

# **MELSEC QnA Series**

Programmable Controller

User's Manual (Hardware)

# Q2ASCPU, Q2ASCPU-S1 Q2ASHCPU, Q2ASHCPU-S1



#### **REVISIONS**

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## 1. OVERVIEW

This manual explains the performance specifications, names and settings of each part, and the error codes for the Q2ASCPU, Q2ASCPU-S1, Q2ASHCPU and Q2ASHCPU-S1 (hereinafter, Q2ASCPU).

Refer to the Type A1SC24-R2/A1SH/A2SHCPU(S1)/A2ASCPU(S1/S30) User's Manual (Hardware) IB-66468 enclosed with the base unit for details on the Q2ASCPU safety precautions, general specifications, mounting and installation methods, EMC Directives, Low-voltage Directives and the input/output module specifications and connection methods.

When using the Q2ASCPU with the A1S38HB/A1S38HBEU, refer to the Q2AS(H)CPU (S1) User's Manual (Hardware) enclosed with the base unit. (All of the contents of this manual are given in the User's Manual.)

# 2. PERFORMANCE SPECIFICATION

# 2.1 Q2ASCPU Module Performance Specification

Performance specification of Q2ASCPU module is as follows:

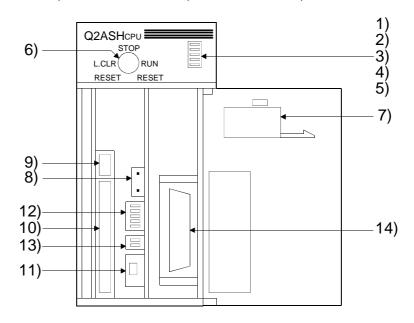
|  |                                |   |                                 | odel            | ale is as follow |  |
|--|--------------------------------|---|---------------------------------|-----------------|------------------|--|
| lte  | em                             | Q2ASCPU   | Q2ASHCPU-S1                     | Remark          |                  |  |
| Control meth                                     | nod                            | Re  | petitive operatio               | n of stored pro | ogram            |  |
| I/O control m                                    | nethod                         |   |                                 | h mode          |                  | I/O enabled<br>by specifying<br>direct I/O<br>(DX, DY) |
|  |                                |   | quence control                  |                 |                  |  |
| Programmin                                       | g language                     | , ,   | (S                              | FĆ)             | uage, MELSAP3    |  |
| Processing                                       | LD                             | 0   | .2                              | C               | ).075            |  |
| speed<br>(sequence<br>instructions)<br>(us/step) | MOV                            | 0   | .6                              | C               | ).225            |  |
|  | Sequence instructions          |   | 3                               | 39              |                  |  |
| Number of  | Basic instructions             |   | 2                               | 30              |                  |  |
| instructions (type)                              | Application instructions       |   | 3                               | 21              |                  |  |
|  | Special dedicated instructions |   | 1                               | 71              |                  |  |
| Constant sca<br>(Function the<br>scan time co    | at makes                       | 5 to 2000   | Set parameter values to specify |                 |                  |  |
| Memory cap                                       | acity                          | Capacity of I   | 1                               |                 |                  |  |
|  | Number of                      | 28 k  | 60 k                            | 28 k            | 60 k             |  |
|  | steps (steps)                  | maximum   | maximum                         | maximum         | maximum          |  |
|  | Number of iles (files)         | 28  | 60                              | 28              | 60               |  |
| I/O device po                                    | oints (points)                 | 8192 (X/Y0 to 1FFF)   |                                 |                 |                  | Number of usable points in program                     |
| I/O points (p                                    | oints)                         | ,   | ,                               | ,               | ,                | Number of points accessible to actual I/O modules      |
| Clock function                                   |                                | Year, month, date, hour, minute, second, day of week (auto-detects leap years)  Accuracy: -1.7 to +4.9s (TYP. +1.7s) / d at 0 depress centigrade  Accuracy: -1.0 to +5.2s (TYP. +2.2s) / d at 25 depress centigrade |                                 |                 |                  |  |
|  |                                | Accuracy : -7   |                                 |                 |                  |  |
| Allowable m power failure                        | e period •                     |   |                                 | upply module    |                  |  |
| 5 VDC Inter                                      |                                | 0.3   | 0.3                             | 0.7             | 0.7              |  |
| consumption<br>Mass kg                           | 1 (A)                          | 0.5   | 0.5                             | 0.5             | 0.5              |  |
|  | ension (mm                     |   |                                 |                 |                  |  |
| (inch))  |                                | 130(H) × 54.5(W) × 110(D) (5.12 × 2.15 × 4.33)  |                                 |                 |                  |  |

## 3. PART NAMES AND SETTINGS

# 3.1 Part names and Settings

This section describes the name and setting of each part of the module.

## Q2ASCPU, Q2ASCPU-S1, Q2ASHCPU, Q2ASHCPU-S1



## Illustration of the module with the front cover open

| No. | Name              | Application   |
|-----|-------------------|---|
| 1)  | RUN LED           | This LED indicates the CPU module operating condition.  Lit :Operating with the RUN/STOP key switch set to RUN or STEP-RUN.  Off :Stopped with the RUN/STOP key switch set to STOP, PAUSE, or STEP-RUN.  Or, the CPU module has detected the error that would cause the operation to stop.  Flash :The RUN/STOP key switch has been set from STOP to RUN after the program was written in stop mode.  The CPU module is not in RUN mode. To engage the CPU module in RUN mode, set the RUN/STOP key switch to RUN, STOP, the RUN. Alternatively, reset the module using the key switch. |
| 2)  | ERROR LED         | Lit :A self-diagnostic error (other than a battery error) that will not stop operation has been detected. (The parameter has been set to Continue operation at error detection.)  Off :Normal  Flash :An error that will stop the operation has been detected.  |
| 3)  | USER LED          | Lit :A error has been detected by the CHK instruction, or annunciator F has been turned ON.  Off :Normal Flash :The latch clear operation has been executed.  |
| 4)  | BAT. ALARM<br>LED | Lit :Battery error has occurred due to a drop in the CPU module main unit/memory card battery voltage.  Off :Normal   |
| 5)  | BOOT LED          | Lit :The boot operation has been completed. Off :The boot operation has not been executed.  |

| No. | Name  | Application   |  |  |  |
|-----|---|---|--|--|--|
| 6)  | RUN/STOP key switch                                   | RUN/STOP: Executes/stops the operation of the sequence program.  L.CLR: Sets the entire data of the latch area specified by the parameter to OFF or 0. Clears the entry of the sampling trace and the status latch.  RESET: Executes the hardware reset operation and the reset at an operation error occurrence, and initializes the operation.  |  |  |  |
| 7)  | Battery (A6BAT)                                       | Backup battery to be used for the internal RAM and the power failure compensation function.   |  |  |  |
| 8)  | Battery connector pin                                 | Used to connect the battery lead wire. (The lead wire is removed from the connector at shipment in order to prevent battery consumption.)   |  |  |  |
| 9)  | Memory card EJECT button                              | Used to eject the memory card from the CPU module.  |  |  |  |
| 10) | Memory card loading connector                         | This connector is used to load the memory card in the CPU module.   |  |  |  |
| 11) | Memory card Load/eject switch (LED equipped)          | This switch setting determines whether or not you can load/eject the memory card during energizing. The factory default setting is OFF.  ON :Loading is prohibited. (LED is lit.)  OFF :Loading is allowed. (LED is turned off.)  |  |  |  |
| 12) | System setting switches 1  ON  5  4  3  2  1          | These switches allow you to set the items for the CPU module operation. The factory default setting of all switches is OFF.  SW5 :Boot setting. This switch allows you to select the memory for operation.  ON :Boot operation  OFF :Boot operation is not performed  SW2 to 4 :Parameter area. These switches allow you to select the memory into which to write the parameters.  Internal RAM   Memory card   RAM   ROM   SW4   OFF   ON   OFF   ON   SW3   OFF   OFF   OFF   OFF   OFF   OFF    SW1 :System protect. Writing to the CPU module and issuing the control instructions are prohibited.  ON :System protect is valid.  OFF :System protect is invalid. |  |  |  |
| 13) | System setting switches 2  ON  2  1  RS-422 connector | OFF :System protect is invalid.  These switches allow you to set the items for CPU module operation. The factory default setting of all switches is OFF.  SW2 :Unused (Fixed to OFF)  SW1 :Peripheral protocol. This switch allows you to select the type of peripheral devices that are connected to the CPU modules peripheral interface.  (Set this switch to ON when you wish to access another stations ACPU from the ACPU peripheral device. The setting becomes effective as soon as you set the switch.)  ON :Peripheral device for the ACPU OFF :Peripheral device for the Q2ASCPU  Used to connect a peripheral device.                                     |  |  |  |

### 3.2 Relationship between switch operation and the LED indication

- (1) Writing a program while the CPU module is stopped:
  - Follow the procedure below to write a program while the CPU module is stopped:
  - (a) RUN/STOP key switch: STOP RUN LED: Off ..... CPU module is in STOP mode. → Write a program.
  - (b) RUN/STOP key switch: RESET RUN LED: Off ..... CPU module is in STOP mode.
  - (c) RUN/STOP key switch: STOP → RUN RUN LED: Lit ...... CPU module is in RUN mode.

#### POINT

- After writing a program (except for online program write), perform reset operation, and then place the CPU module in the RUN status.
- When remote STOP is switched to RUN, the CPU module is not put in the "PROG CHECK" status but is placed in the RUN status.
  - (2) Latch clear operation:
    - Operate the RUN/STOP key switch as follows to execute the latch clear operation:
    - (a) Turn the RUN/STOP key switch of the CPU module from the "STOP" position to the "L. CLR" position several times to flicker the "USER LED" on the CPU module front.
      - Normally, the LED flickers when the switch is turned several times (three or four times).
      - When the "USER LED" flickers, it indicates that latch clear is ready.
    - (b) After the "USER LED" has flickered, turning the RUN/STOP key switch from the "STOP" position to the "L. CLR" position again executes latch clear and lights up the "USER LED". If the "USER LED" comes on for two seconds and then goes off, it indicates that latch clear is completed normally.
    - (c) To cancel latch clear midway, turn the RUN/STOP key switch to the "RUN" position to place the CPU module in the RUN state, or turn it to the "RESET" position to make a reset.

#### **POINT**

- You can make latch clear valid or invalid for each device via the device setting in parameter mode.
- Instead of using the RUN/STOP key switch, you can also execute the latch clear operation remotely from the peripheral GPP function device. (Refer to the Q2AS(H)CPU(S1) User's Manual (Detailed Manual).)

- (3) Removing the memory card while the PLC power is on:
  - Operate the memory card load/eject switch as described below the memory card while the PLC power is still on:
  - (a) Load/eject switch: ON,
    - Load/eject switch internal LED:Lit.......Ejecting the memory card is prohibited.
  - (b) Load/eject switch: OFF,

Load/eject switch internal LED:Off...... Ejecting the memory card is allowed.

...... → Remove the memory card.

#### **POINT**

- The load/eject switch internal LED may not be turned off when you are using the memory card for the CPU module system function (such as sampling trace and status latch) or for the program.
   In this case, quit the corresponding system function or program that is using the memory card. Then, make sure that the load/eject switch internal LED is turned off, and remove the memory card.
- Do not turn on the memory card load/eject switch after you have removed the memory card. Otherwise, on error will occur.
- When there are parameter-set file registers, local devices or failure history, the memory card cannot be the removed. If the "memory card in/out" switch is turned OFF, the in/out switch built-in LED does not go off. For the file registers, the memory card can be removed when they are set to be unused with the QDRSET(P) instruction.
  - (4) Loading the memory card while the PLC power is on:

Operate the memory card load/eject switch as described below to load the memory card while the PLC power is still on:

- (a) Load the memory card.
- (b) Load/eject switch: ON, Load/eject switch internal LED: Lit...... Ejecting the memory card is prohibited.

## POINT

- Be sure to turn on the memory card load/eject switch after you have loaded the memory card. Otherwise, you will not be able to use the card.
- Since mount processing is performed again after the memory card is inserted, note that the scan time of one scan when mount processing is performed increases by a maximum of 10ms.

## 4. ABOUT FAIL-SAFE CIRCUITS

#### 4.1 About Fail-safe Circuits

When the PLC is powered on and off, normal control output may not be done momentarily due to a delay or a start-up time difference between the PLC power supply and the external power supply (DC in particular) for the control target.

For example, if the external power supply for the controlled object is switched on in a DC output module and then the PLC power supply is switched on, the DC output module may provide false output instantaneously at power-on of the PLC. Therefore, it is necessary to make up a circuit that can switch on the PLC power supply first.

Also, an abnormal operation may be performed if an external power supply fault or PLC failure takes place.

To prevent any of these abnormal operations from leading to the abnormal operation of the whole system and in a fail-safe viewpoint, areas which can result in machine breakdown and accidents due to abnormal operations (e.g. emergency stop, protective and interlock circuits) should be constructed outside the PLC.

The next page shows an example of the system design circuits, based on the considerations described above.

# **DANGER**

- Install a safety circuit external to the PLC that keeps the entire system safe even when there are problems with the external power supply or the PLC module. Otherwise, trouble could result from erroneous output or erroneous operation.
  - (1) Outside the PLC, construct mechanical damage preventing interlock circuits such as emergency stop, protective circuits, positioning upper and lower limits switches and interlocking forward/reverse operations.
  - (2) When the PLC detects the following problems, it will stop calculation and turn off all output in the case of (a). In the case of (b), it will stop calculation and hold or turn off all output according to the parameter setting. Note that the AnS series module will turn off the output in either of cases (a) and (b).
    - (a) The power supply module has over current protection equipment and over voltage protection equipment.
    - (b) The CPU module self-diagnostic functions, such as the watchdog timer error, detect problems. In addition, all output will be turned on when there are problems that the CPU module cannot detect, such as in the I/O controller. Build a fail safe circuit exterior to the PLC that will make sure the equipment operates safely at such times.
  - (3) Output could be left on or off when there is trouble in the outputs module relay or transistor. So build an external monitoring circuit that will monitor any single outputs that could cause serious trouble.
- Build a circuit that turns on the external power supply when the PLC main module power is turned on. If the external power supply is turned on first, it could result in erroneous output or erroneous operation.
- When there are comminication problems with the data link, refer to the corresponding data link manual for the operating status of each station. Not doing so could result in erroneous output or erroneous operation. operating status of each station. Not doing so could result in erroneous output or erroneous operation.

# **ODANGER**

• When connecting a peripheral device to a CPU module, or a PC to an intelligent function module to control a PLC in operation (data change), configure an interlock circuit on the sequence program so that the entire system operates safely at any time. Also before exercising other control (program change, operating status change (status control)) on the running PLC, read the manual carefully and fully confirm safety.

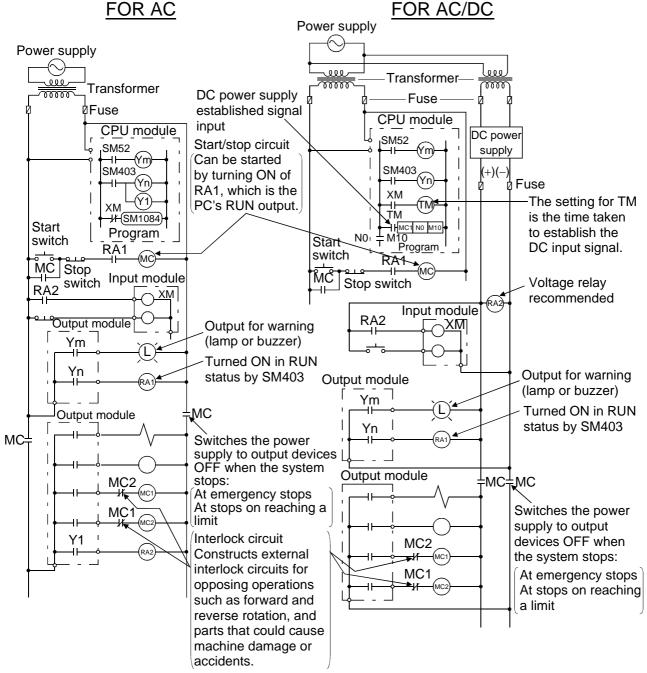
Especially for the above control on the remote PLC from an external device, an immediate action may not be taken for PLC trouble due to a data communication fault.

In addition to configuring up the interlock circuit in the sequence program, corrective and other actions to be taken as a system for the occurrence of a data communication fault should be predetermined between the external device and PLC CPU.

## **ACAUTION**

- Do not bunch the control wires or communication cables with the main circuit or power wires, or install them close to each other. They should be installed 100 mm (3.94 inch) or more from each other.
   Not doing so could result in noise that would cause erroneous operation.
- When controlling items like lamp load, heater or solenoid valve using an output module, large current (approximately ten times greater than that present in normal circumstances) may flow when the output is turned OFF to ON. Take measures such as replacing the module with one having sufficient rated current.

### (1) Examples of system design circuits



Follow the procedure below to start up the power supply:

#### For AC

- 1) Turn the power ON.
- 2) Set the CPU module RUN.
- 3) Set the start switch to ON.
- 4) Turn ON the magnetic contactor (MC) and drive the output device using the program.

#### For AC/DC

- 1) Turn the power ON.
- 2) Select the CPU module RUN.
- 3) When the DC power is established, turn RA2 ON.
- 4) When 100% of the DC power is established, set the timer (TM) to ON. (The TM value should be the time required from when RA2 is turned ON until 100% of the DC voltage is established. Set the value to 0.5 seconds.)
- 5) Set the start switch to ON.
- 6) Turn ON the magnetic contactor (MC), and drive the output equipment using the program. (When you are using a voltage relay for RA2, the timer (TM) on the program is not required.)

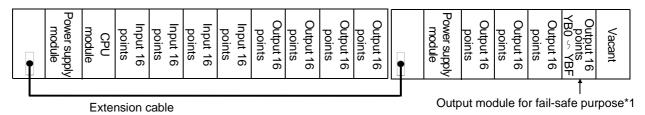
### (2) Fail-safe action during PC malfunction

Although a malfunction of the PCs CPU module and memory can be usually detected by the self-diagnostic function, the CPU module sometimes cannot detect a malfunction if the I/O controller is faulty.

In this case, depending on the degree of the malfunction, all devices might turn on or off, or you might have a situation in which you cannot maintain normal operation or safety of the controlled item.

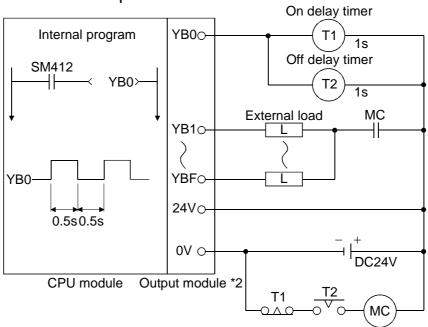
We have done our best to maintain the highest quality as a manufacturer. However, should the PC become defective for some reason, configure an external fail-safe circuit to prevent mechanical damages and possible accidents.

Examples of a system and its fail-safe circuitry are described below: <System example>



\*1: The output moduel for fail-safe purpose should be loaded in the last slot of the system. (YB0 to YBF in the above system.)

### <Fail-safe circuit example>



\*2: YB0 will repeats turning ON and OFF with an interval of 0.5 seconds. Use a contactless output module (the example above uses a transistor.).

| MEMO |  |  |
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## 5. ERROR CODES

The Q2ASCPU uses the self-diagnostic function to display an error code (LED indicator) and store the error information in the special relay SM and the special register SD, if an error occurs when the power is turned on to the PC or when the PC starts or running.

This chapter explains the details of errors that could occur on the Q2ASCPU and how to take a corrective action against them.

## REMARK

The error code of the error that occurred when a general data processing request is made from the peripheral device, special function module or network system is not stored into SD0 of the Q2ASCPU.

The error code is returned to the source of the general data processing request.

## **5.1 Reading Error Codes**

When an error occurs, the error code or error message, etc., can be read out at GPP function. For details regarding the GPP function operation procedure, refer to the GX Developer OPERATING MANUAL or SW□IVD-GPPQ OPERATING MANUAL.

#### 5.2 Error Code List

The following information deals with error codes and the meanings, causes, and corrective measures of error messages.

<Relevant CPU>

: Indicates all the QnACPUs and QCPU.QCPU : Indicates all the Q series CPU modules.

Q00J/Q00/Q01 : Indicates the Basic model QCPU.

Qn(H) : Indicates the High Performance model QCPU.

QnPH : Indicates the Process CPU.
QnPRH : Indicates the Redundant CPU.

QnA : Indicates the QnA series and Q2ASCPU series.

Rem : Indicates the MELSECNET/H remote I/O modules.

Each CPU module model name: Indicates the relevant specific CPU module.

