motion was executed but the gripper arrived at the destination position with no object gripped.	Please check the following items. 1. Check that the workpiece is placed within the gripping-available range. 2. Check that the gripper can hold a workpiece at the gripper destination position.
83587080		ElectricGripper0:Invalid point data	3	Invalid motion mode was specified in electric gripper point data.	Revise the destination point data value.
83587081		ElectricGripper1:Invalid point data	3	Invalid motion mode was specified in electric gripper point data.	Revise the destination point data value.
83587082		ElectricGripper2:Invalid point data	3	Invalid motion mode was specified in electric gripper point data.	Revise the destination point data value.
83587083		ElectricGripper3:Invalid point data	3	Invalid motion mode was specified in electric gripper point data.	Revise the destination point data value.
83587084		ElectricGripper4:Invalid point data	3	Invalid motion mode was specified in electric gripper point data.	Revise the destination point data value.
83587085		ElectricGripper5:Invalid point data	3	Invalid motion mode was specified in electric gripper point data.	Revise the destination point data value.
83587086		ElectricGripper6:Invalid point data	3	Invalid motion mode was specified in electric gripper point data.	Revise the destination point data value.
83587087		ElectricGripper7:Invalid point data	3	Invalid motion mode was specified in electric gripper point data.	Revise the destination point data value.
83587090		ElectricGripper0:Invalid parameter	3	Command parameter is out of range.	Revise the input parameter.
83587091		ElectricGripper1:Invalid parameter	3	Command parameter is out of range.	Revise the input parameter.
83587092		ElectricGripper2:Invalid parameter	3	Command parameter is out of range.	Revise the input parameter.
83587093		ElectricGripper3:Invalid parameter	3	Command parameter is out of range.	Revise the input parameter.
83587094		ElectricGripper4:Invalid parameter	3	Command parameter is out of range.	Revise the input parameter.
83587095		ElectricGripper5:Invalid parameter	3	Command parameter is out of range.	Revise the input parameter.
83587096		ElectricGripper6:Invalid parameter	3	Command parameter is out of range.	Revise the input parameter.
83587097		ElectricGripper7:Invalid parameter	3	Command parameter is out of range.	Revise the input parameter.

Code	RC7 Code	Message	Level	Description	Remedy
835870A0		ElectricGripper0:Board ID overlap	3	Failed to identify the electric gripper control board, because board-ID overlap.	Failed to identify the enabled electric gripper board because two or more board ID exist. Please check the setting of board ID.
835870A1		ElectricGripper1:Board ID overlap	3	Failed to identify the electric gripper control board, because board-ID overlap.	Failed to identify the enabled electric gripper board because two or more board ID exist. Please check the setting of board ID.
835870A2		ElectricGripper2:Board ID overlap	3	Failed to identify the electric gripper control board, because board-ID overlap.	Failed to identify the enabled electric gripper board because two or more board ID exist. Please check the setting of board ID.
835870A3		ElectricGripper3:Board ID overlap	3	Failed to identify the electric gripper control board, because board-ID overlap.	Failed to identify the enabled electric gripper board because two or more board ID exist. Please check the setting of board ID.
835870A4		ElectricGripper4:Board ID overlap	3	Failed to identify the electric gripper control board, because board-ID overlap.	Failed to identify the enabled electric gripper board because two or more board ID exist. Please check the setting of board ID.
835870A5		ElectricGripper5:Board ID overlap	3	Failed to identify the electric gripper control board, because board-ID overlap.	Failed to identify the enabled electric gripper board because two or more board ID exist. Please check the setting of board ID.
835870A6		ElectricGripper6:Board ID overlap	3	Failed to identify the electric gripper control board, because board-ID overlap.	Failed to identify the enabled electric gripper board because two or more board ID exist. Please check the setting of board ID.
835870A7		ElectricGripper7:Board ID overlap	3	Failed to identify the electric gripper control board, because board-ID overlap.	Failed to identify the enabled electric gripper board because two or more board ID exist. Please check the setting of board ID.
835870B0		ElectricGripper0:Board ID mismatch	3	Failed to identify the electric gripper control board, because board-ID does not match.	Failed to identify the enabled electric gripper board because the board ID does not match. Please check the setting of board ID.
835870B1		ElectricGripper1:Board ID mismatch	3	Failed to identify the electric gripper control board, because board-ID does not match.	Failed to identify the enabled electric gripper board because the board ID does not match. Please check the setting of board ID.
835870B2		ElectricGripper2:Board ID mismatch	3	Failed to identify the electric gripper control board, because board-ID does not match.	Failed to identify the enabled electric gripper board because the board ID does not match. Please check the setting of board ID.
835870B3		ElectricGripper3:Board ID mismatch	3	Failed to identify the electric gripper control board, because board-ID does not match.	Failed to identify the enabled electric gripper board because the board ID does not match. Please check the setting of board ID.

Code	RC7 Code	Message	Level	Description	Remedy
835870B4		ElectricGripper4:Board ID mismatch	3	Failed to identify the electric gripper control board, because board-ID does not match.	Failed to identify the enabled electric gripper board because the board ID does not match. Please check the setting of board ID.
835870B5		ElectricGripper5:Board ID mismatch	3	Failed to identify the electric gripper control board, because board-ID does not match.	Failed to identify the enabled electric gripper board because the board ID does not match. Please check the setting of board ID.
835870B6		ElectricGripper6:Board ID mismatch	3	Failed to identify the electric gripper control board, because board-ID does not match.	Failed to identify the enabled electric gripper board because the board ID does not match. Please check the setting of board ID.
835870B7		ElectricGripper7:Board ID mismatch	3	Failed to identify the electric gripper control board, because board-ID does not match.	Failed to identify the enabled electric gripper board because the board ID does not match. Please check the setting of board ID.
835870C0		ElectricGripper0:Failed to retrieve the error number.	3	Electric gripper-related error occurred, but failed to retrieve the error number.	Reboot the robot controller, and try again. If the error still occurs,please contact DENSO WAVE service.
835870C1		ElectricGripper1:Failed to retrieve the error number.	3	Electric gripper-related error occurred, but failed to retrieve the error number.	Reboot the robot controller, and try again. If the error still occurs,please contact DENSO WAVE service.
835870C2		ElectricGripper2:Failed to retrieve the error number.	3	Electric gripper-related error occurred, but failed to retrieve the error number.	Reboot the robot controller, and try again. If the error still occurs,please contact DENSO WAVE service.
835870C3		ElectricGripper3:Failed to retrieve the error number.	3	Electric gripper-related error occurred, but failed to retrieve the error number.	Reboot the robot controller, and try again. If the error still occurs,please contact DENSO WAVE service.
835870C4		ElectricGripper4:Failed to retrieve the error number.	3	Electric gripper-related error occurred, but failed to retrieve the error number.	Reboot the robot controller, and try again. If the error still occurs,please contact DENSO WAVE service.
835870C5		ElectricGripper5:Failed to retrieve the error number.	3	Electric gripper-related error occurred, but failed to retrieve the error number.	Reboot the robot controller, and try again. If the error still occurs,please contact DENSO WAVE service.
835870C6		ElectricGripper6:Failed to retrieve the error number.	3	Electric gripper-related error occurred, but failed to retrieve the error number.	Reboot the robot controller, and try again. If the error still occurs,please contact DENSO WAVE service.
835870C7		ElectricGripper7:Failed to retrieve the error number.	3	Electric gripper-related error occurred, but failed to retrieve the error number.	Reboot the robot controller, and try again. If the error still occurs,please contact DENSO WAVE service.
835870D0		ElectricGripper0:Failed to retrieve the commnd number.	3	Electric gripper-related command was executed, but failed to retrieve the command number.	Reboot the robot controller, and try again. If the error still occurs, please contact DENSO WAVE service.
835870D1		ElectricGripper1:Failed to retrieve the commnd number.	3	Electric gripper-related command was executed, but failed to retrieve the command number.	Reboot the robot controller, and try again. If the error still occurs, please contact DENSO WAVE service.
835870D2		ElectricGripper2:Failed to retrieve the commnd number.	3	Electric gripper-related command was executed, but failed to retrieve the command number.	Reboot the robot controller, and try again. If the error still occurs, please contact DENSO WAVE service.
835870D3		ElectricGripper3:Failed to retrieve the commnd number.	3	Electric gripper-related command was executed, but failed to retrieve the command number.	Reboot the robot controller, and try again. If the error still occurs, please contact DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
835870D4		ElectricGripper4:Failed to retrieve the commnd number.	3	Electric gripper-related command was executed, but failed to retrieve the command number.	Reboot the robot controller, and try again. If the error still occurs, please contact DENSO WAVE service.
835870D5		ElectricGripper5:Failed to retrieve the commnd number.	3	Electric gripper-related command was executed, but failed to retrieve the command number.	Reboot the robot controller, and try again. If the error still occurs, please contact DENSO WAVE service.
835870D6		ElectricGripper6:Failed to retrieve the commnd number.	3	Electric gripper-related command was executed, but failed to retrieve the command number.	Reboot the robot controller, and try again. If the error still occurs, please contact DENSO WAVE service.
835870D7		ElectricGripper7:Failed to retrieve the commnd number.	3	Electric gripper-related command was executed, but failed to retrieve the command number.	Reboot the robot controller, and try again. If the error still occurs, please contact DENSO WAVE service.
83587100		ElectricGripper:No license	3	No lisence.	Please register a license, when it already has a license. Please contact DENSO WAVE service, if you do not have a license.
83587101		ElectricGripper:No license	3	No lisence.	Please register a license, when it already has a license. Please contact DENSO WAVE service, if you do not have a license.
83587102		ElectricGripper:No license	3	No lisence.	Please register a license, when it already has a license. Please contact DENSO WAVE service, if you do not have a license.
83587103		ElectricGripper:No license	3	No lisence.	Please register a license, when it already has a license. Please contact DENSO WAVE service, if you do not have a license.
83587104		ElectricGripper:No license	3	No lisence.	Please register a license, when it already has a license. Please contact DENSO WAVE service, if you do not have a license.
83587105		ElectricGripper:No license	3	No lisence.	Please register a license, when it already has a license. Please contact DENSO WAVE service, if you do not have a license.
83587106		ElectricGripper:No license	3	No lisence.	Please register a license, when it already has a license. Please contact DENSO WAVE service, if you do not have a license.

Code	RC7 Code	Message	Level	Description	Remedy
83587107		ElectricGripper:No license	3	No lisence.	Please register a license, when it already has a license. Please contact DENSO WAVE service, if you do not have a license.
83589000		EMU:Argument is incorrect	3	The specified argument is not correct.	Revise the number or the type of argument to meet with the specification.
81589001		EMU:Failed to get variable	1	Failed to get variable.	Specify the model corresponding to the variable.
81589002		EMU:Failed to set variable	1	Failed to set variable.	Specify the model corresponding to the variable.
81589003		EMU:Internal error	1	Unexpected EMU internal error occurred.	Retry the command. If an error occurs again, restart EMU.
81589004		EMU:Model is moving	1	Motion command was issued during Model movement.	Motion command cannot be executed while Model is moving. Execute the motion command when Model is not moving, by waiting until Status (Model moving flag) turns end.
8358A000		No license.	3	No lisence.	Register the license if you have it. If not, contact us.
8358A001		Disable function.	3	Disable function.	Please enable function and reboot.
8358A002		Initialization error.	3	Initialization error.	Revise the parameters to meet with the specification.
8358A003		Disable device address0	3	Disable device address0	Please enable device address0 and reboot.
8358A004		Disable device address1	3	Disable device address1	Please enable device address1 and reboot.
8358A005		Disable device address2	3	Disable device address2	Please enable device address2 and reboot.
8358A006		Disable device address3	3	Disable device address3	Please enable device address3 and reboot.
8358A007		Disable device address4	3	Disable device address4	Please enable device address4 and reboot.
8358A008		Disable device address5	3	Disable device address5	Please enable device address5 and reboot.
8358A009		Disable device address6	3	Disable device address6	Please enable device address6 and reboot.
8358A00A		Disable device address7	3	Disable device address7	Please enable device address7 and reboot.
8358A00B		Disable device address8	3	Disable device address8	Please enable device address8 and reboot.
8358A00C		Disable device address9	3	Disable device address9	Please enable device address9 and reboot.
8358A00D		Disable device address10	3	Disable device address10	Please enable device address10 and reboot.
8358A00E		Disable device address11	3	Disable device address11	Please enable device address11 and reboot.
8358A00F		Disable device address12	3	Disable device address12	Please enable device address12 and reboot.
8358A010		Disable device address13	3	Disable device address13	Please enable device address13 and reboot.
8358A011		Disable device address14	3	Disable device address14	Please enable device address14 and reboot.
8358A012		Disable device address15	3	Disable device address15	Please enable device address15 and reboot.

Code	RC7 Code	Message	Level	Description	Remedy
8358A013		Argument error.	3	Argument handed to a command is invalid or out of available range.	Argument handed to a command is invalid or out of available range.
8358A014		Status error.	3	A function is invoked by abnormal state. If the protocol has not been opened normally, this return code will be returned by all functions.	A function is invoked by abnormal state. If the protocol has not been opened normally, this return code will be returned by all functions.
8358A015		Invalid server device address.	3	Address 0 is used by a function that does not support broadcasting.	Address 0 is used by a function that does not support broadcasting.
8358A016		Port open error or socket open error.	3	Failed to open TCP/IP socket or serial port. If the error is serial port open error, the specified serial port may not exist in the system.	Failed to open TCP/IP socket or serial port. If the error is serial port open error, the specified serial port may not exist in the system.
8358A017		Serial port has already opened.	3	A serial port designated for open operation has already been taken by other application.	A serial port designated for open operation has already been taken by other application.
8358A018		TCP/IP connection error.	3	Failed to establish TCP/IP connection. This error occurs when a host exists on the network or on IP address, or the name of host is incorrect. Remote host needs to listen appropriate port number.	Failed to establish TCP/IP connection. This error occurs when a host exists on the network or on IP address, or the name of host is incorrect. Remote host needs to listen appropriate port number.
8358A019		Remote pier closed the TCP/IP connection.	3	This error notifies that TCP/IP connection was closed or damaged by a remote pier.	This error notifies that TCP/IP connection was closed or damaged by a remote pier.
8358A01A		Socket library error.	3	Failed to load TCP/IP socket library (such as WINSOCK). DLL may not be found or may not be installed.	Failed to load TCP/IP socket library (such as WINSOCK). DLL may not be found or may not be installed.
8358A01B		TCP port has already been bound.	3	This error notifies that the specified TCP port cannot be bound. A port may already been occupied by other application or may not been released by TCP/IP stack for reuse.	This error notifies that the specified TCP port cannot be bound. A port may already been occupied by other application or may not been released by TCP/IP stack for reuse.
8358A01C		Failed to listen.	3	Failed to listen the specified TCP port.	Failed to listen the specified TCP port.
8358A01D		File descriptor exceeds the available range.	3	File descriptor exceeds the maximum limit.	File descriptor exceeds the maximum limit.
8358A01E		There is no permission to access the serial port or TCP port.	3	For a serial port error, change the access permission. If a TCP/IP port error occurrs, the specified TCP port number is out of the IPPORT_RESERVED range.	For a serial port error, change the access permission. If a TCP/IP port error occurrs, the specified TCP port number is out of the IPPORT_RESERVED range.
8358A01F		TCP port is not available.	3	The specified TCP port is not available in this operation environment.	The specified TCP port is not available in this operation environment.

Code	RC7 Code	Message	Level	Description	Remedy
8358A020		Serial line is busy.	3	Serial line receives any noise or other signals although it should not have any traffic.	Serial line receives any noise or other signals although it should not have any traffic.
8358A021		Checksum error.	3	Checksum of received frame is invalid.	Checksum of received frame is invalid.
8358A022		Invalid frame error.	3	The received frame does not correspond to any structure or content in communication protocol or does not match with the frame of query that has been sent before.	The received frame does not correspond to any structure or content in communication protocol or does not match with the frame of query that has been sent before.
8358A023		Invalid reply error.	3	The received reply frame does not correspond to the communication protocol.	The received reply frame does not correspond to the communication protocol.
8358A024		Timeout error.	3	This error may occur when a server device does not respond within the predetermined time or does not respond completely. Incorrect server device address may cause this error.	This error may occur when a server device does not respond within the predetermined time or does not respond completely. Incorrect server device address may cause this error.
8358A025		Send timeout error.	3	This error notifies that the data transmission has been time-out. This error may occur when the handshake line is not configured properly.	This error notifies that the data transmission has been time-out. This error may occur when the handshake line is not configured properly.
8358A026		Invalid identifier.	3	Protocol or transaction identifier is invalid. TCP server device needs to return the identifier received from TCP client.	Protocol or transaction identifier is invalid. TCP server device needs to return the identifier received from TCP client.
8358A027		This error notifies that a Modbus exception response message has been received.	3	This error notifies that a Modbus exception response message has been received.	This error notifies that a Modbus exception response message has been received.
8358A028		This error notifies that an exception response (code 01)	3	This error notifies that an exception response (code 01) of Modbus invalid function has been received.	This error notifies that an exception response (code 01) of Modbus invalid function has been received.
8358A029		This error notifies that an exception response (code 02)	3	This error notifies that an exception response (code 02) of Modbus invalid data address has been received.	This error notifies that an exception response (code 02) of Modbus invalid data address has been received.
8358A02A		This error notifies that an exception response (code 03)	3	This error notifies that an exception response (code 03) of Modbus invalid value is received.	This error notifies that an exception response (code 03) of Modbus invalid value is received.
8358A02B		This error notifies that an exception response (code 04)	3	This error notifies that an exception response (code 04) of Modbus slave failure has been received.	This error notifies that an exception response (code 04) of Modbus slave failure has been received.
8358A02C		Selected device model is not supported.	3	Selected device model is not supported.	Selected device model is not supported.

Code	RC7 Code	Message	Level	Description	Remedy
8358B000		Disable K3 hand.	3	Disable K3 hand.	Please set Hand Type parameter to K3 Hand and reboot.
8358B001		Initialization error.	3	Initialization error.	Revise the parameters to meet with the specification.
8158B002	200A	You cannot execute a command while the K3 hand motor power is ON	1	You cannot execute a command while the K3 hand motor power is ON	Turn OFF the K3 hand motor and then retry.
8158B003	2006	Turn ON the K3 hand motor to execute the command	1	Turn ON the K3 hand motor to execute the command	Turn ON the K3 hand motor and then retry.
8358B004		Failed to open the MDB for the K3 hand.	3	Failed to open the MDB for the K3 hand.	Try again. If the error recurs frequently, inspect or repair the controller.
8358B005		Failed to update of the K3 hand module.	3	Failed to update of the K3 hand module.	Send K3 hand module again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
8358B006		Timeout of K3 hand.	3	Not Complete K3 hand moving.	Please review the setting of the moving speed. Also, if you are calling an command of K3Hand from more than one program, be sure not to call the command of K3Hand simultaneously.
8358B007		The error occurred at the hand provider. Please refer to original number and manual of hand for details.	3	An error has occurred at the hand provider. The error code notified from the provider is described as the original number.	Refer to the manual prepared by the hand manufacturer and perform recovery procedure corresponding to the error code written in the original number.
8358B008		Invalid argument of K3 hand movement command.	3	Invalid argument of K3 hand movement command.	The argument of the K3 hand movement command is either an integer or a string only. Please refer to the manual for details.
8358B009		The format of the K3 hand argument is invalid.	3	The format of the string specified in the argument is incorrect.	Please make sure that the arguments have the correct format. Please refer to the manual for details.
8358B00A		It can not be performed with the external wiring configuration.	3	This operation can not be performed with the external wiring configuration.	In the external wiring configuration, you can not operate the hand from COBOTTA. Please operate the hand from the PC.
8358B00B		The connected hand is different from the setting.	3	It can not be executed because the connected hand is different from the set hand type.	Press [F6 Aux] button on the hand page to set the type of hand actually connected.
8358B00C		K3 hand is moving.	3	It can not be executed while the K3 hand is moving.	Review the program.
83500001	73EA	Syntax error	3	Error was found in syntax check.	Revise the program.
83500002	2003	Value is out of range	3	The argument value is out of range.	Change the program so that the argument value is selected from the available range.

Code	RC7 Code	Message	Level	Description	Remedy
83500003	77D1	Undefined arm group	3	Tried to use undefined arm group.	Set the arm group configuration for the specified arm group number.
82500004	21FC	Enable-auto signal turned OFF	2	Enable-auto signal turned OFF while the controller was in Auto mode.	Enable-auto signal must be ON to set the controller to Auto mode.
82500005	21FD	Enable-auto signal turned ON	2	Enable-auto signal turned ON while the controller is in Manual mode or Teach-check mode.	Enable-auto signal turns ON as soon as the operation mode switch of TP turns to AUTO.
81500006	27A8	Unable to Continue-start	1	You tried to execute Continue-start while it is not available.	Continue-start is available only when the continue-start enable signal is ON.
83500007	27A9	Continue-start failed	3	Continue-start failed because the program start or the program stop was executed during the continue-start execution.	Do not start or stop programs while the Continue-start is processing.
83500008	77B7	Motor-OFF command was executed while the robot is running	3	Motor-OFF command was executed while the robot is moving.	Do not execute Motor-OFF command while the robot is moving.
83500009		*** NO LICENSE ***	3	License has not been registered. Prepare the license.	Please register the license with the following application. Path: DENSO ROBOTICS ¥ VRC ¥ Tools ¥ VRCLicenseTool ¥ Bin ¥ VRCLicenseTool.exe Start menu: VRC ¥ VRC License Tool
8250000A	64F9	More than one motor is connected	2	Encoder setting is impossible because more than one motors (encoders) are connected.	Set the encoder with only one motor being connected.
8250000B		Motor isn't connected	2	Encoder setting is impossible because no motor (encoder) is connected.	Setup the encoder with a motor being connected.
8350000C	2187	Communication error with Teach-pendant	3	Communication between the teach pendant and the controller failed. The following causes are likely. 1. Teach pendant cable is damaged, short-circuitted, or the contact failure. 2. Teach pendant failure.	Check the following items first. Connect the teach pendant, and then reboot the controller. If the problem still occurs, contact to DENSO WAVE service. 1. The pendant cable isn't damaged or short-circuited, and properly connected to the teach pendant. 2. Teach pendant isn't damaged.
8050000D	2103	Time to replace the robot controller battery	0	Periodical controller battery replacement time has come.	Replace the controller battery, and then set the next replacement date.
8050000E	24A0	Time to check the robot	0	Periodical encoder backup battery replacement time has come.	Replace the encoder backup battery
8350000F	77F7	This operation is not available to TSR.	3	This operation is not available to TSR.	Do not execute this operation to TSR.

Code	RC7 Code	Message	Level	Description	Remedy
83500010		This operation is not available to Panel task.	3	This operation is not available to Panel task.	Do not execute this operation to Panel task.
83500011	77EB	This operation is not available to TSR.	3	This command is not available to TSR. TSR cannot execute robot motion commands.	Do not execute robot motion command in TSR.
83500012		This operation is not available to Panel task.	3	This command is not available to Panel task. Panel task cannot execute robot motion commands.	Do not execute robot motion command in Panel task.
81500013		Undefined function or sub	1	The function referred by CALL is not defined.	Revise the program. Check if the function called by CALL statement has been properly defined.
81500014		Mismatch arguments number	1	The number of arguments are inconsistent between the function definition and the function call.	Revise the program and match the number of arguments.
83500015		Program is running.	3	You cannot delete or change the file of running program.	Stop program and try again.
83500016		Exception occurred	3	Exception occurred in internal processing.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
83500017	738B	You cannot change this parameter	3	This parameter can't be changed from the program.	You cannot change the parameter specified by program. Revise the program.
81500018		Parameter is incorrect	1	Invalid parameter value	Send parameters from WINCAPSIII again.
80500019		Invalid line number to start	0	You cannot start program from the specified line.	Specify another line.
8350001A		Unexpected exception occurred	3	Exception occurred in the internal process.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
8150001B		Argument is incorrect	1	Incorrect argument is specified.	Revise program argument.
8150001C		Insufficient number of arguments.	1	The number of arguments specified is insufficient.	Revise program argument number.
8150001D		Too much number of arguments	1	The number of arguments specified is too much.	Revise program argument number.
8150001E		The first argument is incorrect	1	The first argument is incorrect	Revise the 1st program argument.
8150001F		The second argument is incorrect	1	The second argument is incorrect	Revise the 2nd program argument.
81500020		The third argument is incorrect	1	The third argument is incorrect	Revise the 3rd program argument.
81500021		The 4th argument is incorrect	1	The 4th argument is incorrect	Revise the 4th program argument.
81500022		The 5th argument is incorrect	1	The 5th argument is incorrect	Revise the 5th program argument.
81500023		The 6th argument is incorrect	1	The 6th argument is incorrect	Revise the 6th program argument.
81500024		The 7th argument is incorrect	1	The 7th argument is incorrect	Revise the 7th program argument.
81500025		The 8th argument is incorrect	1	The 8th argument is incorrect	Revise the 8th program argument.
81500026		The 9th argument is incorrect	1	The 9th argument is incorrect	Revise the 9th program argument.
81500027		The 10th argument is incorrect	1	The 10th argument is incorrect	Revise the 10th program argument.
81500028		Invalid IP address	1	The specified IP address is invalid.	Revise the IP address assignment.

Code	RC7 Code	Message	Level	Description	Remedy
81500029	2031	Failed to find a file.	1	File isn't found.	Revise the file assignment.
8350002A		Program checked as "use" has syntax error	3	A program where the [Use] has been checked at the controller start-up is automatically checked its syntax. Syntax error has been detected in the [Use]-checked program.	Correct the syntax error of the program, or remove the programs with syntax errors from the project by unchecking the "use".
8350002B	3A00	Over 100 errors. Syntax check is aborted.	3	Syntax check is aborted because there are more than 100 errors.	Correct the syntax error of the program, or remove the programs with syntax errors from the project by unchecking the "use".
8350002C		All programs have stopped.	3	All programs were Reset-stop because some tasks in the program were still running while the file was being changed or deleted.	Stop programs and then try again.
8350002D		All TSRs have stopped.	3	All TSRs have been stopped because a file was deleted or changed while TSR was running.	Stop TSR and then try again.
8350002E		Panel task has stopped.	3	Panel task has stopped because a task was deleted or changed while it was still running.	Stop panel task and then try again.
8350002F		This operation is not available to header files.	3	You tried to execute operations prohibited for header files.	Do not execute this operation on header files.
83500030	73C1	You cannot set break points anymore.	3	You tried to register more breakpoints than the maximum limit.	Remove unnecessary breakpoints, and then try again.
83500031		Exceeded the maximum registration number of programs	3	You tried to register more than the maximum number of programs.	Revise the program to reduce the number of registered programs.
83500032	73EE	Impossible to execute. (Exceeded the maximum number of tasks executable simultaneously)	3	The maximum number of programs that are executable simultaneously has been exceeded.	Revise the program in order to reduce the number of programs running simultaneously.
85500033		Backup data is abnormal	5	Failure occurred in the backup data.	Please contact to DENSO WAVE service.
83500034		Illegal pair of GoSub and Return	3	Illegal pair of GoSub and Return	Revise the program.
85500035		Error in initialization process	5	An error occurred in the controller power-on process.	If you can identify an error from the error log that has been issued before the controller power-on process error, remove the cause of the error and try again. If you cannot identify another error, contact to DENSO WAVE service.
81500036		Same file name exists.	1	You cannot operate it because a file or directory with the same name already exists.	Revise the file name or directory name.
83500037		Undefined error	3	Undefined error occurred.	Contact to DENSO WAVE service.
81500038		You cannot set any axis included in the robot axes.	1	You cannot set an axis included in the robot axes. This setting is available to extended-joint only.	Specify extended-joint

Code	RC7 Code	Message	Level	Description	Remedy
80500039		Failed to store the area position	0	Failed to store the area detection position to P type variable.	Revise the area setting and then change P type variable number, or increase P type variable number.
8050003A		This command is not available while program is running	0	You tried to execute a process that is not available while program is running.	Do not execute the process while program is running.
8150003B	3C37	Illegal file name	1	File or folder has illegal name that can't be handled by a program.	Revise the file name or folder name.
8350003C		A transfer file is not found.	3	A file you specified is not exist in the controller.	Revise the file receive process of the program.
8350003D		You cannot execute it because a dependent files have been changed.	3	You cannot execute it because a dependent file has been changed.	Check the syntax of the dependant program.
8350003E		The specified port cannot be used for Detect function.	3	The selected port cannot be used in Detect function.	Specify Mini I/O user input port or Hand I/O input port for Detect function. If the port is assigned to the dummy input, release the dummy input.
8350003F		Port has been DetectOn by other Program.	3	DetectON command in different program have already specified with the same port number and the same detection direction.	Revise the port number and the detection direction of the DetectOn command.
83500040		Specified variable exceeds the range of the global variables	3	Specified global variable number is out of range.	Increase global variable size, or revise the variable specification.
81500041		The length of the string exceeds 255 bytes.	1	You tried to enter more than 255 bytes. Data stored in the character string for global variable cannot exceed 255 bytes.	Revise the program to reduce the string size to 255 bytes or less.
83500042		Program have already obtained arm group.	3	The program already taken the arm group that is different from the specified one.	Release arm semaphore with Givearm command, and then take another arm group number.
80500043		Auto-Tuning has been interrupted.	0	Auto-tuning has been stopped because a stop process was executed.	Execute Auto-tuning again.
80500044		Invalid line number to start	0	Program cannot start from the specified line.	Specify another line number.
80500045		Reset the program.	0	Program has been reset because JUMP was executed to jump to a point outside of the current function while program was running.	The program will be executed from the first line when the program starts next time.
80500046		Syntax check was canceled	0	Syntax check was canceled.	Perform syntax check again.
80500047		The number of Motor-ON exceeded the threshold.	0	Motor has been turned on more than the predetermined times.	Please prepare to change motor.
80500048		Program attribute file error.	0	An error has been occurred on a file that manages program attributes.	Reboot the controller. Set the flags for Priority and Activate/Inactivate again because these attributes have been initialized.

Code	RC7 Code	Message	Level	Description	Remedy
85500049		No valid VRC instance	5	Invalid invocation of AddController.	Revise the connection parameter of AddController method.
8350004A		Check-sum error	3	A Check-sum error has been detected when reading data.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
8350004B	77E5	This axis is not activated.	3	This operation is not available to the inactivated axis.	Do not operate the inactivated axis. Activate the axis and then operate again.
8350004C		Axes are set overlapped	3	Link Info tried to set already used axis.	For Link Info setting, use axis that does not overlap with another link number.
8050004D		Breakpoints on the edited program were cleared.	0	Breakpoints were cleared because the program was edited.	Reset breakpoints if necessary.
8550004E		Although all-stop processing has been performed, some programs do not stop in a certain period of time.	5	Although all-stop processing was performed, some program did not stop within a specified period of time.	Reboot the controller.
8050004F		Duplicated COM Number	0	COM number is duplicated with other settings.	Select non-duplicated COM number.
83500050		Failed to transfer files.	3	Failed to read data from the recording medium.	Reboot the controller and try again.
83500051		Failed to transfer files.	3	Failed to read the transferrd data.	Reboot the controller and try again.
81500052	2261	Failed to write in the media	1	Failed to write into the recording medium.	Reboot the controller and try again.
81500053		Variable index is out of range	1	You tried to access a variable with an Index that exceeds the available range of variable.	Specify an Index within the variable range.
85500054		Encoder version is different.	5	Encoder version is not set properly.	Please contact to DENSO WAVE service.
80500055		Panel task was stopped.	0	Panel task has stopped because an error occurred in the task.	Close the Panel and open it again to restart the Panel task.
83500056		You cannot execute the command while the control log is being saved.	3	This operation is prohibited while the control log is being saved.	Try the operation again after the control log is saved.
83500057		You cannot execute the command while the servo log is being saved.	3	This operation is prohibited while the servo log is being saved.	Try the operation again after the servo log is saved.
85500058		Controller type is not match with the robot type.	5	Different type of robot was connected.	Please contact to DENSO WAVE service.
83500059		Panel Task cannot start.	3	An error occurred while starting Panel task.	Revise Panel task file.
8050005A		Panel Task is in the Stop-state.	0	Panel task stops.	Restart necessary Panel task.
8050005B		Failed to start the Panel Task.	0	An error occurred while starting Panel task.	Revise Panel task file.
8050005C		Direct Mode was cancelled	0	Direct mode was canceled.	Execute the direct mode again if you need to go on the direct mode

Code	RC7 Code	Message	Level	Description	Remedy
8350005D		This command is exclusive to the Panel Task.	3	This command is executable only in Panel tasks (*.pns)	Revise the program.
8350005E		This command is not available to Panel Task.	3	Run, Kill and Suspend are not available to Panel tasks (*.pns)	Revise the program.
8350005F		You cannot change this property.	3	You tried to change the property that cannot be changed from a program.	The property specified by the program cannot be changed. Revise the program.
83500060		CP motion (L,C, or S) can not be used for this robot type.	3	You cannot select CP motion (L,C, or S) for this robot type.	Revise the program.
83500061		TOOL mode cannot be used for this robot type.	3	You cannot select TOOL mode for this robot type.	Change the robot mode other than TOOL mode and manually move the robot.
83500062		X-Y mode cannot be used for this robot type.	3	You cannot select X-Y mode in Manual mode for this robot type.	Change the robot mode other than X-Y mode and manually move the robot.
83500063		For this robot type, you cannot use P-type variable to specify motion-related position.	3	For this robot type, you cannot use P-type variable to move a robot.	To move a robot , use other than P-type variable.
83500064		For this robot type, you cannot use T-type variable to specify motion-related position.	3	For this robot type, you cannot use T-type variable to move a robot.	To move a robot , use other than T-type variable.
85500065		A1 or A2 robot was connected. A1 or A2 robot can't be operated.	5	Robot needs to be converted. Please contact DENSO WAVE service for the conversion.	Once the robot is successfully converted, select "Setting" - "Login" and login the controller with "Specialist" level. Then select "F2:Arm" - "F12:Maintenance" -"F2:Encoder" - "F12: Robot Connection" process. If "Robot Connection" is executed without the robot conversion, the robot performance is limited.
83500066		Rotate, RotateH command can not be run in this robot type.	3	Rotate, RotateH command cannot be performed in this robot type.	Revise the program. Rewrite program without RotateE and RotateH.
81500067		You cannot execute a command while creating a project list.	1	You cannot execute a command while creating a project list.	Retry after a project list is created.
81500068		You cannot execute a command during USB project transfer [RC->USB].	1	You cannot execute a command during USB project transfer [RC->USB].	Retry after the project transfer[RC->USB]
81500069		You cannot execute a command during USB project transfer.[USB->RC]	1	You cannot execute a command during USB project transfer.[USB->RC]	Retry aftert he project transfer[USB->RC]

Code	RC7 Code	Message	Level	Description	Remedy
8150006A		You cannot execute a command while deleting the project list.	1	You cannot execute a command while deleting the project list.	Retry after the project is deleted.
8150006B		You cannot execute a command while program is edited.	1	You cannot execute a command while program is edited.	Retry after the program edit.
8150006C		Program cannot be transferred [USB->RC] because of the incompatibility between the programs.	1	Program cannot be transferred [USB->RC] because of the incompatibility between the programs.	Use a compatible project for transfer.
8150006D		A file is not found (FRAM.dat)	1	A file is not found (FRAM.dat)	Retry after creating a file (FRAM.dat).
8350006E		You cannot execute a command during establishing a robot connection.	3	This operation is not available during establishing a robot connection.	Retry after robot connection completed.
8150006F		Panel event calling timeout was detected.	1	Actual event hasn't called yet, although Panel operation was done long ago.	Specify and revise the event processing that has been delayed. Change the timeout setting of panel, if necessary
80500070		Panel event calling timeout was detected.. Event was canceled.	0	Actual event hasn't called yet, although Panel operation was done long ago.	Specify and revise the event processing that has been delayed. Change the timeout setting of panel, if necessary
80500071		Panel event calling timeout was detected. All events were cancelled.	0	Actual event hasn't called yet, although Panel operation was done long ago.	Specify and revise the event processing that has been delayed. Change the timeout setting of panel, if necessary
84500072		Project will be replaced at the time of next startup.	4	Project will be replaced at the time of next start-up.	Reboot the controller.
84500073		Execute CALSET	4	CALSET has not been performed.	Execute CALSET with a teach-pendant
84500074		CALSET values differ between a robot and a project.	4	CALSET values differ in a robot and a project.	Make sure that the correct robot is connected. If the correct robot is connected already, execute CALSET for the errored joint.
81500075		Unauthorized change of the robot type.	1	Unauthorized change of robot type.	Login as "Maintainer" with Teach-pendant, and then enable "Permission of changing the robot type" in the "Option" menu.
83500076		During the robot motion command execution, the stop processing was performed.	3	During robot motion command execution, the stop processing was performed.	Execute the robot motion command again.
81500077		You cannot execute a command during project transfer.	1	You cannot execute a command during project transfer.	Retry after project transfer.

Code	RC7 Code	Message	Level	Description	Remedy
83500078		Exception occurred	3	Exception occurred in internal process.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
83500079		PacScript takes arm semaphore	3	PacScript takes arm semaphore	While PacScript is taking the Arm Semaphore, the command cannot be executed. To execute a command, release the Arm Semaphore from PacScript.
8350007A		The specified directory does not exist.	3	The specified directory does not exist.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
8350007B		Create-New error	3	Failed to create a directory.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
8350007C		The file has already existed.	3	The file to be created already exists.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
8350007D		The specified file is not a directory.	3	The specified file is not a directory.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
8350007E		Failed to delete a file.	3	Failed to delete a file.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
8350007F		Failed to copy a file.	3	Failed to copy a file.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
83500080		Failed to move a file.	3	Failed to move a file.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
83500081		Failed to obtain the contents of the file.	3	Failed to obtain the contents of the file.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
83500082		Failed to change the contents of the file.	3	Failed to change the contents of the file.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
83500083		Failed to obtain CRC.	3	Failed to obtain CRC.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
83500084		Failed to obtain the date and time of the last update.	3	Failed to obtain the date and time of the last update.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
83500085		Failed to obtain WPJ file.	3	Failed to obtain WPJ file.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
83500086		Failed to obtain option string.	3	Failed to obtain option string.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
83500087		Failed to set DNS address.	3	Failed to set DNS address.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
83500088		Failed to obtain IP address.	3	Failed to obtain IP address.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
83500089		Failed to execute by shell.	3	Failed to execute by shell.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
8350008A		Failed to obtain IP address from CNF file.	3	Failed to obtain IP address from CNF file.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
8350008B		Failed to obtain information of cifX driver.	3	Failed to obtain information of cifX driver.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
8350008C		Failed to obtain cifX system device information.	3	Failed to obtain cifX system device information.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
8350008D		Failed to write in channel I/O.	3	Failed to write in channel I/O.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
8350008E		Failed to read from channel I/O.	3	Failed to read from channel I/O.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
8350008F		Failed to read the channel I/O sending data.	3	Failed to read the channel I/O sending data.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
83500090		Failed to obtain information for I/O list window.	3	Failed to obtain information for I/O list window.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
83500091		Failed to convert CONTEC device information.	3	Failed to convert CONTEC device information.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
83500092		Failed to obtain Usage/Macro information	3	Failed to obtain Usage/Macro information	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
83500093		Failed to initialize error log.	3	Failed to initialize error log.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
83500094		Failed to analyze option parameters.	3	Failed to analyze option parameters.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
83500095		Failed to obtain the size.	3	Failed to obtain the size.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
83500096		Failed to format sentences.	3	Failed to format sentences.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
83500097		Failed to encrypt a program.	3	Failed to encrypt a program.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
83500098		Failed to decrypt a program.	3	Failed to decrypt a program.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
83500099		Failed to create a file.	3	Failed to create a file.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
8350009A		Failed to obtain TP program list information.	3	Failed to obtain TP program list information.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
8350009B		Failed to initialize operation log.	3	Failed to initialize operation log.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
8350009C		Failed to transfer error log format.	3	Failed to transfer error log format.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
8350009D		Failed to issue the trajectory creation error.	3	Failed to issue the trajectory creation error.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
8350009E		Failed to execute slave MOVE.	3	Failed to execute slave MOVE.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
8350009F		The type of the added data is wrong.	3	The type of the added data is wrong.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
83500100		Failed to write in EEPROM.	3	Failed to write in EEPROM.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
83500101		Failed to add a robot.	3	Failed to add a robot.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
83500102		Failed to initialize the variable area.	3	Failed to initialize the variable area.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
83500103		Failed to resize.	3	Failed to resize.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
83500104		Failed to read FRAM.	3	Failed to read FRAM.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
80500105		Failed to initialize the embedded object.	0	Failed to initialize the embedded object.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
85500106		Failed to initialize variable area.	5	Failed to initialize variable area.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
80500107		The program has been dynamically compiled at the controller start-up.	0	This program is not specified as a compile target at the power-ON. The program has been dynamically compiled at the controller start-up.	If "Make On Boot" is not set for a program, the program is compiled when power-ON. Therefore, it will take longer for the controller boot-up. To enable the "Make On Boot" setting for a program at power-ON, with Teach pendant, from [F1:Program], check "Make On Boot Setting"of the program.
85500108		Controller setting does not match with the robot setting. (A1 or A2 robot was connected.)	5	A1 or A2 type of robot was connected.	Please contact to DENSO WAVE service.
81500109		Access has been denied.	1	Unauthorized access occurred.	Revise the access condition.
8050010A		All static variables in the task were initialized .	0	All static variables in the task have been initialized because static variables in the task were changed.	Check if the static variable initialization caused any effects on other tasks.

Code	RC7 Code	Message	Level	Description	Remedy
8150010B		DetectOn command is not set for the specified port or the specified detection direction.	1	You tried to execute DetectOff command with the port number or the detect direction that has not been specified with DetectOn command.	Check the specified port number or detect direction is same on both DetectOn and DetectOff.
8350010C		Motion stop process has been performed while robot motion comand from I/O is executed.	3	Motion stop process has been performed while robot motion comand from I/O is executed.	Execute the robot motion command again.
8350010D		I/O has released arm semaphore.	3	I/O has released arm semaphore	Retrieve arm semaphore.
8550010E		You cannot start this project because the version is old.	5	You cannot start this project because the version is old.	Please update the project.
8350010F		You cannot change WORK or TOOL while the robot is moving.	3	You tried to change WORK or TOOL while the robot is moving.	Stop program and retry.
83500110		You cannot change the internal speed while the robot is moving.	3	You tried to change the internal speed while the robot is moving.	Stop program and retry.
83500111		Inconsistent Extended-joint information.	3	Inconsistent Extended-joint information.	Recreate a project and try again.
83500112		Impossible to stop the specified task.	3	Task is still running.	Start task after stop by manual operation again.
83500113		Failed to get ID	3	Failed to get File ID	Reboot the controller. If error still occurs, please contact DENSO WAVE service.
83500114		Failed to set ID	3	Failed to set File ID	Reboot the controller. If error still occurs, please contact DENSO WAVE service.
83500115		Undefined error	3	Undefined error occurred.	Contact DENSO WAVE service.
83500116		Failed to issue an error	3	Failed to error occurs	Reboot the controller. If error still occurs, please contact DENSO WAVE service.
83500118		Failed to change the variable value	3	Failed to change the value	Reboot the controller. If error still occurs, please contact DENSO WAVE service.
83500119		Failed to obtain the date and time	3	Failed to obtain the date and time.	Reboot the controller. If error still occurs, please contact DENSO WAVE service.
83500120		Failed to output to the capture window.	3	Failed to the output the capture window.	Execute the robot motion command again.
83500121		SlvMove command was executed while the Slave mode was not selected.	3	SlvMove command was executed when Slave mode was not selected.	Switch to the Slave mode and then retry.
83500122		You cannot specify Speed option in ArchMove.	3	Speed option is not available in ArchMove.	Revise ArchMove in the program. Check that the speed-related motion option is not specified for ArchMove.

Code	RC7 Code	Message	Level	Description	Remedy
83500123		You cannot use the specified port for AngularTrigger function.	3	The specified port number is not available to AngularTrigger function.	Specify Mini I/O user output port or Hand I/O output port for Detect function.
83500124		Failed to add the license.	3	Failed to add the license.	Retry after revise the license key.
83500125		Failed to remove the license.	3	Failed to remove the license.	Retry after revise the license key.
83500126		License has not been registered.	3	License has not been registered.	Register a license.
83500127	2003	Value is out of range	3	The argument value is out of range.	Change the program so that argument value is selected from the available range.
83500128		You cannot use RC7 project.	3	You cannot use RC7 project.	Use RC8 project.
83500129		The database is read-only.	3	The database is read-only.	Change the database from read-only to writable.
8350012A		Instantaneous-stop has been executed during TrackStart execution.	3	Instantaneous-stop has been executed during TrackStart execution.	When TrackStart is running, if a Lv1 or Lv2 error process or instantaneous-stop process occurs, the program is Reset-stopped. Restart from the beginning of the program.
8350012B		The specified TrackStart has been already started.	3	The specified TrackStart has been already started.	Revise the program.
8350012C		TrackStart has not been executed.	3	TrackStart has not been executed.	Revise the program.
8150012D		Timeout period has passed.	1	Timeout period has passed.	Revise the process, and set the timeout duration longer if necessary.
8350012E		Processing has been Step-stopped during TrackStart execution.	3	Processing has been Step-stopped during TrackStart execution.	Restart the program from the top.
8350012F		Processing has been Step-started during TrackStart execution.	3	Processing has been Step-started during TrackStart execution.	Do not execute Step-start during TrackStart execution.
83500130		Stop-processing has been performed during TrackTargetPos execution,	3	Stop-processing has been performed during TrackTargetPos execution,	Execute the robot motion command again.
81500131		Same file name exists.	1	When a file name is “Pro***.x” (*** stands for a numerical sequence,x stands for extension such as pcs, pac, pns) format, the zeros at the head of the numerical sequence are ignored. For example, Pro001.pcs is regarded as identical with Pro1.pcs.	Change the file name.
81500132		Controller ID is the default value.	1	Controller ID is the default value.	Send BackupData from WINCAPS again.

Code	RC7 Code	Message	Level	Description	Remedy
81500133		Stop-processing has been executed during the provide running.	1	Execution has been canceled because stop-process occurs while a provider is running. (Emergency-stop, error occurrence, mode switching, Protective-stop, Enable-auto signal, etc.)	Restart the program.
81500134		Undefined arm group.	1	Undefined arm group was specified.	Specify an arm group number that have been defined.
83500135		Failed to take the extended-joint semaphore.	3	A task that does not have extended-joint semahore tried to execute extended-joint command.	Take extended-joint semaphore first, and then execute extended-joint-related command.
83500136		Conveyor is disabled.	3	The conveyor is disabled.	Enable conveyor.
81500137		Invalid conveyor calibration parameter.	1	Invalid conveyor calibration parameter. The following causes are likely. 1. Invalid encoder value of conveyor. 2. Invalid robots coordinates.	Revise encoder value of the conveyor, or revise robots coordinates.
81500138		Invalid vision calibration parameter.	1	Invalid vision calibration parameter. The following causes are likely. 1. Invalid visons coordinates. 2. Invalid robots coordinates.	Revise vision coordinates or revise robots coordinates.
83500139		Unregistered robot accessed work data.	3	Unregistered robot accessed work data.	Register a robot that is allowed to access Work data.
8350013A		Failed to get Work data.	3	Failed to get Work data. The following causes are likely. 1. Work data were cleared. 2. Work data were out of tracking area.	Revise the program, or revise tracking area.
8350013B		This command is not available for slave robots.	3	This command is not available for slave robots.	Revise the program.
8150013C		Invalid conveyor calibration parameter.	1	Invalid conveyor calibration parameter.	Confirm conveyor calibration parameter in the master controller.
8550013D		Maintenance data is abnormal.	5	Failure occurred in the maintenance data.	Reboot the controller.
8350013E		This command is not available during TrackStart execution.	3	This command is inavailable during TrackStart execution.	Revise the program.
8350013F		Failed to connect b-CAP.	3	b-CAP connection was failed. b-CAP communication setting might have a problem.	Revise b-CAP communication setting.
81500140		Force command timeout error	1	Timeout occurred during the force control condition standby.	Revise the force control standby conditions.

Code	RC7 Code	Message	Level	Description	Remedy
83500141		Synchronous semaphore generation error	3	Failed to generate the synchronous semaphore.	
81500142		CAO providor name is incorrect.	1	CAO access providor name is incorrect.	
81500143		Failed to obtain the computer name	1	Failed to obtain the computer name	
81500144		Specified variable type is not supported by VARIANT.	1	Specified variable type is not supported by VARIANT type.	
81500145		Corresponding object was not found.	1	Corresponding object was not found.	
81500146		This has been already registered in the collection.	1	This has been already registered in the collection.	
81500147		Failed to generate worker thread.	1	Failed to generate worker thread.	
81500148		Failed to access the remote CAO server	1	Failed to access the remote CAO server	
81500149		Failed to access the remote CAO provider.	1	Specified variable type is not supported by VARIANT type.	
8150014A		Impossible to write data.	1	You cannot write data.	
8150014B		Command is under execution.	1	A command is under execution.	
8150014C		The specified provider is not licensed.	1	The specified provider is not licensed.	
8150014D		Failed to preload CRD.	1	Failed to preload CRD.	
8150014E		Invalid CRD file.	1	Improper CRD file.	
8150014F		Invalid system name	1	Invalid system name	
81500150		Invalid system type name	1	Invalid system type name	
81500151		Timeout period has passed.	1	Timeout period has passed.	
81500152		No license.	1	No license.	
81500153		Connection has not been established.	1	Connection has not been established.	
81500154		Fatal error	1	Unexpected error occurred.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
81500155		Not implemented.	1	Unexpected operation was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
83500156		Insufficient memory	3	Currently used memory capacity in the controller exceeded the upper limit.	Take following actions. 1. Delete unnecessary tasks. 2. Reduce local variable number. 3. Reduce VM stack size setting, and then restart the task.
81500157		Invalid parameter.	1	Specified parameter is invalid.	Revise the value, type and range of the parameter, and change to the appropriate value.
81500158		Unsupported interface.	1	Specified parameter is invalid.	Revise the value, type and range of the parameter, and then change to the appropriate value.
81500159		Invalid pointer.	1	Unexpected operation was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
8150015A		Invalid handle.	1	Unexpected operation was executed.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
8350015B		Operation aborted.	3	Processing operation is forcibly aborted.	If error occurs, clear the error. Reboot the controller.
8150015C		The data necessary to complete this operation has not been available.	1	Failed to execute the process because the data preparation has not been completed.	Save the program and recreate the task. If the problem still occurs, reboot the controller.
8150015D		ForceWaitCondition cannot be called from multiple programs.	1	ForceWaitCondition cannot be called from multiple programs.	Modify the program so that ForceWaitCondition is not executed from multiple programs simultaneously.
8150015E		Failed to execute GenerateNonStopPath command.	1	Failed to execute GenerateNonStopPath command.	For the detailed information, please confirm the OriginalNumber.
8150015F		Impossible to update maintenance data	1	Failure occurred in the process of updating the maintenance data.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
83500160		Motor-ON processing timeout.	3	Motor-on timeout occurred in the waiting for completion.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
83500161		Motor-OFF processing timeout.	3	Motor-OFF timeout occurred in the waiting for completion.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
83500162	25E2	Communication error with PC (disconnection detected)	3	This error occurs if a communications delay occurrs between PC and the controller when a PC switches the robot controller to Debug mode.	Check whether the Ethernet cable is not damaged. Or connect the PC directly to the robot controller using a crossover cable, not via the network, and then try it again.
80500163		Failed to connect to the wiring check.	0	Error in the wiring check connection between PC and controller has occurred.	Complete other wiring check processing, and then try it again.
80500164		You cannot execute in debug mode	0	This operation is not allowed in Debug mode.	Cancel Debug mode and try it again.

Code	RC7 Code	Message	Level	Description	Remedy
83500165	25E1	Debug mode was released	3	Debug mode has been canceled. This error occurs when Debug mode of the controller is released.	Remove this error with the Teach-pendant, mini-pendant, or external equipment.
83500166		Panel task has stopped	3	Panel task has stopped when Debug mode of the controller was released.	Re-open the Panel task.
85500167		I/O setting error.	5	I/O Port Map and Allocation mismatch.	Set the I/O allocation mode in WINCAPSIII, and then send the project again.
83500168		You cannot use Time option in this command.	3	Command you executed with Time option is not allowed to specify Time option.	Delete Time option and then try again.
83500169		You cannot use Ex- or ExA-option in this command.	3	Command you executed with Ex- or ExA-option is not allowed to specify Ex- or ExA-option.	Delete Ex-option or ExA-option and then try again.
83500170		Command is not executable in the current version.	3	Command is not executable in the current version.	Contact to DENSO WAVE service.
80500171		Page change of Panel was cancelled.	0	You cannot change the page while the Panel is closed.	Close the Panel, and then retry the page change.
81500172		Selected joint cannot be reset.	1	Selected joint canot be reset.	Select different joint for resetting.
81500173		Command isn't executable in acquisition mode.	1	Command isn't executable in acquisition mode.	Switch to the judgment mode, and then try again.
83500174		Interference check of WINCAPSIII finished.	3	Interference check of WINCAPSIII finished.	Enable WINCAPSIII interference check function again. Please check the connection to the PC if there is no improvement.
83500175		WINCAPSIII detects inteference.	3	Interference has been detected in the interference check of WINCAPSIII	Check the interference points and then change the behavior to avoid interference.
83500176		Command-Slave turned to be Disabled.	3	Enable state of the command-slave has been released.	Check whether no error is occured, or whether Emergency-stop have not been entered. After confirmation, run the program from the top again.
81500177		This operation is not available while b-CAP Slave is enabled.	1	Operation that is prohibited in the b-CAP Slave function-enabled condition was executed.	Select "Setting" - "Login" and login the controller with "Maintainer" level, disable the b-CAP Slave function, and then try again.
83500178		You cannot execute this operation while Emergency-stop is ON	3	You tried to execute operation that is prohibited while the Emergency-stop is ON.	Turn OFF the Emergency-stop and then retry.
81500179		Transferred data is invalid.	1	Transferred data is invalid.	Revise the transferred data.

Code	RC7 Code	Message	Level	Description	Remedy
8550017A		Connection with the 1st robot was failed.	5	Connection with the 1st robot was failed.	Check the IP address of the slave controllers. Make sure that the IP address of all unused slave controllers are set to "0.0.0.0". After you confirm the IP addresses, reboot the slave controllers and the master controller again.
8550017B		Connection with the 2nd robot was failed.	5	Connection with the 2nd robot was failed.	Check the IP address of the slave controllers. Make sure that the IP address of all unused slave controllers are set to "0.0.0.0". After you confirm the IP addresses, reboot the slave controllers and the master controller again.
8550017C		Connection with the 3rd robot was failed.	5	Connection with the 3rd robot was failed.	Check the IP address of the slave controllers. Make sure that the IP address of all unused slave controllers are set to "0.0.0.0". After you confirm the IP addresses, reboot the slave controllers and the master controller again.
8550017D		The project of the 1st Robot is invalid.	5	The project of the 1st Robot is invalid.	Recreate the project and try again.
8550017E		The project of the 2nd Robot is invalid.	5	The project of the 2nd Robot is invalid.	Recreate the project and try again.
8550017F		The project of the 3rd Robot is invalid.	5	The project of the 3rd Robot is invalid.	Recreate the project and try again.
85500180		World coordinate is not licensed.	5	Since World coordinate is not licensed, you cannot use the Base number other than 0.	Register the license of World coordinate.
85500181		Cooperative control is not licensed.	5	Since the cooperative control is not licensed, you cannot use controllers as "master controller" and "slave controller".	Register the license of cooperative control, and then change the settings.
83500182		In cooperative control, you cannot use the ArchMove.	3	ArchMove is not available during Cooperative control operation.	Revise the program.
85500183		The master license of the Cooperative control is not registered.	5	Since the master license of cooperative control is not registered, you cannot use a controller as "master controller" .	Register the master license of cooperative control, and then change the settings.
85500184		The slave license of the Cooperative control is not registered.	5	Since the slave license of cooperative control is not registered, you cannot use a controller as "slave controller" .	Register the slave license of cooperative control, and then change the settings.
83500185		This command is not executable from PC to slave controllers.	3	You tried to execute a command that is not executable from PC to slave controllers.	Do not execute this command to the slave controller.

Code	RC7 Code	Message	Level	Description	Remedy
85500186		Data of the slave controller has been updated.	5	Data of the slave controller has been updated.	Reboot the slave controller and the master controller.
81500187		Robot number is invalid.	1	Robot number that you have specified is invalid.	Revise the program.
83500188		Failed to motor power ON.	3	Motor was turned ON in the Motor-ON prohibited condition.	Check if there is no errors, or whether if Emergency-stop is not input.
83500189		SyncTimeEnd was not executed.	3	SyncTimeEnd was not executed after the execution of SyncTimeStart .	Revise the program.
83500190		SyncMoveEnd was not executed.	3	SyncMoveEnd was not executed after the execution of SyncMoveStart.	Revise the program.
83500191		SyncTimeStart was not executed before SyncTimeEnd execution.	3	SyncTimeStart was not executed before SyncTimeEnd execution.	Revise the program.
83500192		SyncMoveStart was not executed befor SyncMoveEnd execution.	3	SyncMoveStart was not executed befor SyncMoveEnd execution.	Revise the program.
83500193		Failed to motor power ON.	3	An error with Lv3 or higher occurred or an Emergency stop input turned on when the motor power turned ON.	Check if there is no errors, or whether if Emergency-stop is not input.
83500194		Motor-ON processing timeout.	3	Motor-on timeout occurred while the waiting of Motor-ON completion.	Check the connection of safety signals between the master controller and the slave controller. RC8 Standard Specification - Check the connection of the contactor monitor output signal of master controller and the enable-auto input signal of slave controller. RC8A Safety Motion Specification or RC8A Standard Specification - Check connections of the STO monitor output signal of master controller and the external emergency stop input signal of slave controller, and the auto move mutual monitoring output signal of master controller and the enable-auto input signal of slave controller. RC8 Safety I/O Less Specification or RC8A Safety I/O Less Specification - Check the connection of the pendant emergency stop output singnal of master controller and the external emergency stop input signal of slave controller, and the short-circuit of the enable-auto input signal of slave controller.

Code	RC7 Code	Message	Level	Description	Remedy
85500195		Faild to initialize the 1st Robot on the Cooperative control.	5	Failed to synchronization with Robot1.	Check the setting of the slave controllerIP[Robot1].
85500196		Faild to initialize the 2nd Robot of Cooperative control.	5	Failed to synchronization with Robot2.	Check the setting of the slave controllerIP[Robot2].
85500197		Faild to initialize the 3rd Robot of Cooperative control.	5	Failed to synchronization with Robot3.	Check the setting of the slave controllerIP[Robot3].
85500198		Faild to initialize the Cooperative control.	5	Faild to initialize the Cooperative control.	Check the setting of the master controller.
83500199		Failed to save data to the slave controller.	3	Unable to save the data to the slave controller.	Check the connection of Ethernet between slave controller and the master controller. After confirmation, reboot the slave controller and the master controller.
8550019A		Teach pendant is connected to the slave controller.	5	Teach pendant is connected to the slave controller.	For the slave controllers, connect a pendant-less dummy connector.
8350019B		This command is not available for slave controllers.	3	This command is not available for slave controllers.	Revise the program.
8550019C		You cannot use DHCP for communication settings in the slave controller.	5	You cannot use DHCP for communication settings in the slave controller.	Use fixed IP address for the communication settings of the slave controller.
8350019D		The version of controller is different between master controller and slave controller.	3	The version of controller is different between the master controller and the slave controller.	Match the version of the master controller and the slave controller.
8550019E		The version of controller is different between master controller and slave controller(Robot1).	5	The version of controller is different between master controller and slave controller(Robot1).	Match the version of the master controller and the slave controller(Robot1).
8550019F		The version of controller is different between master controller and slave controller(Robot2).	5	The version of controller is different between master controller and slave controller(Robot2).	Match the version of the master controller and the slave controller(Robot2).
85500200		The version of controller is different between master controller and slave controller(Robot3).	5	The version of controller is different between master controller and slave controller(Robot3).	Match the version of the master controller and the slave controller(Robot3).

Code	RC7 Code	Message	Level	Description	Remedy
85500201		The version of controller is different between master controller and slave controller.	5	The version of controller is different between master controller and slave controller.	Match the version of the master controller and the slave controller.
85500202		Failed to read Robot1 data of the Cooperative control function.	5	Failed to read Robot1 data of the Cooperative control function.	Reboot the Master and Slave controllers. If the error still occurs, please contact to DENSO WAVE service.
85500203		Failed to read Robot2 data of the Cooperative control function.	5	Failed to read Robot2 data of the Cooperative control function.	Reboot the Master and Slave controllers. If the error still occurs, please contact to DENSO WAVE service.
85500204		Failed to read Robot3 data of the Cooperative control function.	5	Failed to read Robot3 data of the Cooperative control function.	Reboot the Master and Slave controllers. If the error still occurs, please contact to DENSO WAVE service.
85500205		Failed to receive Robot1 data of Cooperative control function.	5	Failed to receive Robot1 data of Cooperative control function.	Reboot the Master and Slave controllers. If the error still occurs, please contact to DENSO WAVE service.
85500206		Failed to receive Robot2 data of Cooperative control function.	5	Failed to receive Robot2 data of Cooperative control function.	Reboot the Master and Slave controllers. If the error still occurs, please contact to DENSO WAVE service.
85500207		Failed to receive Robot3 data of Cooperative control function.	5	Failed to receive Robot3 data of Cooperative control function.	Reboot the Master and Slave controllers. If the error still occurs, please contact to DENSO WAVE service.
85500208		Slave controlelr (Robot1) for the Cooperation control function is not configured as "Slave controller 1".	5	Slave controlelr (Robot1) for the Cooperation control function is not configured as "Slave controller 1".	With a teach pendant, from the Cooperation controller configuration, select Slave controller 1. After setting, please reboot the slave controller and the master controller.
85500209		Slave controlelr (Robot2) for the Cooperation control function is not configured as "Slave controller 2".	5	Slave controlelr (Robot2) for the Cooperation control function is not configured as "Slave controller 2".	With a teach pendant, from the Cooperation controller configuration, select Slave controller 2. After setting, please reboot the slave controller and the master controller.
8550020A		Slave controlelr (Robot3) for the Cooperation control function is not configured as "Slave controller 3".	5	Slave controlelr (Robot3) for the Cooperation control function is not configured as "Slave controller 3".	With a teach pendant, from the Cooperation controller configuration, select Slave controller 3. After setting, please reboot the slave controller and the master controller.
8550020B		Failed to connect to the master controller in Cooperative control function.	5	Failed to connect to the master controller in Cooperative control function.	Check the connection of Ethernet between slave controller and the master controller. After confirmation, reboot the slave controller and the master controller.
8550020C		Failed to register the master controller(Robot1) in Cooperative control function.	5	Failed to register the master controller(Robot1) in Cooperative control function.	Check the setting of the slave controllerIP[Robot1].

Code	RC7 Code	Message	Level	Description	Remedy
8550020D		Failed to register the master controller(Robot2) in Cooperative control function.	5	Failed to register the master controller(Robot2) in Cooperative control function.	Check the setting of the slave controllerIP[Robot2].
8550020E		Failed to register the master controller(Robot3) in Cooperative control function.	5	Failed to register the master controller(Robot3) in Cooperative control function.	Check the setting of the slave controllerIP[Robot3].
8150020F		Command is not executable during EasyBackup execution.	1	Command is not executable during EasyBackup execution.	Retry after EasyBackup.
83500210		IP Address of the expanded ethernet board is duplicated.	3	IP Address of the expanded ethernet board is duplicated. The setting of the expanded ethernet board was changed to DHCP.	Change the IP address so that it does not duplicated with the communication settings.
85500211		For Cooperative control function, slave controller's IP address is entered below the invalidated slave controller's IP address (0.0.0.0).	5	You cannot enter valid IP address after the invalidated slave controlelr's IP address (0.0.0.0) in Cooperative control function.	Modify the IP address settings so that valid slave controller's IP address is not entered below the invalid slave controller's IP addresss. Once you change the settings, reboot the slave and master controllers.
83500212		Robot number you specified in the motion command is not the robot number of the leader robot.	3	Robot number you specified in the motion command is not the robot number of the leader robot.	Revise the program.
83500213		Number of motion command is invalid.	3	Number of motion command is invalid.	Revise the program.
83500214		Robot number specified by Start command and End command are different.	3	Robot number specified by Start command and End command are different.	Revise the program.
83500215		Motion command that includes Robot number specified by Start command is not exist.	3	Motion command that includes Robot number specified by Start command is not exist.	Revise the program.
83500216		Incorrect license is entered.	3	Incorrect license is entered.	Check the license and then retry.
83500217		This license is time-limited. You cannot delete it.	3	This license is time-limited. You cannot delete it.	Check the license.
83500218		An error occurred by adding or deleting the license.	3	An error occurred by adding or deleting the license.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
85500219		Failed to initialize the Exclusive control.	5	Failed to initialize the Exclusive control.	Check the configuration of Exclusive control.

Code	RC7 Code	Message	Level	Description	Remedy
8550021A		Failed to initialize the Exclusive control for the controller of Exclusive control IP (0).	5	Failed to initialize the Exclusive control for the controller of Exclusive control IP (0).	Check the configuration of "Exclusive control IP(0)".
8550021B		Failed to initialize the Exclusive control for the controller of Exclusive control IP (1).	5	Failed to initialize the Exclusive control for the controller of Exclusive control IP (1).	Check the configuration of "Exclusive control IP(1)".
8550021C		Failed to initialize the Exclusive control for the controller of Exclusive control IP (2).	5	Failed to initialize the Exclusive control for the controller of Exclusive control IP (2).	Check the configuration of "Exclusive control IP(2)".
8550021D		Failed to initialize the Exclusive control for the controller of Exclusive control IP (3).	5	Failed to initialize the Exclusive control for the controller of Exclusive control IP (3).	Check the configuration of "Exclusive control IP(3)".
8550021E		Failed to initialize the Exclusive control for the controller of Exclusive control IP (4).	5	Failed to initialize the Exclusive control for the controller of Exclusive control IP (4).	Check the configuration of "Exclusive control IP(4)".
8550021F		Failed to initialize the Exclusive control for the controller of Exclusive control IP (5).	5	Failed to initialize the Exclusive control for the controller of Exclusive control IP (5).	Check the configuration of "Exclusive control IP(5)".
85500220		Failed to initialize the Exclusive control for the controller of Exclusive control IP (6).	5	Failed to initialize the Exclusive control for the controller of Exclusive control IP (6).	Check the configuration of "Exclusive control IP(6)".
85500221		Failed to initialize the Exclusive control for the controller of Exclusive control IP (7).	5	Failed to initialize the Exclusive control for the controller of Exclusive control IP (7).	Check the configuration of "Exclusive control IP(7)".
85500222		Failed to initialize the Exclusive control for the controller of Exclusive control IP (8).	5	Failed to initialize the Exclusive control for the controller of Exclusive control IP (8).	Check the configuration of "Exclusive control IP(8)".
85500223		Failed to initialize the Exclusive control for the controller of Exclusive control IP (9).	5	Failed to initialize the Exclusive control for the controller of Exclusive control IP (9).	Check the configuration of "Exclusive control IP(9)".
85500224		Failed to initialize the Exclusive control for the controller of Exclusive control IP (10).	5	Failed to initialize the Exclusive control for the controller of Exclusive control IP (10).	Check the configuration of "Exclusive control IP(10)".
85500225		Failed to initialize the Exclusive control for the controller of Exclusive control IP (11).	5	Failed to initialize the Exclusive control for the controller of Exclusive control IP (11).	Check the configuration of "Exclusive control IP(11)".

Code	RC7 Code	Message	Level	Description	Remedy
85500226		Failed to initialize the Exclusive control for the controller of Exclusive control IP (12).	5	Failed to initialize the Exclusive control for the controller of Exclusive control IP (12).	Check the configuration of "Exclusive control IP(12)".
85500227		Failed to initialize the Exclusive control for the controller of Exclusive control IP (13).	5	Failed to initialize the Exclusive control for the controller of Exclusive control IP (13).	Check the configuration of "Exclusive control IP(13)".
85500228		Failed to initialize the Exclusive control for the controller of Exclusive control IP (14).	5	Failed to initialize the Exclusive control for the controller of Exclusive control IP (14).	Check the configuration of "Exclusive control IP(14)".
85500229		Failed to initialize the Exclusive control for the controller of Exclusive control IP (15).	5	Failed to initialize the Exclusive control for the controller of Exclusive control IP (15).	Check the configuration of "Exclusive control IP(15)".
8550022A		The version of controller is different between the controller which set exclusive control .	5	The version of controller is different between the controller which set exclusive control .	Match the version of controller between controller which set exclusive control.
8550022B		The version of controller is different from the controller which set exclusive control IP(0).	5	The version of controller is different from the controller which set exclusive control IP(0).	Match the version of controller with the controller which set exclusive control IP(0).
8550022C		The version of controller is different from the controller which set exclusive control IP(1).	5	The version of controller is different from the controller which set exclusive control IP(1).	Match the version of controller with the controller which set exclusive control IP(1).
8550022D		The version of controller is different from the controller which set exclusive control IP(2).	5	The version of controller is different from the controller which set exclusive control IP(2).	Match the version of controller with the controller which set exclusive control IP(2).
8550022E		The version of controller is different from the controller which set exclusive control IP(3).	5	The version of controller is different from the controller which set exclusive control IP(3).	Match the version of controller with the controller which set exclusive control IP(3).
8550022F		The version of controller is different from the controller which set exclusive control IP(4).	5	The version of controller is different from the controller which set exclusive control IP(4).	Match the version of controller with the controller which set exclusive control IP(4).
85500230		The version of controller is different from the controller which set exclusive control IP(5).	5	The version of controller is different from the controller which set exclusive control IP(5).	Match the version of controller with the controller which set exclusive control IP(5).
85500231		The version of controller is different from the controller which set exclusive control IP(6).	5	The version of controller is different from the controller which set exclusive control IP(6).	Match the version of controller with the controller which set exclusive control IP(6).

Code	RC7 Code	Message	Level	Description	Remedy
85500232		The version of controller is different from the controller which set exclusive control IP(7).	5	The version of controller is different from the controller which set exclusive control IP(7).	Match the version of controller with the controller which set exclusive control IP(7).
85500233		The version of controller is different from the controller which set exclusive control IP(8).	5	The version of controller is different from the controller which set exclusive control IP(8).	Match the version of controller with the controller which set exclusive control IP(8).
85500234		The version of controller is different from the controller which set exclusive control IP(9).	5	The version of controller is different from the controller which set exclusive control IP(9).	Match the version of controller with the controller which set exclusive control IP(9).
85500235		The version of controller is different from the controller which set exclusive control IP(10).	5	The version of controller is different from the controller which set exclusive control IP(10).	Match the version of controller with the controller which set exclusive control IP(10).
85500236		The version of controller is different from the controller which set exclusive control IP(11).	5	The version of controller is different from the controller which set exclusive control IP(11).	Match the version of controller with the controller which set exclusive control IP(11).
85500237		The version of controller is different from the controller which set exclusive control IP(12).	5	The version of controller is different from the controller which set exclusive control IP(12).	Match the version of controller with the controller which set exclusive control IP(12).
85500238		The version of controller is different from the controller which set exclusive control IP(13).	5	The version of controller is different from the controller which set exclusive control IP(13).	Match the version of controller with the controller which set exclusive control IP(13).
85500239		The version of controller is different from the controller which set exclusive control IP(14).	5	The version of controller is different from the controller which set exclusive control IP(14).	Match the version of controller with the controller which set exclusive control IP(14).
8550023A		The version of controller is different from the controller which set exclusive control IP(15).	5	The version of controller is different from the controller which set exclusive control IP(15).	Match the version of controller with the controller which set exclusive control IP(15).
8550023B		Failed to register the controller that is set to Exclusive control IP(0).	5	Failed to register the controller that is set to Exclusive control IP(0).	Check the configuration of "Exclusive control IP(0)".

Code	RC7 Code	Message	Level	Description	Remedy
8550023C		Failed to register the controller that is set to Exclusive control IP(1).	5	Failed to register the controller that is set to Exclusive control IP(1).	Check the configuration of "Exclusive control IP(1)".
8550023D		Failed to register the controller that is set to Exclusive control IP(2).	5	Failed to register the controller that is set to Exclusive control IP(2).	Check the configuration of "Exclusive control IP(2)".
8550023E		Failed to register the controller that is set to Exclusive control IP(3).	5	Failed to register the controller that is set to Exclusive control IP(3).	Check the configuration of "Exclusive control IP(3)".
8550023F		Failed to register the controller that is set to Exclusive control IP(4).	5	Failed to register the controller that is set to Exclusive control IP(4).	Check the configuration of "Exclusive control IP(4)".
85500240		Failed to register the controller that is set to Exclusive control IP(5).	5	Failed to register the controller that is set to Exclusive control IP(5).	Check the configuration of "Exclusive control IP(5)".
85500241		Failed to register the controller that is set to Exclusive control IP(6).	5	Failed to register the controller that is set to Exclusive control IP(6).	Check the configuration of "Exclusive control IP(6)".
85500242		Failed to register the controller that is set to Exclusive control IP(7).	5	Failed to register the controller that is set to Exclusive control IP(7).	Check the configuration of "Exclusive control IP(7)".
85500243		Failed to register the controller that is set to Exclusive control IP(8).	5	Failed to register the controller that is set to Exclusive control IP(8).	Check the configuration of "Exclusive control IP(8)".
85500244		Failed to register the controller that is set to Exclusive control IP(9).	5	Failed to register the controller that is set to Exclusive control IP(9).	Check the configuration of "Exclusive control IP(9)".
85500245		Failed to register the controller that is set to Exclusive control IP(10).	5	Failed to register the controller that is set to Exclusive control IP(10).	Check the configuration of "Exclusive control IP(10)".
85500246		Failed to register the controller that is set to Exclusive control IP(11).	5	Failed to register the controller that is set to Exclusive control IP(11).	Check the configuration of "Exclusive control IP(11)".
85500247		Failed to register the controller that is set to Exclusive control IP(12).	5	Failed to register the controller that is set to Exclusive control IP(12).	Check the configuration of "Exclusive control IP(12)".

Code	RC7 Code	Message	Level	Description	Remedy
85500248		Failed to register the controller that is set to Exclusive control IP(13).	5	Failed to register the controller that is set to Exclusive control IP(13).	Check the configuration of "Exclusive control IP(13)".
85500249		Failed to register the controller that is set to Exclusive control IP(14).	5	Failed to register the controller that is set to Exclusive control IP(14).	Check the configuration of "Exclusive control IP(14)".
8550024A		Failed to register the controller that is set to Exclusive control IP(15).	5	Failed to register the controller that is set to Exclusive control IP(15).	Check the configuration of "Exclusive control IP(15)".
8550024B		The controller specified in Exclusive control IP(0) is not set as a slave controller.	5	The controller specified in Exclusive control IP(0) is not set as a slave controller.	For the controller of Exclusive control IP(0), set the "Exclusive control controller configuration"parameter to "Slave controller".
8550024C		The controller specified in Exclusive control IP(1) is not set as a slave controller.	5	The controller specified in Exclusive control IP(1) is not set as a slave controller.	For the controller of Exclusive control IP(1), set the "Exclusive control controller configuration"parameter to "Slave controller".
8550024D		The controller specified in Exclusive control IP(2) is not set as a slave controller.	5	The controller specified in Exclusive control IP(2) is not set as a slave controller.	For the controller of Exclusive control IP(2), set the "Exclusive control controller configuration"parameter to "Slave controller".
8550024E		The controller specified in Exclusive control IP(3) is not set as a slave controller.	5	The controller specified in Exclusive control IP(3) is not set as a slave controller.	For the controller of Exclusive control IP(3), set the "Exclusive control controller configuration"parameter to "Slave controller".
8550024F		The controller specified in Exclusive control IP(4) is not set as a slave controller.	5	The controller specified in Exclusive control IP(4) is not set as a slave controller.	For the controller of Exclusive control IP(4), set the "Exclusive control controller configuration"parameter to "Slave controller".
85500250		The controller specified in Exclusive control IP(5) is not set as a slave controller.	5	The controller specified in Exclusive control IP(5) is not set as a slave controller.	For the controller of Exclusive control IP(5), set the "Exclusive control controller configuration"parameter to "Slave controller".
85500251		The controller specified in Exclusive control IP(6) is not set as a slave controller.	5	The controller specified in Exclusive control IP(6) is not set as a slave controller.	For the controller of Exclusive control IP(6), set the "Exclusive control controller configuration"parameter to "Slave controller".
85500252		The controller specified in Exclusive control IP(7) is not set as a slave controller.	5	The controller specified in Exclusive control IP(7) is not set as a slave controller.	For the controller of Exclusive control IP(7), set the "Exclusive control controller configuration"parameter to "Slave controller".
85500253		The controller specified in Exclusive control IP(8) is not set as a slave controller.	5	The controller specified in Exclusive control IP(8) is not set as a slave controller.	For the controller of Exclusive control IP(8), set the "Exclusive control controller configuration"parameter to "Slave controller".

Code	RC7 Code	Message	Level	Description	Remedy
85500254		The controller specified in Exclusive control IP(9) is not set as a slave controller.	5	The controller specified in Exclusive control IP(9) is not set as a slave controller.	For the controller of Exclusive control IP(9), set the "Exclusive control controller configuration"parameter to "Slave controller".
85500255		The controller specified in Exclusive control IP(10) is not set as a slave controller.	5	The controller specified in Exclusive control IP(10) is not set as a slave controller.	For the controller of Exclusive control IP(10), set the "Exclusive control controller configuration"parameter to "Slave controller".
85500256		The controller specified in Exclusive control IP(11) is not set as a slave controller.	5	The controller specified in Exclusive control IP(11) is not set as a slave controller.	For the controller of Exclusive control IP(11), set the "Exclusive control controller configuration"parameter to "Slave controller".
85500257		The controller specified in Exclusive control IP(12) is not set as a slave controller.	5	The controller specified in Exclusive control IP(12) is not set as a slave controller.	For the controller of Exclusive control IP(12), set the "Exclusive control controller configuration"parameter to "Slave controller".
85500258		The controller specified in Exclusive control IP(13) is not set as a slave controller.	5	The controller specified in Exclusive control IP(13) is not set as a slave controller.	For the controller of Exclusive control IP(13), set the "Exclusive control controller configuration"parameter to "Slave controller".
85500259		The controller specified in Exclusive control IP(14) is not set as a slave controller.	5	The controller specified in Exclusive control IP(14) is not set as a slave controller.	For the controller of Exclusive control IP(14), set the "Exclusive control controller configuration"parameter to "Slave controller".
8550025A		The controller specified in Exclusive control IP(15) is not set as a slave controller.	5	The controller specified in Exclusive control IP(15) is not set as a slave controller.	For the controller of Exclusive control IP(15), set the "Exclusive control controller configuration"parameter to "Slave controller".
8550025B		Timeout occurred by initialization of exclusive area.	5	Timeout occurred by initialization of exclusive control.	Confirm the setting of exclusive control. Confirm the parameter of "Timeout value for exclusive control initialization".
8350025C		Connection to the master controller was failed.	3	Connection to the master controller was failed.	Confirm IP adress of the master controller, cable connection status and master controller is power on.
8350025D		You cannot open open the project.	3	The project file is being used by WINCAPS3 .	Retry after closing the project.
8350025E		Expanded Ehternet board (1) cannot be detected.	3	Expanded Ehternet board (1) cannot be detected.	Check if the expanded Ethernet board is properly connected to the controller.
8350025F		Expanded Ehternet board (2) cannot be detected.	3	Expanded Ehternet board (2) cannot be detected.	Check if the expanded Ethernet board is properly connected to the controller.
83500260		Conveyor tracking is not licensed.	3	Conveyor tracking is not licensed.	Register the license of Conveyor Tracking.
83500261		Failed to execute Conveyor tracking.	3	Failed to execute Conveyor tracking.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
83500262		Virtual Fence setting is not effective.	3	Virtual Fence setting is not effective.	Enable the Virtual fence setting, and then reboot the controller.
83500263		Virtual Fence is not licensed.	3	Virtual Fence is not licensed.	Register the license of Virtual Fence.
85500264		You cannot set Exclusive control controller from the Slave controller of Cooperative control function.	5	You cannot set Exclusive control controller from the Slave controller of Cooperative control function.	Exclude the Slave controller of the Cooperative control from the Exclusive control. With a teach pendant, from "Exclusive control controller configuration", select "0: No setting". With a Master controller of Cooperative control function, perform "Exclusive control controller configuration".
85500265		The configuration of "Exclusive control IP" and "Exclusive control robot no" is duplicated with other configuration.	5	The configuration of "Exclusive control IP" and "Exclusive control robot no" is duplicated with other configuration.	Check that the configuration of Exclusive control.
85500266		The IP address of "Exclusive control IP (0)"is set as a Slave controller of Cooperative control function.	5	The IP address of "Exclusive control IP (0)"is set as a Slave controller of Cooperative control function.	Exclude the Slave controller of the Cooperative control from the Exclusive control. With a teach pendant, from "Exclusive control controller configuration", select "0: No setting". With a Master controller of Cooperative control function, perform "Exclusive control controller configuration".
85500267		The IP address of "Exclusive control IP (1)"is set as a Slave controller of Cooperative control function.	5	The IP address of "Exclusive control IP (1)"is set as a Slave controller of Cooperative control function.	Exclude the Slave controller of the Cooperative control from the Exclusive control. With a teach pendant, from "Exclusive control controller configuration", select "0: No setting". With a Master controller of Cooperative control function, perform "Exclusive control controller configuration".
85500268		The IP address of "Exclusive control IP (2)"is set as a Slave controller of Cooperative control function.	5	The IP address of "Exclusive control IP (2)"is set as a Slave controller of Cooperative control function.	Exclude the Slave controller of the Cooperative control from the Exclusive control. With a teach pendant, from "Exclusive control controller configuration", select "0: No setting". With a Master controller of Cooperative control function, perform "Exclusive control controller configuration".

Code	RC7 Code	Message	Level	Description	Remedy
85500269		The IP address of "Exclusive control IP (3)"is set as a Slave controller of Cooperative control function.	5	The IP address of "Exclusive control IP (3)"is set as a Slave controller of Cooperative control function.	Exclude the Slave controller of the Cooperative control from the Exclusive control. With a teach pendant, from "Exclusive control controller configuration", select "0: No setting". With a Master controller of Cooperative control function, perform "Exclusive control controller configuration".
8550026A		The IP address of "Exclusive control IP (4)"is set as a Slave controller of Cooperative control function.	5	The IP address of "Exclusive control IP (4)"is set as a Slave controller of Cooperative control function.	Exclude the Slave controller of the Cooperative control from the Exclusive control. With a teach pendant, from "Exclusive control controller configuration", select "0: No setting". With a Master controller of Cooperative control function, perform "Exclusive control controller configuration".
8550026B		The IP address of "Exclusive control IP (5)"is set as a Slave controller of Cooperative control function.	5	The IP address of "Exclusive control IP (5)"is set as a Slave controller of Cooperative control function.	Exclude the Slave controller of the Cooperative control from the Exclusive control. With a teach pendant, from "Exclusive control controller configuration", select "0: No setting". With a Master controller of Cooperative control function, perform "Exclusive control controller configuration".
8550026C		The IP address of "Exclusive control IP (6)"is set as a Slave controller of Cooperative control function.	5	The IP address of "Exclusive control IP (6)"is set as a Slave controller of Cooperative control function.	Exclude the Slave controller of the Cooperative control from the Exclusive control. With a teach pendant, from "Exclusive control controller configuration", select "0: No setting". With a Master controller of Cooperative control function, perform "Exclusive control controller configuration".
8550026D		The IP address of "Exclusive control IP (7)"is set as a Slave controller of Cooperative control function.	5	The IP address of "Exclusive control IP (7)"is set as a Slave controller of Cooperative control function.	Exclude the Slave controller of the Cooperative control from the Exclusive control. With a teach pendant, from "Exclusive control controller configuration", select "0: No setting". With a Master controller of Cooperative control function, perform "Exclusive control controller configuration".
8550026E		The IP address of "Exclusive control IP (8)"is set as a Slave controller of Cooperative control function.	5	The IP address of "Exclusive control IP (8)"is set as a Slave controller of Cooperative control function.	Exclude the Slave controller of the Cooperative control from the Exclusive control. With a teach pendant, from "Exclusive control controller configuration", select "0: No setting". With a Master controller of Cooperative control function, perform "Exclusive control controller configuration".

Code	RC7 Code	Message	Level	Description	Remedy
8550026F		The IP address of "Exclusive control IP (9)"is set as a Slave controller of Cooperative control function.	5	The IP address of "Exclusive control IP (9)"is set as a Slave controller of Cooperative control function.	Exclude the Slave controller of the Cooperative control from the Exclusive control. With a teach pendant, from "Exclusive control controller configuration", select "0: No setting". With a Master controller of Cooperative control function, perform "Exclusive control controller configuration".
85500270		The IP address of "Exclusive control IP (10)"is set as a Slave controller of Cooperative control function.	5	The IP address of "Exclusive control IP (10)"is set as a Slave controller of Cooperative control function.	Exclude the Slave controller of the Cooperative control from the Exclusive control. With a teach pendant, from "Exclusive control controller configuration", select "0: No setting". With a Master controller of Cooperative control function, perform "Exclusive control controller configuration".
85500271		The IP address of "Exclusive control IP (11)"is set as a Slave controller of Cooperative control function.	5	The IP address of "Exclusive control IP (11)"is set as a Slave controller of Cooperative control function.	Exclude the Slave controller of the Cooperative control from the Exclusive control. With a teach pendant, from "Exclusive control controller configuration", select "0: No setting". With a Master controller of Cooperative control function, perform "Exclusive control controller configuration".
85500272		The IP address of "Exclusive control IP (12)"is set as a Slave controller of Cooperative control function.	5	The IP address of "Exclusive control IP (12)"is set as a Slave controller of Cooperative control function.	Exclude the Slave controller of the Cooperative control from the Exclusive control. With a teach pendant, from "Exclusive control controller configuration", select "0: No setting". With a Master controller of Cooperative control function, perform "Exclusive control controller configuration".
85500273		The IP address of "Exclusive control IP (13)"is set as a Slave controller of Cooperative control function.	5	The IP address of "Exclusive control IP (13)"is set as a Slave controller of Cooperative control function.	Exclude the Slave controller of the Cooperative control from the Exclusive control. With a teach pendant, from "Exclusive control controller configuration", select "0: No setting". With a Master controller of Cooperative control function, perform "Exclusive control controller configuration".
85500274		The IP address of "Exclusive control IP (14)"is set as a Slave controller of Cooperative control function.	5	The IP address of "Exclusive control IP (14)"is set as a Slave controller of Cooperative control function.	Exclude the Slave controller of the Cooperative control from the Exclusive control. With a teach pendant, from "Exclusive control controller configuration", select "0: No setting". With a Master controller of Cooperative control function, perform "Exclusive control controller configuration".

Code	RC7 Code	Message	Level	Description	Remedy
85500275		The IP address of "Exclusive control IP (15)"is set as a Slave controller of Cooperative control function.	5	The IP address of "Exclusive control IP (15)"is set as a Slave controller of Cooperative control function.	Exclude the Slave controller of the Cooperative control from the Exclusive control. With a teach pendant, from "Exclusive control controller configuration", select "0: No setting". With a Master controller of Cooperative control function, perform "Exclusive control controller configuration".
85500276		The robot number that you set as "Robot(0) of Exclusive control is not found.	5	The robot number that you set as "Robot(0) of Exclusive control is not found.	Check the configuration of "Exclusive control robot no(0)".
85500277		The robot number that you set as "Robot(1) of Exclusive control is not found.	5	The robot number that you set as "Robot(1) of Exclusive control is not found.	Check the configuration of "Exclusive control robot no(1)".
85500278		The robot number that you set as "Robot(2) of Exclusive control is not found.	5	The robot number that you set as "Robot(2) of Exclusive control is not found.	Check the configuration of "Exclusive control robot no(2)".
85500279		The robot number that you set as "Robot(3) of Exclusive control is not found.	5	The robot number that you set as "Robot(3) of Exclusive control is not found.	Check the configuration of "Exclusive control robot no(3)".
8550027A		The robot number that you set as "Robot(4) of Exclusive control is not found.	5	The robot number that you set as "Robot(4) of Exclusive control is not found.	Check the configuration of "Exclusive control robot no(4)".
8550027B		The robot number that you set as "Robot(5) of Exclusive control is not found.	5	The robot number that you set as "Robot(5) of Exclusive control is not found.	Check the configuration of "Exclusive control robot no(5)".
8550027C		The robot number that you set as "Robot(6) of Exclusive control is not found.	5	The robot number that you set as "Robot(6) of Exclusive control is not found.	Check the configuration of "Exclusive control robot no(6)".
8550027D		The robot number that you set as "Robot(7) of Exclusive control is not found.	5	The robot number that you set as "Robot(7) of Exclusive control is not found.	Check the configuration of "Exclusive control robot no(7)".
8550027E		The robot number that you set as "Robot(8) of Exclusive control is not found.	5	The robot number that you set as "Robot(8) of Exclusive control is not found.	Check the configuration of "Exclusive control robot no(8)".
8550027F		The robot number that you set as "Robot(9) of Exclusive control is not found.	5	The robot number that you set as "Robot(9) of Exclusive control is not found.	Check the configuration of "Exclusive control robot no(9)".

Code	RC7 Code	Message	Level	Description	Remedy
85500280		The robot number that you set as "Robot(10) of Exclusive control is not found.	5	The robot number that you set as "Robot(10) of Exclusive control is not found.	Check the configuration of "Exclusive control robot no(10)".
85500281		The robot number that you set as "Robot(11) of Exclusive control is not found.	5	The robot number that you set as "Robot(11) of Exclusive control is not found.	Check the configuration of "Exclusive control robot no(11)".
85500282		The robot number that you set as "Robot(12) of Exclusive control is not found.	5	The robot number that you set as "Robot(12) of Exclusive control is not found.	Check the configuration of "Exclusive control robot no(12)".
85500283		The robot number that you set as "Robot(13) of Exclusive control is not found.	5	The robot number that you set as "Robot(13) of Exclusive control is not found.	Check the configuration of "Exclusive control robot no(13)".
85500284		The robot number that you set as "Robot(14) of Exclusive control is not found.	5	The robot number that you set as "Robot(14) of Exclusive control is not found.	Check the configuration of "Exclusive control robot no(14)".
85500285		The robot number that you set as "Robot(15) of Exclusive control is not found.	5	The robot number that you set as "Robot(15) of Exclusive control is not found.	Check the configuration of "Exclusive control robot no(15)".
85500286		The configuration of "Exclusive control IP" is duplicated with Ethernet board IP.	5	The configuration of "Exclusive control IP" is duplicated with Ethernet board IP.	Check the configuration of "Exclusive control IP".
85500287		DHCP is enabled for the controller that you set as Exclusive control IP(0).	5	DHCP is enabled for the controller that you set as Exclusive control IP(0).	Disable DHCP of the controller of Exclusive control IP(0).
85500288		DHCP is enabled for the controller that you set as Exclusive control IP(1).	5	DHCP is enabled for the controller that you set as Exclusive control IP(1).	Disable DHCP of the controller of Exclusive control IP(1).
85500289		DHCP is enabled for the controller that you set as Exclusive control IP(2).	5	DHCP is enabled for the controller that you set as Exclusive control IP(2).	Disable DHCP of the controller of Exclusive control IP(2).
8550028A		DHCP is enabled for the controller that you set as Exclusive control IP(3).	5	DHCP is enabled for the controller that you set as Exclusive control IP(3).	Disable DHCP of the controller of Exclusive control IP(3).
8550028B		DHCP is enabled for the controller that you set as Exclusive control IP(4).	5	DHCP is enabled for the controller that you set as Exclusive control IP(4).	Disable DHCP of the controller of Exclusive control IP(4).

Code	RC7 Code	Message	Level	Description	Remedy
8550028C		DHCP is enabled for the controller that you set as Exclusive control IP(5).	5	DHCP is enabled for the controller that you set as Exclusive control IP(5).	Disable DHCP of the controller of Exclusive control IP(5).
8550028D		DHCP is enabled for the controller that you set as Exclusive control IP(6).	5	DHCP is enabled for the controller that you set as Exclusive control IP(6).	Disable DHCP of the controller of Exclusive control IP(6).
8550028E		DHCP is enabled for the controller that you set as Exclusive control IP(7).	5	DHCP is enabled for the controller that you set as Exclusive control IP(7).	Disable DHCP of the controller of Exclusive control IP(7).
8550028F		DHCP is enabled for the controller that you set as Exclusive control IP(8).	5	DHCP is enabled for the controller that you set as Exclusive control IP(8).	Disable DHCP of the controller of Exclusive control IP(8).
85500290		DHCP is enabled for the controller that you set as Exclusive control IP(9).	5	DHCP is enabled for the controller that you set as Exclusive control IP(9).	Disable DHCP of the controller of Exclusive control IP(9).
85500291		DHCP is enabled for the controller that you set as Exclusive control IP(10).	5	DHCP is enabled for the controller that you set as Exclusive control IP(10).	Disable DHCP of the controller of Exclusive control IP(10).
85500292		DHCP is enabled for the controller that you set as Exclusive control IP(11).	5	DHCP is enabled for the controller that you set as Exclusive control IP(11).	Disable DHCP of the controller of Exclusive control IP(11).
85500293		DHCP is enabled for the controller that you set as Exclusive control IP(12).	5	DHCP is enabled for the controller that you set as Exclusive control IP(12).	Disable DHCP of the controller of Exclusive control IP(12).
85500294		DHCP is enabled for the controller that you set as Exclusive control IP(13).	5	DHCP is enabled for the controller that you set as Exclusive control IP(13).	Disable DHCP of the controller of Exclusive control IP(13).
85500295		DHCP is enabled for the controller that you set as Exclusive control IP(14).	5	DHCP is enabled for the controller that you set as Exclusive control IP(14).	Disable DHCP of the controller of Exclusive control IP(14).
85500296		DHCP is enabled for the controller that you set as Exclusive control IP(15).	5	DHCP is enabled for the controller that you set as Exclusive control IP(15).	Disable DHCP of the controller of Exclusive control IP(15).
85500297		The configuration of "Exclusive control IP" is duplicated with other configuration.	5	The configuration of "Exclusive control IP" is duplicated with other configuration.	Check the configuration of exclusive control.

