

Operating Memory Area

Name	Model	Operating memory area				Bit	Contents
		X axis	Y axis	Z axis	U axis		
Error Flag	NC4□3	n+8	n+11	n+14	n+17	12	1: Error occurred 0: No error
	NC2□3	n+4	n+7				
	NC1□3	n+2					
Error Code	NC4□3	n+10	n+13	n+16	n+19	00 to 15	Error code (A code of 0000 indicates normal operation.)
	NC2□3	n+6	n+9				
	NC1□3	n+4					

11-5 Error Code Lists

11-5-1 Data Check at Startup

The following table shows the errors checked when power is turned ON.

Group	Name	Code	Cause	Remedy
Data destruction	Parameters destruction	0001	<ul style="list-style-type: none"> Power turned ON normally <p>When using the axis parameters saved in the PCU, the parameters saved in flash memory are lost. It is possible that, while saving to flash memory, the PCU's power supply was interrupted, there was noise, or there was an error in flash memory.</p> <ul style="list-style-type: none"> Restoring operation <p>The data in the Memory Card was corrupted, or data from a different model or version was restored.</p>	In this condition, only the data transfer (read and write) and data save operations can be performed. The PCU's axis parameters and data are all returned to their default values. After transferring the parameters again for all axes, save the parameters and either reset the power supply or restart the Unit. If the error persists, it is possible that there is a fault in flash memory, and so it may be necessary to replace the PCU.
	Data destruction	0002	<p>The following data saved in flash memory will be lost: Zones, positioning sequences, speeds, acceleration/deceleration data, positions, and dwell times.</p> <p>It is possible that, while saving to flash memory, the PCU's power supply was interrupted, there was noise, or there was an error in flash memory.</p>	
	F-ROM check data destruction	0003	<p>The flash memory error data saved in flash memory is lost (OMRON maintenance data is lost). It is possible that, while saving to flash memory, the PCU's power supply was interrupted, there was noise, or there was an error in flash memory.</p>	

Group	Name	Code	Cause	Remedy
Common parameters	Operating data area designation error	0010	The operating data area designation (m) is incorrect. <ul style="list-style-type: none"> Area designation: Set to a setting other than 00, 0D, or 0E. Bank designation: Set to a setting not in the range 00 to 0C, when 0E is set for the area designation. 	In this condition, only the data save operations can be performed. All of the axes' parameters and all data will be returned to their default values. After correcting the common parameters (refer to <i>SECTION 4</i>), reset the power supply or restart the PCU.
	Operating data area address designation error	0011	The designation of the beginning word of the operating data area's address (m+1) is outside the settable range.	
	Parameter designation error	0013	The axis parameter designation (m+2) is not set to 00 or 01.	
Common parameters	Axis designation error	0014	The axis parameter designation (m+2) is set to 01, and 1 is set for an axis not controlled by the PCU.	In this condition, only the data save operations can be performed. All of the axes' parameters and all data will be returned to their default values. After correcting the common parameters (refer to <i>SECTION 4</i>), reset the power supply or restart the PCU.
Axis parameters	Response timeout	0020	The axis parameters set in the CPU Unit could not be read to the PCU.	Increase the cycle monitor time set with CX-Programmer and either reset the power supply or restart the PCU. If this error occurs again, despite increasing the cycle monitor time, it is possible that there is a fault in the PCU or somewhere in the PLC. Either replace the whole PLC, or the PCU.
Initial speed	Initial speed error	1000	The axis parameters' initial speed setting exceeds the maximum speed setting for an axis.	In this condition, only the data transfer (read or write) and data save operations can be performed. All of the axis parameters will be returned to their default values. After correcting the appropriate axis parameters, reset the power supply or restart the PCU.
	Initial pulse designation error	1001	The initial pulse designation is not set to 0000 or 0001.	
Maximum speed	Maximum speed error	1010	The axis parameters' maximum speed setting is outside the settable range (1 to 500 kpps).	In this condition, only the data transfer (read or write) and data save operations can be performed. All of the axis parameters will be returned to their default values. After correcting the appropriate axis parameters, reset the power supply or restart the PCU.
Acceleration/ deceleration data	Acceleration time error	1310	The axis parameters' origin search acceleration time setting is outside the settable range (0 to 250 s).	
	Deceleration time error	1320	The axis parameters' origin search deceleration time setting is outside the settable range (0 to 250 s).	
	Acceleration/ Deceleration curve error	1330	The axis parameters' acceleration/ deceleration curve setting is not 0 or 1.	
	Positioning monitor time error	1332	The axis parameters' positioning monitor time setting is outside the settable range (0 to 9999 ms).	
Origin search	Origin compensation error	1600	The axis parameters' origin compensation setting is outside the settable range (-1,073,741,823 to 1,073,741,823 pulses).	In this condition, only the data transfer (read or write) and data save operations can be performed. All of the axis parameters will be returned to their default values. After correcting the appropriate axis parameters, reset the power supply or restart the PCU.
	Origin search high speed error	1601	The axis parameters' origin search high speed setting exceeds the axis parameters' maximum speed setting.	