(Example: Q4AR, Q2AS)

| Error                       | Error            | Common                     | Individual                  | LED | Status  | Operating       | Diagnostic |  |
|-----------------------------|------------------|----------------------------|-----------------------------|-----|---------|-----------------|------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages         | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN | ERROR   | Statuses of CPU | Timing     |  |
| 1000                        |                  |                            |                             |     |         |                 |            |  |
| 1001                        |                  |                            |                             |     |         |                 |            |  |
| 1002                        |                  |                            |                             |     |         |                 |            |  |
| 1003                        | _                |                            |                             |     |         |                 |            |  |
| 1004                        |                  |                            |                             |     |         |                 |            |  |
| 1005                        |                  |                            |                             |     |         |                 |            |  |
| 1006                        | MAIN CPU<br>DOWN |                            |                             | Off | Flicker | Stop            | Always     |  |
| 1007                        | -                |                            |                             |     |         |                 |            |  |
| 1008                        |                  |                            |                             |     |         |                 |            |  |
| 1009                        |                  |                            |                             |     |         |                 |            |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Erro<br>Cod<br>(SD0 | le Error Contents and Cause  | Corrective Action                               | Corresponding<br>CPU            |
|---------------------|--|---|---------------------------------|
| 1000                |  |   | 0                               |
| 1001                |  |   | Q00J/Q00/Q01                    |
| 1002                |  |   | Qn(H)                           |
| 1003                |  |   | QnPH                            |
| 1004                |  |   | QnPRH                           |
|                     |  | Take noise reduction measures.                  | Q00J/Q00/Q01                    |
|                     | Run mode suspended or failure of main                                      | Reset the CPU module and RUN it                 | Qn(H)                           |
| 1005                | CPU  | again.If the same error is displayed            | QnPH                            |
|                     | Malfunctioning due to noise or other                                       | again, this suggests a CPU module               | QnPRH                           |
|                     | reason   | hardware fault.(Contact your local              | Rem                             |
|                     | Hardware fault   | Mitsubishi representative.)                     | Q00J/Q00/Q01                    |
| 1006                |  | ,   | Qn(H)                           |
|                     |  |   | QnPH                            |
|                     |  |   | QnPRH                           |
| 1007                |  |   | Qn(H)                           |
| 1008                |  |   | QnPH                            |
|                     |  | D 4# 00H 44 10H                                 | QnPRH                           |
|                     |  | Reset the CPU module and RUN it                 | 0001/000/                       |
|                     | • An error is detected on the power  | again.If the same error is displayed            | Q00J/Q00/<br>Q01 <sup>*12</sup> |
| 1000                | supply module, CPU module, base  | again, the power supply module, CPU             |                                 |
| 1009                | unit or extension cable.   | module, main base unit, extension base          | Qn(H) <sup>*14</sup><br>QnPH    |
|                     | The redundant power supply module     failure is detected in both systems. | unit or extension cable is faulty.              | QnPH<br>QnPRH                   |
|                     | failure is detected in both systems.                                       | (Contact your local Mitsubishi representative.) | QIIFKH                          |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

<sup>\*14:</sup> This applies to the CPU module with serial No. of first 5 digits "04101" or later.

| Error                       | Error              | Error Common Individual    |                             | LED Status |         | Operating | Diagnostic                        |  |
|-----------------------------|--------------------|----------------------------|-----------------------------|------------|---------|-----------|-----------------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages           | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN        | ERROR   | Statuses  |                                   |  |
| 1010                        |                    |                            |                             |            |         |           |                                   |  |
| 1011                        |                    |                            |                             |            |         |           |                                   |  |
| 1012                        | END NOT<br>EXECUTE |                            |                             | Off        | Flicker | Stop      | When an END instruction executed. |  |
| 1020                        | SFCP. END<br>ERROR |                            |                             | Off        | Flicker | Stop      | When SFC program is executed      |  |

<sup>\*1 :</sup> Characters in parentheses () indicate the special register numbers where individual information is being stored.

| Error<br>Code<br>(SD0) <sup>*1</sup> | Error Contents and Cause   | Corrective Action   | Corresponding<br>CPU                    |
|--------------------------------------|--|---|---|
| 1010                                 | Entire program was executed without  |   |   |
| 1011                                 | the execution of an END instruction.   |   |   |
| 1012                                 | <ul> <li>When the END instruction is executed it is read as another instruction code, e.g. due to noise.</li> <li>The END instruction has been changed to another instruction code somehow.</li> </ul>                             | <ul> <li>Take noise reduction measures.</li> <li>Reset the CPU module and RUN it again. If the same error is displayed again, this suggests a CPU module</li> </ul> | 0                                       |
| 1020                                 | The SFC program cannot be normally terminated due to noise or other reason.  The SFC program cannot be normally terminated due to noise or any similar cause.  The SFC program cannot be normally terminated for any other reason. | hardware fault. (Contact your local Mitsubishi representative.)   | Q00J/Q00/<br>Q01 <sup>*12</sup><br>QnPH |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

| Error                       | Error              | Common Individual          |                             | LED Status |                          | Operating       | Diagnostic   |  |
|-----------------------------|--------------------|----------------------------|-----------------------------|------------|--------------------------|-----------------|--|--|
| Code<br>(SD0) <sup>*1</sup> | Messages           | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN        | ERROR                    | Statuses of CPU | Timing   |  |
| 1101                        |                    |                            |                             |            |                          |                 |  |  |
| 1102                        |                    |                            |                             |            |                          |                 |  |  |
| 1103                        |                    |                            |                             |            |                          |                 |  |  |
| 1104                        |                    |                            |                             |            |                          |                 | At nower ON/   |  |
| 1105                        | RAM ERROR          | RAM ERROR Off              | Flicker                     | Stop       | At power ON/<br>At reset |                 |  |  |
| 1106                        | RAM ERROR          |                            |                             | Off        | Flicker                  | Stop            | STOP→RUN/<br>When an END<br>instruction<br>executed. |  |
| 1107                        | RAM ERROR          |                            |                             | Off        | Flicker                  | Stop            | At power ON/   |  |
| 1108                        |                    | <del></del>                | <b></b>                     | Oii        | I IICKEI                 | Оюр             | At reset   |  |
| 1110                        | TRK. CIR.<br>ERROR |                            |                             | Off        | Flicker                  | Stop            | At power ON/<br>At reset                             |  |
| 1111                        | LINION             |                            |                             | Off        | Flicker                  | Stop            |  |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

|  | Error<br>Code<br>(SD0)*1 | Error Contents and Cause  | Corrective Action  | Corresponding<br>CPU                  |  |
|--|--------------------------|---|--|---------------------------------------|--|
|  | 1101                     | The sequence program storing built-in RAM/program memory in the CPU module is faulty. |  |                                       |  |
|  | 1102                     | The work area RAM in the CPU module is faulty.  |  | 0                                     |  |
|  | 1103                     | The device memory in the CPU module is faulty.  | This suggests a CPU module hardware fault. (Contact your nearest Mitsubishi  |                                       |  |
|  | 1104                     | The address RAM in the CPU module is faulty.  | representative.)   |                                       |  |
|  |                          | The system RAM in the CPU module is faulty.   |  | Q4AR                                  |  |
|  |                          | The CPU memory in the CPU module is faulty.   |  | Q00J/Q00/Q01                          |  |
|  | 1105                     | The CPU shared memory in the CPU module is faulty.                                    | <ul> <li>Take noise reduction measures.</li> <li>Reset the CPU module and RUN it again. If the same error is displayed again, this suggests a CPU module hardware fault. (Contact your local Mitsubishi representative.)</li> </ul>  | Qn(H) <sup>*12</sup><br>QnPH<br>QnPRH |  |
|  | 1106                     | The battery is dead. The program memory in the CPU module is faulty.                  | <ul> <li>Check the battery to see if it is dead or not. If dead, replace the battery.</li> <li>Take noise reduction measures.</li> <li>Format the program memory, write all files to the PLC, then reset the CPU module, and RUN it again. If the same error is displayed again, the possible cause is a CPU module hardware fault. (Contact your local Mitsubishi representative, explaining a detailed description of the problem.)</li> </ul> | QnPRH                                 |  |
|  | 1107                     | The work area RAM in the CPU module is faulty.  | This suggests a CPU module hardware  |                                       |  |
|  | 1108                     |   | fault. (Contact your local Mitsubishi  |                                       |  |
|  | 1110                     | A fault was detected by the initial check of the tracking hardware.                   | representative.)   |                                       |  |
|  | 1111                     | A tracking hardware fault was detected.   |  |                                       |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*12:</sup> his applies to the CPU module of function version B or later.

| Error                       | Error              | Common                     | Individual                  | LED S | Status  | Operating       | Diagnostic               |  |
|-----------------------------|--------------------|----------------------------|-----------------------------|-------|---------|-----------------|--------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages           | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN   | ERROR   | Statuses of CPU | Timing                   |  |
| 1112                        | TRK. CIR.          |                            |                             |       |         |                 | During                   |  |
| 1113                        | ERROR              |                            |                             | Off   | Flicker | Stop            | running                  |  |
| 1115                        | TRK. CIR.<br>ERROR |                            |                             | Off   | Flicker | Stop            | At power ON/<br>At reset |  |
| 1116                        | TRK. CIR.<br>ERROR |                            |                             | Off   | Flicker | Stop            | During<br>running        |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Error<br>Code<br>(SD0) <sup>*1</sup> | Error Contents and Cause   | Corrective Action   | Corresponding CPU |
|--------------------------------------|--|---|-------------------|
| 1112                                 | A tracking hardware fault was detected during running.  • The tracking cable was disconnected and reinserted without the standby system being powered off or reset.  | Start after checking that the tracking cable is connected.  If the same error is displayed again, the cause is the hardware fault of the tracking cable or CPU module.  (Please contact your local Mitsubishing and capital or capital and capital or capital and capital or c |                   |
| 1113                                 | <ul> <li>The tracking cable is not secured by the connector fixing screws.</li> <li>The error occurred at a startup since the redundant system startup procedure was not followed.</li> </ul>  | representative, explaining a detailed description of the problem.)  • Confirm the redundant system startup procedure, and execute a startup again. For details, refer to the QnPRHCPU User's Manual (Redundant System).   |                   |
| 1115                                 | A fault was detected by the initial check of the tracking hardware.  | This suggests a CPU module hardware fault. (Contact your nearest Mitsubishi representative.)  | QnPRH             |
| 1116                                 | A tracking hardware fault was detected during running.  • The tracking cable was disconnected and reinserted without the standby system being powered off or reset.  • The tracking cable is not secured by the connector fixing screws.  • The error occurred at a startup since the redundant system startup procedure was not followed. | Start after checking that the tracking cable is connected.  If the same error is displayed again, the cause is the hardware fault of the tracking cable or CPU module.  (Please contact your local Mitsubishi representative, explaining a detailed description of the problem.)      Confirm the redundant system startup procedure, and execute a startup again. For details, refer to the QnPRHCPU User's Manual (Redundant System).   |                   |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Error                       | Error                   | Common   | Individual                  | LED :      | Status         | Operating                       | Diagnostic                        |  |
|-----------------------------|-------------------------|--|-----------------------------|------------|----------------|---------------------------------|-----------------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages                | Information<br>(SD5 to 15)   | Information<br>(SD16 to 26) | RUN        | ERROR          | Statuses of CPU                 | Diagnostic<br>Timing              |  |
| 1200                        |                         |  |                             |            |                |                                 |                                   |  |
| 1201                        | OPE.<br>CIRCUIT         |  |                             | Off        | Flicker        | Stop                            | At power ON/<br>At reset          |  |
| 1202                        | ERR.                    |  |                             |            |                |                                 |                                   |  |
| 1203                        |                         |  |                             |            |                |                                 |                                   |  |
| 1204                        | OPE.<br>CIRCUIT         |  |                             | Off        | Flicker        | Stop                            | When an END instruction           |  |
| 1205                        | ERR.                    |  |                             | executed.  |                |                                 |                                   |  |
| 1206                        | OPE.<br>CIRCUIT<br>ERR. |  |                             | Off        | Flicker        | Stop                            | When instruction executed.        |  |
| 1300                        | FUSE BREAK<br>OFF       | Unit No.<br>[For Remote I/O<br>network]<br>Network No./<br>Station No. |                             | Off/<br>On | Flicker/<br>On | Stop/<br>Continue <sup>*2</sup> | When an END instruction executed. |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*2 :</sup> The CPU module operation status when an error occurs can be set at the parameters. (LED display will change accordingly.)

| Error<br>Code<br>(SD0)*1 | Error Contents and Cause   | Corrective Action   | Corresponding<br>CPU          |  |
|--------------------------|--|---|-------------------------------|--|
| 1200                     | The operation circuit for indexing in the CPU module does not operate normally.            |   |                               |  |
| 1201                     | The hardware (logic) in the CPU module does not operate normally.                          |   | 0                             |  |
| 1202                     | The operation circuit for sequence processing in the CPU module does not operate normally. |   |                               |  |
| 1203                     | The operation circuit for indexing in the CPU module does not operate normally.            | This suggests a CPU module hardware fault. (Contact your local Mitsubishi   |                               |  |
| 1204                     | The hardware (logic) in the CPU module does not operate normally.                          | representative.)  | Q4AR<br>QnPRH                 |  |
| 1205                     | The operation circuit for sequence processing in the CPU module does not operate normally. |   | QIIFKN                        |  |
| 1206                     | The DSP operation circuit in the CPU module does not operate normally.                     |   | Q4AR                          |  |
| 1300                     | There is an output module with a blown fuse.   | Check FUSE. LED of the output modules and replace the module whose LED is lit.  (The module with a blown fuse can also be identified using GX Developer. Check the special registers SD1300 to SD1331 to see if the bit corresponding to the module is "1".)      When a GOT is bus-connected to the main base unit or extension base unit, check the connection status of the extension cable and the earth status of the GOT. | Qn(H)<br>QnPH<br>QnPRH<br>Rem |  |
|                          | There is an output module with a blown fuse.   | Check ERR. LED of the output modules and replace the module whose LED is lit.  (The module with a blown fuse can also be identified using GX Developer. Check the special registers SD130 to SD137 to see if the bit corresponding to the module is "1".)   | Q00J/Q00/Q01                  |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Error<br>Code | Error             | Common<br>Information  | Individual<br>Information |            | Status         | Operating Statuses  | Diagnostic                        |  |
|---------------|-------------------|--|---------------------------|------------|----------------|---------------------|-----------------------------------|--|
| (SD0)*1       | Messages          | (SD5 to 15)  | (SD16 to 26)              | RUN        | ERROR          | of CPU              | Timing                            |  |
| 1300          | FUSE BREAK<br>OFF | Unit No.<br>[For Remote I/O<br>network]<br>Network No./<br>Station No. |                           | Off/<br>On | Flicker/<br>On | Stop/<br>Continue*2 | When an END instruction executed. |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*2 :</sup> The CPU module operation status when an error occurs can be set at the parameters. (LED display will change accordingly.)

| Error<br>Code<br>(SD0) <sup>*1</sup> | Error Contents and Cause   | Corrective Action   | Corresponding<br>CPU |
|--------------------------------------|--|---|----------------------|
|                                      | There is an output module with a blown fuse.   | <ul> <li>Check ERR. LED of the output modules and replace the fuse of the module whose LED is lit.</li> <li>Read the common information of the error using the peripheral device and replace the fuse at the output module corresponding to the numerical value (module No.) reading.  Alternatively, monitor special registers SD1300 to SD1331 with the peripheral device and change the fuse of the output module whose bit has a value of "1".</li> <li>When a GOT is bus-connected to the main base unit or extension base unit, check the connection status of the extension cable and the earth status of the GOT.</li> </ul>  | QnA<br>Q4AR          |
| 1300                                 | There is an output module with a blown fuse.  External power supply for output load is turned off or disconnected. | <ul> <li>Check ERR. LED of the output modules and replace the module whose LED is lit.</li> <li>Read the common information of the error using the peripheral device and replace the fuse at the output module corresponding to the numerical value (module No.) reading.  Alternatively, monitor special registers SD1300 to SD1331 with the peripheral device and change the fuse of the output module whose bit has a value of "1".</li> <li>Check whether the external power supply for output load is ON or OFF.</li> <li>When a GOT is bus-connected to the main base unit or extension base unit, check the connection status of the extension cable and the earth status of the GOT.</li> </ul> | Q2AS                 |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Error                       | Error             | Common                     | Individual                  | LED S      | Status         | Operating                       | Diagnostic   |  |
|-----------------------------|-------------------|----------------------------|-----------------------------|------------|----------------|---------------------------------|--|--|
| Code<br>(SD0) <sup>*1</sup> | Messages          | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN        | ERROR          | Statuses of CPU                 | Timing   |  |
| 1310                        |                   |                            |                             |            |                |                                 |  |  |
| 1311                        | I/O INT.<br>ERROR |                            |                             | Off        | Flicker        | Stop                            | During<br>interrupt  |  |
|                             | SP. UNIT<br>DOWN  | Unit No.                   |                             | Off/<br>On | Flicker/<br>On | Stop/<br>Continue <sup>*6</sup> | At power ON/<br>At reset/When<br>intelligent<br>function<br>module is<br>accessed. |  |
| 1401                        | SP. UNIT<br>DOWN  | Unit No.                   |                             | Off/<br>On | Flicker/<br>On | Stop/<br>Continue <sup>*6</sup> | At power ON/<br>At reset   |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored

<sup>\*6 :</sup> Stop/continue operation is selectable for each module by setting parameters.

| Error<br>Code<br>(SD0) <sup>*1</sup> | Error Contents and Cause  | Corrective Action  | Corresponding<br>CPU            |
|--------------------------------------|---|--|---------------------------------|
| 1310                                 | An interruption has occurred although there is no interrupt module.   | Any of the mounted modules is experiencing a hardware fault. Therefore, check the mounted modules and change the faulty module. (Contact your local Mitsubishi representative.)  | 0                               |
|                                      | An interrupt request from other than the interrupt module was detected.   | Take action so that an interrupt will not be issued from other than the interrupt module.  | Q00J/Q00/<br>Q01 <sup>*13</sup> |
| 1311                                 | An interrupt request from the module where interrupt pointer setting has not been made in the PLC parameter dialog box was detected.  | <ul> <li>Correct the interrupt pointer setting in the PLC system setting of the PLC parameter dialog box.</li> <li>Take measures so that an interrupt is not issued from the module where the interrupt pointer setting in the PLC system setting of the PLC parameter dialog box has not been made. Correct the interrupt setting of the network parameter. Correct the interrupt setting of the intelligent function module buffer memory. Correct the basic program of the QD51.</li> </ul> | Q00J/Q00/Q01<br>*12<br>QnPRH    |
|                                      | <ul> <li>There was no response from the intelligent function module/special function module during initial communication stage.</li> <li>The size of the buffer memory of the intelligent function module is wrong.</li> </ul>  | This suggests a CPU module hardware fault. (Contact your local Mitsubishi representative.)   | QCPU<br>Rem                     |
| 1401                                 | When PLC parameter I/O allocation was being made, there was no return signal from the special function module during initial processing stage.(When error is generated, the head I/O number of the special function module that corresponds to the common information is stored.) | The special function module that was accessed is experiencing a hardware fault. (Contact your local Mitsubishi representative.)  | QnA                             |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

<sup>\*13:</sup> This applies to the CPU module of function version A.

| Error                       | Error            | Common                     | Individual                  | LED :      | Status         | Operating                       | Diagnostic  |  |
|-----------------------------|------------------|----------------------------|-----------------------------|------------|----------------|---------------------------------|---|--|
| Code<br>(SD0) <sup>*1</sup> | Messages         | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN        | ERROR          | Statuses of CPU                 | Timing  |  |
| 1402                        | SP. UNIT<br>DOWN | Unit No.                   | Program error<br>location   | Off/<br>On | Flicker/<br>On | Stop/<br>Continue <sup>*6</sup> | When an intelligent function module access instruction is executed. |  |
|                             | SP. UNIT<br>DOWN | Unit No.                   | Program error<br>location   | Off/<br>On | Flicker/<br>On | Stop/<br>Continue <sup>*6</sup> | During<br>execution of<br>FROM/TO<br>instruction set.               |  |
| 1403                        | SP. UNIT<br>DOWN | Unit No.                   |                             | Off/<br>On | Flicker/<br>On | Stop/<br>Continue <sup>*6</sup> | Always  |  |
|                             | SP. UNIT<br>DOWN | Unit No.                   |                             | Off/<br>On | Flicker/<br>On | Stop/<br>Continue <sup>*6</sup> | When an END instruction executed.                                   |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*6 :</sup> Stop/continue operation is selectable for each module by setting parameters.

| Error<br>Code<br>(SD0) <sup>*1</sup> | Error Contents and Cause   | Corrective Action   | Corresponding<br>CPU          |
|--------------------------------------|--|---|-------------------------------|
|                                      | The intelligent function module/special function module was accessed in the program, but there was no response.  | This suggests a CPU module hardware fault. (Contact your local Mitsubishi representative.)  | QCPU<br>Rem                   |
| 1402                                 | The special function module was accessed during the execution of a FROM/TO instruction set, but there was no response.  (When an error is generated, the program error location corresponding to the individual information is stored.)  | The special function module that was accessed is experiencing a hardware fault.(Contact your local Mitsubishi representative.)                              | QnA                           |
|                                      | <ul> <li>There was no response from the intelligent function module when the END instruction is executed.</li> <li>An error is detected at the intelligent function module.</li> <li>The I/O module (intelligent function module) is nearly removed, completely removed, or mounted during running.</li> </ul>   | The intelligent function module that was accessed is experiencing a hardware fault. (Contact your local Mitsubishi representative.)                         | Q00J/Q00/Q01                  |
| 1403                                 | <ul> <li>There was no response from the intelligent function module/special function module when the END instruction is executed.</li> <li>An error is detected at the intelligent function module/special function module.</li> <li>The I/O module (intelligent function module/special function module) is nearly removed, completely removed, or mounted during running.</li> </ul> | The intelligent function module/special function module that was accessed is experiencing a hardware fault. (Contact your local Mitsubishi representative.) | Qn(H)<br>QnPH<br>QnPRH<br>Rem |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Error                       | Error                 | Common                     | Individual                  | LED S | Status  | Operating       | Diagnostic  |  |
|-----------------------------|-----------------------|----------------------------|-----------------------------|-------|---------|-----------------|---|--|
| Code<br>(SD0) <sup>*1</sup> | Messages              | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN   | ERROR   | Statuses of CPU | Timing  |  |
| 1411                        | CONTROL-<br>BUS. ERR. | Unit No.                   |                             | Off   | Flicker | Stop            | At power ON/<br>At reset                              |  |
| 1412                        | CONTROL-<br>BUS. ERR. | Unit No.                   | Program error<br>location   | Off   | Flicker | Stop            | During<br>execution of<br>FROM/TO<br>instruction set. |  |
| 1413                        | CONTROL-<br>BUS. ERR. |                            |                             | Off   | Flicker | Stop            | Always  |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Error<br>Code<br>(SD0) <sup>*1</sup> | Error Contents and Cause   | Corrective Action  | Corresponding<br>CPU  |
|--------------------------------------|--|--|---|
| 1411                                 | When performing a parameter I/O allocation the intelligent function module/special function module could not be accessed during initial communications.  (On error occurring, the head I/O number of the corresponding intelligent function module/special function module is stored in the common information.) | Reset the CPU module and RUN it again. If the same error is displayed again, the intelligent function module/ special function module, CPU module or   | O<br>Rem  |
| 1412                                 | The FROM/TO instruction set could not be executed, due to a system bus error with the intelligent function module/ special function module.  (On error occurring, the program error location is stored in the individual information.)   | base unit is faulty. (Contact your local<br>Mitsubishi representative.)  | 0   |
| 1413                                 | In a multiple CPU system, a CPU module incompatible with the multiple CPU system is mounted.   | <ul> <li>Remove the CPU module incompatible with the multiple CPU system from the main base unit, or replace the CPU module incompatible with the multiple CPU system with a CPU module compatible with the multiple CPU system.</li> <li>The intelligent function module, CPU module or base unit is faulty. (Contact your local Mitsubishi representative.)</li> </ul> | Q00J/Q00/<br>Q01 <sup>*12</sup><br>Qn(H) <sup>*12</sup><br>QnPH |
|                                      | An error is detected on the system bus.  • Self-diagnosis error of the system bus.  • Self-diagnosis error of the CPU module   | Reset the CPU module and RUN it again. If the same error is displayed again, the intelligent function module, CPU module or base unit is faulty. (Contact your local Mitsubishi representative.)   | QCPU<br>Rem   |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

| Error           | Error<br>Messages     | Common<br>Information<br>(SD5 to 15) | Individual<br>Information<br>(SD16 to 26) | LED Status |         | Operating       | Diagnostic                        |  |
|-----------------|-----------------------|--------------------------------------|---|------------|---------|-----------------|-----------------------------------|--|
| Code<br>(SD0)*1 |                       |                                      |   | RUN        | ERROR   | Statuses of CPU | Timing                            |  |
| 1414            | CONTROL-<br>BUS. ERR. | Unit No.                             |   | Off        | Flicker | Stop            | When an END instruction executed. |  |
| 1415            | CONTROL-<br>BUS. ERR. | Base No.                             |   | Off        | Flicker | Stop            | When an END instruction executed. |  |
| 1416            | CONTROL-<br>BUS. ERR. | Unit No.                             |   | Off        | Flicker | Stop            | At power ON/<br>At reset          |  |
| 1417            | CONTROL-<br>BUS. ERR. |                                      |   | Off        | Flicker | Stop            | Always                            |  |
| 1421            | SYS. UNIT<br>DOWN *3  |                                      |   | Off        | Flicker | Stop            | Always                            |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored

<sup>\*3 :</sup> This can only be detected in redundant systems. Detection is possible in either the control system or the standby system.

| Error<br>Code<br>(SD0) <sup>*1</sup> | Error Contents and Cause   | Corrective Action   | Corresponding<br>CPU  |
|--------------------------------------|--|---|---|
| 1414                                 | <ul> <li>Fault of the loaded module was detected.</li> <li>In a multiple CPU system, a CPU module incompatible with the multiple CPU system is mounted.</li> </ul> | <ul> <li>Remove the CPU module incompatible with the multiple CPU system from the main base unit, or replace the CPU module incompatible with the multiple CPU system with a CPU module compatible with the multiple CPU system.</li> <li>Reset the CPU module and RUN it again. If the same error is displayed again, the intelligent function module, CPU module or base unit is faulty. (Contact your local Mitsubishi representative.)</li> </ul> | Q00J/Q00/<br>Q01 <sup>*12</sup><br>Qn(H) <sup>*12</sup><br>QnPH |
|                                      | An error is detected on the system bus.  | Reset the CPU module and RUN it again. If the same error is displayed again, the intelligent function module, CPU module or base unit is faulty. (Contact your local Mitsubishi representative.)  | Q00J/Q00/<br>Q01*12<br>Qn(H)<br>QnPH<br>QnPRH<br>Rem            |
| 1415                                 | Fault of the main or extension base unit was detected.   | Reset the CPU module and RUN it again. If the same error is displayed again, the intelligent function module, CPU module or base unit is faulty.  | Q00J/Q00/Q01<br>Qn(H) <sup>*12</sup><br>QnPH<br>QnPRH           |
| 1416                                 | System bus fault was detected at PLC power-on or CPU module reset.  In a multiple CPU system, a bus fault  | (Contact your local Mitsubishi representative.) Reset the CPU module and RUN it   | Qn(H)*12<br>QnPH<br>Q00/Q01*12                                  |
| 1417                                 | A reset signal error was detected on the system bus.   | again. If the same error is displayed again, the intelligent function module, CPU module or base unit is faulty. (Contact your local Mitsubishi representative.)  | QnPRH   |
| 1421                                 | Hardware fault at the system management module AS92R.  | This suggests a system management module AS92R hardware fault. (Contact your local Mitsubishi representative.)  | Q4AR  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

| Error                       | Error                | Common                           | Individual                  | LED S | Status  | Operating       | Illiadnostic |  |
|-----------------------------|----------------------|----------------------------------|-----------------------------|-------|---------|-----------------|--------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages             | Information<br>(SD5 to 15)       | Information<br>(SD16 to 26) | RUN   | ERROR   | Statuses of CPU | Timing       |  |
| 1500                        | AC/DC<br>DOWN        |                                  |                             | On    | Off     | Continue        | Always       |  |
| 1510                        | DUAL DC<br>DOWN 5V*4 |                                  |                             | On    | On      | Continue        | Always       |  |
|                             | SINGLE PS.<br>DOWN   | Base No./<br>Power supply<br>No. |                             | On    | On      | Continue        | Always       |  |
| 1520                        | DC DOWN<br>5V*5      |                                  |                             | Off   | Flicker | Stop            | Always       |  |
| 1020                        | SINGLE PS.<br>ERROR  | Base No./<br>Power supply<br>No. |                             | On    | On      | Continue        | Always       |  |
| 1530                        | DC DOWN<br>24V*3     |                                  |                             | On    | On      | Continue        | Always       |  |
| 1600                        | - BATTERY            |                                  |                             |       | Off     |                 |              |  |
| 1601                        | ERROR*16             | Drive Name                       |                             | On    |         | Continue        | Always       |  |
| 1602                        |                      |                                  |                             |       | On      |                 |              |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*3 :</sup> This can only be detected in redundant systems. Detection is possible in either the control system or the standby system.