Code	RC7 Code	Message	Level	Description	Remedy
85500298		Communication error with the controller of Exclusive control IP(0) occurred. (Disconnection detected).	5	Communication error with the controller of Exclusive control IP(0) occurred. (Disconnection detected).	Check that the Ethernet cable for the controller of Exclusive control IP(0) is properly connected.
85500299		Communication error with the controller of Exclusive control IP(1) occurred. (Disconnection detected).	5	Communication error with the controller of Exclusive control IP(1) occurred. (Disconnection detected).	Check that the Ethernet cable for the controller of Exclusive control IP(1) is properly connected.
8550029A		Communication error with the controller of Exclusive control IP(2) occurred. (Disconnection detected).	5	Communication error with the controller of Exclusive control IP(2) occurred. (Disconnection detected).	Check that the Ethernet cable for the controller of Exclusive control IP(2) is properly connected.
8550029B		Communication error with the controller of Exclusive control IP(3) occurred. (Disconnection detected).	5	Communication error with the controller of Exclusive control IP(3) occurred. (Disconnection detected).	Check that the Ethernet cable for the controller of Exclusive control IP(3) is properly connected.
8550029C		Communication error with the controller of Exclusive control IP(4) occurred. (Disconnection detected).	5	Communication error with the controller of Exclusive control IP(4) occurred. (Disconnection detected).	Check that the Ethernet cable for the controller of Exclusive control IP(4) is properly connected.
8550029D		Communication error with the controller of Exclusive control IP(5) occurred. (Disconnection detected).	5	Communication error with the controller of Exclusive control IP(5) occurred. (Disconnection detected).	Check that the Ethernet cable for the controller of Exclusive control IP(5) is properly connected.
8550029E		Communication error with the controller of Exclusive control IP(6) occurred. (Disconnection detected).	5	Communication error with the controller of Exclusive control IP(6) occurred. (Disconnection detected).	Check that the Ethernet cable for the controller of Exclusive control IP(6) is properly connected.
8550029F		Communication error with the controller of Exclusive control IP(7) occurred. (Disconnection detected).	5	Communication error with the controller of Exclusive control IP(7) occurred. (Disconnection detected).	Check that the Ethernet cable for the controller of Exclusive control IP(7) is properly connected.
855002A0		Communication error with the controller of Exclusive control IP(8) occurred. (Disconnection detected).	5	Communication error with the controller of Exclusive control IP(8) occurred. (Disconnection detected).	Check that the Ethernet cable for the controller of Exclusive control IP(8) is properly connected.

Code	RC7 Code	Message	Level	Description	Remedy
855002A1		Communication error with the controller of Exclusive control IP(9) occurred. (Disconnection detected).	5	Communication error with the controller of Exclusive control IP(9) occurred. (Disconnection detected).	Check that the Ethernet cable for the controller of Exclusive control IP(9) is properly connected.
855002A2		Communication error with the controller of Exclusive control IP(10) occurred. (Disconnection detected).	5	Communication error with the controller of Exclusive control IP(10) occurred. (Disconnection detected).	Check that the Ethernet cable for the controller of Exclusive control IP(10) is properly connected.
855002A3		Communication error with the controller of Exclusive control IP(11) occurred. (Disconnection detected).	5	Communication error with the controller of Exclusive control IP(11) occurred. (Disconnection detected).	Check that the Ethernet cable for the controller of Exclusive control IP(11) is properly connected.
855002A4		Communication error with the controller of Exclusive control IP(12) occurred. (Disconnection detected).	5	Communication error with the controller of Exclusive control IP(12) occurred. (Disconnection detected).	Check that the Ethernet cable for the controller of Exclusive control IP(12) is properly connected.
855002A5		Communication error with the controller of Exclusive control IP(13) occurred. (Disconnection detected).	5	Communication error with the controller of Exclusive control IP(13) occurred. (Disconnection detected).	Check that the Ethernet cable for the controller of Exclusive control IP(13) is properly connected.
855002A6		Communication error with the controller of Exclusive control IP(14) occurred. (Disconnection detected).	5	Communication error with the controller of Exclusive control IP(14) occurred. (Disconnection detected).	Check that the Ethernet cable for the controller of Exclusive control IP(14) is properly connected.
855002A7		Communication error with the controller of Exclusive control IP(15) occurred. (Disconnection detected).	5	Communication error with the controller of Exclusive control IP(15) occurred. (Disconnection detected).	Check that the Ethernet cable for the controller of Exclusive control IP(15) is properly connected.
855002A8		Communication error occurred on Exclusive control (Disconnection detected).	5	Communication error occurred on Exclusive control (Disconnection detected).	Check that the Ethernet cable is not damaged.
855002A9		Different Exclusive areas are specified among controllers in the Exclusive control.	5	Different Exclusive areas are specified among controllers in the Exclusive control.	Set the same Exclusive area for all controllers in the Exclusive control.

Code	RC7 Code	Message	Level	Description	Remedy
855002AA		The licenses of both Cooperative control and Exclusive control are registered.	5	The licenses of both Cooperative control and Exclusive control are registered.	Delete a license either Cooperation control or Exclusive control.
835002AB		Failed to transfer Safety parameters.	3	Failed to read the transferred data.	Transfer Safety parameters again.
835002AC		Failed to transfer Safety parameters.	3	Failed to read the recording medium.	Transfer Safety parameters again.
835002AD		Failed to the last terminate processing.	3	Failed to the last terminate processing.	Check the terminate processing.
815002AE		The specified Hand number is not effective.	1	The specified Hand number is not effective.	Revise the program, or enable the specified Hand number.
835002AF		You cannot execute a command while deleting variables.	3	You cannot execute a command while deleting variables.	Retry after delete variables.
835002B0		You cannot execute a command while Safety motion specifications.	3	You cannot execute a command while Safety motion specifications.	Do not execute this command to the safety motion specifications.
855002B1		Infinite rotary setting cannot do it with the safety motion specifications.	5	Infinite rotary setting cannot do it with the safety motion specifications.	Do not execute this command to the safety motion specifications.
855002B2		Cannot invalidate a software limit check with the safety motion specifications	5	Cannot invalidate a software limit check with the safety motion specifications	Do not execute this command to the safety motion specifications.
855002B3		Safety motion module is not connected.	5	Safety motion module is not connected.	Please contact DENSO WAVE service with error number and error message.
855002B4		Encoder battery check day settings are not consistent between the robot and the controller.	5	The controller set encoder battery check day setting on the robot side on the controller side, because settings are consistent between the robot and the controller.	Confirm that the appropriate robot is connected. If the correct robot type has been connected, confirm encoder battery check day setting. After confirmation, reboot the controller.
855002B5		Encoder battery check day is not set to the robot.	5	The controller set encoder battery check day setting on the controller side on the robot side, because check day is not set the robot.	Confirm that the appropriate robot is connected. If the correct robot type has been connected, confirm encoder battery check day setting. After confirmation, reboot the controller.
855002B6		Encoder battery check day is set to neither the robot nor the controller.	5	Encoder battery check day is set to neither the robot nor the controller.	Confirm that the appropriate robot is connected. If the correct robot type has been connected, confirm encoder battery check day setting. After confirmation, reboot the controller.

Code	RC7 Code	Message	Level	Description	Remedy
855002B7		Robot controller specifications error.	5	The project cannot used this controller.	Send project data of HSR from WINCAPSIII.
835002B8		Failed to open the database.	3	Failed to open the MDB.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
835002B9		Failed to compact the database.	3	Failed to compact the MDB.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
835002BA		Failed to compact the database.	3	Failed to compact the MDB.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
855002BB		Safety parameters were updated rightly. Please reboot the controller.	5	Safety parameters were updated rightly. Please reboot the controller.	Reboot the controller.
855002BC		The safety of controller is different between master controller and slave controller (Robot1).	5	The safety of controller is different between master controller and slave controller (Robot1).	Match the safety of the master controller and the slave controller (Robot1).
855002BD		The safety of controller is different between master controller and slave controller (Robot2).	5	The safety of controller is different between master controller and slave controller (Robot2).	Match the safety of the master controller and the slave controller (Robot2).
855002BE		The safety of controller is different between master controller and slave controller (Robot3).	5	The safety of controller is different between master controller and slave controller (Robot3).	Match the safety of the master controller and the slave controller (Robot3).
855002BF		The safety of controller is different between master controller and slave controller.	5	The safety of controller is different between master controller and slave controller.	Match the safety of the master controller and the slave controller.
855002C0		You cannot use controller of Exclusive control IP(0) occurred.	5	You cannot use controller of Exclusive control IP(0) occurred.	Set the slave controller of Cooperative control function.
855002C1		You cannot use controller of Exclusive control IP(1) occurred.	5	You cannot use controller of Exclusive control IP(1) occurred.	Set the slave controller of Cooperative control function.
855002C2		You cannot use controller of Exclusive control IP(2) occurred.	5	You cannot use controller of Exclusive control IP(2) occurred.	Set the slave controller of Cooperative control function.
855002C3		You cannot use controller of Exclusive control IP(3) occurred.	5	You cannot use controller of Exclusive control IP(3) occurred.	Set the slave controller of Cooperative control function.
855002C4		You cannot use controller of Exclusive control IP(4) occurred.	5	You cannot use controller of Exclusive control IP(4) occurred.	Set the slave controller of Cooperative control function.

Code	RC7 Code	Message	Level	Description	Remedy
855002C5		You cannot use controller of Exclusive control IP(5) occurred.	5	You cannot use controller of Exclusive control IP(5) occurred.	Set the slave controller of Cooperative control function.
855002C6		You cannot use controller of Exclusive control IP(6) occurred.	5	You cannot use controller of Exclusive control IP(6) occurred.	Set the slave controller of Cooperative control function.
855002C7		You cannot use controller of Exclusive control IP(7) occurred.	5	You cannot use controller of Exclusive control IP(7) occurred.	Set the slave controller of Cooperative control function.
855002C8		You cannot use controller of Exclusive control IP(8) occurred.	5	You cannot use controller of Exclusive control IP(8) occurred.	Set the slave controller of Cooperative control function.
855002C9		You cannot use controller of Exclusive control IP(9) occurred.	5	You cannot use controller of Exclusive control IP(9) occurred.	Set the slave controller of Cooperative control function.
855002CA		You cannot use controller of Exclusive control IP(10) occurred.	5	You cannot use controller of Exclusive control IP(10) occurred.	Set the slave controller of Cooperative control function.
855002CB		You cannot use controller of Exclusive control IP(11) occurred.	5	You cannot use controller of Exclusive control IP(11) occurred.	Set the slave controller of Cooperative control function.
855002CC		You cannot use controller of Exclusive control IP(12) occurred.	5	You cannot use controller of Exclusive control IP(12) occurred.	Set the slave controller of Cooperative control function.
855002CD		You cannot use controller of Exclusive control IP(13) occurred.	5	You cannot use controller of Exclusive control IP(13) occurred.	Set the slave controller of Cooperative control function.
855002CE		You cannot use controller of Exclusive control IP(14) occurred.	5	You cannot use controller of Exclusive control IP(14) occurred.	Set the slave controller of Cooperative control function.
855002CF		You cannot use controller of Exclusive control IP(15) occurred.	5	You cannot use controller of Exclusive control IP(15) occurred.	Set the slave controller of Cooperative control function.
855002D0		You cannot use controller of Exclusive control IP(0) occurred.	5	You cannot use controller of Exclusive control IP(0) occurred.	You cannot use the controller of Cooperative control function.
855002D1		You cannot use controller of Exclusive control IP(1) occurred.	5	You cannot use controller of Exclusive control IP(1) occurred.	You cannot use the controller of Cooperative control function.
855002D2		You cannot use controller of Exclusive control IP(2) occurred.	5	You cannot use controller of Exclusive control IP(2) occurred.	You cannot use the controller of Cooperative control function.
855002D3		You cannot use controller of Exclusive control IP(3) occurred.	5	You cannot use controller of Exclusive control IP(3) occurred.	You cannot use the controller of Cooperative control function.
855002D4		You cannot use controller of Exclusive control IP(4) occurred.	5	You cannot use controller of Exclusive control IP(4) occurred.	You cannot use the controller of Cooperative control function.
855002D5		You cannot use controller of Exclusive control IP(5) occurred.	5	You cannot use controller of Exclusive control IP(5) occurred.	You cannot use the controller of Cooperative control function.
855002D6		You cannot use controller of Exclusive control IP(6) occurred.	5	You cannot use controller of Exclusive control IP(6) occurred.	You cannot use the controller of Cooperative control function.

Code	RC7 Code	Message	Level	Description	Remedy
855002D7		You cannot use controller of Exclusive control IP(7) occurred.	5	You cannot use controller of Exclusive control IP(7) occurred.	You cannot use the controller of Cooperative control function.
855002D8		You cannot use controller of Exclusive control IP(8) occurred.	5	You cannot use controller of Exclusive control IP(8) occurred.	You cannot use the controller of Cooperative control function.
855002D9		You cannot use controller of Exclusive control IP(9) occurred.	5	You cannot use controller of Exclusive control IP(9) occurred.	You cannot use the controller of Cooperative control function.
855002DA		You cannot use controller of Exclusive control IP(10) occurred.	5	You cannot use controller of Exclusive control IP(10) occurred.	You cannot use the controller of Cooperative control function.
855002DB		You cannot use controller of Exclusive control IP(11) occurred.	5	You cannot use controller of Exclusive control IP(11) occurred.	You cannot use the controller of Cooperative control function.
855002DC		You cannot use controller of Exclusive control IP(12) occurred.	5	You cannot use controller of Exclusive control IP(12) occurred.	You cannot use the controller of Cooperative control function.
855002DD		You cannot use controller of Exclusive control IP(13) occurred.	5	You cannot use controller of Exclusive control IP(13) occurred.	You cannot use the controller of Cooperative control function.
855002DE		You cannot use controller of Exclusive control IP(14) occurred.	5	You cannot use controller of Exclusive control IP(14) occurred.	You cannot use the controller of Cooperative control function.
855002DF		You cannot use controller of Exclusive control IP(15) occurred.	5	You cannot use controller of Exclusive control IP(15) occurred.	You cannot use the controller of Cooperative control function.
855002E0		Exclusive Control:No license	5	No lisence.	Please register license number for the function to the controller. If you do not have a license, please contact DENSO WAVE to ask for the new licence.
855002E1		You cannot set Exclusive control slave from the Master controller of Cooperative control function.	5	You cannot set Exclusive control slave from the Master controller of Cooperative control function.	Check the configuration of exclusive control.
855002E2		You cannot set Exclusive control master from the Slave controller of Cooperative control function.	5	You cannot set Exclusive control master from the Slave controller of Cooperative control function.	Check the configuration of Exclusive control.
805002E3		Load-estimate has been interrupted.	0	Load-estimate has been stopped because a stop process was executed.	Execute Load-estimate again.
855002E4		Kinematics Configration is not licensed.	5	Kinematics Configration is not licensed.	Register the license of Kinematics Configration.
835002E5		This command is not available in MC8.	3	This command is not available in MC8.	Revise the program.

Code	RC7 Code	Message	Level	Description	Remedy
855002E6		Failed to transfer safety parameter.	5	Failed to transfer safety parameter.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
855002E7		Provider registration.Restart the controller.	5	Provider registration.Restart the controller.	Restart the controller.
855002E8		EtherCAT motion board is not found.	5	EtherCAT board is not found.	Attach EtherCAT board to the extended board slot. When you perform Ethernet cooperative control, you set a Cooperative control communication mode to only Ethernet.
855002E9		Slave motion and selective external joint cannot be used together.	5	Slave motion and selective external joint cannot be used together.	Disable slave motion or slective external joint.
855002EA		Slave motion and field network cannot be used together.	5	Slave motion and field network cannot be used together.	Disable slave motion or field network.
855002EB		The number of connections of EtherCAT motion board and field network board is different from setting.	5	The number of connections of EtherCAT motion board and field network board is different from setting.	Change the number of connections of extended board.
855002EC		Failed to connect to the extended board.	5	Failed to connect to the extended board.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
855002ED		Slot ID of EtherCAT master board is different from a setting value.	5	Slot ID of EtherCAT master board is different from a setting value.	Match the slot ID of EtherCAT master board and setting value.
855002EE		Slot IDs of EtherCAT master board and field network board are duplicated.	5	Slot IDs of EtherCAT master board and field network board are duplicated.	Change the Slot IDs of boards to avoid duplication.
855002EF		Failed to generate EtherCAT config file.	5	Failed to generate EtherCAT config file.	Revise the configuration of cooperative control and selective extended joint.
855002F0		Teach pendant is connected when slave motion is enabled.	5	Teach pendant is connected when slave motion is enabled.	Connect a pendant-less dummy connector.
855002F1		Selective external joint setting is invalid.	5	Selective external joint setting is invalid.	Revise the configuration of selective extended joint.
855002F2		EtherCAT Slave Motion is not licensed.	5	EtherCAT slave motion is not licensed.	Register the license of EtherCAT slave motion.
855002F3		Selective extended joint (EtherCAT)　is not licensed.	5	Selective extended joint (EtherCAT)　is not licensed.	Register the license of selective extended joint (EtherCAT) .

Code	RC7 Code	Message	Level	Description	Remedy
855002F4		Selective extended joint (EtherCAT) and Ethernet cooperative control cannot be used together.	5	Selective extended joint (EtherCAT) and Ethernet cooperative control cannot be used together.	Set a cooperative communication mode to include EtherCAT.
835002F5		Failed to read the correction data.	3	Failed to read the correction data.	Please transfer the adjusted parameters to RC8 by using the Off-line tool PA (Picking Adjustment) guidance.
855002F6		Communication mode setting is different with master controller and slave controller (Robot1) of cooperative control.	5	Communication mode setting is different with master controller and slave controller (Robot1) of cooperative control.	Please set the same cooperative communication mode to master controller and slave controller (Robot1).
855002F7		Communication mode setting is different with master controller and slave controller (Robot2) of cooperative control.	5	Communication mode setting is different with master controller and slave controller (Robot2) of cooperative control.	Please set the same cooperative communication mode to master controller and slave controller (Robot2).
855002F8		Communication mode setting is different with master controller and slave controller (Robot3) of cooperative control.	5	Communication mode setting is different with master controller and slave controller (Robot3) of cooperative control.	Please set the same cooperative communication mode to master controller and slave controller (Robot3).
855002F9		Cooperative control and slave motion cannot be used together.	5	Cooperative control and slave motion cannot be used together.	Disable cooperative control or slave motion. When you perform EherCAT cooperative control, you invalidate slave motion, and set a cooperative communication mode.
855002FA		Cooperative control can not be used for this robot type.	5	Cooperative control can not be used for this robot type.	Disable cooperative control.
855002FB		Dual arm control can not be used for this robot type.	5	Dual arm control can not be used for this robot type.	Disable dual arm control.
855002FC		Cooperative control and dual arm control cannot be used together.	5	Cooperative control and dual arm control cannot be used together.	Disable cooperative control or dual arm control.
835002FD		MDB of LoadCheck has a problem.	3	MDB of LoadCheck has a problem.	Please check sending LoadCheck.mdb.
845002FE		You cannot execute a command while the motor power is ON.Motor turned off.	4	This operation is not available while the motor power is ON.Motor turned off.	Please retry.

Code	RC7 Code	Message	Level	Description	Remedy
835002FF		During the hand command execution, the stop processing was performed.	3	During the hand command execution, the stop processing was performed.	Please retry.
83500300		Hand Initialization error.	3	Initialization of the hand is not completed nomally.	Reboot the controller.
83500301		Hand control command was executed while a hand is running.	3	Hand control command can not be operation while a hand is running.	Please retry.
83500302		software limit over	3	software limit over	It can not move out of software limit.
85500303		Dual arm control setting becomes effective in the project that dual arm control cannot carry out.	5	Dual arm control setting becomes effective in the project that dual arm control cannot carry out.	Please set the setting of the dual arm control for invalidity.
83500304		Hand point data read error	3	Hand point data read error	Reboot the controller and then try again.
83500305		Hand point data write error	3	Hand point data write error	Reboot the controller and then try again.
84500306		The robot moved greatly immediately after direct start.	4	The robot moved greatly immediately after direct start.	Please reconsider mass of payload.
84500307		The button of robot was on for more than 10 seconds.	4	The button of robot was on for more than 10 seconds.	Please turn OFF within 10 seconds. There is possibility of welding.
81500308		The specified combination of Robot number and Hand number is not effective.	1	The specified combination of Robot number and Hand number is not effective.	Revise the program, or enable the specified SelectHand number.
81500309		The specified Robot number is invalid.	1	The Robot of specified number does not exist.	Revise the program, or set the Robot number that exist on.
8050030A		Failed to get the position.	0	Failed to get the position.	Please press the button with teaching screen open.
8550030B		Force Sensor Compliance Control is not licensed.	5	No lisence.	Please register a license with master controller, when it already has a license. Please contact DENSO WAVE service, when you do not have a license. Alternatively, please revise cooperation settings.
8550030C		Force Sensor Compliance Control is not licensed.	5	No lisence.	Please register a license with slave controller (Robot1), when it already has a license. Please contact DENSO WAVE service, when you do not have a license. Alternatively, please revise cooperation settings.

Code	RC7 Code	Message	Level	Description	Remedy
8550030D		Force Sensor Compliance Control is not licensed.	5	No lisence.	Please register a license with slave controller (Robot2), when it already has a license. Please contact DENSO WAVE service, when you do not have a license. Alternatively, please revise cooperation settings.
8550030E		Force Sensor Compliance Control is not licensed.	5	No lisence.	Please register a license with slave controller (Robot3), when it already has a license. Please contact DENSO WAVE service, when you do not have a license. Alternatively, please revise cooperation settings.
8350030F		A mode that can not be specified in chuck operation is specified as point data.	3	A mode that can not be specified in chuck operation is specified as point data.	Check the point data.
83500310		A mode that can not be specified in unchuck operation is specified as point data.	3	A mode that can not be specified in unchuck operation is specified as point data.	Check the point data.
85500311		Robot Data were updated rightly. Please reboot the controller.	5	Robot Data were updated rightly. Please reboot the controller.	Reboot the controller.
83500312		Failed to transfer Robot Data parameter.	3	Dual arm control setting has been already set.	You cannot transfer Multi Kinema to a set controller.
83500313		A irregular hand is connected.	3	Hand connection is different from the configuration.	Please connect a correct hand.
83500314		It is failed by hand movement setting.	3	Failed to set the movement parameter.	Check the position, the speed, or the gripping force.
84500315		Hand:Speed command limit over	4	Speed instruction that exceeds the speed limit is detected.	Reduce hand speed.
84500316		Hand:Motor speed limit over	4	Encoder detected the speed that exceeds the speed limit.	Reduce robot speed.
84500317		Hand:Motor acceleration limit over	4	Encoder detected the acceleration that exceeds the acceleration limit.	Reduce robot speed.
84500318		Hand:Motor Overcurrent	4	Motor current that exceeds the current limit is detected.	Reduce hand speed, gripping force. If you use MoveA or MoveR or Unchuck command for gripping work, please change program to use gripping motion command.
84500319		Hand motor overload	4	Accumulated motor current value for the predetermined time exceeded the limit.	Revise the hand motion.Make the wait time after the hand motion.

Code	RC7 Code	Message	Level	Description	Remedy
8450031A		Hand lock overload	4	Excessive motor current was detected while hand motion stopped.	Revise the hand motion.Make the wait time after the hand motion. If you use MoveA or MoveR or Unchuck command for gripping work, please change program to use gripping motion command.
8050031B		The load applied to hand is large	0	The continuous load was detected while hand is moving.	This warning is displayed when load is applies the hand continuously. For example, when the hand is gripping a long work. It may be improved by revising programming. Please refer to a manual for the details.
8450031C		Hand:Excessive position error	4	Position error that exceeds the error allowance is detected.	Please check whether the finger is caught on something, and revise the error allowance parameter.
8450031D		Hand:Encoder data unreceived	4	Failed to receive data from encoder.	Check the hand connection.
8450031E		Hand:Encoder framing error	4	Failed to communicate to encoder.	Check the hand connection.
8450031F		Hand:Encoder communication error	4	Failed to communicate to encoder.	Check the hand connection.
83500320		Invalid hand configuration data	3	Configuration data error is found during the data setting.	Please contact DENSO WAVE service with error number and error message.
84500321		Hand:Receive timeout	4	Receive timeout.	Check the hand connection.
85500322		Hand:CAN communication initialization error	5	CAN communication initialization error.	Please contact DENSO WAVE service with error number and error message.
84500323		Hand:Motor temperature sensor error	4	Motor temperature sensor detected heat.	Revise the hand motion. Make the wait time after the hand motion. If you use MoveA or MoveR or Unchuck command for gripping work by the gripper, please change program to use gripping motion command.
84500324		Hand:CAN communication error	4	CAN communication error.	Please contact DENSO WAVE service with error number and error message.
84500325		Hand:Motor power ON failure	4	Failed to turn ON motor, because motor bus voltage is not input.	Please check the power cable connection and the hand connection.
84500326		Hand:A/D conversion reference voltage error	4	A/D conversion reference voltage error.	Please contact DENSO WAVE service with error number and error message.
85500327		Hand:Initialization error	5	Initialization of the microcomputer is not completed.	Please contact DENSO WAVE service with error number and error message.
84500328		Hand:Motor off	4	Microcomputer turn OFF motor.	Please contact DENSO WAVE service with error number and error message.
82500329		Hand:Force calibration is failed	2	Failed to set force calibration data.	Calibration parameters are invalid.
8150032A		The camera can not move to the position.	1	The camera can not move to the position.	Please specify the camera position within the range where the robot can move.

Code	RC7 Code	Message	Level	Description	Remedy
8350032B		Camera is not calibrated.	3	Camera is not calibrated.	Please calibrate the camera.
8550032C		A safety parameter does not accord with a project.	5	A safety parameter does not accord with a project.	Send project and safety parameters.
8450032D		Hand:Driver unit overload	4	Accumulated driver unit current value for the predetermined time period exceeded the limit.	Revise the hand motion. If you use MoveA or MoveR or Unchuck command for gripping work by the gripper, please change program to use gripping motion command.
8450032E		Hand:Driver unit Overcurrent (U-phase)	4	Driver unit detected overcurrent.	Revise the hand motion. If you use MoveA or MoveR or Unchuck command for gripping work by the gripper, please change program to use gripping motion command.
8450032F		Hand:Driver unit Overcurrent (V-phase)	4	Driver unit detected overcurrent.	Revise the hand motion. If you use MoveA or MoveR or Unchuck command for gripping work by the gripper, please change program to use gripping motion command.
84500330		Safety parameters were updated rightly.	4	Safety parameters were updated rightly.	Safety parameters were updated rightly.
83500331		Path can not be specified with 3 or more cooperative or synchronous motions.	3	Path can not be specified with 3 or more cooperative or synchronous motions.	Revise the program.
83500332		It is not possible to connect 3 or more cooperative or synchronous motions and pass motion.	3	It is not possible to connect 3 or more cooperative or synchronous motions and pass motion.	Revise the program.
80500333		The origin return operation has been interrupted.	0	The origin return operation of selective external joint has been stopped because a stop process was executed.	Execute The origin return operation again.
83500334		The origin return operation has been interrupted.	3	The origin return operation of selective external joint has been stopped because timeout is occured.	Execute The origin return operation again or revise a timeout period.
83500335		Invalid joint number is specified.	3	Specified joint number is not configured as selective external joint.	Revise the joint number and specify the appropriate value.
83500336		Failed to get COM port Info.	3	Failed to get COM port Info.	Reboot the controller and then try again.
83500337		Direct communication setting is not valid.	3	Direct communication setting is not valid.	Please enable direct communication setting.
83500338		It is necessary to setting direct preparation mode with the Teach-pendant.	3	It is necessary to setting direct preparation mode with the Teach-pendant.	Please set direct preparation mode with the Teach-pendant.

Code	RC7 Code	Message	Level	Description	Remedy
85500339		You cannot use field network in the slave controller.	5	You cannot use field network in the slave controller.	Set the I/O allocation mode to Mini I/O in the slave controller.
8550033A		Dual Arm Control license required.	5	Dual Arm Control license required.	Please enter Dual Arm Control license.
8350033B		Cooperative license required.	3	Cooperative license required.	Please enter Cooperative license.
8450033C		WaitDirectCommunication can not be executed in multiple.	4	WaitDirectCommunication can not be executed in multiple.	Revise the program.
8450033D		WaitDirectCommunication can not be executed while the robot is running.	4	WaitDirectCommunication can not be executed while the robot is running.	Revise the program.
8350033E		You cannot safety parameters upload during safety parameters upload.	3	You cannot safety parameters upload during safety parameters upload.	Complete Safety parameters transfer and try again.
8350033F		It is not possible to connect path which differ combination of robots for cooperative or synchronous motions.	3	It is not possible to connect path which differ combination of robots for cooperative or synchronous motions.	Revise the program.
81500340		Controller power was shutdown when change of the size of the use of variable.	1	Controller power was shutdown when change of the size of the use of variable.	Please change the size of the use of variable again.
83500341		Hand command was executed while a hand is operated.	3	A task tried to execute hand command, but the hand has been operated by another task already.	Revise the program so that multiple tasks do not operate the hand concurrently.
83500342		Serial number is different.	3	Data can not be read because the serial number is different.	Please check the serial number.
83500343		Robot setting is disable.	3	Robot setting is disable.	Please enable robot setting.
83500344		CALSET and RANG data read error	3	CALSET and RANG data read error	Please check the USB that contains an arm parameter is connected.
83500345		When the dual arm control is started for the first time, it is necessary to read the CALSET value and the RANG value from the USB for the arm data set.	3	When the dual arm control is started for the first time, it is necessary to read the CALSET value and the RANG value from the USB for the arm data set.	Please read data from USB.

Code	RC7 Code	Message	Level	Description	Remedy
83500346		Brake-release processing timeout.	3	Brake-release timeout occurred while the waiting of brake-release completion.	Check the connection of safety signals between the master controller and the slave controller. RC8 Standard Specification – Check the connection of the contactor monitor output signal of master controller and the enable-auto input signal of slave controller. RC8A Safety Motion Specification or RC8A Standard Specification – Check connections of the STO monitor output signal of master controller and the external emergency stop input signal of slave controller, and the auto move mutual monitoring output signal of master controller and the enable-auto input signal of slave controller. RC8 Safety I/O Less Specification or RC8A Safety I/O Less Specification – Check the connection of the pendant emergency stop output singnal of master controller and the external emergency stop input signal of slave controller, and the short-circuit of the enable-auto input signal of slave controller.
83500347		Failed to receive Robot1 data of Cooperative control function.	3	Failed to receive Robot1 data of Cooperative control function.	Reboot the Master and Slave controllers.
83500348		Failed to receive Robot2 data of Cooperative control function.	3	Failed to receive Robot2 data of Cooperative control function.	Reboot the Master and Slave controllers.
83500349		Failed to receive Robot3 data of Cooperative control function.	3	Failed to receive Robot3 data of Cooperative control function.	Reboot the Master and Slave controllers.
8350034A		Safety parameter of the "Max payload setting" is small value than configuration of the "Mass of Payload".	3	Safety parameter of the "Max payload setting" is small value than configuration of the "Mass of Payload".	Please set the value of safety parameter of the "Max payload setting" that is bigger than configuration of the "Mass of Payload", or please set the value of configuration of the "Mass of Payload" that is smaller than safety parameter of the "Max payload setting".
8350034B		Too much number of file in the USB for the arm data set.	3	Too much number of file in the USB for the arm data set.	Please make the number of file in the USB for the arm data set one.
8350034C		Failed to set Dual arm.	3	Failed to set Dual arm.	Send Robot Data from WINCAPS again.
8050034D		Movement to CALSET position was interrupted.	0	Movement to CALSET position has been stopped because a stop process was executed.	Clear error and then retry.

Code	RC7 Code	Message	Level	Description	Remedy
8050034E		Diagnosis movement was interrupted.	0	Diagnosis movement has been stopped because a stop process was executed.	Clear error and then retry.
8350034F		It is necessary to confirm the safety parameter by Teach Pendant.	3	It is necessary to confirm the safety parameter by Teach Pendant.	Please confirm safety parameter by Teach Pendant.
83500350		This command is not available after motion preparation.	3	This command is not available after motion preparation.	Please execute command before motion preparation.
83500351		Movement to CALSET position was unavailable move.	3	Movement to CALSET position was unavailable move.	Please release motor brake and execute CALSET manually.
83500352		You cannot execute command because user parameter of the "CALSET on start-up"(index of 252) is enabled.	3	You cannot execute command because user parameter of the "CALSET on start-up"(index of 252) is enabled.	Please set the value of user parameter of the "CALSET on start-up"(index of 252) to "1:DoNot" and then retry.
83500353		You cannot execute command because user parameter of the "Diagnosis movement on start-up"(index of 254) is enabled.	3	You cannot execute command because user parameter of the "Diagnosis movement on start-up"(index of 254) is enabled.	Please set the value of user parameter of the "Diagnosis movement on start-up"(index of 254) to "1:DoNot" and then retry.
80500354		You cannot press the multiple moving direction keys.	0	You cannot press the multiple moving direction keys.	Please press only one moving direction key.
84500355		Diagnosis movement was not executed more than 24 hours.	4	Diagnosis movement was not executed more than 24 hours.	Please execute diagnosis movement.
81500356		You cannot execute motion preparation.	1	you cannot execute the motion preparation while the safety error is issued, or the Emergency-stop is ON, or Protective-stop signal is ON.	Please change the state that the motion preparation can execute, and then retry.
84500357		Diagnosis movement was completed.	4	Diagnosis movement was completed.	Diagnosis movement was completed.
83500358		System processing is delayed because there is a program with high CPU load.	3	System processing is delayed because there is a program with high CPU load.	Add Delay or Wait Command to lower the CPU load of the program.
80500359		Since TP is not in the direct preparation mode, the position cannot be getting.	0	Since TP is not in the direct preparation mode, the position cannot be getting.	Please set TP to direct preparation mode.
8350035A		The direct assist mode [RZ] can not be used when RX ,RY of tool coordinates is not 0.	3	The direct assist mode [RZ] can not be used when RX ,RY of tool coordinates is not 0.	Set RX and RY of tool coordinates to 0 and use them.

Code	RC7 Code	Message	Level	Description	Remedy
8350035B		Neutral frame is not sent from wireless tablet.Please check the communication status.	3	Neutral frame is not sent from wireless tablet.Please check the communication status.	Please check the TP communication status. Distance of COBOTTA may be too far from TP.
8350035C		Current hand type cannot execute.	3	Current hand type cannot execute this command.	Revise the hand motion.
8050035D		Gripper button is not valid.	0	Gripper button is not valid.	Please enable gripper button settings with COBOTTA parameter tool and send.
8450035E		An abnormal command was sent from the wireless terminal at the time of wireless disconnection.	4	An abnormal command was sent from the wireless terminal at the time of wireless disconnection.	Please restart the wireless terminal.
8050035F		Brake release function by function button is not valid.	0	Brake release function by function button is not valid.	Please enable the setting of brake release function and send.
84500360		The hand movement cannot follow the command position.	4	The hand movement is delayed than the command position.	The hand might break down. Please contact DENSO WAVE service with error number and error message.
83500361		Failed to start the system task.	3	Failed to start the system task.	Please review the system task.
83500362		The target position of HandMoveAH exceeds software limit.	3	The total distance exceeds software limit.	Review target position and low speed gripping end position. You can change low speed gripping end position on Aux button of ServoHand Page.
83500363		The target position of HandMoveRH exceeds software limit.	3	The total distance exceeds software limit.	Review target position and low speed gripping end position. You can change low speed gripping end position on Aux button of ServoHand Page.
83500364		The low speed gripping start position exceeds software limit.	3	The start position of gripping movement exceeds software limit.	Review target position and low speed gripping start position. You can change low speed gripping start position on Aux button of ServoHand Page.
81500365		You cannot execute a command while manual operation of the hand.	1	This operation is not allowed while manual operation of the hand.	Please try again without manual moving of the hand.
83500366		Communication error with TP	3	This error occurs if a communications delay occurrs between TP and COBOTTA.	Please check a cable between TP and COBOTTA.
80500367		Many TP connected to COBOTTA.	0	Many TP connected to COBOTTA.	Only one TP can connect to COBOTTA.
83500368		Communication error with TP	3	This error occurs if a communications delay occurrs between TP and COBOTTA.	When TP and COBOTTA communicate wirelessly, please check the TP communication status. Distance of COBOTTA may be too far from TP. When TP and COBOTTA communicate by wire,, please check a cable between TP and COBOTTA.

Code	RC7 Code	Message	Level	Description	Remedy
83500369		Failed in adjustment of hand.	3	Failed to set calibration data of hand because the parameter is larger or smaller.	Review the setting parameter.
8450036A		The offset voltage of pressure sensor of hand is abnormal.	4	The abnormal value of pressure sensor is detected.	Please confirm that the pressure sensor is connected.
8050036B		The hand is gripping work.	0	The hand is gripping work.	Nothing.
8450036C		The detection state was not canceled even after a certain period of time.	4	The detection state was not canceled even after a certain period of time.	Please reset again.
8050036D		The specified password is out of range.	0	The specified password is out of range.	Please enter the password again.
8050036E		It does not match the mode lock password set when connecting the teaching pendant.	0	It does not match the mode lock password set when connecting the teaching pendant.	Please review your password.
8050036F		It is necessary to set the mode lock password when connecting the teaching pendant.	0	It is necessary to set the mode lock password when connecting the teaching pendant.	To the direct teaching, you need a password input at the time of the teaching pendant connection.
80500370		Mode lock button is locked.	0	Mode lock button is locked.	Enter the password and unlocked the mode lock button.
80500371		As the bus voltage is shut off, the hand power is turned off.	0	As the bus voltage is shut off, the hand power is turned off.	The bus voltage of the hand is shut off under conditions such as emergency stop input, protective stop input, and safety errors. It is possible to operate again by performing motion preparation or error clear.
83500372		In order to execute the MotionPreparation and ClearError commands, it is necessary to execute the ManualResetPreparation command in advance.	3	In order to execute the MotionPreparation and ClearError commands, it is necessary to execute the ManualResetPreparation command in advance.	Execute the ManualResetPreparation command in advance. Or update the version of ORiN.
80500373		The load on the hand is rising.	0	The load on the hand is rising due to continuous operation.	If you continue using it as it is, an error may occur. Reduce the continuous run time of the hand, for example by putting a waiting time into the program.
83500374		The adjustment process of hands was stopped.	3	The adjustment process of hands was stopped.	While the adjustment process of hands is carried out, please do not perform other operation.
84500375		Electric Vacuum Generator :Motor Overcurrent	4	Motor current that exceeds the current limit is detected.	If you use Electric Vacuum Generator, a problem may be settled by lowering the power.

Code	RC7 Code	Message	Level	Description	Remedy
83500376		It is failed by Electric Vacuum Generator movement setting.	3	Failed to set the movement parameter.	Check the power or direction.
80500377		The current position of COBOTTA interferes with the virtual fence of the slave robot.	0		
80500378		The current position of COBOTTA is outside the movable range of the slave robot.	0		
84500379		The operation cannot start because the difference between the axis angles of COBOTTA and the slave robot is outside the allowable range.	4	The angle difference between COBOTTA and the slave robot is larger than the allowable value at the start Master/Slave.	Execute the COBOTTA synchronous operation and align the COBOTTA position with the slave robot position.
8450037A		An error occurred in the slave robot.	4	Master/Slave was interrupted because an error occurred in the slave robot.	If the connection with the slave robot is not disconnected, Master/Slave can be resumed by pressing and holding the function button. If the connection is disconnected or an error occurs again after restarting, take action to recover from the error that occurred on the slave robot.
8450037B		Master/Slave operation communication timeout.	4	No response was returned from the connected robot after a certain period of time.	The cable connector may not be securely inserted. Check the wiring. Then reconnect from the COBOTTA.
8150037C		Not connected to the slave robot.	1	Tried to execute the function of master control, but it is not connected to the slave robot.	After confirming the wiring between the robots, reconnect from the preparation page.
8450037D		Master/Slave was forcibly terminated by the slave robot.	4	The connection was forcibly disconnected because the slave controller is not able to follow master.	There may have been a communication error with the slave controller or the power may have been turned off. Check the controller status and wiring.
8450037E		The Emergency – stop do not match.	4	The Emergency – stop of COBOTTA and the slave robot do not match.	Check if the operation displayed in the window is being performed. If it does not improve, check the wiring between COBOTTA and the slave controller.
8450037F		Master/Slave has been interrupted because the mode is locked.	4	Master/Slave operation was interrupted by the mode lock function because there was no user operation for a certain period of time or the mode lock button was pressed.	Press the button at the top right of the page to release the mode lock. Then start Master/Slave operation.
84500380		Cannot execute in current mode.	4	An attempt was made to perform an operation that cannot be performed in the current mode.	Switch the mode and try again.

Code	RC7 Code	Message	Level	Description	Remedy
83500381		Cobotta World cannot be connected while the master control function is enabled.	3	Cobotta World cannot be connected while the master control function is enabled.	When connecting to COBOTTA from Cobotta World, once connect to COBOTTA with Virtual TP or Remote TP, then disable the master control function setting on the direct setting page.
83500382		Another COBOTTA is connected to the slave controller.	3	Another COBOTTA is already connected to the slave controller that tried to connect.	Perform the connection with no other COBOTTA connected to the slave controller.
83500383		Failed to connect to the slave controller.	3	In the connection process to the slave controller An error has occurred.	Check the following contents. -Is the cable connecting COBOTTA and the slave controller properly wired? -Is the IP address setting correct? -Is the setting of the controller type correct?
84500384		The operation has ended because the difference between the axis angles of COBOTTA and the slave robot is outside the allowable range.	4	The angle difference between COBOTTA and the slave robot is larger than the allowable value during Master/Slave operation.	Execute the COBOTTA synchronous operation and align the COBOTTA position with the slave robot position.
84500385		An error occurred in communication with the slave controller.	4	An abnormal value was obtained during communication with the slave controller.	Please connect to the slave robot again. If not, please check the cable connection. Also, make sure that there is no noise source around the communication cable.
84500386		The protective stop input of the slave controller turned ON during Master/Slave operation.	4	The protective stop input of the slave controller turned ON during Master/Slave operation.	Check the condition inside the safety fence and close the safety fence door. Please execute again after confirming that the protective stop of the slave controller is OFF.
84500387		Emergency stop input turned ON during Master/Slave operation.	4	Emergency stop input turned ON during Master/Slave operation.	Please execute again after canceling the emergency stop.
84500388		The auto enable input of the slave controller was turned off during Master/Slave operation.	4	The auto enable input of the slave controller was turned off during Master/Slave operation.	Turn on the auto enable of the slave controller, and then try again.
84500389		Master/Slave operation cannot be performed in the current slave controller mode.	4	Master/Slave operation cannot be performed in the current slave controller mode.	Please execute again after changing the mode of the slave controller to the mode that allows Master/Slave operation.

Code	RC7 Code	Message	Level	Description	Remedy
8450038A		A slave robot collided with a virtual fence.	4	The slave robot collided with the virtual fence set in the slave controller.	Master/Slave operation can be resumed by pressing and holding the function button. If an error occurs again, execute the synchronous operation from the button on the COBOTTA page, or change the slave controller mode to move the slave robot manually.
8350038B		Slave control function is disabled.	3	It cannot be executed when the slave control function is disabled.	Execute again after enabling the slave control function.
8350038C		It cannot be changed while following the master.	3	It cannot be changed while the slave robot is following COBOTTA.	Press and hold the COBOTTA function button to stop tracking the COBOTTA.
8350038D		Master/Slave operation cannot be started because the slave control function is not selected.	3	An attempt was made to start Master/Slave operation when the slave control function was not selected.	Open the shortcut page, select the slave control function, and then try again.
8450038E		It cannot be executed with pendants other than Smart TP.	4	You tried to execute a function that cannot be executed when a pendant other than Smart TP is connected.	Use the smart TP to operate the robot.
8350038F		It cannot be executed without being connected to COBOTTA.	3	You have tried to perform an operation that cannot be performed without being connected to COBOTTA.	Execute the connection process from COBOTTA to the slave controller.
83500390		The path record function cannot be used during control log running.	3	The path record function cannot be used during control log running.	Please execute again after stopping the control log.
83500391		No more data can be recorded for the path record function.	3	It is not possible to record additional data because the recorded data has reached the limit capacity of temporary storage.	Either clear the data or output the data to a global variable or path points.
83500392		The internal processing of the path record function has finished.	3	Recording has ended because an error occurred while recording the data for the path record function.	For the detailed information, please confirm the OriginalNumber.
83500393		The data of the path record is being copied to the temporary storage area.	3	Since the previous record data is copied to the temporary storage area, the path recording cannot be started or saved.	Execute after the copying to the temporary storage area is completed. You can use a command to get whether the copy is complete. See the manual for details.
83500394		There is no path record data.	3	The data recorded by the path record function does not exist.	After recording the path, execute the save process.
83500395		The processing was terminated because the leader robot was changed while recording the path.	3	Since the leader robot was changed while recording the path, the recording function was terminated and the temporary data was cleared.	When changing leader robot, stop the path record function.

Code	RC7 Code	Message	Level	Description	Remedy
83500396		The external speed cannot be changed when the Slave Control function is selected.	3	An attempt was made to change the external speed while selecting the Slave Control function and connecting to COBOTTA.	Disable the Slave Control function or disconnect the connection from COBOTTA and try again.
83500397		Failed to switch the I/O set by the Slave Control function.	3	Failed to switch the I/O set by the Slave Control function.	Check if the set I/O number is correct. When the original number is described in the error, refer to the error code recovery process described in the original number.
83500398		The variable number specified to get position has reached the maximum value.	3	The variable number specified to get position has reached the maximum value.	If you want to capture additional positions, reset the value of the variable number or increase the variable size.
83500399		The slave controller version is old and cannot be connected.	3	The slave controller version is old and cannot be connected.	Please upgrade the version of the slave controller.
8350039A		The following movement to COBOTTA has ended.	3	The following movement to COBOTTA has ended.	If an error occurs at the same time, take recovery action and then press and hold the COBOTTA function button.
8350039B		This is a process that cannot be executed by this robot type.	3	This is a process that cannot be executed by this robot type.	Please refer to the manual for compatible robot type.
8350039C		Failed to connect the home position guidance server.	3	Failed to connect the home position guidance server.	Connect the home position guidance server or Teach-pendant.
8350039D		The trace position is not found in the log.	3	The trace position is not found in the log.	Revise the trace position.
8350039E		Failed to Calculate the home position guidance.	3	Failed to Calculate the home position guidance.	Please check the following items. 1. Revise the virtual trace position number. 2. Revise the current position.
8350039F		MoveBackTraceLog has been interrupted.	3	MoveBackTraceLog has been stopped because a stop process was executed.	
835003A0		The Master/Slave operation cannot be executed during exclusive control enabled.	3	Since exclusive control is enabled, the Master/Slave connection has been disconnected.	After disabling exclusive control, reconnect from the master.
835003A1		No BackTrace path has been calculated.	3	Because the Backtrace path has not been calculated, the return operation is not possible.	Please calculate the homing path.
855003AD		Update FPGA (Mecha).	5	Update FPGA (Mecha).	Login as "Maintainer".Please Update from [F2Arm]-[F12Maintenance]-[F12-Service]-[F4 FPGA Update]
835003AE		It is not possible to return automatically because some stop has been input.	3	It is not possible to return automatically because some stop has been input.	

Code	RC7 Code	Message	Level	Description	Remedy
835003DC		Home Position Guidance : No license	3	No lisence.	Please register license number for the function to the controller. If you do not have a license, please contact DENSO WAVE to ask for the new licence.
835003E6		AutoCal is not available to normal task. This command is available to TSR.	3	AutoCal is not available to normal task. This command is available to TSR.	Execute AutoCal in TSR.
835003E8		Automatic BackTraceLog calculation failed.	3	The robot's current position is far from the last point of the BackTraceLog.	Perform the BackTrace path calculation on the Smart TP BackTrace screen.
835003EC		The Backtrace path for automatic mode has not been calculated.	3	Calculate the Backtrace path in automatic mode.	
835003ED		The Backtrace path for manual mode has not been calculated.	3	Calculate the Backtrace path in manual mode.	
835003F0		CalcBackTraceLog has been interrupted.	3	CalcBackTraceLog has been stopped because a stop process was executed.	
835003F1		The BackTrace path cannot be calculated because the BackTraceLog has been used once.	3	In automatic mode, it is not possible to recalculate using the BackTraceLog once used.	Obtain the BackTraceLog again, or perform the BackTrace path calculation on the Smart TP BackTrace screen.
815003F5		You cannot use the command until BackTraceLog calculation finished.	1	You cannot use the command until BackTraceLog calculation finished.	Please retry the command, after BackTraceLog calculation finished.
835003F6		This command is not supported in COBOTTA.	3	This command is not supported in COBOTTA.	Review the command.
855003FF		Cannnot connect to RC8 controller with current MC9 controller version.	5	Cannnot connect to RC8 controller with current MC9 controller version.	MC9 or RC8 controller version needs to be updated. Please contact DENSO WAVE service with error number and error message.
81500402		This operation is not available while AI Imitation Learning Runtime is enabled.	1	Operation that is prohibited in the AI Imitation Learning Runtime function-enabled condition was executed.	Select "Setting" – "Login" and login the controller with "Maintainer" level, disable the AI Imitation Learning Runtime function, and then try again.
85500414		You cannot open the project.	5	The project file is being used by another tool .	Retry after closing the project.
83500424		Mode NoN selected.	3	Mode NoN selected.	Please change the mode.
83500425		Mode NoN is selected.	3	Mode NoN is selected.	Please change the mode.
85500426		MP cannot be used with this robot type.	5	MP cannot be used with this robot type.	Please connect a pendant other than MP.

Code	RC7 Code	Message	Level	Description	Remedy
8550042A		The enabling switch is pressed and stuck.	5	The enabling switch is pressed and stuck.	Do not press the enabling switch for a long time. if the problem still occurs, the enabling switch might be broken down.
8350042B		The current position of the slave robot is outside the soft limits of J1 of the COBOTTA.	3	The COBOTTA movement could not be executed because the current position of the slave robot was outside the software limits of COBOTTA.	Move J1 of the slave robot within the soft limits of the COBOTTA.
8350042C		The current position of the slave robot is outside the soft limits of J2 of the COBOTTA.	3	The COBOTTA movement could not be executed because the current position of the slave robot was outside the software limits of COBOTTA.	Move J2 of the slave robot within the soft limits of the COBOTTA.
8350042D		The current position of the slave robot is outside the soft limits of J3 of the COBOTTA.	3	The COBOTTA movement could not be executed because the current position of the slave robot was outside the software limits of COBOTTA.	Move J3 of the slave robot within the soft limits of the COBOTTA.
8350042E		The current position of the slave robot is outside the soft limits of J4 of the COBOTTA.	3	The COBOTTA movement could not be executed because the current position of the slave robot was outside the software limits of COBOTTA.	Move J4 of the slave robot within the soft limits of the COBOTTA.
8350042F		The current position of the slave robot is outside the soft limits of J5 of the COBOTTA.	3	The COBOTTA movement could not be executed because the current position of the slave robot was outside the software limits of COBOTTA.	Move J5 of the slave robot within the soft limits of the COBOTTA.
83500430		The current position of the slave robot is outside the soft limits of J6 of the COBOTTA.	3	The COBOTTA movement could not be executed because the current position of the slave robot was outside the software limits of COBOTTA.	Move J6 of the slave robot within the soft limits of the COBOTTA.
83500501		Bumper collision detected	3	Bumper collision was detected	Check if the bumper collides with something. After removing the obstracles, reset the bumper.
83500502		The command cannot be executed because the robot is controlled by MC9.	3	The command cannot be executed because the robot is controlled by MC9.	Do not execute the command if the robot is controlled by MC9.
81501001	200A	You cannot execute a command while the motor power is ON	1	This operation is not available while the motor power is ON.	Turn OFF the motor and then retry.
81501002		You cannot execute a command while motor power is ON. One or more robots are running.	1	This operation is not available when any robots are Motor-ON state.	Turn OFF the motors of all robots and then retry.
81501003	2006	Turn ON the motor to execute the command	1	Command was executed under the motor power OFF. This command execution requires the motor power ON.	Turn ON the motor and then retry.
81501004		Turn ON the motors of all corresponding robots.	1	This operation requires all robots being Motor-ON state. Any robots are Motor-OFF state.	Turn ON motors of all corresponding robots, and then retry.

Code	RC7 Code	Message	Level	Description	Remedy
81501005	21DE	This command is not available when Machine-lock is ON.	1	This operation is not available while the Machine lock is ON.	Turn OFF the Machine-lock and then retry.
81501006		Any robots are Machine-lock state.	1	This operation is not available if any robots is Machine-lock ON state.	Turn OFF the Machine-lock of all corresponding robots and then retry.
81501007	21DF	Turn ON the Machine-lock to execute the command	1	Machine-lock is OFF. This command execution requires the Machine-lock ON.	Turn ON the Machine-lock and then retry.
81501008		Enable Machine-lock of all corresponding robots to execute the command	1	This operation is available only when all robots are Machine-lock ON state. You executed the operation with at least one robot being Machine-lock OFF state.	Turn ON the Machine-lock of all corresponding robots and then retry.
82501009	27A6	Level 5 Error has been occurred immediately before.	2	You tried to execute a command while level 5 error occurs.	With Error log, check the errors and clear all level 5 errors.
8150100A	71E0	You cannot execute a command program is running	1	This operation is not available while program is running.	Stop the program and retry.
8150100B		Run at least one program to execute the command	1	This operation is not available when at least one program is running.	Start the program and retry.
8350100C		You cannot execute a command because a program is still running.	3	This operation requires the condition that all programs are Reset-stopped.	Reset-stop all programs (includes TSR tasks) and then retry.
8150100D	600B	You cannot execute a command while a robot is running.	1	This operation is not available while a robot is running.	Stop a program that runs a robot, and then retry.
8150100E		You cannot execute a command because one or more corresponding robots are running.	1	This operation is not available while a robot is running..	Stop all corresponding robots and then retry.
8150100F	21BF	You cannot execute a command while program is suspended	1	This operation is not available while a robot is suspended.	Stop a robot and then retry.
81501010		Some robots are suspended.	1	This operation is not available while any robots are suspended.	Stop all corresponding robots and then retry.
81501011	73FF	You cannot execute a command during the program stop processing.	1	You started a program during the program stop process.	Wait for a while and try again. When the program stop process is executed for all tasks, the program cannot start until all tasks stop.
81501012	21E2	You cannot execute a command in Manual mode.	1	This operation is not available in Manual mode.	Change the robot mode to other than Manual mode, and then retry.
81501013	21E3	Select Manual mode to execute the command	1	This operation is available only in Manual mode.	Select Manual mode and then retry.
81501014	21E4	You cannot execute a command in Teach-check mode.	1	This operation is not available in Teach-check mode.	Change the robot mode to other than Teach-check mode and then retry.

Code	RC7 Code	Message	Level	Description	Remedy
81501015	21E5	Select Teach-check mode to execute the command	1	This operation is available only in Teach-check mode.	Select Teach-check mode and then retry.
81501016	21E6	You cannot execute a command in Auto mode.	1	This operation is not available in Auto mode.	Change the robot mode to other than Auto mode and then retry.
81501017	21E7	Select Auto mode to execute the command	1	This operation is available only in Auto mode.	Select Auto mode and then retry.
81501018	21EB	You cannot execute this operation while the deadman switch is pressed.	1	This operation is not available while the deadman switch is pressed.	Release the deadman switch and then retry.
81501019	21EC	Turn ON the deadman switch.	1	This operation is available only when the deadman switch pressed.	Press the deadman switch and then retry.
8150101A	2008	This command is not available while the Emergency-stop is ON	1	This operation is not available while the Emergency-stop is ON.	Turn OFF the Emergency-stop and then retry.
8150101B	21ED	Turn ON the Emergency-stop to execute the command	1	This operation is available only when the Emergency-stop is ON.	Turn ON the Emergency-stop and then retry.
8150101C	21EE	This command is not available while the Instantaneous-stop is ON	1	This operation is not available while the Instantaneous-stop is ON.	Turn OFF the Instantaneous-stop and then retry.
8150101D	21EF	Turn ON Instantaneous-stop to execute the command	1	This operation is available only when the Instantaneous-stop ON.	Turn ON the Instantaneous-stop and then retry.
8150101E	21F0	This command is not available while Step-stop signal is ON	1	This operation is not available while the Step-stop is ON.	Turn OFF the Step-stop and then retry.
8150101F	21F1	Turn ON Step-stop signal to execute the command	1	This operation is available only when the Step-stop ON.	Turn ON the Step-stop and then retry.
81501020	21F2	This command is not available while the Enable-Auto signal is ON.	1	This operation is not available while the Enable-auto is ON.	Turn OFF the Enable-auto and then retry.
81501021	21F3	Turn ON Enable-Auto signal to execute the command	1	This operation is available only when the Enable-auto ON.	Turn ON the Enable-auto and then retry.
81501022		This command is not available while Protective-stop signal is ON	1	This operation is not available while the Protective-stop is ON.	Turn OFF the Protective-stop and then retry.
81501023		Turn ON Protective-stop signal to execute the command	1	This operation is available only when the Protective-stop ON.	Turn ON the Protective-stop and then retry.

Code	RC7 Code	Message	Level	Description	Remedy
83501024	21F7	Failed to take arm semaphore	3	1. The program has not taken arm semaphore, but it tried to execute robot motion command. 2. The program tried to take arm semaphore, but another program has already taken the semaphore.	1. Take arm semaphore with TAKEARM statement, and then execute robot motion commands. 2. Revise the program so that multiple programs do not take arm semaphore simultaneously.
81501025	21D3	This command is not available while an error occurs	1	This operation is not available when an error occurs.	Clear error and then retry.
83501026		Set the executable token to TP to execute the command	3	You tried to move a robot, turn ON motor or start PacScript from the Teach-pendant, while the pendant does not have the executable token. (Executable token: an authority to move robot, turn ON motor or start PacScript).	Set the executable token to the Teach-pendant and then retry.
83501027	2289	Set the executable token to I/O to execute the command	3	You tried to move robot, turn ON motor or start PacScript from I/O, while I/O does not have the executable token. (Executable token: an authority to move robot, turn ON motor or start PacScript).	Set the executable token to I/O and then retry.
83501028	2287	Set the executable token to Ethernet to execute the command	3	You tried to move robot, turn ON motor or start PacScript from Ethernet, while Ethernet does not have the executable token. (Executable token: an authority to move robot, turn ON motor or start PacScript).	Set the executable token to Ethernet and then retry.
83501029	2288	Set IP address for the executable token to execute the command	3	You tried to move robot, turn ON motor or start PacScript from external computer, while the IP address of the computer not have the executable token (Executable token: an authority to move robot, turn ON motor or start PacScript).	Set IP address for executable token and retry.
8350102A	2284	Set the executable token to COM2 to execute the command	3	You tried to move robot, turn ON motor or start PacScript from COM2, while COM2 does not have the executable token. (Executable token: an authority to move robot, turn ON motor or start PacScript).	Set the executable token to COM2 and then retry.
8350102B	2285	Set the executable token to COM3 to execute the command	3	You tried to move robot, turn ON motor or start PacScript from COM3, while COM3 does not have the executable token. (Executable token: an authority to move robot, turn ON motor or start PacScript).	Set privilege of running to COM3 and retry.

Code	RC7 Code	Message	Level	Description	Remedy
8350102C	2286	Set the executable token to COM4 to execute the command	3	You tried to move robot, turn ON motor or start PacScript from COM4, while COM4 does not have the executable token. (Executable token: an authority to move robot, turn ON motor or start PacScript).	Set the executable token to COM4 and then retry.
8350102D		Set the executable token to COM5 to execute the command	3	You tried to move robot, turn ON motor or start PacScript from COM5, while COM5 does not have the executable token. (Executable token: an authority to move robot, turn ON motor or start PacScript).	Set the executable token to COM5 and then retry.
8350102E		Set the executable token to COM6 to execute the command	3	You tried to move robot, turn ON motor or start PacScript from COM6, while COM6 does not have the executable token. (Executable token: an authority to move robot, turn ON motor or start PacScript).	Set the executable token to COM6 and then retry.
8350102F	6308	This command not available while motor brake is released	3	This operation is not available while the motor brake is released.	Set Brake-lock ON and then retry.
83501030		This command not available while the motor brakes on one or more corresponding robots are released.	3	This operation is not available while brake is released on one or more of corresponding robots.	Set all Brake-lock ON on all corresponding robots and then retry.
83501031		Release the motor brake to execute the command	3	This operation is available only when the motor brake is released.	Release brake and then retry.
83501032	2254	You cannot execute a command in Slave mode	3	This operation is not available while the robot is in Slave mode.	This command is not available under the Slave mode (range bounded by SlvChangeMode command). Run the command at the outside of the area surrounded by SlvChangeMode.
83501033		Set the robot to the Slave mode	3	This operation is available only when the robot is in Slave mode.	Set to the Slave mode and then retry.
83501034		Command is not available during initialization	3	This operation is not available during the power-ON initialization process.	Wait until power-ON initialization process finishes, and then try again.
83501035	73FF	This operation is not available during the program stop processing.	3	This operation is not available in the program stop process.	Wait for a while and try again. When stop process is applied to all tasks, the system is in program stop process until all tasks stops.
83501036		Change to real controller to execute the command	3	You cannot execute this operation in Simulation.	Use actual controller to use the operation.

Code	RC7 Code	Message	Level	Description	Remedy
83501037		This command is not availble in real controller	3	This operation is not available to the real controller.	The operation is executable only in simulation. Do not execute operation on the actual controller.
83501038	21BD	You cannot execute a command while program is edited	3	You cannot execute this command while program is edited.	Finish the program edit and then try again.
83501039	21BE	You cannot execute a command while parameter is edited	3	You cannot execute this command while parameter is edited.	Finish the parameter edit and then try again.
8350103A		You cannot execute a command while 3D is displayed	3	This operation is not available while 3D image is displayed.	Finish 3D display and then try again.
8350103B		You cannot execute a command while TSR is running	3	This operation is not available while TSR is running.	Stop TSR and then try again.
8350103C		Run at least one TSR to execute the command	3	This operation is available only when TSR is running.	Start TSR and then try again.
8350103D		You cannot execute a command while Panel task is running	3	This operation is not available when the Panel task is running.	Stop Panel task and then try again.
8350103E		Run at least one Panel task to execute the command	3	This operation is available only when the Panel task is running.	Start Panel task and then try again.
8350103F	6750	You cannot execute a command while CALSET has not been completed.	3	This operation is not available if CALSET is not completed.	Complete CALSET and try again.
83501040		Command isn't executable. One or more corresponding robot have not been performed CALSET.	3	You tried to execute a command although CALSET on one or more corresponding robots have not completed.	Perform CALSET on all of corresponding robots and try again.
83501041	6750	You cannot execute a command because of the encoder reference position error.	3	You tried to execute operation that is prohibited while the encoder reference position error occurs.	Clear encoder reference position error and try again.
83501042		You cannot execute a command. Encoder reference position error is issued on one or more corresponding robot.	3	You tried to execute operation that is prohibited while encoder reference position error occurs on one or more of corresponding robots.	Clear encoder reference position error on all of corresponding robots and try again.
80501043		No communication permission for reading is detected.	0	The controller does not have permission to read communication data	Set permission to read communication data and try again.
80501044		No communication permission for writing is detected.	0	The controller does not have permission to write communication data	Set permission to read and write communication data and try again.
83501045		You cannot execute a command during the syntax check.	3	This operation is not available during syntax check.	Complete syntax check and try again.

Code	RC7 Code	Message	Level	Description	Remedy
80501046		You cannot execute a command when the motor power is ON	0	This operation is not available while the motor is ON.	Turn OFF the motor and try again.
80501047		You cannot execute a command in Machine-lock mode	0	This operation is not available while the Machine-lock is ON.	Turn OFF the Machine-lock and try again.
83501048		You cannot execute a command while the program is suspended.	3	You executed a command while program is suspended.	Stop the program that runs a robot and then retry.
81501049		You cannot execute a command during data transfer.[PC->RC]	1	This operation is not available during data transfer [PC->RC].	Complete the data transfer and try again.
8150104A		You cannot execute a command during data transfer.[RC->PC]	1	This operation is not available during data transfer [RC->PC].	Complete the data transfer and try again.
8150104B		You cannot execute a command during USB data transfer.[USB->RC]	1	This operation is not available during data transfer [USB->RC].	Complete the data transfer and try again.
8150104C		You cannot execute a command during USB data transfer.[RC->USB]	1	This operation is not available during data transfer [RC->USB].	Complete the Data transfer and try again.
8150104D		You cannot execute a command during CALSET.	1	This operation is not available while performing CALSET.	Complete CALSET and try again.
8050104E		You cannot execute a command while the Program list is displayed.	0	This operation is not available while the Program list is displayed.	Close the Program list window and try again.
8150104F		You cannot execute a command during Gain tuning.	1	This operation is not available during Gain tuning.	Finish Gain tuning and try again.
81501050		You cannot execute a commande in the Direct mode.	1	This operation is not available while Direct mode is activated.	Exit Direct mode and try again.
81501051		You cannot execute a command during Z-Balance adjustment.	1	This operation is not available while Z-Balance adjustment is performed.	Finish Z-balance adjustment and then try again.
81501052		You cannot execute a command while the robot runs manually	1	This operation is not available while the robot moves manually.	Finish robot manual motion and try again.
81501053		You cannot execute a command during speed inching setting.	1	This operation is not available during Speed inching.	Turn OFF the "Inching" slider of the "Speed" window.
81501054		You cannot execute a command while Tool setting is displayed.	1	This operation is not available while displaying Tool setting.	Close the Tool setting window and try again.
81501055		You cannot execute a command while the Work setting is displayed.	1	This operation is not available while displaying Work setting.	Close the Work setting window and try again.

Code	RC7 Code	Message	Level	Description	Remedy
81501056		You cannot execute a command while the Area setting is displayed.	1	This operation is not available while the Area setting is displayed.	Close the Area setting window and try again.
81501057		You cannot execute a command while the Variable list is displayed.	1	This operation is not available while the Variable list is displayed.	Close the Variable list window and try again.
81501058		You cannot execute a command while the Parameter edit window is displayed.	1	This operation is not available while the Parameter edit window is displayed.	Close the Parameter edit window and try again.
81501059		You cannot execute a command during the file delete processing.	1	This operation is not available while files are deleted.	Delete files and then try again.
8350105A		You cannot execute a command in the Remote control mode.	3	This operation is not available in the Remote control mode.	Terminate the Remote control and then retry.
8350105B		Command is not executable during Tracking wizard execution.	3	This operation is not available during tracking wizard execution.	Finish Tracking wizard and then try again.
8350105C		Command is not executable while the Command-Slave is enabled.	3	This operation is not available while the Command-Slave is enabled.	Release the Enable-state of the Command-slave and then try again.
8350105D		Command-Slave is disabled.	3	Command-Slave is disabled.	Enable the Command-slave and then try again.
8350105E		Command is not executable while the Base setting is displayed.	3	This operation is not available while displaying base setting.	Close the Base setting window and try again.
8150105F		Command is not executable during EasyBackup execution.	1	This operation is not available during EasyBackup execution.	Retry after EasyBackup.
83501060		Command is not executable while Extension window is displayed.	3	This operation is not available while displaying extension window.	Close Extension window and try again.
83501061		Command is not executable while vision data is being saved.	3	This command is not executable while visition datas is being saved.	Save the vision data completely, and then retry.
83501062		This command is not available in CC8.	3	This command is not available in CC8.	Revise the program.
83501063		You cannot execute a command until Safety parameters are transferred completely.	3	Failed to execute the command because Safety parameters transfer has not been completed.	Complete Safety parameters tranfer.
81501064		You cannot execute a command during Safety parameters transfer.[PC->RC]	1	This operation is not available during Safety parameters transfer [PC->RC].	Complete Safety parameters transfer and try again.
81501065		You cannot execute a command during Safety parameters transfer.[RC->PC]	1	This operation is not available during Safety parameters transfer [RC->PC].	Complete Safety parameters transfer and try again.

Code	RC7 Code	Message	Level	Description	Remedy
81501066		You cannot execute a command when the SS1 ON	1	This operation is not available while the SS1 is ON.	SS1 OFF and try again.
81501067		You cannot execute a command during Load estimating.	1	This operation is not available during Load estimating.	Finish Load estimating and try again.
81501068		You cannot execute a command during direct mode.	1	This operation is not available during Direct Mode.	Finish Direct mode and try again.
81501069		Operation preparation is necessary.	1	Operation preparation is necessary.	Prepare for operation.
8150106A		It can be executed only in direct mode.	1	Please execute in direct mode.	Please execute in direct mode.
8150106B		Execution is possible only if login level is programmer or higher.	1	Execution is possible only if login level is programmer or higher.	Please login with programmer or higher.
8350106C		You cannot execute a command while the homing mode is in process.	3	This operation is not available while the homing mode of selective external joint is in process.	Try again after the end of homing mode.
8350106D		It can not be executed in the direct preparation mode.	3	It can not be executed when the Teach-pendant setting is direct preparation mode.	Please cancel direct preparation mode with the Teach-pendant.
8350106E		You cannot motor power is ON while the motor power is OFF.	3	You cannot motor power is ON while the motor power is OFF.	Turn OFF the motor and try again.
8350106F		All programs were Reset-stop because some tasks in the program were not Reset-stop.	3	All programs were Reset-stop because some tasks in the program were not Reset-stop.	Please execute while all programs are Reset-stop.
81501070		You cannot execute a command while motion preparation has not been performed.	1	You cannot execute a command while motion preparation has not been performed.	Prepare for operation.
83501071		It can not be executed while the electric vacuum generator is running.	3	It can not be executed while the electric vacuum generator is running.	Please execute with the electric vacuum generator stopped.
83502001	73E4	Out of I/O port range	3	You tried to handle I/O port range does not exist on the controller.	Revise the I/O number and then try again.
83502002	73E4	Port is in the System I/O range	3	You tried to handle System I/O port range.	Revise the I/O number and then try again.
83502003	73E4	Port is out of the System I/O range	3	You tried to handle User I/O as System I/O.	Revise the I/O number and then try again.
83502004	73E4	Out of User I/O port range	3	This I/O does not support input/output operation.	Revise the I/O operation and then try again.
83502005		Out of Dummy input range	3	You tried to turn ON/OFF I/O that isn't set as Dummy I/O input port.	Revise Dummy I/O input setup and then try again

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83502006	2032	Undefined I/O command	3	Undefined I/O command was executed in System I/O.	An error occurred in the System I/O input command format. Revise the format and then try again.
83502007	73E4	Undefined I/O allocation	3	Undefined I/O allocation is specified.	Revise I/O allocation.
83502008	2033	I/O parity error	3	Inconsistent parity is found in System I/O.	Set the parity properly and turn ON the strobe signal of the system input.
83502009	73E4	Out of I/O input range	3	Failed to input data because this port is not input-area.	Revise the I/O number and try again.
8350200A		Invalid float value on I/O input	3	Bit-array was not recognized as Float when Float definition of DefIO has been set.	Revise the I/O bits so that it can be recognized as Float, and then retry.
8350200B	123C	Preparing for the field network communication	3	Field network communication has not been established yet.	Revise field network setting.
8350200C	123D	Field network connection has been closed	3	The communication was closed after the field network connection was established.	Confirm field network master parameters and cable connection status.
8350200D	125C	Field network internal EEPROM failure	3	An error occurred at EEPROM of the field network.	Reboot the power supply.
8350200E	125D	Field network address IP is duplicated.	3	IP address specified for the field network board is conflicting with another network device.	Change IP address of network device or field network to avoid IP address duplication.
8350200F	125E	Field network board initialization error	3	Failed to initialize the field network board.	Reboot the power supply of the field network.
83502010	125F	Field network configuration error	3	Failed to initialize the field network board.	Reboot the power supply of the field network.
83502011	1268	Field network communication error	3	An error occurred while establishing the field network connection.	Confirm field network master parameters and cable connection status.
83502012	1269	Field network receiving timeout	3	Timeout error occurred while acquiring the field network input data.	Confirm field network master parameters and cable connection status.
83502013	1298	Field network sending timeout	3	Timeout error occurred while acquiring the field network output data.	Confirm field network master parameters and cable connection status.
83502014	1299	Field network license error	3	Tried to use non-master type field bus board as a master.	Confirm field network board supports master operation.
83502015	123F	Field network Runtime error	3	An error occurred in the runtime routine for the field network.	Confirm LED on the board is lit, and then reboot the power supply.
83502016	123E	Field network error	3	An error occurred at the field network.	Reboot the power supply of the field network.
83502017	1235	Field network Command Timeout Error	3	Controller internal filed network communication error and timeout occurred.	Increase corresponding field network timeout setting.
83502018	123B	Field network error	3	Undefiled field network error	Reboot the power supply of the field network.
83502019		CC-Link error	3	CC-Link slave communication error occurred.	Check the CC-Link slave communication parameter

Code	RC7 Code	Message	Level	Description	Remedy
8350201A		DeviceNet master error	3	DeviceNet master communication error occurred.	Check the DeviceNet master communication parameter
8350201B		DeviceNet slave error	3	DeviceNet slave communication error occurred.	Check the DeviceNet slave communication parameter
8350201C		EtherNet/IP adaptor error	3	Ethernet I/P adaptor communication error occurred.	Check the Ethernet/IP adaptor communication parameter
8350201D		PROFIBUS slave error	3	Profibus slave communication error occurred.	Check the Profibus slave communication parameter.
8350201E		Invalid Robot ID on I/O input	3	The robot ID specified by I/O does not exist.	Check if the robot ID is correct.
8150201F		You cannot switch the I/O lock states between "Disable" to "Disable".	1	Tried to change the I/O lock status from "disable" to "disable".	Set to the Enable-state first, and then change to the Disable-state.
83502020	73E4	Invalid Data Area value	3	This command does not allow to turn ON the 15th bit of the data area.	Revise data area value and then retry.
82502021	21F5	Specified program is already running	2	The program that you specified to start in the System input is already running.	Revise the system input command and then retry.
83502022	2003	I/O value is out of range	3	The value specified in data area is not supported by system input command.	Revise the system input data area and then retry.
83502023	73E4	This is not the output area.	3	Specified area is not for the output.	Revise output I/O number and then retry.
81502024		You cannot use this function in the current I/O allocation	1	Failed to execute a command because this command is not supported by current I/O allocation.	Revise system input command and then retry.
83502025		Invalid device	3	Unsupported field network device is attached.	Revise the installed field network board.
83502027		Invalid allocation	3	Allocation setting is wrong.	Revise the allocation and reboot the field network power supply.
85502028		I/O board specification error	5	NPN type I/O is specified for the controller, but PNP type I/O board is installed.	Change the setting to PNP type, or change the board to NPN type.
85502029		I/O board specification error	5	PNP type I/O is specified for the controller, but NPN type I/O board is installed.	Change the setting to NPN type, or change the board to PNP type.
8350202A		Invalid I/O command argument	3	Invalid argument is passed to I/O command.	Revise the argument for I/O command.
8550202B		Invalid I/O allocation	5	Non-existing I/O allocation is specified.	Revise the I/O allocation, and then select I/O allocation that corresponds with the controller.

Code	RC7 Code	Message	Level	Description	Remedy
8150202C		Specified field network device does not exist.	1	1. Robot controller could not recognize the field network device connected. 2. The field network device specified by the project data sent from WINCAPS3 has not been connected. The target device is running in Simulation mode.	1. Reconnect the network device that had been connected to the robot controller. When connecting, be sure to set the field network device vertically to the connector on the robot controller. For details, refer to "Installing Expansion Board" (ID: 1347) in "RC8 SERIES ROBOT CONTROLLER MANUAL". 2. Connect the corresponding field network device.
8350202D		The system input range does not exist.	3	The system input range does not exist.	Reboot the power supply of the field network.
8150202E		Stop-processing output I/O can only be assigned to the user output.	1	Stop-processing output I/O is set to other than the user output.	Change the setting to user output.
8350202F		DeviceNet Slave:No license	3	No lisence.	Please register license number for the function to the controller. If you do not have a license, please contact DENSO WAVE to ask for the new licence.
83502030		DeviceNet Master:No license	3	No lisence.	Please register license number for the function to the controller. If you do not have a license, please contact DENSO WAVE to ask for the new licence.
83502031		CC-Link Slave:No license	3	No lisence.	Please register license number for the function to the controller. If you do not have a license, please contact DENSO WAVE to ask for the new licence.
83502032		Profibus Slave:No license	3	No lisence.	Please register license number for the function to the controller. If you do not have a license, please contact DENSO WAVE to ask for the new licence.
83502033		EtherNet/IP adaptor:No license	3	No lisence.	Please register license number for the function to the controller. If you do not have a license, please contact DENSO WAVE to ask for the new licence.

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83502034		Parallel I/O:No license	3	No lisence.	Please register license number for the function to the controller. If you do not have a license, please contact DENSO WAVE to ask for the new licence.
83502035		Specified field network device has not been configured. Reboot after the configuration.	3	The installed field network device has not been configured. Reconfigure the board with the Sycon.Net, and then reboot.	The installed network device has not been set. Install Syncon.Net software on a PC, configure the network device through the network with the software, and then reboot.
81502036		Robot-running (command value) I/O can only be assigned to the User output and the Internal I/O.	1	Robot running (command value) output is set to other than the User output.	Change the setting to the user output.
83502037		Command-Slave is not available with the currently used field network device.	3	Command-Slave is not available with the current field network device.	Connect the Command-Slave-supported field network device.
83502038		Command-Slave data area setting error.	3	Insufficient data area for Command-Slave. The minimum I/O area sizes are Input:188 bytes, and Output:120 bytes.	Change the network I/O size to an appropriate value.
81502039		TSR-running I/O can only be assigned to the User output and the Internal I/O.	1	TSR running output is set to other than the User output.	Change the setting to the User output.
8150203A		Robot-running (encoder value) I/O can only be assigned to the User output and the Internal I/O.	1	Robot running (Encoder) output is set to other than the User output.	Change the setting to the User output.
8150203B		Robot controller startup completed-I/O can only be assigned to the User output and the Internal I/O.	1	Robot controller startup completed output is set to other than the User output.	Change the setting to the User output.
8150203C		Tip speed output AO device (manufactured by CONTEC) is not found.	1	The tip speed output AO device is not found.	Connect the AO device manufactured by CONTEC.
8150203D		AO channel that outputs the tip speed is not found.	1	AO channel that outputts the tip speed is not found.	Please set the channel number within the range of the currently installed AO device manufactured by CONTEC.
8150203E		Failed to set the AO range that outputs the tip speed.	1	Failed to set the AO range that outputs the tip speed.	Please set the output range of the currently installed AO device manufactured by CONTEC.

Code	RC7 Code	Message	Level	Description	Remedy
8150203F		Failed to initialize the tip speed output AO.	1	Failed to initialize the tip speed output AO.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
81502040		Failed to get the tip speed.	1	Failed to get the tip speed.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
81502041		Failed to output the analog voltage of the tip speed.	1	Failed to output the analog voltage of the tip speed.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
83502042		PROFINET I/O Device:No license	3	No lisence.	Please register license number for the function to the controller. Or contact DENSO WAVE to ask for the new licence.
83502043		EtherCAT Slave:No license	3	No lisence.	Please register license number for the function to the controller. Or contact DENSO WAVE to ask for the new licence.
83502044		The project is configured as a field network master, but the slave device is connected.	3	The project is configured as a field network master, but the slave device is connected.	The attached device can be used for fielld network slave only. Please exchange it with the field network master device.
81502045		32-bit error number output I/O can only be assigned to the User output and the Internal I/O.	1	32-bit error number output I/O can only be assigned to the user output and the internal I/O.	Change the setting to the User output.
81502046		Battery replacement time output I/O can only be assigned to the User output and the Internal I/O.	1	Change battery time output I/O can only be assigned to the User output and the Internal I/O.	Change the setting to the User output.
81502047		Motor-OFF processing output I/O can only be assigned to the User output and the Internal I/O.	1	Motor-OFF processing output I/O can only be assigned to the User output and the Internal I/O.	Change the setting to the User output.
81502048		Anomaly detection joint output start port can only be assigned to the User output and the Internal I/O.	1	Anomaly detection joint output start port can only be assigned to the User output and the Internal I/O.	Change the setting to the User output.
81502049		Sharp rise pattern output port number can only be assigned to the User output and the Internal I/O.	1	Sharp rise pattern output port number can only be assigned to the User output and the Internal I/O.	Change the setting to the User output.
8150204A		Gradual pattern output port number can only be assigned to the User output and the Internal I/O.	1	Gradual pattern output port number can only be assigned to the User output and the Internal I/O.	Change the setting to the User output.

Code	RC7 Code	Message	Level	Description	Remedy
8350204B		EtherCAT slave error	3	EtherCAT slave communication error occurred.	Confirm EtherCAT slave communication parameter.
8350204C		It is impossible to operate several I/O ports in different I/O devices.	3	You tried to operate several I/O devices at the same time.	You tried to operate several I/O devices at the same time.
8150204D		This operation is not available because another process is using the same CONTEC Co. AO device.	1	This operation is not available because another process is using the same CONTEC Co. AO device.	Please use a device that does not collides with other process.
8150204E		Current mode output port number can only be assigned to the User output and the Internal I/O.	1	Current mode output port number can only be assigned to the User output and the Internal I/O.	Change the setting to the User output.
8350204F		The start number of sending I/O must be the multiples of 8.	3	The start number of sending IO must be the multiples of 8.	Use multiples of 8 for the start number of sending I/O.
83502050		Data length of sending I/O must be the multiples of 8.	3	Data length of sending IO must be the multiples of 8.	Set the data length of sending I/O to the multiples of 8.
83502051		The start number of receiving I/O must be the multiples of 8.	3	The start number of receiving IO must be the multiples of 8.	Use multiples of 8 for the start number of receiving I/O.
83502052		Data length of receiving IO must be the multiples of 8.	3	Data length of receiving IO must be the multiples of 8.	Set the data length of receiving I/O to the multiples of 8.
83502053		POWERLINK Controlled Node:No license	3	No lisence.	Please register license number for the function to the controller. Or contact DENSO WAVE to ask for the new licence.
83502054		sercos Slave:No license	3	No lisence.	Please register license number for the function to the controller. Or contact DENSO WAVE to ask for the new licence.
83502055		Command-Slave data area setting error.	3	Insufficient data area for Command-Slave. The minimum I/O area sizes are Input:248 bytes, and Output:208bytes.	Change the network I/O size to an appropriate value.
81502056		Robot Calc BackTraceLog output I/O can only be assigned to the User output and the Internal I/O.	1	Robot Calc BackTraceLog output I/O can only be assigned to the User output and the Internal I/O.	Change the setting to the User output.
81502057		Robot Move BackTraceLog output I/O can only be assigned to the User output and the Internal I/O.	1	Robot Move BackTraceLog output I/O can only be assigned to the User output and the Internal I/O.	Change the setting to the User output.
81502500		＊ Slave connection is disconnected	1	Slave connection is disconnected	Check the slave device condition.

Code	RC7 Code	Message	Level	Description	Remedy
85503001		Command-Slave fatal error	5	Unexpected Command-Slave error has occurred	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
83503002		Command-Slave strobe control is abnormal	3	Strobe has been turned OFF while Command-Slave was running	Turn OFF the strobe after completion
83503003		Invalid value for the interpolation method setting	3	Specified interpolation method is invalid.	Select the value from 1 or 0.
83503004		Invalid value for the pass start displacement setting	3	Specified pass start displacement is invalid.	Value range is from -6 to 65535. Revise the value.
83503005		Invalid value for the coordinate type of the target position	3	Specified coordinate type is invalid.	Value range is from 257 to 259. Revise the value.
83503006		Invalid valur for the variable number of the target position	3	Out-of-range value is set for the target position variable.	Value range needs to be a positive number. Revise the value.
83503007		Invalid value for the variable number of the route position (Move_C)	3	Out-of-range value is set for the route position variable of the circular motion.	Value range needs to be a positive number. Revise the value.
83503008		Invalid value for the route number (Move_S)	3	Out-of-range value is set for the route position of the spline motion.	Value range is from 1 through 20. Revise the value.
83503009		Invalid value for the Next option	3	Specified parameter of Next option is invalid.	Select the value for the interpolation method from 1 or 0.
8350300A		Invalid value for the Speed setting	3	Out-of-range value is set for internal speed of Motion option.	Value range is from 0.1 to 100. Revise the value.
8350300B		Invalid value for the Acceleration setting	3	Out-of-range value is set for internal acceleration speed of Motion option.	Value range is from 0.0001 to 100. Revise the value.
8350300C		Invalid value for the Deceleration setting	3	Out-of-range value is set for internal deceleration speed of Motion option.	Value range is from 0.0001 to 100. Revise the value.
8350300D		Invalid value for the Motion option (operation time)	3	Out-of-range value is set for motion time of Motion option.	Revise the setting so that the motion time is within the setting range. Specify the motion time by integer type. Entering a negative number causes an error.
8350300E		Invalid value for the Motion option (specify by MPS [internal speed])	3	Out-of-range value is set for internal speed (specified by MPS) of Motion option.	Revise the setting so that the internal speed parameter (specified by MPS) is within the setting range. Specify the Speed value (mm/sec) by single precision real number type data. Entering 0 is regarded as it is omitted. Entering a negative number causes an error.
8350300F		Invalid value for the Arm group	3	Specified Arm group is not defined.	Confirm Arm number index setting. Available arm group number is integer-type data between 0 and 31.

Code	RC7 Code	Message	Level	Description	Remedy
83503010		Invalid value for the Arm group KEEP	3	Out-of-range value is set for KEEP parameter.	Check the KEEP parameter index setting. Specify 0 or 1 by integer type.
83503011		Invalid value for the variable number	3	Out-of-range value is set for variable number.	Revise the setting so that the variable number is within the range of global variable.
83503012		Invalid Tool number for tool setting	3	Out-of-range value is set for Tool number.	Check the Tool number index setting. Available tool number is integer-type data between 1 and 63.
83503013		Invalid Tool number for tool changing	3	Out-of-range value is set for Tool number.	Check the Tool number index setting. Available Tool number is integer-type data between 0 and 63.
83503014		Invalid Work number for work setting	3	Out-of-range value is set for Work number.	Check the Work number index setting. Available Work number is integer-type data between 1 and 7.
83503015		Invalid Work number for work changing	3	Out-of-range value is set for Work number.	Check the Work number index setting. Available Work number is integer-type data between 0 and 7.
83503016		Invalid Area number	3	Out-of-range value is set for Area number	Check the Area number index setting. Available Area number is integer-type data between 0 and 31.
83503017		Invalid P-variable number for the center of detection area	3	Out-of-range value is set for Position-type variable for the center of the detection area.	Revise the setting so that the Position-type variable for the center of the detection area is within the range of global variable.
83503018		Invalid V-variable number for the detection area	3	Out-of-range value is set for Vector-type variable for the detection area.	Revise the setting so that the Vector-type variable for detection area is within the range of global variable.
83503019		Invalid Area detection period	3	Specified value for the Area detection period is out-of-range.	Select the area detection period from 0 to 4 by Integer-type data. Available detection periods are 2, 4, 8, 16 and 32ms.
8350301A		Invalid variable parameter for Area Pose	3	Specified value for the Area Pose paramter is out-of-range.	Select the Pose detection range from 0 to 2. Available Pose parameters are Vector-type or Position-type.
8350301B		Invalid variable number for Area Pose	3	Specified value for the Area Pose variable number is out-of-range.	Set a Area Pose variable within the range of global variable.
8350301C		Invalid variable number for four corners of a palette	3	A variable set for the palette 4-corner position is out-of-range.	Set a variable for the palette 4-corner position within the range of global variable.
8350301D		Incorrect output setting during area detection	3	Out-of-range value was set to the area output setting	Check available area output setting. Available value ranges from 0 to 1.
8350301E		Incorrect error detection setting during area detection	3	Out-of-range value was set to the area detection setting	Check available area detection setting. Available value ranges from 0 to 5.
8350301F		Incorrect axis number for the area extended-joint option	3	Out-of-range value was set to the axis number for the area extended-joint option	Specify the extended-joint number by integer-type data. If a robot axis or axis that isn't exist is specified, an error occurs.

Code	RC7 Code	Message	Level	Description	Remedy
83503020		Incorrect JOG motion mode	3	Specified value for the JOG motion mode was out-of-range.	Revise Motion mode setting. Available value for the motion mode is integer-type data between "0" and "2".
83503021		Incorrect JOG motion axis	3	Specified value for the JOG motion axis was out-of-range.	Revise Motion axis setting. Available value for motion axis is integer-type data between "1"(1-axis/X-axis) and "8"(8-axis).
83503022		Incorrect JOG motion direction	3	Specified value for the JOG motion direction was out-of-range.	Revise Motion direction setting. Available motion direction value is integer-type data either "0"(positiove direction) or "1"(negative direction).
83503023		Incorrect speed value	3	Specified value for Speed was out-of-range.	Revise Speed setting. Available value for Speed ranges from 0.1 to 100.
83503024		Incorrect acceleration value	3	Specified value for Acceleration was out-of-range.	Revise Acceleration setting. Available value for Acceleration ranges from 0.0001 to 100.
83503025		Incorrect deceleration value	3	Specified value for Deceleration was out-of-range.	Revise Deceleration setting. Available value for Deceleration ranges from 0.0001 to 100.
83503026		Incorrect ARRIVE ratio	3	Specified value for ARRIVE motion ratio was out-of-range.	Revise ARRIVE motion ratio setting. Motion ratio must be no less than 0 and equal to 100 or less.
83503027		Incorrect Work attribute	3	Specified value for Work attribute of the Work setting was out-of-range.	Revise Work attribute setting. Available value for the motion direction is integer-type data between "0"(standard) and "1"(fixing tool).
83503028		Incorrect Z-axis thrust	3	Specified value for Z-axis thrust was out-of-range.	Revise Z-axis thrust value. (Unit: N)
83503029		Incorrect P-variable number for storing the error detection position	3	Out-of-range value was set to the P-variable number for storing the area detection position	Revise P-variable number for storing area detection position so that the value is within the range of global variable.
8350302A		Incorrect P-variable number for path point	3	Out-of-range value was set to the P-variable number for path point.	Revise P-variable number for path point so that the value is within the range of global variable.
8350302B		Incorrect V-variable number for the position of the payload center of gravity	3	Out-of-range value was set to the V-variable number for the position of the payload center of gravity.	Revise V-variable number for the position of the payload center of gravity so that the value is within the range of global variable.
8350302C		Incorrect V-variable number for the inertia through the payload center of gravity	3	Out-of-range value was set to the V-variable number for the inertia through the payload center of gravity.	Revise V-variable number for the inertia through the payload center of gravity so that the value is within the range of global variable.
8350302D		Incorrect P-variable number for the force control (force)	3	Out-of-range value was set to the P-variable number for the Force parameter of the force control function.	Revise P-variable number for the Force parameter of the force control function so that the value is within the range of global variable.

Code	RC7 Code	Message	Level	Description	Remedy
8350302E		Incorrect P-variable number for the force control (allowable position deviation)	3	Out-of-range value was set to the P-variable number for Allowable position deviation parameter of the force control function.	Revise P-variable number for Allowable position deviation parameter of the force control function so that the value is within the range of global variable.
8350302F		Incorrect P-variable number for the force control (compliance)	3	Out-of-range value was set to the P-variable number for the Compliance parameter of the force control function.	Revise P-variable number for the Compliance parameter of the force control function so that the value is within the range of global variable.
83503030		Incorrect P-variable number for the force control (damping)	3	Out-of-range value was set to the P-variable number for the Damping parameter of the force control function.	Revise P-variable number for the Damping parameter of the force control function so that the value is within the range of global variable.
83503031		Incorrect P-variable number for the force control (inertia)	3	Out-of-range value was set to the P-variable number for the Inertia parameter of the force control function.	Revise P-variable number for the Inertia parameter of the force control function so that the value is within the range of global variable.
83503032		Incorrect J-variable number for the force control (current limit)	3	Out-of-range value was set to the J-variable number for the Current limit parameter of the force control function.	Revise J-variable number for the Current limit parameter of the force control function so that the value is within the range of global variable.
83503033		Incorrect P-variable number for the force control (offset value)	3	Out-of-range value was set to the P-variable number for the Offset value parameter of the force control function.	Revise P-variable number for the Offset value parameter of the force control function so that the value is within the range of global variable.
83503034		Incorrect J-variable number for the force control (allowable axis deviation)	3	Out-of-range value was set to the J-variable number for the Allowable axis deviation parameter of the force control function.	Revise J-variable number for the Allowable axis deviation parameter of the force control function so that the value is within the range of global variable.
83503035		Incorrect P-variable number for the force control (control rate)	3	Out-of-range value was set to the P-variable number for the Control rate parameter of the force control function.	Revise P-variable number for the Control rate parameter of the force control function so that the value is within the range of global variable.
83503036		Incorrect axis number.	3	Out-of-range value was set to the axis number	Specify the joint number by integer-type data. If a xis that isn't exist is specified, an error occurs.
83503037		Command isn't executable while Stop-ON.	3	Failed to execute because this operation is not available during Stop-ON.	Turn the Stop-OFF and then retry.
83503038		Command isn't executable while Interrupted.	3	Failed to execute because this operation is not available during Interrupted.	While interrupted, only continue and stop commands can be executed.
83503039		Invalid offset number.	3	Invalid offset number　for the error information	Value range needs to be a offset number.
8350303A		Incorrect P-variable number for the force wait condition (travel distance)	3	Out-of-range value was set to the P-variable number for the travel distance parameter of the force control wait condition function.	Revise P-variable number for the travel distance parameter of the force control wait condition function so that the value is within the range of global variable.