Group	Name	Code	Cause	Remedy
Origin search	Origin search proximity speed error	1602	The axis parameters' origin search proximity speed setting exceeds the axis parameters' maximum speed setting.	In this condition, only the data transfer (read or write) and data save operations can be performed. All of the axis parameters will be returned to their default values. After correcting the appropriate axis parameters, reset the power supply or restart the PCU.
	Origin search speed inconsistent	1603	The axis parameters' origin search high speed setting is less than or equal to the origin search proximity speed setting.	
	Operation mode selection error	1604	The axis parameters' origin search operating mode selection setting is not 0, 1, 2, or 3.	
	Origin search operation error	1605	The axis parameters' origin search operation setting is not 0, 1, or 2.	
	Origin search direction error	1606	The axis parameters' origin search direction designation is not 0 or 1.	
	Origin detection method error	1607	Even though the axis parameters' origin search operation is not set to single-direction mode, the origin detection method setting is not 0, 1, or 2.	
Backlash compensation	Backlash compensation error	1700	The axis parameters' backlash compensation setting is outside the settable range (0 to 9,999 pulses).	
	Backlash compensation speed error	1710	The axis parameters' backlash compensation speed setting exceeds the maximum speed setting.	
Software limits	CW software limit error	1800	The axis parameters' CW software limit setting is outside the settable range (-1,073,741,823 to 1,073,741,823).	
	CCW software limit error	1801	The axis parameters' CCW software limit setting is outside the settable range (-1,073,741,823 to 1,073,741,823).	
Sensor inputs	Emergency stop input	6000	An emergency stop signal has been input.	After clearing the emergency stop input, execute RELEASE PROHIBIT/ERROR RESET. For a limit input, execute RELEASE PROHIBIT/ERROR RESET and feed in the opposite direction from the limit stop. Check the axis parameters' signal type setting (N.C. or N.O.).
	CW limit stop	6100	A CW limit input signal has been input.	
	CCW limit stop	6101	A CCW limit input signal has been received.	

11-5-2 Command Execution Check

Data Checks for Data-writing Commands

Item	Name	Code	Cause	Clearing method	Operation after error
Initial speed	Initial speed error	1000	The axis parameters' initial speed setting exceeds the maximum speed designation.	Transfer the data again after checking and correcting it.	When this error occurs during data transfer, all data (including the data with the error) specified for transfer will be lost. All operating axes will be decelerated to a stop.
	Initial pulse designation error	1001	The initial pulse designation is not set to 0000 or 0001.		
Maximum speed	Maximum speed error	1010	The axis parameters' maximum speed setting is outside the settable range (1 to 500 kpps).		
Acceleration/ Deceleration data	Acceleration time error	1310	The axis parameters' origin search acceleration time setting is outside the settable range (0 to 250 s).		
	Acceleration time error	1311 to 1319	An acceleration time setting (1 to 9) is outside the settable range (0 to 250 s). (The rightmost digit of the error code indicates the setting with the error.)		
	Deceleration time error	1320	The axis parameters' origin search deceleration time setting is outside the settable range (0 to 250 s).		
	Deceleration time error	1321 to 1329	A deceleration time setting (1 to 9) is outside the settable range (0 to 250 s). (The rightmost digit of the error code indicates the setting with the error.)		
	Acceleration/ Deceleration curve error	1330	The axis parameters' acceleration/ deceleration curve setting is not 0 or 1.		
	Positioning monitor time error	1332	The axis parameters' positioning monitor time is outside the settable range (0 to 9,999 ms).		
Speed data	Speed error	1500 to 1599	A speed setting is outside the settable range (1 pps to 1,000 kpps). (The last two digits of the code indicate the speed data number where the error occurred.)		
Origin search	Origin compensation error	1600	The axis parameters' origin compensation setting is outside the settable range (-1,073,741,823 to 1,073,741,823).		
	Origin search high speed error	1601	The axis parameters' origin search high speed setting exceeds the axis parameters' maximum speed setting.		
	Origin search proximity speed error	1602	The axis parameters' proximity speed setting exceeds the axis parameters' maximum speed setting.		
	Origin search speed inconsistent	1603	The axis parameters' origin search high speed setting is less than or equal to the origin search proximity speed setting.		
	Operation mode selection error	1604	The axis parameters' origin search operating mode selection setting is not 0, 1, 2, or 3.		
	Origin search operation error	1605	The axis parameters' origin search operation setting is not 0, 1, or 2.		
	Origin search direction error	1606	The axis parameters' origin search direction designation is not 0 or 1.		