<sup>\*4 :</sup> This can only be detected in the redundant system control system.

<sup>\*5 :</sup> This can be detected in either a standalone system or a redundant system. However, in a redundant system it can only be detected in the control system.

<sup>\*16:</sup> When BATTERY ERROR occurs, the BAT. ALM LED turns on.

| Error<br>Code<br>(SD0)*1 | Error Contents and Cause   | Corrective Action  | Corresponding CPU             |
|--------------------------|--|--|-------------------------------|
| 1500                     | <ul><li>A momentary power supply interruption has occurred.</li><li>The power supply went off.</li></ul>   | Check the power supply.  | O<br>Rem                      |
| 1510                     | The power supply voltage (100 to 240VAC) of either of the two power supply modules on the power supply duplexing extension base unit dropped to or below 85% of the rated voltage. | Check the supply voltage of the power supply module. If the voltage is abnormal then replace the power supply module.  | Q4AR                          |
|                          | The power supply voltage of either power supply module dropped in the redundant base unit.   | Check the power supplied to the redundant power supply modules mounted on the redundant base units.  | QnPRH<br>Rem                  |
| 1520                     | The power supply voltage(100 - 240VAC) of the power supply module on the extension base unit dropped to or below 85% of the rated voltage.   | Check the supply voltage of the power supply module. If the voltage is abnormal then replace the power supply module.  | Q4AR                          |
| 1320                     | A fault of either redundant power supply module was detected in the redundant power supply system.   | Hardware fault of the redundant power supply module. (Contact your local Mitsubishi representative, explaining a detailed description of the problem.)                       | QnPRH<br>Rem                  |
| 1530                     | The 24 VDC power supplied to the system management module AS92R has dropped below 90% of the rated voltage.  | Check the 24VDC power supplied to the system management module AS92R.  | Q4AR                          |
| 1600                     | <ul> <li>Voltage in the CPU module battery<br/>has dropped below stipulated level.</li> <li>The CPU module battery is not<br/>connected.</li> </ul>                                | <ul> <li>Change the battery.</li> <li>If the battery is for program memory,<br/>standard RAM or for the back-up<br/>power function, install a lead<br/>connector.</li> </ul> | 0                             |
| 1601                     | Voltage of the battery on memory card 1 has dropped below stipulated level.  | Change the battery.  | QnA<br>Qn(H)<br>QnPH<br>QnPRH |
| 1602                     | Voltage of the battery on memory card 2 has dropped below stipulated level.  | Change the battery.  | QnA                           |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Code (SD0)*1   Information (SD16 to 26)   RUN   ERROR   Statuses of CPU  | Error                       | Error | Error Common                                |  | LED Status |         | Operating           | Diagnostic               |  |
|--|-----------------------------|-------|---|--|------------|---------|---------------------|--------------------------|--|
| 2000 UNIT VERIFY FRR.   For Remote I/O network] Network No./ Station No.   Station No. | Code<br>(SD0) <sup>*1</sup> |       |   |  | RUN        | ERROR   |                     |                          |  |
| 2001 UNIT VERIFY ERR. Unit No Off/ On On Continue instruction executed.  2010 BASE LAY ERROR  Base No Off Flicker Stop/ Continue instruction executed.  At power ON/ At reset  | 2000                        |       | [For Remote I/O<br>network]<br>Network No./ |  |            |         | Stop/<br>Continue*2 | instruction<br>executed. |  |
| BASE LAY Base No Off Flicker Stop At reset   | 2001                        |       | Unit No.                                    |  |            |         | -                   | instruction              |  |
| 2011   | 2010                        |       | Base No.                                    |  | Off        | Flicker | Stop                | -                        |  |
|  | 2011                        |       |   |  |            |         |                     |                          |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*2 :</sup> The CPU module operation status when an error occurs can be set at the parameters. (LED display will change accordingly.)

| Error<br>Code<br>(SD0)*1 | Error Contents and Cause   | Corrective Action  | Corresponding<br>CPU                     |
|--------------------------|--|--|--|
|                          | In a multiple CPU system, a CPU module incompatible with the multiple CPU system is mounted.   | Replace the CPU module incompatible with the multiple CPU system with a CPU module compatible with the multiple CPU system.  | Qn(H) <sup>*12</sup><br>QnPH             |
|                          | <ul> <li>I/O module information power ON is changed.</li> <li>I/O module (or intelligent function module) is not installed properly or installed on the base unit.</li> </ul>                      | Read the error common information at the GX Developer, and check and/or change the module that corresponds to the numerical value (module number) there.  Alternatively, monitor special registers SD150 to SD157 using GX Developer, and check and replace the module where the bit of its data is "1".   | Q00J/Q00/Q01                             |
| 2000                     | <ul> <li>I/O module information power ON is changed.</li> <li>I/O module (or intelligent function module/special function module) not installed properly or installed on the base unit.</li> </ul> | <ul> <li>Read the common information of the error using the peripheral device, and check and/or change the module that corresponds to the numerical value (module number) there.</li> <li>Alternatively, monitor the special registers SD1400 to SD1431 at a peripheral device, and change the fuse at the output module whose bit has a value of "1".</li> <li>When a GOT is bus-connected to the main base unit or extension base unit, check the connection status of the extension cable and the earth status of the GOT.</li> </ul> | QnA<br>Qn(H)<br>QnPH<br>QnPRH<br>Rem     |
| 2001                     | During operation, a module was mounted on the slot where the empty setting of the CPU module was made.   | During operation, do not mount a module on the slot where the empty setting of the CPU module was made.  | Q00J/Q00/<br>Q01 <sup>*12</sup>          |
| 2010                     | <ul> <li>More than applicable number of extension base units have been used.</li> <li>When a GOT was bus-connected, the CPU module was reset while the power of the GOT was OFF.</li> </ul>        | <ul> <li>Use the allowable number of extension base units or less.</li> <li>Power on the PLC and GOT again.</li> </ul>   | Q00J/Q00/<br>Q01 <sup>*12</sup><br>QnPRH |
| 2011                     | The QA□B or QA1S□B was used as the base unit.  | Do not use the QA□B or QA1S□B as the base unit.  |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*12:</sup> This applies to the CPU mdoule of function version B or later.

| Error<br>Code | Error                | Common<br>Information | Individual<br>Information |     | Status  | Operating Statuses | Diagnostic               |  |
|---------------|----------------------|-----------------------|---------------------------|-----|---------|--------------------|--------------------------|--|
| (SD0)*1       | Messages             | (SD5 to 15)           | (SD16 to 26)              | RUN | ERROR   | of CPU             | Timing                   |  |
| 2100          | SP. UNIT LAY<br>ERR. | Unit No.              |                           | Off | Flicker | Stop               | At power ON/<br>At reset |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Error<br>Code<br>(SD0) <sup>*1</sup> | Error Contents and Cause   | Corrective Action   | Corresponding<br>CPU                  |
|--------------------------------------|--|---|---------------------------------------|
|                                      | Slot loaded with the QI60 is set to other than the Inteli (intelligent function module) or Interrupt (interrupt module) in the PLC parameter I/O assignment.   | Make setting again to match the PLC parameter I/O assignment with the actual loading status.  | Qn(H) <sup>*12</sup><br>QnPH<br>QnPRH |
|                                      | <ul> <li>In the PLC parameter I/O allocation settings, an Inteli (intelligent function module) was allocated to a location reserved for an I/O module or vice versa.</li> <li>In the PLC parameter I/O allocation settings, a module other than CPU (or nothing) was allocated to a location reserved for a CPU module or vice versa.</li> <li>In the I/O assignment setting of the PLC parameter dialog box, switch setting was made to the module without switch setting.</li> </ul>   | <ul> <li>Reset the PLC parameter I/O allocation setting to conform to the actual status of the intelligent function module and the CPU module.</li> <li>Delete the switch setting in the I/O assignment setting of the PLC parameter dialog box.</li> </ul> | Qn(H)<br>QnPH<br>QnPRH<br>Rem         |
| 2100                                 | <ul> <li>In the parameter I/O allocation settings, an Inteli (intelligent function module) was allocated to a location reserved for an I/O module or vice versa.</li> <li>In the parameter I/O allocation settings, a module other than CPU (or nothing) was allocated to a location reserved for a CPU module or vice versa.</li> <li>In the I/O assignment setting of the PLC parameter dialog box, the number of points assigned to the intelligent function module is less than the number of points of the mounted module.</li> </ul> | Reset the parameter I/O allocation setting to conform to the actual status of the intelligent function module and the CPU module.   | Q00J/Q00/Q01                          |
|                                      | In PLC parameter I/O allocation settings, a special function module was allocated to a location reserved for an I/O module. Or, the opposite has happened.   | Reset the PLC parameter I/O allocation setting to conform with the actual status of the special function modules.   | QnA                                   |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

| Error                       | _                    | Common                     | Individual                  | LED S | Status  | Operating |                          |  |
|-----------------------------|----------------------|----------------------------|-----------------------------|-------|---------|-----------|--------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Error<br>Messages    | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN   | ERROR   | Statuene  | Diagnostic<br>Timing     |  |
| 2101                        |                      |                            |                             |       |         |           |                          |  |
| 2102                        |                      |                            |                             |       |         |           |                          |  |
| 2103                        | SP. UNIT LAY<br>ERR. | Unit No.                   |                             | Off   | Flicker | Stop      | At power ON/<br>At reset |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

|  | Error<br>Code<br>(SD0) <sup>*1</sup> | Error Contents and Cause   | Corrective Action  | Corresponding<br>CPU            |
|--|--------------------------------------|--|--|---------------------------------|
|  | 2101                                 | 13 or more A-series special function modules (except for the A1SI61) that can initiate an interrupt to the CPU module have been installed.   | Reduce the A series special function modules (except the A1SI61) that can make an interrupt start to the CPU module to 12 or less.   | Qn(H)                           |
|  | 2101                                 | 13 or more special function modules (not counting the A(1S)I61) capable of sending an interrupt to the CPU module have been installed.   | Keep the number of special function modules that can initiate an interrupt (with the exception of the A(1S)I61 module) to 12 or fewer.   | QnA                             |
|  |                                      | 7 or more A1SD51S have been installed.   | Keep the number of A1SD51S to 6 or fewer.  | Qn(H)                           |
|  | 2102                                 | 7 or more serial communication modules (excludes A (1S) J71QC24) have been installed.  | Keep the number of serial communication modules (excludes A(1S)J71QU24) installed to 6 or fewer.   | QnA                             |
|  | 2103                                 | <ul> <li>2 or more QI60/A1SI61 modules are loaded in a single CPU system.</li> <li>2 or more QI60/A1SI61 modules are set to the same control CPU in a multiple CPU system.</li> <li>2 or more A1SI61 modules are loaded in a multiple CPU system.</li> </ul> | <ul> <li>Reduce the number of QI60/A1SI61 modules loaded in the single CPU system to one.</li> <li>Change the number of QI60/A1SI61 modules set to the same control CPU to only one in the multiple CPU system.</li> <li>Reduce the number of A1SI61 modules to only one in the multiple CPU system.When using an interrupt module with each QCPU in a multiple CPU system, change it for the QI60. (Use one A1SI61 module + max. three QI60 modules or only the QI60 modules.)</li> </ul> | Qn(H) <sup>*12</sup><br>QnPH    |
|  |                                      | 2 or more QI60, A1SI61 interrupt modules have been installed.  | Install only 1 QI60, A(1S)I61 module.  | Qn(H)<br>QnPRH                  |
|  |                                      | The QI60 is loaded.  | Remove the QI60.   | Rem                             |
|  |                                      | 2 or more A1SI61 interrupt modules have been installed.  | Install only 1 Al61 module.  | QnA                             |
|  |                                      | 2 or more QI60 modules are mounted.  | Reduce the QI61 modules to one.  | Q00J/Q00/<br>Q01 <sup>*14</sup> |
|  |                                      | 2 or more QI60 modules where interrupt pointer setting has not been made are mounted.  | <ul> <li>Reduce the QI60 modules to one.</li> <li>Make interrupt pointer setting to the<br/>second QI60 module and later.</li> </ul>   | Q00J/Q00/<br>Q01*12             |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

<sup>\*14:</sup> This applies to the CPU module with the serial No. of which first 5 digits are "04101" or later.

| Error                       | Error                | Common                     | Individual<br>Information<br>(SD16 to 26) | LED : | Status  | Operating       | Diagnostic               |  |
|-----------------------------|----------------------|----------------------------|---|-------|---------|-----------------|--------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages             | Information<br>(SD5 to 15) |   | RUN   | ERROR   | Statuses of CPU | Timing                   |  |
| 2104                        |                      |                            |   |       |         |                 |                          |  |
| 2105                        | SP. UNIT LAY<br>ERR. | Unit No.                   |   | Off   | Flicker | Stop            | At power ON/<br>At reset |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Error<br>Code<br>(SD0)*1 | Error Contents and Cause   | Corrective Action   | Corresponding<br>CPU |
|--------------------------|--|---|----------------------|
| 2104                     | At the MELSECNET/MINI auto refresh network parameter settings, the module allocation that was set is different from the actual module models at the station numbers in the link system.  | Reset the network parameter MELSECNET/MINI auto refresh unit module allocation setting so that it conforms to the station number of the module that is actually linked. |                      |
| 2105                     | There are too many special function modules that can use dedicated instructions allocated (number of modules installed).  (The total of the figures indicated below is above 1344.)  (AD57 (S1)/AD58 modules installed × 5) modules installed × 8) modules installed × 10) modules installed × 10) (AJ71C24(S3/S6/S8) modules installed × 10) (AJ71C21(S1) modules installed × 29) (AJ71QC24(R2,R4) modules installed × 29) modules installed × 29) (AJ71D1(2)-R4 modules installed × 29) modules installed × 29) modules installed × 29 modules installed × 12 total > 1344  *: When the expansion mode is used. | Reduce the number of special function modules installed.  | QnA                  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Error<br>Code<br>(SD0)*1 | Error<br>Messages    | Common<br>Information<br>(SD5 to 15) | Individual<br>Information<br>(SD16 to 26) | LED S | Status<br>ERROR | Operating Statuses of CPU | Diagnostic<br>Timing     |  |
|--------------------------|----------------------|--------------------------------------|---|-------|-----------------|---------------------------|--------------------------|--|
| 2106                     | SP. UNIT LAY<br>ERR. | Unit No.                             |   | Off   | Flicker         | Stop                      | At power ON/<br>At reset |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Error<br>Code<br>(SD0)* | Error Contents and Cause   | Corrective Action  | Corresponding<br>CPU          |
|-------------------------|--|--|-------------------------------|
|                         | <ul> <li>5 or more MELSECNET/H modules are loaded in a whole multiple CPU system.</li> <li>5 or more Q series Ethernet interface modules are loaded in a whole multiple CPU system.</li> </ul>   | <ul> <li>Reduce the MELSECNET/H modules to 4 or less in the whole multiple CPU system.</li> <li>Reduce the Q series Ethernet modules to 4 or less in the whole multiple CPU system.</li> </ul>   | Qn(H) <sup>*12</sup><br>QnPH  |
|                         | <ul> <li>5 or more MELSECNET/H modules have been installed.</li> <li>5 or more Q series Ethernet interface modules have been installed.</li> <li>The same network numbers or station numbers exist, in the MELSECNET/ 10 network system.</li> </ul>  | <ul> <li>Reduce the MELSECNET/H modules to 4 or less.</li> <li>Reduce the Q series Ethernet modules to 4 or less.</li> <li>Check the network numbers and station numbers.</li> </ul>   | Qn(H)<br>QnPH<br>QnPRH<br>Rem |
| 2106                    | <ul> <li>2 or more MELSECNET/H modules were installed.</li> <li>2 or more Q series Ethernet modules were installed.</li> <li>3 or more Q series CC-Link modules were installed.</li> <li>The same network number or same station number exists in the MELSECNET/H network system.</li> </ul>   | <ul> <li>Reduce the MELSECNET/H modules to one or less.</li> <li>Reduce the Q series Ethernet modules to one or less.</li> <li>Reduce the Q series CC-Link modules to two or less.</li> <li>Check the network number and station number.</li> </ul>  | Q00J/Q00/Q01                  |
|                         | <ul> <li>• 5 or more AJ71QLP21 &amp; AJ71QBR11 modules are installed.</li> <li>• 3 or more AJ71AP21/R21 &amp; AJ71AT21B modules are installed.</li> <li>• The total number of installed AJ71QLP21, AJ71QBR11, AJ71AP21/R21, and AJ71AT21B modules exceeds 5.</li> <li>• The same network numbers or identical station numbers exist in the MELSECNET/10 network system.</li> <li>• 2 or more master or load stations exist simultaneously at the MELSECNET(II) or MELSECNET/B data link system.</li> </ul> | <ul> <li>Reduce the AJ71QLP21 and AJ71QBR11 modules to 4 or less.</li> <li>Reduce the AJ71AP21/R21 and AJ71AT21B modules to 2 or less.</li> <li>Reduce the AJ71QLP21, AJ71QBR11, AJ71AP21/R21 and AJ71AT21B modules to a total of 4 or less.</li> <li>Check the network Nos. and station Nos.</li> <li>Check the station Nos.</li> </ul> | QnA                           |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

| Error                       | Error                | Common                     | Individual                  | LED S      | Status         | Operating                       | Diagnostic                 |  |
|-----------------------------|----------------------|----------------------------|-----------------------------|------------|----------------|---------------------------------|----------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages             | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN        | ERROR          | Statuses of CPU                 | Timing                     |  |
| 2107                        | SP. UNIT LAY<br>ERR. | Unit No.                   |                             | Off        | Flicker        | Stop                            | At power ON/<br>At reset   |  |
| 2109                        |                      |                            |                             |            |                | Stop/<br>Continue <sup>*6</sup> |                            |  |
| 2110                        | SP. UNIT<br>ERROR    | Unit No.                   | Program error<br>location   | Off/<br>On | Flicker/<br>On | Stop/<br>Continue <sup>*2</sup> | When instruction executed. |  |
| 2111                        |                      |                            |                             |            |                |                                 |                            |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*2 :</sup> The CPU module operation status when an error occurs can be set at the parameters. (LED display will change accordingly.)

<sup>\*6 :</sup> Stop/continue operation is selectable for each module by setting parameters.

| Error<br>Code<br>(SD0)*1 | Error Contents and Cause   | Corrective Action  | Corresponding<br>CPU                                  |
|--------------------------|--|--|---|
| 2107                     | Head X/Y set in the PLC parameter I/O allocation settings is also the head X/Y for another module.   | Reset the PLC parameter I/O allocation setting to conform with the actual status of the special function modules.  | O<br>Rem  |
| 2108                     | <ul> <li>Network module A1SJ71LP21,<br/>A1SJ71BR11, A1SJ71AP21,<br/>A1SJ71AR21, or A1SJ71AT21B<br/>dedicated for the A2USCPU has been<br/>installed.</li> <li>Network module A1SJ71QLP21 or<br/>A1SJ71QBR11 dedicated for the<br/>Q2AS has been installed.</li> </ul>  | Change network module to MELSECNET/H module.   | Qn(H)   |
|                          | A(1S)J71LP21 or A(1S)J71BR11 for use with the AnUCPU network module has been installed.  | Change network module to A(1S)J71QLP21 or A(1S)J71QBR11.   | QnA   |
| 2109                     | The control system and standby system module configurations are different when a redundant system is in the backup mode.   | Check the module configuration of the standby system.  | Q4AR  |
| 2110                     | <ul> <li>The location designated by the FROM/TO instruction set is not the intelligent function module/special function module.</li> <li>The module that does not include buffer memory has been specified by the FROM/TO instruction.</li> <li>The intelligent function module/ special function module, Network module being accessed is faulty.</li> <li>Station not loaded was specified using the instruction whose target was the CPU share memory.</li> </ul> | <ul> <li>Read the individual information of the error using the GX Developer, check the FROM/TO instruction that corresponds to that numerical value (program error location), and correct when necessary.</li> <li>The intelligent function module/ special function module that was accessed is experiencing a hardware</li> </ul> | Q00J/Q00/Q01<br>Qn(H) <sup>*12</sup><br>QnPH<br>QnPRH |
| 2111                     | <ul> <li>The location designated by a link direct device (J□\□) is not a network module.</li> <li>The I/O module (intelligent function module/special function module) was nearly removed, completely removed, or mounted during running.</li> </ul>   | fault. Therefore, change the faulty module. Alternatively, contact your local Mitsubishi representative.   | 0   |

<sup>\*1 :</sup> Characters in parentheses () indicate the special register numbers where individual information is being stored.

