

12 TROUBLESHOOTING

This chapter describes the details of errors that can occur while the network interface module is used and how to troubleshoot them.

12.1 Troubleshooting with the LEDs

This section describes how to check the errors using the LED indication on the network interface module.

For the CPU module errors and master module errors, refer to the user's manual for the CPU module and master module being used.

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When the PW LED turns off

Check item	Corrective action
Is the module power supply (24VDC) wired?	When the module power supply (24VDC) is not wired, wire the power supply.
Is the module power supply (24VDC) on?	When the module power supply (24VDC) is not on, turn it on.
Is the voltage of the module power supply (24VDC) within the allowable voltage range?	When the voltage of the module power supply (24VDC) is out of the allowable voltage range, set the voltage within the range. (Page 19 Performance Specifications)
Is any LED other than the PW LED turned on?	If any LED other than the PW LED turns on, the hardware failure is a possible cause. Please consult your local Mitsubishi Electric representative.
There is no error in the above items.	The hardware failure is a possible cause. Please consult your local Mitsubishi Electric representative and explain the error details.

When the RUN LED is turned off

Check item	Corrective action
Has a hardware error occurred?	Turn off and on the module power supply. If the error occurs again, the possible cause is a failure of the network interface module. Please consult your local Mitsubishi Electric representative.

When the RUN LED is turned off and the ERR LED flashes at 0.2-second intervals, refer to the following.

Page 292 When the ERR LED flashes at 0.2-second intervals and the RUN LED turns off

When the RUN LED flashes

Check item	Corrective action
Are the x1 and x16 of IP address/station number setting switches set to F?	The network interface module is in execution of the unit test. The RUN LED is turned on when the unit test is completed. Take corrective action according to the result of the unit test. When not executing a unit test, set the IP address/station number setting switches to an appropriate value.

When the D LINK LED turns off

Check item	Corrective action
Are Ethernet cables normal?	<ul style="list-style-type: none"> • Replace any damaged cable with new one. • Replace the Ethernet cable with one that satisfies the required communication performance. (☞ Page 92 Applicable Ethernet cables) • Change the station-to-station distance to 100m or less. • Ensure that the cabling condition (bending radius) meets the specifications.
Do the switching hub used in the system and other stations operate normally?	<ul style="list-style-type: none"> • Power on the switching hub and other stations. • Use a switching hub compliant with the specifications of the master station in use.

■CC-Link IE TSN specific errors

Check item	Corrective action
Is the own station connected to the network and operating normally?	Connect the engineering tool to the master station, and take a corrective action using the CC-Link IE TSN/CC-Link IE Field diagnostics function.
Does the IP address of the network interface module match the IP address of the network interface module specified in the network configuration setting of master station?	Match the IP address setting of the network interface module with the IP address that is set in the network configuration settings of the master station.
Is the IP address of the network interface module duplicated with that of other station?	If two or more stations have the same IP address, change the setting so that the stations have a different IP address from each other.
Is the slave station parameter automatic setting completed with an error when the slave station parameter automatic setting is enabled?	Check Slave station parameter automatic setting execution result details (SW0194) and the event history of the master module, and take the corrective actions corresponding to the stored error code.
Does the communication speed of the network interface module match the communication speed of the master station?	Match the setting of the network setting switch (switch 1) of the network interface module with the communication speed of the master station.

■CC-Link IE Field Network specific errors

Check item	Corrective action
Is the own station connected to the network and operating normally?	Connect the engineering tool to the master station, and take a corrective action using the CC-Link IE TSN/CC-Link IE Field diagnostics function.
Does the station number of the network interface module match the station number of the network interface module specified in the network configuration setting of master station?	Match the station number setting of the network interface module with the station number that is set in the network configuration settings of the master station.
Is the station number of the network interface module duplicated with that of other station?	If two or more stations have the same station number, change the setting so that the stations have different station numbers from each other.

■CC-Link IE Field Network Basic specific errors

Check item	Corrective action
Is the own station connected to the network and operating normally?	Connect the engineering tool to the master station, and take a corrective action using the CC-Link IE Field Basic diagnostics function.
Does the IP address of the network interface module match the IP address of the network interface module specified in the network configuration setting of master station?	Match the IP address setting of the network interface module with the IP address that is set in the network configuration settings of the master station.
Is the IP address of the network interface module duplicated with that of other station?	If two or more stations have the same IP address, change the setting so that the stations have a different IP address from each other.