Item	Name	Code	Cause	Clearing method	Operation after error
Origin search	Origin detection method error	1607	Even though the axis parameters' origin search operation is set for other than single-direction mode, the origin detection method setting is not 0, 1, or 2.	Transfer the data again after checking and correcting it.	When this error occurs during data transfer, all data (including the data with the error) specified for transfer will be lost. All operating axes will be decelerated to a stop.
Backlash compensation	Backlash compensation error	1700	The axis parameters' backlash compensation setting is outside the settable range (0 to 9,999pulses).		
	Backlash compensation speed error	1710	The axis parameters' backlash compensation speed setting exceeds the maximum speed setting.		
Software limits	CW software limit error	1800	The axis parameters' CW software limit setting is outside the settable range (-1,073,741,823 to 1,073,741,823).		
	CCW software limit error	1801	The axis parameters' CCW software limit setting is outside the settable range (-1,073,741,823 to 1,073,741,823).		
Zones	Zone 0 CW error	1900	Zone 0's CW data is outside the settable range (-1,073,741,823 to 1,073,741,823).		
	Zone 0 CCW error	1901	Zone 0's CCW data is outside the settable range (-1,073,741,823 to 1,073,741,823).		
	Zone 1 CW error	1910	Zone 1's CW data is outside the settable range (-1,073,741,823 to 1,073,741,823).		
	Zone 1 CCW error	1911	Zone 1's CCW data is outside the settable range (-1,073,741,823 to 1,073,741,823).		
	Zone 2 CW error	1920	Zone 2's CW data is outside the settable range (-1,073,741,823 to 1,073,741,823).		
	Zone 2 CCW error	1921	Zone 2's CCW data is outside the settable range (-1,073,741,823 to 1,073,741,823).		
Position data	Target position error	2000 to 2099	The position data is outside the settable range (-1,073,741,823 to 1,073,741,823). (The last two digits of the code indicate the position data number where the error occurred.)		

Item	Name	Code	Cause	Clearing method	Operation after error
Positioning sequences	Sequence data error	3000 to 3099	<p>One of the following errors occurred in the positioning sequence:</p> <p>The completion code is not in the range 0 to 6.</p> <p>The initial speed number is not in the range 00 to 99.</p> <p>The acceleration time number is not in the range 0 to 9.</p> <p>The deceleration time number is not in the range 0 to 9.</p> <p>The target speed number is not in the range 00 to 99.</p> <p>The dwell time number is not in the range 00 to 19.</p> <p>One of the following errors occurred in the axis designation:</p> <p>The Y, Z, or U axis was specified for a 1-axis PCU.</p> <p>The Z or U axis was specified for a 2-axis PCU.</p> <p>More than one axis is specified for interrupt feeding or speed control, or all axis designation settings are set to 0.</p> <p>(The last two digits of the code indicate the position data number (00 to 99) where the error occurred.)</p>	Transfer the data again after checking and correcting it.	When this error occurs during data transfer, all data (including the data with the error) specified for transfer will be lost. All operating axes will be decelerated to a stop.
Dwell times	Dwell time error	4001 to 4019	<p>These codes indicate that a dwell time is outside the settable range (0 to 9.99 s).</p> <p>(The last two digits of the code indicate the dwell time number (00 to 19) where the error occurred.)</p>		