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

| Error                       | Error             | Common                     | Individual                  | LED S      | Status         | Operating           | Diagnostic  |  |
|-----------------------------|-------------------|----------------------------|-----------------------------|------------|----------------|---------------------|---|--|
| Code<br>(SD0) <sup>*1</sup> | Messages          | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN        | ERROR          | Statuses of CPU     | Timing  |  |
| 2112                        | SP. UNIT<br>ERROR | Unit No.                   | Program error<br>location   | Off/<br>On | Flicker/<br>On | Stop/<br>Continue*2 | When<br>instruction<br>executed/<br>STOP →<br>RUN |  |
| 2113                        | SP. UNIT<br>ERROR | FFFF <sub>H</sub> (fixed)  | Program error location      | Off/<br>On | Flicker/<br>On | Stop/<br>Continue*2 | When instruction executed/ STOP → RUN             |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being

<sup>\*2 :</sup> The CPU module operation status when an error occurs can be set at the parameters. (LED display will change accordingly.)

| Error<br>Code<br>(SD0) <sup>*1</sup> | Error Contents and Cause   | Corrective Action  | Corresponding<br>CPU |
|--------------------------------------|--|--|----------------------|
|                                      | <ul> <li>The module other than special function module is specified by the special function module dedicated instruction.</li> <li>Or, it is not the corresponding special function module.</li> <li>The module model specified by the special function module dedicated instruction and that specified by the parameter I/O assignment is different.</li> </ul>   | <ul> <li>Read the individual information of the error using a peripheral device, and check the special function module dedicated instruction (network instruction) that corresponds to the value (program error part) to make modification.</li> <li>Set the module model by PLC parameter I/O assignment according to the special function module dedicated instruction setting.</li> <li>Example) Although AJ71QC24N is used actually, AJ71QC24 is set.</li> </ul> | QnA                  |
| 2112                                 | <ul> <li>The module other than intelligent function module/special function module is specified by the intelligent function module dedicated instruction.         Or, it is not the corresponding intelligent function module/special function module.</li> <li>There is no network No. specified by the network dedicated instruction.         Or the relay target network does not exit.</li> <li>The model is incorrectly registered by the dedicated instruction.</li> </ul> | Read the individual information of the error using a peripheral device, and check the special function module / special function module dedicated instruction (network instruction) that corresponds to the value (program error part) to make modification.   | QCPU<br>Rem          |
| 2113                                 | The module other than network module is specified bythe network dedicated instruction.   |  | QnA<br>Qn(H)<br>QnPH |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Error                       | Error             | Common                     | Individual                  | LED S      | Status         | Operating         | Diagnostic                 |  |
|-----------------------------|-------------------|----------------------------|-----------------------------|------------|----------------|-------------------|----------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages          | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN        | ERROR          | Statuses of CPU   | Timing                     |  |
| 2114                        |                   |                            |                             |            |                |                   |                            |  |
| 2115                        |                   |                            |                             |            |                |                   |                            |  |
| 2116                        | SP. UNIT<br>ERROR | Unit No.                   | Program error location      | Off/<br>On | Flicker/<br>On | Stop/<br>Continue | When instruction executed. |  |
| 2117                        |                   |                            |                             |            |                |                   | executed.                  |  |
| 2118                        |                   |                            |                             |            |                |                   |                            |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Error<br>Code<br>(SD0) <sup>*1</sup> | Error Contents and Cause   | Corrective Action  | Corresponding<br>CPU  |  |  |
|--------------------------------------|--|--|---|--|--|
| 2114                                 | An instruction, which on execution specifies other stations, has been used for specifying the host CPU. (An instruction that does not allow the host CPU to be specified).   |  |   |  |  |
| 2115<br>2116<br>2117                 | An instruction, which on execution specifies the host CPU, has been used for specifying other CPUs. (An instruction that does not allow other stations to be specified).  • An instruction that does not allow the under the control of another CPU to be specified is being used for a similar task.  • Instruction was executed for the A or QnA module under control of another CPU.  A CPU module that cannot be specified in the instruction dedicated to the | Read the individual information of the error using the GX Developer, check the program corresponding that value (program error location), and make correction.   | Q00J/Q00/<br>Q01 <sup>*12</sup><br>Qn(H) <sup>*12</sup><br>QnPH |  |  |
| 2118                                 | multiple CPU system was specified.  When the online module change setting has been set to enable in the PLC parameter of the Process CPU in a multiple CPU system, the intelligent function module controlled by another CPU has been specified in the FROM instruction/intelligent function module device (U□NG□).  | When online module change of the Process CPU is to be performed in a multiple CPU system, correct the program so that access will not be made to the intelligent function module controlled by another CPU.      When access is to be made to the intelligent function module controlled by another CPU in a multiple CPU system, set the online module change setting to disable in the parameter of the Process CPU. | Qn(H) <sup>*12</sup><br>QnPH                                    |  |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

| Error<br>Code | Error                | Common<br>Information | Individual<br>Information | LED S | Status  | Operating<br>Statuses | Diagnostic               |  |
|---------------|----------------------|-----------------------|---------------------------|-------|---------|-----------------------|--------------------------|--|
| (SD0)*1       | Messages             | (SD5 to 15)           | (SD16 to 26)              | RUN   | ERROR   | of CPU                | Timing                   |  |
| 2120          |                      |                       |                           |       |         |                       |                          |  |
| 2121          |                      |                       |                           |       |         |                       |                          |  |
| 2122          |                      |                       |                           |       |         |                       |                          |  |
| 2124          | SP. UNIT LAY<br>ERR. |                       |                           | Off   | Flicker | Stop                  | At power ON/<br>At reset |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Error<br>Code<br>(SD0) <sup>*1</sup> | Error Contents and Cause  | Corrective Action  | Corresponding<br>CPU                             |
|--------------------------------------|---|--|--|
| 2120                                 | The location of Q□B and QA1S□B is improper.   | Check the location of the base unit.   | Q00J/Q00/<br>Q01 <sup>*13</sup><br>Qn(H)<br>QnPH |
| 2121                                 | The CPU module is installed at other than the CPU slot or slots 0 to 2.   | Check the loading position of the CPU module and reinstall it at the correct slot.   | Qn(H)<br>QnPH<br>Rem                             |
| 2122                                 | QA1S□B is used to the main base unit.   | Replace the main base unit with a usable one.  | Qn(H)<br>QnPH<br>QnPRH<br>Rem                    |
|                                      | <ul> <li>A module is installed at 65th or higher slot.</li> <li>A module is installed at the slot later than the number of slots specified with base allocation setting.</li> <li>A module is installed at the I/O points later than the 4,096th point.</li> <li>A module installed at the 4,096th point occupies higher points.</li> </ul>   | <ul> <li>Remove the module installed at 65th or later slot.</li> <li>Remove the module installed at the slot later than the number of slots specified with base allocation setting.</li> <li>Remove the module installed at the I/O points later than the 4,096th point.</li> <li>Change the last module to a module which does not exceed the 4,096th point.</li> </ul>   | Q00J/Q00/Q01<br>Rem                              |
| 2124                                 | <ul> <li>A module is mounted on the 25th or higher slot. (17th or higher slots for the Q00J)</li> <li>A module is mounted on the slot higher than the number specified with base allocation setting.</li> <li>A module is mounted on the I/O points higher than the 1024th point. (256th or higher points for the Q00J)</li> <li>A module is mounted on the 1024th or higher points. (256th or higher points for the Q00J)</li> </ul> | <ul> <li>Remove the module mounted on the 25th or higher slot. (17th or higher slots for the Q00J)</li> <li>Remove the module mounted on the slot higher than the number specified with base allocation setting.</li> <li>Remove the module mounted on the I/O points higher than the 1024th point. (256th or higher points for the Q00J)</li> <li>Change the last module with the one which does not exceed the 1024th point. (256th or lower points for the Q00J)</li> </ul> | Q00J/Q00/Q01<br>Rem                              |
|                                      | 5 or more extension base units were added. (3 bases for Q00J)   | Remove 5 or more extension base units. (3 bases for Q00J)  | Q00J/Q00/<br>Q01 <sup>*13</sup><br>Rem           |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*13:</sup> This applies to the CPU module of function version A.

| Error                       | Error                 | Common                     | Individual                  | LED S | Status  | Operating       | Diagnostic               |  |
|-----------------------------|-----------------------|----------------------------|-----------------------------|-------|---------|-----------------|--------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages              | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN   | ERROR   | Statuses of CPU | Timing                   |  |
| 2125                        |                       |                            |                             |       |         |                 |                          |  |
| 2126                        | SP. UNIT LAY.<br>ERR. | Unit No.                   |                             | Off   | Flicker | Stop            | At power ON/<br>At reset |  |
| 2150                        | SP. UNIT<br>VER. ERR. | Unit No.                   |                             | Off   | Flicker | Stop            | At power ON/<br>At reset |  |
| 2151                        |                       |                            |                             |       |         |                 |                          |  |
| 2200                        | MISSING<br>PARA.      | Drive Name                 |                             | Off   | Flicker | Stop            | At power ON/<br>At reset |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Erro<br>Cod<br>(SDC | de Error Contents and Cause  | Corrective Action   | Corresponding<br>CPU         |
|---------------------|--|---|------------------------------|
| 2125                | <ul> <li>A module which the QCPU cannot recognise has been installed.</li> <li>There was no response form the intelligent function module/special function module.</li> </ul>  | nstall a usable module.     The intelligent function module/     special function module is     experiencing a hardware fault.     (Contact your local Mitsubishi representative.)  | QCPU<br>Rem                  |
| 2126                | CPU module locations in a multiple CPU system are either of the following.  • There are empty slots between the QCPU and QCPU/motion controller.  • A module other than the High Performance model QCPU/Process CPU (including the motion controller) is mounted on the left-hand side of the High Performance model QCPU/Process CPU. | on the right-hand side of the CPU module.)  • Remove the module mounted on the left-hand side of the High Performance model QCPU/Process CPU, and mount the High Performance model QCPU/Process CPU on the empty slot.  Mount the motion CPU on the right-hand side of the High Performance model QCPU/Process CPU. | Qn(H) <sup>*12</sup><br>QnPH |
| 2150                | In a multiple CPU system, the control CPU of the intelligent function module incompatible with the multiple CPU system is set to other than CPU No.1.  | <ul> <li>Change the intelligent function module for the one compatible with the multiple CPU system (function version B).</li> <li>Change the setting of the control CPU of the intelligent function module incompatible with the multiple CPU system to CPU No.1.</li> </ul>                                       |                              |
| 2151                | Either of the following modules incompatible with the redundant system has been mounted in a redundant system.  • MELSECNET/H  • Ethernet  |   | QnPRH                        |
| 2200                | There is no parameter file in the drive specified as valid parameter drive by the DIP switches.  | Set the parameter file to the drive specified as valid parameter drive by the DIP switches.   | Qn(H)<br>QnPH<br>QnPRH       |
|                     | There is no parameter file at the program memory.  | Set the parameter file to the program memory.   | Q00J/Q00/Q01                 |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

| Error                       | Гинон             | Common                     | Individual                  | LED S | Status   | Operating       | Diagnostic               |  |
|-----------------------------|-------------------|----------------------------|-----------------------------|-------|----------|-----------------|--------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Error<br>Messages | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN   | ERROR    | Statuses of CPU | Diagnostic<br>Timing     |  |
| 2210                        | BOOT<br>ERROR     | Drive name                 |                             | Off   | Flicker  | Stop            | At power ON/<br>At reset |  |
| 2211                        |                   |                            |                             |       |          |                 |                          |  |
| 2300                        | ICM. OPE.         | Drive name                 |                             | Off/  | Flicker/ | Stop/           | When memory card is      |  |
| 2301                        | ERROR             | Drive Harrie               |                             | On    | On       | Continue*2      | inserted or removed      |  |
| 2302                        |                   |                            |                             |       |          |                 |                          |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being

<sup>\*2 :</sup> The CPU module operation status when an error occurs can be set at the parameters. (LED display will change accordingly.)

|     | Error<br>Code<br>(SD0) <sup>*1</sup> | Error Contents and Cause   | Corrective Action  | Corresponding<br>CPU                                      |  |
|-----|--------------------------------------|--|--|---|--|
| 200 | 240                                  | The contents of the boot file are incorrect.   | Check the boot setting.  | Q00J/Q00/<br>Q01 <sup>*12</sup><br>Qn(H)<br>QnPH<br>QnPRH |  |
| 22  | 2210                                 | There is no boot file in the drive designated by the parameter enabled drive switch even though the Boot DIP switch is ON.   | Check and correct the valid parameter drive settings made by the DIP switches. Set the boot file to the drive specified by the parameter drive DIP switches.           | QnA   |  |
| 22  | 211                                  | File formatting failed at a boot.  | <ul> <li>Reboot.</li> <li>CPU module hardware fault. (Contact your local Mitsubishi representative, explaining a detailed description of the problem.)</li> </ul>      | QnPRH   |  |
| 23  | 300                                  | <ul> <li>A memory card was removed without switching the memory card in/out switch OFF.</li> <li>The memory card in/out switch is turned ON although a memory card is not actually installed.</li> </ul> | <ul> <li>Remove memory card after placing<br/>the memory card in/out switch OFF.</li> <li>Turn on the card insert switch after<br/>inserting a memory card.</li> </ul> | QnA<br>Qn(H)  |  |
| 23  | 301                                  | <ul><li>The memory card has not been formatted.</li><li>Memory card format status is incorrect.</li></ul>  | <ul> <li>Format memory card.</li> <li>Reformat memory card.</li> <li>Check memory card.</li> </ul>   | QnPH<br>QnPRH   |  |
| 23  | 302                                  | A memory card that cannot be used with the CPU module has been installed.  |  |   |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Error Error                 |                   | Common                     | Individual                  | LED Status |         | Operating       | Lilladudetic             |  |
|-----------------------------|-------------------|----------------------------|-----------------------------|------------|---------|-----------------|--------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages          | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN        | ERROR   | Statuses of CPU | Timing                   |  |
| 2400                        | FILE SET<br>ERROR | File name/<br>Drive name   | Parameter<br>number         | Off        | Flicker | Stop            | At power ON/<br>At reset |  |
| 2401                        | FILE SET<br>ERROR | File name/<br>Drive name   | Parameter<br>number         | Off        | Flicker | Stop            | At power ON/<br>At reset |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

|    | Error<br>Code<br>(SD0) <sup>*1</sup>  | Error Contents and Cause  | Corrective Action   | Corresponding<br>CPU                  |
|----|---|---|---|---------------------------------------|
|    | Automatic write to standard ROM was performed on the CPU module that is incompatible with automatic write to standard ROM.  (Memory card where automatic write to standard ROM was selected in the boot file was fitted and the parameter enable drive was set to the memory card.) |   | <ul> <li>Execute automatic write to standard ROM on the CPU module which is compatible with automatic write to standard ROM.</li> <li>Using GX Developer, perform write of parameters and programs to standard ROM.</li> <li>Change the memory card for the one where automatic write to standard ROM has not been set, and perform boot operation from the memory card.</li> </ul> | Qn(H) <sup>*12</sup><br>QnPH<br>QnPRH |
| 24 | 400   | The file designated at the PLC file settings in the parameters cannot be found.   | <ul> <li>Read the individual information of the error using peripheral device, check to be sure that the parameter drive name and file name correspond to the numerical values there (parameter number), and correct.</li> <li>Create a file created using parameters, and load it to the CPU module.</li> </ul>  | Ο                                     |
|    |   | The Ethernet parameter that was added for QnACPU, with the function version "B," has been set to QnACPU without the function version "B." | Change to QnACPU with the function version "B".  Delete the Ethernet parameter.   | QnA                                   |
| 32 | Program memory capacity was exceeded by performing boot operation or automatic write to standard ROM.   |   | <ul> <li>Check and correct the parameters (boot setting).</li> <li>Delete unnecessary files in the program memory.</li> <li>Choose "Clear program memory" for boot in the parameter so that boot is started after the program memory is cleared.</li> </ul>   | Qn(H) <sup>*12</sup><br>QnPH<br>QnPRH |
| 22 | 401   | The file designated at the parameter PLC RAS settings fault history area has not been created.  | <ul> <li>Read the individual information of the error using the peripheral device, check to be sure that the parameter drive name and file name correspond to the numerical values there (parameter number), and correct.</li> <li>Check the space remaining in the memory card.</li> </ul>   | Ο                                     |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

| Error                       | Error              | Common                     | Individual                  | LED :      | Status         | Operating                       | Diagnostic                 |  |
|-----------------------------|--------------------|----------------------------|-----------------------------|------------|----------------|---------------------------------|----------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages           | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN        | ERROR          | Statuses of CPU                 | Timing                     |  |
| 2402                        | FILE SET<br>ERROR  | File name/<br>Drive Name   | Parameter<br>number         | Off        | Flicker        | Stop                            | At power ON/<br>At reset   |  |
| 2410                        |                    |                            |                             |            |                |                                 |                            |  |
| 2411                        | FILE OPE.<br>ERROR | File name/<br>Drive name   | Program error location      | Off/<br>On | Flicker/<br>On | Stop/<br>Continue <sup>*2</sup> | When instruction executed. |  |
| 2412                        |                    |                            |                             |            |                |                                 | 0.000.00                   |  |
| 2413                        |                    |                            |                             |            |                |                                 |                            |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored

<sup>\*2 :</sup> The CPU module operation status when an error occurs can be set at the parameters. (LED display will change accordingly.)

|    | Error<br>Code<br>(SD0) <sup>*1</sup>   | Error Contents and Cause   | Corrective Action  | Corresponding<br>CPU |
|----|--|--|--|----------------------|
| 24 | 402  | Though the file register has been set in the pairing setting/tracking setting, the file register does not exist.   | Confirm the file register and parameter.   | Q4AR                 |
| 24 | 410  | The specified program does not exist in the program memory. This error may occur when the ECALL, EFCALL, PSTOP, PSCAN, POFF or PLOW instruction is executed.   | Read the individual information of the error using the peripheral device, check to be sure that the program corresponds to the numerical values there (program location), and correct.  Create a file created using parameters, and load it to the CPU module. |                      |
| 24 | 411  | The specified program exists in the program memory, but has not been registered in the program setting of the Parameter dialog box. This error may occur when the ECALL, EFCALL, PSTOP, PSCAN, POFF or PLOW instruction is executed. | Read the individual information of the error using the peripheral device, check to be sure that the program corresponds to the numerical values there (program location), and correct.   | QnA<br>Qn(H)<br>QnPH |
| 24 | The SFC program file is one that cannot be designated by the sequence program. |  | Read the individual information of the error using the peripheral device, check to be sure that the program corresponds to the numerical values there (program location), and correct.   | QnPRH                |
|    | 413  | No data has been written to the file designated by the sequence program.   | Read the individual information of the error using the peripheral device, check to be sure that the program corresponds to the numerical values there (program location), and correct.  Check to ensure that the designated file has not been write protected. |                      |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Error<br>Code | Error              | Common<br>Information    | Individual<br>Information | LED S | Status  | Operating Statuses | Diagnostic               |  |
|---------------|--------------------|--------------------------|---------------------------|-------|---------|--------------------|--------------------------|--|
| (SD0)*1       | Messages           | (SD5 to 15)              | (SD16 to 26)              | RUN   | ERROR   | of CPU             | Timing                   |  |
| 2500          |                    |                          |                           |       |         |                    |                          |  |
| 2501          | CAN'T EXE.<br>PRG. | File name/<br>Drive name |                           | Off   | Flicker | Stop               | At power ON/<br>At reset |  |
| 2502          |                    |                          |                           |       |         |                    |                          |  |
| 2503          |                    |                          |                           |       |         |                    |                          |  |
| 2504          |                    |                          |                           |       |         |                    |                          |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

|  | Error<br>Code<br>(SD0) <sup>*1</sup> | Error Contents and Cause  | Corrective Action  | Corresponding<br>CPU            |
|--|--------------------------------------|---|--|---------------------------------|
|  | 2500                                 | <ul> <li>There is a program file that uses a device that is out of the range set in the PLC parameter device setting.</li> <li>After the PLC parameter setting is changed, only the parameter is written into the PLC.</li> </ul> | <ul> <li>Read the common information of the error using the peripheral device, check to be sure that the parameter device allocation setting and the program file device allocation correspond to the numerical values there (file name), and correct if necessary.</li> <li>If PLC parameter device setting is changed, batch-write the parameter and program file into the PLC.</li> </ul> | 0                               |
|  | 2501                                 | There are multiple program files although "none" has been set at the PLC parameter program settings.  | Edit the PLC parameter program setting to "yes". Alternatively, delete unneeded programs.  | QnA<br>Qn(H)<br>QnPH<br>QnPRH   |
|  |                                      | <ul> <li>There are three or more program files.</li> <li>The program name differs from the program contents.</li> </ul>   | <ul> <li>Delete unnecessary program files.</li> <li>Match the program name with the program contents.</li> </ul>   | Q00J/Q00/Q01                    |
|  | 2502                                 | The program file is incorrect. Alternatively, the file contents are not those of a sequence program.  | Check whether the program version is * * * .QPG, and check the file contents to be sure they are for a sequence program.   | 0                               |
|  |                                      | The program file is not the one for the redundant CPU.  | Create a program using GX Developer or PX Developer for which the PLC type has been set to the redundant CPU (Q12PRH/Q25PRH), and write it to the CPU module.  | QnPRH                           |
|  | 2503                                 | There are no program files at all.  |  | 0                               |
|  | 2504                                 | Two or more SFC normal programs or control programs have been designated.   | <ul> <li>Check program configuration.</li> <li>Check parameters and program configuration.</li> </ul>  | QnA<br>Qn(H)<br>QnPH<br>QnPRH   |
|  | *4 . 0                               | There are two or more SFC programs.   | Reduce the SFC programs to one.  | Q00J/Q00/<br>Q01 <sup>*12</sup> |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

 $<sup>^{\</sup>star}$ 12: This applies to the CPU module of function version B or later.