Code	RC7 Code	Message	Level	Description	Remedy
8350303B		Incorrect P-variable number for the force wait condition (force and moment)	3	Out-of-range value was set to the P-variable number for the force and moment parameter of the force control wait condition function.	Revise P-variable number for the force and moment parameter of the force control wait condition function so that the value is within the range of global variable.
8350303C		Incorrect program type.	3	Incorrect program type.	Please review set point.
8350303D		Incorrect program number.	3	Incorrect program number.	Please review set point.
8350303E		Incorrect DIO kind.	3	Incorrect DIO kind.	Please review set point.
8350303F		Incorrect DIO Bit input-output number.	3	Incorrect DIO Bit input-output number.	Please review set point.
83503040		Incorrect DIO-Bit output value.	3	Incorrect DIO-Bit output value.	Please review set point.
83503041		Incorrect DIO Byte input-output number.	3	Incorrect DIO Byte input-output number.	Please review set point.
83503042		Incorrect DIO-Byte output value.	3	Incorrect DIO-Byte output value.	Please review set point.
83503043		Incorrect robot parameter number.	3	Incorrect robot parameter number.	Please review set point.
83503044		Incorrect buffer moder.	3	Incorrect buffer moder.	Please review set point.
83503045		Incorrect transition moder.	3	Incorrect transition moder.	Please review set point.
83503046		Incorrect transition parameter.	3	Incorrect transition parameter.	Please review set point.
83503047		Periodic access from the PLC to the controller has been interrupted.	3	Periodic access from the PLC to the controller has been interrupted.	Check the setting of PLC.
83503048		The communication parameter is incorrect.	3	The communication parameter is incorrect.	Check the communication parameter.
83503049		The communication permission parameter is incorrect.	3	The communication permission parameter is incorrect.	Check the communication permission parameter.
8350304A		The excutable token parameter is incorrect.	3	The excutable token parameter is incorrect.	Check the excutable token parameter.
8350304B		The date parameter is incorrect.	3	The date parameter is incorrect.	Check the date parameter.
8350304C		The calset parameter is incorrect.	3	The calset parameter is incorrect.	Check the calset parameter.
8350304D		The encoder reset parameter is incorrect.	3	The encoder reset parameter is incorrect.	Check the encoder reset parameter.
8350304E		FB multiple run	3	Multiple FB run at the same time.	Do not run multiple.
83505001	27D3	Failed to take J1 semaphore	3	1. A task that does not have arm semaphore tried to execute robot motion command. 2. A task tried to take arm semaphore, but the semaphore has been taken by another task already.	1. Retrieve arm semaphore with TakeArm statement, and then execute robot motion command. 2. Revise the program so that multiple programs do not take the arm semaphore concurrently.

Code	RC7 Code	Message	Level	Description	Remedy
83505002	27D3	Failed to take J2 semaphore	3	1. A task that does not have arm semaphore tried to execute robot motion command. 2. A task tried to take arm semaphore, but the semaphore has been taken by another task already.	1. Retrieve arm semaphore with TakeArm statement, and then execute robot motion command. 2. Revise the program so that multiple programs do not take the arm semaphore concurrently.
83505003	27D3	Failed to take J3 semaphore	3	1. A task that does not have arm semaphore tried to execute robot motion command. 2. A task tried to take arm semaphore, but the semaphore has been taken by another task already.	1. Retrieve arm semaphore with TakeArm statement, and then execute robot motion command. 2. Revise the program so that multiple programs do not take the arm semaphore concurrently.
83505004	27D3	Failed to take J4 semaphore	3	1. A task that does not have arm semaphore tried to execute robot motion command. 2. A task tried to take arm semaphore, but the semaphore has been taken by another task already.	1. Retrieve arm semaphore with TakeArm statement, and then execute robot motion command. 2. Revise the program so that multiple programs do not take the arm semaphore concurrently.
83505005	27D3	Failed to take J5 semaphore	3	1. A task that does not have arm semaphore tried to execute robot motion command. 2. A task tried to take arm semaphore, but the semaphore has been taken by another task already.	1. Retrieve arm semaphore with TakeArm statement, and then execute robot motion command. 2. Revise the program so that multiple programs do not take the arm semaphore concurrently.
83505006	27D3	Failed to take J6 semaphore	3	1. A task that does not have arm semaphore tried to execute robot motion command. 2. A task tried to take arm semaphore, but the semaphore has been taken by another task already.	1. Retrieve arm semaphore with TakeArm statement, and then execute robot motion command. 2. Revise the program so that multiple programs do not take the arm semaphore concurrently.
83505007	27D3	Failed to take J7 semaphore	3	1. A task that does not have arm semaphore tried to execute robot motion command. 2. A task tried to take arm semaphore, but the semaphore has been taken by another task already.	1. Retrieve arm semaphore with TakeArm statement, and then execute robot motion command. 2. Revise the program so that multiple programs do not take the arm semaphore concurrently.
83505008	27D3	Failed to take J8 semaphore	3	1. A task that does not have arm semaphore tried to execute robot motion command. 2. A task tried to take arm semaphore, but the semaphore has been taken by another task already.	1. Retrieve arm semaphore with TakeArm statement, and then execute robot motion command. 2. Revise the program so that multiple programs do not take the arm semaphore concurrently.
81505011		Execute J1 CALSET	1	CALSET has not been performed.	Perform CALSET.
81505012		Execute J2 CALSET	1	CALSET has not been performed.	Perform CALSET.
81505013		Execute J3 CALSET	1	CALSET has not been performed.	Perform CALSET.
81505014		Execute J4 CALSET	1	CALSET has not been performed.	Perform CALSET.
81505015		Execute J5 CALSET	1	CALSET has not been performed.	Perform CALSET.
81505016		Execute J6 CALSET	1	CALSET has not been performed.	Perform CALSET.
81505017		Execute J7 CALSET	1	CALSET has not been performed.	Perform CALSET.
81505018		Execute J8 CALSET	1	CALSET has not been performed.	Perform CALSET.

Code	RC7 Code	Message	Level	Description	Remedy
84505021		Execute J1 CALSET	4	CALSET has not been performed.	Perform CALSET.
84505022		Execute J2 CALSET	4	CALSET has not been performed.	Perform CALSET.
84505023		Execute J3 CALSET	4	CALSET has not been performed.	Perform CALSET.
84505024		Execute J4 CALSET	4	CALSET has not been performed.	Perform CALSET.
84505025		Execute J5 CALSET	4	CALSET has not been performed.	Perform CALSET.
84505026		Execute J6 CALSET	4	CALSET has not been performed.	Perform CALSET.
84505027		Execute J7 CALSET	4	CALSET has not been performed.	Perform CALSET.
84505028		Execute J8 CALSET	4	CALSET has not been performed.	Perform CALSET.
84505031		J1 CALSET values are not consistent between the robot and the project.	4	CALSET values are different between the robot and the project.	Confirm that the appropriate robot is connected. If the correct robot type has been connected, perform CALSET on the axis where an error occurs.
84505032		J2 CALSET values are not consistent between the robot and the project.	4	CALSET values are different between the robot and the project.	Confirm that the appropriate robot is connected. If the correct robot type has been connected, perform CALSET on the axis where an error occurs.
84505033		J3 CALSET values are not consistent between the robot and the project.	4	CALSET values are different between the robot and the project.	Confirm that the appropriate robot is connected. If the correct robot type has been connected, perform CALSET on the axis where an error occurs.
84505034		J4 CALSET values are not consistent between the robot and the project.	4	CALSET values are different between the robot and the project.	Confirm that the appropriate robot is connected. If the correct robot type has been connected, perform CALSET on the axis where an error occurs.
84505035		J5 CALSET values are not consistent between the robot and the project.	4	CALSET values are different between the robot and the project.	Confirm that the appropriate robot is connected. If the correct robot type has been connected, perform CALSET on the axis where an error occurs.
84505036		J6 CALSET values are not consistent between the robot and the project.	4	CALSET values are different between the robot and the project.	Confirm that the appropriate robot is connected. If the correct robot type has been connected, perform CALSET on the axis where an error occurs.
84505037		J7 CALSET values are not consistent between the robot and the project.	4	CALSET values are different between the robot and the project.	Confirm that the appropriate robot is connected. If the correct robot type has been connected, perform CALSET on the axis where an error occurs.
84505038		J8 CALSET values are not consistent between the robot and the project.	4	CALSET values are different between the robot and the project.	Confirm that the appropriate robot is connected. If the correct robot type has been connected, perform CALSET on the axis where an error occurs.
81505041		Abnormal load factor has been detected on the J1d. (Sharp)	1	Abnormal load factor has been detected.	Stop the operation, and then replace the motor of the symmetry axis.
81505042		Abnormal load factor has been detected on the J1d. (Sharp)	1	Abnormal load factor has been detected.	Stop the operation, and then replace the motor of the symmetry axis.

Code	RC7 Code	Message	Level	Description	Remedy
81505043		Abnormal load factor has been detected on the J1d. (Sharp)	1	Abnormal load factor has been detected.	Stop the operation, and then replace the motor of the symmetry axis.
81505044		Abnormal load factor has been detected on the J1d. (Sharp)	1	Abnormal load factor has been detected.	Stop the operation, and then replace the motor of the symmetry axis.
81505045		Abnormal load factor has been detected on the J1d. (Sharp)	1	Abnormal load factor has been detected.	Stop the operation, and then replace the motor of the symmetry axis.
81505046		Abnormal load factor has been detected on the J1d. (Sharp)	1	Abnormal load factor has been detected.	Stop the operation, and then replace the motor of the symmetry axis.
81505047		Abnormal load factor has been detected on the J1d. (Sharp)	1	Abnormal load factor has been detected.	Stop the operation, and then replace the motor of the symmetry axis.
81505048		Abnormal load factor has been detected on the J1d. (Sharp)	1	Abnormal load factor has been detected.	Stop the operation, and then replace the motor of the symmetry axis.
81505051		Abnormal load factor has been detected on the J1d. (Gradual)	1	Abnormal load factor has been detected.	Stop the operation, and then replace the motor of the symmetry axis.
81505052		Abnormal load factor has been detected on the J1d. (Gradual)	1	Abnormal load factor has been detected.	Stop the operation, and then replace the motor of the symmetry axis.
81505053		Abnormal load factor has been detected on the J1d. (Gradual)	1	Abnormal load factor has been detected.	Stop the operation, and then replace the motor of the symmetry axis.
81505054		Abnormal load factor has been detected on the J1d. (Gradual)	1	Abnormal load factor has been detected.	Stop the operation, and then replace the motor of the symmetry axis.
81505055		Abnormal load factor has been detected on the J1d. (Gradual)	1	Abnormal load factor has been detected.	Stop the operation, and then replace the motor of the symmetry axis.
81505056		Abnormal load factor has been detected on the J1d. (Gradual)	1	Abnormal load factor has been detected.	Stop the operation, and then replace the motor of the symmetry axis.
81505057		Abnormal load factor has been detected on the J1d. (Gradual)	1	Abnormal load factor has been detected.	Stop the operation, and then replace the motor of the symmetry axis.
81505058		Abnormal load factor has been detected on the J1d. (Gradual)	1	Abnormal load factor has been detected.	Stop the operation, and then replace the motor of the symmetry axis.
81509000		This function is not supported by this system	1	You tried to use an OS function that is not supported by RC8.	The operation is not supported by RC8.
82509001		Failed to enable EWF	2	Failed to enable EWF.	Reboot the controller and then try again.
82509002		Failed to disable EWF	2	Failed to disable EWF.	Reboot the controller and then try again.
82509003		Failed to commit EWF	2	Failed to commit EWF.	Reboot the controller and then try again.
82509004		Failed to commit and disable EWF	2	Failed to commit and disable EWF.	Reboot the controller and then try again.
82509005		Failed to commit and disable EWF immediately	2	Failed to immediate commit and disable EWF.	Reboot the controller and then try again.

Code	RC7 Code	Message	Level	Description	Remedy
82509006		Failed to clear the pending EWF command	2	Failed to clear pending EWF commands.	Reboot the controller and then try again.
82509007		Failed to search the EWF protection volume name	2	Failed to search the EWF protection volume name	Reboot the controller and then try again.
82509008		Failed to obtain the EWF protection volume name list	2	Failed to obtain the EWF protection volume name list	Reboot the controller and then try again.
82509009		Failed to entry the EWF protection volume name list	2	Failed to entry the EWF protection volume name list	Reboot the controller and then try again.
8250900A		Failed to obtain the EWF protection drive	2	Failed to obtain the EWF protection drive	Reboot the controller and then try again.
8250900B		Failed to delete the EWF protection volume name list entry	2	Failed to delete the EWF protection volume name list entry	Reboot the controller and then try again.
8250900C		Failed to open the EWF protection volume	2	Failed to open the EWF protection volume	Reboot the controller and then try again.
8250900D		Failed to close the EWF protection volume	2	Failed to close the EWF protection volume	Reboot the controller and then try again.
8250900E		Failed to obtain the configuration information of the EWF protection volume	2	Failed to get EWF protected volume configuration information.	Reboot the controller and then try again.
8150900F		EWF immediate commit is not supported by other than the RAMREG mode.	1	You tried to execute immediate commit EWF, but the operation is not supported by RC8.	The operation is not supported by RC8.
82509020		Failed to set the time and date of the system.	2	Failed to set the time and date of the system.	Reboot the controller and then try again.
82509021		Failed to set the local time and date.	2	Failed to set the local time and date.	Reboot the controller and then try again.
82509022		Failed to obtain the timezone.	2	Failed to obtain the timezone.	Reboot the controller and then try again.
82509023		Failed to set the timezone.	2	Failed to set the timezone.	Reboot the controller and then try again.
82509024		Failed to set the timezone.	2	Invalid index id of timezone is specified.	Check the setting of timezone.
82509030		IP address inputted has already been used. Set different IP address.	2	Duplicated IP addresses exist on the network.	Set IP address that does not duplicate on the network.
82509031		DNS address setting error	2	Configured DNS address is wrong.	Check and revise the DNS address configuration.
82509032		WINS address setting error	2	Configured WINS address is wrong.	Check and revise the WINS address configuration.
82509033		Failed to set the network adaptor	2	Failed to setup network adaptor.	Reboot the controller and then try again.

Code	RC7 Code	Message	Level	Description	Remedy
82509034		Network adaptor is not found.	2	Network connection name "Local Area Connection" doesn't exist.	Reboot the controller and then try again.
82509040		Failed to execute internal Shell	2	Failed to execute internal command.	Reboot the controller and then try again.
85509041		MDB was damaged. The file at the time of the previous success is used.	5	Database file in the robot controller was damaged. The previously used database was restored.	Changes performed after the latest booting are not saved because the database has been damaged. Set the changes again.
83509042		Failed to optimize MDB	3	Failed to optimize database in the robot controller.	Check user area data size, and then delete unnecessary data to secure enough free space.
81509043		The system is not protected by EWF.	1	C drive is notEWF-protected.	Enable EWF.
81509044		Failed to initialize the project	1	Failed to initialize controller with RC8 default project settings.	Check user area data size, and then delete unnecessary data if data size is too big. And then restart the controller.
81509045		Failed to restore the project	1	Failed to restore the project with previous robot type before type change.	Check user area data size, and delete unnecessary data if data size is too big. Then restart controller.
85509046		Memory capacity is insufficient.	5	Free memory size is very few.	Reboot the controller and then try again.
81509047		Memory capacity warning	1	Free memory is running out.	Reboot the controller and then try again.
85509048		Disk capacity is insufficient.	5	Free user area of disk is very few.	Check user area data size, and then delete unnecessary data if data size is too big.
81509049		Disk capacity warning	1	Free user area of disk is running out.	Check user area data size, and then delete unnecessary data if data size is too big.
8550904A		CPU temperature is abnormal.	5	CPU temperature is abnormal.	Check whether if the exhaust port of fan is not blocked or if the exhaust air is properly expelled from the ventilation port.
8250904B		CPU temperature warning.	2	CPU temperature warning.	Check whether if the exhaust port of fan is not blocked or if the exhaust air is properly expelled from the ventilation port.
8350904C		Failed to optimize MDB. The file at the time of a success is used.	3	Failed to optimize robot controller database. The database used in the previous boot was restored.	Changes performed after the latest booting are not saved because the database was damaged. Set the changes again.
8150904D	2D31	File processing failed	1	File processing failed.	Try again. If the error recurs frequently, inspect or repair the controller.
8250904E		OS internal processing (1) failed	2	OS internal processing(1) failed.	Reboot the controller and then try again.
8150904F		Failed to write file directly.	1	Failed to write file directly.	Try again. If the error recurs frequently, inspect or repair the controller.

Code	RC7 Code	Message	Level	Description	Remedy
81509050		Failed to open the MDB for the backup.	1	Failed to open the MDB for the backup.	Try again. If the error recurs frequently, inspect or repair the controller.
82509051		OS internal processing (2) failed	2	OS internal processing (2) failed	Reboot the controller and then try again.
82509052		OS internal processing (3) failed	2	OS internal processing (3) failed	Reboot the controller and then try again.
82509053		OS internal processing (40) failed	2	OS internal processing (40) failed	Reboot the controller and then try again.
82509054		OS internal processing (5) failed	2	OS internal processing (5) failed	Reboot the controller and then try again.
82509055		OS internal processing (6) failed	2	OS internal processing (6) failed	Reboot the controller and then try again.
82509056		OS internal processing (7) failed	2	OS internal processing (7) failed	Reboot the controller and then try again.
82509057		OS internal processing (8) failed	2	OS internal processing (8) failed	Reboot the controller and then try again.
82509058		OS internal processing (9) failed	2	OS internal processing (9) failed	Reboot the controller and then try again.
82509059		OS internal processing (10) failed	2	OS internal processing (10) failed	Reboot the controller and then try again.
8250905A		OS internal processing (11) failed	2	OS internal processing (11) failed	Reboot the controller and then try again.
8250905B		Ethernet adapter abnormal was detected.	2	Ethernet adapter abnormal was detected.	Please contact DENSO WAVE service.
8250905C		OS internal processing (13) failed	2	OS internal processing (13) failed	Reboot the controller and then try again.
8250905D		OS internal processing (14) failed	2	OS internal processing (14) failed	Reboot the controller and then try again.
8250905E		OS internal processing (15) failed	2	OS internal processing (15) failed	Reboot the controller and then try again.
8250905F		OS internal processing (16) failed	2	OS internal processing (16) failed	Reboot the controller and then try again.
82509060		OS internal processing (17) failed	2	OS internal processing (17) failed	Reboot the controller and then try again.
82509061		OS internal processing (18) failed	2	OS internal processing (18) failed	Reboot the controller and then try again.
82509062		OS internal processing (19) failed	2	OS internal processing (19) failed	Reboot the controller and then try again.
82509063		OS internal processing (20) failed	2	OS internal processing (20) failed	Reboot the controller and then try again.
82509064		OS internal processing (21) failed	2	OS internal processing (21) failed	Reboot the controller and then try again.
82509065		OS internal processing (22) failed	2	OS internal processing (22) failed	Reboot the controller and then try again.
82509066		OS internal processing (23) failed	2	OS internal processing (23) failed	Reboot the controller and then try again.
82509067		OS internal processing (24) failed	2	OS internal processing (24) failed	Reboot the controller and then try again.
82509068		OS internal processing (25) failed	2	OS internal processing (25) failed	Reboot the controller and then try again.
82509069		OS internal processing (26) failed	2	OS internal processing (26) failed	Reboot the controller and then try again.
8250906A		OS internal processing (27) failed	2	OS internal processing (27) failed	Reboot the controller and then try again.
8250906B		OS internal processing (28) failed	2	OS internal processing (28) failed	Reboot the controller and then try again.
8250906C		Failed to get the product version.	2	Failed to get the product version.	Reboot the controller and then try again.
8250906D		OS internal processing (41) failed	2	OS internal processing (41) failed	Reboot the controller and then try again.
8250906E		OS internal processing (42) failed	2	OS internal processing (42) failed	Reboot the controller and then try again.
8250906F		OS internal processing (43) failed	2	OS internal processing (43) failed	Reboot the controller and then try again.
82509070		OS internal processing (44) failed	2	OS internal processing (44) failed	Reboot the controller and then try again.

Code	RC7 Code	Message	Level	Description	Remedy
82509071		OS internal processing (45) failed	2	OS internal processing (45) failed	Reboot the controller and then try again.
80509072		Failed to get information CFAST(1).	0	Failed to get information CFAST(1).	Reboot the controller and then try again.
80509073		Failed to get information CFAST(2).	0	Failed to get information CFAST(2).	Reboot the controller and then try again.
80509074		Failed to get information CFAST(3).	0	Failed to get information CFAST(3).	Reboot the controller and then try again.
80509075		Failed to get information CFAST(4).	0	Failed to get information CFAST(4).	Reboot the controller and then try again.
80509076		Failed to get information CFAST(5).	0	Failed to get information CFAST(5).	Reboot the controller and then try again.
80509077		Failed to get information CFAST(6).	0	Failed to get information CFAST(6).	Reboot the controller and then try again.
80509078		Failed to get information CFAST(7).	0	Failed to get information CFAST(7).	Reboot the controller and then try again.
80509079		Service life of CFAST is approaching.	0	Service life of CFAST is approaching.	Contact to DENSO WAVE service.
8550907A		MDB was not found. The file at the time of a success is used.	5	Database file in the robot controller was not found. The previously used database was restored.	Changes after the latest booting are not saved because database is not found. Configure the changes again.
8550907B		Failed to restore FPGA.	5	Failed to restore of FPGA.	Contact to DENSO WAVE service.
8250907C		OS internal processing (29) failed	2	OS internal processing (29) failed	Reboot the controller and then try again.
8250907D		OS internal processing (30) failed	2	OS internal processing (30) failed	Reboot the controller and then try again.
8050907E		OS internal processing (50) failed	0	OS internal processing (50) failed	Reboot the controller and then try again.
8050907F		OS internal processing (51) failed	0	OS internal processing (51) failed	Reboot the controller and then try again.
80509080		OS internal processing (52) failed	0	OS internal processing (52) failed	Reboot the controller and then try again.
80509081		OS internal processing (53) failed	0	OS internal processing (53) failed	Reboot the controller and then try again.
80509082		OS internal processing (54) failed	0	OS internal processing (54) failed	Reboot the controller and then try again.
80509083		OS internal processing (55) failed	0	OS internal processing (55) failed	Reboot the controller and then try again.
80509084		OS internal processing (56) failed	0	OS internal processing (56) failed	Reboot the controller and then try again.
80509085		OS internal processing (57) failed	0	OS internal processing (57) failed	Reboot the controller and then try again.
80509086		OS internal processing (58) failed	0	OS internal processing (58) failed	Reboot the controller and then try again.
80509087		OS internal processing (59) failed	0	OS internal processing (59) failed	Reboot the controller and then try again.
81509088		Failed to open the MDB for the maintenance log.	1	Failed to open the MDB for the maintenancelog.	Reboot the controller. If the error recurs frequently, inspect or repair the controller.

Code	RC7 Code	Message	Level	Description	Remedy
82509089		Failed to check the version of FPGA.	2	Failed to check the version of FPGA.	Contact to DENSO WAVE service.
8550908A		FPGA version is old. Execute "FPGA update".	5	The controller's version is old. Execute "FPGA update".	Select "Setting" – "Login" and login the controller with "Specialist" level. Then select "Special tag" – "F8:FPGA update" process.
8550908B		License file was damaged.	5	License file in the robot controller was damaged.	Contact to DENSO WAVE service.
8150908C		MDB was damaged. The file at the time of a success is used.	1	License file in the robot controller was damaged. The previously used file was restored.	Changes after the latest booting are not recorded because license file was damaged. Configure the changes again.
8250908D		OS internal processing (60) failed	2	OS internal processing (60) failed	Reboot the controller and then try again.
8250908E		OS internal processing (61) failed	2	OS internal processing (61) failed	Reboot the controller and then try again.
8250908F		OS internal processing (62) failed	2	OS internal processing (62) failed	Reboot the controller and then try again.
82509090		OS internal processing (63) failed	2	OS internal processing (63) failed	Reboot the controller and then try again.
82509091		OS internal processing (64) failed	2	OS internal processing (64) failed	Reboot the controller and then try again.
82509092		OS internal processing (65) failed	2	OS internal processing (65) failed	Reboot the controller and then try again.
82509093		OS internal processing (66) failed	2	OS internal processing (66) failed	Reboot the controller and then try again.
82509094		OS internal processing (67) failed	2	OS internal processing (67) failed	Reboot the controller and then try again.
83509095		Network adaptor currently used does not support jumbo packet.	3	Network adaptor currently used does not support jumbo packet.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
85509096		Failed to set the jumbo packet.	5	Failed to set the jumbo packet.	Reboot the controller. If error still occurs, please contact to DENSO WAVE service.
82509097		OS internal processing (70) failed	2	OS internal processing (70) failed	Reboot the controller and then try again.
82509098		OS internal processing (71) failed	2	OS internal processing (71) failed	Reboot the controller and then try again.
82509099		OS internal processing (72) failed	2	OS internal processing (72) failed	Reboot the controller and then try again.
8250909A		OS internal processing (73) failed	2	OS internal processing (73) failed	Reboot the controller and then try again.
8250909B		OS internal processing (74) failed	2	OS internal processing (74) failed	Reboot the controller and then try again.
8250909C		OS internal processing (75) failed	2	OS internal processing (75) failed	Reboot the controller and then try again.
8250909D		OS internal processing (76) failed	2	OS internal processing (76) failed	Reboot the controller and then try again.
8250909E		OS internal processing (77) failed	2	OS internal processing (77) failed	Reboot the controller and then try again.
8250909F		OS internal processing (78) failed	2	OS internal processing (78) failed	Reboot the controller and then try again.
825090A0		OS internal processing (79) failed	2	OS internal processing (79) failed	Reboot the controller and then try again.
805090A1		Damages on the file system were detected but it have been recovered successfully.	0	Damages on the file system were detected but it have been recovered successfully.	If this symptom recurs frequently, please contact to DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
845090A2		Disk was damaged. Disk may have been degraded.	4	Disk was damaged. Disk might have been degraded.	Contact to DENSO WAVE service.
815090A3		OS internal processing (80) failed	1	OS internal processing (80) failed	Reboot the controller and then try again.
815090A4		OS internal processing (81) failed	1	OS internal processing (81) failed	Reboot the controller and then try again.
835090A5		Failed to change the language.	3	Failed to change the language.	Reboot the controller and then try again.
825090A6		OS internal processing (31) failed	2	OS internal processing (31) failed	Reboot the controller and then try again.
825090A7		OS internal processing (32) failed	2	OS internal processing (32) failed	Reboot the controller and then try again.
825090A8		OS internal processing (33) failed	2	OS internal processing (33) failed	Reboot the controller and then try again.
825090A9		OS internal processing (34) failed	2	OS internal processing (34) failed	Reboot the controller and then try again.
825090AA		OS internal processing (35) failed	2	OS internal processing (35) failed	Reboot the controller and then try again.
825090AB		OS internal processing (36) failed	2	OS internal processing (36) failed	Reboot the controller and then try again.
825090AC		OS internal processing (90) failed	2	OS internal processing (90) failed	Reboot the controller and then try again.
825090AD		OS internal processing (91) failed	2	OS internal processing (91) failed	Reboot the controller and then try again.
825090AE		OS internal processing (92) failed	2	OS internal processing (92) failed	Reboot the controller and then try again.
825090AF		OS internal processing (93) failed	2	OS internal processing (93) failed	Reboot the controller and then try again.
825090B0		OS internal processing (94) failed	2	OS internal processing (94) failed	Reboot the controller and then try again.
825090B1		OS internal processing (95) failed	2	OS internal processing (95) failed	Reboot the controller and then try again.
825090B2		OS internal processing (96) failed	2	OS internal processing (96) failed	Reboot the controller and then try again.
825090B3		OS internal processing (97) failed	2	OS internal processing (97) failed	Reboot the controller and then try again.
825090B4		OS internal processing (98) failed	2	OS internal processing (98) failed	Reboot the controller and then try again.
825090B5		Failed in device setting of the COM port.	2	Failed in device setting of the COM port.	Reboot the controller and then try again.
835090B6		Failed to change the Camera.	3	Failed to change the Camera.	Reboot the controller and then try again.
825090B7		OS internal processing (100) failed	2	OS internal processing (100) failed	Reboot the controller and then try again.
825090B8		OS internal processing (101) failed	2	OS internal processing (101) failed	Reboot the controller and then try again.
825090B9		OS internal processing (102) failed	2	OS internal processing (102) failed	Reboot the controller and then try again.
825090BA		OS internal processing (99) failed	2	OS internal processing (99) failed	Reboot the controller and then try again.
825090BB		OS internal processing (103) failed	2	OS internal processing (103) failed	Reboot the controller and then try again.
825090C0		The system is not protected by UWF.	2	C drive is notUWF-protected.	Enable UWF.

Code	RC7 Code	Message	Level	Description	Remedy
825090C1		OS internal processing (110) failed	2	OS internal processing (110) failed	Reboot the controller and then try again.
825090C2		OS internal processing (111) failed	2	OS internal processing (111) failed	Reboot the controller and then try again.
825090C3		OS internal processing (112) failed	2	OS internal processing (112) failed	Reboot the controller and then try again.
825090C4		OS internal processing (113) failed	2	OS internal processing (113) failed	Reboot the controller and then try again.
825090C5		OS internal processing (114) failed	2	OS internal processing (114) failed	Reboot the controller and then try again.
825090C6		OS internal processing (115) failed	2	OS internal processing (115) failed	Reboot the controller and then try again.
825090C7		OS internal processing (116) failed	2	OS internal processing (116) failed	Reboot the controller and then try again.
825090C8		OS internal processing (117) failed	2	OS internal processing (117) failed	Reboot the controller and then try again.
825090C9		OS internal processing (118) failed	2	OS internal processing (118) failed	Reboot the controller and then try again.
825090CA		OS internal processing (119) failed	2	OS internal processing (119) failed	Reboot the controller and then try again.
825090CB		OS internal processing (120) failed	2	OS internal processing (120) failed	Reboot the controller and then try again.
825090CC		OS internal processing (121) failed	2	OS internal processing (121) failed	Reboot the controller and then try again.
825090CD		OS internal processing (122) failed	2	OS internal processing (122) failed	Reboot the controller and then try again.
825090CE		OS internal processing (123) failed	2	OS internal processing (123) failed	Reboot the controller and then try again.
825090CF		OS internal processing (124) failed	2	OS internal processing (124) failed	Reboot the controller and then try again.
825090D0		OS internal processing (125) failed	2	OS internal processing (125) failed	Reboot the controller and then try again.
825090D1		OS internal processing (126) failed	2	OS internal processing (126) failed	Reboot the controller and then try again.
825090D2		OS internal processing (127) failed	2	OS internal processing (127) failed	Reboot the controller and then try again.

Code	RC7 Code	Message	Level	Description	Remedy
825090D3		OS internal processing (128) failed	2	OS internal processing (128) failed	Reboot the controller and then try again.
825090D4		OS internal processing (129) failed	2	OS internal processing (129) failed	Reboot the controller and then try again.
825090D5		OS internal processing (130) failed	2	OS internal processing (130) failed	Reboot the controller and then try again.
825090D6		Failed to check the version of MCU	2	Failed to check the version of MCU.	Contact to DENSO WAVE service.
855090D7		Failed to restore MCU.	5	Failed to restore of MCU.	Contact to DENSO WAVE service.
855090D8		Failed to restore FPGA.	5	Failed to restore of FPGA.	Please carry it out once again without switching it off. When the situation is not improved, please contact to DENSO WAVE service.
855090D9		ServoMCU version is old. Execute "MCU VersionUp".	5	The robot's ServoMCU version is old. Execute "MCU VersionUp".	Select [F6 Setting] – [F1 Login] and login the controller with "Maintainer" level. Then select [F6 Setting] – [F8 Option] – [F9 MCU VersionUp] process.
855090DA		The ServoMCU has been updated. Please restart the controller.	5	The ServoMCU has been updated. Please restart the controller.	The ServoMCU has been updated. Please restart the controller.
834A0001		Flange speed limit over	3	It was detected flange speed excessive in automatic mode.	Please decrease the operating speed. If error still occurs, please contact DENSO WAVE service with error number and error message.
834A0002		Flange speed limit over	3	It was detected flange speed excessive in manual mode.	Please decrease the operating speed. If error still occurs, please contact DENSO WAVE service with error number and error message.
834A0003		TCP speed limit over	3	It was detected TCP speed excessive in automatic mode.	Please decrease the operating speed. If error still occurs, please contact DENSO WAVE service with error number and error message.
834A0004		TCP speed limit over	3	It was detected TCP speed excessive in manual mode.	Please decrease the operating speed. If error still occurs, please contact DENSO WAVE service with error number and error message.
834A0005		Arm monitoring points speed limit over	3	It was detected arm monitoring points speed excessive in automatic mode.	Please decrease the operating speed. If error still occurs, please contact DENSO WAVE service with error number and error message.
834A0006		Arm monitoring points speed limit over	3	It was detected arm monitoring points speed excessive in manual mode.	Please decrease the operating speed. If error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A0011		Can not area monitoring.	5	Can not area monitoring.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
834A0012		Detected a collision of the robot.	3	Detected a collision of the robot.	Please move the robot to not collide position. If error still occurs, please contact DENSO WAVE service with error number and error message.
834A0013		Detected a error in the encoder	3	Can not correct the encoder data.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A0014		Failed to access the FIFO	5	Failed to access the FIFO.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A0015		Safety parameter CRC mismatch	5	Safety parameter CRC mismatch.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A0016		Safety parameter out of range	5	Safety parameter out of range.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A0017		Detected sequence violation	5	Detected sequence violation.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A0018		Detected a stack access violation	5	Detected a stack access violation.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A0019		Detected a error in the interrupt process	5	Detected a error in the interrupt process.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A001A		Detected a error in the ROM	5	Detected a error in the ROM.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A001B		Controller type does not match	5	Controller type does not match.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A001C		Failed to initialize the safety monitoring device	5	Failed to initialize the safety monitoring device.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A001D		Failed to initialize the safety monitoring processor	5	Failed to initialize the safety monitoring processor.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A001E		Internal parameter out of range	5	Internal parameter out of range.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
834A001F		Failed to Safe reference position check	3	Failed to safe reference position check.	After moving the robot to the reference position, please put safe reference position check input.
834A0020		Detected the positional deviation at the time of power OFF	3	Detected the positional deviation at the time of power OFF.	After moving the robot to the reference position, please put safe reference position check input.
834A0021		Safe reference position check output was turned OFF	3	Safe reference position check output was turned OFF.	After moving the robot to the reference position, please put safe reference position check input.
854A0022		Detected a error in the RAM	5	Detected a error in the RAM.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A0023		Detected a error in the executable code	5	Detected a error in the executable code.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A0024		Detected a error in the external-RAM	5	Detected a error in the external-RAM.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A1000		Motor on circuit error (ON1)	5	Motor on circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
854A1001		Motor on circuit error (OFF1)	5	Motor on circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
854A1002		Motor on circuit error (ON2)	5	Motor on circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
854A1003		Motor on circuit error (OFF2)	5	Motor on circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
854A1004		Motor on circuit error (BUFON)	5	Motor on circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
854A1005		Motor on circuit error (BUFOFF)	5	Motor on circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
834A1300		Emergency-stop signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety I/O emergency-stop signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on emergency-stop signal connection. Once you check that all emergency-stop wirings are properly connected, remove the mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1301		Emergency-stop signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety I/O emergency-stop signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on emergency-stop signal connection. Once you check that all emergency-stop wirings are properly connected, remove the mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1302		Emergency-stop signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety I/O emergency-stop signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on emergency-stop signal connection. Once you check that all emergency-stop wirings are properly connected, remove the mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1303		Emergency-stop signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety I/O emergency-stop signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on emergency-stop signal connection. Once you check that all emergency-stop wirings are properly connected, remove the mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1304		Deadman switch signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety I/O deadman switch signal input circuit 1.	Please contact DENSO WAVE service with error number and error message.
834A1305		Deadman switch signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety I/O deadman switch signal input circuit 2.	Please contact DENSO WAVE service with error number and error message.
834A1306		Deadman switch signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety I/O deadman switch signal input circuit 1.	Please contact DENSO WAVE service with error number and error message.
834A1307		Deadman switch signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety I/O deadman switch signal input circuit 2.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1308		Enable-auto signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety I/O enable-auto signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on Enable-auto signal connection. Once you check that all Enable-auto wirings are properly connected, remove the mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1309		Enable-auto signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety I/O enable-auto signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on enable-auto signal connection. Once you check that all enable-auto wirings are properly connected, remove the mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A130A		Enable-auto signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety I/O enable-auto signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on enable-auto signal connection. Once you check that all enable-auto wirings are properly connected, remove the mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A130B		Enable-auto signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety I/O enable-auto signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on enable-auto signal connection. Once you check that all enable-auto wirings are properly connected, remove the mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A130C		Protective-stop signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety I/O protective-stop signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on enable-auto signal connection. Once you check that all enable-auto wirings are properly connected, remove the mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A130D		Protective-stop signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety I/O protective-stop signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on protective-stop signal connection. Once you check that all protective-stop wirings are properly connected, remove the mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A130E		Protective-stop signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety I/O protective-stop signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on protective-stop signal connection. Once you check that all protective-stop wirings are properly connected, remove the mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A130F		Protective-stop signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety I/O protective-stop signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on protective-stop signal connection. Once you check that all protective-stop wirings are properly connected, remove the mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1310		Auto-mode signal input circuit diagnosis signal is undetected	3	Diagnosis signal is undetected at safety I/O auto-mode signal input circuit.	Please contact DENSO WAVE service with error number and error message.
834A1311		Manual-mode signal input circuit diagnosis signal is undetected	3	Diagnosis signal is undetected at safety I/O manual-mode signal input circuit.	Please contact DENSO WAVE service with error number and error message.
834A1312		Auto-mode signal input circuit diagnosis signal failure	3	Diagnosis signal failure is detected at safety I/O auto-mode signal input circuit.	Please contact DENSO WAVE service with error number and error message.
834A1313		Manual-mode signal input circuit diagnosis signal failure	3	Diagnosis signal failure is detected at safety I/O manual-mode signal input circuit.	Please contact DENSO WAVE service with error number and error message.
834A1340		SS2 signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O SS2 signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on SS2 signal connection. Once you check that all SS2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1341		SS2 signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O SS2 signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on SS2 signal connection. Once you check that all SS2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1342		SS2 signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O SS2 signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on SS2 signal connection. Once you check that all SS2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1343		SS2 signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O SS2 signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on SS2 signal connection. Once you check that all SS2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1344		RSM1 signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O RSM1 signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on RSM1 signal connection. Once you check that all RSM1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1345		RSM1 signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O RSM1 signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on RSM1 signal connection. Once you check that all RSM1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1346		RSM1 signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O RSM1 signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on RSM1 signal connection. Once you check that all RSM1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1347		RSM1 signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O RSM1 signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on RSM1 signal connection. Once you check that all RSM1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1348		RSM2 signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O RSM2 signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on RSM2 signal connection. Once you check that all RSM2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1349		RSM2 signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O RSM2 signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on RSM2 signal connection. Once you check that all RSM2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A134A		RSM2 signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O RSM2 signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on RSM2 signal connection. Once you check that all RSM2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A134B		RSM2 signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O RSM2 signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on RSM2 signal connection. Once you check that all RSM2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A134C		RSM3 signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O RSM3 signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on RSM3 signal connection. Once you check that all RSM3 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A134D		RSM3 signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O RSM3 signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on RSM3 signal connection. Once you check that all RSM3 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A134E		RSM3 signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O RSM3 signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on RSM3 signal connection. Once you check that all RSM3 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A134F		RSM3 signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O RSM3 signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on RSM3 signal connection. Once you check that all RSM3 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1350		Tool number input 0 signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O tool number input 0 signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 0 signal connection. Once you check that all tool number input 0 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1351		Tool number input 0 signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O tool number input 0 signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 0 signal connection. Once you check that all tool number input 0 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1352		Tool number input 0 signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O TOOL0 signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 0 signal connection. Once you check that all tool number input 0 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1353		Tool number input 0 signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O tool number input 0 signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 0 signal connection. Once you check that all tool number input 0 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1354		Tool number input 1 signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O tool number input 1 signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 1 signal connection. Once you check that all tool number input 1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1355		Tool number input 1 signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O tool number input 1 signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 1 signal connection. Once you check that all tool number input 1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1356		Tool number input 1 signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O tool number input 1 signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 1 signal connection. Once you check that all tool number input 1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1357		Tool number input 1 signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O tool number input 1 signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 1 signal connection. Once you check that all tool number input 1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1358		Tool number input 2 signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O tool number input 2 signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 2 signal connection. Once you check that all tool number input 2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1359		Tool number input 2 signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O tool number input 2 signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 2 signal connection. Once you check that all tool number input 2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A135A		Tool number input 2 signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O tool number input 2 signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 2 signal connection. Once you check that all tool number input 2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A135B		Tool number input 2 signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O tool number input 2 signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 2 signal connection. Once you check that all tool number input 2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A135C		Tool number input 3 signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O tool number input 3 signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 3 signal connection. Once you check that all tool number input 3 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A135D		Tool number input 3 signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O tool number input 3 signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 3 signal connection. Once you check that all tool number input 3 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A135E		Tool number input 3 signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O tool number input 3 signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 3 signal connection. Once you check that all tool number input 3 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A135F		Tool number input 3 signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O tool number input 3 signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 3 signal connection. Once you check that all tool number input 3 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1360		Monitoring area 0 disable signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O monitoring area 0 disable signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 0 disable signal connection. Once you check that all monitoring area 0 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1361		Monitoring area 0 disable signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O monitoring area 0 disable signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 0 disable signal connection. Once you check that all monitoring area 0 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1362		Monitoring area 0 disable signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O monitoring area 0 disable signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 0 disable signal connection. Once you check that all monitoring area 0 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1363		Monitoring area 0 disable signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O monitoring area 0 disable signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 0 disable signal connection. Once you check that all monitoring area 0 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1364		Monitoring area 1 disable signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O monitoring area 1 disable signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 1 disable signal connection. Once you check that all monitoring area 1 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1365		Monitoring area 1 disable signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O monitoring area 1 disable signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 1 disable signal connection. Once you check that all monitoring area 1 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1366		Monitoring area 1 disable signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O monitoring area 1 disable signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 1 disable signal connection. Once you check that all monitoring area 1 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1367		Monitoring area 1 disable signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O monitoring area 1 disable signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 1 disable signal connection. Once you check that all monitoring area 1 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1368		Monitoring area 2 disable signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O monitoring area 2 disable signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 2 disable signal connection. Once you check that all monitoring area 2 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1369		Monitoring area 2 disable signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O monitoring area 2 disable signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 2 disable signal connection. Once you check that all monitoring area 2 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A136A		Monitoring area 2 disable signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O monitoring area 2 disable signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 2 disable signal connection. Once you check that all monitoring area 2 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A136B		Monitoring area 2 disable signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O monitoring area 2 disable signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 2 disable signal connection. Once you check that all monitoring area 2 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A136C		Monitoring area 3 disable signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O monitoring area 3 disable signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 3 disable signal connection. Once you check that all monitoring area 3 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A136D		Monitoring area 3 disable signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O monitoring area 3 disable signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 3 disable signal connection. Once you check that all monitoring area 3 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A136E		Monitoring area 3 disable signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O monitoring area 3 disable signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 3 disable signal connection. Once you check that all monitoring area 3 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A136F		Monitoring area 3 disable signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O monitoring area 3 disable signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 3 disable signal connection. Once you check that all monitoring area 3 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1370		Monitoring disable signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O monitoring disable signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on monitoring disable signal connection. Once you check that all monitoring disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1371		Monitoring disable signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O monitoring disable signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on monitoring disable signal connection. Once you check that all monitoring disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1372		Monitoring disable signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O monitoring disable signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on monitoring disable signal connection. Once you check that all monitoring disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1373		Monitoring disable signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O monitoring disable signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on monitoring disable signal connection. Once you check that all monitoring disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1374		SS1 signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O SS1 signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on SS1 signal connection. Once you check that all SS1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1375		SS1 signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O SS1 signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on SS1 signal connection. Once you check that all SS1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1376		SS1 signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O SS1 signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on SS1 signal connection. Once you check that all SS1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1377		SS1 signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O SS1 signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on SS1 signal connection. Once you check that all SS1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1378		Safe reference position check signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O safe reference position check signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on safe reference position check signal connection. Once you check that all safe reference position check wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1379		Safe reference position check signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O safe reference position check signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on safe reference position check signal connection. Once you check that all safe reference position check wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A137A		Safe reference position check signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O safe reference position check signal input circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on safe reference position check signal connection. Once you check that all safe reference position check wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A137B		Safe reference position check signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O safe reference position check signal input circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on safe reference position check signal connection. Once you check that all safe reference position check wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A1380		STO monitor signal output circuit 1 diagnosis signal is undetected	5	Diagnosis signal is undetected at safety I/O STO monitor signal output circuit 1.	If Mini I/O power supply is set to external power supply (i.e., the initial value before shipping), this error occurs. Check the power supply. Check if there are no short circuit, ground fault, or improper connection for two lines on STO Monitor signal connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A1381		STO monitor signal output circuit 2 diagnosis signal is undetected	5	Diagnosis signal is undetected at safety I/O STO monitor signal output circuit 2.	If Mini I/O power supply is set to external power supply (i.e., the initial value before shipping), this error occurs. Check the power supply. Check if there are no short circuit, ground fault, or improper connection for two lines on STO Monitor signal connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A1382		STO monitor signal output circuit 1 diagnosis signal failure	5	Diagnosis signal failure is detected at safety I/O STO monitor signal output circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on STO monitor signal connection. Once you check that all STO monitor wirings are properly connected, remove the mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A1383		STO monitor signal output circuit 2 diagnosis signal failure	5	Diagnosis signal failure is detected at safety I/O STO monitor signal output circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on STO monitor signal connection. Once you check that all STO monitor wirings are properly connected, remove the mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A1384		Auto-mode signal output circuit 1 diagnosis signal is undetected	5	Diagnosis signal is undetected at safety I/O auto-mode signal output circuit 1.	If Mini I/O power supply is set to external power supply (i.e., the initial value before shipping), this error occurs. Check the power supply. Check if there are no short circuit, ground fault, or improper connection for two lines on Auto Mode output signal connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A1385		Auto-mode signal output circuit 2 diagnosis signal is undetected	5	Diagnosis signal is undetected at safety I/O auto-mode signal output circuit 2.	If Mini I/O power supply is set to external power supply (i.e., the initial value before shipping), this error occurs. Check the power supply. Check if there are no short circuit, ground fault, or improper connection for two lines on Auto Mode output signal connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A1386		Auto-mode signal output circuit 1 diagnosis signal failure	5	Diagnosis signal failure is detected at safety I/O auto-mode signal output circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on auto-mode signal connection. Once you check that all auto-mode wirings are properly connected, remove the mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A1387		Auto-mode signal output circuit 2 diagnosis signal failure	5	Diagnosis signal failure is detected at safety I/O auto-mode signal output circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on auto-mode signal connection. Once you check that all auto-mode wirings are properly connected, remove the mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A13B0		STO monitor circuit failure	5	Circuit failure detected at safety I/O STO monitor.	Please contact DENSO WAVE service with error number and error message.
854A13B1		STO monitor circuit welding is detected	5	Circuit welding detected at safety I/O STO monitor.	Please contact DENSO WAVE service with error number and error message.
854A13C0		SLP signal output circuit 1 diagnosis signal is undetected	5	Diagnosis signal is undetected at safety-motion I/O SLP signal output circuit 1.	If Mini I/O power supply is set to external power supply (i.e., the initial value before shipping), this error occurs. Check the power supply. Check if there are no short circuit, ground fault, or improper connection for two lines on SLP signal connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A13C1		SLP signal output circuit 2 diagnosis signal is undetected	5	Diagnosis signal is undetected at safety-motion I/O SLP signal output circuit 2.	If Mini I/O power supply is set to external power supply (i.e., the initial value before shipping), this error occurs. Check the power supply. Check if there are no short circuit, ground fault, or improper connection for two lines on SLP signal connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A13C2		SLP signal output circuit 1 diagnosis signal failure	5	Diagnosis signal failure is detected at safety-motion I/O SLP signal output circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on SLP signal connection. Once you check that all SLP wirings are properly connected, remove the safety-motion output connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A13C3		SLP signal output circuit 2 diagnosis signal failure	5	Diagnosis signal failure is detected at safety-motion I/O SLP signal output circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on SLP signal connection. Once you check that all SLP wirings are properly connected, remove the safety-motion output connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A13C4		RSM1 signal output circuit 1 diagnosis signal is undetected	5	Diagnosis signal is undetected at safety-motion I/O RSM1 signal output circuit 1.	If Mini I/O power supply is set to external power supply (i.e., the initial value before shipping), this error occurs. Check the power supply. Check if there are no short circuit, ground fault, or improper connection for two lines on RSM1 signal connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A13C5		RSM1 signal output circuit 2 diagnosis signal is undetected	5	Diagnosis signal is undetected at safety-motion I/O RSM1 signal output circuit 2.	If Mini I/O power supply is set to external power supply (i.e., the initial value before shipping), this error occurs. Check the power supply. Check if there are no short circuit, ground fault, or improper connection for two lines on RSM1 signal connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A13C6		RSM1 signal output circuit 1 diagnosis signal failure	5	Diagnosis signal failure is detected at safety-motion I/O RSM1 signal output circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on RSM1 signal connection. Once you check that all RSM1 wirings are properly connected, remove the safety-motion output connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A13C7		RSM1 signal output circuit 2 diagnosis signal failure	5	Diagnosis signal failure is detected at safety-motion I/O RSM1 signal output circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on RSM1 signal connection. Once you check that all RSM1 wirings are properly connected, remove the safety-motion output connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A13C8		RSM2 signal output circuit 1 diagnosis signal is undetected	5	Diagnosis signal is undetected at safety-motion I/O RSM2 signal output circuit 1.	If Mini I/O power supply is set to external power supply (i.e., the initial value before shipping), this error occurs. Check the power supply. Check if there are no short circuit, ground fault, or improper connection for two lines on RSM2 signal connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A13C9		RSM2 signal output circuit 2 diagnosis signal is undetected	5	Diagnosis signal is undetected at safety-motion I/O RSM2 signal output circuit 2.	If Mini I/O power supply is set to external power supply (i.e., the initial value before shipping), this error occurs. Check the power supply. Check if there are no short circuit, ground fault, or improper connection for two lines on RSM2 signal connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A13CA		RSM2 signal output circuit 1 diagnosis signal failure	5	Diagnosis signal failure is detected at safety-motion I/O RSM2 signal output circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on RSM2 signal connection. Once you check that all RSM2 wirings are properly connected, remove the safety-motion output connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A13CB		RSM2 signal output circuit 2 diagnosis signal failure	5	Diagnosis signal failure is detected at safety-motion I/O RSM2 signal output circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on RSM2 signal connection. Once you check that all RSM2 wirings are properly connected, remove the safety-motion output connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A13CC		RSM3 signal output circuit 1 diagnosis signal is undetected	5	Diagnosis signal is undetected at safety-motion I/O RSM3 signal output circuit 1.	If Mini I/O power supply is set to external power supply (i.e., the initial value before shipping), this error occurs. Check the power supply. Check if there are no short circuit, ground fault, or improper connection for two lines on RSM3 signal connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A13CD		RSM3 signal output circuit 2 diagnosis signal is undetected	5	Diagnosis signal is undetected at safety-motion I/O RSM3 signal output circuit 2.	If Mini I/O power supply is set to external power supply (i.e., the initial value before shipping), this error occurs. Check the power supply. Check if there are no short circuit, ground fault, or improper connection for two lines on RSM3 signal connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A13CE		RSM3 signal output circuit 1 diagnosis signal failure	5	Diagnosis signal failure is detected at safety-motion I/O RSM3 signal output circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on RSM3 signal connection. Once you check that all RSM3 wirings are properly connected, remove the safety-motion output connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A13CF		RSM3 signal output circuit 2 diagnosis signal failure	5	Diagnosis signal failure is detected at safety-motion I/O RSM3 signal output circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on RSM3 signal connection. Once you check that all RSM3 wirings are properly connected, remove the safety-motion output connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A13D0		RPM signal output circuit 1 diagnosis signal is undetected	5	Diagnosis signal is undetected at safety-motion I/O RPM signal output circuit 1.	If Mini I/O power supply is set to external power supply (i.e., the initial value before shipping), this error occurs. Check the power supply. Check if there are no short circuit, ground fault, or improper connection for two lines on RPM signal connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A13D1		RPM signal output circuit 2 diagnosis signal is undetected	5	Diagnosis signal is undetected at safety-motion I/O RPM signal output circuit 2.	If Mini I/O power supply is set to external power supply (i.e., the initial value before shipping), this error occurs. Check the power supply. Check if there are no short circuit, ground fault, or improper connection for two lines on RPM signal connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A13D2		RPM signal output circuit 1 diagnosis signal failure	5	Diagnosis signal failure is detected at safety-motion I/O RPM signal output circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on RPM signal connection. Once you check that all RPM wirings are properly connected, remove the safety-motion output connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A13D3		RPM signal output circuit 2 diagnosis signal failure	5	Diagnosis signal failure is detected at safety-motion I/O RPM signal output circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on RPM signal connection. Once you check that all RPM wirings are properly connected, remove the safety-motion output connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A13D4		SOS signal output circuit 1 diagnosis signal is undetected	5	Diagnosis signal is undetected at safety-motion I/O SOS signal output circuit 1.	If Mini I/O power supply is set to external power supply (i.e., the initial value before shipping), this error occurs. Check the power supply. Check if there are no short circuit, ground fault, or improper connection for two lines on SOS signal connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A13D5		SOS signal output circuit 2 diagnosis signal is undetected	5	Diagnosis signal is undetected at safety-motion I/O SOS signal output circuit 2.	If Mini I/O power supply is set to external power supply (i.e., the initial value before shipping), this error occurs. Check the power supply. Check if there are no short circuit, ground fault, or improper connection for two lines on SOS signal connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A13D6		SOS signal output circuit 1 diagnosis signal failure	5	Diagnosis signal failure is detected at safety-motion I/O SOS signal output circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on SOS signal connection. Once you check that all SOS wirings are properly connected, remove the safety-motion output connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A13D7		SOS signal output circuit 2 diagnosis signal failure	5	Diagnosis signal failure is detected at safety-motion I/O SOS signal output circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on SOS signal connection. Once you check that all SOS wirings are properly connected, remove the safety-motion output connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A13D8		Safe reference position check signal output circuit 1 diagnosis signal is undetected	5	Diagnosis signal is undetected at safety-motion I/O safe reference position check signal output circuit 1.	If Mini I/O power supply is set to external power supply (i.e., the initial value before shipping), this error occurs. Check the power supply. Check if there are no short circuit, ground fault, or improper connection for two lines on reference-position-confirmation signal connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A13D9		Safe reference position check signal output circuit 2 diagnosis signal is undetected	5	Diagnosis signal is undetected at safety-motion I/O safe reference position check signal output circuit 2.	If Mini I/O power supply is set to external power supply (i.e., the initial value before shipping), this error occurs. Check the power supply. Check if there are no short circuit, ground fault, or improper connection for two lines on reference-position-confirmation signal connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A13DA		Safe reference position check signal output circuit 1 diagnosis signal failure	5	Diagnosis signal failure is detected at safety-motion I/O safe reference position check signal output circuit 1.	Check if there are no short circuit, ground fault, or improper connection for two lines on safe reference position check signal connection. Once you check that all safe reference position check wirings are properly connected, remove the safety-motion output connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A13DB		Safe reference position check signal output circuit 2 diagnosis signal failure	5	Diagnosis signal failure is detected at safety-motion I/O safe reference position check signal output circuit 2.	Check if there are no short circuit, ground fault, or improper connection for two lines on safe reference position check signal connection. Once you check that all safe reference position check wirings are properly connected, remove the safety-motion output connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A1400		Motor on enable circuit error (1)	5	Motor on enable circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
854A1401		Motor on enable circuit error (2)	5	Motor on enable circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
854A1402		Motor on enable circuit error (BUFF)	5	Motor on enable circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
854A1500		Safety monitoring circuit over voltage (1.1V)	5	Safety monitoring circuit over voltage is detected.	Please contact DENSO WAVE service with error number and error message.
854A1501		Safety monitoring circuit over voltage (1.8V)	5	Safety monitoring circuit over voltage is detected.	Please contact DENSO WAVE service with error number and error message.
854A1503		Safety monitoring circuit over voltage (2.5V)	5	Safety monitoring circuit over voltage is detected.	Please contact DENSO WAVE service with error number and error message.
854A1504		Safety monitoring circuit over voltage (3.3V)	5	Safety monitoring circuit over voltage is detected.	Please contact DENSO WAVE service with error number and error message.
854A1505		Safety monitoring circuit over voltage (5V)	5	Safety monitoring circuit over voltage is detected.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A1508		Safety monitoring circuit under voltage (1.1V)	5	Safety monitoring circuit under voltage is detected.	Please contact DENSO WAVE service with error number and error message.
854A1509		Safety monitoring circuit under voltage (1.8V)	5	Safety monitoring circuit under voltage is detected.	Please contact DENSO WAVE service with error number and error message.
854A150B		Safety monitoring circuit under voltage (2.5V)	5	Safety monitoring circuit under voltage is detected.	Please contact DENSO WAVE service with error number and error message.
854A150C		Safety monitoring circuit under voltage (3.3V)	5	Safety monitoring circuit under voltage is detected.	Please contact DENSO WAVE service with error number and error message.
854A150D		Safety monitoring circuit under voltage (5V)	5	Safety monitoring circuit under voltage is detected.	Please contact DENSO WAVE service with error number and error message.
854A1510		Over voltage diagnosis circuit of safety monitoring circuit error (1.1V)	5	Over voltage diagnosis circuit of safety monitoring circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
854A1511		Over voltage diagnosis circuit of safety monitoring circuit error (1.8V)	5	Over voltage diagnosis circuit of safety monitoring circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
854A1513		Over voltage diagnosis circuit of safety monitoring circuit error (2.5V)	5	Over voltage diagnosis circuit of safety monitoring circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
854A1514		Over voltage diagnosis circuit of safety monitoring circuit error (3.3V)	5	Over voltage diagnosis circuit of safety monitoring circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
854A1515		Over voltage diagnosis circuit of safety monitoring circuit error (5V)	5	Over voltage diagnosis circuit of safety monitoring circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
854A1518		Under voltage diagnosis circuit of safety monitoring circuit error (1.1V)	5	Under voltage diagnosis circuit of safety monitoring circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
854A1519		Under voltage diagnosis circuit of safety monitoring circuit error (1.8V)	5	Under voltage diagnosis circuit of safety monitoring circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
854A151B		Under voltage diagnosis circuit of safety monitoring circuit error (2.5V)	5	Under voltage diagnosis circuit of safety monitoring circuit error is detected.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A151C		Under voltage diagnosis circuit of safety monitoring circuit error (3.3V)	5	Under voltage diagnosis circuit of safety monitoring circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
854A151D		Under voltage diagnosis circuit of safety monitoring circuit error (5V)	5	Under voltage diagnosis circuit of safety monitoring circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
854A1600		Safety monitoring device watch dog timer error	5	Safety monitoring device watch dog timer error is detected.	Please contact DENSO WAVE service with error number and error message.
854A1608		Safety monitoring device watch dog timer circuit error	5	Safety monitoring device watch dog timer circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
854A1700		STO register cross monitoring error	5	Safety monitoring device STO register mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1701		SS1 register cross monitoring error	5	Safety monitoring device SS1 register mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1702		INT-ST register cross monitoring error	5	Safety monitoring device INT-ST register mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1703		MODE register cross monitoring error	5	Safety monitoring device MODE register mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1708		Sequence count cross monitoring error	5	Safety monitoring device sequence count mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1709		Sequence monitoring execution time cross monitoring error	5	Safety monitoring device sequence monitoring execution time mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A1710		Brake diagnosis setting cross monitoring error	5	Safety monitoring device brake diagnosis setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1718		SS1 auto-mode timer setting cross monitoring error	5	Safety monitoring device SS1 auto-mode timer setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A171C		SS1 manual-mode timer setting cross monitoring error	5	Safety monitoring device SS1 manual-mode timer setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1720		Brake switching setting cross monitoring error	5	Safety monitoring device brake switching setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1733		Enable-auto input setting cross monitoring error	5	Safety monitoring device enable-auto input setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1740		SS2 input setting cross monitoring error	5	Safety monitoring device SS2 input setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1741		RSM1 input setting cross monitoring error	5	Safety monitoring device RSM1 input setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1742		RSM2 input setting cross monitoring error	5	Safety monitoring device RSM2 input setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1743		RSM3 input setting cross monitoring error	5	Safety monitoring device RSM3 input setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A1744		Tool number input 0 setting cross monitoring error	5	Safety monitoring device tool number input 0 setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1745		Tool number input 1 setting cross monitoring error	5	Safety monitoring device tool number input 1 setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1746		Tool number input 2 setting cross monitoring error	5	Safety monitoring device tool number input 2 setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1747		Tool number input 3 setting cross monitoring error	5	Safety monitoring device tool number input 3 setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1748		Monitoring area 0 disable input setting cross monitoring error	5	Safety monitoring device monitoring area 0 disable input setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1749		Monitoring area 1 disable input setting cross monitoring error	5	Safety monitoring device monitoring area 1 disable input setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A174A		Monitoring area 2 disable input setting cross monitoring error	5	Safety monitoring device monitoring area 2 disable input setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A174B		Monitoring area 3 disable input setting cross monitoring error	5	Safety monitoring device monitoring area 3 disable input setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A174C		Monitoring disable input setting cross monitoring error	5	Safety monitoring device monitoring disable input setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A174D		SS1 input setting cross monitoring error	5	Safety monitoring device SS1 input setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A174E		Safe reference position check input setting cross monitoring error	5	Safety monitoring device safe reference position check input setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1750		Area-sensor SS2 input setting cross monitoring error	5	Safety monitoring device area-sensor SS2 input setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1751		Area-sensor RSM1 input setting cross monitoring error	5	Safety monitoring device area-sensor RSM1 input setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1752		Area-sensor RSM2 input setting cross monitoring error	5	Safety monitoring device area-sensor RSM2 input setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1753		Area-sensor RSM3 input setting cross monitoring error	5	Safety monitoring device area-sensor RSM3 input setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1754		Area-sensor tool number input 0 setting cross monitoring error	5	Safety monitoring device area-sensor tool number input 0 setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1755		Area-sensor tool number input 1 setting cross monitoring error	5	Safety monitoring device area-sensor tool number input 1 setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1756		Area-sensor tool number input 2 setting cross monitoring error	5	Safety monitoring device area-sensor tool number input 2 setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A1757		Area-sensor tool number input 3 setting cross monitoring error	5	Safety monitoring device area-sensor tool number input 3 setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1758		Area-sensor monitoring area 0 disable input setting cross monitoring error	5	Safety monitoring device area-sensor monitoring area 0 disable input setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1759		Area-sensor monitoring area 1 disable input setting cross monitoring error	5	Safety monitoring device area-sensor monitoring area 1 disable input setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A175A		Area-sensor monitoring area 2 disable input setting cross monitoring error	5	Safety monitoring device area-sensor monitoring area 2 disable input setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A175B		Area-sensor monitoring area 3 disable input setting cross monitoring error	5	Safety monitoring device area-sensor monitoring area 3 disable input setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A175C		Area-sensor monitoring disable input setting cross monitoring error	5	Safety monitoring device area-sensor monitoring disable input setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A175D		Area-sensor SS1 input setting cross monitoring error	5	Safety monitoring device area-sensor SS1 input setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A175E		Area-sensor safe reference position check input setting cross monitoring error	5	Safety monitoring device area-sensor safe reference position check input setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1760		Auto-mode output setting cross monitoring error	5	Safety monitoring device auto-mode output setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A1770		SLP output setting cross monitoring error	5	Safety monitoring device SLP output setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1771		RSM1 output setting cross monitoring error	5	Safety monitoring device RSM1 output setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1772		RSM2 output setting cross monitoring error	5	Safety monitoring device RSM2 output setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1773		RSM3 output setting cross monitoring error	5	Safety monitoring device RSM3 output setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1774		RPM output setting cross monitoring error	5	Safety monitoring device RPM output setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1775		SOS output setting cross monitoring error	5	Safety monitoring device SOS output setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1776		Safe reference position check output setting cross monitoring error	5	Safety monitoring device safe reference position check output setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1780		Motor ON back check monitor cross monitoring error	5	Safety monitoring device motor ON back check monitor mismatch is detected.	Please contact DENSO WAVE service with error number and error message.
854A1784		Brake release back check monitor cross monitoring error	5	Safety monitoring device brake release back check monitor mismatch is detected.	Please contact DENSO WAVE service with error number and error message.
854A1790		Encoder communication setting cross monitoring error	5	Safety monitoring device encoder communication setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A17A0		Emergency-stop input signal cross monitoring error	3	Safety monitoring device emergency-stop input signal mismatch is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on emergency-stop signal connection. Once you check that all emergency-stop wirings are properly connected, remove the mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A17A1		Deadman switch input signal cross monitoring error	3	Safety monitoring device deadman switch input signal mismatch is detected.	Please contact DENSO WAVE service with error number and error message.
834A17A2		Enable-auto input signal cross monitoring error	3	Safety monitoring device enable-auto input signal mismatch is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on enable-auto signal connection. Once you check that all enable-auto wirings are properly connected, remove the mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A17A3		Protective-stop input signal cross monitoring error	3	Safety monitoring device protective-stop input signal mismatch is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on protective-stop signal connection. Once you check that all protective-stop wirings are properly connected, remove the mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A17A4		Manual/auto-mode input signal cross monitoring error	3	Safety monitoring device manual/auto-mode input signal mismatch is detected.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A17B0		SS2 input signal cross monitoring error	3	Safety monitoring device SS2 input signal mismatch is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on SS2 signal connection. Once you check that all SS2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A17B1		RSM1 input signal cross monitoring error	3	Safety monitoring device RSM1 input signal mismatch is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on RSM1 signal connection. Once you check that all RSM1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A17B2		RSM2 input signal cross monitoring error	3	Safety monitoring device RSM2 input signal mismatch is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on RSM2 signal connection. Once you check that all RSM2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A17B3		RSM3 input signal cross monitoring error	3	Safety monitoring device RSM3 input signal mismatch is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on RSM3 signal connection. Once you check that all RSM3 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A17B4		Tool number input 0 signal cross monitoring error	3	Safety monitoring device tool number input 0 signal mismatch is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 0 signal connection. Once you check that all tool number input 0 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A17B5		Tool number input 1 signal cross monitoring error	3	Safety monitoring device tool number input 1 signal mismatch is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 1 signal connection. Once you check that all tool number input 1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A17B6		Tool number input 2 signal cross monitoring error	3	Safety monitoring device tool number input 2 signal mismatch is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 2 signal connection. Once you check that all tool number input 2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A17B7		Tool number input 3 signal cross monitoring error	3	Safety monitoring device tool number input 3 signal mismatch is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 3 signal connection. Once you check that all tool number input 3 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A17B8		Monitoring area 0 disable input signal cross monitoring error	3	Safety monitoring device monitoring area 0 disable input signal mismatch is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 0 disable signal connection. Once you check that all monitoring area 0 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A17B9		Monitoring area 1 disable input signal cross monitoring error	3	Safety monitoring device monitoring area 1 disable input signal mismatch is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 1 disable signal connection. Once you check that all monitoring area 1 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A17BA		Monitoring area 2 disable input signal cross monitoring error	3	Safety monitoring device monitoring area 2 disable input signal mismatch is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 2 disable signal connection. Once you check that all monitoring area 2 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A17BB		Monitoring area 3 disable input signal cross monitoring error	3	Safety monitoring device monitoring area 3 disable input signal mismatch is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 3 disable signal connection. Once you check that all monitoring area 3 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A17BC		Monitoring disable input signal cross monitoring error	3	Safety monitoring device monitoring disable input signal mismatch is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on monitoring disable signal connection. Once you check that all monitoring disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A17BD		SS1 input signal cross monitoring error	3	Safety monitoring device SS1 input signal mismatch is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on SS1 signal connection. Once you check that all SS1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A17BE		Safe reference position check input signal cross monitoring error	3	Safety monitoring device safe reference position check input signal mismatch is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on safe reference position check signal connection. Once you check that all safe reference position check wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A17C0		STO monitor output signal cross monitoring error	3	Safety monitoring device STO monitor output signal mismatch is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on STO monitor signal connection. Once you check that all STO monitor wirings are properly connected, remove the mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A17C1		Auto-mode output signal cross monitoring error	3	Safety monitoring device auto-mode output signal mismatch is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on auto-mode signal connection. Once you check that all auto-mode wirings are properly connected, remove the mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A17D0		SLP output signal cross monitoring error	3	Safety monitoring device SLP output signal mismatch is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on SLP signal connection. Once you check that all SLP wirings are properly connected, remove the safety-motion output connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A17D1		RSM1 output signal cross monitoring error	3	Safety monitoring device RSM1 output signal mismatch is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on RSM1 signal connection. Once you check that all RSM1 wirings are properly connected, remove the safety-motion output connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A17D2		RSM2 output signal cross monitoring error	3	Safety monitoring device RSM2 output signal mismatch is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on RSM2 signal connection. Once you check that all RSM2 wirings are properly connected, remove the safety-motion output connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A17D3		RSM3 output signal cross monitoring error	3	Safety monitoring device RSM3 output signal mismatch is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on RSM3 signal connection. Once you check that all RSM3 wirings are properly connected, remove the safety-motion output connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A17D4		RPM output signal cross monitoring error	3	Safety monitoring device RPM output signal mismatch is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on RPM signal connection. Once you check that all RPM wirings are properly connected, remove the safety-motion output connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A17D5		SOS output signal cross monitoring error	3	Safety monitoring device SOS output signal mismatch is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on SOS signal connection. Once you check that all SOS wirings are properly connected, remove the safety-motion output connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A17D6		Safe reference position check output signal cross monitoring error	3	Safety monitoring device safe reference position check output signal mismatch is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on safe reference position check signal connection. Once you check that all safe reference position check wirings are properly connected, remove the safety-motion output connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A17E0		Motor ON status cross monitoring error	3	Safety monitoring device motor ON status mismatch is detected.	Please contact DENSO WAVE service with error number and error message.
834A17E1		Brake release status cross monitoring error	3	Safety monitoring device brake release status mismatch is detected.	Please contact DENSO WAVE service with error number and error message.
854A17F0		Emergency-stop input signal diagnosis setting cross monitoring error	5	Safety monitoring device emergency-stop input signal diagnosis setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A17F1		Deadman switch input signal diagnosis setting cross monitoring error	5	Safety monitoring device deadman switch input signal diagnosis setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A17F2		Enable-auto input signal diagnosis setting cross monitoring error	5	Safety monitoring device enable-auto input signal diagnosis setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A17F3		Protective-stop input signal diagnosis setting cross monitoring error	5	Safety monitoring device protective-stop input signal diagnosis setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A17F4		Auto/manual-mode input signal diagnosis setting cross monitoring error	5	Safety monitoring device auto/manual-mode input signal diagnosis setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1801		Motor off function for deadman switch diagnosis setting cross monitoring error	5	Safety monitoring device motor off function for deadman switch diagnosis setting mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1810		Controller type cross monitoring error	5	Safety monitoring device controller type mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A1900		Motor on lamp main circuit error	5	Motor on lamp main circuit error	Please contact DENSO WAVE service with error number and error message.
854A1901		Motor on lamp 1 circuit error	5	Motor on lamp 1 circuit error	Please contact DENSO WAVE service with error number and error message.
854A1902		Motor on lamp 2 circuit error	5	Motor on lamp 2 circuit error	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1A00		Area-sensor SS2 signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor SS2 signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on SS2 signal connection. Once you check that all SS2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A01		Area-sensor SS2 signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor SS2 signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on SS2 signal connection. Once you check that all SS2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A02		Area-sensor SS2 signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor SS2 signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on SS2 signal connection. Once you check that all SS2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1A03		Area-sensor SS2 signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor SS2 signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on SS2 signal connection. Once you check that all SS2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A04		Area-sensor RSM1 signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor RSM1 signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on RSM1 signal connection. Once you check that all RSM1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A05		Area-sensor RSM1 signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor RSM1 signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on RSM1 signal connection. Once you check that all RSM1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1A06		Area-sensor RSM1 signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor RSM1 signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on RSM1 signal connection. Once you check that all RSM1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A07		Area-sensor RSM1 signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor RSM1 signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on RSM1 signal connection. Once you check that all RSM1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A08		Area-sensor RSM2 signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor RSM2 signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on RSM2 signal connection. Once you check that all RSM2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1A09		Area-sensor RSM2 signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor RSM2 signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on RSM2 signal connection. Once you check that all RSM2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A0A		Area-sensor RSM2 signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor RSM2 signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on RSM2 signal connection. Once you check that all RSM2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A0B		Area-sensor RSM2 signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor RSM2 signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on RSM2 signal connection. Once you check that all RSM2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1A0C		Area-sensor RSM3 signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor RSM3 signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on RSM3 signal connection. Once you check that all RSM3 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A0D		Area-sensor RSM3 signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor RSM3 signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on RSM3 signal connection. Once you check that all RSM3 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A0E		Area-sensor RSM3 signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor RSM3 signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on RSM3 signal connection. Once you check that all RSM3 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1A0F		Area-sensor RSM3 signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor RSM3 signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on RSM3 signal connection. Once you check that all RSM3 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A10		Area-sensor tool number input 0 signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor tool number input 0 signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 0 signal connection. Once you check that all tool number input 0 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A11		Area-sensor tool number input 0 signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor tool number input 0 signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 0 signal connection. Once you check that all tool number input 0 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

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834A1A12		Area-sensor tool number input 0 signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor TOOL0 signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 0 signal connection. Once you check that all tool number input 0 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A13		Area-sensor tool number input 0 signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor tool number input 0 signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 0 signal connection. Once you check that all tool number input 0 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A14		Area-sensor tool number input 1 signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor tool number input 1 signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 1 signal connection. Once you check that all tool number input 1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

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834A1A15		Area-sensor tool number input 1 signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor tool number input 1 signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 1 signal connection. Once you check that all tool number input 1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A16		Area-sensor tool number input 1 signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor tool number input 1 signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 1 signal connection. Once you check that all tool number input 1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A17		Area-sensor tool number input 1 signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor tool number input 1 signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 1 signal connection. Once you check that all tool number input 1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

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834A1A18		Area-sensor tool number input 2 signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor tool number input 2 signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 2 signal connection. Once you check that all tool number input 2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A19		Area-sensor tool number input 2 signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor tool number input 2 signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 2 signal connection. Once you check that all tool number input 2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A1A		Area-sensor tool number input 2 signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor tool number input 2 signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 2 signal connection. Once you check that all tool number input 2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

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834A1A1B		Area-sensor tool number input 2 signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor tool number input 2 signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 2 signal connection. Once you check that all tool number input 2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A1C		Area-sensor tool number input 3 signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor tool number input 3 signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 3 signal connection. Once you check that all tool number input 3 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A1D		Area-sensor tool number input 3 signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor tool number input 3 signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 3 signal connection. Once you check that all tool number input 3 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

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834A1A1E		Area-sensor tool number input 3 signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor tool number input 3 signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 3 signal connection. Once you check that all tool number input 3 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A1F		Area-sensor tool number input 3 signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor tool number input 3 signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 3 signal connection. Once you check that all tool number input 3 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A20		Area-sensor monitoring area 0 disable signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor monitoring area 0 disable signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 0 disable signal connection. Once you check that all monitoring area 0 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

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834A1A21		Area-sensor monitoring area 0 disable signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor monitoring area 0 disable signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 0 disable signal connection. Once you check that all monitoring area 0 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A22		Area-sensor monitoring area 0 disable signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor monitoring area 0 disable signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 0 disable signal connection. Once you check that all monitoring area 0 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A23		Area-sensor monitoring area 0 disable signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor monitoring area 0 disable signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 0 disable signal connection. Once you check that all monitoring area 0 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

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834A1A24		Area-sensor monitoring area 1 disable signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor monitoring area 1 disable signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 1 disable signal connection. Once you check that all monitoring area 1 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A25		Area-sensor monitoring area 1 disable signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor monitoring area 1 disable signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 1 disable signal connection. Once you check that all monitoring area 1 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A26		Area-sensor monitoring area 1 disable signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor monitoring area 1 disable signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 1 disable signal connection. Once you check that all monitoring area 1 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

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834A1A27		Area-sensor monitoring area 1 disable signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor monitoring area 1 disable signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 1 disable signal connection. Once you check that all monitoring area 1 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A28		Area-sensor monitoring area 2 disable signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor monitoring area 2 disable signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 2 disable signal connection. Once you check that all monitoring area 2 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A29		Area-sensor monitoring area 2 disable signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor monitoring area 2 disable signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 2 disable signal connection. Once you check that all monitoring area 2 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

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834A1A2A		Area-sensor monitoring area 2 disable signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor monitoring area 2 disable signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 2 disable signal connection. Once you check that all monitoring area 2 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A2B		Area-sensor monitoring area 2 disable signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor monitoring area 2 disable signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 2 disable signal connection. Once you check that all monitoring area 2 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A2C		Area-sensor monitoring area 3 disable signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor monitoring area 3 disable signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 3 disable signal connection. Once you check that all monitoring area 3 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

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834A1A2D		Area-sensor monitoring area 3 disable signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor monitoring area 3 disable signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 3 disable signal connection. Once you check that all monitoring area 3 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A2E		Area-sensor monitoring area 3 disable signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor monitoring area 3 disable signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 3 disable signal connection. Once you check that all monitoring area 3 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A2F		Area-sensor monitoring area 3 disable signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor monitoring area 3 disable signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 3 disable signal connection. Once you check that all monitoring area 3 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

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834A1A30		Area-sensor monitoring disable signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor monitoring disable signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring disable signal connection. Once you check that all monitoring disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A31		Area-sensor monitoring disable signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor monitoring disable signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring disable signal connection. Once you check that all monitoring disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A32		Area-sensor monitoring disable signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor monitoring disable signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring disable signal connection. Once you check that all monitoring disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

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834A1A33		Area-sensor monitoring disable signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor monitoring disable signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring disable signal connection. Once you check that all monitoring disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A34		Area-sensor SS1 signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor SS1 signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on SS1 signal connection. Once you check that all SS1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A35		Area-sensor SS1 signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor SS1 signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on SS1 signal connection. Once you check that all SS1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1A36		Area-sensor SS1 signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor SS1 signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on SS1 signal connection. Once you check that all SS1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A37		Area-sensor SS1 signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor SS1 signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on SS1 signal connection. Once you check that all SS1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A38		Area-sensor safe reference position check signal input circuit 1 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor safe reference position check signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on safe reference position check signal connection. Once you check that all safe reference position check wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1A39		Area-sensor safe reference position check signal input circuit 2 diagnosis signal is undetected	3	Diagnosis signal is undetected at safety-motion I/O area-sensor safe reference position check signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on safe reference position check signal connection. Once you check that all safe reference position check wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A3A		Area-sensor safe reference position check signal input circuit 1 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor safe reference position check signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on safe reference position check signal connection. Once you check that all safe reference position check wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A3B		Area-sensor safe reference position check signal input circuit 2 diagnosis signal failure	3	Diagnosis signal failure is detected at safety-motion I/O area-sensor safe reference position check signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on safe reference position check signal connection. Once you check that all safe reference position check wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1A80		Area-sensor SS2 signal input circuit 1 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor SS2 signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on SS2 signal connection. Once you check that all SS2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A81		Area-sensor SS2 signal input circuit 2 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor SS2 signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on SS2 signal connection. Once you check that all SS2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A84		Area-sensor RSM1 signal input circuit 1 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor RSM1 signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on RSM1 signal connection. Once you check that all RSM1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1A85		Area-sensor RSM1 signal input circuit 2 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor RSM1 signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on RSM1 signal connection. Once you check that all RSM1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A88		Area-sensor RSM2 signal input circuit 1 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor RSM2 signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on RSM2 signal connection. Once you check that all RSM2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A89		Area-sensor RSM2 signal input circuit 2 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor RSM2 signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on RSM2 signal connection. Once you check that all RSM2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1A8C		Area-sensor RSM3 signal input circuit 1 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor RSM3 signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on RSM3 signal connection. Once you check that all RSM3 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A8D		Area-sensor RSM3 signal input circuit 2 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor RSM3 signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on RSM3 signal connection. Once you check that all RSM3 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A90		Area-sensor tool number input 0 signal input circuit 1 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor tool number input 0 signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 0 signal connection. Once you check that all tool number input 0 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1A91		Area-sensor tool number input 0 signal input circuit 2 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor tool number input 0 signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 0 signal connection. Once you check that all tool number input 0 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A94		Area-sensor tool number input 1 signal input circuit 1 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor tool number input 1 signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 1 signal connection. Once you check that all tool number input 1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A95		Area-sensor tool number input 1 signal input circuit 2 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor tool number input 1 signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 1 signal connection. Once you check that all tool number input 1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1A98		Area-sensor tool number input 2 signal input circuit 1 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor tool number input 2 signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 2 signal connection. Once you check that all tool number input 2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A99		Area-sensor tool number input 2 signal input circuit 2 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor tool number input 2 signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 2 signal connection. Once you check that all tool number input 2 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1A9C		Area-sensor tool number input 3 signal input circuit 1 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor tool number input 3 signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 3 signal connection. Once you check that all tool number input 3 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1A9D		Area-sensor tool number input 3 signal input circuit 2 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor tool number input 3 signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on tool number input 3 signal connection. Once you check that all tool number input 3 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1AA0		Area-sensor monitoring area 0 disable signal input circuit 1 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor monitoring area 0 disable signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 0 disable signal connection. Once you check that all monitoring area 0 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1AA1		Area-sensor monitoring area 0 disable signal input circuit 2 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor monitoring area 0 disable signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 0 disable signal connection. Once you check that all monitoring area 0 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1AA4		Area-sensor monitoring area 1 disable signal input circuit 1 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor monitoring area 1 disable signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 1 disable signal connection. Once you check that all monitoring area 1 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1AA5		Area-sensor monitoring area 1 disable signal input circuit 2 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor monitoring area 1 disable signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 1 disable signal connection. Once you check that all monitoring area 1 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1AA8		Area-sensor monitoring area 2 disable signal input circuit 1 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor monitoring area 2 disable signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 2 disable signal connection. Once you check that all monitoring area 2 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1AA9		Area-sensor monitoring area 2 disable signal input circuit 2 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor monitoring area 2 disable signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 2 disable signal connection. Once you check that all monitoring area 2 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1AAC		Area-sensor monitoring area 3 disable signal input circuit 1 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor monitoring area 3 disable signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 3 disable signal connection. Once you check that all monitoring area 3 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1AAD		Area-sensor monitoring area 3 disable signal input circuit 2 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor monitoring area 3 disable signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring area 3 disable signal connection. Once you check that all monitoring area 3 disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1AB0		Area-sensor monitoring disable signal input circuit 1 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor monitoring disable signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring disable signal connection. Once you check that all monitoring disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1AB1		Area-sensor monitoring disable signal input circuit 2 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor monitoring disable signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on monitoring disable signal connection. Once you check that all monitoring disable wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1AB4		Area-sensor SS1 signal input circuit 1 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor SS1 signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on SS1 signal connection. Once you check that all SS1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A1AB5		Area-sensor SS1 signal input circuit 2 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor SS1 signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on SS1 signal connection. Once you check that all SS1 wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1AB8		Area-sensor safe reference position check signal input circuit 1 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor safe reference position check signal input circuit 1.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on safe reference position check signal connection. Once you check that all safe reference position check wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A1AB9		Area-sensor safe reference position check signal input circuit 2 diagnosis signal detection error	3	Diagnosis signal is detected at safety-motion I/O area-sensor safe reference position check signal input circuit 2.	Please confirm the safety parameters, and retransmit them. If error still occurs, check if there are no short circuit, ground fault, or improper connection for two lines on safe reference position check signal connection. Once you check that all safe reference position check wirings are properly connected, remove the safety-motion input connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