Initial Operation Error Checks and Checks During Operation

Group	Name	Code	Cause	Clearing method	Operation after error
Software limits	CW software limit value	5030	If positioning were performed within the software limit range in response to one of the following commands with the specified position data, the CW software limit would be exceeded, so positioning cannot be started. <ul style="list-style-type: none"> • ABSOLUTE MOVEMENT, RELATIVE MOVEMENT, or PRESENT POSITION PRESET • Positioning commands used in memory operation (absolute or relative designation) <p>The axis has been stopped outside the CW limit and a command (e.g., JOG) was received to move further clockwise.</p>	Start operation after correcting all of the position data.	The current START command will not be executed. Or, the axes for which speed control or interrupt feeding is performed and which exceeded the software limit will decelerate to a stop. Operating axes will not be affected.
			The software limit was exceeded for interrupt feeding or speed control during memory operation.	Start operation after correcting all of the position data and clearing the pulse output prohibited state.	
	CCW software limit value	5031	If positioning were performed within the software limit range in response to one of the following commands with the specified position data, the CCW software limit would be exceeded, so positioning cannot be started. <ul style="list-style-type: none"> • ABSOLUTE MOVEMENT, RELATIVE MOVEMENT, or PRESENT POSITION PRESET • Positioning commands used in memory operation (absolute or relative designation) <p>The axis has been stopped outside the CCW limit and a command (e.g., JOG) was received to move further counterclockwise.</p>	Start operation after correcting all of the position data.	
			The software limit was exceeded for interrupt feeding or speed control during memory operation.	Start operation after correcting all of the position data and clearing the pulse output prohibited state.	
Origin	Current position unknown	5040	One of the following commands was attempted with an unknown origin. Memory operation with absolute values, ABSOLUTE MOVEMENT direct operation, TEACH, or ORIGIN RETURN	Execute the command again after executing ORIGIN SEARCH or PRESENT POSITION PRESET and establishing the origin.	

Group	Name	Code	Cause	Clearing method	Operation after error
Limit stop	Stopped at CW limit	5060	A CW-direction movement command was executed while the CW limit input signal was ON.	Move in the CCW direction.	The current START command will not be executed. Or, the axes for which speed control or interrupt feeding is performed and which exceeded the software limit will decelerate to a stop. Operating axes will not be affected.
	Stopped at CCW limit	5061	A CCW-direction movement command was executed while the CCW limit input signal was ON.	Move in the CW direction.	
Software limits (JOG)	Manual CW software limit	5070	The CW software limit was exceeded during JOG operation.	After executing RELEASE PROHIBIT/ERROR RESET, move in the CCW direction.	The axis that exceeded the software limit will be decelerated to a stop. Other operating axes will not be affected.
	Manual CCW software limit	5071	The CCW software limit was exceeded during JOG operation.	After executing RELEASE PROHIBIT/ERROR RESET, move in the CW direction.	
Sensor inputs	Emergency stop input	6000	The axis was stopped by an emergency stop signal input.	Start operation again after clearing the emergency stop input and executing RELEASE PROHIBIT/ERROR RESET.	An emergency stop will be performed on the affected axis. Other operating axes will not be affected.
	CW limit stop	6100	The axis was stopped by a CW limit input signal.	Move in the CCW direction after executing RELEASE PROHIBIT/ERROR RESET.	
	CCW limit stop	6101	The axis was stopped by a CCW limit input signal.	Move in the CW direction after executing RELEASE PROHIBIT/ERROR RESET.	
Origin search	No origin proximity input signal	6200	The Unit is set for a proximity input signal, but no origin proximity input signal was received during the origin search.	Perform the origin search again after checking the origin proximity input signal wiring and the origin proximity input signal type (N.C. or N.O.) in the axis parameters' I/O settings. If the signal type is changed, reset the power supply or restart the PCU before resuming operation.	Other operating axes will not be affected.