| Error                       | Гинан              | Common                     | Individual                  | LED S | Status  | Operating       | Diamastic                             |  |
|-----------------------------|--------------------|----------------------------|-----------------------------|-------|---------|-----------------|---------------------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Error<br>Messages  | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN   | ERROR   | Statuses of CPU | Diagnostic<br>Timing                  |  |
| 3000                        | PARAMETER<br>ERROR | File name/<br>Drive name   | Parameter<br>number         | Off   | Flicker | Stop            | At power ON/<br>At reset/<br>STOP→RUN |  |
| 3001                        |                    |                            |                             |       |         |                 |                                       |  |
| 3002                        |                    |                            |                             |       |         |                 |                                       |  |
|                             | PARAMETER<br>ERROR | File name/<br>Drive name   | Parameter<br>number         | Off   | Flicker | Stop            | When an END instruction executed.     |  |
| 3003                        | PARAMETER<br>ERROR | File name/<br>Drive name   | Parameter<br>number         | Off   | Flicker | Stop            | At power ON/<br>At reset/<br>STOP→RUN |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

|    | Error<br>Code<br>(SD0) <sup>*1</sup> | Error Contents and Cause   | Corrective Action  | Corresponding<br>CPU         |
|----|--------------------------------------|--|--|------------------------------|
|    |                                      | In a multiple CPU system, the intelligent function module under control of another CPU is specified in the interrupt pointer setting of the PLC parameter.   | <ul> <li>Specify the head I/O number of the intelligent function module under control of the host CPU.</li> <li>Delete the interrupt pointer setting of the parameter.</li> </ul>  | Qn(H) <sup>*12</sup><br>QnPH |
| 30 | 000                                  | In a multiple CPU system, the intelligent function module under control of another CPU is specified in the interrupt pointer setting of the PLC parameter.  The PLC parameter settings for timer time limit setting, the RUN-PAUSE contact, the common pointer number, number of vacant slots, or system interrupt settings are outside the range that can be used by the CPU module.  In a program memory check, the check capacity has not been set within the range applicable for the CPU module.  The parameter settings in the error individual information (special register SD16) are illegal.  The parameter settings are corrupted.  When "Use the following file" is selected for the file register in the PLC file setting of the PLC parameter dialog box, the specified file does not exist although the file register capacity.  The number of devices set at the PLC parameter device settings exceeds the possible CPU module range.  Corrective Action  Specify the head I/O number of the intelligent function module under control of the host CPU.  Delete the interrupt pointer setting of the host CPU.  Delete the interrupt pointer setting of the parameter.  Read the detailed information of the error using the peripheral device, check the parameter settings, the possible cause is the memory card. (Contact your local Mitsubishi representative.)  Change the file register file for the one refresh-enabled in the whole range.  Parameter device settings exceeds the possible CPU module range.  Change the file register file for the one refresh-enabled in the whole range.  Parameter device settings exceeds the memory error of the CPU module's built-in RAM or program memory or the error is still generated following the correction of the parameter settings, the possible cause is the memory error of the CPU module's built-in RAM or program memory or the memory error of the CPU module's built-in RAM or program memory or the memory card. (Contact your local volume file of the parameter settings, the possible cause is the memory error of the CPU module's bui | O<br>Rem<br>QnA<br>Qn(H)<br>QnPH<br>QnPRH  |                              |
|    |                                      | The automatic refresh range of the multiple CPU system exceeded the file   |  | Qn(H) <sup>*12</sup><br>QnPH |
| 30 | 003                                  | parameter device settings exceeds the  | error using the peripheral device, check the parameter items corresponding to those numerical values (parameter numbers), and correct when necessary.  • If the error is still generated following the correction of the parameter settings, the possible cause is the memory errorm of the CPU module's built-in RAM or program memory or | 0                            |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

| Error                       | Error              | Common                     | Individual                  | LED : | Status  | Operating       | Diagnostic                            |  |
|-----------------------------|--------------------|----------------------------|-----------------------------|-------|---------|-----------------|---------------------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages           | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN   | ERROR   | Statuses of CPU | Timing                                |  |
| 3004                        | PARAMETER<br>ERROR | File name/<br>Drive name   | Parameter<br>number         | Off   | Flicker | Stop            | At power ON/<br>At reset/<br>STOP→RUN |  |
| 3006                        | PARAMETER<br>ERROR | File name/<br>Drive name   | Parameter<br>number         | Off   | Flicker | Stop            | At power ON/<br>At reset/<br>STOP→RUN |  |
| 3007                        |                    |                            |                             |       |         |                 |                                       |  |
| 3009                        |                    |                            |                             |       |         |                 |                                       |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Error<br>Code<br>(SD0) <sup>*1</sup> | Error Contents and Cause   | Corrective Action  | Corresponding<br>CPU |
|--------------------------------------|--|--|----------------------|
| 3004                                 | The parameter file is incorrect. Alternatively, the contents of the file are not parameters.   | Check whether the parameter file version is * * * .QPA, and check the file contents to be sure they are parameters.  | 0                    |
| 3006                                 | <ul> <li>The high speed interrupt is set in a Q02CPU.</li> <li>The high speed interrupt is set in a multiple CPU system.</li> <li>The high speed interrupt is set when a QA1S□B or QA□B is used.</li> <li>No module is installed at the I/O address designated by the high speed interrupt.</li> </ul> | <ul> <li>Delete the setting of the Q02CPU's high speed interrupt. To use high speed interrupts, change the CPU module to one of the Q02H/Q06H/Q12H/Q25HCPU.</li> <li>To use a multiple CPU system, delete the setting of the high-speed interrupt. To use high speed interrupts, change the system to a single CPU system.</li> <li>To use either the QA1S□B or QA□B, delete the setting of the high speed interrupt. To use high speed interrupts, do not use the QA1S□B/QA□B.</li> <li>Re-examine the I/O address designated by the high speed interrupt setting.</li> </ul> | Qn(H)* <sup>15</sup> |
| 3007                                 | The parameter file in the drive specified as valid parameter drive by the DIP switches is inapplicable for the CPU module.   | Create parameters using GX Developer, and write them to the drive specified as valid parameter drive by the DIP switches.  | QnPRH                |
| 3009                                 | In a multiple CPU system, the modules for AnS, A, Q2AS and QnA have been set to multiple control CPUs.   | Re-set the parameter I/O assignment to control them under one CPU module. (Change the parameters of all CPUs in the multiple CPU system.)  | Qn(H)*12             |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

<sup>\*15:</sup> This applies to the CPU module with the serial No. of which first 5 digits "04102" or later.

| Error           | Error              | Common                     | Individual                  | LED S | Status  | Operating       | Diagnostic                            |  |
|-----------------|--------------------|----------------------------|-----------------------------|-------|---------|-----------------|---------------------------------------|--|
| Code<br>(SD0)*1 | Messages           | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN   | ERROR   | Statuses of CPU | Timing                                |  |
| 3010            |                    |                            |                             |       |         |                 |                                       |  |
| 3012            |                    |                            |                             |       |         |                 |                                       |  |
| 3013            | PARAMETER<br>ERROR | File name/<br>Drive name   | Parameter<br>number         | Off   | Flicker | Stop            | At power ON/<br>At reset/<br>STOP→RUN |  |
| 3014            | PARAMETER<br>ERROR | File name/<br>Drive name   | Parameter<br>number         | Off   | Flicker | Stop            | At power ON/<br>At reset/<br>STOP→RUN |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

|  | Error<br>Code<br>(SD0)*1   | Error Contents and Cause  | Corrective Action   | Corresponding<br>CPU                           |
|--|--|---|---|--|
|  | 3010   | The parameter-set number of CPU modules differs from the actual number in a multiple CPU system.  | Match the number of (CPU modules in multiple CPU setting) - (CPUs set as empty in I/O assignment) with that of actually mounted CPU modules.  | Qn(H) <sup>*12</sup><br>QnPH                   |
|  | 3012   | Multiple CPU setting or control CPU setting differs from that of the reference CPU in a multiple CPU system.  | Match the multiple CPU setting or control CPU setting in the PLC parameter with that of the reference CPU (CPU No.1).   | Q00/Q01 <sup>*12</sup><br>Qn(H) <sup>*12</sup> |
|  | is any of the followings in a multiple CPU system.  • When a bit device is specified as a refresh device, a number other than a multiple of 16 is specified for the refresh-starting device.  • The device specified is other than the one that may be specified.  • The number of send points is an odd number.  In a multiple CPU system, the multiple CPU automatic refresh setting is any of the following.  • The total number of transmission points is greater than the maximum number of refresh points. | Check the following in the multiple CPU automatic refresh parameters and make correction.  • When specifying the bit device, specify a multiple of 16 for the refresh starting device.  • Specify the device that may be specified for the refresh device.  • Set the number of send points to an even number.          | Qn(H) <sup>*12</sup><br>QnPH  |  |
|  |  | CPU automatic refresh setting is any of the following.  • The total number of transmission points is greater than the maximum   | Check if the following settings have been made in the refresh setting of the multiple CPU setting, and correct the settings as necessary.  • The total number of transmission points is within the maximum number of refresh points.              | Q00/Q01*12                                     |
|  | 3014   | <ul> <li>In a multiple CPU system, the online module change parameter (multiple CPU system parameter) settings differ from those of the reference CPU.</li> <li>In a multiple CPU system, the online module change setting is enabled although the CPU module mounted does not support online module change.</li> </ul> | <ul> <li>Match the online module change parameter with that of the reference CPU.</li> <li>If the CPU module that does not support online module change is mounted, replace it with the CPU module that supports online module change.</li> </ul> | QnPH   |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

| Error<br>Code | Error               | Common<br>Information    | Individual<br>Information |     | Status  | Operating Statuses | Diagnostic                            |  |
|---------------|---------------------|--------------------------|---------------------------|-----|---------|--------------------|---------------------------------------|--|
| (SD0)*1       | Messages            | (SD5 to 15)              | (SD16 to 26)              | RUN | ERROR   | of CPU             | Timing                                |  |
| 3100          | LINK PARA.<br>ERROR | File name/<br>Drive name | Parameter number          | Off | Flicker | Stop               | At power ON/<br>At reset/<br>STOP→RUN |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Error<br>Code<br>(SD0) <sup>*1</sup> | Error Contents and Cause   | Corrective Action  | Corresponding<br>CPU                                   |
|--------------------------------------|--|--|--|
|                                      | In a multiple CPU system, the MELSECNET/H under control of another CPU is specified as the head I/O number in the network setting parameter of the MELSECNET/H.  | <ul> <li>Delete the MELSECNET/H network<br/>parameter of the MELSECNET/H under<br/>control of another CPU.</li> <li>Change the setting to the head I/O<br/>number of the MELSECNET/H under<br/>control of the host CPU.</li> </ul>   | Q00/Q01 <sup>*12</sup><br>Qn(H) <sup>*12</sup><br>QnPH |
|                                      | The network parameters of the MELSECNET/H operating in the ordinary station were rewritten to the control station, or the network parameters of the MELSECNET/H operating in the control station were rewritten to the ordinary station.(The network parameters are reflected on the module side by making a reset.)   | Reset the CPU module.  | Qn(H) <sup>*12</sup><br>QnPH<br>QnPRH                  |
| 3100                                 | <ul> <li>The number of actually installed modules is different from that designated in the number of modules setting parameter of MELSECNET/H.</li> <li>The head I/O number of actually installed modules is different from that designated in the network parameter of MELSECNET/H.</li> <li>Some data in the parameter cannot be handled.</li> <li>The station type of MELSECNET/H has been changed while the power is on.(RESET¬RUN is required to change the station type.)</li> </ul> | <ul> <li>Check the network parameters and mounting status, and if they differ, match the network parameters and mounting status.  If any network parameter has been corrected, write it to the CPU module.</li> <li>Confirm the setting of the number of extension stages of the extension base units.</li> <li>Check the connection status of the extension base units and extension cables.  When the GOT is bus-connected to the main base unit and extension base units, also check their connection status.</li> <li>If the error occurs after the above checks, the possible cause is a hardware fault. (Contact your local Mitsubishi representative, explaining a detailed description of the problem.)</li> </ul> | QCPU   |
|                                      | Although the QnACPU is a control station or master station, the network parameters have not been written.  | Correct and write the network parameters.     If the error occurs after correction, it suggests a hardware fault. (Contact your local Mitsubishi representative.)  | QnA  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

| Error                       | Error               | Common                     | Individual                  | LED S | Status  | Operating       | Diagnostic                            |  |
|-----------------------------|---------------------|----------------------------|-----------------------------|-------|---------|-----------------|---------------------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages            | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN   | ERROR   | Statuses of CPU | Timing                                |  |
|                             | LINK PARA.<br>ERROR | File name/<br>Drive name   | Parameter<br>number         | Off   | Flicker | Stop            | When an END instruction executed.     |  |
| 3101                        | LINK PARA.<br>ERROR | File name/<br>Drive name   | Parameter number            | Off   | Flicker | Stop            | At power ON/<br>At reset/<br>STOP→RUN |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Error<br>Code<br>(SD0) <sup>*1</sup> | Error Contents and Cause   | Corrective Action   | Corresponding<br>CPU                  |
|--------------------------------------|--|---|---------------------------------------|
|                                      | The link refresh range exceeded the file register capacity.  | Change the file register file for the one that enables entire range refresh.  |                                       |
|                                      | <ul> <li>When the station number of the MELSECNET/H module is 0, the inter-PLC network parameter setting has been made.</li> <li>When the station number of the MELSECNET/H module is other than 0, the remote master parameter setting has been made.</li> </ul>  | Correct the type or station number of the MELSECNET/H module in the network parameter to meet the used system.  | Qn(H) <sup>*12</sup><br>QnPH<br>QnPRH |
| 3101                                 | <ul> <li>The network No. specified by a network parameter is different from that of the actually mounted network.</li> <li>The head I/O No. specified by a network parameter is different from that of the actually mounted I/O unit.</li> <li>The network class specified by a network parameter is different from that of the actually mounted network.</li> <li>The network refresh parameter of the MELSECNET/H, MELSECNET/10 is out of the specified area.</li> </ul> | <ul> <li>Check the network parameters and mounting status, and if they differ, match the network parameters and mounting status.  If any network parameter has been corrected, write it to the CPU module.</li> <li>Confirm the setting of the number of extension stages of the extension base units.</li> <li>Check the connection status of the extension base units and extension cables.  When the GOT is bus-connected to the main base unit and extension base units, also check their connection status.</li> <li>If the error occurs after the above checks, the cause is a hardware fault. (Contact your local Mitsubishi representative, explaining a detailed description of the problem.)</li> </ul> | 0                                     |
|                                      | A multi-remote I/O network was configured using a module that does not support the MELSECNET/H multi-remote I/O network.   | Use a module that supports the MELSECNET/H multi-remote I/O network.  | QnPH                                  |
|                                      | <ul> <li>The system A of the MELSECNET/H remote master station has been set to other than Station No. 0.</li> <li>The system B of the MELSECNET/H remote master station has been set to Station No. 0.</li> </ul>  | <ul> <li>Set the system A of the MELSECNET/<br/>H remote master station to Station No.</li> <li>0.</li> <li>Set the system B of the MELSECNET/<br/>H remote master station to any of<br/>Station No. 1 to 64.</li> </ul>  | QnPRH                                 |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

| Error                       | Error               | Common                     | Individual                  | LED S | Status  | Operating       | Diagnostic                            |  |
|-----------------------------|---------------------|----------------------------|-----------------------------|-------|---------|-----------------|---------------------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages            | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN   | ERROR   | Statuses of CPU | Timing                                |  |
| 3102                        | LINK PARA.<br>ERROR | File name/<br>Drive name   | Parameter<br>number         | Off   | Flicker | Stop            | At power ON/<br>At reset/<br>STOP→RUN |  |
| 3103                        | LINK PARA.<br>ERROR | File name/<br>Drive name   | Parameter<br>number         | Off   | Flicker | Stop            | At power ON/<br>At reset/<br>STOP→RUN |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Error<br>Code<br>(SD0)*1 | Error Contents and Cause  | Corrective Action   | Corresponding<br>CPU                                   |
|--------------------------|---|---|--|
|                          | <ul> <li>The network module detected a<br/>network parameter error.</li> <li>A MELSECNET/H network parameter<br/>error was detected.</li> </ul>   | <ul> <li>Correct and write the network<br/>parameters.</li> <li>If the error occurs after correction, it<br/>suggests a hardware fault. (Contact<br/>your local Mitsubishi representative.)</li> </ul>  | 0  |
| 3102                     | <ul> <li>The station No. specified in pairing setting are not correct.</li> <li>The stations are not numbered consecutively.</li> <li>Pairing setting has not been made for the CPU module at the normal station.</li> </ul>  | Refer to the troubleshooting of the network module, and if the error is due to incorrect pairing setting, reexamine the pairing setting of the network parameter.   | QnPRH  |
|                          | In a multiple CPU system, the Q series Ethernet interface module under control of another station is specified as the head I/O number of the Ethernet network parameter.  | <ul> <li>Delete the Ethernet network parameter of the Q series Ethernet interface module under control of another station.</li> <li>Change the setting to the head I/O number of the Q series Ethernet interface module under control of the host station.</li> </ul> | Q00/Q01 <sup>*12</sup><br>Qn(H) <sup>*12</sup><br>QnPH |
| 3103                     | <ul> <li>Although the number of modules has been set to 1 or greater number in the Ethernet module count setting parameter setting, the number of actually mounted module is 0.</li> <li>The head I/O No. of the Ethernet network parameter differs from the I/O No. of the actually mounted module.</li> </ul> | Correct and write the network parameters.   | O<br>Rem   |
|                          | <ul> <li>AJ71QE71 does not exist in the position of I/O number set by the parameter.</li> <li>I/O number designation is overlapping.</li> <li>Numbers of the network parameter and loaded AJ71QE71 are different.</li> <li>Ethernet (parameter + dedicated instruction) is set to more than 5.</li> </ul>       | If the error occurs after correction, it suggests a hardware fault. (Contact your local Mitsubishi representative.)   | QnA  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

 $<sup>^{\</sup>star}$ 12: This applies to the CPU module of function version B or later.

| Error                       | Error               | Common                     | Individual                  | LED S | Status  | Operating       | Diagnostic                            |  |
|-----------------------------|---------------------|----------------------------|-----------------------------|-------|---------|-----------------|---------------------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages            | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN   | ERROR   | Statuses of CPU | Timing                                |  |
| 3104                        |                     |                            |                             |       |         |                 |                                       |  |
| 3105                        | LINK PARA.<br>ERROR | File name/<br>Drive name   | Parameter<br>number         | Off   | Flicker | Stop            | At power ON/<br>At reset/<br>STOP→RUN |  |
| 3106                        | LINK PARA.<br>ERROR | File name/<br>Drive name   | Parameter<br>number         | Off   | Flicker | Stop            | When an END instruction executed.     |  |
|                             | LINK PARA.<br>ERROR | File name                  | Parameter<br>number         | Off   | Flicker | Stop            | At power ON/<br>At reset/<br>STOP→RUN |  |
| 3107                        | LINK PARA.<br>ERROR | File name                  | Parameter<br>number         | Off   | Flicker | Stop            | At power ON/<br>At reset/<br>STOP→RUN |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

|    | Error<br>Code<br>(SD0) <sup>*1</sup> | Error Contents and Cause   | Corrective Action  | Corresponding<br>CPU                                   |
|----|--------------------------------------|--|--|--|
| 31 | 104                                  | <ul> <li>Ethernet and MELSECNET/10 use the same network number.</li> <li>Network number, station number or group number set by the network parameter is out of range.</li> <li>The I/O No. is specified for the used CPU module.</li> <li>The Ethernet-specific parameter setting is not normal.</li> </ul>  | Correct and write the network parameters. If the error occurs after correction, it suggests a hardware fault. (Contact your local Mitsubishi representative.)  | O<br>Rem   |
|    |                                      | In a multiple CPU system, the Q series CC-Link module under control of another station is specified as the head I/O number of the CC-Link network parameter.   | <ul> <li>Delete the CC-Link network parameter of the Q series CC-Link module under control of another station.</li> <li>Change the setting to the head I/O number of the Q series CC-Link module under control of the host station.</li> </ul> | Q00/Q01 <sup>*12</sup><br>Qn(H) <sup>*12</sup><br>QnPH |
| 31 | 105                                  | <ul> <li>Though the number of CC-Link module set in the network parameters is one or more, the actually mounted number of units is zero.</li> <li>The head I/O number in the common parameters is different from that of the actually mounted module.</li> <li>The station class for the CC-Link module quantity set parameters is different from that of the actually mounted station.</li> </ul> | Correct and write the network parameters. If the error occurs after correction, it suggests a hardware fault. (Contact your local Mitsubishi representative.)  | O<br>Rem   |
|    |                                      | The contents of the Ethernet parameter are incorrect.  | Write after correcting parameters.   | QnA  |
| 31 | 106                                  | The CC-Link link refresh range exceeded the file register capacity.  | Change the file register file for the one refresh-enabled in the whole range.  | Qn(H) <sup>*12</sup><br>QnPH<br>QnPRH                  |
|    |                                      | The network refresh parameter for CC-Link is out of range.   | Check the parameter setting.   | QCPU<br>Rem  |
|    | 107                                  | <ul> <li>The CC-Link parameter setting is incorrect.</li> <li>The set mode is not be allowed for the version of the mounted CC-Link module.</li> </ul>   | Check the parameter setting.   | O<br>Rem   |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

| Error                       | Error              | Common                     | Individual                  | LED S | Status  | Operating       | Diagnostic                            |  |
|-----------------------------|--------------------|----------------------------|-----------------------------|-------|---------|-----------------|---------------------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages           | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN   | ERROR   | Statuses of CPU | Timing                                |  |
| 3200                        |                    |                            |                             |       |         |                 |                                       |  |
| 3201                        |                    |                            |                             |       |         |                 |                                       |  |
| 3202                        | SFC PARA.<br>ERROR | File name                  | Parameter<br>number         | Off   | Flicker | Stop            | STOP→RUN                              |  |
| 3203                        |                    |                            |                             |       |         |                 |                                       |  |
| 3300                        |                    |                            |                             |       |         |                 | At power ON/<br>At reset/<br>STOP→RUN |  |
| 3301                        | SP. PARA<br>ERROR  | File name                  | Parameter<br>number         | Off   | Flicker | Stop            | When an END instruction executed.     |  |
|                             |                    |                            |                             |       |         |                 | At power ON/<br>At reset/<br>STOP→RUN |  |
| 3302                        |                    |                            |                             |       |         |                 | STOFARON                              |  |
| 3303                        | SP. PARA<br>ERROR  | File name/<br>Drive name   | Parameter<br>number         | Off   | Flicker | Stop            | At power ON/<br>At reset/<br>STOP→RUN |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

|  | Error<br>Code<br>(SD0) <sup>*1</sup> | Error Contents and Cause  | Corrective Action  | Corresponding<br>CPU                                    |
|--|--------------------------------------|---|--|---|
|  | 3200                                 | The parameter setting is illegal.  • Though Block 0 was set to "Automatic start" in the SFC setting of the PLC parameter dialog box, Block 0 does not exist.              | Read the common information of the   | QnA<br>Q00J/Q00/<br>Q01 <sup>*12</sup><br>QnPH<br>QnPRH |
|  | 3201                                 | The block parameter setting is illegal.  The number of step relays specified in the device setting of the PLC parameter dialog box is less than that used in the program. | error using the peripheral device, check error step corresponding to its numerical value (program error location), and correct the problem.  | QnA<br>Qn(H)<br>QnPH                                    |
|  | 3203                                 | The execution type of the SFC program specified in the program setting of the PLC parameter dialog box is other than scan execution.                                      |  | QnPRH   |
|  | 3300                                 | The head I/O number in the intelligent function module parameter set on GX Configurator differs from the actual I/O number.   | Check the parameter setting.   | QCPU<br>Rem   |
|  | 3301                                 | The refresh setting of the intelligent function module exceeded the file register capacity.   | Change the file register file for the one which allows refresh in the whole range.   | Q00J/Q00/Q01<br>Qn(H) <sup>*12</sup><br>QnPH<br>QnPRH   |
|  |                                      | The intelligent function module's refresh parameter setting is outside the available range.   | Check the parameter setting.   | QCPU<br>Rem   |
|  | 3302                                 | The intelligent function module's refresh parameter are abnormal.   | Check the parameter setting.   | QCPU  |
|  | 3303                                 | In a multiple CPU system, automatic refresh setting or similar parameter setting was made to the intelligent function module under control of another station.            | <ul> <li>Delete the automatic refresh setting or similar parameter setting of the intelligent function module under control of another CPU.</li> <li>Change the setting to the automatic refresh setting or similar parameter setting of the intelligent function module under control of the host CPU.</li> </ul> | Q00/Q01 <sup>*12</sup><br>Qn(H) <sup>*12</sup><br>QnPH  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

| Error<br>Code<br>(SD0)*1 | Error<br>Messages    | Common<br>Information<br>(SD5 to 15) | Individual<br>Information<br>(SD16 to 26) | LED S | Status<br>ERROR | Operating<br>Statuses<br>of CPU | Diagnostic<br>Timing                  |  |
|--------------------------|----------------------|--------------------------------------|---|-------|-----------------|---------------------------------|---------------------------------------|--|
| 3400                     |                      |                                      |   |       |                 |                                 |                                       |  |
| 3401                     | REMOTE<br>PASS. ERR. |                                      |   | Off   | Flicker         | Stop                            | At power ON/<br>At reset/<br>STOP→RUN |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Error<br>Code<br>(SD0) <sup>*1</sup>   | Error Contents and Cause   | Corrective Action   | Corresponding<br>CPU                         |
|--|--|---|--|
|  | The head I/O number of the target module in the remote password file is set to other than 0 <sub>H</sub> to 0FF0 <sub>H</sub> .  | Change the head I/O number of the target module to within the 0₁ to 0FF0₁ range.  | Qn(H) <sup>*12</sup><br>QnPH<br>QnPRH<br>Rem |
| 3400   | The head I/O number of the target module of the remote password is outside the following range.  • Q00JCPU: 0,to 1E0,  • Q00CPU/Q01CPU: 0,to 3E0,  | Change the head I/O number of the target module of the remote password for the number within the following range.  • Q00JCPU: 0, to 1E0,  • Q00CPU/Q01CPU: 0, to 3E0,   | Q00J/Q00/<br>Q01 <sup>*12</sup>              |
|  | Position specified as the head I/O number of the remote password file is incorrect due to one of the following reasons:  • Module is not loaded.  • Other than a the intelligent function module (I/O, A, QnA module)  • Intelligent function module other than the Q series serial communication module, modem interface module or Ethernet module  • Q series serial communication module or Ethernet module of function version A | Mount the Q series serial communication module, modem interface module or Ethernet module of function version B or later in the position specified in the head I/O No. of the remote password file.   | Qn(H) <sup>*12</sup><br>QnPH<br>QnPRH<br>Rem |
| 3401   | Any of the following modules is not mounted on the slot specified for the head I/O number of the remote password.  • Serial communication module of function version B or later  • Ethernet module of function version B or later  • Modem interface module of function version B or later   | Mount any of the following modules in the position specified for the head I/O number of the remote password.  • Serial communication module of function version B or later  • Ethernet module of function version B or later  • Modem interface module of function version B or later | Q00J/Q00/<br>Q01* <sup>12</sup>              |
| The Q series serial communication module, modem interface module or Ethernet module of function version B or later controlled by another CPU was specified in a multiple CPU system. |  | Change it for the Ethernet module of function version B or later connected by the host CPU.     Delete the remote password setting.   | Qn(H) <sup>*12</sup><br>QnPH                 |

<sup>\*1 :</sup> Characters in parentheses () indicate the special register numbers where individual information is being stored.