■SLMP specific errors

Check item	Corrective action
Is a request message sent?	Check the status of connection with the external device.

■MODBUS/TCP specific errors

Check item	Corrective action
Has the connection with the MODBUS/TCP master device been established?	Issue a request for connection with the MODBUS/TCP master device.

When the D LINK LED flashes

■CC-Link IE TSN specific errors

Check item	Corrective action
Does the station type match?	Match the station type of the network interface module with the station type that is set in the network configuration settings of the master station.
Is the module a reserved station?	Set "Reserved/error invalid station" to a station other than "Reserved station" in the network configuration setting, and reflect the changed parameter in the CPU module.
Has the master station been changed to one with a different network number?	<ul style="list-style-type: none"> • Connect the module to the previous master station again. • To establish communications with a master station with a different network number, power off and on the network interface module.

■CC-Link IE Field Network specific errors

Check item	Corrective action
Is the module a reserved station?	Set "Reserved station" to a station other than "Reserved station" in the network configuration setting, and reflect the changed parameter in the CPU module.
Is the station number set to a number other than 1 to 120?	Change the setting to any number within the setting range (1 to 120) of the IP address/station number setting switches for CC-Link IE Field Network.
Is link stop detected by the CC-Link IE Field Network diagnostics?	Check the link status using the CC-Link IE Field Network diagnostics, and start the link if the link is stopped.
Has the master station been changed to one with a different network number?	<ul style="list-style-type: none"> • Connect the module to the previous master station again. • To establish communications with a master station with a different network number, power off and on the network interface module.
Does the station type match?	Match the station type of the network interface module with the station type that is set in the network configuration settings of the master station.
Does the number of RX/RX points or RWr/RWw points in the network parameters differ from the number of cyclic transmission points for each network interface module?	In the network configuration settings of the master station, set the number of cyclic transmission points for each network interface module to the number of RX/RX points or RWr/RWw points.

■CC-Link IE Field Network Basic specific errors

Check item	Corrective action
Is the module a reserved station?	Set "Reserved station" to a station other than "Reserved station" in the network configuration setting, and reflect the changed parameter in the CPU module.
Is the number of occupied stations set to other than 1?	Set the number of occupied stations of the network interface module to 1 in the network configuration setting, and reflect the changed parameter in the CPU module.

When the P1 LINK LED or P2 LINK LED turns off

Check item	Corrective action
Are Ethernet cables normal?	<ul style="list-style-type: none"> • Replace any damaged cable with new one. • Replace the Ethernet cable with one that satisfies the required communication performance. (☞ Page 92 Applicable Ethernet cables) • Change the station-to-station distance to 100m or less. • Ensure that the cabling condition (bending radius) meets the specifications.
Do the switching hub used in the system and other stations operate normally?	<ul style="list-style-type: none"> • Power on the switching hub and other stations. • Use a switching hub compliant with the specifications of the master station in use.




If link-up processing is repeated due to a condition of a device on the network, it may take longer for the P1 LINK LED/P2 LINK LED to turn on. This phenomenon may be eliminated by changing the connector to which the Ethernet cable is connected (example: P1 → P2). (☞ Page 92 Wiring of Ethernet Cable)

When the ERR. LED turns on

Check item	Corrective action
Does any error occur?	Determine the error factor by the network diagnostics function or the error code, and take actions.

When the ERR. LED flashes at 0.2-second intervals and the RUN LED turns off

Check item	Corrective action
Are the network setting switches set to prohibited settings? ( Page 77 Network mode setting)	Power off the network interface module. Correct the network setting switches and power on the network interface module.

When the ERR. LED flashes at 0.5-second intervals

Check item	Corrective action
Have the settings of the network setting switches been changed during power-on?	Power off the module and set the network setting switches to the proper settings. And then, power on the module.
Have the settings of the IP address/network setting switches been changed during power-on?	Power off the module and set the correct IP address. And then, power on the module.
Does any error occur?	Determine the error factor by the network diagnostics function or the error code, and take actions.