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834A2001		You cannot execute a command with this controller	3	This operation is not available with this robot controller.	Please contact DENSO WAVE service with error number and error message.
854A2002		Safety monitoring module version mismatch	5	Safety monitoring module version mismatch	Please contact DENSO WAVE service with error number and error message.
854A2101		Safety monitoring device watch dog timer error	5	Safety monitoring device communication stopped.	Please contact DENSO WAVE service with error number and error message.
854A2102		Safety monitoring device synchronization error	5	Do not synchronize with safety monitoring device.	Please contact DENSO WAVE service with error number and error message.
854A2103		Synchronization error between safety monitoring devices	5	Do not synchronize between safety monitoring devices.	Please contact DENSO WAVE service with error number and error message.
854A2104		Safety monitoring device is configuring	5	Safety monitoring device is configuring.	Please contact DENSO WAVE service with error number and error message.
854A2111		Initialization of safety monitoring processor is not completed	5	Initialization of safety monitoring processor is not completed.	Please contact DENSO WAVE service with error number and error message.
854A2112		Safety monitoring processor initialization error	5	Failed to initialize safety monitoring processor.	Please contact DENSO WAVE service with error number and error message.
854A2121		Safety monitoring device communication command error	5	Communication command error with safety monitoring device is detected.	Please contact DENSO WAVE service with error number and error message.
854A2122		Safety monitoring device communication line error	5	Communication line error with safety monitoring device is detected.	Please contact DENSO WAVE service with error number and error message.
854A2201		Failed to query safety monitoring device about error detail	5	Failed to query safety monitoring device about error detail.	Please contact DENSO WAVE service with error number and error message.
854A2202		Failed to query safety monitoring device about controller type	5	Failed to query safety monitoring device about controller type.	Please contact DENSO WAVE service with error number and error message.
854A2203		Failed to query safety monitoring device about safety monitoring status	5	Failed to query safety monitoring device about safety monitoring status.	Please contact DENSO WAVE service with error number and error message.
854A2204		Failed to query safety monitoring device about safety monitoring data	5	Failed to query safety monitoring device about safety monitoring data.	Please contact DENSO WAVE service with error number and error message.
854A2205		Failed to query safety monitoring device about synchronization status	5	Failed to query safety monitoring device about synchronization status.	Please contact DENSO WAVE service with error number and error message.
854A2206		Failed to query safety monitoring device about safety monitoring processor initialization status	5	Failed to query safety monitoring device about safety monitoring processor initialization status.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A2207		Failed to query safety monitoring device about software version	3	Failed to query safety monitoring device about software version.	Please contact DENSO WAVE service with error number and error message.
854A2211		Failed to initialize error notification process on safety monitoring device	5	Failed to initialize error notification process on safety monitoring device.	Please contact DENSO WAVE service with error number and error message.
854A2311		Safety motion I/O external power supply is connected in reverse polarity	5	24V and GND input of safety motion I/O external power supply is connected inversely.	Check the safety motion I/O external power supply wiring. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A2312		I/O internal power supply is specified, but external power is supplied to safety motion I/O	5	This controller is configured to I/O internal power supply, and cannot get external I/O power supply to safety motion I/O.	Change the controller setting for the external I/O power supply or check the safety motion I/O power supply wiring. If the error still occurs, please contact DENSO WAVE service with error number and error message.
804A2313		I/O external power supply is specified, but external power is not supplied to safety motion I/O	0	This controller is configured to I/O external power supply. External power supply is required to use safety motion I/O functions.	Change the controller setting for the internal I/O power supply, or check the safety motion I/O power supply wiring. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A2314		No output voltage from safety motion I/O internal power supply	5	Safety motion I/O internal power supply output has stopped because of the power supply unit failure.	Please contact DENSO WAVE service with error number and error message.
834A2315		Safety motion I/O external power supply is stopped	3	Safety motion I/O external power supply error is detected.	Check the safety motion external I/O power supply wiring. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A2401		Safety monitoring processor detects error	3	Cannot turn motor power ON while safety monitoring processor detects error.	Check the cause of safety monitoring processor error. If error still occurs, please contact DENSO WAVE service with error number and error message.
834A2402		Safety monitoring device detects error	3	Cannot turn motor power ON while safety monitoring device detects error.	Check the cause of safety monitoring device error. If error still occurs, please contact DENSO WAVE service with error number and error message.
834A2411		Safety monitoring processor detects error	3	Cannot release brake while safety monitoring processor detects error.	Check the cause of safety monitoring processor error. If error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A2412		Safety monitoring device detects error	3	Cannot release brake while safety monitoring device detects error.	Check the cause of safety monitoring device error. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A2501		Failed to detect safety motion board	5	Safety motion.board detecting status mismatch is detected.	Please contact DENSO WAVE service with error number and error message.
854A2502		Failed to detect robot controller specifications	5	Controller specifications mismatch is detected.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A2503		Undefined controller specifications	5	Undefined controller specifications	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A2504		This robot controller does not support safety motion type.	5	This robot controller is not support safety motion type, because it is not connected to safety motion board.	Please confirm the safety parameters, and retransmit them. If error still occurs, please contact DENSO WAVE service with error number and error message.
854A2505		Failed to detect board revision number	5	Board revision number detecting status mismatch is detected.	Please contact DENSO WAVE service with error number and error message.
854A2801		Failed to open safety monitoring driver module	5	Failed to open safety monitoring driver module.	Please contact DENSO WAVE service with error number and error message.
854A2802		Failed to connect safety monitoring driver module	5	Failed to connect safety monitoring driver module.	Please contact DENSO WAVE service with error number and error message.
854A2803		Safety monitoring driver module is not connected.	5	Safety monitoring driver module is not connected.	Please contact DENSO WAVE service with error number and error message.
854A2804		Safety monitoring controller module is not connected.	5	Safety monitoring controller module is not connected.	Please contact DENSO WAVE service with error number and error message.
854A2805		Failed to communicate with safety monitoring driver module	5	Failed to communicate with safety monitoring driver module.	Please contact DENSO WAVE service with error number and error message.
854A2811		Event open error	5	Unexpected error. Failed to open event at the system startup.	Please contact DENSO WAVE service with error number and error message.
854A2812		Event creation error	5	Unexpected error. Failed to create event at the system startup.	Please contact DENSO WAVE service with error number and error message.
854A2813		Thread creation error	5	Unexpected error. Failed to create thread at the system startup.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A2814		Thread priority setting error	5	Unexpected error. Failed to set priority of main thread at system startup.	Please contact DENSO WAVE service with error number and error message.
854A2821		Failed to load safety parameters.	5	Failed to load safety parameters.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A2822		Failed to transfer safety parameter.	3	Failed to transfer safety parameter.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A2831		Safety monitoring device undefined error is detected	5	Safety monitoring device undefined error is detected.	Please contact DENSO WAVE service with error number and error message.
854A2832		Failed to notice safety monitoring device error	5	Error was notified by safety monitoring device, but there are not error detail.	Please contact DENSO WAVE service with error number and error message.
854A2833		Failed to query safety monitoring driver module about error detail	5	Failed to query safety monitoring driver module about error detail.	Please contact DENSO WAVE service with error number and error message.
854A2841		Robot controller specifications error	5	Standard type project is used for Safety-I/O-less type robot controller.	Send safety-I/O-less type project from WINCAPSIII.
854A2842		Robot controller specifications error	5	Safety motion type project is used for Safety-I/O-less type robot controller.	Send safety-I/O-less type project from WINCAPSIII.
854A2843		Robot controller specifications error	5	Safety-I/O-less type project is used for standard type robot controllers.	Send standard type project data from WINCAPSIII.
854A2844		Robot controller specifications error	5	Safety motion type project is used for standard type robot controllers.	Send standard type project data from WINCAPSIII.
854A2845		Robot controller specifications error	5	Safety-I/O-less type project is used for safety motion type robot controllers.	Send safety motion type project from WINCAPSIII.
854A2846		Robot controller specifications error	5	Standard type project is used for Safety motion type robot controller.	Send safety motion type project from WINCAPSIII.
854A2851		Robot type Is mismatched between the project and safety parameters.	5	Robot type Is mismatched between the project and safety parameters.	Send project same as safety parameters from WINCAPSIII.
844A2852		Failed to get safety monitoring device about version.	4	Failed to get safety monitoring device about version.	Please contact DENSO WAVE service with error number and error message.
834A300A		The data necessary to complete this operation is still unavailable.	3	Process was not completed in the system.	Please contact DENSO WAVE service with error number and error message.
834A3401		Operation is not implemented	3	Non-implemented process was called in the system.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A3402		This interface is not supported.	3	Unintended process was executed in the system.	Please contact DENSO WAVE service with error number and error message.
834A3403		Pointer is invalid	3	Invalid pointer was used in the system.	Please contact DENSO WAVE service with error number and error message.
834A3404		Operation aborted	3	Process was cancelled in the system.	Please contact DENSO WAVE service with error number and error message.
834A3405		Operation failed	3	Safety monitoring module operation failed.	Please contact DENSO WAVE service with error number and error message.
834A3705		Access denied	3	Safety monitoring module operation access was denied.	Please contact DENSO WAVE service with error number and error message.
834A3706		Handle is invalid	3	Invalid handle was used in the system.	Please contact DENSO WAVE service with error number and error message.
834A370E		Memory allocation error	3	Failed to allocate memory in the system.	Please contact DENSO WAVE service with error number and error message.
834A3757	6003	Invalid parameter	3	The operation performed with invalid parameter.	Please contact DENSO WAVE service with error number and error message.
834A3FFF		Unexpected Error	3	Unintended process was executed in the system.	Please contact DENSO WAVE service with error number and error message.
834A4011		J1 detected the movement of the stopped	3	it was detected joint movement of the stopped.	Please do not move the robot while SOS (Safe Operating Stop). If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4012		J2 detected the movement of the stopped	3	it was detected joint movement of the stopped.	Please do not move the robot while SOS (Safe Operating Stop). If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4013		J3 detected the movement of the stopped	3	it was detected joint movement of the stopped.	Please do not move the robot while SOS (Safe Operating Stop). If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4014		J4 detected the movement of the stopped	3	it was detected joint movement of the stopped.	Please do not move the robot while SOS (Safe Operating Stop). If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A4015		J5 detected the movement of the stopped	3	it was detected joint movement of the stopped.	Please do not move the robot while SOS (Safe Operating Stop). If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4016		J6 detected the movement of the stopped	3	it was detected joint movement of the stopped.	Please do not move the robot while SOS (Safe Operating Stop). If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4017		J7 detected the movement of the stopped	3	it was detected joint movement of the stopped.	Please do not move the robot while SOS (Safe Operating Stop). If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4018		J8 detected the movement of the stopped	3	it was detected joint movement of the stopped.	Please do not move the robot while SOS (Safe Operating Stop). If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4021		J1 software limit over	3	It was detected software limit over.	Please revise the robot position to move within the software limit. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4022		J2 software limit over	3	It was detected software limit over.	Please revise the robot position to move within the software limit. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4023		J3 software limit over	3	It was detected software limit over.	Please revise the robot position to move within the software limit. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4024		J4 software limit over	3	It was detected software limit over.	Please revise the robot position to move within the software limit. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4025		J5 software limit over	3	It was detected software limit over.	Please revise the robot position to move within the software limit. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A4026		J6 software limit over	3	It was detected software limit over.	Please revise the robot position to move within the software limit. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4027		J7 software limit over	3	It was detected software limit over.	Please revise the robot position to move within the software limit. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4028		J8 software limit over	3	It was detected software limit over.	Please revise the robot position to move within the software limit. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4031		J1 external joint speed limit over	3	It was detected external joint speed excessive in automatic mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4032		J2 external joint speed limit over	3	It was detected external joint speed excessive in automatic mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4033		J3 external joint speed limit over	3	It was detected external joint speed excessive in automatic mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4034		J4 external joint speed limit over	3	It was detected external joint speed excessive in automatic mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4035		J5 external joint speed limit over	3	It was detected external joint speed excessive in automatic mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4036		J6 external joint speed limit over	3	It was detected external joint speed excessive in automatic mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4037		J7 external joint speed limit over	3	It was detected external joint speed excessive in automatic mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4038		J8 external joint speed limit over	3	It was detected external joint speed excessive in automatic mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A4041		J1 external joint speed limit over	3	It was detected external joint speed excessive in manual mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4042		J2 external joint speed limit over	3	It was detected external joint speed excessive in manual mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4043		J3 external joint speed limit over	3	It was detected external joint speed excessive in manual mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4044		J4 external joint speed limit over	3	It was detected external joint speed excessive in manual mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4045		J5 external joint speed limit over	3	It was detected external joint speed excessive in manual mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4046		J6 external joint speed limit over	3	It was detected external joint speed excessive in manual mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4047		J7 external joint speed limit over	3	It was detected external joint speed excessive in manual mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4048		J8 external joint speed limit over	3	It was detected external joint speed excessive in manual mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4051		Link 1 speed limit over	3	It was detected link speed excessive in automatic mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4052		Link 2 speed limit over	3	It was detected link speed excessive in automatic mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4053		Link 3 speed limit over	3	It was detected link speed excessive in automatic mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4054		Link 4 speed limit over	3	It was detected link speed excessive in automatic mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
834A4055		Link 5 speed limit over	3	It was detected link speed excessive in automatic mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4056		Link 6 speed limit over	3	It was detected link speed excessive in automatic mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4057		Link 7 speed limit over	3	It was detected link speed excessive in automatic mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4058		Link 8 speed limit over	3	It was detected link speed excessive in automatic mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4061		Link 1 speed limit over	3	It was detected link speed excessive in manual mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4062		Link 2 speed limit over	3	It was detected link speed excessive in manual mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4063		Link 3 speed limit over	3	It was detected link speed excessive in manual mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4064		Link 4 speed limit over	3	It was detected link speed excessive in manual mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4065		Link 5 speed limit over	3	It was detected link speed excessive in manual mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4066		Link 6 speed limit over	3	It was detected link speed excessive in manual mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4067		Link 7 speed limit over	3	It was detected link speed excessive in manual mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
834A4068		Link 8 speed limit over	3	It was detected link speed excessive in manual mode.	Please decrease the operating speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A0100		STO circuit error	5	STO circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
854A0101		3.3V error	5	3.3 V power supply error is detected.	Please contact DENSO WAVE service with error number and error message.
854A0102		5V error	5	5 V power supply error is detected.	Please contact DENSO WAVE service with error number and error message.
844A0103		Emergency stop input circuit error	4	Emergency stop input circuit error is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on emergency-stop signal connection. Once you check that all emergency-stop wirings are properly connected, remove the mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. This error may occur when the emergency stop is input immediately after performing motion preparation. Please check there is no emergency stop input immediately after performing motion preparation. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A0104		Protective stop input circuit error	4	Protective stop input circuit error is detected.	Check if there are no short circuit, ground fault, or improper connection for two lines on protective-stop signal connection. Once you check that all protective-stop wirings are properly connected, remove the mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. This error may occur when the protective-stop is input immediately after performing motion preparation. Please check there is no protective-stop input immediately after performing motion preparation. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A0105		STO state output circuit error	5	STO state output error is detected.	If Mini I/O power supply is set to external power supply, this error occurs. Check the power supply. Check if there are no short circuit, ground fault, or improper connection for two lines on STO Monitor output signal connection. When changing the setting from external source to internal source, change from WINCAPSIII and send parameters. It can be changed from [Project] – [Parameter] – [I/O] – [No.59 I/O Power Mode]. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A0106		STO state output circuit error(CPUs)	5	STO state output error is detected(CPUs).	Please contact DENSO WAVE service with error number and error message.
854A0107		AD voltage error(0V)	5	AD converter 0.0 V error is detected.	Please contact DENSO WAVE service with error number and error message.
854A0108		AD voltage error(3.3V)	5	AD converter 3.3 V error is detected.	Please contact DENSO WAVE service with error number and error message.
854A0109		AD converter error	5	AD converter error is detected.	Please contact DENSO WAVE service with error number and error message.
854A010A		Safety function result mismatch	5	Mismatch of safety function execution result was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
854A010B		sequence counter mismatch	5	Mismatch of sequence counter was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
854A010C		execution time mismatch	5	Mismatch of execution time was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
844A010D		emergency stop input mismatch	4	Mismatch of emergency stop input was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
844A010E		protective stop input mismatch	4	Mismatch of protective stop input was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
854A010F		sequence monitor error	5	Sequence monitor error is detected.	Please contact DENSO WAVE service with error number and error message.
854A0110		stack diagnosis error	5	Stack error is detected.	Please contact DENSO WAVE service with error number and error message.
854A0111		CPU execution code diagnosis error	5	Execution code error is detected.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A0112		interrupt error	5	Interrupt process error is detected.	Please contact DENSO WAVE service with error number and error message.
854A0113		Monitor data ROM diagnosis error	5	Monitoring data rom error is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A0114		Program ROM diagnosis error	5	Program data rom error is detected.	Please contact DENSO WAVE service with error number and error message.
854A0115		Internal RAM diagnosis error	5	Internal ram error is detected.	Please contact DENSO WAVE service with error number and error message.
854A0116		Safety parameter crc error	5	Safety parameter CRC error is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A0117		Safety parameter range error	5	Safety parameter out of range is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A0118		Safety parameter setting error	5	Failed to set safety parameters.	Please contact DENSO WAVE service with error number and error message.
854A0119		Initialize error	5	Failed to initialize the safety monitoring processor.	Please contact DENSO WAVE service with error number and error message.
854A011A		Internal error	5	Internal error of the safety monitoring processor.	Please contact DENSO WAVE service with error number and error message.
854A011B		Communication error	5	Communication error of the safety monitoring processor.	Please contact DENSO WAVE service with error number and error message.
854A011C		CAN error	5	CAN communication failed.	Please contact DENSO WAVE service with error number and error message.
854A011D		Timeout error	5	A timeout is detected by the safety monitoring processor.	Please contact DENSO WAVE service with error number and error message.
854A011E		sto state input mismatch	5	Mismatch of sto state input was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
854A011F		watch dog timer error	5	Watch dog timer error is detected.	Please contact DENSO WAVE service with error number and error message.
844A0180		Safety I/O monitoring device communication error (UNREC)	4	Safety I/O monitoring device communication error is detected.	Please contact DENSO WAVE service with error number and error message.
844A0181		Safety I/O monitoring device communication error (CRC)	4	Safety I/O monitoring device communication error is detected.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
844A0182		Safety I/O monitoring device communication error (FM)	4	Safety I/O monitoring device communication error is detected.	Please contact DENSO WAVE service with error number and error message.
844A0183		Safety I/O monitoring device communication error (BS)	4	Safety I/O monitoring device communication error is detected.	Please contact DENSO WAVE service with error number and error message.
844A0184		Safety I/O monitoring device communication error (BM)	4	Safety I/O monitoring device communication error is detected.	Please contact DENSO WAVE service with error number and error message.
844A0185		Safety I/O monitoring device communication error (EXT)	4	Safety I/O monitoring device communication error is detected.	Please contact DENSO WAVE service with error number and error message.
844A0200		Safety parameter update error	4	Safety parameter update failure is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A0201		Safety parameter update mode change timeout	4	Safety parameter update mode change timeout is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A0202		Safety parameter erase timeout	4	Safety parameter erase timeout is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A0203		Safety parameter write timeout	4	Safety parameter write timeout is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A0204		Safety parameter read timeout	4	Safety parameter read timeout is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A0218		Safety parameter erase error	4	Safety parameter erase error is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A0219		Safety parameter crc error	4	Safety parameter CRC error is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A021A		Safety parameter range error	4	Safety parameter out of range is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A021B		Safety parameter write error	4	Safety parameter write error is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
844A021D		Safety parameter access error	4	Safety parameter access error is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A021E		Safety parameter update timeout	4	Safety parameter update timeout is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5001		J1 speed limit over	4	Speed exceeding the monitoring speed of each axis is detected.	Please revise the monitoring speed. Please revise the operation so as not to exceed the monitoring speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5002		J2 speed limit over	4	Speed exceeding the monitoring speed of each axis is detected.	Please revise the monitoring speed. Please revise the operation so as not to exceed the monitoring speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5003		J3 speed limit over	4	Speed exceeding the monitoring speed of each axis is detected.	Please revise the monitoring speed. Please revise the operation so as not to exceed the monitoring speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5004		J4 speed limit over	4	Speed exceeding the monitoring speed of each axis is detected.	Please revise the monitoring speed. Please revise the operation so as not to exceed the monitoring speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5005		J5 speed limit over	4	Speed exceeding the monitoring speed of each axis is detected.	Please revise the monitoring speed. Please revise the operation so as not to exceed the monitoring speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5006		J6 speed limit over	4	Speed exceeding the monitoring speed of each axis is detected.	Please revise the monitoring speed. Please revise the operation so as not to exceed the monitoring speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
844A5007		J7 speed limit over	4	Speed exceeding the monitoring speed of each axis is detected.	Please revise the monitoring speed. Please revise the operation so as not to exceed the monitoring speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5008		J8 speed limit over	4	Speed exceeding the monitoring speed of each axis is detected.	Please revise the monitoring speed. Please revise the operation so as not to exceed the monitoring speed. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5011		J1 torque limit over	4	Torque exceeding the monitoring torque of each axis is detected.	Please revise the monitoring torque. Please revise the operation so as not to exceed the monitoring torque. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5012		J2 torque limit over	4	Torque exceeding the monitoring torque of each axis is detected.	Please revise the monitoring torque. Please revise the operation so as not to exceed the monitoring torque. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5013		J3 torque limit over	4	Torque exceeding the monitoring torque of each axis is detected.	Please revise the monitoring torque. Please revise the operation so as not to exceed the monitoring torque. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5014		J4 torque limit over	4	Torque exceeding the monitoring torque of each axis is detected.	Please revise the monitoring torque. Please revise the operation so as not to exceed the monitoring torque. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5015		J5 torque limit over	4	Torque exceeding the monitoring torque of each axis is detected.	Please revise the monitoring torque. Please revise the operation so as not to exceed the monitoring torque. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
844A5016		J6 torque limit over	4	Torque exceeding the monitoring torque of each axis is detected.	Please revise the monitoring torque. Please revise the operation so as not to exceed the monitoring torque. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5017		J7 torque limit over	4	Torque exceeding the monitoring torque of each axis is detected.	Please revise the monitoring torque. Please revise the operation so as not to exceed the monitoring torque. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5018		J8 torque limit over	4	Torque exceeding the monitoring torque of each axis is detected.	Please revise the monitoring torque. Please revise the operation so as not to exceed the monitoring torque. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5021		J1 STO circuit error	5	STO circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5022		J2 STO circuit error	5	STO circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5023		J3 STO circuit error	5	STO circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5024		J4 STO circuit error	5	STO circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5025		J5 STO circuit error	5	STO circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5026		J6 STO circuit error	5	STO circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5027		J7 STO circuit error	5	STO circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5028		J8 STO circuit error	5	STO circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5031		J1 3.3V error	5	3.3 V power supply error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5032		J2 3.3V error	5	3.3 V power supply error is detected.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A5033		J3 3.3V error	5	3.3 V power supply error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5034		J4 3.3V error	5	3.3 V power supply error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5035		J5 3.3V error	5	3.3 V power supply error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5036		J6 3.3V error	5	3.3 V power supply error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5037		J7 3.3V error	5	3.3 V power supply error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5038		J8 3.3V error	5	3.3 V power supply error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5041		J1 5V error	5	5 V power supply error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5042		J2 5V error	5	5 V power supply error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5043		J3 5V error	5	5 V power supply error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5044		J4 5V error	5	5 V power supply error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5045		J5 5V error	5	5 V power supply error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5046		J6 5V error	5	5 V power supply error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5047		J7 5V error	5	5 V power supply error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5048		J8 5V error	5	5 V power supply error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5051		J1 STO state output circuit error	5	STO state output error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5052		J2 STO state output circuit error	5	STO state output error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5053		J3 STO state output circuit error	5	STO state output error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5054		J4 STO state output circuit error	5	STO state output error is detected.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A5055		J5 STO state output circuit error	5	STO state output error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5056		J6 STO state output circuit error	5	STO state output error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5057		J7 STO state output circuit error	5	STO state output error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5058		J8 STO state output circuit error	5	STO state output error is detected.	Please contact DENSO WAVE service with error number and error message.
844A5061		J1 SLS diagnosis error	4	SLS diagnosis error is detected.	Please contact DENSO WAVE service with error number and error message.
844A5062		J2 SLS diagnosis error	4	SLS diagnosis error is detected.	Please contact DENSO WAVE service with error number and error message.
844A5063		J3 SLS diagnosis error	4	SLS diagnosis error is detected.	Please contact DENSO WAVE service with error number and error message.
844A5064		J4 SLS diagnosis error	4	SLS diagnosis error is detected.	Please contact DENSO WAVE service with error number and error message.
844A5065		J5 SLS diagnosis error	4	SLS diagnosis error is detected.	Please contact DENSO WAVE service with error number and error message.
844A5066		J6 SLS diagnosis error	4	SLS diagnosis error is detected.	Please contact DENSO WAVE service with error number and error message.
844A5067		J7 SLS diagnosis error	4	SLS diagnosis error is detected.	Please contact DENSO WAVE service with error number and error message.
844A5068		J8 SLS diagnosis error	4	SLS diagnosis error is detected.	Please contact DENSO WAVE service with error number and error message.
844A5071		J1 SLT diagnosis error	4	SLT diagnosis error is detected.	Please contact DENSO WAVE service with error number and error message.
844A5072		J2 SLT diagnosis error	4	SLT diagnosis error is detected.	Please contact DENSO WAVE service with error number and error message.
844A5073		J3 SLT diagnosis error	4	SLT diagnosis error is detected.	Please contact DENSO WAVE service with error number and error message.
844A5074		J4 SLT diagnosis error	4	SLT diagnosis error is detected.	Please contact DENSO WAVE service with error number and error message.
844A5075		J5 SLT diagnosis error	4	SLT diagnosis error is detected.	Please contact DENSO WAVE service with error number and error message.
844A5076		J6 SLT diagnosis error	4	SLT diagnosis error is detected.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
844A5077		J7 SLT diagnosis error	4	SLT diagnosis error is detected.	Please contact DENSO WAVE service with error number and error message.
844A5078		J8 SLT diagnosis error	4	SLT diagnosis error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5081		J1 AD voltage error(0V)	5	AD converter 0.0 V error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5082		J2 AD voltage error(0V)	5	AD converter 0.0 V error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5083		J3 AD voltage error(0V)	5	AD converter 0.0 V error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5084		J4 AD voltage error(0V)	5	AD converter 0.0 V error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5085		J5 AD voltage error(0V)	5	AD converter 0.0 V error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5086		J6 AD voltage error(0V)	5	AD converter 0.0 V error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5087		J7 AD voltage error(0V)	5	AD converter 0.0 V error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5088		J8 AD voltage error(0V)	5	AD converter 0.0 V error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5091		J1 AD voltage error(3.3V)	5	AD converter 3.3 V error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5092		J2 AD voltage error(3.3V)	5	AD converter 3.3 V error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5093		J3 AD voltage error(3.3V)	5	AD converter 3.3 V error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5094		J4 AD voltage error(3.3V)	5	AD converter 3.3 V error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5095		J5 AD voltage error(3.3V)	5	AD converter 3.3 V error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5096		J6 AD voltage error(3.3V)	5	AD converter 3.3 V error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5097		J7 AD voltage error(3.3V)	5	AD converter 3.3 V error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5098		J8 AD voltage error(3.3V)	5	AD converter 3.3 V error is detected.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A50A1		J1 AD converter error	5	AD converter error is detected.	Please contact DENSO WAVE service with error number and error message.
854A50A2		J2 AD converter error	5	AD converter error is detected.	Please contact DENSO WAVE service with error number and error message.
854A50A3		J3 AD converter error	5	AD converter error is detected.	Please contact DENSO WAVE service with error number and error message.
854A50A4		J4 AD converter error	5	AD converter error is detected.	Please contact DENSO WAVE service with error number and error message.
854A50A5		J5 AD converter error	5	AD converter error is detected.	Please contact DENSO WAVE service with error number and error message.
854A50A6		J6 AD converter error	5	AD converter error is detected.	Please contact DENSO WAVE service with error number and error message.
854A50A7		J7 AD converter error	5	AD converter error is detected.	Please contact DENSO WAVE service with error number and error message.
854A50A8		J8 AD converter error	5	AD converter error is detected.	Please contact DENSO WAVE service with error number and error message.
854A50B1		J1 Safety function result mismatch	5	Mismatch of safety function execution result was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
854A50B2		J2 Safety function result mismatch	5	Mismatch of safety function execution result was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
854A50B3		J3 Safety function result mismatch	5	Mismatch of safety function execution result was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
854A50B4		J4 Safety function result mismatch	5	Mismatch of safety function execution result was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
854A50B5		J5 Safety function result mismatch	5	Mismatch of safety function execution result was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
854A50B6		J6 Safety function result mismatch	5	Mismatch of safety function execution result was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
854A50B7		J7 Safety function result mismatch	5	Mismatch of safety function execution result was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
854A50B8		J8 Safety function result mismatch	5	Mismatch of safety function execution result was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
854A50C1		J1 sequence counter mismatch	5	Mismatch of sequence counter was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
854A50C2		J2 sequence counter mismatch	5	Mismatch of sequence counter was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A50C3		J3 sequence counter mismatch	5	Mismatch of sequence counter was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
854A50C4		J4 sequence counter mismatch	5	Mismatch of sequence counter was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
854A50C5		J5 sequence counter mismatch	5	Mismatch of sequence counter was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
854A50C6		J6 sequence counter mismatch	5	Mismatch of sequence counter was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
854A50C7		J7 sequence counter mismatch	5	Mismatch of sequence counter was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
854A50C8		J8 sequence counter mismatch	5	Mismatch of sequence counter was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
854A50D1		J1 execution time mismatch	5	Mismatch of execution time was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
854A50D2		J2 execution time mismatch	5	Mismatch of execution time was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
854A50D3		J3 execution time mismatch	5	Mismatch of execution time was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
854A50D4		J4 execution time mismatch	5	Mismatch of execution time was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
854A50D5		J5 execution time mismatch	5	Mismatch of execution time was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
854A50D6		J6 execution time mismatch	5	Mismatch of execution time was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
854A50D7		J7 execution time mismatch	5	Mismatch of execution time was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
854A50D8		J8 execution time mismatch	5	Mismatch of execution time was detected in sequence monitor.	Please contact DENSO WAVE service with error number and error message.
854A50E1		J1 sequence monitor error	5	Sequence monitor error is detected.	Please contact DENSO WAVE service with error number and error message.
854A50E2		J2 sequence monitor error	5	Sequence monitor error is detected.	Please contact DENSO WAVE service with error number and error message.
854A50E3		J3 sequence monitor error	5	Sequence monitor error is detected.	Please contact DENSO WAVE service with error number and error message.
854A50E4		J4 sequence monitor error	5	Sequence monitor error is detected.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A50E5		J5 sequence monitor error	5	Sequence monitor error is detected.	Please contact DENSO WAVE service with error number and error message.
854A50E6		J6 sequence monitor error	5	Sequence monitor error is detected.	Please contact DENSO WAVE service with error number and error message.
854A50E7		J7 sequence monitor error	5	Sequence monitor error is detected.	Please contact DENSO WAVE service with error number and error message.
854A50E8		J8 sequence monitor error	5	Sequence monitor error is detected.	Please contact DENSO WAVE service with error number and error message.
854A50F1		J1 stack diagnosis error	5	Stack error is detected.	Please contact DENSO WAVE service with error number and error message.
854A50F2		J2 stack diagnosis error	5	Stack error is detected.	Please contact DENSO WAVE service with error number and error message.
854A50F3		J3 stack diagnosis error	5	Stack error is detected.	Please contact DENSO WAVE service with error number and error message.
854A50F4		J4 stack diagnosis error	5	Stack error is detected.	Please contact DENSO WAVE service with error number and error message.
854A50F5		J5 stack diagnosis error	5	Stack error is detected.	Please contact DENSO WAVE service with error number and error message.
854A50F6		J6 stack diagnosis error	5	Stack error is detected.	Please contact DENSO WAVE service with error number and error message.
854A50F7		J7 stack diagnosis error	5	Stack error is detected.	Please contact DENSO WAVE service with error number and error message.
854A50F8		J8 stack diagnosis error	5	Stack error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5101		J1 CPU execution code diagnosis error	5	Execution code error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5102		J2 CPU execution code diagnosis error	5	Execution code error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5103		J3 CPU execution code diagnosis error	5	Execution code error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5104		J4 CPU execution code diagnosis error	5	Execution code error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5105		J5 CPU execution code diagnosis error	5	Execution code error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5106		J6 CPU execution code diagnosis error	5	Execution code error is detected.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A5107		J7 CPU execution code diagnosis error	5	Execution code error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5108		J8 CPU execution code diagnosis error	5	Execution code error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5111		J1 interrupt error	5	Interrupt process error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5112		J2 interrupt error	5	Interrupt process error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5113		J3 interrupt error	5	Interrupt process error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5114		J4 interrupt error	5	Interrupt process error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5115		J5 interrupt error	5	Interrupt process error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5116		J6 interrupt error	5	Interrupt process error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5117		J7 interrupt error	5	Interrupt process error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5118		J8 interrupt error	5	Interrupt process error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5121		J1 Monitor data ROM diagnosis error	5	Monitoring data rom error is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5122		J2 Monitor data ROM diagnosis error	5	Monitoring data rom error is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5123		J3 Monitor data ROM diagnosis error	5	Monitoring data rom error is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5124		J4 Monitor data ROM diagnosis error	5	Monitoring data rom error is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5125		J5 Monitor data ROM diagnosis error	5	Monitoring data rom error is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A5126		J6 Monitor data ROM diagnosis error	5	Monitoring data rom error is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5127		J7 Monitor data ROM diagnosis error	5	Monitoring data rom error is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5128		J8 Monitor data ROM diagnosis error	5	Monitoring data rom error is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5131		J1 Calibration data ROM diagnosis error	5	Calibration data rom error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5132		J2 Calibration data ROM diagnosis error	5	Calibration data rom error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5133		J3 Calibration data ROM diagnosis error	5	Calibration data rom error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5134		J4 Calibration data ROM diagnosis error	5	Calibration data rom error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5135		J5 Calibration data ROM diagnosis error	5	Calibration data rom error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5136		J6 Calibration data ROM diagnosis error	5	Calibration data rom error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5137		J7 Calibration data ROM diagnosis error	5	Calibration data rom error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5138		J8 Calibration data ROM diagnosis error	5	Calibration data rom error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5141		J1 Program ROM diagnosis error	5	Program data rom error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5142		J2 Program ROM diagnosis error	5	Program data rom error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5143		J3 Program ROM diagnosis error	5	Program data rom error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5144		J4 Program ROM diagnosis error	5	Program data rom error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5145		J5 Program ROM diagnosis error	5	Program data rom error is detected.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A5146		J6 Program ROM diagnosis error	5	Program data rom error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5147		J7 Program ROM diagnosis error	5	Program data rom error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5148		J8 Program ROM diagnosis error	5	Program data rom error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5151		J1 internal ROM diagnosis error	5	Internal ram error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5152		J2 internal ROM diagnosis error	5	Internal ram error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5153		J3 internal ROM diagnosis error	5	Internal ram error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5154		J4 internal ROM diagnosis error	5	Internal ram error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5155		J5 internal ROM diagnosis error	5	Internal ram error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5156		J6 internal ROM diagnosis error	5	Internal ram error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5157		J7 internal ROM diagnosis error	5	Internal ram error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5158		J8 internal ROM diagnosis error	5	Internal ram error is detected.	Please contact DENSO WAVE service with error number and error message.
854A5161		J1 Safety parameter crc error	5	Safety parameter CRC error is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5162		J2 Safety parameter crc error	5	Safety parameter CRC error is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5163		J3 Safety parameter crc error	5	Safety parameter CRC error is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5164		J4 Safety parameter crc error	5	Safety parameter CRC error is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A5165		J5 Safety parameter crc error	5	Safety parameter CRC error is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5166		J6 Safety parameter crc error	5	Safety parameter CRC error is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5167		J7 Safety parameter crc error	5	Safety parameter CRC error is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5168		J8 Safety parameter crc error	5	Safety parameter CRC error is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5171		J1 Safety parameter range error	5	Safety parameter out of range is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5172		J2 Safety parameter range error	5	Safety parameter out of range is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5173		J3 Safety parameter range error	5	Safety parameter out of range is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5174		J4 Safety parameter range error	5	Safety parameter out of range is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5175		J5 Safety parameter range error	5	Safety parameter out of range is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5176		J6 Safety parameter range error	5	Safety parameter out of range is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5177		J7 Safety parameter range error	5	Safety parameter out of range is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5178		J8 Safety parameter range error	5	Safety parameter out of range is detected.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A5181		J1 Safety parameter setting error	5	Failed to set safety parameters.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5182		J2 Safety parameter setting error	5	Failed to set safety parameters.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5183		J3 Safety parameter setting error	5	Failed to set safety parameters.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5184		J4 Safety parameter setting error	5	Failed to set safety parameters.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5185		J5 Safety parameter setting error	5	Failed to set safety parameters.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5186		J6 Safety parameter setting error	5	Failed to set safety parameters.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5187		J7 Safety parameter setting error	5	Failed to set safety parameters.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5188		J8 Safety parameter setting error	5	Failed to set safety parameters.	Send safety parameter again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5191		J1 Initialize error	5	Failed to initialize the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5192		J2 Initialize error	5	Failed to initialize the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A5193		J3 Initialize error	5	Failed to initialize the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5194		J4 Initialize error	5	Failed to initialize the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5195		J5 Initialize error	5	Failed to initialize the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5196		J6 Initialize error	5	Failed to initialize the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5197		J7 Initialize error	5	Failed to initialize the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5198		J8 Initialize error	5	Failed to initialize the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51A1		J1 Internal error	5	Internal error of the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A51A2		J2 Internal error	5	Internal error of the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51A3		J3 Internal error	5	Internal error of the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51A4		J4 Internal error	5	Internal error of the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51A5		J5 Internal error	5	Internal error of the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51A6		J6 Internal error	5	Internal error of the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51A7		J7 Internal error	5	Internal error of the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51A8		J8 Internal error	5	Internal error of the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A51B1		J1 Communication error	5	Communication error of the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51B2		J2 Communication error	5	Communication error of the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51B3		J3 Communication error	5	Communication error of the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51B4		J4 Communication error	5	Communication error of the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51B5		J5 Communication error	5	Communication error of the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51B6		J6 Communication error	5	Communication error of the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51B7		J7 Communication error	5	Communication error of the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A51B8		J8 Communication error	5	Communication error of the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51C1		J1 DP error	5	Failed to set DP.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51C2		J2 DP error	5	Failed to set DP.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51C3		J3 DP error	5	Failed to set DP.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51C4		J4 DP error	5	Failed to set DP.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51C5		J5 DP error	5	Failed to set DP.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51C6		J6 DP error	5	Failed to set DP.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A51C7		J7 DP error	5	Failed to set DP.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51C8		J8 DP error	5	Failed to set DP.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51D1		J1 CAN error	5	CAN communication failed.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51D2		J2 CAN error	5	CAN communication failed.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51D3		J3 CAN error	5	CAN communication failed.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51D4		J4 CAN error	5	CAN communication failed.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51D5		J5 CAN error	5	CAN communication failed.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A51D6		J6 CAN error	5	CAN communication failed.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51D7		J7 CAN error	5	CAN communication failed.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51D8		J8 CAN error	5	CAN communication failed.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51E1		J1 Timeout error	5	A timeout is detected by the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51E2		J2 Timeout error	5	A timeout is detected by the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51E3		J3 Timeout error	5	A timeout is detected by the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51E4		J4 Timeout error	5	A timeout is detected by the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A51E5		J5 Timeout error	5	A timeout is detected by the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51E6		J6 Timeout error	5	A timeout is detected by the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51E7		J7 Timeout error	5	A timeout is detected by the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A51E8		J8 Timeout error	5	A timeout is detected by the safety monitoring processor.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A51F1		J1 software limit over	4	It was detected software limit over.	Please revise the robot position to move within the software limit. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A51F2		J2 software limit over	4	It was detected software limit over.	Please revise the robot position to move within the software limit. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A51F3		J3 software limit over	4	It was detected software limit over.	Please revise the robot position to move within the software limit. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A51F4		J4 software limit over	4	It was detected software limit over.	Please revise the robot position to move within the software limit. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
844A51F5		J5 software limit over	4	It was detected software limit over.	Please revise the robot position to move within the software limit. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A51F6		J6 software limit over	4	It was detected software limit over.	Please revise the robot position to move within the software limit. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A51F7		J7 software limit over	4	It was detected software limit over.	Please revise the robot position to move within the software limit. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A51F8		J8 software limit over	4	It was detected software limit over.	Please revise the robot position to move within the software limit. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5201		J1 watch dog timer error	5	Watch dog timer error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5202		J2 watch dog timer error	5	Watch dog timer error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5203		J3 watch dog timer error	5	Watch dog timer error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5204		J4 watch dog timer error	5	Watch dog timer error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854A5205		J5 watch dog timer error	5	Watch dog timer error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5206		J6 watch dog timer error	5	Watch dog timer error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5207		J7 watch dog timer error	5	Watch dog timer error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854A5208		J8 watch dog timer error	5	Watch dog timer error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5211		J1 SLS diagnosis operation not performed	4	SLS The condition that can not be diagnosed has exceeded a certain period of time.	Please perform SLS diagnostic operation. Please revise the operation so that it can be diagnosed.
844A5212		J2 SLS diagnosis operation not performed	4	SLS The condition that can not be diagnosed has exceeded a certain period of time.	Please perform SLS diagnostic operation. Please revise the operation so that it can be diagnosed.
844A5213		J3 SLS diagnosis operation not performed	4	SLS The condition that can not be diagnosed has exceeded a certain period of time.	Please perform SLS diagnostic operation. Please revise the operation so that it can be diagnosed.
844A5214		J4 SLS diagnosis operation not performed	4	SLS The condition that can not be diagnosed has exceeded a certain period of time.	Please perform SLS diagnostic operation. Please revise the operation so that it can be diagnosed.
844A5215		J5 SLS diagnosis operation not performed	4	SLS The condition that can not be diagnosed has exceeded a certain period of time.	Please perform SLS diagnostic operation. Please revise the operation so that it can be diagnosed.

Code	RC7 Code	Message	Level	Description	Remedy
844A5216		J6 SLS diagnosis operation not performed	4	SLS The condition that can not be diagnosed has exceeded a certain period of time.	Please perform SLS diagnostic operation. Please revise the operation so that it can be diagnosed.
844A5217		J7 SLS diagnosis operation not performed	4	SLS The condition that can not be diagnosed has exceeded a certain period of time.	Please perform SLS diagnostic operation. Please revise the operation so that it can be diagnosed.
844A5218		J8 SLS diagnosis operation not performed	4	SLS The condition that can not be diagnosed has exceeded a certain period of time.	Please perform SLS diagnostic operation. Please revise the operation so that it can be diagnosed.
844A5801		J1 Safety monitoring device communication error (UNREC)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5802		J2 Safety monitoring device communication error (UNREC)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5803		J3 Safety monitoring device communication error (UNREC)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.

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844A5804		J4 Safety monitoring device communication error (UNREC)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5805		J5 Safety monitoring device communication error (UNREC)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5806		J6 Safety monitoring device communication error (UNREC)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5807		J7 Safety monitoring device communication error (UNREC)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5808		J8 Safety monitoring device communication error (UNREC)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
844A5811		J1 Safety monitoring device communication error (CRC)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5812		J2 Safety monitoring device communication error (CRC)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5813		J3 Safety monitoring device communication error (CRC)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5814		J4 Safety monitoring device communication error (CRC)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5815		J5 Safety monitoring device communication error (CRC)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.

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844A5816		J6 Safety monitoring device communication error (CRC)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5817		J7 Safety monitoring device communication error (CRC)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5818		J8 Safety monitoring device communication error (CRC)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5821		J1 Safety monitoring device communication error (FM)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5822		J2 Safety monitoring device communication error (FM)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.

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844A5823		J3 Safety monitoring device communication error (FM)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5824		J4 Safety monitoring device communication error (FM)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5825		J5 Safety monitoring device communication error (FM)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5826		J6 Safety monitoring device communication error (FM)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5827		J7 Safety monitoring device communication error (FM)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.

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844A5828		J8 Safety monitoring device communication error (FM)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5831		J1 Safety monitoring device communication error (BS)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5832		J2 Safety monitoring device communication error (BS)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5833		J3 Safety monitoring device communication error (BS)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5834		J4 Safety monitoring device communication error (BS)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.

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844A5835		J5 Safety monitoring device communication error (BS)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5836		J6 Safety monitoring device communication error (BS)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5837		J7 Safety monitoring device communication error (BS)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5838		J8 Safety monitoring device communication error (BS)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5841		J1 Safety monitoring device communication error (BM)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.

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844A5842		J2 Safety monitoring device communication error (BM)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5843		J3 Safety monitoring device communication error (BM)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5844		J4 Safety monitoring device communication error (BM)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5845		J5 Safety monitoring device communication error (BM)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5846		J6 Safety monitoring device communication error (BM)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.

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844A5847		J7 Safety monitoring device communication error (BM)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5848		J8 Safety monitoring device communication error (BM)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5851		J1 Safety monitoring device communication error (EXT)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5852		J2 Safety monitoring device communication error (EXT)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5853		J3 Safety monitoring device communication error (EXT)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
844A5854		J4 Safety monitoring device communication error (EXT)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5855		J5 Safety monitoring device communication error (EXT)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5856		J6 Safety monitoring device communication error (EXT)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5857		J7 Safety monitoring device communication error (EXT)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844A5858		J8 Safety monitoring device communication error (EXT)	4	Safety monitoring device communication error is detected.	If it occurs during transmission of the safety parameter, please re-transmit the safety parameter or turn on the power again. If it happens after installing a new device, please turn on the power again. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
84490001		Safety I/O circuit power supply interrupted.	4	Power supply to Safety I/O is interrupted.	Please contact DENSO WAVE service with error number and error message.
85490002	660A	Safety I/O circuit failure.	5	Failure occurred in Safety I/O.	Please contact DENSO WAVE service with error number and error message.
85490003		CPU normal check error.	5	Safety I/O confirmed that the CPU normal signal is not issued.	Please contact DENSO WAVE service with error number and error message.
84490004		Monitoring unit Emergency-stop.	4	Motion monitoring unit initiated Emergency-stop.	Please contact DENSO WAVE service with error number and error message.
85490201	660A	Deadman switch circuit failure 1b	5	Deadman switch is turned ON but the Safety I/O back check signal is OFF.	Please contact DENSO WAVE service with error number and error message.
85490202	660A	Deadman switch circuit failure 2b	5	Deadman switch is turned OFF but the Safety I/O back check signal is ON.	Please contact DENSO WAVE service with error number and error message.
83490301	660A	Inconsistency in Manual and Auto mode setting 1	3	Robot control software identifies that the operation mode is Auto but the Safety I/O identifies it as Manual.	Clear the error. If the error still occurs, replace the teach pendant. If the error still occurs, please contact DENSO WAVE service with error number and error message.
83490302	660A	Inconsistency in Manual and Auto mode setting 2	3	Robot control software identifies that the operation mode is Auto but the Safety I/O does not recognize it as Auto.	Clear the error. If the error still occurs, replace the teach pendant. If the error still occurs, please contact DENSO WAVE service with error number and error message.
83490303	660A	Inconsistency in Manual and Auto mode setting 3	3	Robot control software identifies that the operation mode is Manual but the Safety I/O identifies it as Auto.	Clear the error. If the error still occurs, replace the teach pendant. If the error still occurs, please contact DENSO WAVE service with error number and error message.
83490304	660A	Inconsistency in Manual and Auto mode setting 4	3	Robot control software identifies that the operation mode is Manual but the Safety I/O does not identify it as Manual.	Clear the error. If the error still occurs, replace the teach pendant. If the error still occurs, please contact DENSO WAVE service with error number and error message.
83490311	660A	Inconsistency in Manual and Auto mode setting 1d	3	Robot control software identifies that the operation mode is Auto but the Safety I/O recognizes Manual mode.	Clear the error and confirm Enable-auto input signal, and replace the teach pendant. If the error still occurs, please contact DENSO WAVE service with error number and error message.
83490312	660A	Inconsistency in Manual and Auto mode setting 2d	3	Robot control software identifies that the operation mode is Auto but the Safety I/O does not recognize Auto mode.	Clear the error and confirm Enable-auto input signal, and replace the teach pendant. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
83490313	660A	Inconsistency in Manual and Auto mode setting 3d	3	Robot control software identifies that the operation mode is Manual but the Safety I/O identifies it as Auto.	Clear the error and confirm Enable-auto input signal. If the error still occurs, replace the teach pendant. If the error still occurs, please contact DENSO WAVE service with error number and error message.
83490314	660A	Inconsistency in Manual and Auto mode setting 4d	3	Robot control software identifies that the operation mode is Manual but the Safety I/O does not identify it as Manual.	Clear the error and confirm Enable-auto input signal. If the error still occurs, replace the teach pendant. If the error still occurs, please contact DENSO WAVE service with error number and error message.
84490321	660A	Operation mode selection circuit error (1)	4	Both Manual mode signal and Auto mode signal are turned OFF at the same time.	Clear the error. If the error still occurs, replace the teach pendant. And If the error still occurs, please contact DENSO WAVE service with error number and error message.
84490322	660A	Operation mode selection circuit error (2)	4	Both Manual mode signal and Auto mode signal are turned ON at the same time.	Clear the error. If the error still occurs, replace the teach pendant. And If the error still occurs, please contact DENSO WAVE service with error number and error message.
84490401		Safety I/O temperature error.	4	Safety I/O temperature rose. Temperature error has been detected.	Change robot controller location so that it can emit the heat properly.
80490402		Safety I/O temperature warning.	0	Safety I/O temperature rose. Temperature warning has been detected.	Change the robot controller location so that it can emit the heat properly.
84490501		Inconsistent contactor status (1)	4	Robot Control software identifies the Contactor is ON but the Safety I/O identifies the contactor is OFF.	Please contact DENSO WAVE service with error number and error message.
84490502		Inconsistent contactor status (2)	4	Robot Control software identifies the contacgtor is OFF but the Safety I/O identifies the contactor is ON.	Please contact DENSO WAVE service with error number and error message.
85491001	660A	Communication command format error. (SAIO)	5	Failed to communicate with Safety I/O.	Please contact DENSO WAVE service with error number and error message.
85491002	660A	Communication response error. (SAIO)	5	Failed to communicate with Safety I/O.	Please contact DENSO WAVE service with error number and error message.
85491003	660A	Communication checksum error. (SAIO)	5	Failed to communicate with Safety I/O.	Please contact DENSO WAVE service with error number and error message.
85491004	660A	Communication pattern error. (SAIO)	5	Failed to communicate with Safety I/O.	Please contact DENSO WAVE service with error number and error message.
85491005	660A	Receive error. (SAIO)	5	Failed to communicate with Safety I/O.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
85491006	660A	Communication timeout. (SAIO)	5	Failed to communicate with Safety I/O.	Please contact DENSO WAVE service with error number and error message.
84491011	660A	Inconsistent Emergency-stop input is detected. (SAIO)	4	Safety I/O detected inconsistency in Emergency-stop duplicated signal system.	Confirm Emergency-stop signal connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
84491012	660A	Inconsistent Enable-auto input is detected. (SAIO)	4	Safety I/O detected inconsistency in Enable-auto mode duplicated signal system.	Confirm Enable-auto signal connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
84491013	660A	Inconsistent Protective-stop input is detected. (SAIO)	4	Safety I/O detected inconsistency in Protective-stop duplicated signal system.	Confirm Protective-stop signal connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
84491014	660A	Inconsistent internal Emergency-stop input is detected. (SAIO)	4	Safety I/O detected inconsistency in internal Emergency-stop duplicated signal system.	Please contact DENSO WAVE service with error number and error message.
84491015	660A	Inconsistent deadman switch input is detected. (SAIO)	4	Safety I/O detected inconsistency in deadman switch duplicated signal system.	Please contact DENSO WAVE service with error number and error message.
85491021	660A	Safety contactor EDM error. (SAIO1)	5	EDM error occurred on safety contactor.	Please contact DENSO WAVE service with error number and error message.
85491022	660A	Safety contactor EDM error. (SAIO2)	5	EDM error occurred on safety contactor.	Please contact DENSO WAVE service with error number and error message.
85491023	660A	RSC teach EDM error. (SAIO)	5	EDM error occurred on RSC teach.	Please contact DENSO WAVE service with error number and error message.
85491024	660A	RSC speed EDM error. (SAIO)	5	EDM error occurred on RSC speed setting.	Please contact DENSO WAVE service with error number and error message.
85491025	660A	RSC override EDM error. (SAIO)	5	EDM error occurred on RSC override.	Please contact DENSO WAVE service with error number and error message.
85491105	660A	Forced mode timeout. (SAIO)	5	Force mode timeout occuerd on Safety I/O	Please contact DENSO WAVE service with error number and error message.
85491107	660A	Configuration data failure. (SAIO)	5	Safety I/O configration data is incorrect	Please contact DENSO WAVE service with error number and error message.
85491108	660A	System failure. (SAIO)	5	Safety I/O system failure occurred	Please contact DENSO WAVE service with error number and error message.
85491115	660A	Test output terminal overcurrent. (SAIO)	5	Overcurrent is detected at the test output terminal of Safety I/O	Confirm Emergency-stop signal, Enable-auto signal and Protective-stop signal connections. If the error still occurs, please contact DENSO WAVE service with error number and error message.

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85491117	660A	Test output terminal is fixed to ON. (SAIO)	5	Output status of Safety I/O test output terminal is fixed to ON.	Confirm Emergency-stop signal, Enable-auto signal and Protective-stop signal connections. If the error still occurs, please contact DENSO WAVE service with error number and error message.
85491118	660A	Test output terminal current lower limit detection failure. (SAIO)	5	Safety I/O test output terminal detected current lower limit	Confirm Emergency-stop signal, Enable-auto signal and Protective-stop signal connections. If the error still occurs, please contact DENSO WAVE service with error number and error message.
85491122	660A	Output power supply voltage failure. (SAIO)	5	Safety I/O output power supply voltage failure detected	Please contact DENSO WAVE service with error number and error message.
85491125	660A	Power cut-off test failure. (SAIO)	5	Safety I/O power supply cut-off test failure	Please contact DENSO WAVE service with error number and error message.
85491126	660A	Test output terminal internal circuit failure. (SAIO)	5	Safety I/O test terminal detected internal circuit failure	Please contact DENSO WAVE service with error number and error message.
84491133	660A	Function block status failure. (SAIO)	4	Safety I/O function block is not operating normally	Please contact DENSO WAVE service with error number and error message.
85491139	660A	Internal NVS access error. (SAIO)	5	Safety I/O internal NVS access failure is detected	Please contact DENSO WAVE service with error number and error message.
8549113A	660A	Unsupported extension I/O unit. (SAIO)	5	Unsupported extension I/O unit is connected to Safety I/O	Please contact DENSO WAVE service with error number and error message.
8549113B	660A	Extension I/O unit connection number over. (SAIO)	5	Too many extension I/O units are connected to Safety I/O	Please contact DENSO WAVE service with error number and error message.
8549113C	660A	Unmatched extension I/O unit configuration. (SAIO)	5	Safety I/O extension I/O unit configuration failure	Please contact DENSO WAVE service with error number and error message.
8549113D	660A	Extension I/O unit bus failure. (SAIO)	5	Safety I/O extension I/O unit bus failure detected	Please contact DENSO WAVE service with error number and error message.
8549113E	660A	Unsupported robot controller. (SAIO)	5	Unsupported robot controller is connected to Safety I/O	Please contact DENSO WAVE service with error number and error message.
8549113F	660A	Robot controller communication timeout. (SAIO)	5	Communication timeout occured between Safety I/O and robot controller	At time of reboot of robot controller, turn on after 6 seconds or more pass since switch off. If the error still occurs, please contact DENSO WAVE service with error number and error message.
85491140	660A	Robot controller not installed. (SAIO)	5	Robot controller is not connected to Safety I/O	Please contact DENSO WAVE service with error number and error message.
85491142	660A	Memory cassette failure. (SAIO)	5	Safety I/O memory cassette is not inserted or the cassette is wrong.	Please contact DENSO WAVE service with error number and error message.

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85491143	660A	Memory cassette access failure. (SAIO)	5	Safety I/O memory cassette access error occurred, or the cassette has been removed.	Please contact DENSO WAVE service with error number and error message.
85491144	660A	Internal NVS access error while executing memory cassette function. (SAIO)	5	Internal NVS access failure occurred while accessing Safety I/O memory cassette function.	Please contact DENSO WAVE service with error number and error message.
85491145	660A	Restore type information unmatch. (SAIO)	5	Safety I/O restore type information is wrong.	Please contact DENSO WAVE service with error number and error message.
85491146	660A	Restore password unmatch. (SAIO)	5	Safety I/O restore password is wrong.	Please contact DENSO WAVE service with error number and error message.
85491147	660A	Restore prohibited. (SAIO)	5	Safety I/O restoration is prohibited.	Please contact DENSO WAVE service with error number and error message.
85491148	660A	Configuration data failure in restoration. (SAIO)	5	Configuration data for Safety I/O restoration is wrong.	Please contact DENSO WAVE service with error number and error message.
85491149	660A	Non-configured unit exists for backup. (SAIO)	5	Some units are not configured for Safety I/O backup.	Please contact DENSO WAVE service with error number and error message.
8549114A	660A	Unlocked unit exists for backup. (SAIO)	5	Some units are not locked for Safety I/O backup.	Please contact DENSO WAVE service with error number and error message.
85491820	660A	Emergency-stop signal input terminal 1 configuration failure. (SAIO)	5	Safety I/O safety input terminal ch0 (Emergency-stop signal input terminal 1) configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
85491821	660A	Emergency-stop signal input terminal 2 configuration failure. (SAIO)	5	Safety I/O safety input terminal ch1 (Emergency-stop signal input terminal 2) configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
85491822	660A	Enable-auto signal input terminal 1 configuration failure. (SAIO)	5	Safety I/O safety input terminal ch2 (Enable-auto signal input terminal 1) configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
85491823	660A	Enable-auto signal input terminal 2 configuration failure. (SAIO)	5	Safety I/O safety input terminal ch3 (Enable-auto signal input terminal 2) configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
85491824	660A	Protective-stop signal input terminal 1 configuration failure. (SAIO)	5	Safety I/O safety input terminal ch4 (Protective-stop signal input terminal 1) configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
85491825	660A	Protective-stop signal input terminal 2 configuration failure. (SAIO)	5	Safety I/O safety input terminal ch5 (Protective-stop signal input terminal 2) configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
85491826	660A	Motor-OFF signal input terminal configuration failure. (SAIO)	5	Safety I/O safety input terminal ch6 (Motor-OFF signal input terminal) configuration is wrong.	Please contact DENSO WAVE service with error number and error message.

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85491827	660A	Motor-ON signal input terminal configuration failure. (SAIO)	5	Safety I/O safety input terminal ch7 (Motor-ONsignal input terminal) configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
85491828	660A	Internal Emergency-stop signal input terminal 1 configuration failure. (SAIO)	5	Safety I/O safety input terminal ch8 (Internal Emergency-stop signal input terminal 1) configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
85491829	660A	Internal Emergency-stop signal input terminal 2 configuration failure. (SAIO)	5	Safety I/O safety input terminal ch9 (Internal Emergency-stop signal input terminal 2) configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
8549182A	660A	Deadman switch signal input terminal 1 configuration failure. (SAIO)	5	Safety I/O safety input terminal ch10 (Deadman switch signal input terminal 1) configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
8549182B	660A	Deadman switch signal input terminal 2 configuration failure. (SAIO)	5	Safety I/O safety input terminal ch11 (Deadman switch signal input terminal 2) configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
8549182C	660A	Contactor-ON back check signal input terminal 1 configuration failure. (SAIO)	5	Safety I/O safety input terminal ch12 (Contactor-ON back check signal input terminal 1) configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
8549182D	660A	Contactor-ON back check signal input terminal 2 configuration failure. (SAIO)	5	Safety I/O safety input terminal ch13 (Contactor-ON back check signal input terminal 2) configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
8549182E	660A	Manual mode signal input terminal configuration failure. (SAIO)	5	Safety I/O safety input terminal ch14 (Manual mode signal input terminal) configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
8549182F	660A	Auto mode signal input terminal configuration failure. (SAIO)	5	Safety I/O safety input terminal ch15 (Auto mode signal input terminal) configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
85491830	660A	CPU normal signal input terminal configuration failure. (SAIO)	5	Safety I/O safety input terminal ch16 (CPU normal signal input terminal) configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
85491831	660A	RSC teach signal input terminal configuration failure. (SAIO)	5	Safety I/O safety input terminal ch17 (RSC teach signal input terminal) configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
85491832	660A	RSC speed setting signal input terminal configuration failure. (SAIO)	5	Safety I/O safety input terminal ch18 (RSC speed setting signal input terminal) configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
85491833	660A	RSC override signal input terminal configuration failure. (SAIO)	5	Safety I/O safety input terminal ch19 (RSC override signal input terminal) configuration is wrong.	Please contact DENSO WAVE service with error number and error message.

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85491840	660A	Emergency-stop signal input terminal 1 externally connected device failure. (SAIO)	5	External device connection failure is detected at Safety I/O safety input terminal ch0 (Emergency-stop signal input terminal 1).	For Emergency-stop 1 signal connections, check if there are no short circuit, ground fault, or improper connection between two Emergency-stop signal lines. Once you check that all Emergency-stop 1 wirings are properly connected, remove the Mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
85491841	660A	Emergency-stop signal input terminal 2 externally connected device failure. (SAIO)	5	External device connection failure is detected at Safety I/O safety input terminal ch1 (Emergency-stop signal input terminal 2).	For Emergency-stop 2 signal connections, check if there are no short circuit, ground fault, or improper connection between two Emergency-stop signal lines. Once you check that all Emergency-stop 1 wirings are properly connected, remove the Mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
85491842	660A	Enable-auto signal input terminal 1 externally connected device failure. (SAIO)	5	External device connection failure is detected at Safety I/O safety input terminal ch2 (Enable-auto signal input terminal 1).	For Enable-auto 1 signal connections, check if there are no short circuit, ground fault, or improper connection between two Enable-auto signal lines. Once you check that all Enable-auto 1 wirings are properly connected, remove the Mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
85491843	660A	Enable-auto signal input terminal 2 externally connected device failure. (SAIO)	5	External device connection failure is detected at Safety I/O safety input terminal ch3 (Enable-auto signal input terminal 2).	For Enable-auto 2 signal connections, check if there are no short circuit, ground fault, or improper connection between two Enable-auto signal lines. Once you check that all Enable-auto 2 wirings are properly connected, remove the Mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

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85491844	660A	Protective-stop signal input terminal 1 externally connected device failure. (SAIO)	5	External device connection failure is detected at Safety I/O safety input terminal ch4 (Protective-stop signal input terminal 1).	For Protective-stop 1 signal connections, check if there are no short circuit, ground fault, or improper connection between two Protective-stop signal lines. Once you check that all Protective-stop 1 wirings are properly connected, remove the Mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
85491845	660A	Protective-stop signal input terminal 2 externally connected device failure. (SAIO)	5	External device connection failure is detected at Safety I/O safety input terminal ch5 (Protective-stop signal input terminal 2).	For Protective-stop 2 signal connections, check if there are no short circuit, ground fault, or improper connection between two Protective-stop signal lines. Once you check that all Protective-stop 2 wirings are properly connected, remove the Mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
85491846	660A	Motor-OFF signal input terminal externally connected device failure. (SAIO)	5	External device connection failure is detected at Safety I/O safety input terminal ch6 (Motor-OFF signal input terminal).	Please contact DENSO WAVE service with error number and error message.
85491847	660A	Motor-ON signal input terminal externally connected device failure. (SAIO)	5	External device connection failure is detected at Safety I/O safety input terminal ch7 (Motor-ON signal input terminal).	Please contact DENSO WAVE service with error number and error message.
85491848	660A	Internal Emergency-stop signal input terminal 1 externally connected device failure. (SAIO)	5	External device connection failure is detected at Safety I/O safety input terminal ch8 (Internal Emergency-stop signal input terminal 1).	Please contact DENSO WAVE service with error number and error message.
85491849	660A	Internal Emergency-stop signal input terminal 2 externally connected device failure. (SAIO)	5	External device connection failure is detected at Safety I/O safety input terminal ch9 (Internal Emergency-stop signal input terminal 2).	Please contact DENSO WAVE service with error number and error message.
8549184A	660A	Deadman switch signal input terminal 1 externally connected device failure. (SAIO)	5	External device connection failure is detected at Safety I/O safety input terminal ch10 (Deadman switch signal input terminal 1).	Replace the teach pendant. If the error still occurs, please contact DENSO WAVE service with error number and error message.
8549184B	660A	Deadman switch signal input terminal 2 externally connected device failure. (SAIO)	5	External device connection failure is detected at Safety I/O safety input terminal ch11 (Deadman switch signal input terminal 2).	Replace the teach pendant. If the error still occurs, please contact DENSO WAVE service with error number and error message.

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8549184C	660A	Contactor-ON back check signal input terminal 1 externally connected device failure. (SAIO)	5	External device connection failure is detected at Safety I/O safety input terminal ch12 (Contactor-ON back check signal input terminal 1).	Please contact DENSO WAVE service with error number and error message.
8549184D	660A	Contactor-ON back check signal input terminal 2 externally connected device failure. (SAIO)	5	External device connection failure is detected at Safety I/O safety input terminal ch13 (Contactor-ON back check signal input terminal 2).	Please contact DENSO WAVE service with error number and error message.
8549184E	660A	Manual mode signal input terminal externally connected device failure. (SAIO)	5	External device connection failure is detected at Safety I/O safety input terminal ch14 (Manual mode signal input terminal).	Replace the teach pendant. If the error still occurs, please contact DENSO WAVE service with error number and error message.
8549184F	660A	Auto mode signal input terminal externally connected device failure. (SAIO)	5	External device connection failure is detected at Safety I/O safety input terminal ch15 (Auto mode signal input terminal).	Replace the teach pendant. If the error still occurs, please contact DENSO WAVE service with error number and error message.
85491850	660A	CPU normal signal input terminal externally connected device failure. (SAIO)	5	External device connection failure is detected at Safety I/O safety input terminal ch16 (CPU normal signal input terminal).	Please contact DENSO WAVE service with error number and error message.
85491851	660A	RSC teach signal input terminal externally connected device failure. (SAIO)	5	External device connection failure is detected at Safety I/O safety input terminal ch17 (RSC teach signal input terminal).	Please contact DENSO WAVE service with error number and error message.
85491852	660A	RSC speed setting signal input terminal externally connected device failure. (SAIO)	5	External device connection failure is detected at Safety I/O safety input terminal ch18 (RSC speed setting signal input terminal).	Please contact DENSO WAVE service with error number and error message.
85491853	660A	RSC override signal input terminal externally connected device failure. (SAIO)	5	External device connection failure is detected at Safety I/O safety input terminal ch19 (RSC override signal input terminal).	Please contact DENSO WAVE service with error number and error message.
85491860	660A	Emergency-stop signal input terminal 1 internal circuit failure. (SAIO)	5	Internal circuit failure detected at Safety I/O safety input terminal ch0 (Emergency-stop signal input terminal 1).	Please contact DENSO WAVE service with error number and error message.
85491861	660A	Emergency-stop signal input terminal 2 internal circuit failure. (SAIO)	5	Internal circuit failure detected at Safety I/O safety input terminal ch1 (Emergency-stop signal input terminal 2).	Please contact DENSO WAVE service with error number and error message.
85491862	660A	Enable-auto signal input terminal 1 internal circuit failure. (SAIO)	5	Internal circuit failure detected at Safety I/O safety input terminal ch2 (Enable-auto signal input terminal 1).	Please contact DENSO WAVE service with error number and error message.
85491863	660A	Enable-auto signal input terminal 2 internal circuit failure. (SAIO)	5	Internal circuit failure detected at Safety I/O safety input terminal ch3 (Enable-auto signal input terminal 2).	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
85491864	660A	Protective-stop signal input terminal 1 internal circuit failure. (SAIO)	5	Internal circuit failure detected at Safety I/O safety input terminal ch4 (Protective-stop signal input terminal 1).	Please contact DENSO WAVE service with error number and error message.
85491865	660A	Protective-stop signal input terminal 2 internal circuit failure. (SAIO)	5	Internal circuit failure detected at Safety I/O safety input terminal ch5 (Protective-stop signal input terminal 2).	Please contact DENSO WAVE service with error number and error message.
85491866	660A	Motor-OFF signal input terminal internal circuit failure. (SAIO)	5	Internal circuit failure detected at Safety I/O safety input terminal ch6 (Motor-OFF signal input terminal).	Please contact DENSO WAVE service with error number and error message.
85491867	660A	Motor-ON signal input terminal internal circuit failure. (SAIO)	5	Internal circuit failure detected at Safety I/O safety input terminal ch7 (Motor-ON signal input terminal).	Please contact DENSO WAVE service with error number and error message.
85491868	660A	Internal Emergency-stop signal input terminal 1 internal circuit failure. (SAIO)	5	Internal circuit failure detected at Safety I/O safety input terminal ch8 (Internal Emergency-stop signal input terminal 1).	Please contact DENSO WAVE service with error number and error message.
85491869	660A	Internal Emergency-stop signal input terminal 2 internal circuit failure. (SAIO)	5	Internal circuit failure detected at Safety I/O safety input terminal ch9 (Internal Emergency-stop signal input terminal 2).	Please contact DENSO WAVE service with error number and error message.
8549186A	660A	Deadman switch signal input terminal 1 internal circuit failure. (SAIO)	5	Internal circuit failure detected at Safety I/O safety input terminal ch10 (Deadman switch signal input terminal 1).	Please contact DENSO WAVE service with error number and error message.
8549186B	660A	Deadman switch signal input terminal 2 internal circuit failure. (SAIO)	5	Internal circuit failure detected at Safety I/O safety input terminal ch11 (Deadman switch signal input terminal 2).	Please contact DENSO WAVE service with error number and error message.
8549186C	660A	Contactor-ON back check signal input terminal 1 internal circuit failure. (SAIO)	5	Internal circuit failure detected at Safety I/O safety input terminal ch12 (Contactor-ON back check signal input terminal 1).	Please contact DENSO WAVE service with error number and error message.
8549186D	660A	Contactor-ON back check signal input terminal 2 internal circuit failure. (SAIO)	5	Internal circuit failure detected at Safety I/O safety input terminal ch13 (Contactor-ON back check signal input terminal 2).	Please contact DENSO WAVE service with error number and error message.
8549186E	660A	Manual mode signal input terminal internal circuit failure. (SAIO)	5	Internal circuit failure detected at Safety I/O safety input terminal ch14 (Manual mode signal input terminal).	Please contact DENSO WAVE service with error number and error message.
8549186F	660A	Auto mode signal input terminal internal circuit failure. (SAIO)	5	Internal circuit failure detected at Safety I/O safety input terminal ch15 (Auto mode signal input terminal).	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
85491870	660A	CPU normal signal input terminal internal circuit failure. (SAIO)	5	Internal circuit failure detected at Safety I/O safety input terminal ch16 (CPU normal signal input terminal).	Please contact DENSO WAVE service with error number and error message.
85491871	660A	RSC teach signal input terminal internal circuit failure. (SAIO)	5	Internal circuit failure detected at Safety I/O safety input terminal ch17 (RSC teach signal input terminal).	Please contact DENSO WAVE service with error number and error message.
85491872	660A	RSC speed setting signal input terminal internal circuit failure. (SAIO)	5	Internal circuit failure detected at Safety I/O safety input terminal ch18 (RSC speed setting signal input terminal).	Please contact DENSO WAVE service with error number and error message.
85491873	660A	RSC override signal input terminal internal circuit failure. (SAIO)	5	Internal circuit failure detected at Safety I/O safety input terminal ch19 (RSC override signal input terminal).	Please contact DENSO WAVE service with error number and error message.
84491880	660A	Emergency-stop signal input terminal 1 dual channel monitoring failure. (SAIO)	4	Dual channel input logic failure at Safety I/O safety input terminal ch0 (Emergency-stop signal input terminal 1).	Check if there are no short circuit, ground fault, or improper connection for two lines on Emergency-stop signal connection. Once you check that all Emergency-stop wirings are properly connected, remove the Mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
84491881	660A	Emergency-stop signal input terminal 2 dual channel monitoring failure. (SAIO)	4	Dual channel input logic failure at Safety I/O safety input terminal ch1 (Emergency-stop signal input terminal 2).	Check if there are no short circuit, ground fault, or improper connection for two lines on Emergency-stop signal connection. Once you check that all Emergency-stop wirings are properly connected, remove the Mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
84491882	660A	Enable-auto signal input terminal 1 dual channel monitoring failure. (SAIO)	4	Dual channel input logic failure at Safety I/O safety input terminal ch2 (Enable-auto signal input terminal 1).	Check if there are no short circuit, ground fault, or improper connection for two lines on Enable-auto signal connection. Once you check that all Enable-auto wirings are properly connected, remove the Mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
84491883	660A	Enable-auto signal input terminal 2 dual channel monitoring failure. (SAIO)	4	Dual channel input logic failure at Safety I/O safety input terminal ch3 (Enable-auto signal input terminal 2).	Check if there are no short circuit, ground fault, or improper connection for two lines on Enable-auto signal connection. Once you check that all Enable-auto wirings are properly connected, remove the Mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
84491884	660A	Protective-stop signal input terminal 1 dual channel monitoring failure. (SAIO)	4	Dual channel input logic failure at Safety I/O safety input terminal ch4 (Protective-stop signal input terminal 1).	Check if there are no short circuit, ground fault, or improper connection for two lines on Protective-stop signal connection. Once you check that all Protective-stop wirings are properly connected, remove the Mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
84491885	660A	Protective-stop signal input terminal 2 dual channel monitoring failure. (SAIO)	4	Dual channel input logic failure at Safety I/O safety input terminal ch5 (Protective-stop signal input terminal 2).	Check if there are no short circuit, ground fault, or improper connection for two lines on Protective-stop signal connection. Once you check that all Protective-stop wirings are properly connected, remove the Mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
84491886	660A	Motor-OFF signal input terminal dual channel monitoring failure. (SAIO)	4	Dual channel input logic failure at Safety I/O safety input terminal ch6 (Motor-OFF signal input terminal).	Please contact DENSO WAVE service with error number and error message.
84491887	660A	Motor-ON signal input terminal dual channel monitoring failure. (SAIO)	4	Dual channel input logic failure at Safety I/O safety input terminal ch7 (Motor-ON signal input terminal).	Please contact DENSO WAVE service with error number and error message.
84491888	660A	Internal Emergency-stop signal input terminal 1 dual channel monitoring failure. (SAIO)	4	Dual channel input logic failure at Safety I/O safety input terminal ch8 (Internal Emergency-stop signal input terminal 1).	Please contact DENSO WAVE service with error number and error message.
84491889	660A	Internal Emergency-stop signal input terminal 2 dual channel monitoring failure. (SAIO)	4	Dual channel input logic failure at Safety I/O safety input terminal ch9 (Internal Emergency-stop signal input terminal 2).	Please contact DENSO WAVE service with error number and error message.
8449188A	660A	Deadman switch signal input terminal 1 dual channel monitoring failure. (SAIO)	4	Dual channel input logic failure at Safety I/O safety input terminal ch10 (Deadman switch signal input terminal 1).	Replace the teach pendant. If the error still occurs, please contact DENSO WAVE service with error number and error message.
8449188B	660A	Deadman switch signal input terminal 2 dual channel monitoring failure. (SAIO)	4	Dual channel input logic failure at Safety I/O safety input terminal ch11 (Deadman switch signal input terminal 2).	Replace the teach pendant. If the error still occurs, please contact DENSO WAVE service with error number and error message.
8449188C	660A	Contactor-ON back check signal input terminal 1 dual channel monitoring failure. (SAIO)	4	Dual channel input logic failure at Safety I/O safety input terminal ch12 (Contactor-ON back check signal input terminal 1).	Please contact DENSO WAVE service with error number and error message.
8449188D	660A	Contactor-ON back check signal input terminal 2 dual channel monitoring failure. (SAIO)	4	Dual channel input logic failure at Safety I/O safety input terminal ch13 (Contactor-ON back check signal input terminal 2).	Please contact DENSO WAVE service with error number and error message.
8449188E	660A	Manual mode signal input terminal dual channel monitoring failure. (SAIO)	4	Dual channel input logic failure at Safety I/O safety input terminal ch14 (Manual mode signal input terminal).	Replace the teach pendant. If the error still occurs, please contact DENSO WAVE service with error number and error message.
8449188F	660A	Auto mode signal input terminal dual channel monitoring failure. (SAIO)	4	Dual channel input logic failure at Safety I/O safety input terminal ch15 (Auto mode signal input terminal).	Replace the teach pendant. If the error still occurs, please contact DENSO WAVE service with error number and error message.
84491890	660A	CPU normal signal input terminal dual channel monitoring failure. (SAIO)	4	Dual channel input logic failure at Safety I/O safety input terminal ch16 (CPU normal signal input terminal).	Please contact DENSO WAVE service with error number and error message.
84491891	660A	RSC teach signal input terminal dual channel monitoring failure. (SAIO)	4	Dual channel input logic failure at Safety I/O safety input terminal ch17 (RSC teach signal input terminal).	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
84491892	660A	RSC speed setting signal input terminal dual channel monitoring failure. (SAIO)	4	Dual channel input logic failure at Safety I/O safety input terminal ch18 (RSC speed setting signal input terminal).	Please contact DENSO WAVE service with error number and error message.
84491893	660A	RSC override signal input terminal dual channel monitoring failure. (SAIO)	4	Dual channel input logic failure at Safety I/O safety input terminal ch19 (RSC override signal input terminal).	Please contact DENSO WAVE service with error number and error message.
844918A0	660A	Emergency-stop signal input terminal 1 dual channel connected device terminal failure. (SAIO)	4	Dual channel connected terminal failure is detected at Safety I/O safety input terminal ch0 (Emergency-stop signal input terminal 1).	Check if there are no short circuit, ground fault, or improper connection for two lines on Emergency-stop signal connection. Once you check that all Emergency-stop wirings are properly connected, remove the Mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844918A1	660A	Emergency-stop signal input terminal 2 dual channel connected device terminal failure. (SAIO)	4	Dual channel connected terminal failure is detected at Safety I/O safety input terminal ch1 (Emergency-stop signal input terminal 2).	Check if there are no short circuit, ground fault, or improper connection for two lines on Emergency-stop signal connection. Once you check that all Emergency-stop wirings are properly connected, remove the Mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844918A2	660A	Enable-auto signal input terminal 1 dual channel connected device terminal failure. (SAIO)	4	Dual channel connected terminal failure is detected at Safety I/O safety input terminal ch2 (Enable-auto signal input terminal 1).	Check if there are no short circuit, ground fault, or improper connection for two lines on Enable-auto signal connection. Once you check that all Enable-auto wirings are properly connected, remove the Mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
844918A3	660A	Enable-auto signal input terminal 2 dual channel connected device terminal failure. (SAIO)	4	Dual channel connected terminal failure is detected at Safety I/O safety input terminal ch3 (Enable-auto signal input terminal 2).	Check if there are no short circuit, ground fault, or improper connection for two lines on Enable-auto signal connection. Once you check that all Enable-auto wirings are properly connected, remove the Mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844918A4	660A	Protective-stop signal input terminal 1 dual channel connected device terminal failure. (SAIO)	4	Dual channel connected terminal failure is detected at Safety I/O safety input terminal ch4 (Protective-stop signal input terminal 1).	Check if there are no short circuit, ground fault, or improper connection for two lines on Protective-stop signal connection. Once you check that all Protective-stop wirings are properly connected, remove the Mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844918A5	660A	Protective-stop signal input terminal 2 dual channel connected device terminal failure. (SAIO)	4	Dual channel connected terminal failure is detected at Safety I/O safety input terminal ch5 (Protective-stop signal input terminal 2).	Check if there are no short circuit, ground fault, or improper connection for two lines on Protective-stop signal connection. Once you check that all Protective-stop wirings are properly connected, remove the Mini I/O connector and then reboot the robot controller. If the error doesn't occur, revise the connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844918A6	660A	Motor-OFF signal input terminal dual channel connected device terminal failure. (SAIO)	4	Dual channel connected terminal failure is detected at Safety I/O safety input terminal ch6 (Motor-OFF signal input terminal).	Please contact DENSO WAVE service with error number and error message.
844918A7	660A	Motor-ON signal input terminal dual channel connected device terminal failure. (SAIO)	4	Dual channel connected terminal failure is detected at Safety I/O safety input terminal ch7 (Motor-ON signal input terminal).	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
844918A8	660A	Internal Emergency-stop signal input terminal 1 dual channel connected device terminal failure. (SAIO)	4	Dual channel connected terminal failure is detected at Safety I/O safety input terminal ch8 (Internal Emergency-stop signal input terminal 1).	Please contact DENSO WAVE service with error number and error message.
844918A9	660A	Internal Emergency-stop signal input terminal 2 dual channel connected device terminal failure. (SAIO)	4	Dual channel connected terminal failure is detected at Safety I/O safety input terminal ch9 (Internal Emergency-stop signal input terminal 2).	Please contact DENSO WAVE service with error number and error message.
844918AA	660A	Deadman switch signal input terminal 1 dual channel connected device terminal failure. (SAIO)	4	Dual channel connected terminal failure is detected at Safety I/O safety input terminal ch10 (Deadman switch signal input terminal 1).	Replace the teach pendant. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844918AB	660A	Deadman switch signal input terminal 2 dual channel connected device terminal failure. (SAIO)	4	Dual channel connected terminal failure is detected at Safety I/O safety input terminal ch11 (Deadman switch signal input terminal 2).	Replace the teach pendant. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844918AC	660A	Contactor-ON back check signal input terminal 1 dual channel connected device terminal failure. (SAIO)	4	Dual channel connected terminal failure is detected at Safety I/O safety input terminal ch12 (Contactor-ON back check signal input terminal 1).	Please contact DENSO WAVE service with error number and error message.
844918AD	660A	Contactor-ON back check signal input terminal 2 dual channel connected device terminal failure. (SAIO)	4	Dual channel connected terminal failure is detected at Safety I/O safety input terminal ch13 (Contactor-on back check signal input terminal 2).	Please contact DENSO WAVE service with error number and error message.
844918AE	660A	Manual mode signal input terminal dual channel connected device terminal failure. (SAIO)	4	Dual channel connected terminal failure is detected at Safety I/O safety input terminal ch14 (Manual mode signal input terminal).	Replace the teach pendant. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844918AF	660A	Auto mode signal input terminal dual channel connected device terminal failure. (SAIO)	4	Dual channel connected terminal failure is detected at Safety I/O safety input terminal ch15 (Auto mode signal input terminal).	Replace the teach pendant. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844918B0	660A	CPU normal signal input terminal dual channel connected device terminal failure. (SAIO)	4	Dual channel connected terminal failure is detected at Safety I/O safety input terminal ch16 (CPU normal signal input terminal).	Please contact DENSO WAVE service with error number and error message.
844918B1	660A	RSC teach signal input terminal dual channel connected device terminal failure. (SAIO)	4	Dual channel connected terminal failure is detected at Safety I/O safety input terminal ch17 (RSC teach signal input terminal).	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
844918B2	660A	RSC speed setting signal input terminal dual channel connected device terminal failure. (SAIO)	4	Dual channel connected terminal failure is detected at Safety I/O safety input terminal ch18 (RSC speed setting signal input terminal).	Please contact DENSO WAVE service with error number and error message.
844918B3	660A	RSC override signal input terminal dual channel connected device terminal failure. (SAIO)	4	Dual channel connected terminal failure is detected at Safety I/O safety input terminal ch19 (RSC override signal input terminal).	Please contact DENSO WAVE service with error number and error message.
85491920	660A	Contactor-ON signal output terminal 1 configuration failure. (SAIO)	5	Safety I/O safety output terminal ch0 (Contactor-ON signal output terminal 1) configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
85491921	660A	Contactor-ON signal output terminal 2configuration failure. (SAIO)	5	Safety I/O safety output terminal ch1 (Contactor-ON signal output terminal 2) configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
85491922	660A	RSC teach signal output terminal 1 configuration failure. (SAIO)	5	Safety I/O safety output terminal ch2 (RSC teach signal output terminal 1) configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
85491923	660A	RSC teach signal output terminal 2 configuration failure. (SAIO)	5	Safety I/O safety output terminal ch3 (RSC teach signal output terminal 2) configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
85491924	660A	RSC speed setting signal output terminal 1 configuration failure. (SAIO)	5	Safety I/O safety output terminal ch4 (RSC speed setting signal output terminal 1) configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
85491925	660A	RSC speed setting signal output terminal 2 configuration failure. (SAIO)	5	Safety I/O safety output terminal ch5 (RSC speed setting signal output terminal 2) configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
85491926	660A	RSC override signal output terminal 1 configuration failure. (SAIO)	5	Safety I/O safety output terminal ch6 (RSC override signal output terminal 1) configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
85491927	660A	RSC override signal output terminal 2 configuration failure. (SAIO)	5	Safety I/O safety output terminal ch7 (RSC override signal output terminal 2) configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
85491928	660A	Safety output terminal ch8 configuration failure. (SAIO)	5	Safety I/O safety output terminal ch8 configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
85491929	660A	Safety output terminal ch9 configuration failure. (SAIO)	5	Safety I/O safety output terminal ch9 configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
8549192A	660A	Safety output terminal ch10 configuration failure. (SAIO)	5	Safety I/O safety output terminal ch10 configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
8549192B	660A	Safety output terminal ch11 configuration failure. (SAIO)	5	Safety I/O safety output terminal ch11 configuration is wrong.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
8549192C	660A	Safety output terminal ch12 configuration failure. (SAIO)	5	Safety I/O safety output terminal ch12 configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
8549192D	660A	Safety output terminal ch13 configuration failure. (SAIO)	5	Safety I/O safety output terminal ch13 configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
8549192E	660A	Safety output terminal ch14 configuration failure. (SAIO)	5	Safety I/O safety output terminal ch14 configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
8549192F	660A	Safety output terminal ch15 configuration failure. (SAIO)	5	Safety I/O safety output terminal ch15 configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
85491930	660A	Safety output terminal ch16 configuration failure. (SAIO)	5	Safety I/O safety output terminal ch16 configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
85491931	660A	Safety output terminal ch17 configuration failure. (SAIO)	5	Safety I/O safety output terminal ch17 configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
85491932	660A	Safety output terminal ch18 configuration failure. (SAIO)	5	Safety I/O safety output terminal ch18 configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
85491933	660A	Safety output terminal ch19 configuration failure. (SAIO)	5	Safety I/O safety output terminal ch19 configuration is wrong.	Please contact DENSO WAVE service with error number and error message.
85491940	660A	Contactor-ON signal output terminal 1 overcurrent. (SAIO)	5	Overcurrent is detected at Safety I/O safety output terminal ch0 (Contactor-ON signal output terminal 1).	Please contact DENSO WAVE service with error number and error message.
85491941	660A	Contactor-ON signal output terminal 2 overcurrent. (SAIO)	5	Overcurrent is detected at Safety I/O safety output terminal ch1 (Contactor-ON signal output terminal 2).	Please contact DENSO WAVE service with error number and error message.
85491942	660A	RSC teach signal output terminal 1 overcurrent. (SAIO)	5	Overcurrent is detected at Safety I/O safety output terminal ch2 (RSC teach signal output terminal 1).	Please contact DENSO WAVE service with error number and error message.
85491943	660A	RSC teach signal output terminal 2 overcurrent. (SAIO)	5	Overcurrent is detected at Safety I/O safety output terminal ch3 (RSC teach signal output terminal 2).	Please contact DENSO WAVE service with error number and error message.
85491944	660A	RSC speed setting signal output terminal 1 overcurrent. (SAIO)	5	Overcurrent is detected at Safety I/O safety output terminal ch4 (RSC speed setting signal output terminal 1).	Please contact DENSO WAVE service with error number and error message.
85491945	660A	RSC speed setting signal output terminal 2 overcurrent. (SAIO)	5	Overcurrent is detected at Safety I/O safety output terminal ch5 (RSC speed setting signal output terminal 2).	Please contact DENSO WAVE service with error number and error message.

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85491946	660A	RSC override signal output terminal 1 overcurrent. (SAIO)	5	Overcurrent is detected at Safety I/O safety output terminal ch6 (RSC override signal output terminal 1).	Please contact DENSO WAVE service with error number and error message.
85491947	660A	RSC override signal output terminal 2 overcurrent. (SAIO)	5	Overcurrent is detected at Safety I/O safety output terminal ch7 (RSC override signal output terminal 2).	Please contact DENSO WAVE service with error number and error message.
85491948	660A	Safety output terminal ch8 overcurrent. (SAIO)	5	Overcurrent is detected at Safety I/O safety output terminal ch8.	Please contact DENSO WAVE service with error number and error message.
85491949	660A	Safety output terminal ch9 overcurrent. (SAIO)	5	Overcurrent is detected at Safety I/O safety output terminal ch9.	Please contact DENSO WAVE service with error number and error message.
8549194A	660A	Safety output terminal ch10 overcurrent. (SAIO)	5	Overcurrent is detected at Safety I/O safety output terminal ch10.	Please contact DENSO WAVE service with error number and error message.
8549194B	660A	Safety output terminal ch11 overcurrent. (SAIO)	5	Overcurrent is detected at Safety I/O safety output terminal ch11.	Please contact DENSO WAVE service with error number and error message.
8549194C	660A	Safety output terminal ch12 overcurrent. (SAIO)	5	Overcurrent is detected at Safety I/O safety output terminal ch12.	Please contact DENSO WAVE service with error number and error message.
8549194D	660A	Safety output terminal ch13 overcurrent. (SAIO)	5	Overcurrent is detected at Safety I/O safety output terminal ch13.	Please contact DENSO WAVE service with error number and error message.
8549194E	660A	Safety output terminal ch14 overcurrent. (SAIO)	5	Overcurrent is detected at Safety I/O safety output terminal ch14.	Please contact DENSO WAVE service with error number and error message.
8549194F	660A	Safety output terminal ch15 overcurrent. (SAIO)	5	Overcurrent is detected at Safety I/O safety output terminal ch15.	Please contact DENSO WAVE service with error number and error message.
85491950	660A	Safety output terminal ch16 overcurrent. (SAIO)	5	Overcurrent is detected at Safety I/O safety output terminal ch16.	Please contact DENSO WAVE service with error number and error message.
85491951	660A	Safety output terminal ch17 overcurrent. (SAIO)	5	Overcurrent is detected at Safety I/O safety output terminal ch17.	Please contact DENSO WAVE service with error number and error message.
85491952	660A	Safety output terminal ch18 overcurrent. (SAIO)	5	Overcurrent is detected at Safety I/O safety output terminal ch18.	Please contact DENSO WAVE service with error number and error message.
85491953	660A	Safety output terminal ch19 overcurrent. (SAIO)	5	Overcurrent is detected at Safety I/O safety output terminal ch19.	Please contact DENSO WAVE service with error number and error message.
85491960	660A	Contactor-ON signal output terminal 1 ground fault. (SAIO)	5	Ground fault is detected at Safety I/O safety output terminal ch0 (Contactor-ON signal output terminal 1).	Please contact DENSO WAVE service with error number and error message.
85491961	660A	Contactor-ON signal output terminal 2 ground fault. (SAIO)	5	Ground fault is detected at Safety I/O safety output terminal ch1 (Contactor-ON signal output terminal 2).	Please contact DENSO WAVE service with error number and error message.

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85491962	660A	RSC teach signal output terminal 1 ground fault. (SAIO)	5	Ground fault is detected at Safety I/O safety output terminal ch2 (RSC teach signal output terminal 1).	Please contact DENSO WAVE service with error number and error message.
85491963	660A	RSC teach signal output terminal 2 ground fault. (SAIO)	5	Ground fault is detected at Safety I/O safety output terminal ch3 (RSC teach signal output terminal 2).	Please contact DENSO WAVE service with error number and error message.
85491964	660A	RSC speed setting signal output terminal 1 ground fault. (SAIO)	5	Ground fault is detected at Safety I/O safety output terminal ch4 (RSC speed setting signal output terminal 1).	Please contact DENSO WAVE service with error number and error message.
85491965	660A	RSC speed setting signal output terminal 2 ground fault. (SAIO)	5	Ground fault is detected at Safety I/O safety output terminal ch5 (RSC speed setting signal output terminal 2).	Please contact DENSO WAVE service with error number and error message.
85491966	660A	RSC override signal output terminal 1 ground fault. (SAIO)	5	Ground fault is detected at Safety I/O safety output terminal ch6 (RSC override signal output terminal 1).	Please contact DENSO WAVE service with error number and error message.
85491967	660A	RSC override signal output terminal 2 ground fault. (SAIO)	5	Ground fault is detected at Safety I/O safety output terminal ch7 (RSC override signal output terminal 2).	Please contact DENSO WAVE service with error number and error message.
85491968	660A	Safety output terminal ch8 ground fault. (SAIO)	5	Ground fault is detected at Safety I/O safety output terminal ch8.	Please contact DENSO WAVE service with error number and error message.
85491969	660A	Safety output terminal ch9 ground fault. (SAIO)	5	Ground fault is detected at Safety I/O safety output terminal ch9.	Please contact DENSO WAVE service with error number and error message.
8549196A	660A	Safety output terminal ch10 ground fault. (SAIO)	5	Ground fault is detected at Safety I/O safety output terminal ch10.	Please contact DENSO WAVE service with error number and error message.
8549196B	660A	Safety output terminal ch11 ground fault. (SAIO)	5	Ground fault is detected at Safety I/O safety output terminal ch11.	Please contact DENSO WAVE service with error number and error message.
8549196C	660A	Safety output terminal ch12 ground fault. (SAIO)	5	Ground fault is detected at Safety I/O safety output terminal ch12.	Please contact DENSO WAVE service with error number and error message.
8549196D	660A	Safety output terminal ch13 ground fault. (SAIO)	5	Ground fault is detected at Safety I/O safety output terminal ch13.	Please contact DENSO WAVE service with error number and error message.
8549196E	660A	Safety output terminal ch14 ground fault. (SAIO)	5	Ground fault is detected at Safety I/O safety output terminal ch14.	Please contact DENSO WAVE service with error number and error message.
8549196F	660A	Safety output terminal ch15 ground fault. (SAIO)	5	Ground fault is detected at Safety I/O safety output terminal ch15.	Please contact DENSO WAVE service with error number and error message.
85491970	660A	Safety output terminal ch16 ground fault. (SAIO)	5	Ground fault is detected at Safety I/O safety output terminal ch16.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
85491971	660A	Safety output terminal ch17 ground fault. (SAIO)	5	Ground fault is detected at Safety I/O safety output terminal ch17.	Please contact DENSO WAVE service with error number and error message.
85491972	660A	Safety output terminal ch18 ground fault. (SAIO)	5	Ground fault is detected at Safety I/O safety output terminal ch18.	Please contact DENSO WAVE service with error number and error message.
85491973	660A	Safety output terminal ch19 ground fault. (SAIO)	5	Ground fault is detected at Safety I/O safety output terminal ch19.	Please contact DENSO WAVE service with error number and error message.
85491980	660A	Contactor-ON signal output terminal 1 output fixed to ON. (SAIO)	5	Output fixed to ON is detected at Safety I/O safety output terminal ch0 (Contactor-ON signal output terminal 1).	Please contact DENSO WAVE service with error number and error message.
85491981	660A	Contactor-ON signal output terminal 2 output fixed to ON. (SAIO)	5	Output fixed to ON is detected at Safety I/O safety output terminal ch1 (Contactor-ON signal output terminal 2).	Please contact DENSO WAVE service with error number and error message.
85491982	660A	RSC teach signal output terminal 1 output fixed to ON. (SAIO)	5	Output fixed to ON is detected at Safety I/O safety output terminal ch2 (RSC teach signal output terminal 1).	Please contact DENSO WAVE service with error number and error message.
85491983	660A	RSC teach signal output terminal 2 output fixed to ON. (SAIO)	5	Output fixed to ON is detected at Safety I/O safety output terminal ch3 (RSC teach signal output terminal 2).	Please contact DENSO WAVE service with error number and error message.
85491984	660A	RSC speed setting signal output terminal 1 output fixed to ON. (SAIO)	5	Output fixed to ON is detected at Safety I/O safety output terminal ch4 (RSC speed setting signal output terminal 1).	Please contact DENSO WAVE service with error number and error message.
85491985	660A	RSC speed setting signal output terminal 2 output fixed to ON. (SAIO)	5	Output fixed to ON is detected at Safety I/O safety output terminal ch5 (RSC speed setting signal output terminal 2).	Please contact DENSO WAVE service with error number and error message.
85491986	660A	RSC override signal output terminal 1 output fixed to ON. (SAIO)	5	Output fixed to ON is detected at Safety I/O safety output terminal ch6 (RSC override signal output terminal 1).	Please contact DENSO WAVE service with error number and error message.
85491987	660A	RSC override signal output terminal 2 output fixed to ON. (SAIO)	5	Output fixed to ON is detected at Safety I/O safety output terminal ch7 (RSC override signal output terminal 2).	Please contact DENSO WAVE service with error number and error message.
85491988	660A	Safety output terminal ch8 output fixed to ON. (SAIO)	5	Output fixed to ON is detected at Safety I/O safety output terminal ch8.	Please contact DENSO WAVE service with error number and error message.
85491989	660A	Safety output terminal ch9 output fixed to ON. (SAIO)	5	Output fixed to ON is detected at Safety I/O safety output terminal ch9.	Please contact DENSO WAVE service with error number and error message.
8549198A	660A	Safety output terminal ch10 output fixed to ON. (SAIO)	5	Output fixed to ON is detected at Safety I/O safety output terminal ch10.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
8549198B	660A	Safety output terminal ch11 output fixed to ON. (SAIO)	5	Output fixed to ON is detected at Safety I/O safety output terminal ch11.	Please contact DENSO WAVE service with error number and error message.
8549198C	660A	Safety output terminal ch12 output fixed to ON. (SAIO)	5	Output fixed to ON is detected at Safety I/O safety output terminal ch12.	Please contact DENSO WAVE service with error number and error message.
8549198D	660A	Safety output terminal ch13 output fixed to ON. (SAIO)	5	Output fixed to ON is detected at Safety I/O safety output terminal ch13.	Please contact DENSO WAVE service with error number and error message.
8549198E	660A	Safety output terminal ch14 output fixed to ON. (SAIO)	5	Output fixed to ON is detected at Safety I/O safety output terminal ch14.	Please contact DENSO WAVE service with error number and error message.
8549198F	660A	Safety output terminal ch15 output fixed to ON. (SAIO)	5	Output fixed to ON is detected at Safety I/O safety output terminal ch15.	Please contact DENSO WAVE service with error number and error message.
85491990	660A	Safety output terminal ch16 output fixed to ON. (SAIO)	5	Output fixed to ON is detected at Safety I/O safety output terminal ch16.	Please contact DENSO WAVE service with error number and error message.
85491991	660A	Safety output terminal ch17 output fixed to ON. (SAIO)	5	Output fixed to ON is detected at Safety I/O safety output terminal ch17.	Please contact DENSO WAVE service with error number and error message.
85491992	660A	Safety output terminal ch18 output fixed to ON. (SAIO)	5	Output fixed to ON is detected at Safety I/O safety output terminal ch18.	Please contact DENSO WAVE service with error number and error message.
85491993	660A	Safety output terminal ch19 output fixed to ON. (SAIO)	5	Output fixed to ON is detected at Safety I/O safety output terminal ch19.	Please contact DENSO WAVE service with error number and error message.
854919A0	660A	Contactor-ON signal output terminal 1 dual channel connected device terminal failure. (SAIO)	5	Dual channel connected terminal failure is detected at Safety I/O safety output terminal ch0 (Contactor-ON signal output terminal 1).	Please contact DENSO WAVE service with error number and error message.
854919A1	660A	Contactor-ON signal output terminal 2 dual channel connected device terminal failure. (SAIO)	5	Dual channel connected terminal failure is detected at Safety I/O safety output terminal ch1 (Contactor-ON signal output terminal 2).	Please contact DENSO WAVE service with error number and error message.
854919A2	660A	RSC teach signal output terminal 1 dual channel connected device terminal failure. (SAIO)	5	Dual channel connected terminal failure is detected at Safety I/O safety output terminal ch2 (RSC teach signal output terminal 1).	Please contact DENSO WAVE service with error number and error message.
854919A3	660A	RSC teach signal output terminal 2 dual channel connected device terminal failure. (SAIO)	5	Dual channel connected terminal failure is detected at Safety I/O safety output terminal ch3 (RSC teach signal output terminal 2).	Please contact DENSO WAVE service with error number and error message.
854919A4	660A	RSC speed setting signal output terminal 1 dual channel connected device terminal failure. (SAIO)	5	Dual channel connected terminal failure is detected at Safety I/O safety output terminal ch4 (RSC speed setting signal output terminal 1).	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854919A5	660A	RSC speed setting signal output terminal 2 dual channel connected device terminal failure. (SAIO)	5	Dual channel connected terminal failure is detected at Safety I/O safety output terminal ch5 (RSC speed setting signal output terminal 2).	Please contact DENSO WAVE service with error number and error message.
854919A6	660A	RSC override signal output terminal 1 dual channel connected device terminal failure. (SAIO)	5	Dual channel connected terminal failure is detected at Safety I/O safety output terminal ch6 (RSC override signal output terminal 1).	Please contact DENSO WAVE service with error number and error message.
854919A7	660A	RSC override signal output terminal 2 dual channel connected device terminal failure. (SAIO)	5	Dual channel connected terminal failure is detected at Safety I/O safety output terminal ch7 (RSC override signal output terminal 2).	Please contact DENSO WAVE service with error number and error message.
854919A8	660A	Safety output terminal ch8 dual channel connected device terminal failure. (SAIO)	5	Dual channel connected terminal failure is detected at Safety I/O safety output terminal ch8.	Please contact DENSO WAVE service with error number and error message.
854919A9	660A	Safety output terminal ch9 dual channel connected device terminal failure. (SAIO)	5	Dual channel connected terminal failure is detected at Safety I/O safety output terminal ch9.	Please contact DENSO WAVE service with error number and error message.
854919AA	660A	Safety output terminal ch10 dual channel connected device terminal failure. (SAIO)	5	Dual channel connected terminal failure is detected at Safety I/O safety output terminal ch10.	Please contact DENSO WAVE service with error number and error message.
854919AB	660A	Safety output terminal ch11 dual channel connected device terminal failure. (SAIO)	5	Dual channel connected terminal failure is detected at Safety I/O safety output terminal ch11.	Please contact DENSO WAVE service with error number and error message.
854919AC	660A	Safety output terminal ch12 dual channel connected device terminal failure. (SAIO)	5	Dual channel connected terminal failure is detected at Safety I/O safety output terminal ch12.	Please contact DENSO WAVE service with error number and error message.
854919AD	660A	Safety output terminal ch13 dual channel connected device terminal failure. (SAIO)	5	Dual channel connected terminal failure is detected at Safety I/O safety output terminal ch13.	Please contact DENSO WAVE service with error number and error message.
854919AE	660A	Safety output terminal ch14 dual channel connected device terminal failure. (SAIO)	5	Dual channel connected terminal failure is detected at Safety I/O safety output terminal ch14.	Please contact DENSO WAVE service with error number and error message.
854919AF	660A	Safety output terminal ch15 dual channel connected device terminal failure. (SAIO)	5	Dual channel connected terminal failure is detected at Safety I/O safety output terminal ch15.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854919B0	660A	Safety output terminal ch16 dual channel connected device terminal failure. (SAIO)	5	Dual channel connected terminal failure is detected at Safety I/O safety output terminal ch16.	Please contact DENSO WAVE service with error number and error message.
854919B1	660A	Safety output terminal ch17 dual channel connected device terminal failure. (SAIO)	5	Dual channel connected terminal failure is detected at Safety I/O safety output terminal ch17.	Please contact DENSO WAVE service with error number and error message.
854919B2	660A	Safety output terminal ch18 dual channel connected device terminal failure. (SAIO)	5	Dual channel connected terminal failure is detected at Safety I/O safety output terminal ch18.	Please contact DENSO WAVE service with error number and error message.
854919B3	660A	Safety output terminal ch19 dual channel connected device terminal failure. (SAIO)	5	Dual channel connected terminal failure is detected at Safety I/O safety output terminal ch19.	Please contact DENSO WAVE service with error number and error message.
854919C0	660A	Contactor-ON signal output terminal 1 internal circuit failure. (SAIO)	5	Internal circuit failure is detected at Safety I/O safety output terminal ch0 (Contactor-ON signal output terminal 1).	Please contact DENSO WAVE service with error number and error message.
854919C1	660A	Contactor-ON signal output terminal 2internal circuit failure. (SAIO)	5	Internal circuit failure is detected at Safety I/O safety output terminal ch1 (Contactor-ON signal output terminal 2).	Please contact DENSO WAVE service with error number and error message.
854919C2	660A	RSC teach signal output terminal 1 internal circuit failure. (SAIO)	5	Internal circuit failure is detected at Safety I/O safety output terminal ch2 (RSC teach signal output terminal 1).	Please contact DENSO WAVE service with error number and error message.
854919C3	660A	RSC teach signal output terminal 2 internal circuit failure. (SAIO)	5	Internal circuit failure is detected at Safety I/O safety output terminal ch3 (RSC teach signal output terminal 2).	Please contact DENSO WAVE service with error number and error message.
854919C4	660A	RSC speed setting signal output terminal 1 internal circuit failure. (SAIO)	5	Internal circuit failure is detected at Safety I/O safety output terminal ch4 (RSC speed setting signal output terminal 1).	Please contact DENSO WAVE service with error number and error message.
854919C5	660A	RSC speed setting signal output terminal 2 internal circuit failure. (SAIO)	5	Internal circuit failure is detected at Safety I/O safety output terminal ch5 (RSC speed setting signal output terminal 2).	Please contact DENSO WAVE service with error number and error message.
854919C6	660A	RSC override signal output terminal 1 internal circuit failure. (SAIO)	5	Internal circuit failure is detected at Safety I/O safety output terminal ch6 (RSC override signal output terminal 1).	Please contact DENSO WAVE service with error number and error message.
854919C7	660A	RSC override signal output terminal 2 internal circuit failure. (SAIO)	5	Internal circuit failure is detected at Safety I/O safety output terminal ch7 (RSC override signal output terminal 2).	Please contact DENSO WAVE service with error number and error message.