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

| Error                       | Error                | Common                     | Individual                  | LED : | Status  | Operating       | Diagnostic                            |  |
|-----------------------------|----------------------|----------------------------|-----------------------------|-------|---------|-----------------|---------------------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages             | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN   | ERROR   | Statuses of CPU | Timing                                |  |
| 4000                        |                      |                            |                             |       |         |                 |                                       |  |
| 4001                        |                      |                            |                             |       |         |                 |                                       |  |
| 4002                        | INSTRCT.<br>CODE ERR | Program error location     |                             | Off   | Flicker | Stop            |                                       |  |
| 4003                        |                      |                            |                             |       |         |                 | At power ON/<br>At reset/<br>STOP→RUN |  |
| 4004                        |                      |                            |                             |       |         |                 |                                       |  |
| 4010                        | MISSING<br>END INS.  | Program error location     |                             | Off   | Flicker | Stop            |                                       |  |
| 4020                        | - CAN'T SET(P)       | Program error              |                             | Off   | Flicker | Stop            |                                       |  |
| 4021                        |                      | location                   |                             | J.,   |         |                 |                                       |  |
| 4030                        | CAN'T SET(I)         | Program error location     |                             | Off   | Flicker | Stop            |                                       |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

|   | Error<br>Code<br>(SD0)*1 | Error Contents and Cause   | Corrective Action  | Corresponding<br>CPU   |
|---|--------------------------|--|--|--|
|   | 4000                     | <ul> <li>The program contains an instruction code that cannot be decoded.</li> <li>An unusable instruction is included in the program.</li> </ul>  |  | 0  |
|   | 4001                     | The program contains a dedicated instruction for SFC although it is not an SFC program.  |  | QnA<br>Q00J/Q00/<br>Q01 <sup>*12</sup><br>Qn(H)<br>QnPH<br>QnPRH |
|   | 4002                     | <ul> <li>The extension instruction designated<br/>by the program has an incorrect<br/>instruction name.</li> <li>The extension instruction specified in<br/>the program cannot be executed by<br/>the specified module.</li> </ul> | Read the common information of the   | O  |
|   | 4003                     | The extension instruction designated by the program has an incorrect number of devices.  | error using a peripheral device, check<br>error step corresponding to its numerical<br>value (program error location), and | Rem  |
| · | 4004                     | The extension instruction designated by the program a device which cannot be used.   | correct the problem.   |  |
|   | 4010                     | There is no END (FEND) instruction in the program.   |  | 0  |
|   | 4020                     | The total number of internal file pointers used by the program exceeds the number of internal file pointers set in the parameters.   |  | QnA<br>Qn(H)<br>QnPH<br>QnPRH                                    |
|   | 4021                     | The common pointer Nos. assigned to files overlap. The local pointer Nos. assigned to files overlap.   |  | 0  |
|   | 4030                     | The allocation pointer Nos. assigned by files overlap.   |  |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

| Error                       | Error              | Common                     | Individual                  | LED S      | Status         | Operating                       | Diagnostic                 |  |
|-----------------------------|--------------------|----------------------------|-----------------------------|------------|----------------|---------------------------------|----------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages           | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN        | ERROR          | Statuses of CPU                 | Timing                     |  |
| 4100                        |                    |                            |                             |            |                |                                 |                            |  |
| 4101                        |                    |                            |                             |            |                |                                 |                            |  |
| 4102                        | OPERATION<br>ERROR | Program error<br>location  |                             | Off/<br>On | Flicker/<br>On | Stop/<br>Continue <sup>*2</sup> | When instruction executed. |  |
| 4103                        |                    |                            |                             |            |                |                                 |                            |  |
| 4104                        |                    |                            |                             |            |                |                                 |                            |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored

<sup>\*2 :</sup> The CPU module operation status when an error occurs can be set at the parameters. (LED display will change accordingly.)

|  | Error<br>Code<br>(SD0) <sup>*1</sup> | Error Contents and Cause  | Corrective Action  | Corresponding<br>CPU                                     |
|--|--------------------------------------|---|--|--|
|  | 4100                                 | The instruction cannot process the contained data.  |  |  |
|  | 4101                                 | <ul> <li>The designated device number for data processed by the instruction exceeds the usable range.</li> <li>Alternatively, the stored data or constants for the devices designated by the instruction exceeds the usable range.</li> <li>In the settings of write to the host CPU shared memory, the write designation disabled area is specified as the write destination address.</li> </ul> | Read the common information of the error using the peripheral device, check error step corresponding to its numerical value (program error location), and correct the problem.   | O<br>Rem   |
|  | 4102                                 | In a multiple CPU system, the link direct device (J  was specified for the network module under control of another station.   | <ul> <li>Delete from the program the link direct device which specifies the network module under control of another CPU.</li> <li>Using the link direct device, specify the network module under control of the host CPU.</li> </ul> | Q00/Q01 <sup>*12</sup><br>Qn(H) <sup>*12</sup><br>QnPH   |
|  |                                      | <ul> <li>The network No. or station No. specified for the network dedicated instruction is wrong.</li> <li>The link direct device (J□N□) setting is incorrect.</li> <li>The module No./network No/number of character strings specified for the extension instruction is beyond the allowed range.</li> </ul>   | Read the common information of the error using the peripheral device, check error step corresponding to its numerical value (program error location), and correct the problem.   | O<br>Rem   |
|  | 4103                                 | The configuration of the PID dedicated instruction is incorrect.  |  | QnA<br>Q00J/Q00/<br>Q01 <sup>*12</sup><br>Qn(H)<br>QnPRH |
|  | 4104                                 | The number of settings is beyond the range.   | Read the common information of the error using peripheral device, and check and correct the program corresponding to that value (program error location).  | Q4AR   |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

| Error                       | Error              | Common                     | Individual                  | LED S      | Status         | Operating                       | Diagnostic                 |  |
|-----------------------------|--------------------|----------------------------|-----------------------------|------------|----------------|---------------------------------|----------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages           | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN        | ERROR          | Statuses of CPU                 | Diagnostic<br>Timing       |  |
| 4107                        |                    |                            |                             |            |                |                                 |                            |  |
| 4108                        |                    |                            |                             |            |                |                                 |                            |  |
| 4109                        |                    |                            |                             |            |                |                                 |                            |  |
| 4111                        |                    |                            |                             |            |                |                                 |                            |  |
| 4112                        | OPERATION<br>ERROR | Program error location     |                             | Off/<br>On | Flicker/<br>On | Stop/<br>Continue <sup>*2</sup> | When instruction executed. |  |
| 4120                        |                    |                            |                             |            |                |                                 |                            |  |
| 4121                        |                    |                            |                             |            |                |                                 |                            |  |

<sup>\*1 :</sup> Characters in parentheses () indicate the special register numbers where individual information is being stored.

<sup>\*2 :</sup> The CPU module operation status when an error occurs can be set at the parameters. (LED display will change accordingly.)

|  | Error<br>Code<br>(SD0)*1 | Error Contents and Cause  | Corrective Action   | Corresponding<br>CPU                                   |
|--|--------------------------|---|---|--|
|  | 4107                     | 33 or more multiple CPU dedicated instructions were executed from one CPU module.   | Using the multiple CPU dedicated instruction completion bit, provide interlocks to prevent one CPU module from executing 33 or more multiple CPU dedicated instructions.  | Q00/Q01 <sup>*12</sup><br>Qn(H) <sup>*12</sup><br>QnPH |
|  | 4400                     | Numbers of execution to the CC-Link instruction are beyond 32.  The CC-Link parameter is not set when   | Set the numbers of execution to the CC-<br>Link instruction to 32 or less.<br>Execute the CC-Link instruction after   | - QnA  |
|  | 4108                     | the CC-Link instruction is executed.  | setting the CC-Link parameter.  |  |
|  | 4109                     | With high speed interrupt setting execute PR/PRC,UDCNT1, UDCONT2, PLSY, PWM,SPD,PLOADP,PUNLOADP,PAWP P instruction.   | Delete the high-speed interrupt setting. When using high-speed interrupt, delete the PR, PRC, UDCNT1, UDCNT2, PLSY and PWM instructions.  | Qn(H) <sup>*15</sup>                                   |
|  | 4111                     | An attempt was made to perform write to the CPU shared memory write disable area of the host station CPU module with the instruction.   | Read the common information of the error using GX Developer, and check and correct the error step corresponding   | Q00/Q01 <sup>*12</sup>                                 |
|  | 4112                     | The CPU module that cannot be specified with the multiple CPU dedicated instruction was specified.  | to that value (program error location).   |  |
|  | 4120                     | Since the manual system switching enable flag (special register SM1592) is OFF, manual system switching cannot be executed by the control system switching instruction (SP. CONTSW).                              | To execute control system switching by the SP. CONTSW instruction, turn ON the manual system switching enable flag (special register SM1592).   |  |
|  | 4121                     | In the separate mode, the control system switching instruction (SP. CONTSW) was executed in the standby system CPU module. In the debug mode, the control system switching instruction (SP. CONTSW) was executed. | <ul> <li>Reexamine the interlock signal for the SP. CONTSW instruction, and make sure that the SP. CONTSW instruction is executed in the control system only. (Since the SP. CONTSW instruction cannot be executed in the standby system, it is recommended to provide an interlock using the operation mode signal or like.)</li> <li>As the SP. CONTSW instruction cannot be executed in the debug mode, reexamine the interlock signal related to the operation mode.</li> </ul> | QnPRH  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

 $<sup>^{*}15</sup>$ : This applies to the CPU module with the serial No. of which first 5 digits "04102" or later.

| Error                       | Error               | Common                     | Individual                  | LED S | Status  | Operating       | Diagnostic                 |  |
|-----------------------------|---------------------|----------------------------|-----------------------------|-------|---------|-----------------|----------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages            | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN   | ERROR   | Statuses of CPU | Timing                     |  |
| 4200                        | FOR NEXT<br>ERROR   | Program error location     |                             | Off   | Flicker | Stop            | When instruction executed. |  |
| 4201                        | FOR NEXT            | NEXT Program error         |                             | Off   | Flicker | Stop            | When<br>instruction        |  |
| 4202                        | ERROR               | location                   |                             | Oll   | Tilokei | ickei Stop      | executed.                  |  |
| 4203                        |                     |                            |                             |       |         |                 |                            |  |
| 4210                        |                     |                            |                             |       |         |                 |                            |  |
| 4211                        | CAN'T<br>EXECUTE(P) | Program error location     |                             | Off   | Flicker | Stop            | When instruction           |  |
| 4212                        | EXECUTE(F)          | location                   |                             |       |         |                 | executed.                  |  |
| 4213                        |                     |                            |                             |       |         |                 |                            |  |
| 4220                        | CANUT               | _                          |                             |       |         |                 | When                       |  |
| 4221                        | EXECUTE(I)          | Program error location     |                             | Off   | Flicker | Stop            | instruction executed.      |  |
| 4223                        |                     |                            |                             |       |         |                 |                            |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

|   | Error<br>Code<br>(SD0) <sup>*1</sup>   | Error Contents and Cause  | Corrective Action   | Corresponding<br>CPU |  |
|---|--|---|---|----------------------|--|
| 4 | 4200   | No NEXT instruction was executed following the execution of a FOR instruction.  Alternatively, there are fewer NEXT instructions than FOR instructions. | Read the common information of the error using the peripheral device, check error step corresponding to its numerical                                     |                      |  |
| 4 | although no FOR instruction has been executed.  Alternatively, there are more NEXT instructions than FOR instructions. |   | value (program error location), and correct the problem.  |                      |  |
| 4 | 4202   | More than 16 nesting levels are programmed.   | Keep nesting levels at 16 or under.   | 0                    |  |
| 4 | 4203   | A BREAK instruction was executed although no FOR instruction has been executed prior to that.   |   |                      |  |
| 4 | 4210   | The CALL instruction is executed, but there is no subroutine at the specified pointer.  | Read the common information of the error using the peripheral device, check error step corresponding to its numerical value (program error location), and |                      |  |
| 4 | 4211   | There was no RET instruction in the executed subroutine program.  | correct the problem.  |                      |  |
| 4 | 4212   | The RET instruction was before the FEND instruction in the main program.  |   |                      |  |
| 2 | 4213   | More than 16 nesting levels are programmed.   | Keep nesting levels at 16 or under.   |                      |  |
| 4 | 4220   | Though an interrupt input occurred, the corresponding interrupt pointer does not exist.   | Read the common information of the error using the peripheral device, check   |                      |  |
| 4 | An IRET instruction does not exist in the executed interrupt program.  |   | error step corresponding to its numerical value (program error location), and   | 0                    |  |
| 2 | 4223   | An IRET instruction exists before the FEND instruction of the main program.   | correct the problem.  |                      |  |

<sup>\*1 :</sup> Characters in parentheses () indicate the special register numbers where individual information is being stored.

| Error                       | Error                | Common                     | Individual                  | LED S      | Status         | Operating                       | Diagnostic       |  |
|-----------------------------|----------------------|----------------------------|-----------------------------|------------|----------------|---------------------------------|------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages             | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN        | ERROR          | Statuses of CPU                 | Timing           |  |
| 4230                        |                      |                            |                             |            |                |                                 |                  |  |
| 4231                        | INST.                | D                          |                             |            |                |                                 | When             |  |
| 4235                        | FORMAT<br>ERR.       | Program error location     | Off                         | Flicker    | Stop           | instruction<br>executed.        |                  |  |
| 4300                        | EXTEND<br>INST. ERR. | Program error location     |                             | Off/<br>On | Flicker/<br>On | Stop/<br>Continue <sup>*2</sup> | When instruction |  |
| 4301                        |                      | iocation                   |                             |            | Oii            | Continue                        | executed.        |  |
| 4400                        | SFCP. CODE<br>ERROR  | Program error location     |                             | Off        | Flicker        | Stop                            | STOP→RUN         |  |
| 4410                        | CAN'T                | Program error              |                             | Off        | Flicker        | Stop                            | STOP→RUN         |  |
| 4411                        | SET(BL)              | location                   |                             | Oii        | I lickel       | Stop                            | 3101 →1011       |  |
| 4420                        | CAN'T SET(S)         | Program error location     |                             | Off        | Flicker        | Stop                            | STOP→RUN         |  |

<sup>\*1 :</sup> Characters in parentheses () indicate the special register numbers where individual information is being stored.

<sup>\*2 :</sup> The CPU module operation status when an error occurs can be set at the parameters. (LED display will change accordingly.)

|   | Error<br>Code<br>(SD0)*1 | Error Contents and Cause   | Corrective Action   | Corresponding<br>CPU          |
|---|--------------------------|--|---|-------------------------------|
| 4 | 4230                     | The number of CHK and CHKEND instructions is not equal.  |   | QnA<br>Qn(H)<br>QnPH          |
| 4 | 4231                     | The number of IX and IXEND instructions is not equal.  | Read the common information of the error using the peripheral device, check   | 0                             |
| 4 | 4235                     | The configuration of the check conditions for the CHK instruction is incorrect.  Alternatively, a CHK instruction has been used in a low speed execution type program. | error step corresponding to its numerical value (program error location), and correct the problem.  Read the common information of the error using the peripheral device, check error step corresponding to its numerical | QnA<br>Qn(H)<br>QnPH          |
|   | 4300<br>4301             | The designation of a MELSECNET/ MINI-S3 master module control instruction was wrong.  The designation of an AD57/AD58 control instruction was wrong.                   | Read the common information of the error using the peripheral device, check error step corresponding to its numerical value (program error location), and correct the problem.  | QnA                           |
| 4 | 4400                     | No SFCP or SFCPEND instruction in SFC program.   | Read common information of the error  | QnA<br>Qn(H)<br>QnPH<br>QnPRH |
| 4 | 4410                     | The block number designated by the SFC program exceeds the range.  | using the peripheral device, check error step corresponding to its numerical value (program error location), and  |                               |
| 4 | 4411                     | Block number designations overlap in SFC program.  | correct the problem.  | 0                             |
| 4 | 4420                     | A step number designated in an SFC program exceeds the range.  |   |                               |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

| Error                       | Error             | Common                     | Individual                  | LED : | Status  | Operating       | Diagnostic |  |
|-----------------------------|-------------------|----------------------------|-----------------------------|-------|---------|-----------------|------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages          | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN   | ERROR   | Statuses of CPU | Timing     |  |
| 4421                        |                   |                            |                             |       |         |                 |            |  |
| 4422                        | CAN'T SET(S)      | Program error<br>location  |                             | Off   | Flicker | Stop            | STOP→RUN   |  |
| 4423                        |                   |                            |                             |       |         |                 |            |  |
| 4430                        | SFC EXE.<br>ERROR | File name/<br>Drive name   |                             | Off   | Flicker | Stop            | STOP→RUN   |  |
| 4431                        |                   |                            |                             |       |         |                 |            |  |
| 4432                        |                   |                            |                             |       |         |                 |            |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Error<br>Code<br>(SD0)*1 | Error Contents and Cause  | Corrective Action  | Corresponding<br>CPU            |  |  |
|--------------------------|---|--|---------------------------------|--|--|
| 4421                     | Total number of steps in all SFC programs exceed the range.   | Reduce total number of steps to below the maximum.   |                                 |  |  |
| 4422                     | Step number designations overlap in SFC program.  | Read common information of the error using the peripheral device, check error step corresponding to its numerical value (program error location), and correct the problem.   | 0                               |  |  |
| 4423                     | Step relays are insufficient in the SFC program.  | Read the common information of the error using GX Developer, and check and correct the error step corresponding to that value (program error location).  |                                 |  |  |
| 4430                     | <ul> <li>The SFC program cannot be executed.</li> <li>The data of the block data setting is illegal.</li> <li>The SFC data device of the block data setting is beyond the device setting range set in the PLC parameter.</li> </ul> | <ul> <li>Write the program to the CPU module again using GX Developer.</li> <li>After correcting the setting of the SFC data device, write it to the CPU module.</li> <li>After correcting the device setting range set in the PLC parameter, write it to the CPU module.</li> </ul> | Q00J/Q00/<br>Q01 <sup>*12</sup> |  |  |
| 4431                     | The SFC program cannot be executed.  • The block parameter setting is abnormal.   | Write the program to the CPU module  |                                 |  |  |
| 4432                     | The SFC program cannot be executed.  • The structure of the SFC program is illegal.   | again using GX Developer.  |                                 |  |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

| Error                       | Error                   | Common                     | Individual                  | LED S      | Status         | Operating                       | Diagnostic       |  |
|-----------------------------|-------------------------|----------------------------|-----------------------------|------------|----------------|---------------------------------|------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages                | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN        | ERROR          | Statuses of CPU                 | Timing           |  |
| 4500                        |                         |                            |                             |            |                |                                 |                  |  |
| 4501                        |                         |                            |                             |            |                |                                 |                  |  |
| 4502                        |                         |                            |                             |            |                |                                 |                  |  |
| 4503                        | SFCP.<br>FORMAT<br>ERR. | Program error<br>location  |                             | Off        | Flicker        | Stop                            | STOP→RUN         |  |
| 4504                        |                         |                            |                             |            |                |                                 |                  |  |
| 4505                        |                         |                            |                             |            |                |                                 |                  |  |
| 4506                        |                         |                            |                             |            |                |                                 |                  |  |
| 4600                        |                         |                            |                             |            |                |                                 |                  |  |
| 4601                        | SFCP. OPE.<br>ERROR     | Program error location     |                             | Off/<br>On | Flicker/<br>On | Stop/<br>Continue <sup>*2</sup> | When instruction |  |
| 4602                        |                         |                            |                             | <u> </u>   |                | 2 2 3 3 3 3 3                   | executed.        |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*2 :</sup> The CPU module operation status when an error occurs can be set at the parameters. (LED display will change accordingly.)

|   | Error<br>Code<br>(SD0) <sup>*1</sup>  | Error Contents and Cause   | Corrective Action  | Corresponding<br>CPU   |  |
|---|---|--|--|--|--|
|   | 4500  | The numbers of BLOCK and BEND instructions in an SFC program are not equal.  | Read common information of the error using the peripheral device, check error step corresponding to its numerical  | 0  |  |
|   | 4501  | The configuration of the STEP* to TRAN* to TSET to SEND instructions in the SFC program is incorrect.  | value (program error location), and correct the problem.   | _  |  |
|   | 4502  | The structure of the SFC program is illegal.  • STEPI* instruction does not exist in the block of the SFC program.   | Write the program to the CPU module again using GX Developer.  |  |  |
|   | illega<br>• Tr<br>4503 ins<br>• In  | The structure of the SFC program is illegal.  • The step specified in the TSET instruction does not exist.  • In jump transition, the host step number was specified as the destination step number. | <ul> <li>Write the program to the CPU module again using GX Developer.</li> <li>Read the common information of the error using GX Developer, and check and correct the error step corresponding to that value (program error location).</li> </ul> | QnA<br>Q00J/Q00/<br>Q01 <sup>*12</sup><br>Qn(H)<br>QnPH<br>QnPRH |  |
|   | The structure of the SFC program is illegal.                                    |  | Write the program to the CPU module again using GX Developer.  |  |  |
| _ | 4505  | The structure of the SFC program is illegal.  • In the operation output of a step, the SET Sn/BLmSn or RST Sn/BLmSn instruction was specified for the host step.                                     | Read the common information of the error using GX Developer, and check and correct the error step corresponding  | Q00J/Q00/<br>Q01 <sup>*12</sup>                                  |  |
|   | 4506  | The structure of the SFC program is illegal.  • In a reset step, the host step number was specified as the destination step.   | to that value (program error location).  | <b>Q</b> 0.  |  |
|   | 4600  | The SFC program contains data that cannot be processed.  | Read common information of the error   | OnA  |  |
|   | 4601  | Exceeds device range that can be designated by the SFC program.  | using the peripheral device, check error step corresponding to its numerical   | QnA<br>Qn(H)<br>QnPH   |  |
|   | The START instruction in an SFC 4602 program is preceded by an END instruction. |  | value (program error location), and correct the problem.   | QnPRH  |  |

<sup>\*1 :</sup> Characters in parentheses () indicate the special register numbers where individual information is being stored.