When the ALM LED turns on

Check item	Corrective action
Is a warning output? (FA3-AT)	<p>■FA3-AT1T8X, FA3-AT1M8X Check Warning output flag (RWrb) and take corrective action to change the digital value of the target channel so that it is between the warning output lower limit value and the warning output upper limit value.</p> <p>■FA3-AT1T8Y, FA3-AT1M8Y Check Warning output flag (RWrA) and take corrective action to change the digital value of the target channel so that it is between the warning output lower limit value and the warning output upper limit value.</p>
Does the operating time exceed the threshold?	Check whether the alarm detecting the excessive operating time occurs or not by the network diagnostics function or the alarm code, and take actions.
Does the relay ON count exceed the threshold? (FA3-TH)	Check whether the alarm detecting the excessive relay ON count occurs or not by the network diagnostics function or the alarm code, and take actions.

When the ALM LED flashes

Check item	Corrective action
Has any input signal error occurred?	Check Input signal error detection flag (RWrA) and take corrective action to change the analog input value of the target channel from 0.5V to 5.5V.

12.2 Unit Test



Run a unit test to check if there is any abnormality in the hardware of network interface module.

- 1.** Power off the network interface module.
- 2.** Connect P1 and P2 of the network interface module with an Ethernet cable.
- 3.** Turn off all network setting switches.
- 4.** Set x1 and x16 of IP address/station number setting switches to F.
- 5.** Power on the network interface module.
- 6.** Unit test begins. The RUN LED flashes during the unit test.
- 7.** The RUN LED is turned on when the unit test is completed.
 - If the test is completed normally, the ERR. LED is not turned on, but remains off.
 - If the test is completed with an error, the ERR. LED is turned on. If the test is completed with an error, replace the Ethernet cable and run the test again. If the test is completed with an error again, it may be due to a hardware failure in the network interface module. Please consult your local Mitsubishi Electric representative.

12.3 Troubleshooting by Symptom

This section describes troubleshooting when the module does not operate normally even when no error has occurred.

FA3-TH1T16XC, FA3-TH1M16XC

The following is troubleshooting when the CC-Link IE TSN, CC-Link IE Field Network, or CC-Link IE Field Network Basic is used. ( Page 298 SLMP,  Page 299 MODBUS/TCP)

When the on/off status of an external input cannot be read





When the on/off status of an external input cannot be read, check the following items.

Check item	Corrective action
Is the corresponding RX0 to RXF turned on when the external input is turned on?	If the input is not recognized, one of the following problems is possible. <ul style="list-style-type: none">• The refresh device settings may be incorrect. Check the refresh parameter and correct the setting of the refresh device so that it matches the setting in the program.• The input wiring may be incorrect. Confirm that the wire is not disconnected or short-circuited, and correct the input wiring.
Is the CPU module in the STOP state?	Change the status of the CPU module to RUN.
Is there any problem with other equipment such as the master module and connected devices?	Perform troubleshooting for other equipment.

If the network interface module does not operate normally after checking all the above items, module LEDs, network diagnostics, and error codes, a possible cause may be a network interface module failure. Please consult your local Mitsubishi Electric representative.



When parameter read/write and network diagnostics cannot be performed

When parameter read/write and network diagnostics cannot be performed, check the following items.

Check item	Corrective action
Is the D LINK LED of the network interface module on?	If it is not on, perform troubleshooting by referring to the following. <ul style="list-style-type: none">•  Page 290 When the D LINK LED turns off•  Page 291 When the D LINK LED flashes Check other LEDs as well according to the following and take the corrective actions for the applicable check item.  Page 289 Troubleshooting with the LEDs
Are the versions of the master module and the engineering tool supported?	If the versions are older than the supported versions, upgrade them. ( Page 14 Applicable Systems)
Are network parameter settings same as the settings of the CPU module?	Verify the network parameter settings against the actual system configuration. If they differ, match the settings by performing "Read from PLC" and "Write to PLC", and write the parameters to modules on slave stations.

If the network interface module does not operate normally after checking all the above items, module LEDs, and error codes, a possible cause may be a network interface module failure. Please consult your local Mitsubishi Electric representative.

FA3-TH1T16Y, FA3-TH1T16YE, FA3-TH1M16Y, FA3-TH1M16YE

The following is troubleshooting when the CC-Link IE TSN, CC-Link IE Field Network, or CC-Link IE Field Network Basic is used. ( Page 298 SLMP,  Page 299 MODBUS/TCP)

When the on/off status of an external output cannot be changed





When the on/off status of an external output cannot be changed, check the following items.