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854919C8	660A	Safety output terminal ch8 internal circuit failure. (SAIO)	5	Internal circuit failure is detected at Safety I/O safety output terminal ch8.	Please contact DENSO WAVE service with error number and error message.
854919C9	660A	Safety output terminal ch9 internal circuit failure. (SAIO)	5	Internal circuit failure is detected at Safety I/O safety output terminal ch9.	Please contact DENSO WAVE service with error number and error message.
854919CA	660A	Safety output terminal ch10 internal circuit failure. (SAIO)	5	Internal circuit failure is detected at Safety I/O safety output terminal ch10.	Please contact DENSO WAVE service with error number and error message.
854919CB	660A	Safety output terminal ch11 internal circuit failure. (SAIO)	5	Internal circuit failure is detected at Safety I/O safety output terminal ch11.	Please contact DENSO WAVE service with error number and error message.
854919CC	660A	Safety output terminal ch12 internal circuit failure. (SAIO)	5	Internal circuit failure is detected at Safety I/O safety output terminal ch12.	Please contact DENSO WAVE service with error number and error message.
854919CD	660A	Safety output terminal ch13 internal circuit failure. (SAIO)	5	Internal circuit failure is detected at Safety I/O safety output terminal ch13.	Please contact DENSO WAVE service with error number and error message.
854919CE	660A	Safety output terminal ch14 internal circuit failure. (SAIO)	5	Internal circuit failure is detected at Safety I/O safety output terminal ch14.	Please contact DENSO WAVE service with error number and error message.
854919CF	660A	Safety output terminal ch15 internal circuit failure. (SAIO)	5	Internal circuit failure is detected at Safety I/O safety output terminal ch15.	Please contact DENSO WAVE service with error number and error message.
854919D0	660A	Safety output terminal ch16 internal circuit failure. (SAIO)	5	Internal circuit failure is detected at Safety I/O safety output terminal ch16.	Please contact DENSO WAVE service with error number and error message.
854919D1	660A	Safety output terminal ch17 internal circuit failure. (SAIO)	5	Internal circuit failure is detected at Safety I/O safety output terminal ch17.	Please contact DENSO WAVE service with error number and error message.
854919D2	660A	Safety output terminal ch18 internal circuit failure. (SAIO)	5	Internal circuit failure is detected at Safety I/O safety output terminal ch18.	Please contact DENSO WAVE service with error number and error message.
854919D3	660A	Safety output terminal ch19 internal circuit failure. (SAIO)	5	Internal circuit failure is detected at Safety I/O safety output terminal ch19.	Please contact DENSO WAVE service with error number and error message.
854919E0	660A	Contactor-ON signal output terminal 1 dual channel output data mismatch failure. (SAIO)	5	Dual channel output data inconsistency is detected at Safety I/O safety output terminal ch0 (Contactor-ON signal output terminal 1).	Please contact DENSO WAVE service with error number and error message.
854919E1	660A	Contactor-ON signal output terminal 2 dual channel output data mismatch failure. (SAIO)	5	Dual channel output data inconsistency is detected at Safety I/O safety output terminal ch1 (Contactor-ON signal output terminal 2).	Please contact DENSO WAVE service with error number and error message.
854919E2	660A	RSC teach signal output terminal 1 dual channel output data mismatch failure. (SAIO)	5	Dual channel output data inconsistency is detected at Safety I/O safety output terminal ch2 (RSC teach signal output terminal 1).	Please contact DENSO WAVE service with error number and error message.
854919E3	660A	RSC teach signal output terminal 2 dual channel output data mismatch failure. (SAIO)	5	Dual channel output data inconsistency is detected at Safety I/O safety output terminal ch3 (RSC teach signal output terminal 2).	Please contact DENSO WAVE service with error number and error message.

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854919E4	660A	RSC speed setting signal output terminal 1 dual channel output data mismatch failure. (SAIO)	5	Dual channel output data inconsistency is detected at Safety I/O safety output terminal ch4 (RSC speed setting signal output terminal 1).	Please contact DENSO WAVE service with error number and error message.
854919E5	660A	RSC speed setting signal output terminal 2 dual channel output data mismatch failure. (SAIO)	5	Dual channel output data inconsistency is detected at Safety I/O safety output terminal ch5 (RSC speed setting signal output terminal 2).	Please contact DENSO WAVE service with error number and error message.
854919E6	660A	RSC override signal output terminal 1 dual channel output data mismatch failure. (SAIO)	5	Dual channel output data inconsistency is detected at Safety I/O safety output terminal ch6 (RSC override signal output terminal 1).	Please contact DENSO WAVE service with error number and error message.
854919E7	660A	RSC override signal output terminal 2 dual channel output data mismatch failure. (SAIO)	5	Dual channel output data inconsistency is detected at Safety I/O safety output terminal ch7 (RSC override signal output terminal 2).	Please contact DENSO WAVE service with error number and error message.
854919E8	660A	Safety output terminal ch8 dual channel output data mismatch failure. (SAIO)	5	Dual channel output data inconsistency is detected at Safety I/O safety output terminal ch8.	Please contact DENSO WAVE service with error number and error message.
854919E9	660A	Safety output terminal ch9 dual channel output data mismatch failure. (SAIO)	5	Dual channel output data inconsistency is detected at Safety I/O safety output terminal ch9.	Please contact DENSO WAVE service with error number and error message.
854919EA	660A	Safety output terminal ch10 dual channel output data mismatch failure. (SAIO)	5	Dual channel output data inconsistency is detected at Safety I/O safety output terminal ch10.	Please contact DENSO WAVE service with error number and error message.
854919EB	660A	Safety output terminal ch11 dual channel output data mismatch failure. (SAIO)	5	Dual channel output data inconsistency is detected at Safety I/O safety output terminal ch11.	Please contact DENSO WAVE service with error number and error message.
854919EC	660A	Safety output terminal ch12 dual channel output data mismatch failure. (SAIO)	5	Dual channel output data inconsistency is detected at Safety I/O safety output terminal ch12.	Please contact DENSO WAVE service with error number and error message.
854919ED	660A	Safety output terminal ch13 dual channel output data mismatch failure. (SAIO)	5	Dual channel output data inconsistency is detected at Safety I/O safety output terminal ch13.	Please contact DENSO WAVE service with error number and error message.
854919EE	660A	Safety output terminal ch14 dual channel output data mismatch failure. (SAIO)	5	Dual channel output data inconsistency is detected at Safety I/O safety output terminal ch14.	Please contact DENSO WAVE service with error number and error message.
854919EF	660A	Safety output terminal ch15 dual channel output data mismatch failure. (SAIO)	5	Dual channel output data inconsistency is detected at Safety I/O safety output terminal ch15.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854919F0	660A	Safety output terminal ch16 dual channel output data mismatch failure. (SAIO)	5	Dual channel output data inconsistency is detected at Safety I/O safety output terminal ch16.	Please contact DENSO WAVE service with error number and error message.
854919F1	660A	Safety output terminal ch17 dual channel output data mismatch failure. (SAIO)	5	Dual channel output data inconsistency is detected at Safety I/O safety output terminal ch17.	Please contact DENSO WAVE service with error number and error message.
854919F2	660A	Safety output terminal ch18 dual channel output data mismatch failure. (SAIO)	5	Dual channel output data inconsistency is detected at Safety I/O safety output terminal ch18.	Please contact DENSO WAVE service with error number and error message.
854919F3	660A	Safety output terminal ch19 dual channel output data mismatch failure. (SAIO)	5	Dual channel output data inconsistency is detected at Safety I/O safety output terminal ch19.	Please contact DENSO WAVE service with error number and error message.
85492001	660A	Emergency-stop circuit failure 1	5	Emergency-stop circuit 1 signal is turned ON but the Safety I/O recognizes the signal is OFF.	Please contact DENSO WAVE service with error number and error message.
85492002	660A	Emergency-stop circuit failure 2	5	Emergency-stop circuit 1 signal is turned OFF but the Safety I/O recognizes the signal is ON.	Please contact DENSO WAVE service with error number and error message.
85492003	660A	Emergency-stop circuit failure 3	5	Emergency-stop circuit 2 signal is turned ON but the Safety I/O recognizes the signal is OFF.	Please contact DENSO WAVE service with error number and error message.
85492004	660A	Emergency-stop circuit failure 4	5	Emergency-stop circuit 2 signal is turned OFF but the Safety I/O recognizes the signal is ON.	Please contact DENSO WAVE service with error number and error message.
85492011	660A	Internal Emergency-stop circuit failure 1	5	Internal Emergency-stop circuit 1 signal is turned ON but the Safety I/O recognizes the signal is OFF.	Please contact DENSO WAVE service with error number and error message.
85492012	660A	Internal Emergency-stop circuit failure 2	5	Internal Emergency-stop circuit 1 signal is turned OFF but the Safety I/O recognizes the signal is ON.	Please contact DENSO WAVE service with error number and error message.
85492013	660A	Internal Emergency-stop circuit failure 3	5	Internal Emergency-stop circuit 2 signal is turned ON but the Safety I/O recognizes the signal is OFF.	Please contact DENSO WAVE service with error number and error message.
85492014	660A	Internal Emergency-stop circuit failure 4	5	Internal Emergency-stop circuit 2 signal is turned OFF but the Safety I/O recognizes the signal is ON.	Please contact DENSO WAVE service with error number and error message.
85492021	660A	Deadman switch circuit failure 1	5	Deadman switch circuit 1signal is turned ON but the Safety I/O recognizes the signal is OFF.	Please contact DENSO WAVE service with error number and error message.
85492022	660A	Deadman switch circuit failure 2	5	Deadman switch circuit 1 signal is turned OFF but the Safety I/O recognizes the signal is ON.	Please contact DENSO WAVE service with error number and error message.

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85492023	660A	Deadman switch circuit failure 3	5	Deadman switch circuit 2 signal is turned ON but the Safety I/O recognizes the signal is OFF.	Please contact DENSO WAVE service with error number and error message.
85492024	660A	Deadman switch circuit failure 4	5	Deadman switch circuit 2 signal is turned OFF but the Safety I/O recognizes the signal is ON.	Please contact DENSO WAVE service with error number and error message.
85492031	660A	Protective-stop circuit failure 1	5	Protective-stop circuit 1 signal is turned ON but the Safety I/O recognizes the signal is OFF.	Please contact DENSO WAVE service with error number and error message.
85492032	660A	Protective-stop circuit failure 2	5	Protective-stop circuit 1signal is turned OFF but the Safety I/O recognizes the signal is ON.	Please contact DENSO WAVE service with error number and error message.
85492033	660A	Protective-stop circuit failure 3	5	Protective-stop circuit 2 signal is turned ON but the Safety I/O recognizes the signal is OFF.	Please contact DENSO WAVE service with error number and error message.
85492034	660A	Protective-stop circuit failure 4	5	Protective-stop circuit 2 signal is turned OFF but the Safety I/O recognizes the signal is ON.	Please contact DENSO WAVE service with error number and error message.
85492041	660A	Enable-auto circuit failure 1	5	Enable-auto circuit 1 signal is turned ON but the Safety I/O recognizes the signal is OFF.	Please contact DENSO WAVE service with error number and error message.
85492042	660A	Enable-auto circuit failure 2	5	Enable-auto circuit 1 signal is turned OFF but the Safety I/O recognizes the signal is ON.	Please contact DENSO WAVE service with error number and error message.
85492043	660A	Enable-auto circuit failure 3	5	Enable-auto circuit 2 signal is turned ON but the Safety I/O recognizes the signal is OFF.	Please contact DENSO WAVE service with error number and error message.
85492044	660A	Enable-auto circuit failure 4	5	Enable-auto circuit 2 signal is turned OFF but the Safety I/O recognizes the signal is ON.	Please contact DENSO WAVE service with error number and error message.
85492051	660A	CPU normal circuit failure.	5	CPU normal circuit signal is turned ON but the Safety I/O recognizes the signal is OFF.	Please contact DENSO WAVE service with error number and error message.
85492061	660F	Safety contactor circuit failure (ON1)	5	Motor-ON signal is turned ON but the Safety contactor is OFF.	Please contact DENSO WAVE service with error number and error message.
85492062	660F	Safety contactor circuit failure (ON2)	5	Motor-ON signal is turned ON but the Safety contactor-ON signal is OFF.	Turn ON the robot controller while the deadman switch is OFF state. If the error still occurs, please contact DENSO WAVE service with error number and error message.
85492063	660F	Safety contactor circuit failure (ON3)	5	Tried to turn ON the Safety contactor but the Motor-ON signal is OFF.	Please contact DENSO WAVE service with error number and error message.
85492064	660F	Safety contactor circuit failure (ON4)	5	Tried to turn ON the Safety contactor but the Motor-ON enabling signal is turned OFF.	Please contact DENSO WAVE service with error number and error message.
85492071	660F	Safety contactor circuit failure (OFF1)	5	Motor-ON signal is turned OFF but the Safety contactor is ON.	Please contact DENSO WAVE service with error number and error message.
85492072	660F	Safety contactor circuit failure (OFF2)	5	Motor-ON signal is turned OFF but the Safety contactor-on signal is ON.	Please contact DENSO WAVE service with error number and error message.

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85492073	660F	Safety contactor circuit failure (OFF3)	5	Tried to turn OFF the Safety contactor but the Motor-ON signal is ON.	Please contact DENSO WAVE service with error number and error message.
84492081	660A	Motor-ON enabling signal timeout	4	Motor-ON processing was interrupted due to the inconsistency of signal status. Input signal for Safety I/O is "Motor-ON Enable state" but the Safety I/O does not issue Motor-ON Enabling signal.	Please contact DENSO WAVE service with error number and error message.
85492101	660A	Emergency-stop circuit failure 1d	5	Emergency-stop signal is turned ON but the Safety I/O recognizes the signal is OFF.	Please contact DENSO WAVE service with error number and error message.
85492102	660A	Emergency-stop circuit failure 2d	5	Emergency-stop signal is turned OFF but the Safety I/O recognizes the signal is ON.	Please contact DENSO WAVE service with error number and error message.
85492111	660A	Internal Emergency-stop circuit failure 1d	5	Internal Emergency-stop signal is turned ON but the Safety I/O recognizes the signal is OFF.	Please contact DENSO WAVE service with error number and error message.
85492112	660A	Internal Emergency-stop circuit failure 2d	5	Internal Emergency-stop signal is turned OFF but the Safety I/O recognizes the signal is ON.	Please contact DENSO WAVE service with error number and error message.
85492121	660A	Deadman switch circuit failure 1d	5	Deadman switch is turned ON but the Safety I/O recognizes the signal is OFF.	Please contact DENSO WAVE service with error number and error message.
85492122	660A	Deadman switch circuit failure 2d	5	Deadman switch is turned OFF but the Safety I/O recognizes the signal is ON.	Please contact DENSO WAVE service with error number and error message.
85492131	660A	Protective-stop circuit failure 1d	5	Protective-stop is turned ON but the Safety I/O recognizes the signal is OFF.	Please contact DENSO WAVE service with error number and error message.
85492132	660A	Protective-stop circuit failure 2d	5	Protective-stop is turned OFF but the Safety I/O recognizes the signal is ON.	Please contact DENSO WAVE service with error number and error message.
85492161	660F	Safety contactor circuit failure (ON1d)	5	Motor-ON signal is turned ON but the Safety contactor is turned OFF.	Please contact DENSO WAVE service with error number and error message.
85492162	660F	Safety contactor circuit failure (ON2d)	5	Motor-ON signal is turned ON but the Safety Contactor-ON signal is turned OFF.	Please contact DENSO WAVE service with error number and error message.
85492163	660F	Safety contactor circuit failure (ON3d)	5	Tried to turn ON the Safety contactor but the Motor-on signal is OFF.	Please contact DENSO WAVE service with error number and error message.
85492171	660F	Safety contactor circuit failure (OFF1d)	5	Motor-ON signal is turned OFF but the Safety contactor is turned ON.	Please contact DENSO WAVE service with error number and error message.
85492172	660F	Safety contactor circuit failure (OFF2d)	5	Motor-ON signal is turned OFF but the Safety Contactor-ON signal is turned ON.	Please contact DENSO WAVE service with error number and error message.
85492173	660F	Safety contactor circuit failure (OFF3d)	5	Tried to turn OFF the Safety contactor but the Motor-ON signal is turned ON.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
85480001	2C01	AC input over voltage	5	Power supply CPU detected excessive AC input voltage (root-mean-square value).	Check that AC input is not overvoltage. If the error still occurs, please contact DENSO WAVE service.
85480002	2C02	AC input under voltage	5	Power supply CPU detected AC input voltage drop (root-mean-square value).	Please check the followings. - Check if AC power supply cable connection is correct. - Check that AC input voltage does not drop. If the error still occurs, please contact DENSO WAVE service.
85480003	2C07	Instantaneous blackout detected	5	Power supply CPU detected instantaneous blackout.	Please check the followings. - Check if AC power supply cable connection is correct. - Check that the AC input voltage does not drop. If the error still occurs, please contact DENSO WAVE service.
85480004	2C09	BUS over voltage	5	Power supply CPU detected excessive motor bus voltage on the power electrics mother board.	Please check the followings. - Check if AC input voltage is not excessive. - Check that the robot load ratio does not exceed its limit. If the error still occurs, please contact DENSO WAVE service.
85480104	2C09	BUS over voltage	5	Power supply CPU detected excessive motor bus voltage on the motor power board.	Please check the followings. - Check if AC input voltage is not excessive. - Check that the robot load ratio does not exceed its limit. If the error still occurs, please contact DENSO WAVE service.
85480005	2C0A	BUS under voltage	5	Power supply CPU detected motor bus voltage drop on the power electrics mother board.	Please check the followings. - Check that the AC input voltage does not drop. - Check that the robot load ratio does not exceed its limit. If the error still occurs, please contact DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
85480105	2C0A	BUS under voltage	5	Power supply CPU detected motor bus voltage drop on the motor power board.	Please check the followings. – Check that the AC input voltage does not drop. – Check that the robot load ratio does not exceed its limit. If the error still occurs, please contact DENSO WAVE service.
85480006	2C0C	DC-BUS over voltage	5	Power supply CPU detected excessive DC bus voltage on the control power supply board.	Confirm the AC input voltage is not excessive. If the error still occurs, please contact DENSO WAVE service.
85480007	2C0D	DC-BUS under voltage	5	Power supply CPU detected DC bus voltage drop on the control power supply board.	Please check the followings. – Check that the AC input voltage does not drop. – Check that the power consumption of optional board, I/O and USB does not exceed the limit. If the error still occurs, please contact DENSO WAVE service.
85480008		MotorBUS-FET failure	5	Power supply CPU detected one of the following conditions. – Low-side FET open failure – High-side FET short-circuit failure – Regeneration FET short-circuit failure – Dynamic brake FET short-circuit failure	Please contact DENSO WAVE service.
85480108		MotorBUS-FET failure	5	Power supply CPU detected one of the following conditions. – Low-side FET open failure – High-side FET short-circuit failure	Please contact DENSO WAVE service.
8548000A		Buck-FET short failure	5	Power supply CPU detected low-side FET short-circuit failure on the power electrics mother board.	Please contact DENSO WAVE service.
8548000C	2C26	Regenerative-FET failure	5	Power supply CPU detected regeneration FET open failure on the power electrics mother board.	Please contact DENSO WAVE service.
8548010C	2C26	Regenerative-FET failure	5	Power supply CPU detected regeneration FET open failure on the mother board.	Please contact DENSO WAVE service.
8548000D	2C27	DB-FET failure	5	Power supply CPU detected dynamic brake FET open failure on the power electrics mother board.	Please contact DENSO WAVE service.
8548010D	2C27	DB-FET failure	5	Power supply CPU detected dynamic brake FET open failure on the mother board.	Please contact DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
8548000E		DC15V under voltage	5	Power supply CPU detected 15VH voltage drop on the power electrics mother board.	Please contact DENSO WAVE service.
8548000F		DC17V over voltage	5	Power supply CPU detected excessive 17VH voltage on the power electrics mother board.	Please contact DENSO WAVE service.
8548010F		DC17V over voltage	5	Power supply CPU detected excessive 17VH voltage on the power mother board.	Please contact DENSO WAVE service.
85480010		DC17V under voltage	5	Power supply CPU detected 17VH voltage drop on the power electrics mother board.	Please contact DENSO WAVE service.
85480110		DC17V under voltage	5	Power supply CPU detected 17VH voltage drop on the power mother board.	Please contact DENSO WAVE service.
85480011		DC24V under voltage	5	Power supply CPU detected 24VL voltage drop on the power electrics mother board.	Please contact DENSO WAVE service.
85480111		DC24V under voltage	5	Power supply CPU detected 24VL voltage drop on the mother board.	Please contact DENSO WAVE service.
85480012		Regenerative-resistor overheated	5	Power supply CPU detected excessive temperature of regeneration resistor.	Please check the followings. - Check that the robot load ratio does not exceed its limit. - Check that the fan rotation speed does not drop, or filters are not clogged. - Check that controller operation environment temperature is correct. If the error still occurs, please contact DENSO WAVE service.
85480013		Motor Power overheated	5	Power supply CPU detected excessive temperature on the electrics mother board (motor power supply part).	Please check the followings. - Check that the robot load ratio does not exceed its limit. - Check that the fan rotation speed does not drop, or filters are not clogged. - Check that controller operation environment temperature is correct. If the error still occurs, please contact DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
85480014		Power supply CPU overheated	5	Power supply CPU detected excessive temperature on the electrics mother board (Power supply CPU part).	Please check the followings. – Check that the fan rotation speed does not drop, or filters are not clogged. – Check that controller operation environment temperature is correct. If the error still occurs, please contact DENSO WAVE service.
85480114		Power supply CPU overheated	5	Power supply CPU detected excessive temperature on the mother board (Power supply CPU part).	Please check the followings. – Check that the fan rotation speed does not drop, or filters are not clogged. – Check that controller operation environment temperature is correct. If the error still occurs, please contact DENSO WAVE service.
85480016		MotorBUS charge voltage failure	5	Power supply CPU detected motor bus charging failure on the electrics mother board when motor power is turned on.	Please check the followings. – Check that AC power supply cable connection is correct. – Check that AC input voltage does not drop. If the error still occurs, please contact DENSO WAVE service.
85480116		MotorBUS charge voltage failure	5	Power supply CPU detected motor bus charging failure on the motor power board when motor power is turned on.	Please check the followings. – Check that AC power supply cable connection is correct. – Check that AC input voltage does not drop. If the error still occurs, please contact DENSO WAVE service.
85480017		AC input out of range	5	Power supply CPU detected out-of-range AC input voltage.	Please check the followings. – Check that AC power supply cable connection is correct. – Check that AC input voltage is in the specified range. If the error still occurs, please contact DENSO WAVE service.
85480018		Contactor timeout	5	Power supply CPU detected safety contactor operation delay.	Please contact DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
85480019		MotorBUS overcurrent	5	Power supply CPU detected overcurrent on the electrics mother board.	Please contact DENSO WAVE service.
85480119		MotorBUS overcurrent	5	Power supply CPU detected overcurrent on the motor power board.	Please contact DENSO WAVE service.
8548001A		EEPROM reading of power supply CPU failure	5	Power supply CPU failed to read EEPROM.	Reboot the robot controller. If the error still occurs, please contact DENSO WAVE service.
8548001B		Hardware error was written in EEPROM of power supply CPU	5	Power supply CPU detected step-down FET short-circuit failure on the electrics mother board.	Please contact DENSO WAVE service.
8548001C		MotorBUS relay short failure	5	Power supply CPU detected motor bus relay short-circuit failure on the electrics mother board.	Please contact DENSO WAVE service.
8548001D		Hardware error was detected at the power on	5	Power supply CPU detected FET short-circuit failure on the electrics mother board at the power on.	Please contact DENSO WAVE service.
8548001E		MotorBUS discharge voltage failure	5	Power supply CPU detected motor bus discharge voltage failure on the electrics mother board at the power on.	Please contact DENSO WAVE service.
8548011E		MotorBUS discharge voltage failure	5	Power supply CPU detected motor bus discharge voltage failure on the motor power board at the power on.	Please contact DENSO WAVE service.
8548011F		Hardware error was written in EEPROM of power supply CPU	5	Power supply CPU detected welding of the inrush current prevention relay on the motor power board.	Please contact DENSO WAVE service.
85480120		Power relay failure	5	Power supply CPU detected welding of the power relay on the motor power board at the power on.	Please contact DENSO WAVE service.
85480121		Hardware error was detected at the power on	5	Power supply CPU detected welding of the inrush current prevention relay on the motor power board at the power on.	Please contact DENSO WAVE service.
8548007F		Unexpected power supply error	5	Power supply CPU sends an unexpected error command.	Reboot the robot controller. If the error still occurs, please contact DENSO WAVE service.
84480081		AC bus voltage has not been detected yet.	4	Power supply CPU could not detect AC bus voltage.	Please contact DENSO WAVE service.
84480082		Hardware version error(HV)	4	Power supply CPU detected hardware version error(HV).	Reboot the robot controller. If the error still occurs, please contact DENSO WAVE service.
844800FF		Unexpected power supply warning	4	Power supply CPU sends an unexpected warning command.	Reboot the robot controller. If the error still occurs, please contact DENSO WAVE service.
84403FFF		Unexpected servo error	4	Unexpected error occurred.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
85400001		Fatal Error	5	Process stopped due to a fatal error.	Check the cause of the fatal error.
85400002		Servo module error queue overflow	5	Error notice process stopped because too many errors occurred.	Please contact DENSO WAVE service with error number and error message.
85400003	6101	Watchdog timer error	5	CPU load increased and the process has been stopped temporary.	Please contact DENSO WAVE service with error number and error message.
85400004	60FE	Servo module and trajectory generation module version mismatch	5	Servo module and trajectory generation module version is different.	Please contact DENSO WAVE service with error number and error message.
85400005	6607	Servo parameter checksum error	5	Servo parameter is changed by unexpected agent.	Please contact DENSO WAVE service with error number and error message.
84400006	60FE	Servo module and trajectory generation module communication error	4	Communication between servo module and trajectory generation module failed.	Please contact DENSO WAVE service with error number and error message.
83400007		Servo module process aborted	3	Servo module operation suspended.	Please contact DENSO WAVE service with operation that caused the error, error number and error message.
83400008		Servo module process timeout error	3	Servo module operation timeout occurred.	Please contact DENSO WAVE service with operation that caused the error, error number and error message.
83400009		Servo module process failed.	3	Servo module operation failed.	Please contact DENSO WAVE service with operation that caused the error, error number and error message.
8340000A		Access denied in servo module	3	Servo module operation access was denied.	Please confirm that there is no write access to read only area, and no read access to write only area.
8340000B		There are unshown errors.	3	Operation is suspended for error processing.	Please contact DENSO WAVE service with operation that caused the error, error number and error message.
8540000C		FPGA watchdog timer error.	5	FPGA communication stopped.	Please contact DENSO WAVE service with error number and error message.
8540000D		Watchdog timer is disabled.	5	Could not execute the command because watchdog timer is disabled.	Please contact DENSO WAVE service with error number and error message.
8540000E		Communication with Safety I/O unit has stopped.	5	Could not execute the command because communication with safety I/O is stopped.	Please contact DENSO WAVE service with error number and error message.
85400011		You cannot execute a command while servo driver is running	5	Unexpected error. This operation is prohibited while the servo driver is ON.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
85400012		You cannot execute a command while servo driver stops	5	Unexpected error. This operation is prohibited while the servo driver is OFF.	Please contact DENSO WAVE service with error number and error message.
81400013	600A	Turn motor power OFF to execute the command.	1	This operation is not available while motor power is ON.	Turn OFF motor.
81400014	6006	Turn motor power ON to execute the command.	1	This operation is not available while motor power is OFF.	Turn ON motor.
81400015	21D3	You cannot execute a command while an error occurs.	1	This operation is not available while error occurs.	Clear error.
81400016	2008	Turn OFF Emergency-stop to execute the command.	1	This operation is not available while Emergency-stop is ON.	Turn OFF Emergency-stop.
81400017	21EC	Press deadman switch to execute the command.	1	This operation is not available while deadman switch is OFF.	Turn ON deadman switch.
81400018	21F3	Turn ON the Enable-auto to execute the command.	1	This operation is not available while Enable-auto is OFF.	Turn ON Enable-auto.
81400019		Turn OFF Protective-stop signal to execute the command.	1	This operation is not available while Protective-stop is ON.	Turn OFF Protective-stop.
8140001A		You cannot execute a command while contactor is OFF	1	This operation is not available while contactor is OFF.	Please contact DENSO WAVE service with error number and error message.
8140001B		Lock the brake to execute the command.	1	This operation is not available while brake is released.	Lock brakes.
8140001C		You cannot execute a command while robot is reducing the speed to stop.	1	This operation is not available while robot is reducing the speed to stop.	Turn OFF motor and try again.
8140001D		You cannot execute a command while motor power is ON.	1	This operation is not available while motor power is turning ON.	Turn ON motor and try again.
8140001E		You cannot execute a command while motor power is OFF.	1	This operation is not available while motor power is turning OFF.	Turn OFF motor and try again.
81400021		Stop servo log recording to execute the command.	1	This operation is not available while servo log is recorded.	Stop servo log recording and try again.
81400022		Start servo log recording to execute the command.	1	This operation is not available while servo log recording is stopped.	Start servo log recording and try again.
83400023		You cannot execute a command while one of the Emergency-stop lines is disconnected.	3	Failed to execute the command because one of the Emergency-stop lines is disconnected.	Turn ON both Emergency-stop lines, and turn OFF again. If the error still occurs, confirm the external Emergency-stop input signal connection.

Code	RC7 Code	Message	Level	Description	Remedy
83400024		You cannot execute a command while one of the deadman switch lines is disconnected.	3	Failed to execute the command because one of the deadman switch lines is disconnected.	Turn OFF deadman switch, and turn ON again. If the error still occurs, replace teach pendant.
83400025		You cannot execute a command while one of the Enable-auto lines is disconnected.	3	Failed to execute the command because one of the Enable-auto lines is disconnected.	Turn OFF both Enable-auto lines, and turn ON again for Auto mode operation. If the error still occurs, confirm the Enable-auto input signal connection.
83400026		You cannot execute a command while one of the Protective-stop lines is disconnected.	3	Failed to execute the command because one of the Protective-stop lines is disconnected.	Turn ON both Protective-stop lines, and turn OFF again for Auto mode operation. If the error still occurs, confirm the Protective-stop input signal connection.
83400041	279E	One of the external Emergency-stop line is disconnected. (1)	3	Emergency-stop input circuit1 is open but the circuit2 is closed.	Check external Emergency-stop input connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
83400042	279E	One of the external Emergency-stop line is disconnected. (2)	3	Emergency-stop input circuit1 is closed but the circuit2 is open.	Check external Emergency-stop input connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
83400043		One of the deadman switch line is disconnected (1)	3	Deadman switch input circuit1 is open but the circuit2 is closed.	Replace teach pendant. If the error still occurs, please contact DENSO WAVE service with error number and error message.
83400044		One of the deadman switch line is disconnected (2)	3	Deadman switch input circuit1 is closed but the circuit2 is open.	Replace teach pendant. If the error still occurs, please contact DENSO WAVE service with error number and error message.
83400045		One of the protective switch line is disconnected (1)	3	Protective-stop input circuit1 is open but the circuit2 is closed.	Check Protective-stop input connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
83400046		One of the protective switch line is disconnected (2)	3	Protective-stop input circuit1 is closed but the circuit2 is open.	Check Protective-stop input connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
83400047		One of the Enable-auto line is not connected (1)	3	Enable-auto input circuit1 is open but the circuit2 is closed.	Check Enable-auto input connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
83400048		One of the Enable-auto line is not connected (2)	3	Enable-auto input circuit1 is closed but the circuit2 is open.	Check Enable-auto input connection. If the error still occurs, please contact DENSO WAVE service with error number and error message.
83400049		You cannot turn OFF the Emergency-stop.	3	Failed to turn OFF the Emergency-stop because one of the Emergency-stop signal line is disconnected.	Turn ON all Emergency-stop lines, and turn OFF again. If the error still occurs, confirm the external Emergency-stop input signal connection.

Code	RC7 Code	Message	Level	Description	Remedy
8340004A		You cannot turn ON deadman switch.	3	Failed to turn ON the deadman switch because one of the deadman switch line is disconnected.	Turn OFF deadman switch, and turn ON again. If the error still occurs, replace teach pendant.
8340004B		You cannot turn OFF Protective-stop.	3	Failed to turn OFF the Protective-stop because one of the Protective switch line is disconnected.	Turn ON all Protective-stop lines, and turn OFF again. If the error still occurs, confirm the Protective-stop input signal connection.
8340004C		You cannot turn ON Enable-auto.	3	Failed to turn ON the Enable-auto because one of the Enable-auto line is disconnected.	Turn OFF all Enable-auto lines, and turn ON again. If the error still occurs, confirm the Enable-auto input signal connection.
83400051	6001	Incorrect entry	3	Wrong data is sent to servo module.	Check the input parameter.
85400052	6607	Invalid servo parameter	5	Wrong parameter was sent to servo module.	Check the changed parameter.
85400053	6607	Servo parameter size is not compatible with the controller software version	5	Unexpected error. Parameter data size sent to servo module is wrong.	Please contact DENSO WAVE service with error number and error message.
85400054	6607	Servo parameter is not assigned	5	Unexpected error. Parameter is not correctly set in the servo module.	Please contact DENSO WAVE service with error number and error message.
83400055	601B	Servo parameter value change error	3	Failed to change servo module parameter.	Check the changed parameter.
83400056	6001	Invalid joint	3	Operation was performed with invalid joint number.	Check the specified joint number.
83400057	6003	Invalid input size	3	Unexpected error. Input data size sent to servo module is wrong.	Please contact DENSO WAVE service with error number and error message.
83400058	6003	Invalid output size	3	Unexpected error. Output data size from servo module is wrong.	Please contact DENSO WAVE service with error number and error message.
83400059	6003	Invalid command	3	Invalid command index is sent to servo module.	Check the specified command index.
8340005A	6003	Invalid parameter	3	The operation performed with invalid parameter.	Check the specified parameter.
8340005B	6001	Invalid arm number	3	Operation was performed with invalid arm number.	Check the specified parameter.
83404061	6001	Joint 1 : Invalid joint	3	The operation performed with invalid joint number.	Check the specified joint number.
83404062	6001	Joint 2 : Invalid joint	3	The operation performed with invalid joint number.	Check the specified joint number.
83404063	6001	Joint 3 : Invalid joint	3	The operation performed with invalid joint number.	Check the specified joint number.
83404064	6001	Joint 4 : Invalid joint	3	The operation performed with invalid joint number.	Check the specified joint number.
83404065	6001	Joint 5 : Invalid joint	3	The operation performed with invalid joint number.	Check the specified joint number.
83404066	6001	Joint 6 : Invalid joint	3	The operation performed with invalid joint number.	Check the specified joint number.
83404067	6001	Joint 7 : Invalid joint	3	The operation performed with invalid joint number.	Check the specified joint number.
83404068	6001	Joint 8 : Invalid joint	3	The operation performed with invalid joint number.	Check the specified joint number.
85400071	6182	Interrupt process delay 1	5	Failed to calculate Motor command value properly because the interrupt process was delayed.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
85400072	6182	Interrupt process delay 2	5	Failed to calculate motor command value properly because the interrupt process was delayed.	Please contact DENSO WAVE service with error number and error message.
85400073	6181	Servo process time over 1	5	Failed to process normally because Servo process was delayed.	Please contact DENSO WAVE service with error number and error message.
85400074	6181	Servo process time over 2	5	Servo process delay occurred and could not process normally.	Please contact DENSO WAVE service with error number and error message.
85400075	6181	Servo process time over 3	5	Failed to process normally because Servo process was delayed.	Please contact DENSO WAVE service with error number and error message.
85400076	6181	Servo process time over 4	5	Failed to process normally because Servo process was delayed.	Please contact DENSO WAVE service with error number and error message.
85400077	6181	Servo process time over 5	5	Failed to process normally because Servo process was delayed.	Please contact DENSO WAVE service with error number and error message.
85400078	6181	Servo process time over 6	5	Failed to process normally because Servo process was delayed.	Please contact DENSO WAVE service with error number and error message.
85400081		Update FPGA (Main)	5	Failed to communicate with FPGA normally because the FPGA version is old.	Update FPGA (Main).
85400082		Update FPGA (Sub)	5	Failed to communicate with FPGA normally because the FPGA version is old.	Update FPGA (Sub).
85400083		Power supply unit software version error	5	Failed to communicate with the power unit normally because the power supply software version is old.	Please contact DENSO WAVE service with error number and error message.
85400084		Failed to erase Flash sector	5	Failed to erase FLASH sector while update FLASH.	Please contact DENSO WAVE service with error number and error message.
85400085		Flash access timeout error	5	FLASH access timeout occurred.	Please contact DENSO WAVE service with error number and error message.
85400086		Flash access mode change timeout error	5	FLASH access mode change timeout occurred.	Please contact DENSO WAVE service with error number and error message.
85400087		Flash read access timeout error	5	FLASH read access timeout occurred.	Please contact DENSO WAVE service with error number and error message.
85400088		Flash write access timeout error	5	FLASH write access timeout occurred.	Please contact DENSO WAVE service with error number and error message.
85400089		Flash write crc error	5	FLASH write data is wrong crc.	Please contact DENSO WAVE service with error number and error message.
8540008A		Flash write range error	5	FLASH write data range is wrong.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
8540008B		Flash erase timeout error	5	FLASH erase access timeout pccirred while update FLASH.	Please contact DENSO WAVE service with error number and error message.
8540008C		Flash read error	5	FLASH read access error occurred.	Please contact DENSO WAVE service with error number and error message.
8540008D		Flash write error	5	FLASH write access error occurred.	Please contact DENSO WAVE service with error number and error message.
8540008E		Flash access error	5	FLASH access error occurred.	Please contact DENSO WAVE service with error number and error message.
8540008F		Flash access mode change error	5	FLASH access mode change error occurred.	Please contact DENSO WAVE service with error number and error message.
80400091		Reboot the controller	0	Reboot the robot to activate the changed parameters.	Reboot robot controller.
85400092		The operation cannot be executed while power supply error occurs.	5	Tried to execute a command that is not executable while power failure occurs.	Reboot robot controller.
854000F0		Fatal error occurred.	5	Fatal error occurred.	Please contact DENSO WAVE service with error number and error message.
854000F1		Since the fatal error occurred, the robot controller was rebooted.	5	Because the fatal error occurred, the robot controller was rebooted.	Please contact DENSO WAVE service with error number and error message.
85400101	602B	Motor power ON failure (CON)	5	Failed to turn ON motor.	Please contact DENSO WAVE service with error number and error message.
85400102	602B	Motor power ON failure (ONREJ)	5	Failed to turn ON motor.	Please contact DENSO WAVE service with error number and error message.
85400103	602A	Motor power ON failure (ONTO)	5	Failed to turn ON motor.	Please contact DENSO WAVE service with error number and error message.
85400104	602B	Motor power ON failure (CHKREJ)	5	Failed to turn ON motor.	Please contact DENSO WAVE service with error number and error message.
85400105	602A	Motor power ON failure (CHKTO)	5	Failed to turn ON motor.	Please contact DENSO WAVE service with error number and error message.
85400106	602B	Motor power ON failure (EXT)	5	Failed to turn ON motor.	Please contact DENSO WAVE service with error number and error message.
85400109	602D	Motor power OFF failure (OFFREJ)	5	Failed to turn OFF motor.	Please contact DENSO WAVE service with error number and error message.
8540010A	602C	Motor power OFF failure (OFFTO)	5	Failed to turn OFF motor.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
8540010B	602D	Motor power OFF failure (CHKREJ)	5	Failed to turn OFF motor.	Please contact DENSO WAVE service with error number and error message.
8540010C	602C	Motor power OFF failure (CHKTO)	5	Failed to turn OFF motor.	Please contact DENSO WAVE service with error number and error message.
8540010D	602D	Motor power OFF failure (CON)	5	Failed to turn OFF motor.	Please contact DENSO WAVE service with error number and error message.
8540010E	602D	Motor power OFF failure (EXT)	5	Failed to turn OFF motor.	Please contact DENSO WAVE service with error number and error message.
85400111		Failed to notice boot completion to power supply unit. (REJ)	5	Failed to notice boot completion to power supply unit.	Please contact DENSO WAVE service with error number and error message.
85400112		Failed to notice boot completion to power supply unit. (TO)	5	Failed to notice boot completion to power supply unit.	Please contact DENSO WAVE service with error number and error message.
84400113		Failed to acquire power supply unit software version. (REJ)	4	Failed to acquire power supply unit software version.	Please contact DENSO WAVE service with error number and error message.
84400114		Failed to acquire power supply unit software version. (TO)	4	Failed to acquire power supply unit software version.	Please contact DENSO WAVE service with error number and error message.
84400115		Failed to acquire power supply unit software version. (REJ)	4	Failed to acquire power supply unit software version.	Please contact DENSO WAVE service with error number and error message.
84400116		Failed to acquire power supply unit software version. (TO)	4	Failed to acquire power supply unit software version.	Please contact DENSO WAVE service with error number and error message.
84400117		Failed to acquire AC input voltage. (REJ)	4	Failed to acquire AC input voltage.	Please contact DENSO WAVE service with error number and error message.
84400118		Failed to acquire AC input voltage. (TO)	4	Failed to acquire AC input voltage.	Please contact DENSO WAVE service with error number and error message.
8540011A		Communication to power supply unit is disconnected (REJ)	5	Communication to power supply unit is disconnected.	Please contact DENSO WAVE service with error number and error message.
8540011B		Communication to power supply unit is disconnected (TO)	5	Communication to power supply unit is disconnected.	Please contact DENSO WAVE service with error number and error message.
8540011C		Failed to turn ON I/O internal power supply (REJ)	5	Failed to turn ON I/O internal power supply.	Please contact DENSO WAVE service with error number and error message.
8540011D		Failed to turn ON I/O internal power supply (TO)	5	Failed to turn ON I/O internal power supply.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
85400121		MotorBUS-FET failure (FO)	5	Power supply CPU detected one of the following conditions. - Low-side FET open failure - High-side FET short-circuit failure - Regeneration FET short-circuit failure - Dynamic brake FET short-circuit failure	Please contact DENSO WAVE service with error number and error message.
85400122		MotorBUS-FET failure (WDT)	5	Power supply CPU detected one of the following conditions. - Low-side FET open failure - High-side FET short-circuit failure - Regeneration FET short-circuit failure - Dynamic brake FET short-circuit failure	Please contact DENSO WAVE service with error number and error message.
85400123		MotorBUS-FET failure (PRS)	5	Power supply CPU detected one of the following conditions. - Low-side FET open failure - High-side FET short-circuit failure - Regeneration FET short-circuit failure - Dynamic brake FET short-circuit failure	Please contact DENSO WAVE service with error number and error message.
85400124		MotorBUS-FET failure (MBO)	5	Power supply CPU detected one of the following conditions. - Low-side FET open failure - High-side FET short-circuit failure - Regeneration FET short-circuit failure - Dynamic brake FET short-circuit failure	Please contact DENSO WAVE service with error number and error message.
85400130		AC input circuit error	5	Power supply unit detected AC input circuit error.	Please contact DENSO WAVE service with error number and error message.
85400131		Failed to turn ON contactor (EXT)	5	Failed to turn ON contactor.	Please contact DENSO WAVE service with error number and error message.
85400132		Failed to turn ON contactor (AF)	5	Failed to turn ON contactor.	Please contact DENSO WAVE service with error number and error message.
85400134		Failed to turn ON contactor (AE)	5	Failed to turn ON contactor.	Please contact DENSO WAVE service with error number and error message.
84400135		Failed to turn ON contactor (EMG)	4	Failed to turn ON contactor.	Please contact DENSO WAVE service with error number and error message.
84400136		Failed to turn ON contactor (IEM)	4	Failed to turn ON contactor.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
84400137		Failed to turn ON contactor (PRT)	4	Failed to turn ON contactor.	Please contact DENSO WAVE service with error number and error message.
84400138		Failed to turn ON contactor (AEN)	4	Failed to turn ON contactor.	Please contact DENSO WAVE service with error number and error message.
84400139		Failed to turn ON contactor (DMN)	4	Failed to turn ON contactor.	Please contact DENSO WAVE service with error number and error message.
8540013A		Failed to turn ON contactor (CPU)	5	Failed to turn ON contactor.	Please contact DENSO WAVE service with error number and error message.
8440013B		Failed to turn ON contactor (MODE)	4	Failed to turn ON contactor.	Please contact DENSO WAVE service with error number and error message.
8540013C		Failed to turn ON contactor (SAIO)	5	Failed to turn ON contactor.	Please contact DENSO WAVE service with error number and error message.
85400141		Failed to turn OFF contactor (AF)	5	Failed to turn OFF contactor.	Please contact DENSO WAVE service with error number and error message.
85400143		Failed to turn OFF contactor (AE)	5	Failed to turn OFF contactor.	Please contact DENSO WAVE service with error number and error message.
84400181		Data size transferred to the power supply unit is invalid.	4	Data size transferred to the power supply unit is invalid.	Please contact DENSO WAVE service with error number and error message.
84400182		Invalid power supply communication packet is received.	4	Invalid power supply communication packet is received.	Please contact DENSO WAVE service with error number and error message.
84400183		Failed to retry data transfer to power supply unit.	4	Failed to retry data transfer to power supply unit.	Please contact DENSO WAVE service with error number and error message.
84400184		Failed to retry data reception from power supply unit.	4	Failed to retry data reception from power supply unit.	Please contact DENSO WAVE service with error number and error message.
84400185		Received power supply communication packet from an invalid source	4	Received power supply communication packet from an invalid source	Please contact DENSO WAVE service with error number and error message.
84400186		Received power supply communication packet to an invalid destination	4	Received power supply communication packet to an invalid destination	Please contact DENSO WAVE service with error number and error message.
83400187		Boot completion notice has not been set to the power supply unit.	3	Boot completion notice has not been set to the power supply unit.	Please contact DENSO WAVE service with error number and error message.
83400188		Power supply unit communication aborted	3	Power supply unit communication aborted	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
83400189		Power supply unit communication timeout	3	Power supply unit communication timeout	Please contact DENSO WAVE service with error number and error message.
8340018A		Power supply unit communication failure	3	Power supply unit communication failure	Please contact DENSO WAVE service with error number and error message.
85400191	6102	Power supply unit failure	5	Power supply unit failure	Please contact DENSO WAVE service with error number and error message.
85400192		Power supply watchdog timer error.	5	Power supply process stopped.	Please contact DENSO WAVE service with error number and error message.
854001A1		Abnormal AC input voltage	5	Power supply unit operation stop detected.	Please contact DENSO WAVE service with error number and error message.
834001A2		This robot type does not support AC100V input operation.	3	You are going to run a robot with 100V power supply but it is not designed for 100V operation.	Connect robot controller to AC200V power supply.
834001A3		You cannot turn ON motor power with AC100V input	3	You are going to run a robot with 100V power supply but it is not designed for 100V operation.	Connect robot controller to AC200V power supply.
834001A4		This robot controller does not support AC100V input.	3	This robot controller does not support 100V power supply operation.	Connect robot controller to AC200V power supply.
834001B1		This robot controller does not support logging function.	3	This robot controller does not support power supply log function.	Disable power supply log.
834001C1		This robot controller does not support extended-joint function.	3	This robot controller does not support extended-joint function. If four driver unit boards are installed in this controller, the teach pendant may not display.	Please contact DENSO WAVE service with error number and error message.
83400300		I/O Failure	3	I/O access failure occurred.	Please contact DENSO WAVE service with error number and error message.
85400301		I/O watchdog timer error	5	I/O process is stopped.	Please contact DENSO WAVE service with error number and error message.
85400310		Ch01:Mini I/O output short-circuited	5	Mini I/O ch1 output is short-circuited.	Check the Mini I/O ch1 wiring
85400311		Ch02:Mini I/O output short-circuited	5	Mini I/O ch2 output is short-circuited.	Check the Mini I/O ch2 wiring
85400312		Ch03:Mini I/O output short-circuited	5	Mini I/O ch3 output is short-circuited.	Check the Mini I/O ch3 wiring
85400313		Ch04:Mini I/O output short-circuited	5	Mini I/O ch4 output is short-circuited.	Check the Mini I/O ch4 wiring
85400314		Ch05:Mini I/O output short-circuited	5	Mini I/O ch5 output is short-circuited.	Check the Mini I/O ch5 wiring

Code	RC7 Code	Message	Level	Description	Remedy
85400315		Ch06:Mini I/O output short-circuited	5	Mini I/O ch6 output is short-circuited.	Check the Mini I/O ch6 wiring
85400316		Ch07:Mini I/O output short-circuited	5	Mini I/O ch7 output is short-circuited.	Check the Mini I/O ch7 wiring
85400317		Ch08:Mini I/O output short-circuited	5	Mini I/O ch8 output is short-circuited.	Check the Mini I/O ch8 wiring
85400318		Ch09:Mini I/O output short-circuited	5	Mini I/O ch9 output is short-circuited.	Check the Mini I/O ch9 wiring
85400319		Ch10:Mini I/O output short-circuited	5	Mini I/O ch10 output is short-circuited.	Check the Mini I/O ch10 wiring
8540031A		Ch11:Mini I/O output short-circuited	5	Mini I/O ch11 output is short-circuited.	Check the Mini I/O ch11 wiring
8540031B		Ch12:Mini I/O output short-circuited	5	Mini I/O ch12 output is short-circuited.	Check the Mini I/O ch12 wiring
8540031C		Ch13:Mini I/O output short-circuited	5	Mini I/O ch13 output is short-circuited.	Check the Mini I/O ch13 wiring
8540031D		Ch14:Mini I/O output short-circuited	5	Mini I/O ch14 output is short-circuited.	Check the Mini I/O ch14 wiring
8540031E		Ch15:Mini I/O output short-circuited	5	Mini I/O ch15 output is short-circuited.	Check the Mini I/O ch15 wiring
8540031F		Ch16:Mini I/O output short-circuited	5	Mini I/O ch16 output is short-circuited.	Check the Mini I/O ch16 wiring
85400320		Ch01:Hand I/O output short-circuited	5	Hand I/O ch1 output is short-circuited.	Check the Hand I/O ch1 wiring
85400321		Ch02:Hand I/O output short-circuited	5	Hand I/O ch2 output is short-circuited.	Check the Hand I/O ch2 wiring
85400322		Ch03:Hand I/O output short-circuited	5	Hand I/O ch3 output is short-circuited.	Check the Hand I/O ch3 wiring
85400323		Ch04:Hand I/O output short-circuited	5	Hand I/O ch4 output is short-circuited.	Check the Hand I/O ch4 wiring
85400324		Ch05:Hand I/O output short-circuited	5	Hand I/O ch5 output is short-circuited.	Check the Hand I/O ch5 wiring
85400325		Ch06:Hand I/O output short-circuited	5	Hand I/O ch6 output is short-circuited.	Check the Hand I/O ch6 wiring
85400326		Ch07:Hand I/O output short-circuited	5	Hand I/O ch7 output is short-circuited.	Check the Hand I/O ch7 wiring

Code	RC7 Code	Message	Level	Description	Remedy
85400327		Ch08:Hand I/O output short-circuited	5	Hand I/O ch8 output is short-circuited.	Check the Hand I/O ch8 wiring
85400330		I/O internal power supply 24V fuse blown	5	I/O internal power supply 24V fuse blow is detected.	Check the I/O power supply wiring
85400331		I/O internal power supply 0V fuse blown	5	I/O internal power supply 0V fuse blow is detected.	Check the I/O power supply wiring
85400332		Mini I/O power supply 24V fuse blown	5	Mini I/O power supply 24V fuse blow is detected.	Check the I/O power supply wiring
85400333		Mini I/O power supply 0V fuse blown	5	Mini I/O power supply 0V fuse blow is detected.	Check the I/O power supply wiring
85400334		Hand I/O power supply 24V fuse blown	5	Hand I/O power supply 24V fuse blow is detected.	Check the I/O power supply wiring
85400335		Hand I/O power supply 0V fuse blown	5	Hand I/O power supply 0V fuse blow is detected.	Check the I/O power supply wiring
85400336		I/O external power supply is connected in reverse polarity.	5	24V and GND input of I/O external power supply is connected inversely.	Check the I/O external power supply wiring
85400337		I/O internal power supply is specified, but external power is supplied.	5	This controller is configured to I/O internal power supply, and cannot get external I/O power supply.	Change the controller setting for the external I/O power supply or check the I/O power supply wiring.
80400338		I/O external power supply is specified, but external power is not supplied.	0	This controller is configured to I/O external power supply. External power supply is required to use I/O functions.	Change the controller setting for the internal I/O power supply, or check the I/O power supply wiring.

Code	RC7 Code	Message	Level	Description	Remedy
85400339		No output voltage from I/O internal power supply	5	I/O internal power supply output has stopped.	Make sure that the signal lines (see below) of +24V and +0V on Mini I/O are not shorted; if so, repair the short-circuit before using. < Signal lines of +24V > - External Emergency Stop (input) - Enable Auto (input) - Protective Stop (input) - DC power output +24V < Signal lines of +0V > - DC power output 0V - Case of Mini I/O connecter If the problem cannot be repaired, please contact DENSO WAVE service with error number and error message.
8440033A		I/O external power supply is stopped.	4	I/O external power supply error is detected.	Check the the external I/O power supply wiring.
854003C1		Option device power supply fuse blown	5	Option device power supply fuse blow is detected.	Check the extended-joint unit and/or the fieldnet box wiring. If the problem cannot be repaired, please contact DENSO WAVE service with error number and error message.
854003C2		LED power supply fuse blown	5	LED power supply fuse blow is detected.	Please contact DENSO WAVE service with error number and error message.
84400401	6139	Driver unit 1 temperature error	4	Driver unit temperature rose, and temperature error is detected.	Reduce the speed, acceleration and decelaration of the robot, or change the controller position to emit its heat more effectively.
84400402	6139	Driver unit 2 temperature error	4	Driver unit temperature rose, and temperature error is detected.	Reduce the speed, acceleration and decelaration of the robot, or change the controller position to emit its heat more effectively.
84400403	6139	Driver unit 3 temperature error	4	Driver unit temperature rose, and temperature error is detected.	Reduce the speed, acceleration and decelaration of the robot, or change the controller position to emit its heat more effectively.

Code	RC7 Code	Message	Level	Description	Remedy
84400404	6139	Driver unit 4 temperature error	4	Driver unit temperature rose, and temperature error is detected.	Reduce the speed, acceleration and decelaration of the robot, or change the controller position to emit its heat more effectively.
80400409		Driver unit 1 temperature warning	0	Driver unit temperature rose, and temperature warning is detected.	Reduce the speed, acceleration and decelaration of the robot, or change the controller position to emit its heat more effectively.
8040040A		Driver unit 2 temperature warning	0	Driver unit temperature rose, and temperature warning is detected.	Reduce the speed, acceleration and decelaration of the robot, or change the controller position to emit its heat more effectively.
8040040B		Driver unit 3 temperature warning	0	Driver unit temperature rose, and temperature warning is detected.	Reduce the speed, acceleration and decelaration of the robot, or change the controller position to emit its heat more effectively.
8040040C		Driver unit 4 temperature warning	0	Driver unit temperature rose, and temperature warning is detected.	Reduce the speed, acceleration and decelaration of the robot, or change the controller position to emit its heat more effectively.
84400411		Driver unit capacity has not been detected.	4	Cannot detect power module capacity.	Please contact DENSO WAVE service with error number and error message.
85400412		Lower arm switch of robot brake broke down	5	Negative power supply side switch of robot brake broke down.	Please contact DENSO WAVE service with error number and error message.
81400413		Internal battery warning	1	Controller internal backup battery voltage lowered because of lifetime.	Check the internal battery in the controller.
84400414		UL lamp fuse blown	4	UL lamp fuse blow is detected.	Inspect the UL lamp fuse.
85400415		UL brake fuse blown	5	UL brake fuse blow is detected.	Inspect the UL brake fuse.
85400416		Robot brake broke down, but failed to query trouble point.	5	Robot brake broke down, but failed to detect trouble point, because failed to query trouble point.	Please contact DENSO WAVE service with error number and error message.
85400417		Main robot brake lock failure	5	Main robot brake breakdown is detected when brake lock.	Please contact DENSO WAVE service with error number and error message.
85400418		Main robot brake release failure	5	Main robot brake breakdown is detected when brake release.	Please contact DENSO WAVE service with error number and error message.
85400421		Fan1 stopped.	5	FAN1 is stopped.	Please contact DENSO WAVE service with error number and error message.
85400422		Fan2 stopped.	5	FAN2 is stopped.	Please contact DENSO WAVE service with error number and error message.
85400423		Fan3 stopped.	5	FAN3 is stopped.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
85400424		Fan4 stopped.	5	FAN4 is stopped.	Please contact DENSO WAVE service with error number and error message.
85400425		Fan5 stopped.	5	FAN5 is stopped.	Please contact DENSO WAVE service with error number and error message.
85400426		Fan6 stopped.	5	FAN6 is stopped.	Please contact DENSO WAVE service with error number and error message.
85400427		Fan7 stopped.	5	FAN7 is stopped.	Please contact DENSO WAVE service with error number and error message.
81400431		Fan1 life span warning	1	FAN1 rotation slows because of lifetime	Please contact DENSO WAVE service with error number and error message.
81400432		Fan2 life span warning	1	FAN2 rotation slows because of lifetime	Please contact DENSO WAVE service with error number and error message.
81400433		Fan3 life span warning	1	FAN3 rotation slows because of lifetime	Please contact DENSO WAVE service with error number and error message.
81400434		Fan4 life span warning	1	FAN4 rotation slows because of lifetime	Please contact DENSO WAVE service with error number and error message.
81400435		Fan5 life span warning	1	FAN5 rotation slows because of lifetime	Please contact DENSO WAVE service with error number and error message.
81400436		Fan6 life span warning	1	FAN6 rotation slows because of lifetime	Please contact DENSO WAVE service with error number and error message.
81400437		Fan7 life span warning	1	FAN7 rotation slows because of lifetime	Please contact DENSO WAVE service with error number and error message.
85400441		Driver unit 1 board information abnormal	5	Failed to find the capacity of driver unit board and extension board installation conditions (such as power output board) because the driver unit board information is incorrect.	Please contact DENSO WAVE service with error number and error message.
85400442		Driver unit 2 board information abnormal	5	Failed to find the capacity of driver unit board and extension board installation conditions (such as power output board) because the driver unit board information is incorrect.	Please contact DENSO WAVE service with error number and error message.
85400443		Driver unit 3 board information abnormal	5	Failed to find the capacity of driver unit board and extension board installation conditions (such as power output board) because the driver unit board information is incorrect.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
85400444		Driver unit 4 board information abnormal	5	Failed to find the capacity of driver unit board and extension board installation conditions (such as power output board) because the driver unit board information is incorrect.	Please contact DENSO WAVE service with error number and error message.
84400451		Brake release by external brake release switch.	4	Brake release by external brake release switch. For safety, cancel the brake release operation from controller.	When you don't use external brake release switch, please contact DENSO WAVE service with error number and error message.
84400452		Brake release by external brake release switch.	4	Brake release by external brake release switch. For safety, controller turns off motor.	When you don't use external brake release switch, please contact DENSO WAVE service with error number and error message.
83400453		When brake release by external brake release switch, you cannot release brake by controller.	3	For safety, when brake release by external brake release switch, you cannot release brake by controller.	When you don't use external brake release switch, please contact DENSO WAVE service with error number and error message.
83400454		When brake release by external brake release switch, you cannot turn motor on.	3	For safety, when brake release by external brake release switch, you cannot turn motor on.	When you don't use external brake release switch, please contact DENSO WAVE service with error number and error message.
83400455		External brake release switch circuit error.	3	External brake release switch circuit error is detected.	Please contact DENSO WAVE service with error number and error message.
84404411		J1:Driver unit fuse blown	4	Driver unit fuse blow is detected.	Check the driver unit fuse.
84404412		J2:Driver unit fuse blown	4	Driver unit fuse blow is detected.	Check the driver unit fuse.
84404413		J3:Driver unit fuse blown	4	Driver unit fuse blow is detected.	Check the driver unit fuse.
84404414		J4:Driver unit fuse blown	4	Driver unit fuse blow is detected.	Check the driver unit fuse.
84404415		J5:Driver unit fuse blown	4	Driver unit fuse blow is detected.	Check the driver unit fuse.
84404416		J6:Driver unit fuse blown	4	Driver unit fuse blow is detected.	Check the driver unit fuse.
84404417		J7:Driver unit fuse blown	4	Driver unit fuse blow is detected.	Check the driver unit fuse.
84404418		J8:Driver unit fuse blown	4	Driver unit fuse blow is detected.	Check the driver unit fuse.
84404421		J1:Driver unit capacity abnormal	4	The driver unit does not match the connected robot type.	Check the combination of the controller and the robot.
84404422		J2:Driver unit capacity abnormal	4	The driver unit does not match the connected robot type.	Check the combination of the controller and the robot.
84404423		J3:Driver unit capacity abnormal	4	The driver unit does not match the connected robot type.	Check the combination of the controller and the robot.
84404424		J4:Driver unit capacity abnormal	4	The driver unit does not match the connected robot type.	Check the combination of the controller and the robot.
84404425		J5:Driver unit capacity abnormal	4	The driver unit does not match the connected robot type.	Check the combination of the controller and the robot.

Code	RC7 Code	Message	Level	Description	Remedy
84404426		J6:Driver unit capacity abnormal	4	The driver unit does not match the connected robot type.	Check the combination of the controller and the robot.
84404427		J7:Driver unit capacity abnormal	4	The driver unit does not match the connected robot type.	Check the combination of the controller and the robot.
84404428		J8:Driver unit capacity abnormal	4	The driver unit does not match the connected robot type.	Check the combination of the controller and the robot.
84404431		J1:Driver unit Overcurrent (U-phase)	4	Driver unit detected overcurrent.	Reduce the robot speed, acceleration and decelaration
84404432		J2:Driver unit Overcurrent (U-phase)	4	Driver unit detected overcurrent.	Reduce the robot speed, acceleration and decelaration
84404433		J3:Driver unit Overcurrent (U-phase)	4	Driver unit detected overcurrent.	Reduce the robot speed, acceleration and decelaration
84404434		J4:Driver unit Overcurrent (U-phase)	4	Driver unit detected overcurrent.	Reduce the robot speed, acceleration and decelaration
84404435		J5:Driver unit Overcurrent (U-phase)	4	Driver unit detected overcurrent.	Reduce the robot speed, acceleration and decelaration
84404436		J6:Driver unit Overcurrent (U-phase)	4	Driver unit detected overcurrent.	Reduce the robot speed, acceleration and decelaration
84404437		J7:Driver unit Overcurrent (U-phase)	4	Driver unit detected overcurrent.	Reduce the robot speed, acceleration and decelaration
84404438		J8:Driver unit Overcurrent (U-phase)	4	Driver unit detected overcurrent.	Reduce the robot speed, acceleration and decelaration
84404441		J1:Driver unit Overcurrent (V-phase)	4	Driver unit detected overcurrent.	Reduce the robot speed, acceleration and decelaration
84404442		J2:Driver unit Overcurrent (V-phase)	4	Driver unit detected overcurrent.	Reduce the robot speed, acceleration and decelaration
84404443		J3:Driver unit Overcurrent (V-phase)	4	Driver unit detected overcurrent.	Reduce the robot speed, acceleration and decelaration
84404444		J4:Driver unit Overcurrent (V-phase)	4	Driver unit detected overcurrent.	Reduce the robot speed, acceleration and decelaration
84404445		J5:Driver unit Overcurrent (V-phase)	4	Driver unit detected overcurrent.	Reduce the robot speed, acceleration and decelaration
84404446		J6:Driver unit Overcurrent (V-phase)	4	Driver unit detected overcurrent.	Reduce the robot speed, acceleration and decelaration
84404447		J7:Driver unit Overcurrent (V-phase)	4	Driver unit detected overcurrent.	Reduce the robot speed, acceleration and decelaration

Code	RC7 Code	Message	Level	Description	Remedy
84404448		J8:Driver unit Overcurrent (V-phase)	4	Driver unit detected overcurrent.	Reduce the robot speed, acceleration and decelaration
85404451		J1:Driver unit abnormal	5	Driver unit detected an error.	Please contact DENSO WAVE service with error number and error message.
85404452		J2:Driver unit abnormal	5	Driver unit detected an error.	Please contact DENSO WAVE service with error number and error message.
85404453		J3:Driver unit abnormal	5	Driver unit detected an error.	Please contact DENSO WAVE service with error number and error message.
85404454		J4:Driver unit abnormal	5	Driver unit detected an error.	Please contact DENSO WAVE service with error number and error message.
85404455		J5:Driver unit abnormal	5	Driver unit detected an error.	Please contact DENSO WAVE service with error number and error message.
85404456		J6:Driver unit abnormal	5	Driver unit detected an error.	Please contact DENSO WAVE service with error number and error message.
85404457		J7:Driver unit abnormal	5	Driver unit detected an error.	Please contact DENSO WAVE service with error number and error message.
85404458		J8:Driver unit abnormal	5	Driver unit detected an error.	Please contact DENSO WAVE service with error number and error message.
85404461		J1:Brake fuse blown	5	Brake fuse blow is detected.	Check the brake fuse.
85404462		J2:Brake fuse blown	5	Brake fuse blow is detected.	Check the brake fuse.
85404463		J3:Brake fuse blown	5	Brake fuse blow is detected.	Check the brake fuse.
85404464		J4:Brake fuse blown	5	Brake fuse blow is detected.	Check the brake fuse.
85404465		J5:Brake fuse blown	5	Brake fuse blow is detected.	Check the brake fuse.
85404466		J6:Brake fuse blown	5	Brake fuse blow is detected.	Check the brake fuse.
85404467		J7:Brake fuse blown	5	Brake fuse blow is detected.	Check the brake fuse.
85404468		J8:Brake fuse blown	5	Brake fuse blow is detected.	Check the brake fuse.
85404471		J1:Current offset abnormal (U-phase)	5	Current sensor zero current level failure	Please contact DENSO WAVE service with error number and error message.
85404472		J2:Current offset abnormal (U-phase)	5	Current sensor zero current level failure	Please contact DENSO WAVE service with error number and error message.
85404473		J3:Current offset abnormal (U-phase)	5	Current sensor zero current level failure	Please contact DENSO WAVE service with error number and error message.
85404474		J4:Current offset abnormal (U-phase)	5	Current sensor zero current level failure	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
85404475		J5:Current offset abnormal (U-phase)	5	Current sensor zero current level failure	Please contact DENSO WAVE service with error number and error message.
85404476		J6:Current offset abnormal (U-phase)	5	Current sensor zero current level failure	Please contact DENSO WAVE service with error number and error message.
85404477		J7:Current offset abnormal (U-phase)	5	Current sensor zero current level failure	Please contact DENSO WAVE service with error number and error message.
85404478		J8:Current offset abnormal (U-phase)	5	Current sensor zero current level failure	Please contact DENSO WAVE service with error number and error message.
85404481		J1:Current offset abnormal (V-phase)	5	Current sensor zero current level failure	Please contact DENSO WAVE service with error number and error message.
85404482		J2:Current offset abnormal (V-phase)	5	Current sensor zero current level failure	Please contact DENSO WAVE service with error number and error message.
85404483		J3:Current offset abnormal (V-phase)	5	Current sensor zero current level failure	Please contact DENSO WAVE service with error number and error message.
85404484		J4:Current offset abnormal (V-phase)	5	Current sensor zero current level failure	Please contact DENSO WAVE service with error number and error message.
85404485		J5:Current offset abnormal (V-phase)	5	Current sensor zero current level failure	Please contact DENSO WAVE service with error number and error message.
85404486		J6:Current offset abnormal (V-phase)	5	Current sensor zero current level failure	Please contact DENSO WAVE service with error number and error message.
85404487		J7:Current offset abnormal (V-phase)	5	Current sensor zero current level failure	Please contact DENSO WAVE service with error number and error message.
85404488		J8:Current offset abnormal (V-phase)	5	Current sensor zero current level failure	Please contact DENSO WAVE service with error number and error message.
85404491		J1:Robot brake lock failure	5	Robot brake breakdown is detected when brake lock.	Please contact DENSO WAVE service with error number and error message.
85404492		J2:Robot brake lock failure	5	Robot brake breakdown is detected when brake lock.	Please contact DENSO WAVE service with error number and error message.
85404493		J3:Robot brake lock failure	5	Robot brake breakdown is detected when brake lock.	Please contact DENSO WAVE service with error number and error message.
85404494		J4:Robot brake lock failure	5	Robot brake breakdown is detected when brake lock.	Please contact DENSO WAVE service with error number and error message.
85404495		J5:Robot brake lock failure	5	Robot brake breakdown is detected when brake lock.	Please contact DENSO WAVE service with error number and error message.
85404496		J6:Robot brake lock failure	5	Robot brake breakdown is detected when brake lock.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
85404497		J7:Robot brake lock failure	5	Robot brake breakdown is detected when brake lock.	Please contact DENSO WAVE service with error number and error message.
85404498		J8:Robot brake lock failure	5	Robot brake breakdown is detected when brake lock.	Please contact DENSO WAVE service with error number and error message.
854044A1		J1:Robot brake broke release failure	5	Robot brake breakdown is detected when brake release.	Please contact DENSO WAVE service with error number and error message.
854044A2		J2:Robot brake broke release failure	5	Robot brake breakdown is detected when brake release.	Please contact DENSO WAVE service with error number and error message.
854044A3		J3:Robot brake broke release failure	5	Robot brake breakdown is detected when brake release.	Please contact DENSO WAVE service with error number and error message.
854044A4		J4:Robot brake broke release failure	5	Robot brake breakdown is detected when brake release.	Please contact DENSO WAVE service with error number and error message.
854044A5		J5:Robot brake broke release failure	5	Robot brake breakdown is detected when brake release.	Please contact DENSO WAVE service with error number and error message.
854044A6		J6:Robot brake broke release failure	5	Robot brake breakdown is detected when brake release.	Please contact DENSO WAVE service with error number and error message.
854044A7		J7:Robot brake broke release failure	5	Robot brake breakdown is detected when brake release.	Please contact DENSO WAVE service with error number and error message.
854044A8		J8:Robot brake broke release failure	5	Robot brake breakdown is detected when brake release.	Please contact DENSO WAVE service with error number and error message.
844044B1		J1:Excessive current error	4	Current error between command and detection exceeds predetermined limit.	Reduce robot speed, acceleration and decelaration. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844044B2		J2:Excessive current error	4	Current error between command and detection exceeds predetermined limit.	Reduce robot speed, acceleration and decelaration. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844044B3		J3:Excessive current error	4	Current error between command and detection exceeds predetermined limit.	Reduce robot speed, acceleration and decelaration. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844044B4		J4:Excessive current error	4	Current error between command and detection exceeds predetermined limit.	Reduce robot speed, acceleration and decelaration. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844044B5		J5:Excessive current error	4	Current error between command and detection exceeds predetermined limit.	Reduce robot speed, acceleration and decelaration. If the error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
844044B6		J6:Excessive current error	4	Current error between command and detection exceeds predetermined limit.	Reduce robot speed, acceleration and decelaration. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844044B7		J7:Excessive current error	4	Current error between command and detection exceeds predetermined limit.	Reduce robot speed, acceleration and decelaration. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844044B8		J8:Excessive current error	4	Current error between command and detection exceeds predetermined limit.	Reduce robot speed, acceleration and decelaration. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844044C1		J1:Excessive voltage command error	4	Voltage command exceeds predetermined limit.	Reduce robot speed, acceleration and decelaration. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844044C2		J2:Excessive voltage command error	4	Voltage command exceeds predetermined limit.	Reduce robot speed, acceleration and decelaration. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844044C3		J3:Excessive voltage command error	4	Voltage command exceeds predetermined limit.	Reduce robot speed, acceleration and decelaration. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844044C4		J4:Excessive voltage command error	4	Voltage command exceeds predetermined limit.	Reduce robot speed, acceleration and decelaration. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844044C5		J5:Excessive voltage command error	4	Voltage command exceeds predetermined limit.	Reduce robot speed, acceleration and decelaration. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844044C6		J6:Excessive voltage command error	4	Voltage command exceeds predetermined limit.	Reduce robot speed, acceleration and decelaration. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844044C7		J7:Excessive voltage command error	4	Voltage command exceeds predetermined limit.	Reduce robot speed, acceleration and decelaration. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844044C8		J8:Excessive voltage command error	4	Voltage command exceeds predetermined limit.	Reduce robot speed, acceleration and decelaration. If the error still occurs, please contact DENSO WAVE service with error number and error message.
85400501	6181	Servo calculation time over	5	Servo calculation time exceeds predetermined limit.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
84400502		Servo command buffer full	4	Command data transfer internal buffer overflow occurred.	Please contact DENSO WAVE service with error number and error message.
84400503	671A	Command value communication delay	4	Command data send internal buffer underflow occurred.	In the case of use spline interpolation (Move S) , insert Delay or reduce interpolation points. If the error still occurs, please contact DENSO WAVE service with error number and error message.
82400504		Servo log buffer full	2	Servo log internal buffer overflow occurred.	Please contact DENSO WAVE service with error number and error message.
82400505		DETECT buffer full	2	DETECT internal buffer overflow occurred.	Please contact DENSO WAVE service with error number and error message.
80400506		Regeneration was not released when brake release	0	Regeneration was not released when brake release. Brake is released, but you feel heavy when moving by hand because regeneration is active.	Update FPGA (Main).
85400507		Initialization failed. Reboot the robot controller.	5	Initialization failed. Reboot the robot controller.	Reboot the robot controller. If the error still occurs, please contact DENSO WAVE service.
84404511		J1:Excessive position error	4	Position error that exceeds the error allowance is detected.	Check the cable between a robot controller and a robot wiring. Disable the excessive position error detection function when the maximum position error setting is changed, or when the motor current limit function is activated.
84404512		J2:Excessive position error	4	Position error that exceeds the error allowance is detected.	Check the cable between a robot controller and a robot wiring. Disable the excessive position error detection function when the maximum position error setting is changed, or when the motor current limit function is activated.
84404513		J3:Excessive position error	4	Position error that exceeds the error allowance is detected.	Check the cable between a robot controller and a robot wiring. Disable the excessive position error detection function when the maximum position error setting is changed, or when the motor current limit function is activated.

Code	RC7 Code	Message	Level	Description	Remedy
84404514		J4:Excessive position error	4	Position error that exceeds the error allowance is detected.	Check the cable between a robot controller and a robot wiring. Disable the excessive position error detection function when the maximum position error setting is changed, or when the motor current limit function is activated.
84404515		J5:Excessive position error	4	Position error that exceeds the error allowance is detected.	Check the cable between a robot controller and a robot wiring. Disable the excessive position error detection function when the maximum position error setting is changed, or when the motor current limit function is activated.
84404516		J6:Excessive position error	4	Position error that exceeds the error allowance is detected.	Check the cable between a robot controller and a robot wiring. Disable the excessive position error detection function when the maximum position error setting is changed, or when the motor current limit function is activated.
84404517		J7:Excessive position error	4	Position error that exceeds the error allowance is detected.	Check the cable between a robot controller and a robot wiring. Disable the excessive position error detection function when the maximum position error setting is changed, or when the motor current limit function is activated.
84404518		J8:Excessive position error	4	Position error that exceeds the error allowance is detected.	Check the cable between a robot controller and a robot wiring. Disable the excessive position error detection function when the maximum position error setting is changed, or when the motor current limit function is activated.
84404521		J1:Excessive position error	4	Position error that exceeds the error allowance is detected while the robot is stopped.	Check the the cable between a robot controller and a robot wiring. Disable the excessive position error detection function when the maximum position error setting is changed, or when the motor current limit function is activated.

Code	RC7 Code	Message	Level	Description	Remedy
84404522		J2:Excessive position error	4	Position error that exceeds the error allowance is detected while the robot is stopped.	Check the the cable between a robot controller and a robot wiring. Disable the excessive position error detection function when the maximum position error setting is changed, or when the motor current limit function is activated.
84404523		J3:Excessive position error	4	Position error that exceeds the error allowance is detected while the robot is stopped.	Check the the cable between a robot controller and a robot wiring. Disable the excessive position error detection function when the maximum position error setting is changed, or when the motor current limit function is activated.
84404524		J4:Excessive position error	4	Position error that exceeds the error allowance is detected while the robot is stopped.	Check the the cable between a robot controller and a robot wiring. Disable the excessive position error detection function when the maximum position error setting is changed, or when the motor current limit function is activated.
84404525		J5:Excessive position error	4	Position error that exceeds the error allowance is detected while the robot is stopped.	Check the the cable between a robot controller and a robot wiring. Disable the excessive position error detection function when the maximum position error setting is changed, or when the motor current limit function is activated.
84404526		J6:Excessive position error	4	Position error that exceeds the error allowance is detected while the robot is stopped.	Check the the cable between a robot controller and a robot wiring. Disable the excessive position error detection function when the maximum position error setting is changed, or when the motor current limit function is activated.
84404527		J7:Excessive position error	4	Position error that exceeds the error allowance is detected while the robot is stopped.	Check the the cable between a robot controller and a robot wiring. Disable the excessive position error detection function when the maximum position error setting is changed, or when the motor current limit function is activated.

Code	RC7 Code	Message	Level	Description	Remedy
84404528		J8:Excessive position error	4	Position error that exceeds the error allowance is detected while the robot is stopped.	Check the the cable between a robot controller and a robot wiring. Disable the excessive position error detection function when the maximum position error setting is changed, or when the motor current limit function is activated.
84404531		J1:Speed command limit over	4	Speed instruction that exceeds the speed limit is detected.	Reduce robot speed.
84404532		J2:Speed command limit over	4	Speed instruction that exceeds the speed limit is detected.	Reduce robot speed.
84404533		J3:Speed command limit over	4	Speed instruction that exceeds the speed limit is detected.	Reduce robot speed.
84404534		J4:Speed command limit over	4	Speed instruction that exceeds the speed limit is detected.	Reduce robot speed.
84404535		J5:Speed command limit over	4	Speed instruction that exceeds the speed limit is detected.	Reduce robot speed.
84404536		J6:Speed command limit over	4	Speed instruction that exceeds the speed limit is detected.	Reduce robot speed.
84404537		J7:Speed command limit over	4	Speed instruction that exceeds the speed limit is detected.	Reduce robot speed.
84404538		J8:Speed command limit over	4	Speed instruction that exceeds the speed limit is detected.	Reduce robot speed.
84404541		J1:Acceleration command limit over	4	Acceleration instruction that exceeds the acceleration limit is detected.	Reduce robot acceleration and decelaration.
84404542		J2:Acceleration command limit over	4	Acceleration instruction that exceeds the acceleration limit is detected.	Reduce robot acceleration and decelaration.
84404543		J3:Acceleration command limit over	4	Acceleration instruction that exceeds the acceleration limit is detected.	Reduce robot acceleration and decelaration.
84404544		J4:Acceleration command limit over	4	Acceleration instruction that exceeds the acceleration limit is detected.	Reduce robot acceleration and decelaration.
84404545		J5:Acceleration command limit over	4	Acceleration instruction that exceeds the acceleration limit is detected.	Reduce robot acceleration and decelaration.
84404546		J6:Acceleration command limit over	4	Acceleration instruction that exceeds the acceleration limit is detected.	Reduce robot acceleration and decelaration.
84404547		J7:Acceleration command limit over	4	Acceleration instruction that exceeds the acceleration limit is detected.	Reduce robot acceleration and decelaration.

Code	RC7 Code	Message	Level	Description	Remedy
84404548		J8:Acceleration command limit over	4	Acceleration instruction that exceeds the acceleration limit is detected.	Reduce robot acceleration and deceleration.
84404551		J1:Motor speed limit over	4	Encoder detected the speed that exceeds the speed limit.	Reduce robot speed.
84404552		J2:Motor speed limit over	4	Encoder detected the speed that exceeds the speed limit.	Reduce robot speed.
84404553		J3:Motor speed limit over	4	Encoder detected the speed that exceeds the speed limit.	Reduce robot speed.
84404554		J4:Motor speed limit over	4	Encoder detected the speed that exceeds the speed limit.	Reduce robot speed.
84404555		J5:Motor speed limit over	4	Encoder detected the speed that exceeds the speed limit.	Reduce robot speed.
84404556		J6:Motor speed limit over	4	Encoder detected the speed that exceeds the speed limit.	Reduce robot speed.
84404557		J7:Motor speed limit over	4	Encoder detected the speed that exceeds the speed limit.	Reduce robot speed.
84404558		J8:Motor speed limit over	4	Encoder detected the speed that exceeds the speed limit.	Reduce robot speed.
84404561		J1:Motor acceleration limit over	4	Encoder detected the acceleration that exceeds the acceleration limit.	Reduce robot acceleration and deceleration.
84404562		J2:Motor acceleration limit over	4	Encoder detected the acceleration that exceeds the acceleration limit.	Reduce robot acceleration and deceleration.
84404563		J3:Motor acceleration limit over	4	Encoder detected the acceleration that exceeds the acceleration limit.	Reduce robot acceleration and deceleration.
84404564		J4:Motor acceleration limit over	4	Encoder detected the acceleration that exceeds the acceleration limit.	Reduce robot acceleration and deceleration.
84404565		J5:Motor acceleration limit over	4	Encoder detected the acceleration that exceeds the acceleration limit.	Reduce robot acceleration and deceleration.
84404566		J6:Motor acceleration limit over	4	Encoder detected the acceleration that exceeds the acceleration limit.	Reduce robot acceleration and deceleration.
84404567		J7:Motor acceleration limit over	4	Encoder detected the acceleration that exceeds the acceleration limit.	Reduce robot acceleration and deceleration.
84404568		J8:Motor acceleration limit over	4	Encoder detected the acceleration that exceeds the acceleration limit.	Reduce robot acceleration and deceleration.
84404571		J1:Motor Overcurrent	4	Motor current that exceeds the current limit is detected.	Reduce robot speed, acceleration and deceleration.

Code	RC7 Code	Message	Level	Description	Remedy
84404572		J2:Motor Overcurrent	4	Motor current that exceeds the current limit is detected.	Reduce robot speed, acceleration and decelaration.
84404573		J3:Motor Overcurrent	4	Motor current that exceeds the current limit is detected.	Reduce robot speed, acceleration and decelaration.
84404574		J4:Motor Overcurrent	4	Motor current that exceeds the current limit is detected.	Reduce robot speed, acceleration and decelaration.
84404575		J5:Motor Overcurrent	4	Motor current that exceeds the current limit is detected.	Reduce robot speed, acceleration and decelaration.
84404576		J6:Motor Overcurrent	4	Motor current that exceeds the current limit is detected.	Reduce robot speed, acceleration and decelaration.
84404577		J7:Motor Overcurrent	4	Motor current that exceeds the current limit is detected.	Reduce robot speed, acceleration and decelaration.
84404578		J8:Motor Overcurrent	4	Motor current that exceeds the current limit is detected.	Reduce robot speed, acceleration and decelaration.
82404581		J1:Arm fall detected while brake is released.	2	Arm-fall was detected while the brake is released.	Hold robot arm to prevent falling while brake is released.
82404582		J2:Arm fall detected while brake is released.	2	Arm-fall was detected while the brake is released.	Hold robot arm to prevent falling while brake is released.
82404583		J3:Arm fall detected while brake is released.	2	Arm-fall was detected while the brake is released.	Hold robot arm to prevent falling while brake is released.
82404584		J4:Arm fall detected while brake is released.	2	Arm-fall was detected while the brake is released.	Hold robot arm to prevent falling while brake is released.
82404585		J5:Arm fall detected while brake is released.	2	Arm-fall was detected while the brake is released.	Hold robot arm to prevent falling while brake is released.
82404586		J6:Arm fall detected while brake is released.	2	Arm-fall was detected while the brake is released.	Hold robot arm to prevent falling while brake is released.
82404587		J7:Arm fall detected while brake is released.	2	Arm-fall was detected while the brake is released.	Hold robot arm to prevent falling while brake is released.
82404588		J8:Arm fall detected while brake is released.	2	Arm-fall was detected while the brake is released.	Hold robot arm to prevent falling while brake is released.
84400600	64FF	Unexpected encoder error	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
83400601		Encoder is not initialized	3	This operation is not available before the encoder initialization completed.	Complete encoder initialization and try again.
83400602		Encoder initializing	3	This operation is not available while the encoder initialization is processing	Complete encoder initialization and try again.

Code	RC7 Code	Message	Level	Description	Remedy
83400603		Encoder error occurs	3	This operation is not available when an encoder error occurs.	Clear error and try again.
83400604		Resetting encoder	3	This operation is not available while the encoder reset is processing	Complete encoder reset procedure and try again
83400605		Encoder accessing	3	This operation is not available while accessing encoder.	Complete accessing to encoder and try again.
83400606		Encoder processing timeout	3	Encoder operation timeout occurred.	Please contact DENSO WAVE service with error number and error message.
83400607		Invalid encoder ID	3	Invalid encoder ID was specified.	Check the specified encoder ID.
83400608		Unsupported encoder	3	The encoder connected to this robot does not support this function.	This robot does not support specified function.
84400609	64FD	Encoder EEPROM access failure	4	Failed to access encoder memory area.	Please contact DENSO WAVE service with error number and error message.
8440060A	64FD	Encoder EEPROM invalid address access	4	Tried to access illegal encoder memory address area.	Please contact DENSO WAVE service with error number and error message.
8440060B	64FD	Encoder EEPROM write protected area access	4	Tried to access write protected encoder memory area.	Please contact DENSO WAVE service with error number and error message.
8540060C		Failed to specify encoder format	5	Failed to set encoder communication format.	Please contact DENSO WAVE service with error number and error message.
8540060D		This robot controller does not support the encoder	5	The encoder which does not support this robot controller is connected.	Please contact DENSO WAVE service with error number and error message.
8540060E		Failed to change encoder mode	5	Failed to set encoder communication mode.	Check the encoder wirings and reboot the robot controller. If the error still occurs, please contact DENSO WAVE service with error number and error message.
85400610		Failed to access encoder	5	Failed to access dual arm control slave robot encoder because this robot controller does not support multi-kinematics slave robot encoder.	Update FPGA (Main).
85400611		Failed to set slave robot	5	Failed to set dual arm control slave robot.	Update FPGA (Mecha).
83400681		Encoder-hub data not received	3	Failed to receive data from encoder-hub.	Check the encoder-hub wiring.
83400682		Encoder-hub framing error	3	Failed to communicate with Encoder-hub	Check the encoder-hub wiring.
83400683		Encoder-hub CRC check error	3	Failed to communicate with Encoder-hub	Check the encoder-hub wiring.
83400684		Encoder-hub data transmitting timeout	3	Failed to send data to Encoder-hub.	Check the encoder-hub wiring.
83400685		Encoder-hub invalid received address	3	Failed to communicate with Encoder-hub	Check the encoder-hub wiring.

Code	RC7 Code	Message	Level	Description	Remedy
83400686		Encoder-hub is not connected	3	Failed to communicate Encoder-hub because Encoder-hub is not connected.	Check the encoder-hub wiring.
83400691		Encoder root cable communication error 1	3	Error occurred in the communication cable between a robot controller and an encoder-hub.	Check the encoder root cable and reboot the robot controller. If the error still occurs, please contact DENSO WAVE service with error number and error message.
83400692		Encoder root cable communication error 2	3	Error occurred in the communication cable between a robot controller and an encoder-hub.	Check the encoder root cable and reboot the robot controller. If the error still occurs, please contact DENSO WAVE service with error number and error message.
83400693		Encoder root cable communication error 3	3	Error occurred in the communication cable between a robot controller and an encoder-hub.	Check the encoder root cable and reboot the robot controller. If the error still occurs, please contact DENSO WAVE service with error number and error message.
83400694		Encoder root cable communication error 4	3	Error occurred in the communication cable between a robot controller and an encoder-hub.	Check the encoder root cable and reboot the robot controller. If the error still occurs, please contact DENSO WAVE service with error number and error message.
83400695		Encoder root cable communication error 5	3	Error occurred in the communication cable between a robot controller and an encoder-hub.	Check the encoder root cable and reboot the robot controller. If the error still occurs, please contact DENSO WAVE service with error number and error message.
83400696		Encoder root cable communication error 6	3	Error occurred in the communication cable between a robot controller and an encoder-hub.	Check the encoder root cable and reboot the robot controller. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854006B0		Backup alarm	5	Backup alarm	Replace encoder battery, reset the encoder and perform CALSET. If the error still occurs, please contact DENSO WAVE service with error number and error message.
854006B1		Encoder error	5	Encoder error	Replace encoder battery and perform CALSET. If the error still occurs, please contact DENSO WAVE service with error number and error message.
844006C0		Bit stuffing error	4	Bit stuffing error	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
844006C1		Bit monitor error	4	Bit monitor error	Please contact DENSO WAVE service with error number and error message.
844006C2		Recv error	4	Recv error	Please contact DENSO WAVE service with error number and error message.
844006C3		Send error	4	Send error	Please contact DENSO WAVE service with error number and error message.
84404601		J1:Unexpected encoder error	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404602		J2:Unexpected encoder error	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404603		J3:Unexpected encoder error	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404604		J4:Unexpected encoder error	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404605		J5:Unexpected encoder error	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404606		J6:Unexpected encoder error	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404607		J7:Unexpected encoder error	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404608		J8:Unexpected encoder error	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
83404611		ID1:Invalid encoder ID	3	Invalid encoder ID was specified.	Check the the specified encoder ID.
83404612		ID2:Invalid encoder ID	3	Invalid encoder ID was specified.	Check the the specified encoder ID.
83404613		ID3:Invalid encoder ID	3	Invalid encoder ID was specified.	Check the the specified encoder ID.
83404614		ID4:Invalid encoder ID	3	Invalid encoder ID was specified.	Check the the specified encoder ID.
83404615		ID5:Invalid encoder ID	3	Invalid encoder ID was specified.	Check the the specified encoder ID.
83404616		ID6:Invalid encoder ID	3	Invalid encoder ID was specified.	Check the the specified encoder ID.
83404617		ID7:Invalid encoder ID	3	Invalid encoder ID was specified.	Check the the specified encoder ID.
83404618		ID8:Invalid encoder ID	3	Invalid encoder ID was specified.	Check the the specified encoder ID.
84404621		J1:Encoder communication error	4	Failed to communicate to encoder.	Check the encoder wirings.
84404622		J2:Encoder communication error	4	Failed to communicate to encoder.	Check the encoder wirings.
84404623		J3:Encoder communication error	4	Failed to communicate to encoder.	Check the encoder wirings.
84404624		J4:Encoder communication error	4	Failed to communicate to encoder.	Check the encoder wirings.
84404625		J5:Encoder communication error	4	Failed to communicate to encoder.	Check the encoder wirings.