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

| Error                       | Error              | Common                     | Individual                  | LED S | Status  | Operating       | Diagnostic                 |  |
|-----------------------------|--------------------|----------------------------|-----------------------------|-------|---------|-----------------|----------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages           | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN   | ERROR   | Statuses of CPU | Timing                     |  |
| 4610                        | SFCP. EXE.         | Program error              |                             |       |         |                 |                            |  |
| 4611                        | ERROR              | location                   |                             | On    | On      | Continue        | STOP→RUN                   |  |
| 4620                        | BLOCK EXE.         | Program error              |                             |       |         |                 | When                       |  |
| 4621                        | ERROR              |                            |                             | Off   | Flicker | Stop            | instruction executed.      |  |
| 4630                        |                    |                            |                             |       |         |                 |                            |  |
| 4631                        | STEP EXE.<br>ERROR | Program error<br>location  |                             | Off   | Flicker | Stop            | When instruction executed. |  |
| 4632                        |                    |                            |                             |       |         |                 |                            |  |
| 4633                        |                    |                            |                             |       |         |                 |                            |  |

<sup>\*1 :</sup> Characters in parentheses () indicate the special register numbers where individual information is being stored.

| Error<br>Code<br>(SD0) <sup>*1</sup> | Error Contents and Cause   | Corrective Action  | Corresponding<br>CPU   |
|--------------------------------------|--|--|--|
| 4610                                 | The active step information at presumptive start of an SFC program is incorrect.   | Read common information of the error using the peripheral device, check error step corresponding to its numerical  |  |
| 4611                                 | Key-switch was reset during RUN when presumptive start was designated for SFC program.   | value (program error location), and correct the problem. The program is automatically subjected to an initial start.   | QnA<br>Qn(H)<br>QnPH   |
| 4620                                 | Startup was executed at a block in the SFC program that was already started up.  | Read common information of the error using the peripheral device, check error step corresponding to its numerical value (program error location), and correct the problem.                                       | QnPRH  |
| 4621                                 | Startup was attempted at a block that does not exist in the SFC program.   | <ul> <li>Read the common information of the error using GX Developer, and check and correct the error step corresponding to that value (program error location).</li> <li>Turn SM321 ON if it is OFF.</li> </ul> | QnA<br>Q00J/Q00/<br>Q01 <sup>*12</sup><br>Qn(H)<br>QnPH<br>QnPRH |
| 4630                                 | Startup was executed at a block in the SFC program that was already started up.  | Read common information of the error using the peripheral device, check error step corresponding to its numerical value (program error location), and correct the problem.                                       | QnA<br>Qn(H)<br>QnPH<br>QnPRH                                    |
| 4631                                 | <ul> <li>Startup was attempted at the step that does not exist in the SFC program.</li> <li>Or, the step that does not exist in the SFC program was specified for end.</li> <li>Forced transition was executed based on the transition condition that does not exit in the SFC program.</li> <li>Or, the transition condition for forced transition that does not exit in the SFC program was canceled.</li> </ul> | <ul> <li>Read the common information of the error using GX Developer, and check and correct the error step corresponding to that value (program error location).</li> <li>Turn SM321 ON if it is OFF.</li> </ul> | QnA<br>Q00J/Q00/<br>Q01 <sup>*12</sup><br>Qn(H)<br>QnPH<br>QnPRH |
| 4632                                 | There were too many simultaneous active steps in blocks that can be designated by the SFC program.   | Read common information of the error using the peripheral device, check error step corresponding to its numerical  | QnA<br>Qn(H)   |
| 4633                                 | There were too many simultaneous active steps in all blocks that can be designated.  | value (program error location), and correct the problem.   | QnPH<br>QnPRH  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

| Error           | Error             | Common                     | Individual                           | LED S | Status  | Operating       | Diagnostic |  |
|-----------------|-------------------|----------------------------|--------------------------------------|-------|---------|-----------------|------------|--|
| Code<br>(SD0)*1 | Messages          | Information<br>(SD5 to 15) | Information<br>(SD16 to 26)          | RUN   | ERROR   | Statuses of CPU | Timing     |  |
| 5000            |                   |                            |                                      |       |         |                 |            |  |
| 5001            | WDT ERROR         | Time (value set)           | Time (value<br>actually<br>measured) | Off   | Flicker | Stop            | Always     |  |
| 5010            | PRG. TIME<br>OVER | Time (value set)           | Time (value<br>actually<br>measured) | On    | On      | Continue        | Always     |  |
| 5011            |                   |                            |                                      |       |         |                 |            |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Error<br>Code<br>(SD0) | Error Contents and Cause  | Corrective Action  | Corresponding<br>CPU          |
|------------------------|---|--|-------------------------------|
| 5000                   | The scan time of the initial execution type program exceeded the initial execution watch time specified in the PLC RAS setting of the PLC parameter dialog box.  Standby system power-off occurred.  The tracking cable was disconnected and reinserted without the standby system being powered off or reset.  The tracking cable is not secured by the connector fixing screws. | <ul> <li>Read the individual information of the error with the peripheral device, check its value (time), and shorten the scan time.</li> <li>Change the initial execution watch time or the WDT value in the PLC RAS setting of the PLC parameter dialog box.</li> <li>Resolve the endless loop caused by jump transition.</li> <li>Since power-off of the standby system</li> </ul>  | QnA<br>Qn(H)<br>QnPH<br>QnPRH |
| 5001                   | The program scan time exceeded the WDT value specified in the PLC RAS setting of the PLC parameter dialog box. Standby system power-off occurred. The tracking cable was disconnected and reinserted without the standby system being powered off or reset. The tracking cable is not secured by the connector fixing screws.   | increases the control system scan time, re-set the WDT value, taking the increase of the control system scan time into consideration.  • When the tracking cable is disconnected during operation, securely connect it and restart. If the same error is displayed again, the cause is the hardware fault of the tracking cable or CPU module. (Contact your local Mitsubishi representative, explaining a detailed description of the problem.) | 0                             |
| 5010                   | <ul> <li>The program scan time exceeded the constant scan time specified in the PLC RAS setting of the PLC parameter dialog box.</li> <li>The low speed program execution time specified in the PLC RAS setting of the PLC parameter dialog box exceeded the excess time of the constant scan.</li> </ul>   | Review the constant scan setting time. Review the constant scan time and low speed program execution time in the PLC parameter so that the margin time of constant scan may be fully reserved.   | QnA<br>Qn(H)<br>QnPH<br>QnPRH |
|                        | The program scan time exceeded the constant scan time specified in the PLC RAS setting of the PLC parameter dialog box.   | Review the constant scan time in the<br>PLC parameter so that the margin<br>time of constant scan may be fully<br>reserved.  | Q00J/Q00/Q01                  |
| 5011                   | The scan time of the low speed execution type program exceeded the low speed execution watch time specified in the PLC RAS setting of the PLC parameter dialog box.   | Read the individual information of the error using the peripheral device, check the numerical value (time) there, and shorten scan time if necessary. Change the low speed execution watch time in the PLC RAS setting of the PLC parameter dialog box.  | QnA<br>Qn(H)<br>QnPH          |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Error                       | Error                             | Common                     | Individual                  | LED S | Status  | Operating       | Diagnostic |  |
|-----------------------------|-----------------------------------|----------------------------|-----------------------------|-------|---------|-----------------|------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages                          | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN   | ERROR   | Statuses of CPU | Timing     |  |
|                             | PRB. VERIFY<br>ERR.* <sup>7</sup> | File name                  |                             | Off   | Flicker | Stop            | Always     |  |
| 6000                        | FILE DIFF.*7                      | File name                  |                             | Off   | Flicker | Stop            | Always     |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*7 :</sup> This can only be detected in the redundant system standby system.

| Error<br>Code<br>(SD0)*1 | Error Contents and Cause  | Corrective Action  | Corresponding<br>CPU |
|--------------------------|---|--|----------------------|
|                          | The control system and standby system in the redundant system do not have the same programs and parameters.   | Synchronise the programs and parameters of the control system and standby system.  • Match the programs and parameters of the control system and standby system.   | Q4AR                 |
| 6000                     | In a redundant system, the control system and standby system do not have the same programs and parameters.  The file type detected as different between the two systems can be checked by the file name of the error common information.  • The program is different.  (File name = ***********.QPG)  • The PLC parameters/network parameters/redundant parameters are different.  (File name = PARAM.QPA)  • The remote password is different.  (File name = PARAM.QPA)  • The intelligent function module parameters are different.  (File name = IPARAM.QPA)  • The device initial values are different.  (File name = ***********.QDI)  • The capacity of each write destination within the CPU for online pchange of multiple program blocks is different.  (File name = MBOC.QMB) | <ul> <li>Perform PLC verify in either of the following procedures 1), 2) to clarify the differences between the files of the two systems, then correct the wrong file, and write the corrected file to the PLC again.</li> <li>1) After reading the programs/ parameters of System A using GX Developer or PX Developer, verify them with those of System B.</li> <li>2) Verify the programs/parameters of GX Developer or PX Developer saved in the offline environment with those written to the CPU modules of both systems.</li> <li>• When the capacity of each write destination within the CPU for online change of multiple program blocks is different between the two systems, take corrective action 1) or 2).</li> <li>1) Using the memory copy from control system to standby system, copy the program memory from the control system to the standby system.</li> <li>2) Format the CPU module program memories of both systems. (For the capacity of each write destination within the CPU for online change of multiple program blocks, set the same value to both systems.)</li> </ul> | QnPRH                |

<sup>\*1 :</sup> Characters in parentheses () indicate the special register numbers where individual information is being stored.

| Error                       | Error                                 | Common                     | Individual                  | LED : | Status  | Operating       | Diagnostic   |  |
|-----------------------------|---------------------------------------|----------------------------|-----------------------------|-------|---------|-----------------|--|--|
| Code<br>(SD0) <sup>*1</sup> | Messages                              | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN   | ERROR   | Statuses of CPU | Timing   |  |
| 6001                        | FILE DIFF.                            |                            |                             | Off   | Flicker | Stop            | At power ON/<br>At reset/At<br>tracking cable<br>connection/At<br>operation<br>mode change |  |
| 6010                        | MODE.<br>VERIFY<br>ERR.* <sup>7</sup> |                            |                             | On    | On      | Continue        | Always   |  |
| 0010                        | OPE. MODE<br>DIFF.*7                  |                            |                             | On    | On      | Continue        | Always   |  |
| 6020                        | OPE. MODE                             |                            |                             | Off   | Flicker | Stop            | At power ON/<br>At reset   |  |
| 6030                        | UNIT LAY.<br>DIFF.* <sup>7</sup>      | Unit No.                   |                             | Off   | Flicker | Stop            | At power ON/<br>At reset/At<br>tracking cable<br>connection/At<br>operation                |  |
| 6035                        | UNIT LAY.<br>DIFF.* <sup>7</sup>      |                            |                             | Off   | Flicker | Stop            | mode change  |  |
| 6036                        | UNIT LAY.<br>DIFF.*3                  | Unit No.                   |                             | Off   | Flicker | Stop            | Always   |  |
| 6040                        | CARD TYPE<br>DIFF.                    |                            |                             | Off   | Flicker | Stop            | At power ON/<br>At reset   |  |
| 6041                        | 5                                     |                            |                             | Off   | Flicker | Stop            | At power ON/<br>At reset   |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*3 :</sup> This can only be detected in redundant systems. Detection is possible in either the control system or the standby system.

<sup>\*7 :</sup> This can only be detected in the redundant system standby system.

| Error<br>Code<br>(SD0)*1 | Error Contents and Cause   | Corrective Action  | Corresponding<br>CPU |
|--------------------------|--|--|----------------------|
| 6001                     | In a redundant system, the valid parameter drive settings (SW2, SW3) made by the DIP switches are not the same.  | Match the valid parameter drive settings (SW2, SW3) by the DIP switches of the control system and standby system.  | QnPRH                |
| 6010                     | The operational status of the control system and standby system in the redundant system is not the same.   | Synchronise the operation statuses of the control system and standby system.   | Q4AR                 |
| 0010                     | The operational status of the control system and standby system in the redundant system is not the same.   | Synchronise the operation statuses of the control system and standby system.   |                      |
| 6020                     | At power ON/reset, the RUN/STOP switch settings of the control system and standby system are not the same in a redundant system.   | Set the RUN/STOP switches of the control system and standby system to the same setting.  |                      |
| 6030                     | <ul> <li>In a redundant system, the module configuration differs between the control system and standby system.</li> <li>The network module mode setting differs between the two systems.</li> </ul> | <ul> <li>Match the module configurations of<br/>the control system and standby<br/>system.</li> <li>In the redundant setting of the<br/>network parameter dialog box, match<br/>the mode setting of System B to that<br/>of System A.</li> </ul> |                      |
| 6035                     | In a redundant system, the CPU module model name differs between the control system and standby system.  | Match the model names of the control system and standby system.  | QnPRH                |
| 6036                     | A difference in the remote I/O configuration of the MELSECNET/H multiplexed remote I/O network between the control system and standby system of a redundant system was detected.                     | Check the network cables of the MELSECNET/H multiplexed remote I/O network for disconnection.  |                      |
| 6040                     | In a redundant system, the memory card installation status (installed/not installed) differs between the control system and standby system.  | Match the memory card installation statuses (set/not set) of the control system and standby system.  |                      |
| 6041                     | In a redundant system, the memory card type differs between the control system and standby system.   | Match the memory card types of the control system and standby system.  |                      |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Error                       | Error                            | Common   | Individual                  | LED : | Status  | Operating       | Diagnostic  |  |
|-----------------------------|----------------------------------|--|-----------------------------|-------|---------|-----------------|---|--|
| Code<br>(SD0) <sup>*1</sup> | Messages                         | Information<br>(SD5 to 15)                         | Information<br>(SD16 to 26) | RUN   | ERROR   | Statuses of CPU | Timing  |  |
| 6050                        | CAN'T EXE.<br>MODE <sup>*3</sup> |  |                             | On    | On      | Continue        | Always  |  |
| 6060                        | CPU MODE<br>DIFF.*7              |  |                             | Off   | Flicker | Stop            | At power ON/<br>At reset/At<br>tracking cable<br>connection |  |
| 6061                        | CPU MODE<br>DIFF.*7              |  |                             | Off   | Flicker | Stop            | When an END instruction executed.                           |  |
| 6062                        | CPU MODE<br>DIFF.*8              |  |                             | Off   | Flicker | Stop            | At power ON/<br>At reset/At<br>tracking cable<br>connection |  |
|                             | TRUCKINERR.<br>*3                |  |                             | On    | On      | Continue        | At power ON/<br>At reset/<br>STOP→RUN                       |  |
| 6100                        | TRK. TRANS.<br>ERR.              | Tracking<br>transmission<br>data<br>classification |                             | On    | On      | Continue        | Always  |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*3 :</sup> This can only be detected in redundant systems. Detection is possible in either the control system or the standby system.

<sup>\*7 :</sup> This can only be detected in the redundant system standby system.

<sup>\*8 :</sup> Can be detected by System B of the redundant system.

| Error<br>Code<br>(SD0) <sup>*1</sup> | Error Contents and Cause   | Corrective Action  | Corresponding<br>CPU |
|--------------------------------------|--|--|----------------------|
| 6050                                 | The function inexecutable in the debug mode or operation mode (backup/ separate mode) was executed.  | Execute the function executable in the debug mode or operation mode (backup/separate mode).  |                      |
| 6060                                 | In a redundant system, the operation mode (backup/separate) differs between  | Match the operation modes of the control system and standby system.  | QnPRH                |
| 6061                                 | the control system and standby system.   | control system and standby system.   |                      |
| 6062                                 | Both System A and B are in the same system status (control system).  | Power the CPU module (System B) which resulted in a stop error, OFF and then ON.   | QnPRH                |
|                                      | A CPU module tracking memory error was detected during initial.  | Hardware fault of the CPU module. (Please contact your local nearest Mitsubishi or sales representative, explaining a detailed description of the problem. Change the CPU modules in order of the standby system CPU module and control system CPU module.)  | Q4AR                 |
| 6100                                 | <ul> <li>An error (e.g. retry limit exceeded)         occurred in tracking data         transmission.         (This error may be caused by         tracking cable removal or other         system power-off (including reset).)</li> <li>The error occurred at a startup since         the redundant system startup         procedure was not followed.</li> </ul> | Check the CPU module or tracking cable. If the error still occurs, this indicates the CPU module or tracking cable is faulty. (Contact your local Mitsubishi representative, explaining a detailed description of the problem.)     Confirm the redundant system startup procedure, and execute a startup again. | QnPRH                |

<sup>\*1 :</sup> Characters in parentheses () indicate the special register numbers where individual information is being stored.

| Error                       | Гинан                 | Common   | Individual                  | LED S | Status | Operating       | Diagnastic                        |  |
|-----------------------------|-----------------------|--|-----------------------------|-------|--------|-----------------|-----------------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Error<br>Messages     | Information<br>(SD5 to 15)                         | Information<br>(SD16 to 26) | RUN   | ERROR  | Statuses of CPU | Diagnostic<br>Timing              |  |
|                             | TRUCKIN<br>ERR.*3     |  |                             | On    | On     | Continue        | When an END instruction executed. |  |
| 6101                        |                       | Tracking<br>transmission<br>data<br>classification |                             |       |        |                 |                                   |  |
| 6102                        |                       |  |                             |       |        |                 |                                   |  |
| 6103                        | TRK. TRANS.<br>ERR.*3 |  |                             | On    | On     | Continue        | Always                            |  |
| 6105                        |                       | Tracking<br>transmission<br>data                   |                             |       |        |                 |                                   |  |
| 6106                        |                       | classification                                     |                             |       |        |                 |                                   |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*3 :</sup> This can only be detected in redundant systems. Detection is possible in either the control system or the standby system.

| Error<br>Code<br>(SD0) <sup>*1</sup> | Error Contents and Cause   | Corrective Action   | Corresponding<br>CPU |  |
|--------------------------------------|--|---|----------------------|--|
|                                      | The CPU module detected an error during the handshake for tracking.  | Check the condition of the other stations.  | Q4AR                 |  |
| 6101                                 | <ul> <li>A timeout error occurred in tracking (data transmission).</li> <li>(This error may be caused by tracking cable removal or other system poweroff (including reset).)</li> <li>The error occurred at a startup since the redundant system startup procedure was not followed.</li> </ul>                        |   |                      |  |
| 6102                                 | A data sum value error occurred in tracking (data reception).  |   |                      |  |
| 6103                                 | <ul> <li>A data error (other than sum value error) occurred in tracking (data reception).</li> <li>(This error may be caused by tracking cable removal or other system poweroff (including reset).)</li> <li>The error occurred at a startup since the redundant system startup procedure was not followed.</li> </ul> | Check the CPU module or tracking cable. If the error still occurs, this indicates the CPU module or tracking cable is faulty. (Contact your local Mitsubishi representative, explaining a detailed description of the problem.) | QnPRH                |  |
| 6105                                 | <ul> <li>An error (e.g. retry limit exceeded) occurred in tracking (data transmission). (This error may be caused by tracking cable removal or other system power- off (including reset).)</li> <li>The error occurred at a startup since the redundant system startup procedure was not followed.</li> </ul>          | Confirm the redundant system startup procedure, and execute a startup again.  |                      |  |
| 6106                                 | <ul> <li>A timeout error occurred in tracking (data transmission).</li> <li>(This error may be caused by tracking cable removal or other system power-off (including reset).)</li> <li>The error occurred at a startup since the redundant system startup procedure was not followed.</li> </ul>                       | al register numbers where individual inform   |                      |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Error                       | Error                            | Common                                | Individual                  | LED S | Status  | Operating       | Diagnostic                        |  |
|-----------------------------|----------------------------------|---------------------------------------|-----------------------------|-------|---------|-----------------|-----------------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages                         | Information<br>(SD5 to 15)            | Information<br>(SD16 to 26) | RUN   | ERROR   | Statuses of CPU | Timing                            |  |
| 6107                        |                                  |                                       |                             |       |         |                 |                                   |  |
| 6108                        | TRK. TRANS.<br>ERR.*3            |                                       |                             | On    | On      | Continue        | Always                            |  |
| 6110                        | TRK. SIZE<br>ERROR*3             | Tracking capacity excess error factor |                             | On    | On      | Continue        | When an END instruction executed. |  |
| 6111                        | TRK. SIZE<br>ERROR*3             |                                       |                             | On    | On      | Continue        | When an END instruction executed. |  |
| 6112                        | TRK. SIZE<br>ERROR <sup>*7</sup> |                                       |                             | On    | On      | Continue        | When an END instruction executed. |  |
| 6120                        | TRK. CABLE<br>ERR.*3             |                                       |                             | Off   | Flicker | Stop            | At power ON/<br>At reset          |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*3 :</sup> This can only be detected in redundant systems. Detection is possible in either the control system or the standby system.

<sup>\*7 :</sup> This can only be detected in the redundant system standby system.

| Error<br>Code<br>(SD0) <sup>*1</sup> | Error Contents and Cause  | Corrective Action  | Corresponding<br>CPU |  |
|--------------------------------------|---|--|----------------------|--|
| 6107                                 | A data sum value error occurred in tracking (data reception).  • A data error (other than sum value error) occurred in tracking (data reception).   | Check the CPU module or tracking cable. If the error still occurs, this indicates the CPU module or tracking cable is faulty. (Contact your local  |                      |  |
| 6108                                 | <ul> <li>(This error may be caused by tracking cable removal or other system power-off (including reset).)</li> <li>The error occurred at a startup since the redundant system startup procedure was not followed.</li> </ul>   | Mitsubishi representative, explaining a detailed description of the problem.)  • Confirm the redundant system startup procedure, and execute a startup again.  | QnPRH                |  |
| 6110                                 | The tracking capacity exceeded the allowed range.   | Reexamine the tracking capacity.   |                      |  |
| 6111                                 | The control system does not have enough file register capacity for the file registers specified in the tracking settings.   | Switch to the file registers of which capacity is greater than the file registers specified in the tracking settings.  |                      |  |
| 6112                                 | File registers greater than those of the standby system were tracked and transmitted from the control system.   | Switch to the file registers of which capacity is greater than the file registers specified in the tracking settings.  |                      |  |
| 6120                                 | <ul> <li>A start was made without the tracking cable being connected.</li> <li>A start was made with the tracking cable faulty.</li> <li>As the tracking hardware on the CPU module side was faulty, communication with the other system could not be made via the tracking cable.</li> </ul> | Make a start after connecting the tracking cable. If the same error still occurs, this indicates the tracking cable or CPU module side tracking transmission hardware is faulty. (Contact your local Mitsubishi representative, explaining a detailed description of the problem.) |                      |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Error                       | Error                            | Common                     | Individual                  | LED : | Status  | Operating       | Diagnostic               |  |
|-----------------------------|----------------------------------|----------------------------|-----------------------------|-------|---------|-----------------|--------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages                         | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN   | ERROR   | Statuses of CPU | Timing                   |  |
| 6130                        | TRK. DISCONNECT *3               |                            |                             | On    | On      | Continue        | Always                   |  |
| 6140                        | TRK.INIT.<br>ERROR <sup>*3</sup> |                            |                             | Off   | Flicker | Stop            | At power ON/<br>At reset |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being

<sup>\*3 :</sup> This can only be detected in redundant systems. Detection is possible in either the control system or the standby system.

| Error<br>Code<br>(SD0)*1 | Error Contents and Cause   | Corrective Action  | Corresponding<br>CPU |
|--------------------------|--|--|----------------------|
| 6130                     | <ul> <li>The tracking cable was removed.</li> <li>The tracking cable became faulty while the CPU module is running.</li> <li>The CPU module side tracking hardware became faulty.</li> </ul>                 | <ul> <li>If the tracking cable was removed, connect the tracking cable to the connectors of the CPU modules of the two systems.</li> <li>When the error is not resolved after connecting the tracking cable to the connectors of the CPU modules of the two systems and resetting the error, the tracking cable or CPU module side tracking hardware is faulty. (Contact your local Mitsubishi representative, explaining a detailed description of the problem.)</li> </ul> | QnPRH                |
| 6140                     | <ul> <li>The other system did not respond during initial communication at power ON/reset.</li> <li>The error occurred at a startup since the redundant system startup procedure was not followed.</li> </ul> | <ul> <li>Power the corresponding CPU module OFF and then ON again, or reset it and then unreset. If the same error still occurs, this indicates the CPU module is faulty. (Contact your local Mitsubishi representative, explaining a detailed description of the problem.)</li> <li>Confirm the redundant system startup procedure, and execute a startup again.</li> </ul>   |                      |

<sup>\*1 :</sup> Characters in parentheses () indicate the special register numbers where individual information is being stored.

| Error                       | Error             | Common                         | Individual                  | LED S | Status | Operating       | Diagnostic |  |
|-----------------------------|-------------------|--------------------------------|-----------------------------|-------|--------|-----------------|------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages          | Information<br>(SD5 to 15)     | Information<br>(SD16 to 26) | RUN   | ERROR  | Statuses of CPU | Timing     |  |
|                             | CONTROL<br>EXE.*4 | Reason(s) for system switching |                             | On    | Off    | Continue        | Always     |  |
| 6200                        | CONTROL<br>EXE.   | Reason(s) for system switching |                             | On    | Off    | No error        | Always     |  |
|                             | CONTROL<br>WAIT*7 | Reason(s) for system switching |                             | On    | Off    | Continue        | Always     |  |
| 6210                        | STANDBY           | Reason(s) for system switching |                             | On    | Off    | No error        | Always     |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being

<sup>\*4 :</sup> This can only be detected in the redundant system control system.