Group	Name	Code	Cause	Clearing method	Operation after error
Origin search	No origin input signal	6201	There was no origin input signal received during the origin search.	Perform the origin search again after checking the origin input signal wiring and the origin input signal type (N.C. or N.O.) in the axis parameters' I/O settings. If the signal type is changed, reset the power supply or restart the PCU before resuming operation.	Other operating axes will not be affected.
	Origin input signal error	6202	There was an origin input signal received while decelerating after the origin proximity input signal was received during an origin search in mode 0.	Perform the following adjustments so that the origin signal will turn ON after deceleration is completed. <ul style="list-style-type: none"> • Increase the distance between the sensors used for the origin input signal and the sensor used for the origin proximity input signal. • Decrease the origin search high speed and origin search proximity speed settings. 	The axis where the origin input signal was input will be decelerated to a stop. Other operating axes will not be affected.
	Limit inputs in both directions	6203	Origin search cannot be executed because there are limit signals being input in both directions.	Perform the origin search again after checking the wiring and signal type in the axis parameters' I/O settings (N.C. or N.O.) for both directions. If the signal type is changed, reset the power supply or restart the PCU before resuming operation.	The origin search will not be executed, but other operating axes will not be affected.
	Simultaneous origin proximity and limit signals	6204	The origin proximity input and limit signal in the origin search direction were input simultaneously during the origin search.	Perform the origin search again after checking the wiring and signal types in the axis parameters' I/O settings (N.C. or N.O.) for the origin proximity and limit signals. If the signal type is changed, reset the power supply or restart the PCU before resuming operation.	An emergency stop will be performed on the axis where the signals were input. Other operating axes will not be affected.

Group	Name	Code	Cause	Clearing method	Operation after error
Origin search	Limit input already being input	6205	<p>There was already a limit signal in the origin search direction during an origin search in a single direction.</p> <p>The origin input signal and limit signal opposite the origin search direction were ON simultaneously or the limit input in the search direction went ON while the origin input signal was reversed during an origin search without proximity input signal.</p>	<p>Perform the origin search again after checking the wiring and signal type in the axis parameters' I/O settings (N.C. or N.O.) for the limit input. If the signal type is changed, reset the power supply or restart the PCU before resuming operation.</p>	<p>The current START command will not be executed.</p> <p>Pulse output for the axes for which the limit input signal was input will be stopped immediately.</p> <p>Other operating axes will not be affected.</p>
	Origin proximity/origin reverse error	6206	<p>The limit signal in the origin search direction was input while the origin proximity input signal was reversed during a proximity search with limit input reversal.</p> <p>The limit input signal in the origin search direction was received while the origin input signal was reversed during a proximity search with limit input reversal (not using the origin proximity input signal).</p>	<p>Perform the origin search again after checking the signal types in the axis parameters' I/O settings (N.C. or N.O.) and positions for the limit input signal, origin proximity input signal, and origin input signal inputs. If the signal type is changed, reset the power supply or restart the PCU before resuming operation.</p>	<p>An emergency stop will be performed on the axis where the signals were input. Other operating axes will not be affected.</p>

Group	Name	Code	Cause	Clearing method	Operation after error
Absolute movement command	Absolute movement position error	7000	The position designation of the ABSOLUTE MOVEMENT command is outside the settable range (-1,073,741,823 to 1,073,741,823 pulses).	Execute the command again after correcting the position or speed designation to a value in the settable range.	The current START command will not be executed, but other operating axes will not be affected.
	Absolute movement speed error	7001	The speed designation for the ABSOLUTE MOVEMENT command is 0 or exceeds the axis parameters' maximum speed.		
	Absolute movement acceleration time error	7002	The acceleration time designation of the ABSOLUTE MOVEMENT command is outside the settable range (0 to 250 ms).		
	Absolute movement deceleration time error	7003	The deceleration time designation of the ABSOLUTE MOVEMENT command is outside the settable range (0 to 250 ms).		
Relative movement command	Relative movement position error	7100	The position designation of the RELATIVE MOVEMENT command is outside the settable range (-1,073,741,823 to 1,073,741,823 pulses).		
	Relative movement speed error	7101	The speed designation of the RELATIVE MOVEMENT command is 0 or exceeds the axis parameters' maximum speed.		
	Relative movement acceleration time error	7102	The acceleration time designation of the RELATIVE MOVEMENT command is outside the settable range (0 to 250 ms).		
	Relative movement deceleration time error	7103	The deceleration time designation of the RELATIVE MOVEMENT command is outside the settable range (0 to 250 ms).		