Code	RC7 Code	Message	Level	Description	Remedy
84404626		J6:Encoder communication error	4	Failed to communicate to encoder.	Check the encoder wirings.
84404627		J7:Encoder communication error	4	Failed to communicate to encoder.	Check the encoder wirings.
84404628		J8:Encoder communication error	4	Failed to communicate to encoder.	Check the encoder wirings.
82404631		J1:Encoder low battery	2	Encoder battery voltage is low.	Replace the encoder battery.
82404632		J2:Encoder low battery	2	Encoder battery voltage is low.	Replace the encoder battery.
82404633		J3:Encoder low battery	2	Encoder battery voltage is low.	Replace the encoder battery.
82404634		J4:Encoder low battery	2	Encoder battery voltage is low.	Replace the encoder battery.
82404635		J5:Encoder low battery	2	Encoder battery voltage is low.	Replace the encoder battery.
82404636		J6:Encoder low battery	2	Encoder battery voltage is low.	Replace the encoder battery.
82404637		J7:Encoder low battery	2	Encoder battery voltage is low.	Replace the encoder battery.
82404638		J8:Encoder low battery	2	Encoder battery voltage is low.	Replace the encoder battery.
85404641		J1:Encoder counter error1	5	Encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404642		J2:Encoder counter error1	5	Encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404643		J3:Encoder counter error1	5	Encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404644		J4:Encoder counter error1	5	Encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404645		J5:Encoder counter error1	5	Encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404646		J6:Encoder counter error1	5	Encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404647		J7:Encoder counter error1	5	Encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404648		J8:Encoder counter error1	5	Encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404651		J1:Encoder counter error2	5	Encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404652		J2:Encoder counter error2	5	Encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404653		J3:Encoder counter error2	5	Encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404654		J4:Encoder counter error2	5	Encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
85404655		J5:Encoder counter error2	5	Encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404656		J6:Encoder counter error2	5	Encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404657		J7:Encoder counter error2	5	Encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404658		J8:Encoder counter error2	5	Encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404661		J1:Encoder counter error3	5	Encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404662		J2:Encoder counter error3	5	Encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404663		J3:Encoder counter error3	5	Encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404664		J4:Encoder counter error3	5	Encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404665		J5:Encoder counter error3	5	Encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404666		J6:Encoder counter error3	5	Encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404667		J7:Encoder counter error3	5	Encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404668		J8:Encoder counter error3	5	Encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
85404671		J1:Encoder system down	5	Either of the following causes can be expected. 1. At the set up of extended joints or MC8, after the axis setting is set to "enable", the encoder is not reset. 2. Encoder system down occurred, and internal multi-rotation data is lost.	[Remedy for cause 1] Press the [LOCK] button and then press [Cancel] button to clear errors. After that, if the encoder ID is not set yet, perform the encoder ID setting. Finally, reset the encoder (Manual ID: 4910, 5085). [Remedy for cause 2] (a) If the original number on the error message window (Manual ID: 5122) is 8540467*(* applies numeric characters from 1 to 8) or 854006B0, replace encoder battery, reset the encoder and perform CALSET. (b) If the original number is 854006B1, the encoder is broken. Please contact DENSO WAVE service with error number.
85404672		J2:Encoder system down	5	Either of the following causes can be expected. 1. At the set up of extended joints or MC8, after the axis setting is set to "enable", the encoder is not reset. 2. Encoder system down occurred, and internal multi-rotation data is lost.	[Remedy for cause 1] Press the [LOCK] button and then press [Cancel] button to clear errors. After that, if the encoder ID is not set yet, perform the encoder ID setting. Finally, reset the encoder (Manual ID: 4910, 5085). [Remedy for cause 2] (a) If the original number on the error message window (Manual ID: 5122) is 8540467*(* applies numeric characters from 1 to 8) or 854006B0, replace encoder battery, reset the encoder and perform CALSET. (b) If the original number is 854006B1, the encoder is broken. Please contact DENSO WAVE service with error number.

Code	RC7 Code	Message	Level	Description	Remedy
85404673		J3:Encoder system down	5	Either of the following causes can be expected. 1. At the set up of extended joints or MC8, after the axis setting is set to "enable", the encoder is not reset. 2. Encoder system down occurred, and internal multi-rotation data is lost.	[Remedy for cause 1] Press the [LOCK] button and then press [Cancel] button to clear errors. After that, if the encoder ID is not set yet, perform the encoder ID setting. Finally, reset the encoder (Manual ID: 4910, 5085). [Remedy for cause 2] (a) If the original number on the error message window (Manual ID: 5122) is 8540467*(* applies numeric characters from 1 to 8) or 854006B0, replace encoder battery, reset the encoder and perform CALSET. (b) If the original number is 854006B1, the encoder is broken. Please contact DENSO WAVE service with error number.
85404674		J4:Encoder system down	5	Either of the following causes can be expected. 1. At the set up of extended joints or MC8, after the axis setting is set to "enable", the encoder is not reset. 2. Encoder system down occurred, and internal multi-rotation data is lost.	[Remedy for cause 1] Press the [LOCK] button and then press [Cancel] button to clear errors. After that, if the encoder ID is not set yet, perform the encoder ID setting. Finally, reset the encoder (Manual ID: 4910, 5085). [Remedy for cause 2] (a) If the original number on the error message window (Manual ID: 5122) is 8540467*(* applies numeric characters from 1 to 8) or 854006B0, replace encoder battery, reset the encoder and perform CALSET. (b) If the original number is 854006B1, the encoder is broken. Please contact DENSO WAVE service with error number.

Code	RC7 Code	Message	Level	Description	Remedy
85404675		J5:Encoder system down	5	Either of the following causes can be expected. 1. At the set up of extended joints or MC8, after the axis setting is set to "enable", the encoder is not reset. 2. Encoder system down occurred, and internal multi-rotation data is lost.	[Remedy for cause 1] Press the [LOCK] button and then press [Cancel] button to clear errors. After that, if the encoder ID is not set yet, perform the encoder ID setting. Finally, reset the encoder (Manual ID: 4910, 5085). [Remedy for cause 2] (a) If the original number on the error message window (Manual ID: 5122) is 8540467*(* applies numeric characters from 1 to 8) or 854006B0, replace encoder battery, reset the encoder and perform CALSET. (b) If the original number is 854006B1, the encoder is broken. Please contact DENSO WAVE service with error number.
85404676		J6:Encoder system down	5	Either of the following causes can be expected. 1. At the set up of extended joints or MC8, after the axis setting is set to "enable", the encoder is not reset. 2. Encoder system down occurred, and internal multi-rotation data is lost.	[Remedy for cause 1] Press the [LOCK] button and then press [Cancel] button to clear errors. After that, if the encoder ID is not set yet, perform the encoder ID setting. Finally, reset the encoder (Manual ID: 4910, 5085). [Remedy for cause 2] (a) If the original number on the error message window (Manual ID: 5122) is 8540467*(* applies numeric characters from 1 to 8) or 854006B0, replace encoder battery, reset the encoder and perform CALSET. (b) If the original number is 854006B1, the encoder is broken. Please contact DENSO WAVE service with error number.

Code	RC7 Code	Message	Level	Description	Remedy
85404677		J7:Encoder system down	5	Either of the following causes can be expected. 1. At the set up of extended joints or MC8, after the axis setting is set to "enable", the encoder is not reset. 2. Encoder system down occurred, and internal multi-rotation data is lost.	[Remedy for cause 1] Press the [LOCK] button and then press [Cancel] button to clear errors. After that, if the encoder ID is not set yet, perform the encoder ID setting. Finally, reset the encoder (Manual ID: 4910, 5085). [Remedy for cause 2] (a) If the original number on the error message window (Manual ID: 5122) is 8540467*(* applies numeric characters from 1 to 8) or 854006B0, replace encoder battery, reset the encoder and perform CALSET. (b) If the original number is 854006B1, the encoder is broken. Please contact DENSO WAVE service with error number.
85404678		J8:Encoder system down	5	Either of the following causes can be expected. 1. At the set up of extended joints or MC8, after the axis setting is set to "enable", the encoder is not reset. 2. Encoder system down occurred, and internal multi-rotation data is lost.	[Remedy for cause 1] Press the [LOCK] button and then press [Cancel] button to clear errors. After that, if the encoder ID is not set yet, perform the encoder ID setting. Finally, reset the encoder (Manual ID: 4910, 5085). [Remedy for cause 2] (a) If the original number on the error message window (Manual ID: 5122) is 8540467*(* applies numeric characters from 1 to 8) or 854006B0, replace encoder battery, reset the encoder and perform CALSET. (b) If the original number is 854006B1, the encoder is broken. Please contact DENSO WAVE service with error number.
85404681		J1:Encoder over speed error	5	Encoder overspeed error is detected.	Please contact DENSO WAVE service with error number and error message.
85404682		J2:Encoder over speed error	5	Encoder overspeed error is detected.	Please contact DENSO WAVE service with error number and error message.
85404683		J3:Encoder over speed error	5	Encoder overspeed error is detected.	Please contact DENSO WAVE service with error number and error message.
85404684		J4:Encoder over speed error	5	Encoder overspeed error is detected.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
85404685		J5:Encoder over speed error	5	Encoder overspeed error is detected.	Please contact DENSO WAVE service with error number and error message.
85404686		J6:Encoder over speed error	5	Encoder overspeed error is detected.	Please contact DENSO WAVE service with error number and error message.
85404687		J7:Encoder over speed error	5	Encoder overspeed error is detected.	Please contact DENSO WAVE service with error number and error message.
85404688		J8:Encoder over speed error	5	Encoder overspeed error is detected.	Please contact DENSO WAVE service with error number and error message.
85404691		J1:Encoder counter overflow	5	Encoder overflow error is detected.	Please contact DENSO WAVE service with error number and error message.
85404692		J2:Encoder counter overflow	5	Encoder overflow error is detected.	Please contact DENSO WAVE service with error number and error message.
85404693		J3:Encoder counter overflow	5	Encoder overflow error is detected.	Please contact DENSO WAVE service with error number and error message.
85404694		J4:Encoder counter overflow	5	Encoder overflow error is detected.	Please contact DENSO WAVE service with error number and error message.
85404695		J5:Encoder counter overflow	5	Encoder overflow error is detected.	Please contact DENSO WAVE service with error number and error message.
85404696		J6:Encoder counter overflow	5	Encoder overflow error is detected.	Please contact DENSO WAVE service with error number and error message.
85404697		J7:Encoder counter overflow	5	Encoder overflow error is detected.	Please contact DENSO WAVE service with error number and error message.
85404698		J8:Encoder counter overflow	5	Encoder overflow error is detected.	Please contact DENSO WAVE service with error number and error message.
834046A1		J1:Encoder overheated	3	Encoder temperature exceeding its limit is detected.	Reduce robot speed, acceleration and decelaration.
834046A2		J2:Encoder overheated	3	Encoder temperature exceeding its limit is detected.	Reduce robot speed, acceleration and decelaration.
834046A3		J3:Encoder overheated	3	Encoder temperature exceeding its limit is detected.	Reduce robot speed, acceleration and decelaration.
834046A4		J4:Encoder overheated	3	Encoder temperature exceeding its limit is detected.	Reduce robot speed, acceleration and decelaration.
834046A5		J5:Encoder overheated	3	Encoder temperature exceeding its limit is detected.	Reduce robot speed, acceleration and decelaration.
834046A6		J6:Encoder overheated	3	Encoder temperature exceeding its limit is detected.	Reduce robot speed, acceleration and decelaration.

Code	RC7 Code	Message	Level	Description	Remedy
834046A7		J7:Encoder overheated	3	Encoder temperature exceeding its limit is detected.	Reduce robot speed, acceleration and decelaration.
834046A8		J8:Encoder overheated	3	Encoder temperature exceeding its limit is detected.	Reduce robot speed, acceleration and decelaration.
844046B1		J1:Encoder memory data error (software)	4	Encoder MEM error is detected.	Please contact DENSO WAVE service with error number and error message.
844046B2		J2:Encoder memory data error (software)	4	Encoder MEM error is detected.	Please contact DENSO WAVE service with error number and error message.
844046B3		J3:Encoder memory data error (software)	4	Encoder MEM error is detected.	Please contact DENSO WAVE service with error number and error message.
844046B4		J4:Encoder memory data error (software)	4	Encoder MEM error is detected.	Please contact DENSO WAVE service with error number and error message.
844046B5		J5:Encoder memory data error (software)	4	Encoder MEM error is detected.	Please contact DENSO WAVE service with error number and error message.
844046B6		J6:Encoder memory data error (software)	4	Encoder MEM error is detected.	Please contact DENSO WAVE service with error number and error message.
844046B7		J7:Encoder memory data error (software)	4	Encoder MEM error is detected.	Please contact DENSO WAVE service with error number and error message.
844046B8		J8:Encoder memory data error (software)	4	Encoder MEM error is detected.	Please contact DENSO WAVE service with error number and error message.
844046C1		J1:Encoder memory busy	4	Encoder MEM BUSY is detected.	Please contact DENSO WAVE service with error number and error message.
844046C2		J2:Encoder memory busy	4	Encoder MEM BUSY is detected.	Please contact DENSO WAVE service with error number and error message.
844046C3		J3:Encoder memory busy	4	Encoder MEM BUSY is detected.	Please contact DENSO WAVE service with error number and error message.
844046C4		J4:Encoder memory busy	4	Encoder MEM BUSY is detected.	Please contact DENSO WAVE service with error number and error message.
844046C5		J5:Encoder memory busy	4	Encoder MEM BUSY is detected.	Please contact DENSO WAVE service with error number and error message.
844046C6		J6:Encoder memory busy	4	Encoder MEM BUSY is detected.	Please contact DENSO WAVE service with error number and error message.
844046C7		J7:Encoder memory busy	4	Encoder MEM BUSY is detected.	Please contact DENSO WAVE service with error number and error message.
844046C8		J8:Encoder memory busy	4	Encoder MEM BUSY is detected.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
844046D1		J1:Encoder data unreceived	4	Failed to receive data from encoder. Either of the following causes can be expected. 1. At the set up of extended joints or MC8, after the axis setting is set to "enable", the encoder ID setting is not performed. 2. Encoder wiring (the encoder cable, encoder root cable, encoder relay cable, the motor and encoder cable and others) is not connected or those connector is not fully inserted.	[Remedy for cause 1] Press the [LOCK] button, and then press [Cancel] button to clear errors. After that, perform the encoder ID setting (Manual ID: 4910). [Remedy for cause 2] (a) "Encoder wiring is not connected" Turn off the robot controller, and then connect the encoder wiring. Before connecting the encoder wiring, if you want to set the parameter, press the [LOCK] button and then press [Cancel] button to clear error. (b) "Encoder wiring is connected" Turn off the robot controller, and then check whether the connector of the encoder wiring is properly inserted.
844046D2		J2:Encoder data unreceived	4	Failed to receive data from encoder. Either of the following causes can be expected. 1. At the set up of extended joints or MC8, after the axis setting is set to "enable", the encoder ID setting is not performed. 2. Encoder wiring (the encoder cable, encoder root cable, encoder relay cable, the motor and encoder cable and others) is not connected or those connector is not fully inserted.	[Remedy for cause 1] Press the [LOCK] button, and then press [Cancel] button to clear errors. After that, perform the encoder ID setting (Manual ID: 4910). [Remedy for cause 2] (a) "Encoder wiring is not connected" Turn off the robot controller, and then connect the encoder wiring. Before connecting the encoder wiring, if you want to set the parameter, press the [LOCK] button and then press [Cancel] button to clear error. (b) "Encoder wiring is connected" Turn off the robot controller, and then check whether the connector of the encoder wiring is properly inserted.

Code	RC7 Code	Message	Level	Description	Remedy
844046D3		J3:Encoder data unreceived	4	Failed to receive data from encoder. Either of the following causes can be expected. 1. At the set up of extended joints or MC8, after the axis setting is set to "enable", the encoder ID setting is not performed. 2. Encoder wiring (the encoder cable, encoder root cable, encoder relay cable, the motor and encoder cable and others) is not connected or those connector is not fully inserted.	[Remedy for cause 1] Press the [LOCK] button, and then press [Cancel] button to clear errors. After that, perform the encoder ID setting (Manual ID: 4910). [Remedy for cause 2] (a) "Encoder wiring is not connected" Turn off the robot controller, and then connect the encoder wiring. Before connecting the encoder wiring, if you want to set the parameter, press the [LOCK] button and then press [Cancel] button to clear error. (b) "Encoder wiring is connected" Turn off the robot controller, and then check whether the connector of the encoder wiring is properly inserted.
844046D4		J4:Encoder data unreceived	4	Failed to receive data from encoder. Either of the following causes can be expected. 1. At the set up of extended joints or MC8, after the axis setting is set to "enable", the encoder ID setting is not performed. 2. Encoder wiring (the encoder cable, encoder root cable, encoder relay cable, the motor and encoder cable and others) is not connected or those connector is not fully inserted.	[Remedy for cause 1] Press the [LOCK] button, and then press [Cancel] button to clear errors. After that, perform the encoder ID setting (Manual ID: 4910). [Remedy for cause 2] (a) "Encoder wiring is not connected" Turn off the robot controller, and then connect the encoder wiring. Before connecting the encoder wiring, if you want to set the parameter, press the [LOCK] button and then press [Cancel] button to clear error. (b) "Encoder wiring is connected" Turn off the robot controller, and then check whether the connector of the encoder wiring is properly inserted.

Code	RC7 Code	Message	Level	Description	Remedy
844046D5		J5:Encoder data unreceived	4	Failed to receive data from encoder. Either of the following causes can be expected. 1. At the set up of extended joints or MC8, after the axis setting is set to "enable", the encoder ID setting is not performed. 2. Encoder wiring (the encoder cable, encoder root cable, encoder relay cable, the motor and encoder cable and others) is not connected or those connector is not fully inserted.	[Remedy for cause 1] Press the [LOCK] button, and then press [Cancel] button to clear errors. After that, perform the encoder ID setting (Manual ID: 4910). [Remedy for cause 2] (a) "Encoder wiring is not connected" Turn off the robot controller, and then connect the encoder wiring. Before connecting the encoder wiring, if you want to set the parameter, press the [LOCK] button and then press [Cancel] button to clear error. (b) "Encoder wiring is connected" Turn off the robot controller, and then check whether the connector of the encoder wiring is properly inserted.
844046D6		J6:Encoder data unreceived	4	Failed to receive data from encoder. Either of the following causes can be expected. 1. At the set up of extended joints or MC8, after the axis setting is set to "enable", the encoder ID setting is not performed. 2. Encoder wiring (the encoder cable, encoder root cable, encoder relay cable, the motor and encoder cable and others) is not connected or those connector is not fully inserted.	[Remedy for cause 1] Press the [LOCK] button, and then press [Cancel] button to clear errors. After that, perform the encoder ID setting (Manual ID: 4910). [Remedy for cause 2] (a) "Encoder wiring is not connected" Turn off the robot controller, and then connect the encoder wiring. Before connecting the encoder wiring, if you want to set the parameter, press the [LOCK] button and then press [Cancel] button to clear error. (b) "Encoder wiring is connected" Turn off the robot controller, and then check whether the connector of the encoder wiring is properly inserted.

Code	RC7 Code	Message	Level	Description	Remedy
844046D7		J7:Encoder data unreceived	4	Failed to receive data from encoder. Either of the following causes can be expected. 1. At the set up of extended joints or MC8, after the axis setting is set to "enable", the encoder ID setting is not performed. 2. Encoder wiring (the encoder cable, encoder root cable, encoder relay cable, the motor and encoder cable and others) is not connected or those connector is not fully inserted.	[Remedy for cause 1] Press the [LOCK] button, and then press [Cancel] button to clear errors. After that, perform the encoder ID setting (Manual ID: 4910). [Remedy for cause 2] (a) "Encoder wiring is not connected" Turn off the robot controller, and then connect the encoder wiring. Before connecting the encoder wiring, if you want to set the parameter, press the [LOCK] button and then press [Cancel] button to clear error. (b) "Encoder wiring is connected" Turn off the robot controller, and then check whether the connector of the encoder wiring is properly inserted.
844046D8		J8:Encoder data unreceived	4	Failed to receive data from encoder. Either of the following causes can be expected. 1. At the set up of extended joints or MC8, after the axis setting is set to "enable", the encoder ID setting is not performed. 2. Encoder wiring (the encoder cable, encoder root cable, encoder relay cable, the motor and encoder cable and others) is not connected or those connector is not fully inserted.	[Remedy for cause 1] Press the [LOCK] button, and then press [Cancel] button to clear errors. After that, perform the encoder ID setting (Manual ID: 4910). [Remedy for cause 2] (a) "Encoder wiring is not connected" Turn off the robot controller, and then connect the encoder wiring. Before connecting the encoder wiring, if you want to set the parameter, press the [LOCK] button and then press [Cancel] button to clear error. (b) "Encoder wiring is connected" Turn off the robot controller, and then check whether the connector of the encoder wiring is properly inserted.
844046E1		J1:Encoder framing error	4	Failed to communicate to encoder.	Check the encoder wirings.
844046E2		J2:Encoder framing error	4	Failed to communicate to encoder.	Check the encoder wirings.
844046E3		J3:Encoder framing error	4	Failed to communicate to encoder.	Check the encoder wirings.
844046E4		J4:Encoder framing error	4	Failed to communicate to encoder.	Check the encoder wirings.
844046E5		J5:Encoder framing error	4	Failed to communicate to encoder.	Check the encoder wirings.
844046E6		J6:Encoder framing error	4	Failed to communicate to encoder.	Check the encoder wirings.
844046E7		J7:Encoder framing error	4	Failed to communicate to encoder.	Check the encoder wirings.
844046E8		J8:Encoder framing error	4	Failed to communicate to encoder.	Check the encoder wirings.

Code	RC7 Code	Message	Level	Description	Remedy
844046F1		J1:Encoder CRC check error	4	Failed to communicate to encoder.	Check the encoder wirings.
844046F2		J2:Encoder CRC check error	4	Failed to communicate to encoder.	Check the encoder wirings.
844046F3		J3:Encoder CRC check error	4	Failed to communicate to encoder.	Check the encoder wirings.
844046F4		J4:Encoder CRC check error	4	Failed to communicate to encoder.	Check the encoder wirings.
844046F5		J5:Encoder CRC check error	4	Failed to communicate to encoder.	Check the encoder wirings.
844046F6		J6:Encoder CRC check error	4	Failed to communicate to encoder.	Check the encoder wirings.
844046F7		J7:Encoder CRC check error	4	Failed to communicate to encoder.	Check the encoder wirings.
844046F8		J8:Encoder CRC check error	4	Failed to communicate to encoder.	Check the encoder wirings.
85404701		J1:Encoder absolute error	5	Encoder absolute error was detected.	Please contact DENSO WAVE service with error number and error message.
85404702		J2:Encoder absolute error	5	Encoder absolute error was detected.	Please contact DENSO WAVE service with error number and error message.
85404703		J3:Encoder absolute error	5	Encoder absolute error was detected.	Please contact DENSO WAVE service with error number and error message.
85404704		J4:Encoder absolute error	5	Encoder absolute error was detected.	Please contact DENSO WAVE service with error number and error message.
85404705		J5:Encoder absolute error	5	Encoder absolute error was detected.	Please contact DENSO WAVE service with error number and error message.
85404706		J6:Encoder absolute error	5	Encoder absolute error was detected.	Please contact DENSO WAVE service with error number and error message.
85404707		J7:Encoder absolute error	5	Encoder absolute error was detected.	Please contact DENSO WAVE service with error number and error message.
85404708		J8:Encoder absolute error	5	Encoder absolute error was detected.	Please contact DENSO WAVE service with error number and error message.
84404711		J1:Multi rotation data acquisition failure	4	Failed to acquire Encoder multi rotation data.	Please contact DENSO WAVE service with error number and error message.
84404712		J2:Multi rotation data acquisition failure	4	Failed to acquire Encoder multi rotation data.	Please contact DENSO WAVE service with error number and error message.
84404713		J3:Multi rotation data acquisition failure	4	Failed to acquire Encoder multi rotation data.	Please contact DENSO WAVE service with error number and error message.
84404714		J4:Multi rotation data acquisition failure	4	Failed to acquire Encoder multi rotation data.	Please contact DENSO WAVE service with error number and error message.
84404715		J5:Multi rotation data acquisition failure	4	Failed to acquire Encoder multi rotation data.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
84404716		J6:Multi rotation data acquisition failure	4	Failed to acquire Encoder multi rotation data.	Please contact DENSO WAVE service with error number and error message.
84404717		J7:Multi rotation data acquisition failure	4	Failed to acquire Encoder multi rotation data.	Please contact DENSO WAVE service with error number and error message.
84404718		J8:Multi rotation data acquisition failure	4	Failed to acquire Encoder multi rotation data.	Please contact DENSO WAVE service with error number and error message.
84404721		J1:Encoder communication test failure	4	Encoder communication test failed.	Check the encoder wiring.
84404722		J2:Encoder communication test failure	4	Encoder communication test failed.	Check the encoder wiring.
84404723		J3:Encoder communication test failure	4	Encoder communication test failed.	Check the encoder wiring.
84404724		J4:Encoder communication test failure	4	Encoder communication test failed.	Check the encoder wiring.
84404725		J5:Encoder communication test failure	4	Encoder communication test failed.	Check the encoder wiring.
84404726		J6:Encoder communication test failure	4	Encoder communication test failed.	Check the encoder wiring.
84404727		J7:Encoder communication test failure	4	Encoder communication test failed.	Check the encoder wiring.
84404728		J8:Encoder communication test failure	4	Encoder communication test failed.	Check the encoder wiring.
84404731		J1:Encoder temperature sensor error	4	Failed to acquire Encoder temperature data.	Please contact DENSO WAVE service with error number and error message.
84404732		J2:Encoder temperature sensor error	4	Failed to acquire Encoder temperature data.	Please contact DENSO WAVE service with error number and error message.
84404733		J3:Encoder temperature sensor error	4	Failed to acquire Encoder temperature data.	Please contact DENSO WAVE service with error number and error message.
84404734		J4:Encoder temperature sensor error	4	Failed to acquire Encoder temperature data.	Please contact DENSO WAVE service with error number and error message.
84404735		J5:Encoder temperature sensor error	4	Failed to acquire Encoder temperature data.	Please contact DENSO WAVE service with error number and error message.
84404736		J6:Encoder temperature sensor error	4	Failed to acquire Encoder temperature data.	Please contact DENSO WAVE service with error number and error message.
84404737		J7:Encoder temperature sensor error	4	Failed to acquire Encoder temperature data.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
84404738		J8:Encoder temperature sensor error	4	Failed to acquire Encoder temperature data.	Please contact DENSO WAVE service with error number and error message.
84404741		J1:Encoder preset error	4	Encoder precise position information hasn't been established yet.	Stop robot arm motion and restart controller. If error still occurs, please contact DENSO WAVE service with error number and error message.
84404742		J2:Encoder preset error	4	Encoder precise position information hasn't been established yet.	Stop robot arm motion and restart controller. If error still occurs, please contact DENSO WAVE service with error number and error message.
84404743		J3:Encoder preset error	4	Encoder precise position information hasn't been established yet.	Stop robot arm motion and restart controller. If error still occurs, please contact DENSO WAVE service with error number and error message.
84404744		J4:Encoder preset error	4	Encoder precise position information hasn't been established yet.	Stop robot arm motion and restart controller. If error still occurs, please contact DENSO WAVE service with error number and error message.
84404745		J5:Encoder preset error	4	Encoder precise position information hasn't been established yet.	Stop robot arm motion and restart controller. If error still occurs, please contact DENSO WAVE service with error number and error message.
84404746		J6:Encoder preset error	4	Encoder precise position information hasn't been established yet.	Stop robot arm motion and restart controller. If error still occurs, please contact DENSO WAVE service with error number and error message.
84404747		J7:Encoder preset error	4	Encoder precise position information hasn't been established yet.	Stop robot arm motion and restart controller. If error still occurs, please contact DENSO WAVE service with error number and error message.
84404748		J8:Encoder preset error	4	Encoder precise position information hasn't been established yet.	Stop robot arm motion and restart controller. If error still occurs, please contact DENSO WAVE service with error number and error message.
84404751		J%1d: Unsupported encoder error 1	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404752		J%1d: Unsupported encoder error 1	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404753		J%1d: Unsupported encoder error 1	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404754		J%1d: Unsupported encoder error 1	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404755		J%1d: Unsupported encoder error 1	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
84404756		J%1d: Unsupported encoder error 1	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404757		J%1d: Unsupported encoder error 1	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404758		J%1d: Unsupported encoder error 1	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404761		J%1d: Unsupported encoder error 2	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404762		J%1d: Unsupported encoder error 2	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404763		J%1d: Unsupported encoder error 2	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404764		J%1d: Unsupported encoder error 2	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404765		J%1d: Unsupported encoder error 2	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404766		J%1d: Unsupported encoder error 2	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404767		J%1d: Unsupported encoder error 2	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404768		J%1d: Unsupported encoder error 2	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404771		J%1d: Unsupported encoder error 3	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404772		J%1d: Unsupported encoder error 3	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404773		J%1d: Unsupported encoder error 3	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404774		J%1d: Unsupported encoder error 3	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404775		J%1d: Unsupported encoder error 3	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404776		J%1d: Unsupported encoder error 3	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404777		J%1d: Unsupported encoder error 3	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
84404778		J%1d: Unsupported encoder error 3	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404781		J%1d: Unsupported encoder error 4	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404782		J%1d: Unsupported encoder error 4	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404783		J%1d: Unsupported encoder error 4	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404784		J%1d: Unsupported encoder error 4	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404785		J%1d: Unsupported encoder error 4	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404786		J%1d: Unsupported encoder error 4	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404787		J%1d: Unsupported encoder error 4	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404788		J%1d: Unsupported encoder error 4	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404791		J%1d: Unsupported encoder error 5	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404792		J%1d: Unsupported encoder error 5	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404793		J%1d: Unsupported encoder error 5	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404794		J%1d: Unsupported encoder error 5	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404795		J%1d: Unsupported encoder error 5	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404796		J%1d: Unsupported encoder error 5	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404797		J%1d: Unsupported encoder error 5	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404798		J%1d: Unsupported encoder error 5	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
844047A1		J%1d: Unsupported encoder error 6	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
844047A2		J%1d: Unsupported encoder error 6	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
844047A3		J%1d: Unsupported encoder error 6	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
844047A4		J%1d: Unsupported encoder error 6	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
844047A5		J%1d: Unsupported encoder error 6	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
844047A6		J%1d: Unsupported encoder error 6	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
844047A7		J%1d: Unsupported encoder error 6	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
844047A8		J%1d: Unsupported encoder error 6	4	Unexpected encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404801		J1:Unexpected arm axis encoder error	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404802		J2:Unexpected arm axis encoder error	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404803		J3:Unexpected arm axis encoder error	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404804		J4:Unexpected arm axis encoder error	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404805		J5:Unexpected arm axis encoder error	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404806		J6:Unexpected arm axis encoder error	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404807		J7:Unexpected arm axis encoder error	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404808		J8:Unexpected arm axis encoder error	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404821		J1:Arm axis encoder communication error	4	Failed to communicate to arm axis encoder.	Check the encoder wirings.
84404822		J2:Arm axis encoder communication error	4	Failed to communicate to arm axis encoder.	Check the encoder wirings.
84404823		J3:Arm axis encoder communication error	4	Failed to communicate to arm axis encoder.	Check the encoder wirings.

Code	RC7 Code	Message	Level	Description	Remedy
84404824		J4:Arm axis encoder communication error	4	Failed to communicate to arm axis encoder.	Check the encoder wirings.
84404825		J5:Arm axis encoder communication error	4	Failed to communicate to arm axis encoder.	Check the encoder wirings.
84404826		J6:Arm axis encoder communication error	4	Failed to communicate to arm axis encoder.	Check the encoder wirings.
84404827		J7:Arm axis encoder communication error	4	Failed to communicate to arm axis encoder.	Check the encoder wirings.
84404828		J8:Arm axis encoder communication error	4	Failed to communicate to arm axis encoder.	Check the encoder wirings.
82404831		J1:Arm axis encoder low battery	2	Arm axis encoder battery voltage is low.	Replace the encoder battery.
82404832		J2:Arm axis encoder low battery	2	Arm axis encoder battery voltage is low.	Replace the encoder battery.
82404833		J3:Arm axis encoder low battery	2	Arm axis encoder battery voltage is low.	Replace the encoder battery.
82404834		J4:Arm axis encoder low battery	2	Arm axis encoder battery voltage is low.	Replace the encoder battery.
82404835		J5:Arm axis encoder low battery	2	Arm axis encoder battery voltage is low.	Replace the encoder battery.
82404836		J6:Arm axis encoder low battery	2	Arm axis encoder battery voltage is low.	Replace the encoder battery.
82404837		J7:Arm axis encoder low battery	2	Arm axis encoder battery voltage is low.	Replace the encoder battery.
82404838		J8:Arm axis encoder low battery	2	Arm axis encoder battery voltage is low.	Replace the encoder battery.
85404841		J1:Arm axis encoder counter error 1	5	Arm axis encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404842		J2:Arm axis encoder counter error 1	5	Arm axis encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404843		J3:Arm axis encoder counter error 1	5	Arm axis encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404844		J4:Arm axis encoder counter error 1	5	Arm axis encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404845		J5:Arm axis encoder counter error 1	5	Arm axis encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404846		J6:Arm axis encoder counter error 1	5	Arm axis encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404847		J7:Arm axis encoder counter error 1	5	Arm axis encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404848		J8:Arm axis encoder counter error 1	5	Arm axis encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
85404851		J1:Arm axis encoder counter error 2	5	Arm axis encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404852		J2:Arm axis encoder counter error 2	5	Arm axis encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404853		J3:Arm axis encoder counter error 2	5	Arm axis encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404854		J4:Arm axis encoder counter error 2	5	Arm axis encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404855		J5:Arm axis encoder counter error 2	5	Arm axis encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404856		J6:Arm axis encoder counter error 2	5	Arm axis encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404857		J7:Arm axis encoder counter error 2	5	Arm axis encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404858		J8:Arm axis encoder counter error 2	5	Arm axis encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404861		J1:Arm axis encoder counter error 3	5	Arm axis encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404862		J2:Arm axis encoder counter error 3	5	Arm axis encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404863		J3:Arm axis encoder counter error 3	5	Arm axis encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404864		J4:Arm axis encoder counter error 3	5	Arm axis encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404865		J5:Arm axis encoder counter error 3	5	Arm axis encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404866		J6:Arm axis encoder counter error 3	5	Arm axis encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404867		J7:Arm axis encoder counter error 3	5	Arm axis encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404868		J8:Arm axis encoder counter error 3	5	Arm axis encoder counter error is detected.	Please contact DENSO WAVE service with error number and error message.
85404871		J1:Arm axis encoder system down	5	Arm axis encoder system down occurred, and internal multi-rotation data is lost.	Replace encoder battery, reset the encoder and then perform CALSET.
85404872		J2:Arm axis encoder system down	5	Arm axis encoder system down occurred, and internal multi-rotation data is lost.	Replace encoder battery, reset the encoder and then perform CALSET.

Code	RC7 Code	Message	Level	Description	Remedy
85404873		J3:Arm axis encoder system down	5	Arm axis encoder system down occurred, and internal multi-rotation data is lost.	Replace encoder battery, reset the encoder and then perform CALSET.
85404874		J4:Arm axis encoder system down	5	Arm axis encoder system down occurred, and internal multi-rotation data is lost.	Replace encoder battery, reset the encoder and then perform CALSET.
85404875		J5:Arm axis encoder system down	5	Arm axis encoder system down occurred, and internal multi-rotation data is lost.	Replace encoder battery, reset the encoder and then perform CALSET.
85404876		J6:Arm axis encoder system down	5	Arm axis encoder system down occurred, and internal multi-rotation data is lost.	Replace encoder battery, reset the encoder and then perform CALSET.
85404877		J7:Arm axis encoder system down	5	Arm axis encoder system down occurred, and internal multi-rotation data is lost.	Replace encoder battery, reset the encoder and then perform CALSET.
85404878		J8:Arm axis encoder system down	5	Arm axis encoder system down occurred, and internal multi-rotation data is lost.	Replace encoder battery, reset the encoder and then perform CALSET.
85404881		J1:Arm axis encoder over speed error	5	Arm axis encoder overspeed error is detected.	Please contact DENSO WAVE service with error number and error message.
85404882		J2:Arm axis encoder over speed error	5	Arm axis encoder overspeed error is detected.	Please contact DENSO WAVE service with error number and error message.
85404883		J3:Arm axis encoder over speed error	5	Arm axis encoder overspeed error is detected.	Please contact DENSO WAVE service with error number and error message.
85404884		J4:Arm axis encoder over speed error	5	Arm axis encoder overspeed error is detected.	Please contact DENSO WAVE service with error number and error message.
85404885		J5:Arm axis encoder over speed error	5	Arm axis encoder overspeed error is detected.	Please contact DENSO WAVE service with error number and error message.
85404886		J6:Arm axis encoder over speed error	5	Arm axis encoder overspeed error is detected.	Please contact DENSO WAVE service with error number and error message.
85404887		J7:Arm axis encoder over speed error	5	Arm axis encoder overspeed error is detected.	Please contact DENSO WAVE service with error number and error message.
85404888		J8:Arm axis encoder over speed error	5	Arm axis encoder overspeed error is detected.	Please contact DENSO WAVE service with error number and error message.
85404891		J1:Arm axis encoder counter overflow	5	Arm axis encoder overflow error is detected.	Please contact DENSO WAVE service with error number and error message.
85404892		J2:Arm axis encoder counter overflow	5	Arm axis encoder overflow error is detected.	Please contact DENSO WAVE service with error number and error message.
85404893		J3:Arm axis encoder counter overflow	5	Arm axis encoder overflow error is detected.	Please contact DENSO WAVE service with error number and error message.
85404894		J4:Arm axis encoder counter overflow	5	Arm axis encoder overflow error is detected.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
85404895		J5:Arm axis encoder counter overflow	5	Arm axis encoder overflow error is detected.	Please contact DENSO WAVE service with error number and error message.
85404896		J6:Arm axis encoder counter overflow	5	Arm axis encoder overflow error is detected.	Please contact DENSO WAVE service with error number and error message.
85404897		J7:Arm axis encoder counter overflow	5	Arm axis encoder overflow error is detected.	Please contact DENSO WAVE service with error number and error message.
85404898		J8:Arm axis encoder counter overflow	5	Arm axis encoder overflow error is detected.	Please contact DENSO WAVE service with error number and error message.
834048A1		J1:Arm axis encoder overheated	3	Arm axis encoder temperature exceeding its limit is detected.	Reduce robot speed, acceleration and decelaration.
834048A2		J2:Arm axis encoder overheated	3	Arm axis encoder temperature exceeding its limit is detected.	Reduce robot speed, acceleration and decelaration.
834048A3		J3:Arm axis encoder overheated	3	Arm axis encoder temperature exceeding its limit is detected.	Reduce robot speed, acceleration and decelaration.
834048A4		J4:Arm axis encoder overheated	3	Arm axis encoder temperature exceeding its limit is detected.	Reduce robot speed, acceleration and decelaration.
834048A5		J5:Arm axis encoder overheated	3	Arm axis encoder temperature exceeding its limit is detected.	Reduce robot speed, acceleration and decelaration.
834048A6		J6:Arm axis encoder overheated	3	Arm axis encoder temperature exceeding its limit is detected.	Reduce robot speed, acceleration and decelaration.
834048A7		J7:Arm axis encoder overheated	3	Arm axis encoder temperature exceeding its limit is detected.	Reduce robot speed, acceleration and decelaration.
834048A8		J8:Arm axis encoder overheated	3	Arm axis encoder temperature exceeding its limit is detected.	Reduce robot speed, acceleration and decelaration.
844048B1		J1:Arm axis encoder memory data error (software)	4	Arm axis encoder MEM error is detected.	Please contact DENSO WAVE service with error number and error message.
844048B2		J2:Arm axis encoder memory data error (software)	4	Arm axis encoder MEM error is detected.	Please contact DENSO WAVE service with error number and error message.
844048B3		J3:Arm axis encoder memory data error (software)	4	Arm axis encoder MEM error is detected.	Please contact DENSO WAVE service with error number and error message.
844048B4		J4:Arm axis encoder memory data error (software)	4	Arm axis encoder MEM error is detected.	Please contact DENSO WAVE service with error number and error message.
844048B5		J5:Arm axis encoder memory data error (software)	4	Arm axis encoder MEM error is detected.	Please contact DENSO WAVE service with error number and error message.
844048B6		J6:Arm axis encoder memory data error (software)	4	Arm axis encoder MEM error is detected.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
844048B7		J7:Arm axis encoder memory data error (software)	4	Arm axis encoder MEM error is detected.	Please contact DENSO WAVE service with error number and error message.
844048B8		J8:Arm axis encoder memory data error (software)	4	Arm axis encoder MEM error is detected.	Please contact DENSO WAVE service with error number and error message.
844048C1		J1:Arm axis encoder memory busy	4	Arm axis encoder MEM BUSY is detected.	Please contact DENSO WAVE service with error number and error message.
844048C2		J2:Arm axis encoder memory busy	4	Arm axis encoder MEM BUSY is detected.	Please contact DENSO WAVE service with error number and error message.
844048C3		J3:Arm axis encoder memory busy	4	Arm axis encoder MEM BUSY is detected.	Please contact DENSO WAVE service with error number and error message.
844048C4		J4:Arm axis encoder memory busy	4	Arm axis encoder MEM BUSY is detected.	Please contact DENSO WAVE service with error number and error message.
844048C5		J5:Arm axis encoder memory busy	4	Arm axis encoder MEM BUSY is detected.	Please contact DENSO WAVE service with error number and error message.
844048C6		J6:Arm axis encoder memory busy	4	Arm axis encoder MEM BUSY is detected.	Please contact DENSO WAVE service with error number and error message.
844048C7		J7:Arm axis encoder memory busy	4	Arm axis encoder MEM BUSY is detected.	Please contact DENSO WAVE service with error number and error message.
844048C8		J8:Arm axis encoder memory busy	4	Arm axis encoder MEM BUSY is detected.	Please contact DENSO WAVE service with error number and error message.
844048D1		J1:Arm axis encoder data unreceived	4	Failed to receive data from arm axis encoder.	Check the encoder wirings.
844048D2		J2:Arm axis encoder data unreceived	4	Failed to receive data from arm axis encoder.	Check the encoder wirings.
844048D3		J3:Arm axis encoder data unreceived	4	Failed to receive data from arm axis encoder.	Check the encoder wirings.
844048D4		J4:Arm axis encoder data unreceived	4	Failed to receive data from arm axis encoder.	Check the encoder wirings.
844048D5		J5:Arm axis encoder data unreceived	4	Failed to receive data from arm axis encoder.	Check the encoder wirings.
844048D6		J6:Arm axis encoder data unreceived	4	Failed to receive data from arm axis encoder.	Check the encoder wirings.
844048D7		J7:Arm axis encoder data unreceived	4	Failed to receive data from arm axis encoder.	Check the encoder wirings.
844048D8		J8:Arm axis encoder data unreceived	4	Failed to receive data from arm axis encoder.	Check the encoder wirings.

Code	RC7 Code	Message	Level	Description	Remedy
844048E1		J1:Arm axis encoder framing error	4	Failed to communicate to arm axis encoder.	Check the encoder wirings.
844048E2		J2:Arm axis encoder framing error	4	Failed to communicate to arm axis encoder.	Check the encoder wirings.
844048E3		J3:Arm axis encoder framing error	4	Failed to communicate to arm axis encoder.	Check the encoder wirings.
844048E4		J4:Arm axis encoder framing error	4	Failed to communicate to arm axis encoder.	Check the encoder wirings.
844048E5		J5:Arm axis encoder framing error	4	Failed to communicate to arm axis encoder.	Check the encoder wirings.
844048E6		J6:Arm axis encoder framing error	4	Failed to communicate to arm axis encoder.	Check the encoder wirings.
844048E7		J7:Arm axis encoder framing error	4	Failed to communicate to arm axis encoder.	Check the encoder wirings.
844048E8		J8:Arm axis encoder framing error	4	Failed to communicate to arm axis encoder.	Check the encoder wirings.
844048F1		J1:Arm axis encoder CRC check error	4	Failed to communicate to arm axis encoder.	Check the encoder wirings.
844048F2		J2:Arm axis encoder CRC check error	4	Failed to communicate to arm axis encoder.	Check the encoder wirings.
844048F3		J3:Arm axis encoder CRC check error	4	Failed to communicate to arm axis encoder.	Check the encoder wirings.
844048F4		J4:Arm axis encoder CRC check error	4	Failed to communicate to arm axis encoder.	Check the encoder wirings.
844048F5		J5:Arm axis encoder CRC check error	4	Failed to communicate to arm axis encoder.	Check the encoder wirings.
844048F6		J6:Arm axis encoder CRC check error	4	Failed to communicate to arm axis encoder.	Check the encoder wirings.
844048F7		J7:Arm axis encoder CRC check error	4	Failed to communicate to arm axis encoder.	Check the encoder wirings.
844048F8		J8:Arm axis encoder CRC check error	4	Failed to communicate to arm axis encoder.	Check the encoder wirings.
85404901		J1:Arm axis encoder absolute error	5	Arm axis encoder absolute error is detected.	Please contact DENSO WAVE service with error number and error message.
85404902		J2:Arm axis encoder absolute error	5	Arm axis encoder absolute error is detected.	Please contact DENSO WAVE service with error number and error message.
85404903		J3:Arm axis encoder absolute error	5	Arm axis encoder absolute error is detected.	Please contact DENSO WAVE service with error number and error message.
85404904		J4:Arm axis encoder absolute error	5	Arm axis encoder absolute error is detected.	Please contact DENSO WAVE service with error number and error message.
85404905		J5:Arm axis encoder absolute error	5	Arm axis encoder absolute error is detected.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
85404906		J6:Arm axis encoder absolute error	5	Arm axis encoder absolute error is detected.	Please contact DENSO WAVE service with error number and error message.
85404907		J7:Arm axis encoder absolute error	5	Arm axis encoder absolute error is detected.	Please contact DENSO WAVE service with error number and error message.
85404908		J8:Arm axis encoder absolute error	5	Arm axis encoder absolute error is detected.	Please contact DENSO WAVE service with error number and error message.
84404911		J1:Arm axis encoder multi rotation data acquisition failure	4	Failed to acquire arm axis encoder multi rotation data.	Please contact DENSO WAVE service with error number and error message.
84404912		J2:Arm axis encoder multi rotation data acquisition failure	4	Failed to acquire arm axis encoder multi rotation data.	Please contact DENSO WAVE service with error number and error message.
84404913		J3:Arm axis encoder multi rotation data acquisition failure	4	Failed to acquire arm axis encoder multi rotation data.	Please contact DENSO WAVE service with error number and error message.
84404914		J4:Arm axis encoder multi rotation data acquisition failure	4	Failed to acquire arm axis encoder multi rotation data.	Please contact DENSO WAVE service with error number and error message.
84404915		J5:Arm axis encoder multi rotation data acquisition failure	4	Failed to acquire arm axis encoder multi rotation data.	Please contact DENSO WAVE service with error number and error message.
84404916		J6:Arm axis encoder multi rotation data acquisition failure	4	Failed to acquire arm axis encoder multi rotation data.	Please contact DENSO WAVE service with error number and error message.
84404917		J7:Arm axis encoder multi rotation data acquisition failure	4	Failed to acquire arm axis encoder multi rotation data.	Please contact DENSO WAVE service with error number and error message.
84404918		J8:Arm axis encoder multi rotation data acquisition failure	4	Failed to acquire arm axis encoder multi rotation data.	Please contact DENSO WAVE service with error number and error message.
84404921		J1:Arm axis encoder communication test failure	4	Arm axis encoder communication test failed.	Check the encoder wirings.
84404922		J2:Arm axis encoder communication test failure	4	Arm axis encoder communication test failed.	Check the encoder wirings.
84404923		J3:Arm axis encoder communication test failure	4	Arm axis encoder communication test failed.	Check the encoder wirings.
84404924		J4:Arm axis encoder communication test failure	4	Arm axis encoder communication test failed.	Check the encoder wirings.
84404925		J5:Arm axis encoder communication test failure	4	Arm axis encoder communication test failed.	Check the encoder wirings.
84404926		J6:Arm axis encoder communication test failure	4	Arm axis encoder communication test failed.	Check the encoder wirings.
84404927		J7:Arm axis encoder communication test failure	4	Arm axis encoder communication test failed.	Check the encoder wirings.

Code	RC7 Code	Message	Level	Description	Remedy
84404928		J8:Arm axis encoder communication test failure	4	Arm axis encoder communication test failed.	Check the encoder wirings.
84404931		J1:Arm axis encoder temperature sensor error	4	Failed to acquire arm axis encoder temperature data.	Please contact DENSO WAVE service with error number and error message.
84404932		J2:Arm axis encoder temperature sensor error	4	Failed to acquire arm axis encoder temperature data.	Please contact DENSO WAVE service with error number and error message.
84404933		J3:Arm axis encoder temperature sensor error	4	Failed to acquire arm axis encoder temperature data.	Please contact DENSO WAVE service with error number and error message.
84404934		J4:Arm axis encoder temperature sensor error	4	Failed to acquire arm axis encoder temperature data.	Please contact DENSO WAVE service with error number and error message.
84404935		J5:Arm axis encoder temperature sensor error	4	Failed to acquire arm axis encoder temperature data.	Please contact DENSO WAVE service with error number and error message.
84404936		J6:Arm axis encoder temperature sensor error	4	Failed to acquire arm axis encoder temperature data.	Please contact DENSO WAVE service with error number and error message.
84404937		J7:Arm axis encoder temperature sensor error	4	Failed to acquire arm axis encoder temperature data.	Please contact DENSO WAVE service with error number and error message.
84404938		J8:Arm axis encoder temperature sensor error	4	Failed to acquire arm axis encoder temperature data.	Please contact DENSO WAVE service with error number and error message.
84404941		J1:Arm axis encoder preset error	4	Arm axis encoder precise position information hasn't been established yet.	Stop robot arm motion and restart controller. If error still occurs, please contact DENSO WAVE service with error number and error message.
84404942		J2:Arm axis encoder preset error	4	Arm axis encoder precise position information hasn't been established yet.	Stop robot arm motion and restart controller. If error still occurs, please contact DENSO WAVE service with error number and error message.
84404943		J3:Arm axis encoder preset error	4	Arm axis encoder precise position information hasn't been established yet.	Stop robot arm motion and restart controller. If error still occurs, please contact DENSO WAVE service with error number and error message.
84404944		J4:Arm axis encoder preset error	4	Arm axis encoder precise position information hasn't been established yet.	Stop robot arm motion and restart controller. If error still occurs, please contact DENSO WAVE service with error number and error message.
84404945		J5:Arm axis encoder preset error	4	Arm axis encoder precise position information hasn't been established yet.	Stop robot arm motion and restart controller. If error still occurs, please contact DENSO WAVE service with error number and error message.
84404946		J6:Arm axis encoder preset error	4	Arm axis encoder precise position information hasn't been established yet.	Stop robot arm motion and restart controller. If error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
84404947		J7:Arm axis encoder preset error	4	Arm axis encoder precise position information hasn't been established yet.	Stop robot arm motion and restart controller. If error still occurs, please contact DENSO WAVE service with error number and error message.
84404948		J8:Arm axis encoder preset error	4	Arm axis encoder precise position information hasn't been established yet.	Stop robot arm motion and restart controller. If error still occurs, please contact DENSO WAVE service with error number and error message.
84404951		J%1d: Unsupported arm axis encoder error 1	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404952		J%1d: Unsupported arm axis encoder error 1	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404953		J%1d: Unsupported arm axis encoder error 1	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404954		J%1d: Unsupported arm axis encoder error 1	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404955		J%1d: Unsupported arm axis encoder error 1	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404956		J%1d: Unsupported arm axis encoder error 1	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404957		J%1d: Unsupported arm axis encoder error 1	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404958		J%1d: Unsupported arm axis encoder error 1	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404961		J%1d: Unsupported arm axis encoder error 2	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404962		J%1d: Unsupported arm axis encoder error 2	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404963		J%1d: Unsupported arm axis encoder error 2	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404964		J%1d: Unsupported arm axis encoder error 2	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404965		J%1d: Unsupported arm axis encoder error 2	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404966		J%1d: Unsupported arm axis encoder error 2	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404967		J%1d: Unsupported arm axis encoder error 2	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
84404968		J%1d: Unsupported arm axis encoder error 2	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404971		J%1d: Unsupported arm axis encoder error 3	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404972		J%1d: Unsupported arm axis encoder error 3	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404973		J%1d: Unsupported arm axis encoder error 3	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404974		J%1d: Unsupported arm axis encoder error 3	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404975		J%1d: Unsupported arm axis encoder error 3	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404976		J%1d: Unsupported arm axis encoder error 3	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404977		J%1d: Unsupported arm axis encoder error 3	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404978		J%1d: Unsupported arm axis encoder error 3	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404981		J%1d: Unsupported arm axis encoder error 4	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404982		J%1d: Unsupported arm axis encoder error 4	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404983		J%1d: Unsupported arm axis encoder error 4	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404984		J%1d: Unsupported arm axis encoder error 4	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404985		J%1d: Unsupported arm axis encoder error 4	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404986		J%1d: Unsupported arm axis encoder error 4	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404987		J%1d: Unsupported arm axis encoder error 4	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404988		J%1d: Unsupported arm axis encoder error 4	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404991		J%1d: Unsupported arm axis encoder error 5	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
84404992		J%1d: Unsupported arm axis encoder error 5	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404993		J%1d: Unsupported arm axis encoder error 5	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404994		J%1d: Unsupported arm axis encoder error 5	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404995		J%1d: Unsupported arm axis encoder error 5	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404996		J%1d: Unsupported arm axis encoder error 5	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404997		J%1d: Unsupported arm axis encoder error 5	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
84404998		J%1d: Unsupported arm axis encoder error 5	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
844049A1		J%1d: Unsupported arm axis encoder error 6	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
844049A2		J%1d: Unsupported arm axis encoder error 6	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
844049A3		J%1d: Unsupported arm axis encoder error 6	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
844049A4		J%1d: Unsupported arm axis encoder error 6	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
844049A5		J%1d: Unsupported arm axis encoder error 6	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
844049A6		J%1d: Unsupported arm axis encoder error 6	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
844049A7		J%1d: Unsupported arm axis encoder error 6	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
844049A8		J%1d: Unsupported arm axis encoder error 6	4	Unexpected arm axis encoder error occurred.	Please contact DENSO WAVE service with error number and error message.
85400801		Previous backup was not completed.	5	Data backup to storage area failed at previous power OFF.	Please contact DENSO WAVE service with error number and error message.
85400802		Data is not restored after backup failure.	5	Data is not restored after backup to storage area failed.	Please contact DENSO WAVE service with error number and error message.
85400803		Storage area access failure.	5	Failed to check the access of storage area.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
85400804		Backup data error.	5	Backup data error occurred.	Please contact DENSO WAVE service with error number and error message.
85400805		Data is not restored after backup data error.	5	Data is not restored after backup data error occurred.	Please contact DENSO WAVE service with error number and error message.
85400901		Abnormal voltage was detected in Power output board	5	Abnormal voltage was detected in Power output board	Check the power output board wiring and connection apparatus. Check if the input of connection apparatus in current capacity is within the limits. If error still occurs, please contact DENSO WAVE service with error number and error message.
85400902		Failed to start output voltage from the power output board	5	Failed to start output voltage from the power output board	Please contact DENSO WAVE service with error number and error message.
85400903		Power output board controller fuse blown	5	Power output board controller fuse blown.	Check the power output board wiring and connection apparatus. Check if the input of connection apparatus in current capacity is within the limits. And check brake fuse. If error still occurs, please contact DENSO WAVE service with error number and error message.
85400904		Only one board can be installed.	5	Two or more power output boards are installed.	Install only one board. If error still occurs, please contact DENSO WAVE service with error number and error message.
85400981		Slot1: Power output board 24VA fuse blown	5	Power output board 24VA fuse blown.	Check the power output board wiring and connection apparatus. Check if the input of connection apparatus in current capacity is within the limits. And check power output board fuse. If error still occurs, please contact DENSO WAVE service with error number and error message.
85400982		Slot2: Power output board 24VA fuse blown	5	Power output board 24VA fuse blown.	Check the power output board wiring and connection apparatus. Check if the input of connection apparatus in current capacity is within the limits. And check power output board fuse. If error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
85400983		Slot3: Power output board 24VA fuse blown	5	Power output board 24VA fuse blown.	Check the power output board wiring and connection apparatus. Check if the input of connection apparatus in current capacity is within the limits. And check power output board fuse. If error still occurs, please contact DENSO WAVE service with error number and error message.
85400984		Slot4: Power output board 24VA fuse blown	5	Power output board 24VA fuse blown.	Check the power output board wiring and connection apparatus. Check if the input of connection apparatus in current capacity is within the limits. And check power output board fuse. If error still occurs, please contact DENSO WAVE service with error number and error message.
85400991		Slot1: Power output board 24VB fuse blown	5	Power output board 24VB fuse blown.	Check the power output board wiring and connection apparatus. Check if the input of connection apparatus in current capacity is within the limits. And check power output board fuse. If error still occurs, please contact DENSO WAVE service with error number and error message.
85400992		Slot2: Power output board 24VB fuse blown	5	Power output board 24VB fuse blown.	Check the power output board wiring and connection apparatus. Check if the input of connection apparatus in current capacity is within the limits. And check power output board fuse. If error still occurs, please contact DENSO WAVE service with error number and error message.
85400993		Slot3: Power output board 24VB fuse blown	5	Power output board 24VB fuse blown.	Check the power output board wiring and connection apparatus. Check if the input of connection apparatus in current capacity is within the limits. And check power output board fuse. If error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
85400994		Slot4: Power output board 24VB fuse blown	5	Power output board 24VB fuse blown.	Check the power output board wiring and connection apparatus. Check if the input of connection apparatus in current capacity is within the limits. And check power output board fuse. If error still occurs, please contact DENSO WAVE service with error number and error message.
854009A1		Slot1: Power output board 12V fuse blown	5	Power output board 12V fuse blown.	Check the power output board wiring and connection apparatus. Check if the input of connection apparatus in current capacity is within the limits. And check power output board fuse. If error still occurs, please contact DENSO WAVE service with error number and error message.
854009A2		Slot2: Power output board 12V fuse blown	5	Power output board 12V fuse blown.	Check the power output board wiring and connection apparatus. Check if the input of connection apparatus in current capacity is within the limits. And check power output board fuse. If error still occurs, please contact DENSO WAVE service with error number and error message.
854009A3		Slot3: Power output board 12V fuse blown	5	Power output board 12V fuse blown.	Check the power output board wiring and connection apparatus. Check if the input of connection apparatus in current capacity is within the limits. And check power output board fuse. If error still occurs, please contact DENSO WAVE service with error number and error message.
854009A4		Slot4: Power output board 12V fuse blown	5	Power output board 12V fuse blown.	Check the power output board wiring and connection apparatus. Check if the input of connection apparatus in current capacity is within the limits. And check power output board fuse. If error still occurs, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
854009B1		Slot1: Power output board 5V fuse blown	5	Power output board 5V fuse blown.	Check the power output board wiring and connection apparatus. Check if the input of connection apparatus in current capacity is within the limits. And check power output board fuse. If error still occurs, please contact DENSO WAVE service with error number and error message.
854009B2		Slot2: Power output board 5V fuse blown	5	Power output board 5V fuse blown.	Check the power output board wiring and connection apparatus. Check if the input of connection apparatus in current capacity is within the limits. And check power output board fuse. If error still occurs, please contact DENSO WAVE service with error number and error message.
854009B3		Slot3: Power output board 5V fuse blown	5	Power output board 5V fuse blown.	Check the power output board wiring and connection apparatus. Check if the input of connection apparatus in current capacity is within the limits. And check power output board fuse. If error still occurs, please contact DENSO WAVE service with error number and error message.
854009B4		Slot4: Power output board 5V fuse blown	5	Power output board 5V fuse blown.	Check the power output board wiring and connection apparatus. Check if the input of connection apparatus in current capacity is within the limits. And check power output board fuse. If error still occurs, please contact DENSO WAVE service with error number and error message.
85400A00		EtherCAT board detected communication error	5	EtherCAT board detected communication error	Confirm that the EtherCAT cable is property connected. After confirmation, reboot the robot controller. If the error still occurs, Please contact DENSO WAVE service with error number and error message.
83400A01		EtherCAT board detects communication error	3	EtherCAT board detects communication error	Confirm that the EtherCAT cable is property connected.

Code	RC7 Code	Message	Level	Description	Remedy
83400A02		EtherCAT communication disconnection	3	EtherCAT communication disconnection has been detected.	Confirm the EtherCAT cable connection.
85400A03		EtherCAT board memory offset error	5	memory offset of EtherCAT board is unexpected.	Please contact DENSO WAVE service with error number and error message.
83400A20		States of EtherCAT is changed from OP when the motor power is ON	3	States of EtherCAT is changed from OP when the motor power is ON.	When you turn ON motor on again, make states of EhterCAT OP.
83400A21		States of EtherCAT is NOT OP	3	You cannot turn motor ON while states of EtherCAT is NOT OP.	Make states of EhterCAT OP.
83400A22		Failed to EtherCAT acyclic communication	3	Timeout is occurred.	Confirm communication is established and execute the operation again. If the error still occurs, Please contact DENSO WAVE service with error number and error message.
84400A23		Enable-auto signal has been turned ON while motor power is ON	4	Enable-auto signal Strobe has been turned ON beyond a certain time. Therefore, system suspended the motion and turned OFF the motor power.	When you turn ON motor on again, turn ON enable-auto.
84400A24		Protective-stop signal has been turned ON while motor power is ON	4	Protective-stop signal has been turned ON beyond a certain time. Therefore, system suspended the motion and turned OFF the motor power.	When you turn ON motor on again, turn OFF protective-stop signal.
84400A25		Failed to synchronization.	4	Output cycle counter of controlword has not been incremented even after a certain time.	Increment the output cycle counter while motor power is ON. Disable slave motion sync option if you don't use output cycle counter.
84400A26		Servo command buffer full	4	Command data transfer internal buffer overflow occurred.	Comfirm communication cycle of EtherCAT matches a setting value. If sync option is enabled, comfirm the output cycle counter is incrementing.
84400A27		Command value communication delay	4	Command data send internal buffer underflow occurred.	Comfirm communication cycle of EtherCAT matches a setting value. If sync option is enabled, comfirm the output cycle counter is incrementing.
83400A28		Failed to EtherCAT acyclic communication	3	Error was reported from the EtherCAT slave device.	Check the input parameter.
84400A29		Failed to EtherCAT cyclic communication	4	Failed to EtherCAT cyclic communication	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
83404C01		J1 alert occurred in the external joint	3	Alert occured in the external joint.	Error code that servo amplifier appeared is stored in the original number by hexadecimal. Please refer to the manual of servo amplifier and confirm error description.
83404C02		J2 alert occurred in the external joint	3	Alert occured in the external joint.	Error code that servo amplifier appeared is stored in the original number by hexadecimal. Please refer to the manual of servo amplifier and confirm error description.
83404C03		J3 alert occurred in the external joint	3	Alert occured in the external joint.	Error code that servo amplifier appeared is stored in the original number by hexadecimal. Please refer to the manual of servo amplifier and confirm error description.
83404C04		J4 alert occurred in the external joint	3	Alert occured in the external joint.	Error code that servo amplifier appeared is stored in the original number by hexadecimal. Please refer to the manual of servo amplifier and confirm error description.
83404C05		J5 alert occurred in the external joint	3	Alert occured in the external joint.	Error code that servo amplifier appeared is stored in the original number by hexadecimal. Please refer to the manual of servo amplifier and confirm error description.
83404C06		J6 alert occurred in the external joint	3	Alert occured in the external joint.	Error code that servo amplifier appeared is stored in the original number by hexadecimal. Please refer to the manual of servo amplifier and confirm error description.
83404C07		J7 alert occurred in the external joint	3	Alert occured in the external joint.	Error code that servo amplifier appeared is stored in the original number by hexadecimal. Please refer to the manual of servo amplifier and confirm error description.
83404C08		J8 alert occurred in the external joint	3	Alert occured in the external joint.	Error code that servo amplifier appeared is stored in the original number by hexadecimal. Please refer to the manual of servo amplifier and confirm error description.
85404C11		J1 fatal alert occurred in the external joint	5	Fatal alert occured in the external joint.	Error code that servo amplifier appeared is stored in the original number by hexadecimal. Please refer to the manual of servo amplifier and confirm error description.

Code	RC7 Code	Message	Level	Description	Remedy
85404C12		J2 fatal alert occurred in the external joint	5	Fatal alert occured in the external joint.	Error code that servo amplifier appeared is stored in the original number by hexadecimal. Please refer to the manual of servo amplifier and confirm error description.
85404C13		J3 fatal alert occurred in the external joint	5	Fatal alert occured in the external joint.	Error code that servo amplifier appeared is stored in the original number by hexadecimal. Please refer to the manual of servo amplifier and confirm error description.
85404C14		J4 fatal alert occurred in the external joint	5	Fatal alert occured in the external joint.	Error code that servo amplifier appeared is stored in the original number by hexadecimal. Please refer to the manual of servo amplifier and confirm error description.
85404C15		J5 fatal alert occurred in the external joint	5	Fatal alert occured in the external joint.	Error code that servo amplifier appeared is stored in the original number by hexadecimal. Please refer to the manual of servo amplifier and confirm error description.
85404C16		J6 fatal alert occurred in the external joint	5	Fatal alert occured in the external joint.	Error code that servo amplifier appeared is stored in the original number by hexadecimal. Please refer to the manual of servo amplifier and confirm error description.
85404C17		J7 fatal alert occurred in the external joint	5	Fatal alert occured in the external joint.	Error code that servo amplifier appeared is stored in the original number by hexadecimal. Please refer to the manual of servo amplifier and confirm error description.
85404C18		J8 fatal alert occurred in the external joint	5	Fatal alert occured in the external joint.	Error code that servo amplifier appeared is stored in the original number by hexadecimal. Please refer to the manual of servo amplifier and confirm error description.
80404C21		J1 warning occurred in the external joint	0	Warning occurred in the external joint.	Error code that servo amplifier appeared is stored in the original number by hexadecimal. Please refer to the manual of servo amplifier and confirm error description.
80404C22		J2 warning occurred in the external joint	0	Warning occurred in the external joint.	Error code that servo amplifier appeared is stored in the original number by hexadecimal. Please refer to the manual of servo amplifier and confirm error description.

Code	RC7 Code	Message	Level	Description	Remedy
80404C23		J3 warning occurred in the external joint	0	Warning occurred in the external joint.	Error code that servo amplifier appeared is stored in the original number by hexadecimal. Please refer to the manual of servo amplifier and confirm error description.
80404C24		J4 warning occurred in the external joint	0	Warning occurred in the external joint.	Error code that servo amplifier appeared is stored in the original number by hexadecimal. Please refer to the manual of servo amplifier and confirm error description.
80404C25		J5 warning occurred in the external joint	0	Warning occurred in the external joint.	Error code that servo amplifier appeared is stored in the original number by hexadecimal. Please refer to the manual of servo amplifier and confirm error description.
80404C26		J6 warning occurred in the external joint	0	Warning occurred in the external joint.	Error code that servo amplifier appeared is stored in the original number by hexadecimal. Please refer to the manual of servo amplifier and confirm error description.
80404C27		J7 warning occurred in the external joint	0	Warning occurred in the external joint.	Error code that servo amplifier appeared is stored in the original number by hexadecimal. Please refer to the manual of servo amplifier and confirm error description.
80404C28		J8 warning occurred in the external joint	0	Warning occurred in the external joint.	Error code that servo amplifier appeared is stored in the original number by hexadecimal. Please refer to the manual of servo amplifier and confirm error description.
83404C31		J1 alert occurs in the external joint	3	You cannot turn motor ON while alert occurs in the external joint.	Check the cause of the alert occurs in the external joint and solve it. Clear error.
83404C32		J2 alert occurs in the external joint	3	You cannot turn motor ON while alert occurs in the external joint.	Check the cause of the alert occurs in the external joint and solve it. Clear error.
83404C33		J3 alert occurs in the external joint	3	You cannot turn motor ON while alert occurs in the external joint.	Check the cause of the alert occurs in the external joint and solve it. Clear error.
83404C34		J4 alert occurs in the external joint	3	You cannot turn motor ON while alert occurs in the external joint.	Check the cause of the alert occurs in the external joint and solve it. Clear error.

Code	RC7 Code	Message	Level	Description	Remedy
83404C35		J5 alert occurs in the external joint	3	You cannot turn motor ON while alert occurs in the external joint.	Check the cause of the alert occurs in the external joint and solve it. Clear error.
83404C36		J6 alert occurs in the external joint	3	You cannot turn motor ON while alert occurs in the external joint.	Check the cause of the alert occurs in the external joint and solve it. Clear error.
83404C37		J7 alert occurs in the external joint	3	You cannot turn motor ON while alert occurs in the external joint.	Check the cause of the alert occurs in the external joint and solve it. Clear error.
83404C38		J8 alert occurs in the external joint	3	You cannot turn motor ON while alert occurs in the external joint.	Check the cause of the alert occurs in the external joint and solve it. Clear error.
85404C41		J1 fatal alert occurs in the external joint	5	You cannot turn motor ON while fatal alert occurs in the external joint.	Check the cause of the fatal alert occurs in the external joint and solve it. Reboot the robot controller and all EtherCAT slave devices.
85404C42		J2 fatal alert occurs in the external joint	5	You cannot turn motor ON while fatal alert occurs in the external joint.	Check the cause of the fatal alert occurs in the external joint and solve it. Reboot the robot controller and all EtherCAT slave devices.
85404C43		J3 fatal alert occurs in the external joint	5	You cannot turn motor ON while fatal alert occurs in the external joint.	Check the cause of the fatal alert occurs in the external joint and solve it. Reboot the robot controller and all EtherCAT slave devices.
85404C44		J4 fatal alert occurs in the external joint	5	You cannot turn motor ON while fatal alert occurs in the external joint.	Check the cause of the fatal alert occurs in the external joint and solve it. Reboot the robot controller and all EtherCAT slave devices.
85404C45		J5 fatal alert occurs in the external joint	5	You cannot turn motor ON while fatal alert occurs in the external joint.	Check the cause of the fatal alert occurs in the external joint and solve it. Reboot the robot controller and all EtherCAT slave devices.
85404C46		J6 fatal alert occurs in the external joint	5	You cannot turn motor ON while fatal alert occurs in the external joint.	Check the cause of the fatal alert occurs in the external joint and solve it. Reboot the robot controller and all EtherCAT slave devices.

Code	RC7 Code	Message	Level	Description	Remedy
85404C47		J7 fatal alert occurs in the external joint	5	You cannot turn motor ON while fatal alert occurs in the external joint.	Check the cause of the fatal alert occurs in the external joint and solve it. Reboot the robot controller and all EtherCAT slave devices.
85404C48		J8 fatal alert occurs in the external joint	5	You cannot turn motor ON while fatal alert occurs in the external joint.	Check the cause of the fatal alert occurs in the external joint and solve it. Reboot the robot controller and all EtherCAT slave devices.
85404C51		J1 clear error timeout	5	Timeout is occurred in the process of external joint.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C52		J2 clear error timeout	5	Timeout is occurred in the process of external joint.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C53		J3 clear error timeout	5	Timeout is occurred in the process of external joint.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C54		J4 clear error timeout	5	Timeout is occurred in the process of external joint.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C55		J5 clear error timeout	5	Timeout is occurred in the process of external joint.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C56		J6 clear error timeout	5	Timeout is occurred in the process of external joint.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C57		J7 clear error timeout	5	Timeout is occurred in the process of external joint.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C58		J8 clear error timeout	5	Timeout is occurred in the process of external joint.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C61		J1 turn motor ON timeout	5	Timeout is occurred in the process of external joint.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.

Code	RC7 Code	Message	Level	Description	Remedy
85404C62		J2 turn motor ON timeout	5	Timeout is occurred in the process of external joint.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C63		J3 turn motor ON timeout	5	Timeout is occurred in the process of external joint.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C64		J4 turn motor ON timeout	5	Timeout is occurred in the process of external joint.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C65		J5 turn motor ON timeout	5	Timeout is occurred in the process of external joint.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C66		J6 turn motor ON timeout	5	Timeout is occurred in the process of external joint.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C67		J7 turn motor ON timeout	5	Timeout is occurred in the process of external joint.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C68		J8 turn motor ON timeout	5	Timeout is occurred in the process of external joint.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C71		J1 turn motor OFF timeout	5	Timeout is occurred in the process of external joint.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C72		J2 turn motor OFF timeout	5	Timeout is occurred in the process of external joint.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C73		J3 turn motor OFF timeout	5	Timeout is occurred in the process of external joint.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C74		J4 turn motor OFF timeout	5	Timeout is occurred in the process of external joint.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C75		J5 turn motor OFF timeout	5	Timeout is occurred in the process of external joint.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.

Code	RC7 Code	Message	Level	Description	Remedy
85404C76		J6 turn motor OFF timeout	5	Timeout is occurred in the process of external joint.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C77		J7 turn motor OFF timeout	5	Timeout is occurred in the process of external joint.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C78		J8 turn motor OFF timeout	5	Timeout is occurred in the process of external joint.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C81		J1 failed to turn motor ON	5	The status of external joint is not ready to switch on.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C82		J2 failed to turn motor ON	5	The status of external joint is not ready to switch on.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C83		J3 failed to turn motor ON	5	The status of external joint is not ready to switch on.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C84		J4 failed to turn motor ON	5	The status of external joint is not ready to switch on.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C85		J5 failed to turn motor ON	5	The status of external joint is not ready to switch on.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C86		J6 failed to turn motor ON	5	The status of external joint is not ready to switch on.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C87		J7 failed to turn motor ON	5	The status of external joint is not ready to switch on.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
85404C88		J8 failed to turn motor ON	5	The status of external joint is not ready to switch on.	Confirm EtherCAT cable connection and parameter. Reboot the robot controller and all EtherCAT slave devices.
83404C91		J1 external joint device main power is OFF	3	You cannot turn motor ON while external joint device main power OFF.	Servo amplifier main power is OFF. Please confirm signals such as emergency-stop input connected to servo amplifier.

Code	RC7 Code	Message	Level	Description	Remedy
83404C92		J2 external joint device main power is OFF	3	You cannot turn motor ON while external joint device main power OFF.	Servo amplifier main power is OFF. Please confirm signals such as emergency-stop input connected to servo amplifier.
83404C93		J3 external joint device main power is OFF	3	You cannot turn motor ON while external joint device main power OFF.	Servo amplifier main power is OFF. Please confirm signals such as emergency-stop input connected to servo amplifier.
83404C94		J4 external joint device main power is OFF	3	You cannot turn motor ON while external joint device main power OFF.	Servo amplifier main power is OFF. Please confirm signals such as emergency-stop input connected to servo amplifier.
83404C95		J5 external joint device main power is OFF	3	You cannot turn motor ON while external joint device main power OFF.	Servo amplifier main power is OFF. Please confirm signals such as emergency-stop input connected to servo amplifier.
83404C96		J6 external joint device main power is OFF	3	You cannot turn motor ON while external joint device main power OFF.	Servo amplifier main power is OFF. Please confirm signals such as emergency-stop input connected to servo amplifier.
83404C97		J7 external joint device main power is OFF	3	You cannot turn motor ON while external joint device main power OFF.	Servo amplifier main power is OFF. Please confirm signals such as emergency-stop input connected to servo amplifier.
83404C98		J8 external joint device main power is OFF	3	You cannot turn motor ON while external joint device main power OFF.	Servo amplifier main power is OFF. Please confirm signals such as emergency-stop input connected to servo amplifier.
83404CA1		J1 external joint device main power has been turned OFF	3	External joint device main power has been turned OFF.	Servo amplifier main power has been turned OFF. Please confirm signals such as emergency-stop input connected to servo amplifier.
83404CA2		J2 external joint device main power has been turned OFF	3	External joint device main power has been turned OFF.	Servo amplifier main power has been turned OFF. Please confirm signals such as emergency-stop input connected to servo amplifier.
83404CA3		J3 external joint device main power has been turned OFF	3	External joint device main power has been turned OFF.	Servo amplifier main power has been turned OFF. Please confirm signals such as emergency-stop input connected to servo amplifier.
83404CA4		J4 external joint device main power has been turned OFF	3	External joint device main power has been turned OFF.	Servo amplifier main power has been turned OFF. Please confirm signals such as emergency-stop input connected to servo amplifier.
83404CA5		J5 external joint device main power has been turned OFF	3	External joint device main power has been turned OFF.	Servo amplifier main power has been turned OFF. Please confirm signals such as emergency-stop input connected to servo amplifier.

Code	RC7 Code	Message	Level	Description	Remedy
83404CA6		J6 external joint device main power has been turned OFF	3	External joint device main power has been turned OFF.	Servo amplifier main power has been turned OFF. Please confirm signals such as emergency-stop input connected to servo amplifier.
83404CA7		J7 external joint device main power has been turned OFF	3	External joint device main power has been turned OFF.	Servo amplifier main power has been turned OFF. Please confirm signals such as emergency-stop input connected to servo amplifier.
83404CA8		J8 external joint device main power has been turned OFF	3	External joint device main power has been turned OFF.	Servo amplifier main power has been turned OFF. Please confirm signals such as emergency-stop input connected to servo amplifier.
83404CB1		J1 external joint device motor has been turned OFF	3	External joint device motor has been turned OFF.	Servo amplifier motor has been turned OFF. Please confirm signals such as emergency-stop input connected to servo amplifier.
83404CB2		J2 external joint device motor has been turned OFF	3	External joint device motor has been turned OFF.	Servo amplifier motor has been turned OFF. Please confirm signals such as emergency-stop input connected to servo amplifier.
83404CB3		J3 external joint device motor has been turned OFF	3	External joint device motor has been turned OFF.	Servo amplifier motor has been turned OFF. Please confirm signals such as emergency-stop input connected to servo amplifier.
83404CB4		J4 external joint device motor has been turned OFF	3	External joint device motor has been turned OFF.	Servo amplifier motor has been turned OFF. Please confirm signals such as emergency-stop input connected to servo amplifier.
83404CB5		J5 external joint device motor has been turned OFF	3	External joint device motor has been turned OFF.	Servo amplifier motor has been turned OFF. Please confirm signals such as emergency-stop input connected to servo amplifier.
83404CB6		J6 external joint device motor has been turned OFF	3	External joint device motor has been turned OFF.	Servo amplifier motor has been turned OFF. Please confirm signals such as emergency-stop input connected to servo amplifier.
83404CB7		J7 external joint device motor has been turned OFF	3	External joint device motor has been turned OFF.	Servo amplifier motor has been turned OFF. Please confirm signals such as emergency-stop input connected to servo amplifier.
83404CB8		J8 external joint device motor has been turned OFF	3	External joint device motor has been turned OFF.	Servo amplifier motor has been turned OFF. Please confirm signals such as emergency-stop input connected to servo amplifier.
83404CC1		J1 external joint device quick stopped	3	The status of external joint changed in quick stop active.	Servo amplifier quick stopped. Please confirm signals such as emergency-stop input connected to servo amplifier.

Code	RC7 Code	Message	Level	Description	Remedy
83404CC2		J2 external joint device quick stopped	3	The status of external joint changed in quick stop active.	Servo amplifier quick stopped. Please confirm signals such as emergency-stop input connected to servo amplifier.
83404CC3		J3 external joint device quick stopped	3	The status of external joint changed in quick stop active.	Servo amplifier quick stopped. Please confirm signals such as emergency-stop input connected to servo amplifier.
83404CC4		J4 external joint device quick stopped	3	The status of external joint changed in quick stop active.	Servo amplifier quick stopped. Please confirm signals such as emergency-stop input connected to servo amplifier.
83404CC5		J5 external joint device quick stopped	3	The status of external joint changed in quick stop active.	Servo amplifier quick stopped. Please confirm signals such as emergency-stop input connected to servo amplifier.
83404CC6		J6 external joint device quick stopped	3	The status of external joint changed in quick stop active.	Servo amplifier quick stopped. Please confirm signals such as emergency-stop input connected to servo amplifier.
83404CC7		J7 external joint device quick stopped	3	The status of external joint changed in quick stop active.	Servo amplifier quick stopped. Please confirm signals such as emergency-stop input connected to servo amplifier.
83404CC8		J8 external joint device quick stopped	3	The status of external joint changed in quick stop active.	Servo amplifier quick stopped. Please confirm signals such as emergency-stop input connected to servo amplifier.
85404CD1		J1 unexpected external joint device statusword	5	External joint device statusword is unexpected value.	Please contact DENSO WAVE service with error number and error message.
85404CD2		J2 unexpected external joint device statusword	5	External joint device statusword is unexpected value.	Please contact DENSO WAVE service with error number and error message.
85404CD3		J3 unexpected external joint device statusword	5	External joint device statusword is unexpected value.	Please contact DENSO WAVE service with error number and error message.
85404CD4		J4 unexpected external joint device statusword	5	External joint device statusword is unexpected value.	Please contact DENSO WAVE service with error number and error message.
85404CD5		J5 unexpected external joint device statusword	5	External joint device statusword is unexpected value.	Please contact DENSO WAVE service with error number and error message.
85404CD6		J6 unexpected external joint device statusword	5	External joint device statusword is unexpected value.	Please contact DENSO WAVE service with error number and error message.
85404CD7		J7 unexpected external joint device statusword	5	External joint device statusword is unexpected value.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
85404CD8		J8 unexpected external joint device statusword	5	External joint device statusword is unexpected value.	Please contact DENSO WAVE service with error number and error message.
83404CE1		J1 homing error occurred.	3	Homing error occurred in the process of external joint.	Please refer to the manual of servo amplifier and remove the cause of the error and try again.
83404CE2		J2 homing error occurred.	3	Homing error occurred in the process of external joint.	Please refer to the manual of servo amplifier and remove the cause of the error and try again.
83404CE3		J3 homing error occurred.	3	Homing error occurred in the process of external joint.	Please refer to the manual of servo amplifier and remove the cause of the error and try again.
83404CE4		J4 homing error occurred.	3	Homing error occurred in the process of external joint.	Please refer to the manual of servo amplifier and remove the cause of the error and try again.
83404CE5		J5 homing error occurred.	3	Homing error occurred in the process of external joint.	Please refer to the manual of servo amplifier and remove the cause of the error and try again.
83404CE6		J6 homing error occurred.	3	Homing error occurred in the process of external joint.	Please refer to the manual of servo amplifier and remove the cause of the error and try again.
83404CE7		J7 homing error occurred.	3	Homing error occurred in the process of external joint.	Please refer to the manual of servo amplifier and remove the cause of the error and try again.
83404CE8		J8 homing error occurred.	3	Homing error occurred in the process of external joint.	Please refer to the manual of servo amplifier and remove the cause of the error and try again.
85404D01		J1 position actual value is out of robot motion range	5	Position actual value is out of robot motion range.	Turn OFF the robot controller and move the robot in the robot motion range. When brake is locked, disable slave motion, release brakes and move the robot in the robot motion range.
85404D02		J2 position actual value is out of robot motion range	5	Position actual value is out of robot motion range.	Turn OFF the robot controller and move the robot in the robot motion range. When brake is locked, disable slave motion, release brakes and move the robot in the robot motion range.
85404D03		J3 position actual value is out of robot motion range	5	Position actual value is out of robot motion range.	Turn OFF the robot controller and move the robot in the robot motion range. When brake is locked, disable slave motion, release brakes and move the robot in the robot motion range.
85404D04		J4 position actual value is out of robot motion range	5	Position actual value is out of robot motion range.	Turn OFF the robot controller and move the robot in the robot motion range. When brake is locked, disable slave motion, release brakes and move the robot in the robot motion range.

Code	RC7 Code	Message	Level	Description	Remedy
85404D05		J5 position actual value is out of robot motion range	5	Position actual value is out of robot motion range.	Turn OFF the robot controller and move the robot in the robot motion range. When brake is locked, disable slave motion, release brakes and move the robot in the robot motion range.
85404D06		J6 position actual value is out of robot motion range	5	Position actual value is out of robot motion range.	Turn OFF the robot controller and move the robot in the robot motion range. When brake is locked, disable slave motion, release brakes and move the robot in the robot motion range.
85404D07		J7 position actual value is out of robot motion range	5	Position actual value is out of robot motion range.	Turn OFF the robot controller and move the robot in the robot motion range. When brake is locked, disable slave motion, release brakes and move the robot in the robot motion range.
85404D08		J8 position actual value is out of robot motion range	5	Position actual value is out of robot motion range.	Turn OFF the robot controller and move the robot in the robot motion range. When brake is locked, disable slave motion, release brakes and move the robot in the robot motion range.
83404D11		J1 target position is out of robot motion range	3	Target position is out of robot motion range.	The robot cannot move to this direction anymore. Operate the robot to the opposite direction.
83404D12		J2 target position is out of robot motion range	3	Target position is out of robot motion range.	The robot cannot move to this direction anymore. Operate the robot to the opposite direction.
83404D13		J3 target position is out of robot motion range	3	Target position is out of robot motion range.	The robot cannot move to this direction anymore. Operate the robot to the opposite direction.
83404D14		J4 target position is out of robot motion range	3	Target position is out of robot motion range.	The robot cannot move to this direction anymore. Operate the robot to the opposite direction.
83404D15		J5 target position is out of robot motion range	3	Target position is out of robot motion range.	The robot cannot move to this direction anymore. Operate the robot to the opposite direction.
83404D16		J6 target position is out of robot motion range	3	Target position is out of robot motion range.	The robot cannot move to this direction anymore. Operate the robot to the opposite direction.
83404D17		J7 target position is out of robot motion range	3	Target position is out of robot motion range.	The robot cannot move to this direction anymore. Operate the robot to the opposite direction.
83404D18		J8 target position is out of robot motion range	3	Target position is out of robot motion range.	The robot cannot move to this direction anymore. Operate the robot to the opposite direction.
85400C00		Servo MCU version mismatch	5	Servo MCU version mismatch	Please execute the MCU version up.
85400C01		Safety MCU version mismatch	5	Safety MCU version mismatch	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
85400C02		Reboot the robot controller to complete version up of MCU	5	Reboot the robot controller to complete version up of microcomputer	Reboot the robot controller.
85400C03		Failed to query control MCU about error detail	5	Failed to query the control MCU about error detail.	Please contact DENSO WAVE service with error number and error message.
85400C80		Hand:Error raised. Please refer to original code and manual of hand for details.	5	An error in the hand is detected. The error code notified from the hand is described in the original code.	Refer to the hand manual and perform recovery procedure corresponding to the hand error code described in the original code.
84400C81		Hand:Error raised. Please refer to original code and manual of hand for details.	4	An error in the hand is detected. The error code notified from the hand is described in the original code.	Refer to the hand manual and perform recovery procedure corresponding to the hand error code described in the original code.
83400C82		Hand:Error raised. Please refer to original code and manual of hand for details.	3	An error in the hand is detected. The error code notified from the hand is described in the original code.	Refer to the hand manual and perform recovery procedure corresponding to the hand error code described in the original code.
82400C83		Hand:Error raised. Please refer to original code and manual of hand for details.	2	An error in the hand is detected. The error code notified from the hand is described in the original code.	Refer to the hand manual and perform recovery procedure corresponding to the hand error code described in the original code.
85405001		J1:Data flash 1 is blank	5	Data flash 1 is blank.	Please contact DENSO WAVE service with error number and error message.
85405002		J2:Data flash 1 is blank	5	Data flash 1 is blank.	Please contact DENSO WAVE service with error number and error message.
85405003		J3:Data flash 1 is blank	5	Data flash 1 is blank.	Please contact DENSO WAVE service with error number and error message.
85405004		J4:Data flash 1 is blank	5	Data flash 1 is blank.	Please contact DENSO WAVE service with error number and error message.
85405005		J5:Data flash 1 is blank	5	Data flash 1 is blank.	Please contact DENSO WAVE service with error number and error message.
85405006		J6:Data flash 1 is blank	5	Data flash 1 is blank.	Please contact DENSO WAVE service with error number and error message.
85405007		J7:Data flash 1 is blank	5	Data flash 1 is blank.	Please contact DENSO WAVE service with error number and error message.
85405008		J8:Data flash 1 is blank	5	Data flash 1 is blank.	Please contact DENSO WAVE service with error number and error message.
85405011		J1:Data flash 2 is blank	5	Data flash 2 is blank.	Please contact DENSO WAVE service with error number and error message.
85405012		J2:Data flash 2 is blank	5	Data flash 2 is blank.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
85405013		J3:Data flash 2 is blank	5	Data flash 2 is blank.	Please contact DENSO WAVE service with error number and error message.
85405014		J4:Data flash 2 is blank	5	Data flash 2 is blank.	Please contact DENSO WAVE service with error number and error message.
85405015		J5:Data flash 2 is blank	5	Data flash 2 is blank.	Please contact DENSO WAVE service with error number and error message.
85405016		J6:Data flash 2 is blank	5	Data flash 2 is blank.	Please contact DENSO WAVE service with error number and error message.
85405017		J7:Data flash 2 is blank	5	Data flash 2 is blank.	Please contact DENSO WAVE service with error number and error message.
85405018		J8:Data flash 2 is blank	5	Data flash 2 is blank.	Please contact DENSO WAVE service with error number and error message.
85405021		J1:Invalid joint number	5	Invalid joint number.	Please contact DENSO WAVE service with error number and error message.
85405022		J2:Invalid joint number	5	Invalid joint number.	Please contact DENSO WAVE service with error number and error message.
85405023		J3:Invalid joint number	5	Invalid joint number.	Please contact DENSO WAVE service with error number and error message.
85405024		J4:Invalid joint number	5	Invalid joint number.	Please contact DENSO WAVE service with error number and error message.
85405025		J5:Invalid joint number	5	Invalid joint number.	Please contact DENSO WAVE service with error number and error message.
85405026		J6:Invalid joint number	5	Invalid joint number.	Please contact DENSO WAVE service with error number and error message.
85405027		J7:Invalid joint number	5	Invalid joint number.	Please contact DENSO WAVE service with error number and error message.
85405028		J8:Invalid joint number	5	Invalid joint number.	Please contact DENSO WAVE service with error number and error message.
85405101		J1:CAN initialize error	5	Failed to initialize CAN communication.	Please contact DENSO WAVE service with error number and error message.
85405102		J2:CAN initialize error	5	Failed to initialize CAN communication.	Please contact DENSO WAVE service with error number and error message.
85405103		J3:CAN initialize error	5	Failed to initialize CAN communication.	Please contact DENSO WAVE service with error number and error message.
85405104		J4:CAN initialize error	5	Failed to initialize CAN communication.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
85405105		J5:CAN initialize error	5	Failed to initialize CAN communication.	Please contact DENSO WAVE service with error number and error message.
85405106		J6:CAN initialize error	5	Failed to initialize CAN communication.	Please contact DENSO WAVE service with error number and error message.
85405107		J7:CAN initialize error	5	Failed to initialize CAN communication.	Please contact DENSO WAVE service with error number and error message.
85405108		J8:CAN initialize error	5	Failed to initialize CAN communication.	Please contact DENSO WAVE service with error number and error message.
84405401		J1:CAN communication error	4	CAN communication error is detected.	Please contact DENSO WAVE service with error number and error message.
84405402		J2:CAN communication error	4	CAN communication error is detected.	Please contact DENSO WAVE service with error number and error message.
84405403		J3:CAN communication error	4	CAN communication error is detected.	Please contact DENSO WAVE service with error number and error message.
84405404		J4:CAN communication error	4	CAN communication error is detected.	Please contact DENSO WAVE service with error number and error message.
84405405		J5:CAN communication error	4	CAN communication error is detected.	Please contact DENSO WAVE service with error number and error message.
84405406		J6:CAN communication error	4	CAN communication error is detected.	Please contact DENSO WAVE service with error number and error message.
84405407		J7:CAN communication error	4	CAN communication error is detected.	Please contact DENSO WAVE service with error number and error message.
84405408		J8:CAN communication error	4	CAN communication error is detected.	Please contact DENSO WAVE service with error number and error message.
84405501		J1:Bus voltage failure	4	Motor bus undervoltage was detected during motor-on state.	Check that the safety monitoring processor detects any error. If an error has been detected, clear the error and retry. Also, it may occur when disconnection is detected by communication with TP. If the error still remains after this procedure, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
84405502		J2:Bus voltage failure	4	Motor bus undervoltage was detected during motor-on state.	Check that the safety monitoring processor detects any error. If an error has been detected, clear the error and retry. Also, it may occur when disconnection is detected by communication with TP. If the error still remains after this procedure, please contact DENSO WAVE service with error number and error message.
84405503		J3:Bus voltage failure	4	Motor bus undervoltage was detected during motor-on state.	Check that the safety monitoring processor detects any error. If an error has been detected, clear the error and retry. Also, it may occur when disconnection is detected by communication with TP. If the error still remains after this procedure, please contact DENSO WAVE service with error number and error message.
84405504		J4:Bus voltage failure	4	Motor bus undervoltage was detected during motor-on state.	Check that the safety monitoring processor detects any error. If an error has been detected, clear the error and retry. Also, it may occur when disconnection is detected by communication with TP. If the error still remains after this procedure, please contact DENSO WAVE service with error number and error message.
84405505		J5:Bus voltage failure	4	Motor bus undervoltage was detected during motor-on state.	Check that the safety monitoring processor detects any error. If an error has been detected, clear the error and retry. Also, it may occur when disconnection is detected by communication with TP. If the error still remains after this procedure, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
84405506		J6:Bus voltage failure	4	Motor bus undervoltage was detected during motor-on state.	Check that the safety monitoring processor detects any error. If an error has been detected, clear the error and retry. Also, it may occur when disconnection is detected by communication with TP. If the error still remains after this procedure, please contact DENSO WAVE service with error number and error message.
84405507		J7:Bus voltage failure	4	Motor bus undervoltage was detected during motor-on state.	Check that the safety monitoring processor detects any error. If an error has been detected, clear the error and retry. Also, it may occur when disconnection is detected by communication with TP. If the error still remains after this procedure, please contact DENSO WAVE service with error number and error message.
84405508		J8:Bus voltage failure	4	Motor bus undervoltage was detected during motor-on state.	Check that the safety monitoring processor detects any error. If an error has been detected, clear the error and retry. Also, it may occur when disconnection is detected by communication with TP. If the error still remains after this procedure, please contact DENSO WAVE service with error number and error message.
84405601		J1:Receive timeout	4	Receive timeout.	Please contact DENSO WAVE service with error number and error message.
84405602		J2:Receive timeout	4	Receive timeout.	Please contact DENSO WAVE service with error number and error message.
84405603		J3:Receive timeout	4	Receive timeout.	Please contact DENSO WAVE service with error number and error message.
84405604		J4:Receive timeout	4	Receive timeout.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
84405605		J5:Receive timeout	4	Receive timeout.	Please contact DENSO WAVE service with error number and error message.
84405606		J6:Receive timeout	4	Receive timeout.	Please contact DENSO WAVE service with error number and error message.
84405607		J7:Receive timeout	4	Receive timeout.	Please contact DENSO WAVE service with error number and error message.
84405608		J8:Receive timeout	4	Receive timeout.	Please contact DENSO WAVE service with error number and error message.
85405C01		J1:Acceleration sensor initialization error	5	Acceleration sensor initialization error.	Please contact DENSO WAVE service with error number and error message.
85405C02		J2:Acceleration sensor initialization error	5	Acceleration sensor initialization error.	Please contact DENSO WAVE service with error number and error message.
85405C03		J3:Acceleration sensor initialization error	5	Acceleration sensor initialization error.	Please contact DENSO WAVE service with error number and error message.
85405C04		J4:Acceleration sensor initialization error	5	Acceleration sensor initialization error.	Please contact DENSO WAVE service with error number and error message.
85405C05		J5:Acceleration sensor initialization error	5	Acceleration sensor initialization error.	Please contact DENSO WAVE service with error number and error message.
85405C06		J6:Acceleration sensor initialization error	5	Acceleration sensor initialization error.	Please contact DENSO WAVE service with error number and error message.
85405C07		J7:Acceleration sensor initialization error	5	Acceleration sensor initialization error.	Please contact DENSO WAVE service with error number and error message.
85405C08		J8:Acceleration sensor initialization error	5	Acceleration sensor initialization error.	Please contact DENSO WAVE service with error number and error message.
84405F01		J1:Control MCU communication error	4	Failed to communicate to the control MCU.	Please contact DENSO WAVE service with error number and error message.
84405F02		J2:Control MCU communication error	4	Failed to communicate to the control MCU.	Please contact DENSO WAVE service with error number and error message.
84405F03		J3:Control MCU communication error	4	Failed to communicate to the control MCU.	Please contact DENSO WAVE service with error number and error message.
84405F04		J4:Control MCU communication error	4	Failed to communicate to the control MCU.	Please contact DENSO WAVE service with error number and error message.
84405F05		J5:Control MCU communication error	4	Failed to communicate to the control MCU.	Please contact DENSO WAVE service with error number and error message.
84405F06		J6:Control MCU communication error	4	Failed to communicate to the control MCU.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
84405F07		J7:Control MCU communication error	4	Failed to communicate to the control MCU.	Please contact DENSO WAVE service with error number and error message.
84405F08		J8:Control MCU communication error	4	Failed to communicate to the control MCU.	Please contact DENSO WAVE service with error number and error message.
85405FB1		J1:Failed to query control MCU about error detail	5	Failed to query the control MCU about error detail.	Please contact DENSO WAVE service with error number and error message.
85405FB2		J2:Failed to query control MCU about error detail	5	Failed to query the control MCU about error detail.	Please contact DENSO WAVE service with error number and error message.
85405FB3		J3:Failed to query control MCU about error detail	5	Failed to query the control MCU about error detail.	Please contact DENSO WAVE service with error number and error message.
85405FB4		J4:Failed to query control MCU about error detail	5	Failed to query the control MCU about error detail.	Please contact DENSO WAVE service with error number and error message.
85405FB5		J5:Failed to query control MCU about error detail	5	Failed to query the control MCU about error detail.	Please contact DENSO WAVE service with error number and error message.
85405FB6		J6:Failed to query control MCU about error detail	5	Failed to query the control MCU about error detail.	Please contact DENSO WAVE service with error number and error message.
85405FB7		J7:Failed to query control MCU about error detail	5	Failed to query the control MCU about error detail.	Please contact DENSO WAVE service with error number and error message.
85405FB8		J8:Failed to query control MCU about error detail	5	Failed to query the control MCU about error detail.	Please contact DENSO WAVE service with error number and error message.
85405FC1		J1:Initialization error	5	Initialization of the control MCU is not completed.	Please contact DENSO WAVE service with error number and error message.
85405FC2		J2:Initialization error	5	Initialization of the control MCU is not completed.	Please contact DENSO WAVE service with error number and error message.
85405FC3		J3:Initialization error	5	Initialization of the control MCU is not completed.	Please contact DENSO WAVE service with error number and error message.
85405FC4		J4:Initialization error	5	Initialization of the control MCU is not completed.	Please contact DENSO WAVE service with error number and error message.
85405FC5		J5:Initialization error	5	Initialization of the control MCU is not completed.	Please contact DENSO WAVE service with error number and error message.
85405FC6		J6:Initialization error	5	Initialization of the control MCU is not completed.	Please contact DENSO WAVE service with error number and error message.
85405FC7		J7:Initialization error	5	Initialization of the control MCU is not completed.	Please contact DENSO WAVE service with error number and error message.
85405FC8		J8:Initialization error	5	Initialization of the control MCU is not completed.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
85405FD1		J1:Unexpected error	5	Error occurs, but cannot acquire error details.	Please contact DENSO WAVE service with error number and error message.
85405FD2		J2:Unexpected error	5	Error occurs, but cannot acquire error details.	Please contact DENSO WAVE service with error number and error message.
85405FD3		J3:Unexpected error	5	Error occurs, but cannot acquire error details.	Please contact DENSO WAVE service with error number and error message.
85405FD4		J4:Unexpected error	5	Error occurs, but cannot acquire error details.	Please contact DENSO WAVE service with error number and error message.
85405FD5		J5:Unexpected error	5	Error occurs, but cannot acquire error details.	Please contact DENSO WAVE service with error number and error message.
85405FD6		J6:Unexpected error	5	Error occurs, but cannot acquire error details.	Please contact DENSO WAVE service with error number and error message.
85405FD7		J7:Unexpected error	5	Error occurs, but cannot acquire error details.	Please contact DENSO WAVE service with error number and error message.
85405FD8		J8:Unexpected error	5	Error occurs, but cannot acquire error details.	Please contact DENSO WAVE service with error number and error message.
85405FE1		J1:Unsupported error	5	Unexpected error detail information is received.	Please contact DENSO WAVE service with error number and error message.
85405FE2		J2:Unsupported error	5	Unexpected error detail information is received.	Please contact DENSO WAVE service with error number and error message.
85405FE3		J3:Unsupported error	5	Unexpected error detail information is received.	Please contact DENSO WAVE service with error number and error message.
85405FE4		J4:Unsupported error	5	Unexpected error detail information is received.	Please contact DENSO WAVE service with error number and error message.
85405FE5		J5:Unsupported error	5	Unexpected error detail information is received.	Please contact DENSO WAVE service with error number and error message.
85405FE6		J6:Unsupported error	5	Unexpected error detail information is received.	Please contact DENSO WAVE service with error number and error message.
85405FE7		J7:Unsupported error	5	Unexpected error detail information is received.	Please contact DENSO WAVE service with error number and error message.
85405FE8		J8:Unsupported error	5	Unexpected error detail information is received.	Please contact DENSO WAVE service with error number and error message.
84405FF1		J1:Motor off	4	Microcomputer turn OFF motor.	The motor has been turned OFF because an error with LV3 or higher occurred. If no other error has occurred, please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
84405FF2		J2:Motor off	4	Microcomputer turn OFF motor.	The motor has been turned OFF because an error with LV3 or higher occurred. If no other error has occurred, please contact DENSO WAVE service with error number and error message.
84405FF3		J3:Motor off	4	Microcomputer turn OFF motor.	The motor has been turned OFF because an error with LV3 or higher occurred. If no other error has occurred, please contact DENSO WAVE service with error number and error message.
84405FF4		J4:Motor off	4	Microcomputer turn OFF motor.	The motor has been turned OFF because an error with LV3 or higher occurred. If no other error has occurred, please contact DENSO WAVE service with error number and error message.
84405FF5		J5:Motor off	4	Microcomputer turn OFF motor.	The motor has been turned OFF because an error with LV3 or higher occurred. If no other error has occurred, please contact DENSO WAVE service with error number and error message.
84405FF6		J6:Motor off	4	Microcomputer turn OFF motor.	The motor has been turned OFF because an error with LV3 or higher occurred. If no other error has occurred, please contact DENSO WAVE service with error number and error message.
84405FF7		J7:Motor off	4	Microcomputer turn OFF motor.	The motor has been turned OFF because an error with LV3 or higher occurred. If no other error has occurred, please contact DENSO WAVE service with error number and error message.
84405FF8		J8:Motor off	4	Microcomputer turn OFF motor.	The motor has been turned OFF because an error with LV3 or higher occurred. If no other error has occurred, please contact DENSO WAVE service with error number and error message.
85401000		Internal error 1	5	Unexpected servo module internal error occurred.	Please contact DENSO WAVE service with error number and error message.
85401001		Internal error 2	5	Unexpected servo module internal error occurred.	Please contact DENSO WAVE service with error number and error message.
85401002		Internal error 3	5	Unexpected servo module internal error occurred.	Please contact DENSO WAVE service with error number and error message.
85402000	6607	Invalid servo parameter 1	5	Invalid servo parameter is specified.	Check the parameter.
85402001	6607	Invalid encoder setting 1	5	Invalid encoder setting is specified.	Check the parameter.