Check item	Corrective action
Are signals output from output terminal Y when the external output signals RY0 to RYF is turned on?	If signals are not output, one of the following problems is possible. <ul style="list-style-type: none">• The refresh device settings may be incorrect. Check the refresh parameter and correct the setting of the refresh device so that it matches the setting in the program.• The output wiring may be incorrect. Confirm that the wire is not disconnected or short-circuited, and correct the output wiring.
Is the CPU module in the STOP state?	Change the status of the CPU module to RUN.
Is there any problem with other equipment such as the master module and connected devices?	Perform troubleshooting for other equipment.

If the network interface module does not operate normally after checking all the above items, module LEDs, network diagnostics, and error codes, a possible cause may be a network interface module failure. Please consult your local Mitsubishi Electric representative.



When parameter read/write and network diagnostics cannot be performed

When parameter read/write and network diagnostics cannot be performed, check the following items.

Check item	Corrective action
Is the D LINK LED of the network interface module on?	If it is not on, perform troubleshooting by referring to the following. <ul style="list-style-type: none">•  Page 290 When the D LINK LED turns off•  Page 291 When the D LINK LED flashes Check other LEDs as well according to the following and take the corrective actions for the applicable check item.  Page 289 Troubleshooting with the LEDs
Are the versions of the master module and the engineering tool supported?	If the versions are older than the supported versions, upgrade them. ( Page 14 Applicable Systems)
Are network parameter settings same as the settings of the CPU module?	Verify the network parameter settings against the actual system configuration. If they differ, match the settings by performing "Read from PLC" and "Write to PLC", and write the parameters to modules on slave stations.

If the network interface module does not operate normally after checking all the above items, module LEDs, and error codes, a possible cause may be a network interface module failure. Please consult your local Mitsubishi Electric representative.

FA3-AT1T8X, FA3-AT1M8X

The following is troubleshooting when the CC-Link IE TSN, CC-Link IE Field Network, or CC-Link IE Field Network Basic is used. ( Page 298 SLMP,  Page 299 MODBUS/TCP)

When digital operation value cannot be read

When the digital operation value cannot be read, check the following items.

Check item	Corrective action
Is there any problem with the wiring, such as looseness or disconnection of analog signal lines?	Identify the faulty area of signal lines by a visual check or a continuity check and take corrective action.
Is the CPU module in the STOP state?	Change the status of the CPU module to RUN.
Is A/D conversion enable/disable setting set to A/D conversion disabled for the channels where the analog value is to be input?	Check CH□ A/D conversion enable/disable setting (remote buffer memory: 0102H) by using the engineering tool or the dedicated instruction. Then, set A/D conversion to Enable by program or parameter setting.
Is Initial data setting request flag (RY9) executed?	Turn on and off Initial data setting request flag (RY9) by using the engineering tool. If the digital operation value is not stored in CH□ Digital operation value (RWr2 to RWr9), check the program.
Is there any problem with other equipment such as the master module and connected devices?	Perform troubleshooting for other equipment.

If the network interface module does not operate normally after checking all the above items, module LEDs, network diagnostics, and error codes, a possible cause may be a network interface module failure. Please consult your local Mitsubishi Electric representative.

When an A/D conversion completed flag does not turn on

When CH□ A/D conversion completion flag (RX10 to RX17) does not turn on, check the following item.

Check item	Corrective action
Has any input signal error occurred?	Check Input signal error detection flag (RWrA) and take corrective action to change the analog input value of the target channel from 0.5V to 5.5V.





When the digital operation value is out of the accuracy range

When the digital operation value is out of the accuracy range, check the following item.

Check item	Corrective action
Is any measure against noise taken?	Take measures to reduce noise, such as using a shielded cable for connection.

When parameter read/write and network diagnostics cannot be performed

When parameter read/write and network diagnostics cannot be performed, check the following items.

Check item	Corrective action
Is the D LINK LED of the network interface module on?	If it is not on, perform troubleshooting by referring to the following. <ul style="list-style-type: none"> Page 290 When the D LINK LED turns off Page 291 When the D LINK LED flashes Check other LEDs as well according to the following and take the corrective actions for the applicable check item.  Page 289 Troubleshooting with the LEDs
Are the versions of the master module and the engineering tool supported?	If the versions are older than the supported versions, upgrade them. ( Page 14 Applicable Systems)
Are network parameter settings same as the settings of the CPU module?	Verify the network parameter settings against the actual system configuration. If they differ, match the settings by performing "Read from PLC" and "Write to PLC", and write the parameters to modules on slave stations.