Group	Name	Code	Cause	Clearing method	Operation after error
Interrupt feeding	Interrupt feeding position error	7200	The position designation of interrupt feeding is outside the settable range (-1,073,741,823 to 1,073,741,823 pulses).	Execute the command again after correcting the position or speed designation to a value in the settable range.	The current START command will not be executed, but other operating axes will not be affected.
	Interrupt feeding speed error	7201	The speed designation of interrupt feeding is 0 or exceeds the axis parameters' maximum speed.		
	Interrupt feeding acceleration time error	7202	The acceleration time designation of interrupt feeding is outside the settable range (0 to 250 ms).		
	Interrupt feeding deceleration time error	7203	The deceleration time designation of interrupt feeding is outside the settable range (0 to 250 ms).		
Origin return	Origin return error	7300	The speed designation of origin return is 0 or exceeds the axis parameters' maximum speed.		
	Origin return acceleration time error	7301	The acceleration time designation of origin return is outside the settable range (0 to 250 s).		
	Origin return deceleration time error	7302	The deceleration time designation of origin return is outside the settable range (0 to 250 s).		
Present position	Present position error	7400	The position designated with present position preset is outside the settable range (-1,073,741,823 to 1,073,741,823).		
JOG	JOG speed error	7500	The JOG speed is 0 or exceeds the axis parameters' maximum speed.		
	JOG acceleration time error	7501	The JOG acceleration time is outside the settable range (0 to 250 s).		
	JOG deceleration time error	7502	The JOG deceleration time is outside the settable range (0 to 250 s).		

Group	Name	Code	Cause	Clearing method	Operation after error
Multiple axis start	Multiple axis start	8000	Two or more of the following commands were executed simultaneously for the same axis: START, INDEPENDENT START, ORIGIN SEARCH, ORIGIN RETURN, PRESENT POSITION PRESET, JOG, TEACH, RELEASE PROHIBIT/ERROR RESET, ABSOLUTE MOVEMENT, RELATIVE MOVEMENT, or INTERRUPT FEEDING	Correct the ladder program so that just one command is executed for each axis at one time and execute the command again.	The command will not be executed. If the last command made before the error was START, INDEPENDENT START, ORIGIN SEARCH, ORIGIN RETURN, JOG, ABSOLUTE MOVEMENT, RELATIVE MOVEMENT, or INTERRUPT FEEDING, the axis with the error will be decelerated to a stop. When interpolation operation is being used, all interpolated axes will be decelerated to a stop. If the error is generated during data transfer (read or write) or data saving, all axes will be decelerated to a stop. Any operating axes not specified above will not be affected.
			One of the following commands was executed for a busy axis: ORIGIN SEARCH, ORIGIN RETURN, PRESENT POSITION PRESET, JOG, TEACH, RELEASE PROHIBIT/ERROR RESET, ABSOLUTE MOVEMENT, RELATIVE MOVEMENT, or INTERRUPT FEEDING	Correct the ladder program so that a command is not executed for a busy axis and execute the command again.	
			A data save operation was executed while one of the following commands was in progress: START, INDEPENDENT START, ORIGIN SEARCH, ORIGIN RETURN, PRESENT POSITION PRESET, JOG, TEACH, RELEASE PROHIBIT/ERROR RESET, ABSOLUTE MOVEMENT, RELATIVE MOVEMENT, or INTERRUPT FEEDING	Correct the ladder program so that the data save operation is executed while none of the axes are busy. Execute the data save operation again.	
			Two or more of the following commands were executed: DATA WRITE, DATA READ, or DATA SAVE	Correct the ladder program so that more than one data transfer (read or write) or data save operation is not executed at the same time. Execute the data transfer or data save operation again.	
			A START or INDEPENDENT START command was executed for a different axis, but a busy axis was specified in the axis designation.	Correct the ladder program so that busy axes are not specified for memory operation and execute the command again.	

Group	Name	Code	Cause	Clearing method	Operation after error
Multiple axis start	Multiple axis start	8000	One of the following commands was executed while the Data Transferring Flag was ON: DATA WRITE, DATA READ, or DATA SAVE	Correct the ladder program so that data transfer (read or write) or data save operation is not executed while the Data Transferring Flag is ON. Execute the data transfer or data save operation again.	<p>The command will not be executed.</p> <p>If the last command made before the error was START, INDEPENDENT START, ORIGIN SEARCH, ORIGIN RETURN, JOG, ABSOLUTE MOVEMENT, RELATIVE MOVEMENT, or INTERRUPT FEEDING, the axis with the error will be decelerated to a stop.</p> <p>When interpolation operation is being used, all interpolated axes will be decelerated to a stop.</p> <p>If the error is generated during data transfer (read or write) or data saving, all axes will be decelerated to a stop.</p> <p>Any operating axes not specified above will not be affected.</p>