Code	RC7 Code	Message	Level	Description	Remedy
85402002	6607	Invalid encoder setting 2	5	Invalid encoder setting is specified.	Check the parameter.
85402003	6607	Invalid driver unit setting 1	5	Invalid driver unit setting is specified.	Check the parameter.
85402004	6607	Invalid brake setting 1	5	Invalid brake setting is specified.	Check the parameter.
85402005	6607	Invalid Emergency-stop setting 1	5	Invalid Emergency-stop setting is specified.	Check the parameter.
85402006	6607	Invalid Emergency-stop setting 2	5	Invalid Emergency-stop setting is specified.	Check the parameter.
85402007	6607	Invalid slot number setting	5	Same slot number setting is specified for some joints. When robot controller is dual arm control configuration, same slot number may be specified for master robot and slave robot.	Check the slot number.
85406001		J1:Invalid servo parameter 2	5	Invalid servo parameter is specified.	Check the parameter.
85406002		J2:Invalid servo parameter 2	5	Invalid servo parameter is specified.	Check the parameter.
85406003		J3:Invalid servo parameter 2	5	Invalid servo parameter is specified.	Check the parameter.
85406004		J4:Invalid servo parameter 2	5	Invalid servo parameter is specified.	Check the parameter.
85406005		J5:Invalid servo parameter 2	5	Invalid servo parameter is specified.	Check the parameter.
85406006		J6:Invalid servo parameter 2	5	Invalid servo parameter is specified.	Check the parameter.
85406007		J7:Invalid servo parameter 2	5	Invalid servo parameter is specified.	Check the parameter.
85406008		J8:Invalid servo parameter 2	5	Invalid servo parameter is specified.	Check the parameter.
85406011		J1:Invalid motor setting 1	5	Invalid motor setting is specified.	Check the parameter.
85406012		J2:Invalid motor setting 1	5	Invalid motor setting is specified.	Check the parameter.
85406013		J3:Invalid motor setting 1	5	Invalid motor setting is specified.	Check the parameter.
85406014		J4:Invalid motor setting 1	5	Invalid motor setting is specified.	Check the parameter.
85406015		J5:Invalid motor setting 1	5	Invalid motor setting is specified.	Check the parameter.
85406016		J6:Invalid motor setting 1	5	Invalid motor setting is specified.	Check the parameter.
85406017		J7:Invalid motor setting 1	5	Invalid motor setting is specified.	Check the parameter.
85406018		J8:Invalid motor setting 1	5	Invalid motor setting is specified.	Check the parameter.
85406021		J1:Invalid brake setting 2	5	Invalid brake setting is specified.	Check the parameter.
85406022		J2:Invalid brake setting 2	5	Invalid brake setting is specified.	Check the parameter.
85406023		J3:Invalid brake setting 2	5	Invalid brake setting is specified.	Check the parameter.
85406024		J4:Invalid brake setting 2	5	Invalid brake setting is specified.	Check the parameter.
85406025		J5:Invalid brake setting 2	5	Invalid brake setting is specified.	Check the parameter.
85406026		J6:Invalid brake setting 2	5	Invalid brake setting is specified.	Check the parameter.
85406027		J7:Invalid brake setting 2	5	Invalid brake setting is specified.	Check the parameter.
85406028		J8:Invalid brake setting 2	5	Invalid brake setting is specified.	Check the parameter.
85406031		J1:Invalid brake setting 3	5	Invalid brake setting is specified.	Check the parameter.

Code	RC7 Code	Message	Level	Description	Remedy
85406032		J2:Invalid brake setting 3	5	Invalid brake setting is specified.	Check the parameter.
85406033		J3:Invalid brake setting 3	5	Invalid brake setting is specified.	Check the parameter.
85406034		J4:Invalid brake setting 3	5	Invalid brake setting is specified.	Check the parameter.
85406035		J5:Invalid brake setting 3	5	Invalid brake setting is specified.	Check the parameter.
85406036		J6:Invalid brake setting 3	5	Invalid brake setting is specified.	Check the parameter.
85406037		J7:Invalid brake setting 3	5	Invalid brake setting is specified.	Check the parameter.
85406038		J8:Invalid brake setting 3	5	Invalid brake setting is specified.	Check the parameter.
85406041		G1:Invalid brake setting 4	5	Invalid brake setting is specified.	Check the parameter.
85406042		G2:Invalid brake setting 4	5	Invalid brake setting is specified.	Check the parameter.
85406043		G3:Invalid brake setting 4	5	Invalid brake setting is specified.	Check the parameter.
85406044		G4:Invalid brake setting 4	5	Invalid brake setting is specified.	Check the parameter.
85406045		G5:Invalid brake setting 4	5	Invalid brake setting is specified.	Check the parameter.
85406046		G6:Invalid brake setting 4	5	Invalid brake setting is specified.	Check the parameter.
85406047		G7:Invalid brake setting 4	5	Invalid brake setting is specified.	Check the parameter.
85406048		G8:Invalid brake setting 4	5	Invalid brake setting is specified.	Check the parameter.
85406051		J1:Invalid brake setting 5	5	Invalid brake setting is specified.	Check the parameter.
85406052		J2:Invalid brake setting 5	5	Invalid brake setting is specified.	Check the parameter.
85406053		J3:Invalid brake setting 5	5	Invalid brake setting is specified.	Check the parameter.
85406054		J4:Invalid brake setting 5	5	Invalid brake setting is specified.	Check the parameter.
85406055		J5:Invalid brake setting 5	5	Invalid brake setting is specified.	Check the parameter.
85406056		J6:Invalid brake setting 5	5	Invalid brake setting is specified.	Check the parameter.
85406057		J7:Invalid brake setting 5	5	Invalid brake setting is specified.	Check the parameter.
85406058		J8:Invalid brake setting 5	5	Invalid brake setting is specified.	Check the parameter.
85406061		J1:Invalid encoder setting 1	5	Invalid encoder setting is specified.	Check the parameter.
85406062		J2:Invalid encoder setting 1	5	Invalid encoder setting is specified.	Check the parameter.
85406063		J3:Invalid encoder setting 1	5	Invalid encoder setting is specified.	Check the parameter.
85406064		J4:Invalid encoder setting 1	5	Invalid encoder setting is specified.	Check the parameter.
85406065		J5:Invalid encoder setting 1	5	Invalid encoder setting is specified.	Check the parameter.
85406066		J6:Invalid encoder setting 1	5	Invalid encoder setting is specified.	Check the parameter.
85406067		J7:Invalid encoder setting 1	5	Invalid encoder setting is specified.	Check the parameter.
85406068		J8:Invalid encoder setting 1	5	Invalid encoder setting is specified.	Check the parameter.
85406071		J1:Invalid encoder ID setting	5	Invalid encoder setting is specified.	Check the parameter.
85406072		J2:Invalid encoder ID setting	5	Invalid encoder setting is specified.	Check the parameter.
85406073		J3:Invalid encoder ID setting	5	Invalid encoder setting is specified.	Check the parameter.
85406074		J4:Invalid encoder ID setting	5	Invalid encoder setting is specified.	Check the parameter.

Code	RC7 Code	Message	Level	Description	Remedy
85406075		J5:Invalid encoder ID setting	5	Invalid encoder setting is specified.	Check the parameter.
85406076		J6:Invalid encoder ID setting	5	Invalid encoder setting is specified.	Check the parameter.
85406077		J7:Invalid encoder ID setting	5	Invalid encoder setting is specified.	Check the parameter.
85406078		J8:Invalid encoder ID setting	5	Invalid encoder setting is specified.	Check the parameter.
85406081		ID1:Duplicated encoder ID	5	Invalid encoder setting is specified.	Check the parameter.
85406082		ID2:Duplicated encoder ID	5	Invalid encoder setting is specified.	Check the parameter.
85406083		ID3:Duplicated encoder ID	5	Invalid encoder setting is specified.	Check the parameter.
85406084		ID4:Duplicated encoder ID	5	Invalid encoder setting is specified.	Check the parameter.
85406085		ID5:Duplicated encoder ID	5	Invalid encoder setting is specified.	Check the parameter.
85406086		ID6:Duplicated encoder ID	5	Invalid encoder setting is specified.	Check the parameter.
85406087		ID7:Duplicated encoder ID	5	Invalid encoder setting is specified.	Check the parameter.
85406088		ID8:Duplicated encoder ID	5	Invalid encoder setting is specified.	Check the parameter.
85406091		J1:Invalid encoder setting 2	5	Invalid encoder setting is specified.	Check the parameter.
85406092		J2:Invalid encoder setting 2	5	Invalid encoder setting is specified.	Check the parameter.
85406093		J3:Invalid encoder setting 2	5	Invalid encoder setting is specified.	Check the parameter.
85406094		J4:Invalid encoder setting 2	5	Invalid encoder setting is specified.	Check the parameter.
85406095		J5:Invalid encoder setting 2	5	Invalid encoder setting is specified.	Check the parameter.
85406096		J6:Invalid encoder setting 2	5	Invalid encoder setting is specified.	Check the parameter.
85406097		J7:Invalid encoder setting 2	5	Invalid encoder setting is specified.	Check the parameter.
85406098		J8:Invalid encoder setting 2	5	Invalid encoder setting is specified.	Check the parameter.
854060A1		J1:Invalid encoder setting 3	5	Invalid encoder setting is specified.	Check the parameter.
854060A2		J2:Invalid encoder setting 3	5	Invalid encoder setting is specified.	Check the parameter.
854060A3		J3:Invalid encoder setting 3	5	Invalid encoder setting is specified.	Check the parameter.
854060A4		J4:Invalid encoder setting 3	5	Invalid encoder setting is specified.	Check the parameter.
854060A5		J5:Invalid encoder setting 3	5	Invalid encoder setting is specified.	Check the parameter.
854060A6		J6:Invalid encoder setting 3	5	Invalid encoder setting is specified.	Check the parameter.
854060A7		J7:Invalid encoder setting 3	5	Invalid encoder setting is specified.	Check the parameter.
854060A8		J8:Invalid encoder setting 3	5	Invalid encoder setting is specified.	Check the parameter.
854060B1		J1:Invalid power module setting 2	5	Invalid driver unit setting is specified.	Check the parameter.
854060B2		J2:Invalid power module setting 2	5	Invalid driver unit setting is specified.	Check the parameter.
854060B3		J3:Invalid power module setting 2	5	Invalid driver unit setting is specified.	Check the parameter.
854060B4		J4:Invalid power module setting 2	5	Invalid driver unit setting is specified.	Check the parameter.
854060B5		J5:Invalid power module setting 2	5	Invalid driver unit setting is specified.	Check the parameter.
854060B6		J6:Invalid power module setting 2	5	Invalid driver unit setting is specified.	Check the parameter.
854060B7		J7:Invalid power module setting 2	5	Invalid driver unit setting is specified.	Check the parameter.

Code	RC7 Code	Message	Level	Description	Remedy
854060B8		J8:Invalid power module setting 2	5	Invalid driver unit setting is specified.	Check the parameter.
854060C1		J1:Invalid power module setting 3	5	Invalid driver unit setting is specified.	Check the parameter.
854060C2		J2:Invalid power module setting 3	5	Invalid driver unit setting is specified.	Check the parameter.
854060C3		J3:Invalid power module setting 3	5	Invalid driver unit setting is specified.	Check the parameter.
854060C4		J4:Invalid power module setting 3	5	Invalid driver unit setting is specified.	Check the parameter.
854060C5		J5:Invalid power module setting 3	5	Invalid driver unit setting is specified.	Check the parameter.
854060C6		J6:Invalid power module setting 3	5	Invalid driver unit setting is specified.	Check the parameter.
854060C7		J7:Invalid power module setting 3	5	Invalid driver unit setting is specified.	Check the parameter.
854060C8		J8:Invalid power module setting 3	5	Invalid driver unit setting is specified.	Check the parameter.
854060D1		J1:Invalid power module setting 4	5	Invalid driver unit setting is specified.	Check the parameter.
854060D2		J2:Invalid power module setting 4	5	Invalid driver unit setting is specified.	Check the parameter.
854060D3		J3:Invalid power module setting 4	5	Invalid driver unit setting is specified.	Check the parameter.
854060D4		J4:Invalid power module setting 4	5	Invalid driver unit setting is specified.	Check the parameter.
854060D5		J5:Invalid power module setting 4	5	Invalid driver unit setting is specified.	Check the parameter.
854060D6		J6:Invalid power module setting 4	5	Invalid driver unit setting is specified.	Check the parameter.
854060D7		J7:Invalid power module setting 4	5	Invalid driver unit setting is specified.	Check the parameter.
854060D8		J8:Invalid power module setting 4	5	Invalid driver unit setting is specified.	Check the parameter.
854060E1		J1:Invalid motor setting 2	5	Invalid motor setting is specified.	Check the parameter.
854060E2		J2:Invalid motor setting 2	5	Invalid motor setting is specified.	Check the parameter.
854060E3		J3:Invalid motor setting 2	5	Invalid motor setting is specified.	Check the parameter.
854060E4		J4:Invalid motor setting 2	5	Invalid motor setting is specified.	Check the parameter.
854060E5		J5:Invalid motor setting 2	5	Invalid motor setting is specified.	Check the parameter.
854060E6		J6:Invalid motor setting 2	5	Invalid motor setting is specified.	Check the parameter.
854060E7		J7:Invalid motor setting 2	5	Invalid motor setting is specified.	Check the parameter.
854060E8		J8:Invalid motor setting 2	5	Invalid motor setting is specified.	Check the parameter.
854060F1		J1:Invalid motor setting 3	5	Invalid motor setting is specified.	Check the parameter.
854060F2		J2:Invalid motor setting 3	5	Invalid motor setting is specified.	Check the parameter.
854060F3		J3:Invalid motor setting 3	5	Invalid motor setting is specified.	Check the parameter.
854060F4		J4:Invalid motor setting 3	5	Invalid motor setting is specified.	Check the parameter.
854060F5		J5:Invalid motor setting 3	5	Invalid motor setting is specified.	Check the parameter.
854060F6		J6:Invalid motor setting 3	5	Invalid motor setting is specified.	Check the parameter.
854060F7		J7:Invalid motor setting 3	5	Invalid motor setting is specified.	Check the parameter.
854060F8		J8:Invalid motor setting 3	5	Invalid motor setting is specified.	Check the parameter.
85406101		J1:Invalid motor setting 4	5	Invalid motor setting is specified.	Check the parameter.
85406102		J2:Invalid motor setting 4	5	Invalid motor setting is specified.	Check the parameter.

Code	RC7 Code	Message	Level	Description	Remedy
85406103		J3:Invalid motor setting 4	5	Invalid motor setting is specified.	Check the parameter.
85406104		J4:Invalid motor setting 4	5	Invalid motor setting is specified.	Check the parameter.
85406105		J5:Invalid motor setting 4	5	Invalid motor setting is specified.	Check the parameter.
85406106		J6:Invalid motor setting 4	5	Invalid motor setting is specified.	Check the parameter.
85406107		J7:Invalid motor setting 4	5	Invalid motor setting is specified.	Check the parameter.
85406108		J8:Invalid motor setting 4	5	Invalid motor setting is specified.	Check the parameter.
85406111		J1:Invalid controller setting	5	Invalid robot controller setting is specified.	Check the parameter.
85406112		J2:Invalid controller setting	5	Invalid robot controller setting is specified.	Check the parameter.
85406113		J3:Invalid controller setting	5	Invalid robot controller setting is specified.	Check the parameter.
85406114		J4:Invalid controller setting	5	Invalid robot controller setting is specified.	Check the parameter.
85406115		J5:Invalid controller setting	5	Invalid robot controller setting is specified.	Check the parameter.
85406116		J6:Invalid controller setting	5	Invalid robot controller setting is specified.	Check the parameter.
85406117		J7:Invalid controller setting	5	Invalid robot controller setting is specified.	Check the parameter.
85406118		J8:Invalid controller setting	5	Invalid robot controller setting is specified.	Check the parameter.
85406121		J1:Invalid controller limit value setting	5	Invalid limit value is specified.	Check the parameter.
85406122		J2:Invalid controller limit value setting	5	Invalid limit value is specified.	Check the parameter.
85406123		J3:Invalid controller limit value setting	5	Invalid limit value is specified.	Check the parameter.
85406124		J4:Invalid controller limit value setting	5	Invalid limit value is specified.	Check the parameter.
85406125		J5:Invalid controller limit value setting	5	Invalid limit value is specified.	Check the parameter.
85406126		J6:Invalid controller limit value setting	5	Invalid limit value is specified.	Check the parameter.
85406127		J7:Invalid controller limit value setting	5	Invalid limit value is specified.	Check the parameter.
85406128		J8:Invalid controller limit value setting	5	Invalid limit value is specified.	Check the parameter.
85406131		J1:Invalid current control setting	5	Invalid current control setting is specified.	Check the parameter.
85406132		J2:Invalid current control setting	5	Invalid current control setting is specified.	Check the parameter.
85406133		J3:Invalid current control setting	5	Invalid current control setting is specified.	Check the parameter.
85406134		J4:Invalid current control setting	5	Invalid current control setting is specified.	Check the parameter.
85406135		J5:Invalid current control setting	5	Invalid current control setting is specified.	Check the parameter.

Code	RC7 Code	Message	Level	Description	Remedy
85406136		J6:Invalid current control setting	5	Invalid current control setting is specified.	Check the parameter.
85406137		J7:Invalid current control setting	5	Invalid current control setting is specified.	Check the parameter.
85406138		J8:Invalid current control setting	5	Invalid current control setting is specified.	Check the parameter.
85406141		J1:Filter parameter calculation error 1	5	Invalid filter setting is specified.	Check the parameter.
85406142		J2:Filter parameter calculation error 1	5	Invalid filter setting is specified.	Check the parameter.
85406143		J3:Filter parameter calculation error 1	5	Invalid filter setting is specified.	Check the parameter.
85406144		J4:Filter parameter calculation error 1	5	Invalid filter setting is specified.	Check the parameter.
85406145		J5:Filter parameter calculation error 1	5	Invalid filter setting is specified.	Check the parameter.
85406146		J6:Filter parameter calculation error 1	5	Invalid filter setting is specified.	Check the parameter.
85406147		J7:Filter parameter calculation error 1	5	Invalid filter setting is specified.	Check the parameter.
85406148		J8:Filter parameter calculation error 1	5	Invalid filter setting is specified.	Check the parameter.
85406151		J1:Filter parameter calculation error 2	5	Invalid filter setting is specified.	Check the parameter.
85406152		J2:Filter parameter calculation error 2	5	Invalid filter setting is specified.	Check the parameter.
85406153		J3:Filter parameter calculation error 2	5	Invalid filter setting is specified.	Check the parameter.
85406154		J4:Filter parameter calculation error 2	5	Invalid filter setting is specified.	Check the parameter.
85406155		J5:Filter parameter calculation error 2	5	Invalid filter setting is specified.	Check the parameter.
85406156		J6:Filter parameter calculation error 2	5	Invalid filter setting is specified.	Check the parameter.
85406157		J7:Filter parameter calculation error 2	5	Invalid filter setting is specified.	Check the parameter.
85406158		J8:Filter parameter calculation error 2	5	Invalid filter setting is specified.	Check the parameter.

Code	RC7 Code	Message	Level	Description	Remedy
81201001		Watchdog timeover	1	Teach-pendant has not been responded in a predetermined period. TSR task stops although the error level is 1.	Programs block the Teach-pendant process. Execute one of the following to process the Teach-pendant; - reduce the number of simultaneously-running program - insert delay statement to the program - lower the program priority - reduce the time-consuming process such as image processing - reduce the number of monitoring models of virtual fence or exclusive control
85201002		A new device is detected. Driver installation is carried out.	5	Installing device driver for new device. Wait for a moment.	Installing a driver. Please wait without manipulating Teach-pendant.
85201003		Driver installation of the new device has completed. Press "OK" and wait until it is fully shut down.	5	Driver for the new device has been installed. Press "OK" and wait until it is fully shut down.	Press OK to shutdown the controller. Do not turn OFF the controller power before the shutdown completion window appears.
83201004		Invalid controller index	3	Unexpected error. Specified robot controller ID is out of range.	Please contact DENSO WAVE service with error number and error message.
83201005		Invalid time scale	3	Unexpected error. Specified time scale is out of range.	Please contact DENSO WAVE service with error number and error message.
83201006		Controller Registration error	3	The maximum number of registrable robot controllers has been exceeded.	No more robot controllers can be registered. Shutdown another controller and then register again.
83201007		Controller mode switching failure	3	Failed to switch the controller mode.	Switch the controller mode again. If the problem still occurs, hardware malfunction might be possible. Please contact DENSO WAVE service.
83201008		Motor switching failure	3	Failed to switch the motor ON/OFF.	Retry motor ON/OFF. If the problem still occurs, hardware malfunction might be possible. Please contact DENSO WAVE service.
83201009		Motor state does not match.	3	The ON/OFF status of motors in all robot controllers are inconsistent.	Check the inter-controller connection again. If the problem still occurs, hardware malfunction might be possible. Please contact DENSO WAVE service.
8120100a		Level 1 error was notified.	1	The following causes are possible.	Please contact DENSO WAVE service with error number and error message.
8220100b		Level 2 error was notified.	2	The following causes are possible.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
8320100c		Level 3 error was notified.	3	The following causes are possible.	Please contact DENSO WAVE service with error number and error message.
8420100d		Level 4 error was notified.	4	The following causes are possible.	Please contact DENSO WAVE service with error number and error message.
8520100e		Level 5 error was notified.	5	The following causes are possible. Process has stopped.	Please contact DENSO WAVE service with error number and error message.
8520100f		Driver of a new device is not found.	5	Device driver for the new device is not found.	If unsupported device is connected, remove the device. If not, please contact DENSO WAVE service.
85201010		Unknown USB device has been detected.	5	Unknown USB device has been detected.	If unsupported USB device is connected, remove the device. Alternatively, I can be considered contacts of the connector. If not, please contact DENSO WAVE service.
85201011		Installation of new devices will continue after reboot. Press ″OK″ and wait until it is fully shut down.	5	Installation of new devices will continue after reboot. Press ″OK″ and wait until it is fully shut down.	Press OK to shutdown the controller. Do not turn OFF the controller power before shutdown completion screen appears. If the problem still occurs, hardware malfunction might be possible. Please contact DENSO WAVE service.
85201012		The interrupt process was delayed.	5	CPU load increased and the interrupt process was delayed.	Please contact DENSO WAVE service with error number and error message.
80201013		Level 0 error was notified.	0	The following causes are possible.	Please contact DENSO WAVE service with error number and error message.
83201081		Invalid configuration data	3	Configuration data error is found during the data setting.	Please contact DENSO WAVE service with error number and error message.
83201082	60D2	Invalid motion optimization parameter	3	Invalid configuration data for payload, center of gravity or inertia.	The setting parameter might be out of range. Please revise the setting value.
85201083		Invalid configuration record count	5	An error is found for the database that stores system startup parameters.	Project data of wrong version might be sent to the controller. Recreate project data with WINCAPSIII.
85201084		Invalid common configuration record count	5	An error is found for the database that stores system startup parameters.	Wrong version project data might be sent to the controller. Recreate project data with WINCAPSIII.
85201085		Invalid database file path	5	Unexpected error. Data file path you referred is invalid.	Please contact DENSO WAVE service with error number and error message.
85201086		DataBase open error	5	An error is found for the database that stores system startup parameters.	Current project file might be damaged. Backup the project data and then contact DENSO WAVE service.
83201087		Invalid configuration table	3	Unexpected error. Referred parameter area is out of system parameter range.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
83201088		Configuration data check is not implemented	3	Unexpected error. System parameter pre-check is not functioning.	Please contact DENSO WAVE service with error number and error message.
83201089		Invalid configuration index	3	Unexpected error. Referred parameter area is out of system parameter range.	Please contact DENSO WAVE service with error number and error message.
8520108a		Invalid database connection	5	Unexpected error. Failed to connect to database.	Please contact DENSO WAVE service with error number and error message.
8520108b		Configuration record count is not identical with the common configuration record count	5	An error was found for the database that stores system startup parameters.	Project data of wrong version might be sent to the controller. Recreate project data with WINCAPSIII.
8520108c		Memory allocation error	5	Unexpected error. Failed to allocate memory for system parameter.	Please contact DENSO WAVE service with error number and error message.
8320108d		Invalid software motion limit parameter	3	Software motion limit setting is invalid.	Positive side software limit value might be smaller than that of the negative side. Please revise the value.
8520108e		Database validity check is failed	5	Inconsistency is found on the parameter in the database.	Project data of wrong version might be sent to the controller. Recreate project data with WINCAPSIII. If the problem still occurs, project data might be damaged. Backup the project data and then contact DENSO WAVE service.
8320108F		Invalid motor type.	3	Invalid motor type.	Please revise the motor type.
83201091		Specified configuration data is out of range.	3	The value you entered for the system parameter is out-of-range.	Please contact DENSO WAVE service with error number and error message.
83201092		Failed to reload configuration data.	3	Unexpected error. Failed to reload system parameter.	Please contact DENSO WAVE service with error number and error message.
83201093		Invalid motor parameter.	3	An error is found on the database that stores motor parameters.	Project data with wrong motor parameters might be sent to the controller. Recreate project data with WINCAPSIII.
83201094		Cannot use RC7 compatible type robot model parameter.	3	Falied to use RC7-compatible robot model parameters because RC7-compatible robot model parameter is not prepared.	If RC7-compatible parameter is not prepared, standard robot parameter is assigned as RC7-compatible robot model parameter. In this case, turn OFF the robot model parameter RC7-compatible mode.
83201095		Disable extended-joints property.	3	Invalid extended-joints setting.	You can't activate the extended-joint. Motor type for the extended-joint might be unspecified. Revise the extended-joints setting.

Code	RC7 Code	Message	Level	Description	Remedy
83201096		Invalid force sensor payload parameter	3	Invalid configuration data for force sensor payload, center of gravity or inertia.	The setting mass parameter might be beyond limit for Mass of PayLoad. Please revise the setting value.
83201101		Invalid I/O device	3	Unexpected error. I/O device you tried to access is not exist.	Please contact DENSO WAVE service with error number and error message.
83201102		Specified I/O is not output device	3	Unexpected error. I/O that you tried to output is not the output I/O area.	Please contact DENSO WAVE service with error number and error message.
83201103		Invalid I/O watch number	3	Unexpected error. I/O number you tried to check the state is out-of-range.	Please contact DENSO WAVE service with error number and error message.
83201104		Invalid I/O device	3	Unexpected error. This I/O device is not supported.	Please contact DENSO WAVE service with error number and error message.
83201105		Invalid I/O number	3	Unexpected error. Tried to refer out-of-range I/O number.	Please contact DENSO WAVE service with error number and error message.
85201106		Memory allocation error	5	Unexpected error. Failed to allocate memory at the I/O device initialization.	Please contact DENSO WAVE service with error number and error message.
83201201		Specified controller parameter is invalid	3	Unexpected error. System tried to refer non-implemented parameter.	Please contact DENSO WAVE service with error number and error message.
83201202		Invalid External speed	3	The value you set for the external speed is out-of-range.	Setting value range is 0.1-100. Revise the setting value.
83201203		Invalid External acceleration	3	The value you set for the external acceleration is out-of-range.	Setting value range is 0.0001-100. Revise the setting value.
83201204		Invalid External deceleration	3	The value you set for the external deceleration is out-of-range.	Setting value range is 0.0001-100.0. Revise the setting value.
83201205		Speed conversion type is invalid	3	Unexpected error. Specified speed conversion mode is not supported.	Please contact DENSO WAVE service with error number and error message.
82201206		Motion speed optimazation setting failed	2	Motion speed optimization setting change is aborted because system parameter error was found.	Please contact DENSO WAVE service with error number and error message.
82201207		Failed to change motion speed optimization setting	2	You cannot change the motion speed optimization setting while the robot is moving or suspended.	Wait until robot motion is stopped, and then try again. If program is suspended, reset the program and try again.
81201208		Invalid DETECT command position size	1	Unexpected error. The stored data type obtained by Detect command is invalid.	Please contact DENSO WAVE service with error number and error message.
81201209		Invalid DETECT command I/O number	1	Unexpected error. The I/O number monitored by Detect command contains invalid value.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
8120120a		Invalid DETECT command position index	1	Unexpected error. The index number that stores detection start position of Detect command is invalid.	Please contact DENSO WAVE service with error number and error message.
8520120b		Robot controller specifications error	5	Standard type project is used for Safety-I/O-less type robot controller.	Send safety-I/O-less type project from WINCAPSIII.
8520120c		Operation was denied because initialization was failed	5	Internal processing was aborted because the fatal error occurred.	Confirm the cause of fatal error.
8220120d		Accel Mode is invalid	2	Specified acceleration mode is not exist.	Confirm the acceleration mode index.
8520120e		Robot controller specifications error	5	Safety-I/O-less type project is used for standard type robot controllers.	Send standard type project data from WINCAPSIII.
8220120f		You cannot change the operation mode while the arm is moving.	2	Operation mode change is not allowed while the robot is moving.	Wait until robot motion is fully stopped, and then try again.
81201211		MotionSkip Mode is invalid	1	Specified MotionSkip mode is not exist.	Confirm the MotionSkip mode.
81201212		Specified I/O number is currently locked by the system, and cannot use at DETECT command.	1	Specified I/O number is currently locked by the system. This I/O number cannot be used by Detect command.	Please use different I/O number.
81201213		I/O state is not changed.	1	I/O state has not changed.	Revise the I/O setting.
83201281	2490	TCP is interfering with Area0	3	Tool center point interferes with area 0.	Check if the tool center point is placed in the expected position.
83201282	2491	TCP is interfering with Area1	3	Tool center point interferes with area 1.	Check if the tool center point is placed in the expected position.
83201283	2492	TCP is interfering with Area2	3	Tool center point interferes with area 2.	Check if the tool center point is placed in the expected position.
83201284	2493	TCP is interfering with Area3	3	Tool center point interferes with area 3.	Check if the tool center point is placed in the expected position.
83201285	2494	TCP is interfering with Area4	3	Tool center point interferes with area 4.	Check if the tool center point is placed in the expected position.
83201286	2495	TCP is interfering with Area5	3	Tool center point interferes with area 5.	Check if the tool center point is placed in the expected position.
83201287	2496	TCP is interfering with Area6	3	Tool center point interferes with area 6.	Check if the tool center point is placed in the expected position.
83201288	2497	TCP is interfering with Area7	3	Tool center point interferes with area 7.	Check if the tool center point is placed in the expected position.
83201289	2498	TCP is interfering with Area8	3	Tool center point interferes with area 8.	Check if the tool center point is placed in the expected position.

Code	RC7 Code	Message	Level	Description	Remedy
8320128a	2499	TCP is interfering with Area9	3	Tool center point interferes with area 9.	Check if the tool center point is placed in the expected position.
8320128b	249a	TCP is interfering with Area10	3	Tool center point interferes with area 10.	Check if the tool center point is placed in the expected position.
8320128c	249b	TCP is interfering with Area11	3	Tool center point interferes with area 11.	Check if the tool center point is placed in the expected position.
8320128d	249c	TCP is interfering with Area12	3	Tool center point interferes with area 12.	Check if the tool center point is placed in the expected position.
8320128e	249d	TCP is interfering with Area13	3	Tool center point interferes with area 13.	Check if the tool center point is placed in the expected position.
8320128f	249e	TCP is interfering with Area14	3	Tool center point interferes with area 14.	Check if the tool center point is placed in the expected position.
83201290	249f	TCP is interfering with Area15	3	Tool center point interferes with area 15.	Check if the tool center point is placed in the expected position.
83201291	24a0	TCP is interfering with Area16	3	Tool center point interferes with area 16.	Check if the tool center point is placed in the expected position.
83201292	24a1	TCP is interfering with Area17	3	Tool center point interferes with area 17.	Check if the tool center point is placed in the expected position.
83201293	24a2	TCP is interfering with Area18	3	Tool center point interferes with area 18.	Check if the tool center point is placed in the expected position.
83201294	24a3	TCP is interfering with Area19	3	Tool center point interferes with area 19.	Check if the tool center point is placed in the expected position.
83201295	24a4	TCP is interfering with Area20	3	Tool center point interferes with area 20.	Check if the tool center point is placed in the expected position.
83201296	24a5	TCP is interfering with Area21	3	Tool center point interferes with area 21.	Check if the tool center point is placed in the expected position.
83201297	24a6	TCP is interfering with Area22	3	Tool center point interferes with area 22.	Check if the tool center point is placed in the expected position.
83201298	24a7	TCP is interfering with Area23	3	Tool center point interferes with area 23.	Check if the tool center point is placed in the expected position.
83201299	24a8	TCP is interfering with Area24	3	Tool center point interferes with area 24.	Check if the tool center point is placed in the expected position.
8320129a	24a9	TCP is interfering with Area25	3	Tool center point interferes with area 25.	Check if the tool center point is placed in the expected position.
8320129b	24b0	TCP is interfering with Area26	3	Tool center point interferes with area 26.	Check if the tool center point is placed in the expected position.

Code	RC7 Code	Message	Level	Description	Remedy
8320129c	24b1	TCP is interfering with Area27	3	Tool center point interferes with area 27.	Check if the tool center point is placed in the expected position.
8320129d	24b2	TCP is interfering with Area28	3	Tool center point interferes with area 28.	Check if the tool center point is placed in the expected position.
8320129e	24b3	TCP is interfering with Area29	3	Tool center point interferes with area 29.	Check if the tool center point is placed in the expected position.
8320129f	24b4	TCP is interfering with Area30	3	Tool center point interferes with area 30.	Check if the tool center point is placed in the expected position.
832012a0	24b5	TCP is interfering with Area31	3	Tool center point interferes with area 31.	Check if the tool center point is placed in the expected position.
832012f8		Area enable/disable setting is invalid.	3	Specified value can not change the area monitoring status.	Revise the area setting.
832012f9		Area monitoring is disabled.	3	Area setting is invalid due to the invalid area settings.	Failed to enable area monitoring. Revise the area setting.
832012fa		The number of Area monitoring exceeds the upper limit.	3	Tried to enable Area monitoring more than the upper limit.	Failed to enable area monitoring. Revise the area setting. The maximum number of area monitoring differs depending on each monitoring interval. Set the number of area monitoring less than or equal to the maximum monitoring number for the monitoring interval.
832012fb		Error check condition is invalid	3	Specified value is out-of error detection setting range.	Confirm error detection range setting.
832012fc		Area number is invalid	3	Specified area number does not exist.	Confirm area number index setting.
832012fd		Monitoring cycle is invalid	3	Area monitoring is not possible with the specified monitoring cycle.	Confirm area monitoring cycle setting. The monitoring cycle needs to correspond with that of different areas.
832012fe		Posture check range is invalid	3	Specified value is out of possible pose detection range.	Confirm pose detection range setting.
832012ff		Axis angle check range is invalid	3	Specified value is out of possible axis detection range.	Confirm joint detection range setting.
83201301		Failed to take arm	3	Unexpected error. Failed to take arm semaphore.	Please contact DENSO WAVE service with error number and error message.
85201302		Operation was aborted because initialization is failed	5	Internal processing was aborted because the fatal error occurred.	Confirm the cause of fatal error.
83201381		Invalid Rotate plane type	3	Unexpected error. Invalid rotation plane was specified at ROTATE command execution.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
83201382		Invalid Internal speed	3	Out-of-range value was set for the internal speed.	Value range is 0.1 – 100. Revise the value.
83201383		Invalid internal acceleration	3	Out-of-range value was set for the internal acceleration.	Value range is 0.0001 – 100. Revise the value.
83201384		Invalid internal deceleration	3	Out-of-range value was set for the internal deceleration.	Value range is 0.0001 – 100. Revise the value.
83201385		Invalid internal joint speed	3	Out-of-range value was set for the internal joint speed.	Value range is 0.1 – 100. Revise the value.
83201386		Invalid internal joint acceleration	3	Out-of-range value was set for the internal joint acceleration.	Value range is 0.0001 – 100. Revise the value.
83201387		Invalid internal joint deceleration	3	Out-of-range value was set for the internal joint deceleration.	Value range is 0.0001 – 100. Revise the value.
83201388		Invalid Achievement level	3	Achievement level for Arrive command is out of range.	Value range is 0 – 100 (0 is not allowed). Revise the value.
83201389		Invalid Arch start length	3	Arch start position value for ArchMove command is out of range.	Value range is from 0 to the arch height. Revise the value.
8020138a		Switch linear interpolation because the circular trajectory cannot be generated.	0	If circular trajectory cannot be calculated from its teaching points (for example, if start point, passing point and end point is on the same line), motion calculation is switched to a simple linear motion from start point to end point.	If the linear motion is different from the motion you have expected, revise the Pass point and End point.
8020138b		Switch linear interpolation because spline interpolation cannot be generated.	0	If invalid pass point is specified for spline interpolation motion, motion calculation is switched to a simple linear motion from start point to end point.	If the linear motion is different from the motion you have expected, revise the Pass point.
8520138c		Operation was aborted because initialization is failed	5	Internal processing is aborted because the fatal error occurred.	Confirm the cause of fatal error.
8320138d		Circular trajectory cannot be generated	3	The circular trajectory is linear motion not to pass passing point because start point, passing point and end point is on the same line and passing point is not between start point and end point.	Revise the pass point and end point.
8020138e		Spline interpolation motion was completed.	0	Spline interpolation motion was completed.	Spline interpolation motion was completed.

Code	RC7 Code	Message	Level	Description	Remedy
83201401	607F	Destination position figure is inconsist with the current figure.	3	Destination position figure is inconsist with the current figure.	The robot cannot move to the destination position with Fig setting different from the starting point, because the robot pose needs to change rapidly in the middle of the motion. Please change the Fig setting of the starting point or the destination point.
83201402		Motion buffer overflow	3	Unexpected error. System motion buffer overflow occurred.	Please contact DENSO WAVE service with error number and error message.
81201403		Cannot move within the specified motion time	1	Robot cannot move because specified motion time is shorter than the minimum required time for the motion.	Specify longer motion time.
83201404	73FF	Robot stops the motion	3	This operation is not available during the robot stop process.	Operate after the robot completely stopped.
83201405		Command position is invalid	3	Unexpected error. The process was stopped because invalid motion instruction has been generated.	Please contact DENSO WAVE service with error number and error message.
83201406		Specified motion parameter is invalid	3	Unexpected error. System tried to refer to an undefined parameter.	Please contact DENSO WAVE service with error number and error message.
81201407		Specified TCP speed setting is not implemented.	1	Unexpected error. The specified TCP speed setting value is not implemented.	Please contact DENSO WAVE service with error number and error message.
81201408		Move option is invalid	1	Invalid value was set for the motion command option argument.	Check the option argument of the motion command.
83201409		This motion is prohibited in the current setting.	3	Unexpected error. Tried to issue motion command with invalid setting.	Please contact DENSO WAVE service with error number and error message.
8420140a		Referred motion is invalid	4	Unexpected error. Tried to refer to non-existing motion object.	Please contact DENSO WAVE service with error number and error message.
8320140b		Path point is invalid.	3	Robot arm cannot reach path points on the trajectory.	Check if the specified pass point is reachable for the robot.
8520140c		Memory allocation error.	5	Unexpected error. Failed to allocate memory for motion object when system initialization.	Please contact DENSO WAVE service with error number and error message.
8120140d		Specified path number is invalid.	1	Path number you have set is out-of-range.	The setting range is 1-20. Check the setting.
8120140e		Specified path is empty.	1	No motion point on the trajectory is specified.	Specify at least one Path point.
8020140f		Motions other than robot joints were set to Pass motion, because specified pass start displacement is invalid.	0	If pass start displacement is specified for other than robot axes, it will be ignored. In this case, Pass motion is set automatically.	Pass start displacement setting for the joints other than robot axis is ignored, and changed to pass motion.

Code	RC7 Code	Message	Level	Description	Remedy
83201411		Specified interpolation is invalid	3	Unexpected error. The trajectory cannot be generated at offline with the specified interpolation.	Please contact DENSO WAVE service with error number and error message.
83201412		Stopped position and restart position is different.	3	Because of the great difference between the Suspended-stop position and the Continue-start position, the restart is stopped for safety. This situation might occur if the robot is manually moved after the Suspend-stop, and then changed to the Auto mode again, and then the Continue-start is executed.	Error threshold can be changed by changing the allowance for position gap detection.
83201413		Specified path is locked	3	The specified number's trajectory is currently locked by the system, therefore you cannot operate or change it.	Change or operate after robot motion is completed.
84201414		TCP command speed limit over	4	The system tried to reduce TCP speed in accordance with the safety standard ISO10218-1, but the speed still exceeds the limit. Therefore, system suspended the motion and turned OFF the motor power.	Reduce the speed because automatic speed reduction function cannot reduce the speed to the required level.
84201415		TCP command speed limit over	4	The system tried to reduce TCP speed in accordance with the safety standard ISO10218-1, but the speed still exceeds the limit. Therefore, system suspended the motion and turned OFF the motor power.	Reduce the speed because automatic speed reduction function cannot reduce the speed to the required level.
84201416		Failed to synchronize the Motion time	4	Unexpected error. An error occurred in the motion time synchronization process.	Please contact DENSO WAVE service with error number and error message.
81201417		Specified path point number is invalid	1	Pass point number setting is incorrect.	The setting range is from 1 to [pass point registered number]. Revise the setting.
80201418		The path is close to the singular point.	0	The robot is traveling the vicinity of the singular point. Robot speed might change suddenly.	If there is a problem, enable singular point avoidance function, or revise the motion destination position or the interpolation method.
82201419		Specified path is protected	2	Because the specified trajectory number is currently protected by the system, it cannot be operated or changed.	Change or operate after changing protect setting.
8320141a		TCP position check motion timeout.	3	TCP did not reach the target position within the time limit.	The robot arm might be vibrating. Revise the motion speed and the settling time.
8220141b		Path point count exceeds the upper limit.	2	Exceeded the maximum registration count of pass point.	You cannot register no more path point. Revise the setting.

Code	RC7 Code	Message	Level	Description	Remedy
8220141c		Specified path is not generated.	2	Unexpected error occurred. Trajectory for the specified number has not been generated yet.	Please contact DENSO WAVE service with error number and error message.
8120141d		The path needs to be divided.	1	Path points include invalid point pair where the position (X,Y,Z) is same but the posture(RX,RY,RZ) is different.	Please divide path at the vicinity of the invalid point pair.
8120141e		Tracking canceled	1	Tracking motion is terminated	Execute the robot motion command again.
8420141f		Motion time gap occuured.	4	Unexpected error occurred. An error occurred in the motion time synchronization process.	Please contact DENSO WAVE service with error number and error message.
80201421		Set the pass start displacement distance again.	0	If the value designated with @"numeric value" exceeds the half of the travel distance, the deceleration start position is fixed to the middle point of the travel distance.	Set pass start displacement distance again.
81201422		The robot cannot catch up with the work.	1	The issued command was cancelled because it is impossible to catch up with the workpiece.	Revise the setting. Revise the start position and the motion speed of the robot motion. Or, reduce the conveyor's speed.
81201423		Lower tracking limit over.	1	The robot stopped tracking the workpiece because it passed the lower limit.	Change the lower limt of tracking range by TrackStartArea, or set the additional argument of TrackStart
81201424		Upper tracking limit is out of robot motion range.	1	The upper tracking limit is out of the robot motion range	Change the upper limt of tracking range by TrackStartArea.
81201425		Lower tracking limit is out of robot motion range.	1	The lower tracking limit is out of the robot motion range	Change the lower limt of tracking range by TrackStartArea.
80201426		You cannot exectue with Pass-motion	0	This operation is not allowed while Pass-motion.	Complete the Pass-motion and then try again.
80201427		MotionSkip Mode was changed.	0	The specified MotionSkip Mode is currently forbid by the system.	Revise the setting.
83201428		Failed to optimal speed control.	3	Unexpected error. An error occurred in the optimal speed control process.	Please contact DENSO WAVE service with error number and error message.
81201429		Disconnect to master robot	1	Disconnect to master robot	Please revise network condition

Code	RC7 Code	Message	Level	Description	Remedy
8220142a		First path point is different from current position.	2	Spline interpolation motion cannot work because its first path point is different from current position.	Please revise any of the following setting. – Please disable configuration of the ″Use a start point in spline curve″. – Please add current position to beginning of the path. – Please revise the first path point in current position. – Please carry it out after moving to position of the first path point. (You can acquire position of the path point in GetPathPoint.)
8220142b		Spline interpolation cannot be generated because there is too few path points.	2	Valid pass points are necessary more than three points in the spline interpolation motion.	Revise the pass point.
8320142c		Entered the Exclusive area during Tracking Motin	3	Interrupt Tracking Motion because of entering the exclussive area during Tracking Motion	Revise the exclusive area
8320142d		Deceling by Safety Function during Tracking Motin	3	Interrupt Tracking Motion because of deceling by Safety Function during Tracking Motion	Revise the Safety Function
8320142e		TCP current speed limit over	3	The system tried to reduce TCP speed in accordance with the safety standard ISO10218-1, but the speed still exceeds the limit. Therefore, system suspended the motion and turned OFF the motor power.	Reduce the speed because automatic speed reduction function cannot reduce the speed to the required level.
8320142f		Option Setting for TrackStart is incorrect	3	You cannot enable Error setting option and Skip option at the same time	Revise the TrackStart Option setting
83201430		Failed to generate path by optimal speed control.	3	The specifued move can not be performed with current setting.	Revise the robot motion.
83201431		Path point is spline interpolation cannot be generated.	3	Robot arm cannot be calculated path points on the trajectory.	Check if the specified pass point is reachable for the robot.
83201481		Slave controller is not set to the Slave mode	3	Slave controller is not set to the Slave mode	Check the setting of the slave controller.
84201482		Position command buffer is empty	4	Position command was not generated for a certain period of time.	If the system is set to the Slave mode, check that the position command is correctly sent from the master side.
83201483		Position command buffer overflow	3	Command buffer overflowed because too many commands were generated in a short period of time.	If the system is set to the Slave mode, check that the position command is correctly sent from the master side.
83201484		Slave controller is not set to the Auto mode	3	Slave mode is available only in the Auto mode operation.	Change the slave controller to the Auto mode, and then try again.

Code	RC7 Code	Message	Level	Description	Remedy
85201485		Memory allocation error	5	Unexpected error. Failed to allocate memory when the buffer size of position command was changed.	Please contact DENSO WAVE service with error number and error message.
84201486		Command position generation is stopped	4	Process was aborted because no more position commands can be generated due to error occurrence. All joints were immediately suspended and motor power was turned OFF.	Confirm the cause of previous error. If the system is set to the Slave mode, check that the position command is correctly sent from the master side.
83201501	607A	Destination position is out of robot motion range	3	The robot tried to exit the motion range. All joint motions were suspended and motor power was turned OFF.	The robot cannot move to this direction anymore. Operate the robot to the opposite direction.
82201502	607A	Destination position is out of robot motion range	2	Manually controlled robot tried to exit the motion range. All joint motions were suspended.	The robot cannot move to this direction anymore. Operate the robot to the opposite direction.
81201503	607A	Destination position is out of robot motion range	1	Transformation failed because input pose was out of motion range. The error occurs when executing T2J(),P2J() or T2P().	Specify a pose that can be transformed.
83201504	607D	Motion is stopped because the path is too close to the singular point	3	All joint motion has been suspended and the motor power turned OFF. The trajectory to the destination TCP position or figure includes the vicinity of the singular point which might cause the abrupt motion of each joint.	The robot cannot move to this direction anymore. Enable singular point avoidance function, or revise the motion destination position or the interpolation method.
82201505	607D	Motion is stopped because the path is too close to the singular point	2	All joint motion has been suspended. The trajectory to the destination TCP position or figure includes the vicinity of the singular point which might cause the abrupt motion of each joint.	The robot cannot move to this direction anymore. Enable singular point avoidance function, or revise the motion destination position or the interpolation method.
81201506	607D	Motion is stopped because the path is too close to the singular point	1	All transformation have been suspended. The trajectory to the specified position or figure includes the vicinity of the singular point which might cause the abrupt motion of each joint. The error occurs when executing T2J(),P2J() or T2P().	Specify a pose that can be transformed.
83201507		Specified robot parameter is invalid	3	Unexpected error. System tried to refer to non-implemented parameter.	Please contact DENSO WAVE service with error number and error message.
83201508		Failed to convert the robot posture	3	Unexpected error. An error occurred when the robot posture was transferred to commands, such as T2J() and P2J().	Please contact DENSO WAVE service with error number and error message.
82201509		Axis number is invalid	2	Specified joint number is out of range.	Confirm the specified joint number value.

Code	RC7 Code	Message	Level	Description	Remedy
8520150a	600E	Unsupported robot type	5	Unsupported robot type is specified.	Please contact DENSO WAVE service with error number, error message and the version of the robot controller.
8520150b		Failed to allocate memory for robot objects	5	Unexpected error. Failed to allocate memory at the initialization.	Please contact DENSO WAVE service with error number and error message.
8520150c		Failed to allocate memory for extended-joint objects	5	Unexpected error. Failed to allocate memory at the initialization.	Please contact DENSO WAVE service with error number and error message.
8320150d		You cannot enable gravity compensation	3	Gravity compensation is not available in the current setting.	Revise the setting.
8320150e		You cannot disable gravity compensation	3	You cannot disable the gravity compensation in the current setting.	Revise the setting.
8320150f		You cannot enable current limitation	3	Current limitation is not available in the current setting.	Revise the setting.
83201510		You cannot disable current limitation	3	You cannot disable the Current limitation in the current setting.	Revise the setting.
83201511		You cannot set the allowable deviation of the axis	3	You cannot change the Error allowance in the current setting.	Revise the setting.
83201512		You cannot release servo lock	3	Servo unlock is not available in the current setting.	Revise the setting.
85201513		Operation was aborted because initialization is failed	5	Internal process is suspended because fatal error occurred.	Confirm the cause of fatal error.
85201514		Invalid speed setting or acceleration setting	5	Unexpected error. Abnormal parameter setting was found in the initialization of Speed/Accel .	Please contact DENSO WAVE service with error number and error message.
83201517		Enable gravity compensation	3	This operation requires the gravity compensation-enabled.	Enable the gravity compensation, and then try again.
83201518		Invalid motor current limit is set	3	Current limit setting is out of range.	Confirm the specified current limit setting.
81201519		Specified robot fig is invalid	1	Invalid robot Fig was specified.	Confirm the specified robot Fig.
8320151a		You cannot set the allowable positioning error	3	You cannot set the Error allowance in the current setting.	Revise the setting.
8320151b		You cannot set the motion finish timeout value	3	Motion finish timeout cannot be set in the current setting.	Revise the setting.
8420151c		Command position transmission is stopped	4	Command position transfer was stopped because an abnormal command position was found. All joint motions were suspended and the motor power was turned OFF.	Please contact DENSO WAVE service with error number and error message.
8120151d		RobotName Parameter is invalid	1	Parameter for acquiring robot name is out of range.	Check the parameter for the robot name acquisition.

Code	RC7 Code	Message	Level	Description	Remedy
8320151e		Robot arm interference error	3	All joint motions were suspended and motor power was turned OFF. The trajectory to the destination TCP position or figure interferes with the robot arm.	The robot cannot move to this direction anymore. Operate the robot to the opposite direction.
8220151f		Robot arm interference error	2	All joint motions are suspended, because the robot arm interferes in the motion to the destination position.	The robot cannot move to this direction anymore. Operate the robot to the opposite direction.
83201521		You cannot set Arm property	3	You cannot enable/disable arm in the current setting.	Revise the setting.
83201522		You cannot set gravity offset	3	Gravity compensation is not available in the current setting.	Revise the setting.
83201523		You cannot execute CalReady	3	CalReady is not available in the current setting. The following possible causes are likely: 1. The robot type does not support CalReady. 2. Invalid CalReady execution order. 3. Invalid CalReady number.	Take the following action according to the possible causes. 1. Confirm the robot type supports CalReady. 2. Confirm the execution order of CalReady is correct. 3. Confirm executable number is specified for CalReady.
83201524		You cannot execute a command in this robot type	3	This robot type does not support the operation.	Check if the robot type supports the operation.
83201525		Destination posture cannot be realized with this robot type.	3	The robot tried to move to the unrealizable posture. All joint motions were suspended and motor power was turned OFF.	Take following action according to the destination pose type. 1. Set Rx = 180[deg] Ry = 0[deg] in type P 2. Set approach vector at V(0, 0, −1) in type T
83201526		Invalid Z-axis force limit value	3	Z-axis force limit setting is out of range.	Confirm the specified Z-axis force limit setting.
83201527		You cannot enable Z-axis force limitation	3	Cannot enable Z-axis force limitation in the current setting.	Revise the setting.
83201528		You cannot disable Z-axis force limitation	3	Cannot disable Z-axis force limitation in the current setting.	Revise the setting.
83201529		You cannot lock servo	3	Servo lock is not available in this setting.	Revise the setting.
8320152A		You cannot enable PWM control	3	Cannot enable PWM control in the current setting.	Revise the setting.
8320152B		You cannot disable PWM control	3	Cannot disable PWM control in the current setting.	Revise the setting.
8320152C		You cannot enable force control	3	Cannot enable force control in the current setting.	Revise the setting.
8320152D		You cannot disable force control	3	Cannot disable force control in the current setting.	Revise the setting.
8320152E		Excessive position error in force control	3	TCP position exceeded the deviation limit while Force control is ON.	Revise the setting of TCP deviation allowable value.

Code	RC7 Code	Message	Level	Description	Remedy
8320152F		Force limit over in force control	3	Control force exceeded the limit while the force control is ON.	Revise the setting.
83201530		Speed limit over in force control.	3	TCP exceeded the speed limit while force control is ON.	Reduce the speed.
83201531		You cannot perform PTP motion while in force control mode.	3	Tried to perform PTP motion while force control is ON.	Revise the program so as not to move the robot with PTP motion under the force control.
83201532		Force control parameter error.	3	Tried to set invalid value to force control parameter.	Revise the setting of the force control parameter. Please check whether there is any out-of-range parameter .
83201533		You cannot resume motion while in force control mode.	3	Tried to resume motion from halt state while force control is ON.	Revise the program so as not to suspend the robot motion under the force control.
82201534		Specified axis is not the boundless rotation axis	2	This operation is available only for the boundless rotation axis.	Confirm the specified joint number. Check if the specified joint is set to the boundless rotation. If not, set the joint to the boundless rotation from the joint setting window.
83201535		You cannot set control parameter while in force control mode.	3	Tried to set control parameter while force control is ON.	Revise the program so as not to set the force control parameter while the force control is enabled.
81201536		Collision detection parameter error	1	Tried to set invalid value to collision detection parameter.	Revise the setting of the collision detection parameter.
83201537		Commond is not executable with robot joints	3	This operation is not available for the robot joint.	Reconfirm the setting.
83201538		Commond is not executable with sliding joints	3	This operation is not available for the sliding joints.	Reconfirm the setting.
83201539		You cannot execute this operation while force control is enabled	3	This operation is not available while the force limit is ON.	Disable the force control and the try again.
8320153A		Invalid force control coordinate system.	3	This coordinate system is not available in the Force control.	Revise the coordinate system.
8320153B		Invalid force control mode.	3	This control mode is not available in the Force control.	Revise the control mode.
8320153C		Invalid force control number.	3	This control number is not available in the Force control.	Revise the force control number.
8320153D		You cannot set "0" for Inertia and damping parameter.	3	Tried to set zero value for inertia or damping parameter.	Revise the inertia, or damping parameter.

Code	RC7 Code	Message	Level	Description	Remedy
8320153E		You cannot control inertia, damping and compliance parameters.	3	You cannot control inertia, damping and compliance parameters.	Please increase the damping parameter. Or, please reduce the inertia, or compliance parameters.
8320153F		You cannot calculate inertia, damping and compliance parameters.	3	You cannot calculate inertia, damping and compliance parameters.	Please reduce the damping parameter. Or, please increase the inertia, or compliance parameters.
83201540		Invalid license(Force Sensor Compliance Control)	3	Tried to use a function without a force sensor compliance control license.	Please register a license, when it already has a license. Please contact DENSO WAVE service, when you do not have a license.
83201541		Failed to communicate to Force sensor.	3	Failed to communicate with a Force sensor	Please check connection of a force sensor and a controller.
83201542		Force sensor data error	3	The force sensor data was not updated during the force control operation.	Please check connection between a force sensor and a controller. Avoid electric noise by placing the noise source away.
83201543		Failed to connect to Force sensor.	3	Failed to communicate with a Force sensor	Check the connection with the force sensor
83201544		Force sensor is not available in this system.	3	You cannot use Force sensor in this system because of the current Force sensor's configuration.	Please enable configuration of the "Force sensor status". [F2 Arm] – [F6 Aux] – [F1 Config] – [152 Force sensor status]
83201545		Force control is disabled	3	Force control was finished because the operation was stopped during the force control..	Stop processing was executed during force control . Please disable the force control before the stop processing . Move the robot to the safe place, and then enable the force control again.
83201546		Force control data argument is invalid	3	Invalid value is set to the force control data argument.	Check the argument of the force control data acquision.
84201547		Command position generation error	4	Unexpected command speed was detected. All joints have Emergency-stopped and motor power was turned OFF for safety reason.	Please contact DENSO WAVE service with the error number and the error message.
80201548		Command position generation error	0	Unexpected command speed was detected.	Please contact DENSO WAVE service with the error number and the error message.
80201549		Failed to communicate to force sensor	0	Failed to communicate with a Force sensor	Check the connection between the force sensor and the controller.

Code	RC7 Code	Message	Level	Description	Remedy
8020154A		Force sensor communication is disconnected	0	Disconnected from Force sensor.	Check the connection between the force sensor and the controller.
8020154B		Force sensor packet error	0	Received invalid force sensor communication packet.	Check the connection between the force sensor and the controller. Avoid electric noise by placing the noise source away.
8020154C		Force sensor data reception timeout	0	Failed to receive data from Force sensor within predetermined time.	Connection between the force sensor and the robot controller might have a problem. Or, the network load might be too high to receive the sensor data on time. In that case, arrange the network connection topology to reduce the effect of other network devices on the controller–force sensor communication.
8320154D		X-axis position deviation error in the force control	3	X-axis position exceeded the limit while the force control is ON.	Revise the setting of TCP deviation allowable value.
8320154E		Y-axis position deviation error in the force control	3	Y-axis position exceeded the limit while the force control is ON.	Revise the setting of TCP deviation allowable value.
8320154F		Z-axis position deviation error in the force control	3	Z-axis position exceeded the limit while the force control is ON.	Revise the setting of TCP deviation allowable value.
83201550		Excessive posture error around X-axis in the force control	3	X-axis posture exceeded the limit while the force control is ON.	Revise the setting of TCP deviation allowable value.
83201551		Excessive posture error around Y-axis in the force control	3	Y-axis posture exceeded the limit while the force control is ON.	Revise the setting of TCP deviation allowable value.
83201552		Excessive posture error around Z-axis in the force control	3	Z-axis posture exceeded the limit while the force control is ON.	Revise the setting of TCP deviation allowable value.
81201553		Failed to acquire force control data.	1	The data acquisition command was executed while the force control was deactivated. This command is available only while the force control is activated.	Acquire data while the force control is activated.
83201554		X-axis force limit over in the force control	3	X force exceeded the limit	The force sensor detected the value higher than the rated value. Please check the rated value of the force sensor. Reduce speed, or change operation.
83201555		Y-axis force limit over in the force control	3	Y force exceeded the limit	The force sensor detected the value higher than the rated value. Please check the rated value of the force sensor. Reduce speed, or change operation.

Code	RC7 Code	Message	Level	Description	Remedy
83201556		Z-axis force limit over in the force control	3	Z force exceeded the limit	The force sensor detected the value higher than the rated value. Please check the rated value of the force sensor. Reduce speed, or change operation.
83201557		Moment about X-axis is over the limit in the force control	3	Moment around X-axis exceeded the limit.	The force sensor detected the value higher than the rated value. Please check the rated value of the force sensor. Reduce speed, or change operation.
83201558		Moment about Y-axis is over the limit in the force control	3	Moment around Y-axis exceeded the limit.	The force sensor detected the value higher than the rated value. Please check the rated value of the force sensor. Reduce speed, or change operation.
83201559		Moment about Z-axis is over the limit in the force control	3	Moment around Z-axis exceeded the limit.	The force sensor detected the value higher than the rated value. Please check the rated value of the force sensor. Reduce speed, or change operation.
8320155A		You cannot exectue with Auto-PosClr	3	You cannot exectue it with Auto-PosClr	Revise the setting.
8320155B		You cannot exectue with calibrated kinematics	3	You cannot execute it with calibrated kinematics	Revise the setting.
8220155C		Command position collided with the virtual fence (Manual mode).	2	Collision was detected between the robot command position and equipment data in Manual mode.	Please operate the robot away from the equipment or tools robot. Please operate the robot away from the robot tool. To detect a collision in the virtual fence while robot is out-of-detection area, disable the virtual fence first, and then move the robot to the outside of detection area.
8220155D		Current position collided with the virtual fence (Manual mode).	2	Collision was detected between the current robot position and equipment data in Manual mode.	Please operate the robot away from the equipment or tools robot. Please operate the robot away from the robot tool. To detect a collision in the virtual fence while robot is out-of-detection area, disable the virtual fence first, and then move the robot to the outside of detection area.

Code	RC7 Code	Message	Level	Description	Remedy
8320155E		Command position collided with the virtual fence (Auto mode).	3	Collision was detected between the robot command position and equipment data in Auto mode.	Please operate the robot away from the equipment or tools robot. Please operate the robot away from the robot tool. To detect a collision in the virtual fence while robot is out-of-detection area, disable the virtual fence first, and then move the robot to the outside of detection area.
8420155F		Current position collided with the virtual fence (Auto mode).	4	Collision was detected between the current robot position and equipment data in Auto mode.	Please operate the robot away from the equipment or tools robot. Please operate the robot away from the robot tool. To detect a collision in the virtual fence while robot is out-of-detection area, disable the virtual fence first, and then move the robot to the outside of detection area.
82201560		Target position collided with the virtual fence (Manual mode).	2	Collision was detected between the robot target position and equipment data in Manual mode.	Perform teaching the robot again apart from the equipment.
83201561		Target position collided with the virtual fence (Auto mode).	3	Collision was detected between the robot target position and equipment data in Auto mode.	Perform teaching the robot again apart from the equipment.
83201562		Position command entered the Exclusive area.	3	Detected a position command intrusion in the Exclusive area.	Control all robots so that multiple robots do not enter the same Exclusive area simultaneously. To detect a collision in the Exclusive area while the robot is out-of-detection area, disable the Exclusive area first, and then move the robot to the outside of exclusive area.
84201563		Current position entered the Exclusive area.	4	Detected a position current intrusion in the Exclusive area.	Control all robots so that multiple robots do not enter the same Exclusive area simultaneously. To detect a collision in the Exclusive area while the robot is out-of-detection area, disable the Exclusive area first, and then move the robot to the outside of exclusive area.
80201564		Target position entered the Exclusive area.	0	Detected a target position intrusion in the Exclusive area.	Perform teaching the robot away from the exclusive area.
83201565		Virtual fence monitoring processing delay.	3	Timeout occurred in the virtual fence monitoring process.	Please reduce the number of monitoring model. Please simplify the shape of the monitoring model. Please lower the detection level of the monitoring model.

Code	RC7 Code	Message	Level	Description	Remedy
83201566		Exclusive area monitoring processing delay.	3	Timeout occurred in the exclusive area monitoring process.	Please reduce the number of monitoring model. Please simplify the shape of the monitoring model. Please lower the detection level of the monitoring model.
83201567		Exclusive control wait timeout.	3	Timeout occurred in the exclusive control waiting process.	Please modify the program to avoid the long waiting time.
83201568		Collision monitoring function initialization error.	3	Collision monitoring function initialization error.	Make sure that the monitoring model is set correctly.
83201569		Specified axis deviation is invalid	3	Error allowance setting is out of range.	Confirm the specified error allowance setting.
8320156A		You cannot enable high tracing control	3	High tracing control is not available in the current setting.	Revise the setting.
8320156B		You cannot disable high tracing control	3	High tracing control is not available in the current setting.	Revise the setting.
8320156C		You cannot enable vibration control.	3	Vibration control is not available in the current setting.	Revise the setting.
8320156D		You cannot disable vibration control.	3	Vibration control is not available in the current setting.	Revise the setting.
8320156E		You cannot enable vibration controlM.	3	Vibration controlM is not available in the current setting.	Revise the setting.
8320156F		You cannot disable vibration controlM.	3	Vibration controlM is not available in the current setting.	Revise the setting.
85201570		Failed to initialize force sensor	5	Unexpected Error. Failed to initialize force sensor	Please contact DENSO WAVE service with error number and error message.
83201571		Failed to transfer force sensor data	3	Failed to transfer force sensor data.	Please check EtherCAT connection.
83201572		Command position collided with the virtual fence	3	Collision was detected between the robot command position and equipment data	Please operate the robot away from the equipment or tools robot. Please operate the robot away from the robot tool. To detect a collision in the virtual fence while robot is out-of-detection area, first disable the virtual fence, or use direct mode, and then move the robot to the outside of detection area.

Code	RC7 Code	Message	Level	Description	Remedy
83201573		Current position collided with the virtual fence	3	Collision was detected between the current robot position and equipment data	Please operate the robot away from the equipment or tools robot. Please operate the robot away from the robot tool. To detect a collision in the virtual fence while robot is out-of-detection area, first disable the virtual fence, or use direct mode, and then move the robot to the outside of detection area.
83201574		Target position collided with the virtual fence	3	Collision was detected between the robot target position and equipment data	Perform teaching the robot again apart from the equipment.
83201575		Failed to disable direct mode.	3	You cannot disable direct mode while you move the robot.	Stop robot motions and then try again.
84201576		Collision detected during continue.	4	Collision was detected during continue motion.	The program has been reset. If you execute the program again, it start from top of it.
83201577		Unsupported protocol by the force sensor.	3	Unsupported protocol by the force sensor is set.	Revise the setting.
84201578		Collision detected during circular or spline movement.	4	Motor power was turned OFF and program was reset because the robot detected collision during circular or spline movement.	The program has been reset. If you execute the program again, it start from top of it.
83201579		Force sensor type not supported by cooperative control	3	Force sensor type that is not supported by the cooperative control is set.	Please set an appropriate value for [Force sensor type]. [F2 Arm] – [F2 Force Control] – [F5 sensor] – [F1 Sensor Setting] – [1317 Force sensor type]"
8320157E		Invalid license(Force Sensor Compliance Control and Force Sensor Robust Compliance Control)	3	Tried to use a function without both a force sensor compliance control license and a force sensor robust compliance control license.	Please register a license, when it already has a license. Please contact DENSO WAVE service, when you do not have a license.
8320157F		Invalid license(Force Sensor Robust Compliance Control)	3	Tried to use a function without a force sensor robust compliance control license.	Please register a license, when it already has a license. Please contact DENSO WAVE service, when you do not have a license.

Code	RC7 Code	Message	Level	Description	Remedy
83201580		Target force is uncontrollable.	3	Target Force is lower than contact detect force.	Please refer to contact detect force and contact detect torque ([Arm] – [Force Control] – [Sensor] – [Sensor Setting]) and take the following action. 1.Set the target force over the contact detect force/torque. 2.Set the contact detect force under the target force/torque. Caution:If you do procedure 2, set the contact detect force/torque over the sensor noise.
83201581		You cannot edit TOOL 0.	3	TOOL 0 cannot be edited.	Use Tool number other than 0.
83201582		Specified tool number is invalid.	3	Tool number is out of range.	Confirm the specified tool number.
83201583		Tool definition generation error	3	Unexpected error. Tool definition generation failed in the Easy tool teach.	Please contact DENSO WAVE service with error number and error message.
83201601		You cannot edit WORK 0.	3	WORK 0 cannot be edited.	Use WORK number other than 0.
83201602		Specified work number is invalid.	3	Work number is out of range.	Confirm the specified work number.
83201603		Specified work attribute is invalid.	3	Work attribute is out of range.	Confirm the specified work attribute.
83201604		You cannot edit BASE 0.	3	BASE 0 cannot be edited.	Use BASE number other than 0.
83201605		Specified base number is invalid.	3	Base number is out of range.	Confirm the specified base number.
8120167B		No target workpiece exists on the conveyor	1	This operation is not executable because there is no target work on the conveyor.	Revise the setting.
8320167C		Conveyor does not exist.	3	Conveyor does not exist.	Connect the conveyor to the controller.
8320167D		Failed to communicate to the conveyor	3	Failed to communicate to the conveyor	Confirm the connection between conveyor and controller.
8120167E		Invalid conveyor option	1	Invalid value is specified for conveyor communication parameter.	Please Revise Joint Number or I/O Number.
8120167F		Failed to connect to the conveyor	1	Unexpected error. Failed to connect to the conveyor	Please contact DENSO WAVE service with error number and error message.
83201681		Reporting already started	3	This operation is prohibited while the Report function is running.	Stop report function and then try again.
83201682		Previous command transfer process have not finished	3	Tried to send the next command position before previous command position transfer was not completed.	Please contact DENSO WAVE service with error number and error message.
83201683		Slave controller robot setting is not identical with the master controller robot setting	3	Robot type is different between the robot controller's setting and the actual robot.	Revise the slave controller setting.

Code	RC7 Code	Message	Level	Description	Remedy
83201684		Command position buffer is empty	3	Unexpected error. Failed to send the command position because the internal command buffer is empty.	Please contact DENSO WAVE service with error number and error message.
83201685		You cannot execute a command while motor power is ON	3	This operation is prohibited while the motor power is ON	Turn OFF the motor and try again.
83201686		Turn motor power ON to execute the command.	3	This operation requires Motor-ON state.	Turn ON the motor and try again.
83201687		You cannot execute a command in the machine-lock mode	3	This operation is prohibited in Machine-lock mode.	Release the Machine-lock and then try again.
83201688		You cannot execute a command while the Emergency-stop is ON	3	This operation is prohibited while the Emergency-stop is ON.	Turn OFF the Emergency-stop and then try again.
83201689		Press the deadman switch to execute the command	3	This operation is prohibited while the deadman switch is OFF.	Turn ON the deadman switch and then try again.
8320168a		You cannot execute a command while the Protective-stop signal is ON	3	This operation is prohibited while the Protective-stop is ON.	Turn OFF the Protecitive-stop and then try again.
8320168b		You cannot execute a command while the arm is moving	3	This operation is prohibited while a joint is moving.	Completely stop all joints and then try again.
8320168c		Move at least one joint to execute the command.	3	At least one joint must be moving for this operation.	Move at lease one joint and then try again.
8320168d		You cannot execute this operation while the current limit is enabled	3	This operation is not available while the current limit is ON.	Turn OFF the current limit and then try again.
8420168e		Specified driver connection type is invalid	4	Unexpected error. Failed to connect to the driver module. Specified connection ID is not supported.	Please contact DENSO WAVE service with error number and error message.
8520168f		Specified servo connection option is invalid	5	Unexpected error. Failed to connect to the servo module. Specified connection option is not supported.	Please contact DENSO WAVE service with error number and error message.
83201691		Slave controller robot count have exceeded the maximum.	3	Robot controller registration number exceeded the limit.	No more robot controllers can be registered. Shutdown another controller and then try to register again.
82201692		Failed to connect b-CAP servo	2	Failed to connect to the servo module. b-CAP communication setting might have a problem.	Revise the b-CAP communication setting.
83201693		Motion stop wait timeout.	3	Motion joint stop wait process timeout occurred.	Completely stop all joints and then try again.
82201694		b-CAP servo connection timeout	2	Failed to connect to the servo module. b-CAP communication might be disconnected.	Confirm b-CAP communication is established.

Code	RC7 Code	Message	Level	Description	Remedy
83201695		Failed to execute this operation while a motion command is executed.	3	This operation is prohibited while the motion command is executed.	Wait until the motion comman is completed, and try again.
85201696		Operation was aborted because initialization failed	5	Internal processing stopped because a fatal error occurred.	Check the cause of the fatal error.
83201697		Invalid filter parameter	3	Invalid parameter was set as a filter	The setting parameter might be out of range. Please revise the setting value.
80201698		Change to real environment to execute the command	0	This operation is not supported on simulation environment.	Try on the real controller.
83201699		Encoder hub is not connected	3	Extended-joint is enable, but the encoder hub is not connected.	Turn OFF the robot controller and connect the encoder hub correctly. Then turn ON the robot controller.
8420169a		Servo command buffer full	4	Command data transfer internal buffer overflow occurred.	Please contact DENSO WAVE service with error number and error message.
8020169b		The load on the hand is rising.	0	The load on the hand is rising.	If the load continues to rise, an error may occur. Reduce the continuous operation time of the hand by setting a waiting time, etc. If you use MoveA or MoveR or Unchuck command for gripping work by the gripper, please change program to use gripping motion command.
8420169c		The temperature error due to hand overload.	4	The load on the hand is large and the motor temperature has exceeded the allowable value.	Reduce the continuous operation time of the hand by setting a waiting time, etc. If you use MoveA or MoveR or Unchuck command for gripping work by the gripper, please change program to use gripping motion command.
852016fa	6180	Servo communication error	5	Unexpected error. Communication to servo module might have a problem.	Please contact DENSO WAVE service with error number and error message.
842016fb		Servo error	4	Unexpected error. Error found in the servo module.	Please contact DENSO WAVE service with error number and error message.
832016fc		I/O communication error	3	Unexpected error. Communication to I/O device module might have a problem.	Please contact DENSO WAVE service with error number and error message.
832016fd		I/O error	3	Unexpected error. Error found in I/O device.	Please contact DENSO WAVE service with error number and error message.
822016fe		Controller power is OFF	2	Robot controller power is turned OFF.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
832016ff		Regenerative resistor overload	3	Unexpected error. Excessive current flowed through the regeneration resister.	Revise the robot motion.
83201700		You cannot execute the command because enabling condition is not specified.	3	Unexpected error. Enabling condition is not set for the command.	Please contact DENSO WAVE service with error number and error message.
81201701	21D3	You cannot execute a command while an error occurs.	1	Tried to perform an operation that is not allowed while an error occurs on at least one robot.	Clear errors on all robot controllers and then try again.
81201801		Execute the command with deliberate error.	1	This operation requires the condition that an error is occurring.	Intentionally generate an error and then try again.
81201702	600A	You cannot execute a command when the motor power of all robot controllers are ON.	1	Tried to perform an operation that is not allowed while motor power is ON at all robots.	Turn OFF the motor power at least one robot and then try again.
81201802	6006	To execute the command, turn motor power ON of all robot controllers.	1	This operation requires the condition that all motor power is ON at all robots.	Turn ON motor of all robot controllers and then try again.
81201703		You cannot execute a command while an arm is moving.	1	This operation is prohibited while a joint is moving.	Stop all joint motions of all robot controllers and then try again.
81201803		Move at least one joint to execute the command.	1	At least one joint must be moving for this operation.	Move at least one joint and try again.
81201704		You cannot execute a command after the calibration of all joints has been finished with all robot controllers.	1	This operation is prohibited while CALSET is completed on all robots.	Set at least one controller to be CALSET unfinished status and then try again.
81201804		Complete calibration for all joints with all robot controllers before executing the command.	1	This operation requires the condition that CALSET has been completed on all robots.	Finish CALSET on all robot controllers and then try again.
81201705	21DE	You cannot execute a command when all robot controllers are Machine-locked.	1	This operation is not allowed while all robots are machine-locked.	Release the machine-lock at least one robot controller and then try again.
81201805	21DF	Set all robot controllers to the machine-lock mode before command execution.	1	This operation requires the condition that all robots are machine-locked.	Set the machine-lock on all robot controllers and then try again.
81201706	21E2	You cannot execute a command in the Manual mode.	1	This operation is not allowed in the Manual mode.	Change the robot mode other than the Manual mode, and then try again.
81201806	21E3	Change to the Manual mode to execute the command	1	This operation requires the condition that robots are in the Manual mode.	Change the robot mode to the Manual mode, and then try again.

Code	RC7 Code	Message	Level	Description	Remedy
81201707	21E4	You cannot execute the command in the Teach-check mode	1	This operation is not allowed in the Teach-check mode.	Change the robot mode other than the Teach-check mode, and then try again.
81201807	21E5	Change to the Teach-check mode to execute the command	1	This operation requires the condition that the robot is in Teach-check mode.	Change the robot mode to the Teach-check mode, and then try again.
81201708	21E6	You cannot execute the command in the Auto mode	1	This operation is not allowed in the Auto mode.	Change the robot mode other than the Auto mode, and then try again.
81201808	21E7	Change to the Auto mode to execute the command	1	This operation requires the condition that robot is in the Auto mode.	Change the robot mode to the Auto mode, and then try again.
81201709	21EB	You cannot execute the command while the deadman switch is pressed	1	This operation is not allowed while the deadman switch is ON.	Turn OFF the deadman switch, and then try again.
81201809	21EC	Press the deadman switch to execute the command	1	This operation is prohibited while the deadman switch is OFF.	Turn ON the deadman switch, and then try again.
8120170a	2008	You cannot execute the command while the Emergency-stop is ON	1	This operation is prohibited while the Emergency-stop is ON.	Turn OFF the Emergency-stop, and then try again.
8120180a	21ED	Turn ON the Emergency-stop to execute the command	1	This operation is prohibited while the Emergency-stop is OFF.	Turn ON the Emergency-stop, and then try again.
8120170b		You cannot execute the command while the Protective-stop signal is ON	1	This operation is prohibited while the Protective-stop is ON.	Turn OFF the Protecitive-stop, and then try again.
8120180b		Turn ON the Protecitive-stop signal to execute the command	1	This operation is not allowed the Protecitive-stop is OFF.	Turn ON the Protecitive-stop, and then try again.
8120170c	21F2	You cannot execute the command while the Enable-auto signal is ON	1	This operation is not allowed while the Enable-auto is ON.	Turn OFF the Enable-auto, and then try again.
8120180c	21F3	Turn ON the Enable-auto signal to execute the command	1	This operation is not allowed the Enable-auto is OFF.	Turn ON the Enable-auto, and then try again.
8420170d		This operation is available only in the simulation environment.	4	This operation is not allowed in the real controller.	Try on the simulation environment.
8420180d		This operation is available only in the real environment.	4	This operation is not allowed in the simulation.	Try on the real controller.
8120170e		You cannot execute a command after robot calibration completed.	1	This operation is not allowed while CALSET is completed on all robots.	Set at least one controller to be CALSET unfinished status, and then try again.

Code	RC7 Code	Message	Level	Description	Remedy
8120180e		Calibrate the robot before executing the command	1	This operation requires the condition that CALSET is completed on all robots.	Finish CALSET on all robot controllers, and then try again.
81201741		You cannot execute a command while an arm is moving.	1	This operation is prohibited while a joint is moving.	Stop all joint motions and then try again.
81201841		Move at least one joint to execute the command.	1	At least one joint must be moving for this operation.	Move at least one joint and then try again.
81201742	21EE	You cannot execute a command while the arm is suspended.	1	At least one joint must be moving for this operation.	Move at least one joint and then try again.
81201842	21EF	Suspend the arm to execute the command.	1	This operation is prohibited while a joint is moving.	Continue-stop all joints and then try again.
81201743		You cannot execute a command while the arm stops.	1	This operation is not allowed while all joints are stopped.	Move at least one joint and then try again.
81201843		Stop the arm to execute the command.	1	This operation is prohibited while a joint is moving.	Stop all joint motions and then try again.
81201744	600B	You cannot execute a command while the robot is moving.	1	This operation is not allowed while robot joint is moving.	Stop robot joint and then try again.
81201844		Move the robot to execute the command.	1	This operation requires the condition that a robot joint is moving.	Move robot joint and then try again.
81201745		You cannot execute a command while the robot is suspended.	1	This operation is not allowed while robot joint is Continue-stopped.	Completely stop robot joint and then try again.
81201845		Suspend the robot to execute the command.	1	This operation requires the condition that robot joint is Continue-stopped.	Continue-stop robot joint and then try again.
81201746		You cannot execute a command while an extended-joint is moving.	1	This operation is not allowed while the extended-joint is moving.	Stop the extended-joint completely and then try again.
81201846		Move an extended-joint to execute the command.	1	This operation requires the condition that an extended-joint is moving.	Move the extended-joint and then try again.
81201747		You cannot execute a command while an extended-joint is suspended.	1	This operation is not allowed while the extended-joint is Continue-stopped.	Completely stop the extended-joint and then try again.
81201847		Suspend the extended-joint to execute the command	1	This operation requires the extended-joint being Continue-stopped.	Continue-stop the extended-joint and then try again.
81201748	21DE	You cannot execute a command in the machine-lock mode.	1	This operation is prohibited in Machine-lock mode.	Release the machine-lock and then try again.
81201848	21DF	Change to the machine-lock mode to execute the command.	1	This operation requires a robot being machine-locked.	Machine-lock the controller and then try again.

Code	RC7 Code	Message	Level	Description	Remedy
81201749	21D3	You cannot execute a command while error occurs.	1	This operation is not allowed while an error occurs.	Clear errors and then try again.
81201849		Execute the command with a deliberate error.	1	This operation requires the condition that an error is intentionally generated.	Generate any errors intentionally and then try again.
8320174a		You cannot execute a command while motor power is ON	3	This operation is prohibited while the motor power is ON	Turn OFF the motor and then try again.
8220184a		Turn motor power ON to execute the command.	2	This operation requires the motor power ON.	Turn ON the motor and then try again.
8120174b	600A	You cannot execute a command while motor power is ON	1	This operation is prohibited while the motor power is ON	Turn OFF the motor and then try again.
8120184b	6006	Turn motor power ON to execute the command.	1	This operation requires Motor-ON state.	Turn ON the motor and then try again.
8320174c		You cannot execute a command while the motor power is OFF	3	This operation is not allowed while the motor power is OFF.	Turn OFF the motor and then try again.
8220184c		Turn the motor power OFF to execute the command	2	This operation requires the motor power OFF.	Turn OFF motor and then try again.
8120174d		You cannot execute a command after all joint calibration completed.	1	This operation is not allowed when CALSET is completed.	Set the robot to be CALSET unfinished and then try again.
8120184d		Calibrate all joints before executing the command.	1	This operation requires the condition that CALSET is completed.	Finish CALSET and then try again.
8120174e		You cannot execute a command in the Slave mode.	1	This operation is not allowed in the Slave mode.	Turn OFF the Slave mode and then try again.
8120184e		Change to Slave mode to execute the command.	1	This operation requires the condition that the robot is in the Slave mode.	Turn ON the Slave mode and then try again.
8120174f		You cannot execute a command on a slave controller.	1	This operation is not allowed on the Slave controller.	Try on the master controller
8120184f		Command is executable only on a slave controller.	1	This operation is allowed only in the Slave controller.	Try on the slave controller
81201751		You cannot execute a command while TCP is interfering with Area.	1	This operation is not allowed while area is interfering.	Move robot to the outside of interference area and try again.
81201851		Move the robot to the interfering position.	1	This operation requires the condition that an area is intentionally interfered.	Intentionally interferein the detection area, and then try again.
81201752		You cannot execute a command when Variable-move is processing.	1	This operation is not allowed during the variable-move.	Complete the variable-move and then try again.

Code	RC7 Code	Message	Level	Description	Remedy
81201852		Command is executable only when Variable-move is processing.	1	This operation is allowed during the variable-move only.	Try the command during the variable-move.
81201753		You cannot execute a command during Automatic operation.	1	This operation is not allowed while executing the auto-move.	Complete the auto-move and then try again.
81201853		Command is executable during Automatic operation only.	1	This operation is allowed only in the auto-move.	Try the command during the auto-move.
81201754		You cannot execute the command in Manual operation	1	This operation is not allowed during the manual-move.	Complete the manual-move and try again.
81201854		Command is executable only in the Manual operation	1	This operation is allowed only in the manual-move.	Try the command during the manual-move.
81201755		You cannot execute a command after robot calibration completed.	1	This operation is not allowed when CALSET is completed.	Set robot to be CALSET unfinished and try again.
81201855		Calibrate the robot before executing the command.	1	This operation requires the condition that CALSET is completed.	Finish CALSET and then try again.
83201756		You cannot execute a command in the remote servo mode	3	This operation is not allowed on the remote servo mode	Turn OFF the remote servo mode.
82201856		Command is executable only in the remote servo mode	2	This operation is allowed only in the remote servo mode	Turn ON the remote servo mode.
81201757		You cannot execute a command when a collision is detected in the virtual fence.	1	This operation is not allowed while virtual fence is detecting collision.	Move robot to the no collide area and try again.
81201857		Command is executable only when a collision is detected in the virtual fence.	1	This operation is allowed only when a virtual fence is detecting collision.	Move robot to the collide area and try again.
81201758		You cannot execute a command when an intrusion is detected in the Exclusive area.	1	This operation is not allowed while exclusive area is detecting instrusion.	Move robot to the no instrusion area and try again.
81201858		Command is executable only when an intrusion is detected in the Exclusive area.	1	This operation is allowed only when an Exclusive area is detecting instrusion.	Move robot to the instrusion area and try again.
81201759		You cannot execute a command in the JOG mode.	1	This operation is not allowed in the JOG mode.	Turn OFF the JOG mode and then try again.
81201859		Change to JOG mode to execute the command.	1	This operation requires the condition that the robot is in the JOG mode.	Turn ON the JOG mode and then try again.