<sup>\*7 :</sup> This can only be detected in the redundant system standby system.

| Error<br>Code<br>(SD0) <sup>*1</sup> | Error Contents and Cause   | Corrective Action                   | Corresponding<br>CPU |
|--------------------------------------|--|-------------------------------------|----------------------|
|                                      | The standby system in a redundant system is switched to the control system.  | Check the control system condition. | Q4AR                 |
| 6200                                 | The standby system has been switched to the control system in a redundant system. (Detected by the CPU that was switched from the standby system to the control system)  Since this error code does not indicate the error information of the CPU module but indicates its status, the error code and error information are not stored into SD0 to 26, but are stored into the error log every system switching.  (Check the error information by reading the error log using GX Developer.) |                                     | QnPRH                |
|                                      | The control system in a redundant system is switched to the standby system.  | Check the control system condition. | Q4AR                 |
| 6210                                 | The control system has been switched to the standby system in a redundant system. (Detected by the CPU that was switched from the control system to the standby system)  Since this error code does not indicate the error information of the CPU module but indicates its status, the error code and error information are not stored into SD0 to 26, but are stored into the error log every system switching.  (Check the error information by reading the error log using GX Developer.) |                                     | QnPRH                |

<sup>\*1 :</sup> Characters in parentheses () indicate the special register numbers where individual information is being stored.

| Error                       | Error                              | Common                         | Individual                                   | LED : | Status | Operating       | Diagnostic             |  |
|-----------------------------|------------------------------------|--------------------------------|--|-------|--------|-----------------|------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages                           | Information<br>(SD5 to 15)     | Information<br>(SD16 to 26)                  | RUN   | ERROR  | Statuses of CPU | Timing                 |  |
| 6220                        | CAN'T EXE.<br>CHANGE*4             | Reason(s) for system switching |  | On    | On     | Continue        | At switching request   |  |
|                             | CAN'T<br>SWITCH                    | Reason(s) for system switching | Reason(s) for<br>system switching<br>failure | On    | On     | Continue        | At switching execution |  |
| 6221                        | CAN'T EXE.<br>CHANGE <sup>*4</sup> | Reason(s) for system switching |  | On    | On     | Continue        | At switching request   |  |
| 6230                        | DUAL SYS.<br>ERROR                 |                                |  | On    | On     | Continue        | Always                 |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*4 :</sup> This can only be detected in the redundant system control system.

| Error<br>Code<br>(SD0)*1 | Error Contents and Cause  | Corrective Action  | Corresponding<br>CPU |
|--------------------------|---|--|----------------------|
| 6220                     | <ul> <li>Since the standby system is in an error or similar status in the redundant system, the control system cannot be switched to the standby system.</li> <li>When an attempt was made to execute system switching, the control system could not be switched to the standby system due to a network error of the control system.</li> </ul> | Check the standby system condition.  | Q4AR                 |
| 6220                     | System switching cannot be executed as the standby system or tracking cable is faulty in a redundant system. The following shows the reasons for system switching on the control system.  • System switching by SP. CONTSW instruction  • System switching request from network module  | Check the status of the standby system and resolve the error.                                  | QnPRH                |
| 6221                     | Switching is disabled because of a bus switching module error.  | This is a bus switching module hardware fault. (Contact your local Mitsubishi representative.) | OAAR                 |
| 6230                     | The link module mounted on the standby type CPU is the remote master station.   | Check the system configuration status.   | - Q4AR               |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Error                       | Error                  | Common                     | Individual                  | LED S | Status  | Operating       | Diagnostic |  |
|-----------------------------|------------------------|----------------------------|-----------------------------|-------|---------|-----------------|------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages               | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN   | ERROR   | Statuses of CPU | Timing     |  |
| 6300                        | STANDBY<br>SYS. DOWN*4 |                            |                             | On    | On      | Continue        | Always     |  |
| 6310                        | CONTROL<br>SYS. DOWN*7 |                            |                             | Off   | Flicker | Stop            | Always     |  |

<sup>\*1 :</sup> Characters in parentheses () indicate the special register numbers where individual information is being stored.

<sup>\*4 :</sup> This can only be detected in the redundant system control system.

<sup>\*7 :</sup> This can only be detected in the redundant system standby system.

| Co   | rror<br>ode<br>D0) <sup>*1</sup> | Error Contents and Cause  | Corrective Action  | Corresponding<br>CPU |
|------|----------------------------------|---|--|----------------------|
| 6300 |                                  | Any of the following errors was detected in the backup mode.  • The standby system has not started up in the redundant system.  • The standby system has developed a stop error in the redundant system.  • The CPU module in the debug mode was connected to the operating control system.   | <ul> <li>Check whether the standby system is on or not, and if it is not on, power it on.</li> <li>Check whether the standby system has been reset or not, and if it has been reset, unreset it.</li> <li>Check whether the standby system has developed a stop error or not, and if it has developed the error, remove the error factor and restart it.</li> <li>When the CPU module in the debug mode was connected to the control system operating in the backup mode, make connection so that the control system and standby system are combined correctly.</li> </ul>   | QnPRH                |
| 6310 | 0                                | Any of the following errors was detected in the backup mode.  • The control system has not started up in the redundant system.  • The control system has developed a stop error in the redundant system.  • The CPU module in the debug mode was connected to the operating standby system.  • The error occurred at a startup since the redundant system startup procedure was not followed. | <ul> <li>The standby system exists but the control system does not exist.</li> <li>Check whether the system other than the standby system is on or not, and if it is not on, power it on.</li> <li>Check whether the system other than the standby system has been reset or not, and if it is has been reset, unreset it.</li> <li>Check whether the system other than the standby system has developed a stop error or not, and if has developed the error, remove the error factor, set the control system and standby system to the same operating status, and restart.</li> <li>When the CPU module in the debug mode was connected to the control system operating in the backup mode, make connection so that the control system and control system are combined correctly.</li> <li>Confirm the redundant system startup procedure, and execute a startup again.</li> <li>all register numbers where individual informatical register numbers w</li></ul> | QnPRH                |

<sup>\*1 :</sup> Characters in parentheses () indicate the special register numbers where individual information is being stored.

| Error                       | Error                  | Common                     | Individual                  | LED : | Status  | Operating       | Diagnostic   |  |
|-----------------------------|------------------------|----------------------------|-----------------------------|-------|---------|-----------------|--|--|
| Code<br>(SD0) <sup>*1</sup> | Messages               | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN   | ERROR   | Statuses of CPU | Timing   |  |
| 6311                        | CONTROL<br>SYS. DOWN*7 |                            |                             | Off   | Flicker | Stop            | At power ON/<br>At reset   |  |
| 6400                        | PRG. MEM.<br>CLEAR     |                            |                             | Off   | Flicker | Stop            | At execution of the memory copy from control system to standby system                |  |
| 6410                        | MEM.COPY<br>EXE*4      |                            |                             | On    | On      | Continue        | At execution of the function of copying memory from control system to standby system |  |
| 6500                        | TRK. PARA.             | File name/<br>Drive name   | Parameter<br>number         | Off   | Flicker | Stop            | At power ON/<br>At reset   |  |
| 6501                        | ERROR                  | File name/<br>Drive name   | Parameter<br>number         | Off   | Flicker | Stop            | At power ON/<br>At reset   |  |
| 7000                        | MULTI CPU<br>DOWN      | Unit No.                   |                             | Off   | Flicker | Stop            | Always   |  |
|                             |                        |                            |                             |       |         |                 | At power ON/<br>At reset   |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*4 :</sup> This can only be detected in the redundant system control system.

 $<sup>^{*}7</sup>$ : This can only be detected in the redundant system standby system.

|    | Error<br>Code<br>SD0)*1 | Error Contents and Cause  | Corrective Action  | Corresponding<br>CPU                                   |
|----|-------------------------|---|--|--|
| 63 | 311                     | <ul> <li>As consistency check data has not<br/>transmitted from the control system in<br/>a redundant system, the other system</li> </ul>   | Replace the tracking cable. If the<br>same error still occurs, this indicates<br>the CPU module is faulty. (Contact)   | QnPRH  |
| 63 | 312                     | cannot start as a standby system.  The error occurred at a startup since  | your local Mitsubishi representative, explaining a detailed description of   |  |
| 64 | 400                     | The memory copy from control system to standby system was executed, and the program memory was cleared.   | After the memory copy from control system to standby system is completed, switch power OFF and then ON, or make a reset.   |  |
| 64 | 410                     | The memory copy from control system to standby system was executed.   |  | QnPRH  |
| 65 | 500                     | The file register file specified in the tracking setting of the PLC parameter dialog box does not exist.  | Read the individual information of the error using GX Developer, and check and correct the drive name and file name. Create the specified file.  |  |
| 65 | 501                     | The file register range specified in the device detail setting of the tracking setting of the PLC parameter dialog box exceeded the specified file register file capacity.  | Read the individual information of the error using GX Developer, and increase the file register capacity.  | QnPRH  |
| 70 | 000                     | <ul> <li>In a multiple CPU system, at CPU module fault occurred at a station where "All station stop by stop error of PLC " was selected in the operating mode.</li> <li>In a multiple CPU system, a CPU module incompatible with the multiple CPU system was mounted.</li> </ul> | <ul> <li>Read the individual information of the error using the GX Developer, check the error of the PLC resulting in CPU module fault, and remove the error.</li> <li>Remove the CPU module incompatible with the multiple CPU system from the main base unit.</li> </ul> | Q00/Q01 <sup>*12</sup><br>Qn(H) <sup>*12</sup><br>QnPH |
|    |                         | In a multiple CPU system, station 1 resulted in stop error at power-on and the other stations cannot start. (This error occurred at stations 2 to 4)  | Read the individual information of the error using the GX Developer, check the error of the CPU module resulting in CPU module fault, and remove the error.  |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

| Error                       | _                   | Common                     | Individual                  | LED S | Status  | Operating          |                          |  |
|-----------------------------|---------------------|----------------------------|-----------------------------|-------|---------|--------------------|--------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Error<br>Messages   | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN   | ERROR   | Statuses<br>of CPU | Diagnostic<br>Timing     |  |
| 7002                        | MULTI CPU<br>DOWN   | Unit No.                   |                             | Off   | Flicker | Stop               | At power ON/<br>At reset |  |
| 7003                        |                     |                            |                             |       |         |                    |                          |  |
| 7004                        | MULTI CPU<br>DOWN   | Unit No.                   |                             | Off   | Flicker | Stop               | Always                   |  |
| 7010                        | MULTI EXE.<br>ERROR | Unit No.                   |                             | Off   | Flicker | Stop               | At power ON/<br>At reset |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

| Error<br>Code<br>(SD0)*1 | Error Contents and Cause  | Corrective Action   | Corresponding CPU                                      |
|--------------------------|---|---|--|
| 7002                     | <ul> <li>There is no response from the target CPU module in a multiple CPU system at initial communication stage.</li> <li>In a multiple CPU system, a CPU module incompatible with the multiple CPU system was mounted.</li> </ul>   | <ul> <li>Reset the CPU module and RUN it again. If the same error is displayed again, this suggests the hardware fault of any of the CPU modules. (Contact your local Mitsubishi representative.)</li> <li>Remove the CPU module incompatible with the multiple CPU system from the main base unit.</li> <li>Or, replace the CPU module incompatible with the multiple CPU system with the compatible one.</li> </ul>   | Q00/Q01 <sup>*12</sup><br>Qn(H) <sup>*12</sup><br>QnPH |
| 7003                     | There is no response from the target CPU module in a multiple CPU system at initial communication stage.  | Reset the CPU module and RUN it again. If the same error is displayed again, this suggests the hardware fault of any of the CPU modules. (Contact your local Mitsubishi representative.)  |  |
| 7004                     | In a multiple CPU system, a data error occurred in communication between the CPU modules.   | <ul> <li>Check the system configuration to see if modules are mounted in excess of the number of I/O points.</li> <li>When there are no problems in the system configuration, this indicates the CPU module hardware is faulty. (Contact your local Mitsubishi representative, explaining a detailed description of the problem.)</li> </ul>  | Q00/Q01*12   |
| 7010                     | <ul> <li>In a multiple CPU system, a faulty CPU module was mounted.</li> <li>In a multiple CPU system, a CPU module incompatible with the multiple CPU system was mounted. (The CPU module compatible with the multiple CPU system was used to detect an error.)</li> <li>In a multiple CPU system, any of the CPU No. 2 to 4 was reset with power ON. (The unreset CPU was used to detect an error.)</li> <li>In a multiple CPU system, the PC CPU module used the QFB (bus interface driver) of version 1.06 or earlier.</li> </ul> | <ul> <li>Read the individual information of the error using GX Developer, and replace the faulty CPU module.</li> <li>Replace the CPU module incompatible with the multiple CPU system with the one compatible with the multiple CPU system.</li> <li>Do not reset any of the No. 2 to 4 CPU modules.</li> <li>Use the PC CPU module that uses the QFB of version 1.07 or later.</li> <li>Reset the No. 1 CPU module and restart up the multiple CPU system.</li> </ul> | Q00/Q01 <sup>*12</sup><br>Qn(H) <sup>*12</sup><br>QnPH |

<sup>\*1 :</sup> Characters in parentheses () indicate the special register numbers where individual information is being stored.

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

| Error                       | Error               | Common                     | Individual                  | LED S | Status  | Operating       | Diagnostic               |  |
|-----------------------------|---------------------|----------------------------|-----------------------------|-------|---------|-----------------|--------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages            | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN   | ERROR   | Statuses of CPU | Timing                   |  |
| 7011                        | MULTI EXE.<br>ERROR | Unit No.                   |                             | Off   | Flicker | Stop            | At power ON/<br>At reset |  |
| 7020                        | MULTI CPU<br>ERROR  | Unit No.                   |                             | On    | On      | Continue        | Always                   |  |
| 7030                        |                     |                            |                             |       |         |                 |                          |  |
| 7031                        | -CPU LAY.           |                            |                             |       |         |                 | At power ON/             |  |
| 7032                        | ERROR               | Unit No.                   |                             | Off   | Flicker | Stop            | At reset                 |  |
| 7035                        | CPU LAY.<br>ERROR   | Unit No.                   |                             | Off   | Flicker | Stop            | At power ON/<br>At reset |  |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

|    | Error<br>Code<br>(SD0) <sup>*1</sup> | Error Contents and Cause  | Corrective Action  | Corresponding<br>CPU                                   |
|----|--------------------------------------|---|--|--|
| 70 | 011                                  | Either of the following settings was made in a multiple CPU system.  • Multiple CPU automatic refresh setting was made for the inapplicable CPU module.  • "I/O sharing when using multiple CPUs" setting was made for the inapplicable CPU module.   | Correct the multiple CPU automatic refresh setting.     Correct the "I/O sharing when using multiple CPUs" setting.  | Q00/Q01* <sup>12</sup>                                 |
| 70 | 020                                  | In a multiple CPU system, an error occurred in the CPU "where system stop was not selected" in the operation mode.  (The CPU module where no error occurred was used to detect an error.)   | Read the individual information of the error using the peripheral device, check the error of the CPU module resulting in CPU module fault, and remove the error.                       | Q00/Q01 <sup>*12</sup><br>Qn(H) <sup>*12</sup><br>QnPH |
| 70 |                                      | An assignment error occurred in the CPU-mountable slot (CPU slot, I/O slot 0, 1) in excess of the number of CPU modules specified in the multiple CPU setting of the PLC parameter dialog box.  | Set the same value to the number of<br>CPU modules specified in the multiple<br>CPU setting of the PLC parameter<br>dialog box and the number of mounted<br>CPU modules (including CPU |  |
| 70 | 031                                  | An assignment error occurred within the range of the number of CPUs specified in the multiple CPU setting of the PLC parameter dialog box.  | <ul> <li>(empty)).</li> <li>Make the type specified in the I/O assignment setting of the PLC parameter dialog box consistent with the CPU module configuration.</li> </ul>             |  |
| 70 | 032                                  | <ul> <li>The number of CPU modules mounted in a multiple CPU system is wrong.</li> <li>(Q00CPU or Q01CPU: more than 1 module, motion CPU: more than 1 module, PC CPU module: more than 1 module)</li> <li>The PLC CPU is mounted as the CPU No. 2 or later.</li> <li>The motion CPU is mounted as the CPU No. 3.</li> </ul> | Configure a multiple CPU system so that the following restriction will be satisfied: Q00CPU or Q01CPU: within 1 module the motion CPU: within 1 module PC CPU module: within 1 module. | Q00/Q01 <sup>*12</sup>                                 |
| 70 | 035                                  | The CPU module has been mounted on the inapplicable slot.   | Mount the CPU module on the applicable slot.   | Q00J/Q00/<br>Q01 <sup>*12</sup><br>QnPRH               |

<sup>\*1 :</sup> Characters in parentheses ( ) indicate the special register numbers where individual information is being stored.

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

| Error                       | Error                          | Common                     | Individual                  | LED S      | Status                   | Operating       | Diagnostic                 |  |
|-----------------------------|--------------------------------|----------------------------|-----------------------------|------------|--------------------------|-----------------|----------------------------|--|
| Code<br>(SD0) <sup>*1</sup> | Messages                       | Information<br>(SD5 to 15) | Information<br>(SD16 to 26) | RUN        | ERROR                    | Statuses of CPU | Timing                     |  |
| 9000                        | F**** *9                       | Program error location     | Annunciator<br>number       | On<br>USER | On/<br>Off *11<br>LED On | Continue        | When instruction executed. |  |
|                             |                                |                            |                             | On         | Off                      |                 | When                       |  |
| 9010                        | <chk>ERR<br/>***_*** *10</chk> | Program error location     | Failure No.                 | USER       | LED On                   | Continue        | instruction executed.      |  |
| 9020                        | воот ок                        |                            |                             | Off        | Flicker                  | Stop            | At power ON/<br>At reset   |  |
| 10000                       | CONT. UNIT<br>ERROR            |                            |                             | Off        | Flicker                  | Continue        | Always                     |  |

<sup>\*1 :</sup> Characters in parentheses () indicate the special register numbers where individual information is being stored.

<sup>\*9 : \*\*\*\*</sup> indicates the detected annunciator No.

<sup>\*10: \*\*\*</sup>\_\*\*\* indicates the detected contact and coil No.

<sup>\*11 :</sup> For the Basic model QCPU, it can be turned off by the LED indication priority setting special register (SD207 to SD209). (Only turned off for the High Performance model QCPU, Process CPU or Redundant CPU.)

| Error<br>Code<br>(SD0) <sup>*1</sup> | Error Contents and Cause  | Corrective Action  | Corresponding<br>CPU                  |
|--------------------------------------|---|--|---------------------------------------|
| 9000                                 | Annunciator (F) was set ON  | Read the individual information of the error using the peripheral device, and check the program corresponding to the numerical value (annunciator number). | 0                                     |
| 9010                                 | Error detected by the CHK instruction.  | Read the individual information of the error using the peripheral device, and check the program corresponding to the numerical value (error number) there. | QnA<br>Qn(H)<br>QnPH<br>QnPRH         |
| 9020                                 | Storage of data onto ROM was completed normally in automatic write to standard ROM. (BOOT LED also flickers.)           | Use the DIP switches to set the valid parameter drive to the standard ROM. Then, switch power on again, and perform boot operation from the standard ROM.  | Qn(H) <sup>*12</sup><br>QnPH<br>QnPRH |
| 10000                                | In the multiple CPU system, an error occurred in the CPU module other than the Process CPU/High Performance model QCPU. | Check the details of the generated error by connecting to the corresponding CPU module using GX Developer.   | Qn(H) <sup>*12</sup><br>QnPH          |

<sup>\*1 :</sup> Characters in parentheses () indicate the special register numbers where individual information is being stored.

<sup>\*12:</sup> This applies to the CPU module of function version B or later.

## 6. TRANSPORTATION PRECAUTIONS

When transporting lithium batteries, make sure to treat them based on the transport regulations.

### **6.1 Controlled Models**

The batteries for the MELSEC-QnA series CPU module (including memory cards) are classified as follows:

| Product name              | Model   | Product supply status                     | Classification for transportation |
|---------------------------|---|---|-----------------------------------|
| QnA series battery        | A6BAT   | Lithium battery                           |                                   |
| QnA series<br>memory card | Q1MEM-128S,<br>Q1MEM-128SE,<br>Q1MEM-1MS,<br>Q1MEM-1MSF,<br>Q1MEM-256S,<br>Q1MEM-256SE,<br>Q1MEM-256SF,<br>Q1MEM-256SF,<br>Q1MEM-2MS,<br>Q1MEM-512SE,<br>Q1MEM-512SE,<br>Q1MEM-512SE,<br>Q1MEM-512SF,<br>Q1MEM-64S,<br>Q1MEM-64SE | Packed with lithium coin battery (BR2325) | Non-dangerous goods               |

# **6.2 Transport Guidelines**

Comply with IATA Dangerous Goods Regulations, IMDG code and the local transport regulations when transporting products after unpacking or repacking, while Mitsubishi ships products with packages to comply with the transport regulations.

Also, contact the transporters.

#### Warranty

Mitsubishi will not be held liable for damage caused by factors found not to be the cause of Mitsubishi; machine damage or lost profits caused by faults in the Mitsubishi products; damage, secondary damage, accident compensation caused by special factors unpredictable by Mitsubishi; damages to products other than Mitsubishi products; and to other duties.

## **!** For safe use

- This product has been manufactured as a general-purpose part for general industries, and has not been designed or manufactured to be incorporated in a device or system used in purposes related to human life.
- Before using the product for special purposes such as nuclear power, electric power, aerospace, medicine or passenger movement vehicles, consult with Mitsubishi.
- This product has been manufactured under strict quality control. However, when installing the product where major accidents or losses could occur if the product fails, install appropriate backup or failsafe functions in the system.

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