Group	Name	Code	Cause	Clearing method	Operation after error
Memory operation	Sequence number error	8101	There was a memory operation command and the Sequence Number Enable Bit was ON, but the specified sequence number was outside the settable range (00 to 99).	Execute the command again after checking the sequence number.	The current START command will not be executed, but other operating axes will not be affected.
			The Sequence Number Enable Bit was OFF, or the FORCED INTERRUPT Bit was ON, when memory operation was executed after the power was turned ON or the PCU was restarted, or after an origin search, origin return, or present position preset.	Execute the command again after changing the turning ON the Sequence Number Enable Bit. Change the ON timing for the FORCED INTERRUPT Bit.	
			The axis designations for the specified sequence number's sequence data were all set to 0.	Execute the command again after correcting the sequence data.	
			The FORCED INTERRUPT Bit was turned ON after a bank end completion in memory operation.	Change the ON timing for the FORCED INTERRUPT Bit.	
	Speed error	8104	When positioning with memory operation, the speed designated in the sequence data was set to 0.	Execute the command again after checking the speed data and sequence data to make sure that the target speed is not 0.	The axis will be decelerated to a stop if the error is detected during positioning. Other operating axes will not be affected.
Teaching	Teaching address error	8200	There was a TEACH command, but the teaching position number was not in the range 00 to 99.	Execute the command again after correcting the teaching position number.	The current START command will not be executed, but other operating axes will not be affected.
	Teaching range error	8201	Teaching cannot be performed because the present position is outside the range -1,073,741,823 to 1,073,741,823 pulses.	Change the present position on the axis (e.g., using JOG) and perform teaching again.	

Group	Name	Code	Cause	Clearing method	Operation after error
Data transfer	Write transfer: number of words error	8310	The number of write words was set to 0 or exceeded the number of write data words. The parameters for the origin search high speed and the origin search proximity speed were not sent together.	Execute the command again after changing the incorrect setting.	The current START command will not be executed, but other operating axes will not be affected.
	Write transfer: source word error	8311	The write source word or the write source area was outside the settable range.		
	Write transfer: destination address error	8312	The write destination address was outside the settable range.		
	Read transfer: number of words error	8320	The number of read words was set to 0 or exceeded the number of read data words.		
	Read transfer: source address error	8321	The read source address was outside the settable range.		
	Read transfer: destination word error	8322	The read destination word or the read destination area was outside the settable range.		
Error counter reset/ Origin adjustment output	Error counter reset/ Origin adjustment output error	8400	There was an attempt to output a error counter reset/origin adjustment output when the output couldn't be used.	Execute the command again after checking that the output can be used and changing the ladder program if necessary.	The axis will be decelerated to a stop. Other operating axes will not be affected.
Override	Override error	8500	The override setting was outside the settable range (1 to 999%).		
Positioning	Positioning timer timeout	8600	The Servo Driver's positioning completed signal did not go ON within the axis parameters' specified time.	Execute the command again after making adjustments such as adjusting the positioning monitor time or the servo system's gain, or checking the wiring for the positioning completed signal and correcting if necessary.	The designated axis will be decelerated to a stop. Other operating axes will not be affected.
	Overflow	8601	The movement distance is too long (greater than 2,147,483,646 pulses, or greater than 2,147,483,520 pulses for linear interpolation) and so operation is not possible.		

Group	Name	Code	Cause	Clearing method	Operation after error
Intelligent Read/Write	IORD format error	8700	One of the following errors occurred when the IORD instruction was executed: The PCU's address was outside the settable range.	Execute the instruction again after correcting the data.	The current data transfer will not be executed, but other operating axes will not be affected.
	IOWR format error	8701	One of the following errors occurred when the IOWR instruction was executed: The PCU's address was outside the settable range. The parameters for the origin search high speed and the origin search proximity speed were not sent together.		
Flash memory	Flash memory error	9300	An attempt was made to save data to flash memory, but the data couldn't be saved because of a problem with the flash memory.	Execute the data save operation again. The error will be cleared if the data is written normally. Replace the Unit if the error occurs again. (In some cases the data save operation can take up to 30 s.)	The current instruction will not be executed. All axes will be decelerated to a stop.

11-6 Releasing Pulse Output Prohibition and Resetting After Errors

11-6-1 Outline

Use the following procedure to clear error codes and to re-enable pulse output when the PCU is in the pulse output prohibited state.

In the pulse output prohibited state, pulse output is interrupted and further pulses are not output. The following table shows the main causes for pulse output being prohibited and gives the methods for clearing the prohibited state.