Code	RC7 Code	Message	Level	Description	Remedy
812017fa		You cannot execute a command while the arm is moving.	1	This operation is not allowed while arm group joint is moving.	Stop the arm group joint completely, and then try again.
812018fa		Move at least one joint to execute the command..	1	This operation requires the condition that at least one arm group joint is moving.	Move at least one joint in arm group, and then try again.
812017fb		You cannot execute a command while the arm is suspended.	1	This operation requires the condition that arm group is moving.	Move the arm group, and then try again.
812018fb		Suspend the arm to execute the command.	1	This operation is not allowed while arm group is moving.	Continue-stop the arm group, and then try again.
812017fc		You cannot execute a command when robot joint-included arm group is running.	1	This operation requires the condition that the robot joint-included arm group stops.	Completely stop the arm group including robot joint, and then try again.
812018fc		Execute the command when the robot joint-included arm group is running.	1	This operation is prohibited when the robot joint-included arm group stops.	Stop the arm group including robot joint, and then try again.
812017fd		You cannot execute a command while the robot joint-included arm group is suspended.	1	This operation is not allowed while arm group including robot joint is Continue-stopped.	Completely stop the arm group including robot joint, and then try again.
812018fd		Suspend the robot joint-included arm group to execute the command.	1	This operation requires the condition that robot joint included arm group is Continue-stopped.	Continue-stop the arm group including robot joint, and then try again.
812017fe		You cannot execute a command while the extended-joint included arm group is moving.	1	This operation requires the condition that the extended-joint-included arm group is moving.	Completely stop the arm group including extended-joint, and then try again.
812018fe		Move the extended-joint included arm group to execute the command	1	This operation is not allowed while arm group including extended-joint is moving.	Move the arm group including extended-joint, and then try again.
812017ff		You cannot execute a command while the extended-joint included arm group is suspended	1	This operation is not allowed while arm group including extended-joint is Continue-stopped.	Completely stop the arm group including extended-joint, and then try again.
812018ff		Suspend the extended-joint included arm group to execute the command	1	This operation requires extended-joint-included arm group is Continue-stopped.	Continue-stop the arm group including extended-joint, and then try again.
83201903		Pose type is invalid	3	Unexpected error. Invalid pose type is specified.	Please contact DENSO WAVE service with error number and error message.
83201904		Pose array index is invalid	3	Unexpected error. Tried to refer to the pose array element beyond the available range.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
81201905		Specified T type pose is invalid	1	Pose data with both orient and approach vector is zero, or orient and approach vector is on the same line, cannot be used as the motion destination.	Revise the specified T type pose.
82201906		Specified pose array is invalid	2	Array size is too big, or invalid data type is found in the array.	Revise the specified pose array.
85201981		Main thread creation error	5	Unexpected error. Failed to create main thread at system startup.	Please contact DENSO WAVE service with error number and error message.
85201982		Thread priority setting error	5	Unexpected error. Failed to set priority of main thread at system startup.	Please contact DENSO WAVE service with error number and error message.
83201983		Motion engine registration error	3	Motion engine registration number exceeded the maximum limit.	No more motion engine can be registered. Exit another motion engine, and then register again.
85201984		Device Driver open error	5	Unexpected error. Failed to open device driver.	Please contact DENSO WAVE service with error number and error message.
85201985		Device Driver startup error	5	Unexpected error. Failed to start device driver.	Please contact DENSO WAVE service with error number and error message.
83201986		Invalid device driver call	3	Unexpected error. Invalid device driver was called.	Please contact DENSO WAVE service with error number and error message.
85201987		Event thread creation error	5	Unexpected error. Failed to create event thread at system startup.	Please contact DENSO WAVE service with error number and error message.
85201988		Event creation error	5	Unexpected error. Failed to create event at the system startup.	Please contact DENSO WAVE service with error number and error message.
85201989		Event reception error	5	Unexpected error. Failed to receive event when system is running.	Please contact DENSO WAVE service with error number and error message.
8220198a		Invalid registration key	2	Unexpected error. Failed to read registry at the system startup.	Please contact DENSO WAVE service with error number and error message.
8520198b		Memory allocation error	5	Unexpected error. Failed to allocate memory at the system startup.	Please contact DENSO WAVE service with error number and error message.
8520198c		Timer resolution setting error	5	Unexpected error. Failed to set the event timer resolution at the system startup.	Please contact DENSO WAVE service with error number and error message.
8520198d		Thread creation error	5	Unexpected error. Failed to create thread at the system startup.	Please contact DENSO WAVE service with error number and error message.
83201a01		Tuning value for auto gain tuning waveform is incorrect	3	Failed to save data necessary for the auto gain tuning.	Revise the motor maximum speed, acceleration time and rigidity.
83201a02		Auto gain tuning is not available to this joint.	3	Specified joint is not the target of the auto gain tuning.	Revise the target axis.

Code	RC7 Code	Message	Level	Description	Remedy
83201a03	6003	Rigid is incorrect	3	Specified rigidity is not the target of the auto gain tuning.	Revise the rigidity.
83201a04		Dir is incorrect	3	Specified direction is not the target of the auto gain tuning.	Revise the direction.
83201a05		Failed to obtain acceleration at inertia identification.	3	Failed to detect acceleration used for inertia identification.	Revise the motor setting and mechanical setting.
83201a06		Failed to obtain the log data.	3	Failed to save data necessary for the auto gain tuning.	Revise the motor maximum speed, acceleration time and rigidity.
83201a07	6003	Tuning data is incorrect. Log acquision time for inertia identification is too short.	3	Failed to save data necessary for the auto gain tuning.	Revise the motor setting and mechanical setting.
83201a08		Tuning data is incorrect. Failed to acquire logs at the Auto-tuning.	3	Failed to save data necessary for the auto gain tuning.	Revise the motor setting and mechanical setting.
83201a09		Settling time is incorrect	3	Could not collect data from the wave form in the auto gain tuning.	Revise the motor setting and mechanical setting.
83201a10		The number of identifications are too many.	3	The number of the inertia identification trial execution exceeded the limit.	Revise the motor setting and mechanical setting.
83201a11		The number of tunings are too many	3	The number of the auto gain tuning execution exceeded the limit.	Revise the motor setting and mechanical setting.
83201a12		Velocity is less than tuning velocity.	3	Motion speed did not reach the auto gain tuning adjustment speed.	Revise the motor setting and mechanical setting.
83201a13		Specified acceleration is invalid	3	Auto gain tuning acceleration setting is invalid.	Revise the maximum rotation speed and acceleration time.
80201a14		Tuning result did not converge	0	Auto gain tuning was predetermined number of times. Tuning is not finished.	Revise the motor setting and mechanical setting.
80201a15		Tuning result did not converge	0	Auto gain tuning was predetermined number of times. Tuning is not finished.	Revise the motor setting and mechanical setting.
80201a16		Tuning result did not converge	0	Auto gain tuning was pedetermined number of times. Tuning is not finished.	Revise the motor setting and mechanical setting.
81201a81		Specified control log number is invalid	1	Tried to access the control log record beyond the available range.	Revise the setting.
85201a82		Memory allocation error	5	Unexpected error. Failed to allocate memory for the control log object.	Please contact DENSO WAVE service with error number and error message.
81201a83		Specified log sampling interval is invalid.	1	Specified control log sampling time is out of range.	Value setting range is 8-22. Revise the setting.
81201a84		Specified logging time is invalid.	1	Specified control log record time is out of range.	Value setting range is 10-240. Revise the setting.

Code	RC7 Code	Message	Level	Description	Remedy
81201a85		Specified acquisition mode is invalid.	1	Unsupported control log acquisition mode was specified.	Revise the setting.
81201a86		Specified logging mode is invalid.	1	Unsupported control log record mode was specified.	Revise the setting.
81201a87		You cannot change the log sampling interval during logging.	1	Log record interval cannot be changed while the control log is recorded.	Stop the control log recording and then try again.
81201a88		You cannot change the log sampling interval during logging.	1	Log record interval cannot be changed while the control log is recorded.	Stop the control log recording and then try again.
81201a89		Specified operation is not executable during logging.	1	Tried to perform an operation that is not allowed while the control log is recorded.	Stop the control log recording and then try again.
81201a8a		Specified log page is invalid	1	Tried to access the control log page beyond the available range.	Revise the setting.
81201b01		Specified servo log number is invalid.	1	Tried to access the servo log record beyond the available range.	Revise the setting.
85201b02		Memory allocation error	5	Unexpected error. Failed to allocate memory for the servo log object.	Please contact DENSO WAVE service with error number and error message.
81201b03		Specified servo log sampling interval is invalid.	1	Specified servo log sampling time is out of range.	Value setting range is 1, 2, 4 or 8. Revise the setting.
81201b04		Specified servo logging time is invalid.	1	Specified servo log record time is out of range.	Value setting range is 10–60. Revise the setting.
81201b05		Specified servo log page is invalid.	1	Tried to access the servo log page beyond the available range.	Revise the setting.
83201b06		You cannot execute this operation while servo log is activated.	3	Tried to execute operation that is prohibited while servo log is activated.	Stop the servo log and then try again.
83201b07		Activate servo log and execute	3	Tried to execute operation that is allowed only while servo log is activated.	Stop the servo log and then try again.
83201b08		Invalid servo log parameter	3	Tried to set invalid servo log parameter.	The setting parameter might be out of range. Please revise the setting value.
81201b09		Tried to access servo log item that is out of ragne	1	Tried to access servo log item that is out of range.	Revise the setting.
83201b81		Two buttons were pushed when joint mode cooperation control.	3	Two buttons were pushed when joint mode cooperation control .	Please push the button one by one.
83201b82		Coordinate control–target joint does not exist.	3	The joint you specified for the Coordinate control target does not exist.	Revise the setting.

Code	RC7 Code	Message	Level	Description	Remedy
83201b83		This command cannot be used with the cooperative motion.	3	This command cannot be used with SyncMove option, or this command is not supported by PTP move.	Revise the program.
83201b84		The same robot was chosen.	3	The same robot was chosen	Revise the program.
83201b85		Position settling time over	3	The encoder value did not reach the target position within the time limit.	The robot arm might be vibrating. Revise the motion speed and the settling time.
81201b86		Different pass start displacement distance is specified.	1	Different pass start displacement distance is specified.	Set pass start displacement distance again.
83201b87		The motion time gap occurred between robots in the motion time synchronization process.	3	The motion time gap occurred in the motion time synchronization process.	If the robot is stopped, reset the program and try again.
82201b88		You cannot switch single robot move to cooperative or synchronous move when an intrusion is detected in the exclusive area	2	Combination of robots cannot be changed when an intrusion is detected in the exclusive area	Move robot to the no instrusion area by single robot move and try again.
82201b89		You cannot switch cooperative or synchronous move to single robot move when an intrusion is detected in the exclusive area	2	Combination of robots cannot be changed when an intrusion is detected in the exclusive area	Move robot to the no instrusion area by cooperative or synchronous move and try again.
82201b8a		You cannot change a combination of robots for cooperative or synchronous move when an intrusion is detected in the exclusive area	2	Combination of robots cannot be changed when an intrusion is detected in the exclusive area	Move robot to the no instrusion area by a combination same as exclusion area instrusion time and try again.
83201c01		The number of estimation motion are too many.	3	The number of the estimation motion exceeded the limit.	Revise the setting.
83201c02		The number of sequence are incorrect.	3	Sequence number is out of range.	Revise the setting.
83201c03		You cannot estimate specifying the tip load setting.	3	Specified value cannot be estimated.	Revise the setting.
83201c04		Failed to log acquisition of estimation operation.	3	Failed to save data necessary for the load estimation.	Revise the robot motion.
83201c05		Specified joint speed is invalid	3	Load estimation speed setting is invalid.	Revise the setting.

Code	RC7 Code	Message	Level	Description	Remedy
85201c81		Failed to initialize EtherCAT Motion	5	Failed to initialize EtherCAT connection.	Confirm that the EtherCAT cable is property connected. After confirmation, reboot the robot controller. If the error still occurs, please contact DENSO WAVE service.
85201c82		Failed to initialize EtherCAT Motion	5	Initialization EtherCAT connection timeout.	Please check the followings. - The breaking down of a wire. - The power of EhterCAT slave devices. - Order of EhterCAT slave devices.
85201c83		Failed to initialize EtherCAT Motion	5	The state of EtherCAT is not equal to OP.	Confirm that the EtherCAT cable is property connected. After confirmation, reboot the robot controller. If the error still occurs, please contact DENSO WAVE service.
85201c84		Failed to initialize EtherCAT Motion	5	Failed to construct the object dictionary.	Reboot the robot controller. If the error still occurs, please contact DENSO WAVE service.
85201c85		The number of EtherCAT slave devices is different to a setting	5	The number of EtherCAT slave devices is different to a setting.	Please check EtherCAT connection.
85201c86		EtherCAT slave controller is misconnected	5	The order of EtherCAT slave devices is wrong. Or unexpected EtherCAT slave device is connected.	Please check EtherCAT connection.
85201c87		Failed to initialize EtherCAT Motion	5	EtherCAT command processing failed.	Confirm that the EtherCAT cable is property connected. After confirmation, reboot the robot controller. If the error still occurs, please contact DENSO WAVE service.
85201c88		Failed to initialize EtherCAT Motion	5	The state of EtherCAT is not equal to SAFEOP.	Please check the followings. - The breaking down of a wire. - The power of EhterCAT slave devices. - Order of EhterCAT slave devices.
85201c89		Failed to check EtherCAT Motion connection	5	Main port is connected to nothinig.	Please check EtherCAT connection. When it is connected to the redundacy port (RED CH1), please be connected to the main port (MAIN CH0).

Code	RC7 Code	Message	Level	Description	Remedy
85201c8a		Failed to check EtherCAT Motion connection	5	Cutting of redundancy connection middle is detected.	Please check EtherCAT connection.
85201c8b		Failed to initialize EtherCAT Motion	5	Unsupport memory layout.	Please contact DENSO WAVE service with error number and error message.
82201c8c		EtherCAT Motion connection is redundancy.	2	Redudancy connection setting is disable, but redudancy connection is detected.	Please check EtherCAT connection.
82201c8d		EtherCAT Motion connection is not redundancy.	2	Redudancy connection setting is enable, but redudancy connection is not detected.	Please check EtherCAT connection.
85201c8e		EtherCAT slave controller is reversely connected	5	EtherCAT slave controller is reversely connected.	Please check EtherCAT connection.
85201c8f		EtherCAT slave controller is not connected	5	EtherCAT slave controller is not connected.	Please check EtherCAT connection.
85201c91		EtherCAT Motion internal command error	5	EtherCAT Motion internal command number is unexpected.	Reboot the robot controller. If the error still occurs, please contact DENSO WAVE service.
85201c92		Invalid EtherCAT Motion data size	5	Invalid EtherCAT Motion data size.	Reboot the robot controller. If the error still occurs, please contact DENSO WAVE service.
85201c93		Failed to start EtherCAT Motion	5	Failed to start EtherCAT Motion.	Reboot the robot controller. If the error still occurs, please contact DENSO WAVE service.
85201c94		Failed to communicate to start EtherCAT Motion	5	Failed to communicate to start EtherCAT Motion.	Reboot the robot controller. If the error still occurs, please contact DENSO WAVE service.
85201c95		Failed to stop EtherCAT Motion	5	Failed to stop EtherCAT Motion.	Reboot the robot controller. If the error still occurs, please contact DENSO WAVE service.
85201c96		Failed to communicate to stop EtherCAT Motion	5	Failed to communicate to stop EtherCAT Motion.	Reboot the robot controller. If the error still occurs, please contact DENSO WAVE service.
85201c97		Failed to read CoE data	5	Failed to read CoE data.	Reboot the robot controller. If the error still occurs, please contact DENSO WAVE service.
85201c98		Failed to communicate to read CoE data	5	Failed to communicate to read CoE data.	Reboot the robot controller. If the error still occurs, please contact DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
85201c99		Failed to write CoE data	5	Failed to write CoE data.	Reboot the robot controller. If the error still occurs, please contact DENSO WAVE service.
85201c9a		Failed to communicate to write CoE data	5	Failed to communicate to write CoE data.	Reboot the robot controller. If the error still occurs, please contact DENSO WAVE service.
85201c9b		Failed to communicate EtherCAT Motion	5	Failed to communicate EtherCAT Motion.	Reboot the robot controller. If the error still occurs, please contact DENSO WAVE service.
85201c9c		EtherCAT slave device is misconnected	5	Error was reported from the EtherCAT slave device. The following causes are likely. 1. EtherCAT slave device is reversely connected. 2. The order of EtherCAT slave devices is wrong. 3. Unexpected EtherCAT slave device is connected.	Please check EtherCAT connection.
85201c9d		Failed to MC9 Setting, Auto PosClr is enabled.	5	Failed to MC9 Setting, Auto PosClr is enabled.	If Auto PosClr is used, please RC8 is disable Auto PosClr and only MC9 is enable Auto PosClr.
85201f81		Invalid parameters	5	Unexpected error. Invalid parameter was used in the system.	Please contact DENSO WAVE service with error number and error message.
85201f82		Memory allocation error	5	Unexpected error. Failed to allocate memory in the system.	Please contact DENSO WAVE service with error number and error message.
83201f83		Operation failed	3	Unexpected error. Invalid process was executed in the system.	Please contact DENSO WAVE service with error number and error message.
83201f84		Operation is not implemented	3	Unexpected error. Non-implemented process was called in the system.	Please contact DENSO WAVE service with error number and error message.
85201f85		Unexpected Error	5	Unexpected error. Unintended process was executed in the system.	Please contact DENSO WAVE service with error number and error message.
83201f86		This interface is not supported.	3	Unexpected error. Unintended process was executed in the system.	Please contact DENSO WAVE service with error number and error message.
83201f87		Pointer is invalid	3	Unexpected error. Invalid pointer was used in the system.	Please contact DENSO WAVE service with error number and error message.
83201f88		Handle is invalid	3	Unexpected error. Invalid handle was used in the system.	Please contact DENSO WAVE service with error number and error message.

Code	RC7 Code	Message	Level	Description	Remedy
83201f89		Operation aborted	3	Process was cancelled in the system.	Confirm communication is established and execute the operation again.If the error still occurs, Please contact DENSO WAVE service with error number and error message.
83201f8a		Access denied	3	Unexpected error. Access was denied in the system.	Please contact DENSO WAVE service with error number and error message.
83201f8b		The data necessary to complete this operation is still unavailable.	3	Unexpected error. Process was not completed in the system.	Please contact DENSO WAVE service with error number and error message.
83201f8c		You cannot execute a command in current version	3	You cannot execute this command in the current version.	You cannot execute a command in the current version.
83201f8d		Parameter is out of range	3	Specified value is not correct.	Revise and assign an appropriate value.
81201f8e		Not available	1	Operation is not available	Operation is not available. Please check the controller manual.
82201f8f		b-CAP connection failed	2	b-CAP connection failed. b-CAP communication setting might have a problem.	Revise the b-CAP communication setting.
82201f91		Specified b-CAP connection option is invalid.	2	Specified value is not correct.	Revise and assign the appropriate value.
82201f92		b-CAP connection timeout	2	b-CAP connection failed. b-CAP communication might be disconnected.	Confirm b-CAP communication is established.
85201f93		Level5 error has been issued.	5	Tried to execute command while level 5 error has been issued.	Restart the controller. If the error still occurs, please contact to DENSO WAVE service.
82204011		J1 software limit over	2	Tried to move the robot to the outside of the software limit in the manual operation.	You can move the robot within the software limit by hand with Joint mode.
82204012		J2 software limit over	2	Tried to move the robot to the outside of the software limit in the manual operation.	You can move the robot within the software limit by hand with Joint mode.
82204013		J3 software limit over	2	Tried to move the robot to the outside of the software limit in the manual operation.	You can move the robot within the software limit by hand with Joint mode.
82204014		J4 software limit over	2	Tried to move the robot to the outside of the software limit in the manual operation.	You can move the robot within the software limit by hand with Joint mode.
82204015		J5 software limit over	2	Tried to move the robot to the outside of the software limit in the manual operation.	You can move the robot within the software limit by hand with Joint mode.
82204016		J6 software limit over	2	Tried to move the robot to the outside of the software limit in the manual operation.	You can move the robot within the software limit by hand with Joint mode.
82204017		J7 software limit over	2	Tried to move the robot to the outside of the software limit in the manual operation.	You can move the robot within the software limit by hand with Joint mode.

Code	RC7 Code	Message	Level	Description	Remedy
82204018		J8 software limit over	2	Tried to move the robot to the outside of the software limit in the manual operation.	You can move the robot within the software limit by hand with Joint mode.
82204021		J1 command speed limit over	2	Command value higher than the speed limit was generated in the manual operation.	Robot might be passing near the singular point. The error can be avoided by reducing the external speed or changing to the manual and joint mode.
82204022		J2 command speed limit over	2	Command value higher than the speed limit was generated in the manual operation.	Robot might be passing near the singular point. The error can be avoided by reducing the external speed or changing to the manual and joint mode.
82204023		J3 command speed limit over	2	Command value higher than the speed limit was generated in the manual operation.	Robot might be passing near the singular point. The error can be avoided by reducing the external speed or changing to the manual and joint mode.
82204024		J4 command speed limit over	2	Command value higher than the speed limit was generated in the manual operation.	Robot might be passing near the singular point. The error can be avoided by reducing the external speed or changing to the manual and joint mode.
82204025		J5 command speed limit over	2	Command value higher than the speed limit was generated in the manual operation.	Robot might be passing near the singular point. The error can be avoided by reducing the external speed or changing to the manual and joint mode.
82204026		J6 command speed limit over	2	Command value higher than the speed limit was generated in the manual operation.	Robot might be passing near the singular point. The error can be avoided by reducing the external speed or changing to the manual and joint mode.
82204027		J7 command speed limit over	2	Command value higher than the speed limit was generated in the manual operation.	Robot might be passing near the singular point. The error can be avoided by reducing the external speed or changing to the manual and joint mode.
82204028		J8 command speed limit over	2	Command value higher than the speed limit was generated in the manual operation.	Robot might be passing near the singular point. The error can be avoided by reducing the external speed or changing to the manual and joint mode.
83204031		J1 position settling time over	3	The encoder value of the joint did not reach the target position within the time limit.	The robot arm might be vibrating. Revise the motion speed and the settling time.
83204032		J2 position settling time over	3	The encoder value of the joint did not reach the target position within the time limit.	The robot arm might be vibrating. Revise the motion speed and the settling time.
83204033		J3 position settling time over	3	The encoder value of the joint did not reach the target position within the time limit.	The robot arm might be vibrating. Revise the motion speed and the settling time.
83204034		J4 position settling time over	3	The encoder value of the joint did not reach the target position within the time limit.	The robot arm might be vibrating. Revise the motion speed and the settling time.
83204035		J5 position settling time over	3	The encoder value of the joint did not reach the target position within the time limit.	The robot arm might be vibrating. Revise the motion speed and the settling time.

Code	RC7 Code	Message	Level	Description	Remedy
83204036		J6 position settling time over	3	The encoder value of the joint did not reach the target position within the time limit.	The robot arm might be vibrating. Revise the motion speed and the settling time.
83204037		J7 position settling time over	3	The encoder value of the joint did not reach the target position within the time limit.	The robot arm might be vibrating. Revise the motion speed and the settling time.
83204038		J8 position settling time over	3	The encoder value of the joint did not reach the target position within the time limit.	The robot arm might be vibrating. Revise the motion speed and the settling time.
84204041		J1 command accel limit over	4	Command value higher than the acceleration limit was generated. All joints were Emergency-stopped and motor power was turned OFF.	Robot might be passing near the singular point. The error might be avoided by reducing the internal and external speed and accel.
84204042		J2 command accel limit over	4	Command value higher than the acceleration limit was generated. All joints were Emergency-stopped and motor power was turned OFF.	Robot might be passing near the singular point. The error might be avoided by reducing the internal and external speed and accel.
84204043		J3 command accel limit over	4	Command value higher than the acceleration limit was generated. All joints were Emergency-stopped and motor power was turned OFF.	Robot might be passing near the singular point. The error might be avoided by reducing the internal and external speed and accel.
84204044		J4 command accel limit over	4	Command value higher than the acceleration limit was generated. All joints were Emergency-stopped and motor power was turned OFF.	Robot might be passing near the singular point. The error might be avoided by reducing the internal and external speed and accel.
84204045		J5 command accel limit over	4	Command value higher than the acceleration limit was generated. All joints were Emergency-stopped and motor power was turned OFF.	Robot might be passing near the singular point. The error might be avoided by reducing the internal and external speed and accel.
84204046		J6 command accel limit over	4	Command value higher than the acceleration limit was generated. All joints were Emergency-stopped and motor power was turned OFF.	Robot might be passing near the singular point. The error might be avoided by reducing the internal and external speed and accel.
84204047		J7 command accel limit over	4	Command value higher than the acceleration limit was generated. All joints were Emergency-stopped and motor power was turned OFF.	Robot might be passing near the singular point. The error might be avoided by reducing the internal and external speed and accel.
84204048		J8 command accel limit over	4	Command value higher than the acceleration limit was generated. All joints were Emergency-stopped and motor power was turned OFF.	Robot might be passing near the singular point. The error might be avoided by reducing the internal and external speed and accel.
84204051		J1 command speed limit over	4	Command value higher than the speed limit was about to be sent to the servo module. All joints were Emergency-stopped and motor power was turned OFF.	Unexpected error. If the system is set to the Slave mode, confirm that the motion command from the master is correct.

Code	RC7 Code	Message	Level	Description	Remedy
84204052		J2 command speed limit over	4	Command value higher than the speed limit was about to be sent to the servo module. All joints were Emergency-stopped and motor power was turned OFF.	Unexpected error. If the system is set to the Slave mode, confirm that the motion command from the master is correct.
84204053		J3 command speed limit over	4	Command value higher than the speed limit was about to be sent to the servo module. All joints were Emergency-stopped and motor power was turned OFF.	Unexpected error. If the system is set to the Slave mode, confirm that the motion command from the master is correct.
84204054		J4 command speed limit over	4	Command value higher than the speed limit was about to be sent to the servo module. All joints were Emergency-stopped and motor power was turned OFF.	Unexpected error. If the system is set to the Slave mode, confirm that the motion command from the master is correct.
84204055		J5 command speed limit over	4	Command value higher than the speed limit was about to be sent to the servo module. All joints were Emergency-stopped and motor power was turned OFF.	Unexpected error. If the system is set to the Slave mode, confirm that the motion command from the master is correct.
84204056		J6 command speed limit over	4	Command value higher than the speed limit was about to be sent to the servo module. All joints were Emergency-stopped and motor power was turned OFF.	Unexpected error. If the system is set to the Slave mode, confirm that the motion command from the master is correct.
84204057		J7 command speed limit over	4	Command value higher than the speed limit was about to be sent to the servo module. All joints were Emergency-stopped and motor power was turned OFF.	Unexpected error. If the system is set to the Slave mode, confirm that the motion command from the master is correct.
84204058		J8 command speed limit over	4	Command value higher than the speed limit was about to be sent to the servo module. All joints were Emergency-stopped and motor power was turned OFF.	Unexpected error. If the system is set to the Slave mode, confirm that the motion command from the master is correct.
84204061		J1 command speed limit over	4	Generated command value exceeded the speed limit. All joints were Emergency-stopped and motor power was turned OFF. On CP-motion or Pass-motion, the speed of each joint might change rapidly, so as to realize the target motion and pose of TCP.	The error might be avoided by activating the optimal payload mode or reducing the motion speed.

Code	RC7 Code	Message	Level	Description	Remedy
84204062		J2 command speed limit over	4	Generated command value exceeded the speed limit. All joints were Emergency-stopped and motor power was turned OFF. On CP-motion or Pass-motion, the speed of each joint might change rapidly, so as to realize the target motion and pose of TCP.	The error might be avoided by activating the optimal payload mode or reducing the motion speed.
84204063		J3 command speed limit over	4	Generated command value exceeded the speed limit. All joints were Emergency-stopped and motor power was turned OFF. On CP-motion or Pass-motion, the speed of each joint might change rapidly, so as to realize the target motion and pose of TCP.	The error might be avoided by activating the optimal payload mode or reducing the motion speed.
84204064		J4 command speed limit over	4	Generated command value exceeded the speed limit. All joints were Emergency-stopped and motor power was turned OFF. On CP-motion or Pass-motion, the speed of each joint might change rapidly, so as to realize the target motion and pose of TCP.	The error might be avoided by activating the optimal payload mode or reducing the motion speed.
84204065		J5 command speed limit over	4	Generated command value exceeded the speed limit. All joints were Emergency-stopped and motor power was turned OFF. On CP-motion or Pass-motion, the speed of each joint might change rapidly, so as to realize the target motion and pose of TCP.	The error might be avoided by activating the optimal payload mode or reducing the motion speed.
84204066		J6 command speed limit over	4	Generated command value exceeded the speed limit. All joints were Emergency-stopped and motor power was turned OFF. On CP-motion or Pass-motion, the speed of each joint might change rapidly, so as to realize the target motion and pose of TCP.	The error might be avoided by activating the optimal payload mode or reducing the motion speed.
84204067		J7 command speed limit over	4	Generated command value exceeded the speed limit. All joints were Emergency-stopped and motor power was turned OFF. On CP-motion or Pass-motion, the speed of each joint might change rapidly, so as to realize the target motion and pose of TCP.	The error might be avoided by activating the optimal payload mode or reducing the motion speed.

Code	RC7 Code	Message	Level	Description	Remedy
84204068		J8 command speed limit over	4	Generated command value exceeded the speed limit. All joints were Emergency-stopped and motor power was turned OFF. On CP-motion or Pass-motion, the speed of each joint might change rapidly, so as to realize the target motion and pose of TCP.	The error might be avoided by activating the optimal payload mode or reducing the motion speed.
83204071		J1 software limit over	3	Robot was going to exceed the software limit. All joints were Emergency-stopped and the motor power was turned OFF.	You can move the robot within the software limit by hand with Joint mode.
83204072		J2 software limit over	3	Robot was going to exceed the software limit. All joints were Emergency-stopped and the motor power was turned OFF.	You can move the robot within the software limit by hand with Joint mode.
83204073		J3 software limit over	3	Robot was going to exceed the software limit. All joints were Emergency-stopped and the motor power was turned OFF.	You can move the robot within the software limit by hand with Joint mode.
83204074		J4 software limit over	3	Robot was going to exceed the software limit. All joints were Emergency-stopped and the motor power was turned OFF.	You can move the robot within the software limit by hand with Joint mode.
83204075		J5 software limit over	3	Robot was going to exceed the software limit. All joints were Emergency-stopped and the motor power was turned OFF.	You can move the robot within the software limit by hand with Joint mode.
83204076		J6 software limit over	3	Robot was going to exceed the software limit. All joints were Emergency-stopped and the motor power was turned OFF.	You can move the robot within the software limit by hand with Joint mode.
83204077		J7 software limit over	3	Robot was going to exceed the software limit. All joints were Emergency-stopped and the motor power was turned OFF.	You can move the robot within the software limit by hand with Joint mode.
83204078		J8 software limit over	3	Robot was going to exceed the software limit. All joints were Emergency-stopped and the motor power was turned OFF.	You can move the robot within the software limit by hand with Joint mode.

Code	RC7 Code	Message	Level	Description	Remedy
84204081		J1 command speed limit over	4	The robot speed was automatically reduced, but the speed command still exceeded the speed limit because the robot could not reduce the speed enough. All joints were Emergency-stopped and the motor power was turned OFF. On CP-motion or Pass-motion, the speed of each joint might change rapidly, so as to realize the target motion and pose of TCP.	The robot speed cannot be reduced even if the speed automatic reduction function is enabled. Revise the robot speed and robot destination position.
84204082		J2 command speed limit over	4	The robot speed was automatically reduced, but the speed command still exceeded the speed limit because the robot could not reduce the speed enough. All joints were Emergency-stopped and the motor power was turned OFF. On CP-motion or Pass-motion, the speed of each joint might change rapidly, so as to realize the target motion and pose of TCP.	The robot speed cannot be reduced even if the speed automatic reduction function is enabled. Revise the robot speed and robot destination position.
84204083		J3 command speed limit over	4	The robot speed was automatically reduced, but the speed command still exceeded the speed limit because the robot could not reduce the speed enough. All joints were Emergency-stopped and the motor power was turned OFF. On CP-motion or Pass-motion, the speed of each joint might change rapidly, so as to realize the target motion and pose of TCP.	The robot speed cannot be reduced even if the speed automatic reduction function is enabled. Revise the robot speed and robot destination position.
84204084		J4 command speed limit over	4	The robot speed was automatically reduced, but the speed command still exceeded the speed limit because the robot could not reduce the speed enough. All joints were Emergency-stopped and the motor power was turned OFF. On CP-motion or Pass-motion, the speed of each joint might change rapidly, so as to realize the target motion and pose of TCP.	The robot speed cannot be reduced even if the speed automatic reduction function is enabled. Revise the robot speed and robot destination position.

Code	RC7 Code	Message	Level	Description	Remedy
84204085		J5 command speed limit over	4	The robot speed was automatically reduced, but the speed command still exceeded the speed limit because the robot could not reduce the speed enough. All joints were Emergency-stopped and the motor power was turned OFF. On CP-motion or Pass-motion, the speed of each joint might change rapidly, so as to realize the target motion and pose of TCP.	The robot speed cannot be reduced even if the speed automatic reduction function is enabled. Revise the robot speed and robot destination position.
84204086		J6 command speed limit over	4	The robot speed was automatically reduced, but the speed command still exceeded the speed limit because the robot could not reduce the speed enough. All joints were Emergency-stopped and the motor power was turned OFF. On CP-motion or Pass-motion, the speed of each joint might change rapidly, so as to realize the target motion and pose of TCP.	The robot speed cannot be reduced even if the speed automatic reduction function is enabled. Revise the robot speed and robot destination position.
84204087		J7 command speed limit over	4	The robot speed was automatically reduced, but the speed command still exceeded the speed limit because the robot could not reduce the speed enough. All joints were Emergency-stopped and the motor power was turned OFF. On CP-motion or Pass-motion, the speed of each joint might change rapidly, so as to realize the target motion and pose of TCP.	The robot speed cannot be reduced even if the speed automatic reduction function is enabled. Revise the robot speed and robot destination position.
84204088		J8 command speed limit over	4	The robot speed was automatically reduced, but the speed command still exceeded the speed limit because the robot could not reduce the speed enough. All joints were Emergency-stopped and the motor power was turned OFF. On CP-motion or Pass-motion, the speed of each joint might change rapidly, so as to realize the target motion and pose of TCP.	The robot speed cannot be reduced even if the speed automatic reduction function is enabled. Revise the robot speed and robot destination position.

Code	RC7 Code	Message	Level	Description	Remedy
84204091		J1 command speed limit over	4	The robot speed was automatically reduced, but the speed command still exceeded the speed limit because the robot could not reduce the speed enough. All joints were Emergency-stopped and the motor power was turned OFF. On CP-motion or Pass-motion, the speed of each joint might change rapidly, so as to realize the target motion and pose of TCP.	The robot speed cannot be reduced even if the speed automatic reduction function is enabled. Revise the robot speed and robot destination position.
84204092		J2 command speed limit over	4	The robot speed was automatically reduced, but the speed command still exceeded the speed limit because the robot could not reduce the speed enough. All joints were Emergency-stopped and the motor power was turned OFF. On CP-motion or Pass-motion, the speed of each joint might change rapidly, so as to realize the target motion and pose of TCP.	The robot speed cannot be reduced even if the speed automatic reduction function is enabled. Revise the robot speed and robot destination position.
84204093		J3 command speed limit over	4	The robot speed was automatically reduced, but the speed command still exceeded the speed limit because the robot could not reduce the speed enough. All joints were Emergency-stopped and the motor power was turned OFF. On CP-motion or Pass-motion, the speed of each joint might change rapidly, so as to realize the target motion and pose of TCP.	The robot speed cannot be reduced even if the speed automatic reduction function is enabled. Revise the robot speed and robot destination position.
84204094		J4 command speed limit over	4	The robot speed was automatically reduced, but the speed command still exceeded the speed limit because the robot could not reduce the speed enough. All joints were Emergency-stopped and the motor power was turned OFF. On CP-motion or Pass-motion, the speed of each joint might change rapidly, so as to realize the target motion and pose of TCP.	The robot speed cannot be reduced even if the speed automatic reduction function is enabled. Revise the robot speed and robot destination position.

Code	RC7 Code	Message	Level	Description	Remedy
84204095		J5 command speed limit over	4	The robot speed was automatically reduced, but the speed command still exceeded the speed limit because the robot could not reduce the speed enough. All joints were Emergency-stopped and the motor power was turned OFF. On CP-motion or Pass-motion, the speed of each joint might change rapidly, so as to realize the target motion and pose of TCP.	The robot speed cannot be reduced even if the speed automatic reduction function is enabled. Revise the robot speed and robot destination position.
84204096		J6 command speed limit over	4	The robot speed was automatically reduced, but the speed command still exceeded the speed limit because the robot could not reduce the speed enough. All joints were Emergency-stopped and the motor power was turned OFF. On CP-motion or Pass-motion, the speed of each joint might change rapidly, so as to realize the target motion and pose of TCP.	The robot speed cannot be reduced even if the speed automatic reduction function is enabled. Revise the robot speed and robot destination position.
84204097		J7 command speed limit over	4	The robot speed was automatically reduced, but the speed command still exceeded the speed limit because the robot could not reduce the speed enough. All joints were Emergency-stopped and the motor power was turned OFF. On CP-motion or Pass-motion, the speed of each joint might change rapidly, so as to realize the target motion and pose of TCP.	The robot speed cannot be reduced even if the speed automatic reduction function is enabled. Revise the robot speed and robot destination position.
84204098		J8 command speed limit over	4	The robot speed was automatically reduced, but the speed command still exceeded the speed limit because the robot could not reduce the speed enough. All joints were Emergency-stopped and the motor power was turned OFF. On CP-motion or Pass-motion, the speed of each joint might change rapidly, so as to realize the target motion and pose of TCP.	The robot speed cannot be reduced even if the speed automatic reduction function is enabled. Revise the robot speed and robot destination position.
842040A1		J1 command speed limit over	4	Generated command value exceeded the speed limit. All joints were Emergency-stopped and the motor power was turned OFF.	The error might be avoided by reducing the motion speed.

Code	RC7 Code	Message	Level	Description	Remedy
842040A2		J2 command speed limit over	4	Generated command value exceeded the speed limit. All joints were Emergency-stopped and the motor power was turned OFF.	The error might be avoided by reducing the motion speed.
842040A3		J3 command speed limit over	4	Generated command value exceeded the speed limit. All joints were Emergency-stopped and the motor power was turned OFF.	The error might be avoided by reducing the motion speed.
842040A4		J4 command speed limit over	4	Generated command value exceeded the speed limit. All joints were Emergency-stopped and the motor power was turned OFF.	The error might be avoided by reducing the motion speed.
842040A5		J5 command speed limit over	4	Generated command value exceeded the speed limit. All joints were Emergency-stopped and the motor power was turned OFF.	The error might be avoided by reducing the motion speed.
842040A6		J6 command speed limit over	4	Generated command value exceeded the speed limit. All joints were Emergency-stopped and the motor power was turned OFF.	The error might be avoided by reducing the motion speed.
842040A7		J7 command speed limit over	4	Generated command value exceeded the speed limit. All joints were Emergency-stopped and the motor power was turned OFF.	The error might be avoided by reducing the motion speed.
842040A8		J8 command speed limit over	4	Generated command value exceeded the speed limit. All joints were Emergency-stopped and the motor power was turned OFF.	The error might be avoided by reducing the motion speed.
832040B1		J1 motor overload	3	Accumulated motor current value for the predetermined time exceeded the limit.	Revise the robot motion.
832040B2		J2 motor overload	3	Accumulated motor current value for the predetermined time exceeded the limit.	Revise the robot motion.
832040B3		J3 motor overload	3	Accumulated motor current value for the predetermined time exceeded the limit.	Revise the robot motion.
832040B4		J4 motor overload	3	Accumulated motor current value for the predetermined time exceeded the limit.	Revise the robot motion.
832040B5		J5 motor overload	3	Accumulated motor current value for the predetermined time exceeded the limit.	Revise the robot motion.
832040B6		J6 motor overload	3	Accumulated motor current value for the predetermined time exceeded the limit.	Revise the robot motion.
832040B7		J7 motor overload	3	Accumulated motor current value for the predetermined time exceeded the limit.	Revise the robot motion.

Code	RC7 Code	Message	Level	Description	Remedy
832040B8		J8 motor overload	3	Accumulated motor current value for the predetermined time exceeded the limit.	Revise the robot motion.
832040C1		J1 driver unit overload	3	Accumulated driver unit current value for the predetermined time period exceeded the limit.	Revise the robot motion.
832040C2		J2 driver unit overload	3	Accumulated driver unit current value for the predetermined time period exceeded the limit.	Revise the robot motion.
832040C3		J3 driver unit overload	3	Accumulated driver unit current value for the predetermined time period exceeded the limit.	Revise the robot motion.
832040C4		J4 driver unit overload	3	Accumulated driver unit current value for the predetermined time period exceeded the limit.	Revise the robot motion.
832040C5		J5 driver unit overload	3	Accumulated driver unit current value for the predetermined time period exceeded the limit.	Revise the robot motion.
832040C6		J6 driver unit overload	3	Accumulated driver unit current value for the predetermined time period exceeded the limit.	Revise the robot motion.
832040C7		J7 driver unit overload	3	Accumulated driver unit current value for the predetermined time period exceeded the limit.	Revise the robot motion.
832040C8		J8 driver unit overload	3	Accumulated driver unit current value for the predetermined time period exceeded the limit.	Revise the robot motion.
832040D1		J1 lock overload	3	Excessive motor current was detected while robot motion stopped.	Revise the robot motion.
832040D2		J2 lock overload	3	Excessive motor current was detected while robot motion stopped.	Revise the robot motion.
832040D3		J3 lock overload	3	Excessive motor current was detected while robot motion stopped.	Revise the robot motion.
832040D4		J4 lock overload	3	Excessive motor current was detected while robot motion stopped.	Revise the robot motion.
832040D5		J5 lock overload	3	Excessive motor current was detected while robot motion stopped.	Revise the robot motion.
832040D6		J6 lock overload	3	Excessive motor current was detected while robot motion stopped.	Revise the robot motion.
832040D7		J7 lock overload	3	Excessive motor current was detected while robot motion stopped.	Revise the robot motion.
832040D8		J8 lock overload	3	Excessive motor current was detected while robot motion stopped.	Revise the robot motion.
832040E1		J1 lock overload	3	Excessive motor current was detected while robot motion stopped.	Revise the robot motion.

Code	RC7 Code	Message	Level	Description	Remedy
832040E2		J2 lock overload	3	Excessive motor current was detected while robot motion stopped.	Revise the robot motion.
832040E3		J3 lock overload	3	Excessive motor current was detected while robot motion stopped.	Revise the robot motion.
832040E4		J4 lock overload	3	Excessive motor current was detected while robot motion stopped.	Revise the robot motion.
832040E5		J5 lock overload	3	Excessive motor current was detected while robot motion stopped.	Revise the robot motion.
832040E6		J6 lock overload	3	Excessive motor current was detected while robot motion stopped.	Revise the robot motion.
832040E7		J7 lock overload	3	Excessive motor current was detected while robot motion stopped.	Revise the robot motion.
832040E8		J8 lock overload	3	Excessive motor current was detected while robot motion stopped.	Revise the robot motion.
842040F1		J1 brake released	4	This operation is not allowed while brake is released.	Lock the brake and try again.
842040F2		J2 brake released	4	This operation is not allowed while brake is released.	Lock the brake and try again.
842040F3		J3 brake released	4	This operation is not allowed while brake is released.	Lock the brake and try again.
842040F4		J4 brake released	4	This operation is not allowed while brake is released.	Lock the brake and try again.
842040F5		J5 brake released	4	This operation is not allowed while brake is released.	Lock the brake and try again.
842040F6		J6 brake released	4	This operation is not allowed while brake is released.	Lock the brake and try again.
842040F7		J7 brake released	4	This operation is not allowed while brake is released.	Lock the brake and try again.
842040F8		J8 brake released	4	This operation is not allowed while brake is released.	Lock the brake and try again.

Code	RC7 Code	Message	Level	Description	Remedy
83204111		J1 encoder reference position error	3	Encoder reference position error might occur if the controller power is turned OFF while robot arm is moving.	Move the joint that the encoder reference position error occurs to the reference position, and then visually check whether the robot swerves. If the robot position is correct, clear the encoder reference position error. If the robot has swerved from the reference position, perform CALSET on the target joint.
83204112		J2 encoder reference position error	3	Encoder reference position error might occur if the controller power is turned OFF while robot arm is moving.	Move the joint that the encoder reference position error occurs to the reference position, and then visually check whether the robot swerves. If the robot position is correct, clear the encoder reference position error. If the robot has swerved from the reference position, perform CALSET on the target joint.
83204113		J3 encoder reference position error	3	Encoder reference position error might occur if the controller power is turned OFF while robot arm is moving.	Move the joint that the encoder reference position error occurs to the reference position, and then visually check whether the robot swerves. If the robot position is correct, clear the encoder reference position error. If the robot has swerved from the reference position, perform CALSET on the target joint.
83204114		J4 encoder reference position error	3	Encoder reference position error might occur if the controller power is turned OFF while robot arm is moving.	Move the joint that the encoder reference position error occurs to the reference position, and then visually check whether the robot swerves. If the robot position is correct, clear the encoder reference position error. If the robot has swerved from the reference position, perform CALSET on the target joint.
83204115		J5 encoder reference position error	3	Encoder reference position error might occur if the controller power is turned OFF while robot arm is moving.	Move the joint that the encoder reference position error occurs to the reference position, and then visually check whether the robot swerves. If the robot position is correct, clear the encoder reference position error. If the robot has swerved from the reference position, perform CALSET on the target joint.

Code	RC7 Code	Message	Level	Description	Remedy
83204116		J6 encoder reference position error	3	Encoder reference position error might occur if the controller power is turned OFF while robot arm is moving.	Move the joint that the encoder reference position error occurs to the reference position, and then visually check whether the robot swerves. If the robot position is correct, clear the encoder reference position error. If the robot has swerved from the reference position, perform CALSET on the target joint.
83204117		J7 encoder reference position error	3	Encoder reference position error might occur if the controller power is turned OFF while robot arm is moving.	Move the joint that the encoder reference position error occurs to the reference position, and then visually check whether the robot swerves. If the robot position is correct, clear the encoder reference position error. If the robot has swerved from the reference position, perform CALSET on the target joint.
83204118		J8 encoder reference position error	3	Encoder reference position error might occur if the controller power is turned OFF while robot arm is moving.	Move the joint that the encoder reference position error occurs to the reference position, and then visually check whether the robot swerves. If the robot position is correct, clear the encoder reference position error. If the robot has swerved from the reference position, perform CALSET on the target joint.
81204121		J1 Specified position exceeds the software limit	1	The specified position is over the software limit. This error might occur when T2J(),P2J(),J2T() or J2P() is executed.	Check the specified position.
81204122		J2 Specified position exceeds the software limit	1	The specified position is over the software limit. This error might occur when T2J(),P2J(),J2T() or J2P() is executed.	Check the specified position.
81204123		J3 Specified position exceeds the software limit	1	The specified position is over the software limit. This error might occur when T2J(),P2J(),J2T() or J2P() is executed.	Check the specified position.
81204124		J4 Specified position exceeds the software limit	1	The specified position is over the software limit. This error might occur when T2J(),P2J(),J2T() or J2P() is executed.	Check the specified position.
81204125		J5 Specified position exceeds the software limit	1	The specified position is over the software limit. This error might occur when T2J(),P2J(),J2T() or J2P() is executed.	Check the specified position.

Code	RC7 Code	Message	Level	Description	Remedy
81204126		J6 Specified position exceeds the software limit	1	The specified position is over the software limit. This error might occur when T2J(),P2J(),J2T() or J2P() is executed.	Check the specified position.
81204127		J7 Specified position exceeds the software limit	1	The specified position is over the software limit. This error might occur when T2J(),P2J(),J2T() or J2P() is executed.	Check the specified position.
81204128		J8 Specified position exceeds the software limit	1	The specified position is over the software limit. This error might occur when T2J(),P2J(),J2T() or J2P() is executed.	Check the specified position.
83204231		J1 Destination position exceeds the software limit	3	The robot was going to exceed the software limit during operation. All joint motion were suspended and motor power was turned OFF.	The robot cannot move to this direction anymore. Operate the robot to move to the opposite direction.
83204232		J2 Destination position exceeds the software limit	3	The robot was going to exceed the software limit during operation. All joint motion were suspended and motor power was turned OFF.	The robot cannot move to this direction anymore. Operate the robot to move to the opposite direction.
83204233		J3 Destination position exceeds the software limit	3	The robot was going to exceed the software limit during operation. All joint motion were suspended and motor power was turned OFF.	The robot cannot move to this direction anymore. Operate the robot to move to the opposite direction.
83204234		J4 Destination position exceeds the software limit	3	The robot was going to exceed the software limit during operation. All joint motion were suspended and motor power was turned OFF.	The robot cannot move to this direction anymore. Operate the robot to move to the opposite direction.
83204235		J5 Destination position exceeds the software limit	3	The robot was going to exceed the software limit during operation. All joint motion were suspended and motor power was turned OFF.	The robot cannot move to this direction anymore. Operate the robot to move to the opposite direction.
83204236		J6 Destination position exceeds the software limit	3	The robot was going to exceed the software limit during operation. All joint motion were suspended and motor power was turned OFF.	The robot cannot move to this direction anymore. Operate the robot to move to the opposite direction.
83204237		J7 Destination position exceeds the software limit	3	The robot was going to exceed the software limit during operation. All joint motion were suspended and motor power was turned OFF.	The robot cannot move to this direction anymore. Operate the robot to move to the opposite direction.
83204238		J8 Destination position exceeds the software limit	3	The robot was going to exceed the software limit during operation. All joint motion were suspended and motor power was turned OFF.	The robot cannot move to this direction anymore. Operate the robot to move to the opposite direction.
82204241		J1 Destination position exceeds the software limit	2	The robot was going to exceed the software limit in manual operation. All joint motion were suspended.	The robot cannot move to this direction anymore. Operate the robot to move to the opposite direction.

Code	RC7 Code	Message	Level	Description	Remedy
82204242		J2 Destination position exceeds the software limit	2	The robot was going to exceed the software limit in manual operation. All joint motion were suspended.	The robot cannot move to this direction anymore. Operate the robot to move to the opposite direction.
82204243		J3 Destination position exceeds the software limit	2	The robot was going to exceed the software limit in manual operation. All joint motion were suspended.	The robot cannot move to this direction anymore. Operate the robot to move to the opposite direction.
82204244		J4 Destination position exceeds the software limit	2	The robot was going to exceed the software limit in manual operation. All joint motion were suspended.	The robot cannot move to this direction anymore. Operate the robot to move to the opposite direction.
82204245		J5 Destination position exceeds the software limit	2	The robot was going to exceed the software limit in manual operation. All joint motion were suspended.	The robot cannot move to this direction anymore. Operate the robot to move to the opposite direction.
82204246		J6 Destination position exceeds the software limit	2	The robot was going to exceed the software limit in manual operation. All joint motion were suspended.	The robot cannot move to this direction anymore. Operate the robot to move to the opposite direction.
82204247		J7 Destination position exceeds the software limit	2	The robot was going to exceed the software limit in manual operation. All joint motion were suspended.	The robot cannot move to this direction anymore. Operate the robot to move to the opposite direction.
82204248		J8 Destination position exceeds the software limit	2	The robot was going to exceed the software limit in manual operation. All joint motion were suspended.	The robot cannot move to this direction anymore. Operate the robot to move to the opposite direction.
84204251		J1 command speed limit over	4	Command value that exceeds the speed limit in the direct teaching mode was detected.	Operate within the speed limit during the direct teaching mode.
84204252		J2 command speed limit over	4	Command value that exceeds the speed limit in the direct teaching mode was detected.	Operate within the speed limit during the direct teaching mode.
84204253		J3 command speed limit over	4	Command value that exceeds the speed limit in the direct teaching mode was detected.	Operate within the speed limit during the direct teaching mode.
84204254		J4 command speed limit over	4	Command value that exceeds the speed limit in the direct teaching mode was detected.	Operate within the speed limit during the direct teaching mode.
84204255		J5 command speed limit over	4	Command value that exceeds the speed limit in the direct teaching mode was detected.	Operate within the speed limit during the direct teaching mode.
84204256		J6 command speed limit over	4	Command value that exceeds the speed limit in the direct teaching mode was detected.	Operate within the speed limit during the direct teaching mode.
84204257		J7 command speed limit over	4	Command value that exceeds the speed limit in the direct teaching mode was detected.	Operate within the speed limit during the direct teaching mode.
84204258		J8 command speed limit over	4	Command value that exceeds the speed limit in the direct teaching mode was detected.	Operate within the speed limit during the direct teaching mode.
82204261		J1 Collision detected (Manual mode)	2	Robot collision was detected in Manual mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
82204262		J2 Collision detected (Manual mode)	2	Robot collision was detected in Manual mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
82204263		J3 Collision detected (Manual mode)	2	Robot collision was detected in Manual mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.

Code	RC7 Code	Message	Level	Description	Remedy
82204264		J4 Collision detected (Manual mode)	2	Robot collision was detected in Manual mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
82204265		J5 Collision detected (Manual mode)	2	Robot collision was detected in Manual mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
82204266		J6 Collision detected (Manual mode)	2	Robot collision was detected in Manual mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
82204267		J7 Collision detected (Manual mode)	2	Robot collision was detected in Manual mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
82204268		J8 Collision detected (Manual mode)	2	Robot collision was detected in Manual mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204271		J1 Collision detected (table1)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204272		J2 Collision detected (table1)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204273		J3 Collision detected (table1)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204274		J4 Collision detected (table1)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204275		J5 Collision detected (table1)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204276		J6 Collision detected (table1)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204277		J7 Collision detected (table1)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204278		J8 Collision detected (table1)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204281		J1 Collision detected (table2)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204282		J2 Collision detected (table2)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204283		J3 Collision detected (table2)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204284		J4 Collision detected (table2)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204285		J5 Collision detected (table2)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.

Code	RC7 Code	Message	Level	Description	Remedy
83204286		J6 Collision detected (table2)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204287		J7 Collision detected (table2)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204288		J8 Collision detected (table2)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204291		J1 Collision detected (table3)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204292		J2 Collision detected (table3)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204293		J3 Collision detected (table3)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204294		J4 Collision detected (table3)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204295		J5 Collision detected (table3)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204296		J6 Collision detected (table3)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204297		J7 Collision detected (table3)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204298		J8 Collision detected (table3)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042A1		J1 Collision detected (table4)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042A2		J2 Collision detected (table4)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042A3		J3 Collision detected (table4)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042A4		J4 Collision detected (table4)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042A5		J5 Collision detected (table4)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042A6		J6 Collision detected (table4)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042A7		J7 Collision detected (table4)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.

Code	RC7 Code	Message	Level	Description	Remedy
832042A8		J8 Collision detected (table4)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042B1		J1 Collision detected (table5)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042B2		J2 Collision detected (table5)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042B3		J3 Collision detected (table5)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042B4		J4 Collision detected (table5)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042B5		J5 Collision detected (table5)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042B6		J6 Collision detected (table5)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042B7		J7 Collision detected (table5)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042B8		J8 Collision detected (table5)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042C1		J1 Collision detected (table6)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042C2		J2 Collision detected (table6)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042C3		J3 Collision detected (table6)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042C4		J4 Collision detected (table6)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042C5		J5 Collision detected (table6)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042C6		J6 Collision detected (table6)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042C7		J7 Collision detected (table6)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042C8		J8 Collision detected (table6)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042D1		J1 Collision detected (table7)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.

Code	RC7 Code	Message	Level	Description	Remedy
832042D2		J2 Collision detected (table7)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042D3		J3 Collision detected (table7)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042D4		J4 Collision detected (table7)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042D5		J5 Collision detected (table7)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042D6		J6 Collision detected (table7)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042D7		J7 Collision detected (table7)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042D8		J8 Collision detected (table7)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042E1		J1 Collision detected (table8)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042E2		J2 Collision detected (table8)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042E3		J3 Collision detected (table8)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042E4		J4 Collision detected (table8)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042E5		J5 Collision detected (table8)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042E6		J6 Collision detected (table8)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042E7		J7 Collision detected (table8)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042E8		J8 Collision detected (table8)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042F1		J1 Collision detected (table9)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042F2		J2 Collision detected (table9)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042F3		J3 Collision detected (table9)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.

Code	RC7 Code	Message	Level	Description	Remedy
832042F4		J4 Collision detected (table9)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042F5		J5 Collision detected (table9)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042F6		J6 Collision detected (table9)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042F7		J7 Collision detected (table9)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
832042F8		J8 Collision detected (table9)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204301		J1 Collision detected (table10)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204302		J2 Collision detected (table10)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204303		J3 Collision detected (table10)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204304		J4 Collision detected (table10)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204305		J5 Collision detected (table10)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204306		J6 Collision detected (table10)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204307		J7 Collision detected (table10)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
83204308		J8 Collision detected (table10)	3	Robot collision was detected in Auto mode.	Check if the robot collides with something. If the detection is too sensitive, raise the detection level.
84204311		J1 command accel limit over	4	Gegerated command value exceeded the acceleration limit. All joints were Emergency-stopped and motor power was turned OFF.	The error might be avoided by reducing internal and external speed and accel.
84204312		J2 command accel limit over	4	Gegerated command value exceeded the acceleration limit. All joints were Emergency-stopped and motor power was turned OFF.	The error might be avoided by reducing internal and external speed and accel.
84204313		J3 command accel limit over	4	Gegerated command value exceeded the acceleration limit. All joints were Emergency-stopped and motor power was turned OFF.	The error might be avoided by reducing internal and external speed and accel.

Code	RC7 Code	Message	Level	Description	Remedy
84204314		J4 command accel limit over	4	Gegerated command value exceeded the acceleration limit. All joints were Emergency-stopped and motor power was turned OFF.	The error might be avoided by reducing internal and external speed and accel.
84204315		J5 command accel limit over	4	Gegerated command value exceeded the acceleration limit. All joints were Emergency-stopped and motor power was turned OFF.	The error might be avoided by reducing internal and external speed and accel.
84204316		J6 command accel limit over	4	Gegerated command value exceeded the acceleration limit. All joints were Emergency-stopped and motor power was turned OFF.	The error might be avoided by reducing internal and external speed and accel.
84204317		J7 command accel limit over	4	Gegerated command value exceeded the acceleration limit. All joints were Emergency-stopped and motor power was turned OFF.	The error might be avoided by reducing internal and external speed and accel.
84204318		J8 command accel limit over	4	Gegerated command value exceeded the acceleration limit. All joints were Emergency-stopped and motor power was turned OFF.	The error might be avoided by reducing internal and external speed and accel.
83204321		J1 joint position deviation error (force control)	3	Each joint exceeded the allowable deviation limit while the force control was ON.	Revise the setting.
83204322		J2 joint position deviation error (force control)	3	Each joint exceeded the allowable deviation limit while the force control was ON.	Revise the setting.
83204323		J3 joint position deviation error (force control)	3	Each joint exceeded the allowable deviation limit while the force control was ON.	Revise the setting.
83204324		J4 joint position deviation error (force control)	3	Each joint exceeded the allowable deviation limit while the force control was ON.	Revise the setting.
83204325		J5 joint position deviation error (force control)	3	Each joint exceeded the allowable deviation limit while the force control was ON.	Revise the setting.
83204326		J6 joint position deviation error (force control)	3	Each joint exceeded the allowable deviation limit while the force control was ON.	Revise the setting.
83204327		J7 joint position deviation error (force control)	3	Each joint exceeded the allowable deviation limit while the force control was ON.	Revise the setting.
83204328		J8 joint position deviation error (force control)	3	Each joint exceeded the allowable deviation limit while the force control was ON.	Revise the setting.

Code	RC7 Code	Message	Level	Description	Remedy
82204331		J1 Collision detected	2	Robot collision was detected.	[StopMode] Please turn off the motor and operate the robot away from contact state by direct mode. If you operate the robot away from the state by manual mode, please disable detection of the detected axis. [AxisFreeMode] If any axis moved over 10° , you cannot continue the program. MoveC, MoveS, Rotate, RotateH or ArchMove command is being executed, There is a possibility that you cannot continue the program.(The error of ″Stopped position and restart position is different″ is output.) When misdetection occur, please confirm payload setting and detectionlevel. If misdetection stil occur, please raise the detection level or disable detection.
82204332		J2 Collision detected	2	Robot collision was detected.	[StopMode] Please turn off the motor and operate the robot away from contact state by direct mode. If you operate the robot away from the state by manual mode, please disable detection of the detected axis. [AxisFreeMode] If any axis moved over 10° , you cannot continue the program. MoveC, MoveS, Rotate, RotateH or ArchMove command is being executed, There is a possibility that you cannot continue the program.(The error of ″Stopped position and restart position is different″ is output.) When misdetection occur, please confirm payload setting and detectionlevel. If misdetection stil occur, please raise the detection level or disable detection.

Code	RC7 Code	Message	Level	Description	Remedy
82204333		J3 Collision detected	2	Robot collision was detected.	[StopMode] Please turn off the motor and operate the robot away from contact state by direct mode. If you operate the robot away from the state by manual mode, please disable detection of the detected axis. [AxisFreeMode] If any axis moved over 10° , you cannot continue the program. MoveC, MoveS, Rotate, RotateH or ArchMove command is being executed, There is a possibility that you cannot continue the program.(The error of ″Stopped position and restart position is different″ is output.) When misdetection occur, please confirm payload setting and detectionlevel. If misdetection stil occur, please raise the detection level or disable detection.
82204334		J4 Collision detected	2	Robot collision was detected.	[StopMode] Please turn off the motor and operate the robot away from contact state by direct mode. If you operate the robot away from the state by manual mode, please disable detection of the detected axis. [AxisFreeMode] If any axis moved over 10° , you cannot continue the program. MoveC, MoveS, Rotate, RotateH or ArchMove command is being executed, There is a possibility that you cannot continue the program.(The error of ″Stopped position and restart position is different″ is output.) When misdetection occur, please confirm payload setting and detectionlevel. If misdetection stil occur, please raise the detection level or disable detection.

Code	RC7 Code	Message	Level	Description	Remedy
82204335		J5 Collision detected	2	Robot collision was detected.	[StopMode] Please turn off the motor and operate the robot away from contact state by direct mode. If you operate the robot away from the state by manual mode, please disable detection of the detected axis. [AxisFreeMode] If any axis moved over 10° , you cannot continue the program. MoveC, MoveS, Rotate, RotateH or ArchMove command is being executed, There is a possibility that you cannot continue the program.(The error of ″Stopped position and restart position is different″ is output.) When misdetection occur, please confirm payload setting and detectionlevel. If misdetection stil occur, please raise the detection level or disable detection.
82204336		J6 Collision detected	2	Robot collision was detected.	[StopMode] Please turn off the motor and operate the robot away from contact state by direct mode. If you operate the robot away from the state by manual mode, please disable detection of the detected axis. [AxisFreeMode] If any axis moved over 10° , you cannot continue the program. MoveC, MoveS, Rotate, RotateH or ArchMove command is being executed, There is a possibility that you cannot continue the program.(The error of ″Stopped position and restart position is different″ is output.) When misdetection occur, please confirm payload setting and detectionlevel. If misdetection stil occur, please raise the detection level or disable detection.

Code	RC7 Code	Message	Level	Description	Remedy
82204337		J7 Collision detected	2	Robot collision was detected.	[StopMode] Please turn off the motor and operate the robot away from contact state by direct mode. If you operate the robot away from the state by manual mode, please disable detection of the detected axis. [AxisFreeMode] If any axis moved over 10° , you cannot continue the program. MoveC, MoveS, Rotate, RotateH or ArchMove command is being executed, There is a possibility that you cannot continue the program.(The error of ″Stopped position and restart position is different″ is output.) When misdetection occur, please confirm payload setting and detectionlevel. If misdetection stil occur, please raise the detection level or disable detection.
82204338		J8 Collision detected	2	Robot collision was detected.	[StopMode] Please turn off the motor and operate the robot away from contact state by direct mode. If you operate the robot away from the state by manual mode, please disable detection of the detected axis. [AxisFreeMode] If any axis moved over 10° , you cannot continue the program. MoveC, MoveS, Rotate, RotateH or ArchMove command is being executed, There is a possibility that you cannot continue the program.(The error of ″Stopped position and restart position is different″ is output.) When misdetection occur, please confirm payload setting and detectionlevel. If misdetection stil occur, please raise the detection level or disable detection.

Code	RC7 Code	Message	Level	Description	Remedy
84204341		J1 You cannot start collision detection	4	Collision detection function could not be enabled because large load was detected when motor ON.	Check whether the load is applied to the robot. Payload setting or Detectionlevel may be incorrect.
84204342		J2 You cannot start collision detection	4	Collision detection function could not be enabled because large load was detected when motor ON.	Check whether the load is applied to the robot. Payload setting or Detectionlevel may be incorrect.
84204343		J3 You cannot start collision detection	4	Collision detection function could not be enabled because large load was detected when motor ON.	Check whether the load is applied to the robot. Payload setting or Detectionlevel may be incorrect.
84204344		J4 You cannot start collision detection	4	Collision detection function could not be enabled because large load was detected when motor ON.	Check whether the load is applied to the robot. Payload setting or Detectionlevel may be incorrect.
84204345		J5 You cannot start collision detection	4	Collision detection function could not be enabled because large load was detected when motor ON.	Check whether the load is applied to the robot. Payload setting or Detectionlevel may be incorrect.
84204346		J6 You cannot start collision detection	4	Collision detection function could not be enabled because large load was detected when motor ON.	Check whether the load is applied to the robot. Payload setting or Detectionlevel may be incorrect.
84204347		J7 You cannot start collision detection	4	Collision detection function could not be enabled because large load was detected when motor ON.	Check whether the load is applied to the robot. Payload setting or Detectionlevel may be incorrect.
84204348		J8 You cannot start collision detection	4	Collision detection function could not be enabled because large load was detected when motor ON.	Check whether the load is applied to the robot. Payload setting or Detectionlevel may be incorrect.
80204351		J1 The number of Motor Rotation is over limit of data retention	0	The number of Motor Rotation is over limit of data retention	Execute PosClr or Calset
80204352		J2 The number of Motor Rotation is over limit of data retention	0	The number of Motor Rotation is over limit of data retention	Execute PosClr or Calset
80204353		J3 The number of Motor Rotation is over limit of data retention	0	The number of Motor Rotation is over limit of data retention	Execute PosClr or Calset
80204354		J4 The number of Motor Rotation is over limit of data retention	0	The number of Motor Rotation is over limit of data retention	Execute PosClr or Calset
80204355		J5 The number of Motor Rotation is over limit of data retention	0	The number of Motor Rotation is over limit of data retention	Execute PosClr or Calset
80204356		J6 The number of Motor Rotation is over limit of data retention	0	The number of Motor Rotation is over limit of data retention	Execute PosClr or Calset
80204357		J7 The number of Motor Rotation is over limit of data retention	0	The number of Motor Rotation is over limit of data retention	Execute PosClr or Calset
80204358		J8 The number of Motor Rotation is over limit of data retention	0	The number of Motor Rotation is over limit of data retention	Execute PosClr or Calset

Code	RC7 Code	Message	Level	Description	Remedy
84204361		J1 You cannot excute CALSET.	4	You cannot excute CALSET, because it has not reached mechanical end.	Move each axis to the mechanical end and execute CALSET again. When moving to CALSET position automatically, review the PayLoad setting. If the error still occurs, please contact DENSO WAVE service.
84204362		J2 You cannot excute CALSET.	4	You cannot excute CALSET, because it has not reached mechanical end.	Move each axis to the mechanical end and execute CALSET again. When moving to CALSET position automatically, review the PayLoad setting. If the error still occurs, please contact DENSO WAVE service.
84204363		J3 You cannot excute CALSET.	4	You cannot excute CALSET, because it has not reached mechanical end.	Move each axis to the mechanical end and execute CALSET again. When moving to CALSET position automatically, review the PayLoad setting. If the error still occurs, please contact DENSO WAVE service.
84204364		J4 You cannot excute CALSET.	4	You cannot excute CALSET, because it has not reached mechanical end.	Move each axis to the mechanical end and execute CALSET again. When moving to CALSET position automatically, review the PayLoad setting. If the error still occurs, please contact DENSO WAVE service.
84204365		J5 You cannot excute CALSET.	4	You cannot excute CALSET, because it has not reached mechanical end.	Move each axis to the mechanical end and execute CALSET again. When moving to CALSET position automatically, review the PayLoad setting. If the error still occurs, please contact DENSO WAVE service.
84204366		J6 You cannot excute CALSET.	4	You cannot excute CALSET, because it has not reached mechanical end.	Move each axis to the mechanical end and execute CALSET again. When moving to CALSET position automatically, review the PayLoad setting. If the error still occurs, please contact DENSO WAVE service.
84204367		J7 You cannot excute CALSET.	4	You cannot excute CALSET, because it has not reached mechanical end.	Move each axis to the mechanical end and execute CALSET again. When moving to CALSET position automatically, review the PayLoad setting. If the error still occurs, please contact DENSO WAVE service.

Code	RC7 Code	Message	Level	Description	Remedy
84204368		J8 You cannot excute CALSET.	4	You cannot excute CALSET, because it has not reached mechanical end.	Move each axis to the mechanical end and execute CALSET again. When moving to CALSET position automatically, review the PayLoad setting. If the error still occurs, please contact DENSO WAVE service.
83205001		J1 Encoder connection port failure (Robot port)	3	Incorrect encoder is connected to Encoder hub's robot port.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205002		J2 Encoder connection port failure (Robot port)	3	Incorrect encoder is connected to Encoder hub's robot port.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205003		J3 Encoder connection port failure (Robot port)	3	Incorrect encoder is connected to Encoder hub's robot port.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205004		J4 Encoder connection port failure (Robot port)	3	Incorrect encoder is connected to Encoder hub's robot port.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205005		J5 Encoder connection port failure (Robot port)	3	Incorrect encoder is connected to Encoder hub's robot port.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.

Code	RC7 Code	Message	Level	Description	Remedy
83205006		J6 Encoder connection port failure (Robot port)	3	Incorrect encoder is connected to Encoder hub's robot port.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205007		J7 Encoder connection port failure (Robot port)	3	Incorrect encoder is connected to Encoder hub's robot port.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205008		J8 Encoder connection port failure (Robot port)	3	Incorrect encoder is connected to Encoder hub's robot port.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205011		J1 Encoder connection port failure (Port1)	3	Incorrect encoder is connected to Port 1 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205012		J2 Encoder connection port failure (Port1)	3	Incorrect encoder is connected to Port 1 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205013		J3 Encoder connection port failure (Port1)	3	Incorrect encoder is connected to Port 1 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.

Code	RC7 Code	Message	Level	Description	Remedy
83205014		J4 Encoder connection port failure (Port1)	3	Incorrect encoder is connected to Port 1 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205015		J5 Encoder connection port failure (Port1)	3	Incorrect encoder is connected to Port 1 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205016		J6 Encoder connection port failure (Port1)	3	Incorrect encoder is connected to Port 1 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205017		J7 Encoder connection port failure (Port1)	3	Incorrect encoder is connected to Port 1 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205018		J8 Encoder connection port failure (Port1)	3	Incorrect encoder is connected to Port 1 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205021		J1 Encoder connection port failure (Port2)	3	Incorrect encoder is connected to Port 2 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.

Code	RC7 Code	Message	Level	Description	Remedy
83205022		J2 Encoder connection port failure (Port2)	3	Incorrect encoder is connected to Port 2 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205023		J3 Encoder connection port failure (Port2)	3	Incorrect encoder is connected to Port 2 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205024		J4 Encoder connection port failure (Port2)	3	Incorrect encoder is connected to Port 2 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205025		J5 Encoder connection port failure (Port2)	3	Incorrect encoder is connected to Port 2 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205026		J6 Encoder connection port failure (Port2)	3	Incorrect encoder is connected to Port 2 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205027		J7 Encoder connection port failure (Port2)	3	Incorrect encoder is connected to Port 2 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.

Code	RC7 Code	Message	Level	Description	Remedy
83205028		J8 Encoder connection port failure (Port2)	3	Incorrect encoder is connected to Port 2 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205031		J1 Encoder connection port failure (Port3)	3	Incorrect encoder is connected to Port 3 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205032		J2 Encoder connection port failure (Port3)	3	Incorrect encoder is connected to Port 3 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205033		J3 Encoder connection port failure (Port3)	3	Incorrect encoder is connected to Port 3 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205034		J4 Encoder connection port failure (Port3)	3	Incorrect encoder is connected to Port 3 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205035		J5 Encoder connection port failure (Port3)	3	Incorrect encoder is connected to Port 3 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.

Code	RC7 Code	Message	Level	Description	Remedy
83205036		J6 Encoder connection port failure (Port3)	3	Incorrect encoder is connected to Port 3 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205037		J7 Encoder connection port failure (Port3)	3	Incorrect encoder is connected to Port 3 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205038		J8 Encoder connection port failure (Port3)	3	Incorrect encoder is connected to Port 3 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205041		J1 Encoder connection port failure (Port4)	3	Incorrect encoder is connected to Port 4 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205042		J2 Encoder connection port failure (Port4)	3	Incorrect encoder is connected to Port 4 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205043		J3 Encoder connection port failure (Port4)	3	Incorrect encoder is connected to Port 4 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.

Code	RC7 Code	Message	Level	Description	Remedy
83205044		J4 Encoder connection port failure (Port4)	3	Incorrect encoder is connected to Port 4 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205045		J5 Encoder connection port failure (Port4)	3	Incorrect encoder is connected to Port 4 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205046		J6 Encoder connection port failure (Port4)	3	Incorrect encoder is connected to Port 4 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205047		J7 Encoder connection port failure (Port4)	3	Incorrect encoder is connected to Port 4 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205048		J8 Encoder connection port failure (Port4)	3	Incorrect encoder is connected to Port 4 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205051		J1 Encoder connection port failure (Port5)	3	Incorrect encoder is connected to Port 5 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.

Code	RC7 Code	Message	Level	Description	Remedy
83205052		J2 Encoder connection port failure (Port5)	3	Incorrect encoder is connected to Port 5 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205053		J3 Encoder connection port failure (Port5)	3	Incorrect encoder is connected to Port 5 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205054		J4 Encoder connection port failure (Port5)	3	Incorrect encoder is connected to Port 5 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205055		J5 Encoder connection port failure (Port5)	3	Incorrect encoder is connected to Port 5 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205056		J6 Encoder connection port failure (Port5)	3	Incorrect encoder is connected to Port 5 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205057		J7 Encoder connection port failure (Port5)	3	Incorrect encoder is connected to Port 5 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.

Code	RC7 Code	Message	Level	Description	Remedy
83205058		J8 Encoder connection port failure (Port5)	3	Incorrect encoder is connected to Port 5 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205061		J1 Encoder connection port failure (Port6)	3	Incorrect encoder is connected to Port 6 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205062		J2 Encoder connection port failure (Port6)	3	Incorrect encoder is connected to Port 6 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205063		J3 Encoder connection port failure (Port6)	3	Incorrect encoder is connected to Port 6 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205064		J4 Encoder connection port failure (Port6)	3	Incorrect encoder is connected to Port 6 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205065		J5 Encoder connection port failure (Port6)	3	Incorrect encoder is connected to Port 6 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.

Code	RC7 Code	Message	Level	Description	Remedy
83205066		J6 Encoder connection port failure (Port6)	3	Incorrect encoder is connected to Port 6 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205067		J7 Encoder connection port failure (Port6)	3	Incorrect encoder is connected to Port 6 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205068		J8 Encoder connection port failure (Port6)	3	Incorrect encoder is connected to Port 6 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205071		J1 Encoder connection port failure (Port7)	3	Incorrect encoder is connected to Port 7 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205072		J2 Encoder connection port failure (Port7)	3	Incorrect encoder is connected to Port 7 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205073		J3 Encoder connection port failure (Port7)	3	Incorrect encoder is connected to Port 7 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.

Code	RC7 Code	Message	Level	Description	Remedy
83205074		J4 Encoder connection port failure (Port7)	3	Incorrect encoder is connected to Port 7 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205075		J5 Encoder connection port failure (Port7)	3	Incorrect encoder is connected to Port 7 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205076		J6 Encoder connection port failure (Port7)	3	Incorrect encoder is connected to Port 7 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205077		J7 Encoder connection port failure (Port7)	3	Incorrect encoder is connected to Port 7 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205078		J8 Encoder connection port failure (Port7)	3	Incorrect encoder is connected to Port 7 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205081		J1 Encoder connection port failure (Port8)	3	Incorrect encoder is connected to Port 8 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.

Code	RC7 Code	Message	Level	Description	Remedy
83205082		J2 Encoder connection port failure (Port8)	3	Incorrect encoder is connected to Port 8 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205083		J3 Encoder connection port failure (Port8)	3	Incorrect encoder is connected to Port 8 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205084		J4 Encoder connection port failure (Port8)	3	Incorrect encoder is connected to Port 8 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205085		J5 Encoder connection port failure (Port8)	3	Incorrect encoder is connected to Port 8 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205086		J6 Encoder connection port failure (Port8)	3	Incorrect encoder is connected to Port 8 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205087		J7 Encoder connection port failure (Port8)	3	Incorrect encoder is connected to Port 8 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.

Code	RC7 Code	Message	Level	Description	Remedy
83205088		J8 Encoder connection port failure (Port8)	3	Incorrect encoder is connected to Port 8 of Encoder hub.	If the encoder ID has not been configured, check the encoder hub connection and then configure the encoder ID. Otherwise, turn OFF the robot controller, check the encoder signal lines, and then turn ON the robot controller.
83205091		J1 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.
83205092		J2 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.
83205093		J3 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.
83205094		J4 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.

Code	RC7 Code	Message	Level	Description	Remedy
83205095		J5 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.
83205096		J6 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.
83205097		J7 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.
83205098		J8 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.
832050A1		J1 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.

Code	RC7 Code	Message	Level	Description	Remedy
832050A2		J2 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.
832050A3		J3 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.
832050A4		J4 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.
832050A5		J5 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.
832050A6		J6 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.

Code	RC7 Code	Message	Level	Description	Remedy
832050A7		J7 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.
832050A8		J8 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.
832050B1		J1 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.
832050B2		J2 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.
832050B3		J3 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.

Code	RC7 Code	Message	Level	Description	Remedy
832050B4		J4 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.
832050B5		J5 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.
832050B6		J6 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.
832050B7		J7 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.
832050B8		J8 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.

Code	RC7 Code	Message	Level	Description	Remedy
832050C1		J1 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.
832050C2		J2 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.
832050C3		J3 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.
832050C4		J4 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.
832050C5		J5 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.

Code	RC7 Code	Message	Level	Description	Remedy
832050C6		J6 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.
832050C7		J7 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.
832050C8		J8 Different type encoder is connected	3	Encoder data cannot be received because wrong encoder type is connected.	If the wrong connection is found in the robot joint, the robot does not match with the controller. Connect the proper controller with the robot. If the wrong connection is found in the encoder hub, the port connection or the motor configuration might be incorrect. Check the encoder hub connection and the motor configuration.
85205C01		J1 EtherCAT slave device is misconnected	5	The order of EtherCAT slave devices is wrong. Or unexpected EtherCAT slave device is connected.	Please check EtherCAT connection.
85205C02		J2 EtherCAT slave device is misconnected	5	The order of EtherCAT slave devices is wrong. Or unexpected EtherCAT slave device is connected.	Please check EtherCAT connection.
85205C03		J3 EtherCAT slave device is misconnected	5	The order of EtherCAT slave devices is wrong. Or unexpected EtherCAT slave device is connected.	Please check EtherCAT connection.
85205C04		J4 EtherCAT slave device is misconnected	5	The order of EtherCAT slave devices is wrong. Or unexpected EtherCAT slave device is connected.	Please check EtherCAT connection.
85205C05		J5 EtherCAT slave device is misconnected	5	The order of EtherCAT slave devices is wrong. Or unexpected EtherCAT slave device is connected.	Please check EtherCAT connection.

Code	RC7 Code	Message	Level	Description	Remedy
85205C06		J6 EtherCAT slave device is misconnected	5	The order of EtherCAT slave devices is wrong. Or unexpected EtherCAT slave device is connected.	Please check EtherCAT connection.
85205C07		J7 EtherCAT slave device is misconnected	5	The order of EtherCAT slave devices is wrong. Or unexpected EtherCAT slave device is connected.	Please check EtherCAT connection.
85205C08		J8 EtherCAT slave device is misconnected	5	The order of EtherCAT slave devices is wrong. Or unexpected EtherCAT slave device is connected.	Please check EtherCAT connection.
85205C11		J1 EtherCAT slave device is reversely connected	5	EtherCAT slave device is reversely connected.	Please check EtherCAT connection.
85205C12		J2 EtherCAT slave device is reversely connected	5	EtherCAT slave device is reversely connected.	Please check EtherCAT connection.
85205C13		J3 EtherCAT slave device is reversely connected	5	EtherCAT slave device is reversely connected.	Please check EtherCAT connection.
85205C14		J4 EtherCAT slave device is reversely connected	5	EtherCAT slave device is reversely connected.	Please check EtherCAT connection.
85205C15		J5 EtherCAT slave device is reversely connected	5	EtherCAT slave device is reversely connected.	Please check EtherCAT connection.
85205C16		J6 EtherCAT slave device is reversely connected	5	EtherCAT slave device is reversely connected.	Please check EtherCAT connection.
85205C17		J7 EtherCAT slave device is reversely connected	5	EtherCAT slave device is reversely connected.	Please check EtherCAT connection.
85205C18		J8 EtherCAT slave device is reversely connected	5	EtherCAT slave device is reversely connected.	Please check EtherCAT connection.
85205C21		J1 EtherCAT slave device is not connected	5	EtherCAT slave device is not connected	Please check EtherCAT connection.
85205C22		J2 EtherCAT slave device is not connected	5	EtherCAT slave device is not connected	Please check EtherCAT connection.
85205C23		J3 EtherCAT slave device is not connected	5	EtherCAT slave device is not connected	Please check EtherCAT connection.
85205C24		J4 EtherCAT slave device is not connected	5	EtherCAT slave device is not connected	Please check EtherCAT connection.
85205C25		J5 EtherCAT slave device is not connected	5	EtherCAT slave device is not connected	Please check EtherCAT connection.

Code	RC7 Code	Message	Level	Description	Remedy
85205C26		J6 EtherCAT slave device is not connected	5	EtherCAT slave device is not connected	Please check EtherCAT connection.
85205C27		J7 EtherCAT slave device is not connected	5	EtherCAT slave device is not connected	Please check EtherCAT connection.
85205C28		J8 EtherCAT slave device is not connected	5	EtherCAT slave device is not connected	Please check EtherCAT connection.
83206001		Failed to communicate to Force sensor.(COM1)	3	Failed to communicate with a Force sensor	Please check connection of a force sensor and a controller.
83206002		Failed to communicate to Force sensor.(COM2)	3	Failed to communicate with a Force sensor	Please check connection of a force sensor and a controller.
83206003		Failed to communicate to Force sensor.(COM3)	3	Failed to communicate with a Force sensor	Please check connection of a force sensor and a controller.
83206004		Failed to communicate to Force sensor.(COM4)	3	Failed to communicate with a Force sensor	Please check connection of a force sensor and a controller.
83206005		Failed to communicate to Force sensor.(COM5)	3	Failed to communicate with a Force sensor	Please check connection of a force sensor and a controller.
83206006		Failed to communicate to Force sensor.(COM6)	3	Failed to communicate with a Force sensor	Please check connection of a force sensor and a controller.
83206007		Failed to communicate to Force sensor.(COM7)	3	Failed to communicate with a Force sensor	Please check connection of a force sensor and a controller.
83206008		Failed to communicate to Force sensor.(COM8)	3	Failed to communicate with a Force sensor	Please check connection of a force sensor and a controller.
83206011		Force sensor data error(COMM:1)	3	The force sensor data was not updated during the force control operation.	Please check connection between a force sensor and a controller. Avoid electric noise by placing the noise source away.
83206012		Force sensor data error(COMM:2)	3	The force sensor data was not updated during the force control operation.	Please check connection between a force sensor and a controller. Avoid electric noise by placing the noise source away.
83206013		Force sensor data error(COMM:3)	3	The force sensor data was not updated during the force control operation.	Please check connection between a force sensor and a controller. Avoid electric noise by placing the noise source away.
83206014		Force sensor data error(COMM:4)	3	The force sensor data was not updated during the force control operation.	Please check connection between a force sensor and a controller. Avoid electric noise by placing the noise source away.

Code	RC7 Code	Message	Level	Description	Remedy
83206015		Force sensor data error(COMM:5)	3	The force sensor data was not updated during the force control operation.	Please check connection between a force sensor and a controller. Avoid electric noise by placing the noise source away.
83206016		Force sensor data error(COMM:6)	3	The force sensor data was not updated during the force control operation.	Please check connection between a force sensor and a controller. Avoid electric noise by placing the noise source away.
83206017		Force sensor data error(COMM:7)	3	The force sensor data was not updated during the force control operation.	Please check connection between a force sensor and a controller. Avoid electric noise by placing the noise source away.
83206018		Force sensor data error(COMM:8)	3	The force sensor data was not updated during the force control operation.	Please check connection between a force sensor and a controller. Avoid electric noise by placing the noise source away.
83206021		Failed to connect to Force sensor.(COMM:1)	3	Failed to communicate with a Force sensor	Check the connection with the force sensor
83206022		Failed to connect to Force sensor.(COMM:2)	3	Failed to communicate with a Force sensor	Check the connection with the force sensor
83206023		Failed to connect to Force sensor.(COMM:3)	3	Failed to communicate with a Force sensor	Check the connection with the force sensor
83206024		Failed to connect to Force sensor.(COMM:4)	3	Failed to communicate with a Force sensor	Check the connection with the force sensor
83206025		Failed to connect to Force sensor.(COMM:5)	3	Failed to communicate with a Force sensor	Check the connection with the force sensor
83206026		Failed to connect to Force sensor.(COMM:6)	3	Failed to communicate with a Force sensor	Check the connection with the force sensor
83206027		Failed to connect to Force sensor.(COMM:7)	3	Failed to communicate with a Force sensor	Check the connection with the force sensor
83206028		Failed to connect to Force sensor.(COMM:8)	3	Failed to communicate with a Force sensor	Check the connection with the force sensor
80206031		Failed to communicate to force sensor(COMM:1)	0	Failed to communicate with a Force sensor	Check the connection between the force sensor and the controller.
80206032		Failed to communicate to force sensor(COMM:2)	0	Failed to communicate with a Force sensor	Check the connection between the force sensor and the controller.
80206033		Failed to communicate to force sensor(COMM:3)	0	Failed to communicate with a Force sensor	Check the connection between the force sensor and the controller.
80206034		Failed to communicate to force sensor(COMM:4)	0	Failed to communicate with a Force sensor	Check the connection between the force sensor and the controller.

Code	RC7 Code	Message	Level	Description	Remedy
80206035		Failed to communicate to force sensor(COMM:5)	0	Failed to communicate with a Force sensor	Check the connection between the force sensor and the controller.
80206036		Failed to communicate to force sensor(COMM:6)	0	Failed to communicate with a Force sensor	Check the connection between the force sensor and the controller.
80206037		Failed to communicate to force sensor(COMM:7)	0	Failed to communicate with a Force sensor	Check the connection between the force sensor and the controller.
80206038		Failed to communicate to force sensor(COMM:8)	0	Failed to communicate with a Force sensor	Check the connection between the force sensor and the controller.
80206041		Force sensor packet error(COMM:1)	0	Received invalid force sensor communication packet.	Check the connection between the force sensor and the controller. Avoid electric noise by placing the noise source away.
80206042		Force sensor packet error(COMM:2)	0	Received invalid force sensor communication packet.	Check the connection between the force sensor and the controller. Avoid electric noise by placing the noise source away.
80206043		Force sensor packet error(COMM:3)	0	Received invalid force sensor communication packet.	Check the connection between the force sensor and the controller. Avoid electric noise by placing the noise source away.
80206044		Force sensor packet error(COMM:4)	0	Received invalid force sensor communication packet.	Check the connection between the force sensor and the controller. Avoid electric noise by placing the noise source away.
80206045		Force sensor packet error(COMM:5)	0	Received invalid force sensor communication packet.	Check the connection between the force sensor and the controller. Avoid electric noise by placing the noise source away.
80206046		Force sensor packet error(COMM:6)	0	Received invalid force sensor communication packet.	Check the connection between the force sensor and the controller. Avoid electric noise by placing the noise source away.
80206047		Force sensor packet error(COMM:7)	0	Received invalid force sensor communication packet.	Check the connection between the force sensor and the controller. Avoid electric noise by placing the noise source away.
80206048		Force sensor packet error(COMM:8)	0	Received invalid force sensor communication packet.	Check the connection between the force sensor and the controller. Avoid electric noise by placing the noise source away.

Code	RC7 Code	Message	Level	Description	Remedy
80206051		Force sensor data reception timeout(COMM:1)	0	Failed to receive data from Force sensor within predetermined time.	Connection between the force sensor and the robot controller might have a problem. Or, the network load might be too high to receive the sensor data on time. In that case, arrange the network connection topology to reduce the effect of other network devices on the controller–force sensor communication.
80206052		Force sensor data reception timeout(COMM:2)	0	Failed to receive data from Force sensor within predetermined time.	Connection between the force sensor and the robot controller might have a problem. Or, the network load might be too high to receive the sensor data on time. In that case, arrange the network connection topology to reduce the effect of other network devices on the controller–force sensor communication.
80206053		Force sensor data reception timeout(COMM:3)	0	Failed to receive data from Force sensor within predetermined time.	Connection between the force sensor and the robot controller might have a problem. Or, the network load might be too high to receive the sensor data on time. In that case, arrange the network connection topology to reduce the effect of other network devices on the controller–force sensor communication.
80206054		Force sensor data reception timeout(COMM:4)	0	Failed to receive data from Force sensor within predetermined time.	Connection between the force sensor and the robot controller might have a problem. Or, the network load might be too high to receive the sensor data on time. In that case, arrange the network connection topology to reduce the effect of other network devices on the controller–force sensor communication.
80206055		Force sensor data reception timeout(COMM:5)	0	Failed to receive data from Force sensor within predetermined time.	Connection between the force sensor and the robot controller might have a problem. Or, the network load might be too high to receive the sensor data on time. In that case, arrange the network connection topology to reduce the effect of other network devices on the controller–force sensor communication.
80206056		Force sensor data reception timeout(COMM:6)	0	Failed to receive data from Force sensor within predetermined time.	Connection between the force sensor and the robot controller might have a problem. Or, the network load might be too high to receive the sensor data on time. In that case, arrange the network connection topology to reduce the effect of other network devices on the controller–force sensor communication.

Code	RC7 Code	Message	Level	Description	Remedy
80206057		Force sensor data reception timeout(COMM:7)	0	Failed to receive data from Force sensor within predetermined time.	Connection between the force sensor and the robot controller might have a problem. Or, the network load might be too high to receive the sensor data on time. In that case, arrange the network connection topology to reduce the effect of other network devices on the controller–force sensor communication.
80206058		Force sensor data reception timeout(COMM:8)	0	Failed to receive data from Force sensor within predetermined time.	Connection between the force sensor and the robot controller might have a problem. Or, the network load might be too high to receive the sensor data on time. In that case, arrange the network connection topology to reduce the effect of other network devices on the controller–force sensor communication.
83206061		The robot that you set as "Robot no connected to force sensor(1)" is not found.	3	The assignment of "Robot no connected to force sensor" is invalid.	Check the configuration of "Robot no connected to force sensor".
83206062		The robot that you set as "Robot no connected to force sensor(2)" is not found.	3	The assignment of "Robot no connected to force sensor" is invalid.	Check the configuration of "Robot no connected to force sensor".
83206063		The robot that you set as "Robot no connected to force sensor(3)" is not found.	3	The assignment of "Robot no connected to force sensor" is invalid.	Check the configuration of "Robot no connected to force sensor".
83206064		The robot that you set as "Robot no connected to force sensor(4)" is not found.	3	The assignment of "Robot no connected to force sensor" is invalid.	Check the configuration of "Robot no connected to force sensor".
83206065		The robot that you set as "Robot no connected to force sensor(5)" is not found.	3	The assignment of "Robot no connected to force sensor" is invalid.	Check the configuration of "Robot no connected to force sensor".
83206066		The robot that you set as "Robot no connected to force sensor(6)" is not found.	3	The assignment of "Robot no connected to force sensor" is invalid.	Check the configuration of "Robot no connected to force sensor".
83206067		The robot that you set as "Robot no connected to force sensor(7)" is not found.	3	The assignment of "Robot no connected to force sensor" is invalid.	Check the configuration of "Robot no connected to force sensor".
83206068		The robot that you set as "Robot no connected to force sensor(8)" is not found.	3	The assignment of "Robot no connected to force sensor" is invalid.	Check the configuration of "Robot no connected to force sensor".