If the network interface module does not operate normally after checking all the above items, module LEDs, and error codes, a possible cause may be a network interface module failure. Please consult your local Mitsubishi Electric representative.

FA3-AT1T8Y, FA3-AT1M8Y

The following is troubleshooting when the CC-Link IE TSN, CC-Link IE Field Network, or CC-Link IE Field Network Basic is used. (☞ Page 298 SLMP, ☞ Page 299 MODBUS/TCP)

When the analog output value is not output

When the analog output value is not output, check the following items.

Check item	Corrective action
Is there any problem with the wiring, such as looseness or disconnection of analog signal lines?	Identify the faulty area of signal lines by a visual check or a continuity check and take corrective action.
Is the CPU module in the STOP state?	Change the status of the CPU module to RUN.
Is D/A conversion disabled for the channels where the analog value is to be output?	Check CH□ D/A conversion enable/disable setting (remote buffer memory: 0102H) by using the engineering tool or the dedicated instruction. Then, set D/A conversion to Enable by program or parameter setting.
Is Initial data setting request flag (RY9) executed?	Turn on and off Initial data setting request flag (RY9) by using the engineering tool. If analog output is not performed properly, check the program.
Is CH□ Output enable/disable flag (RY10 to RY17) of the output destination channel set to off?	Check if CH□ Output enable/disable flag (RY10 to RY17) on the monitor of the engineering tool is on or off. If it is off, check the program.
Is a digital value written to the channel where the analog value is to be output?	Write the value to the channel where CH□ digital value (RWw2 to RWw9) is to be output.
Is there any problem with other equipment such as the master module and connected devices?	Perform troubleshooting for other equipment.

If the network interface module does not operate normally after checking all the above items, module LEDs, network diagnostics, and error codes, a possible cause may be a network interface module failure. Please consult your local Mitsubishi Electric representative.

When the analog output value is not held

When the analog output value is not held, check the following items.

Check item	Corrective action
Is the setting for the analog output HOLD/CLEAR function correct?	Check the setting value of Analog output HOLD/CLEAR setting (0105H, 0106H) and set the setting to HOLD.

When parameter read/write and network diagnostics cannot be performed

When parameter read/write and network diagnostics cannot be performed, check the following items.

Check item	Corrective action
Is the D LINK LED of the network interface module on?	If it is not on, perform troubleshooting by referring to the following. <ul style="list-style-type: none">☞ Page 290 When the D LINK LED turns off☞ Page 291 When the D LINK LED flashes Check other LEDs as well according to the following and take the corrective actions for the applicable check item. ☞ Page 289 Troubleshooting with the LEDs
Are the versions of the master module and the engineering tool supported?	If the versions are older than the supported versions, upgrade them. (☞ Page 14 Applicable Systems)
Are network parameter settings same as the settings of the CPU module?	Verify the network parameter settings against the actual system configuration. If they differ, match the settings by performing "Read from PLC" and "Write to PLC", and write the parameters to modules on slave stations.

If the network interface module does not operate normally after checking all the above items, module LEDs, and error codes, a possible cause may be a network interface module failure. Please consult your local Mitsubishi Electric representative.

When the network interface module cannot communicate with the external device

When the network interface module cannot communicate with the external device, check the following items.

Check item	Corrective action
Is a request message sent from the external device?	Send a request message from the external device to the network interface module.
Is the network load high?	<ul style="list-style-type: none"> • Decrease the frequency of request message transmission from the external device. • Reduce the network load.
Is the IP address correct?	<ul style="list-style-type: none"> • Match the network part of the external device IP address with that of the network interface module IP address. • Do not set the same IP address as other Ethernet devices. • Set the destination IP address of the request message to the IP address of the network interface module.
Is the proper communication method specified?	Specify UDP/IP for the communication method of the external device.
Is the port No. correct?	Match the destination port No. of the request message with the own station port No. set on the network interface module.
Is the communication data code (ASCII or binary code) the same for both the external device and the network interface module?	Match the communication data code of the request message with the communication data code set on the network interface module.
Is the request message format correct?	Send the request message in the message format described in this manual.
Is the storing order and the value range of the specified data within the request message correct?	Set the specified data within the request message in the storing order and the value range described in this manual.
Is the end code of the response message 0?	If the end code is a value other than 0, check the end code and take corrective action.
Is the firewall set?	Check the firewall settings.

MODBUS/TCP

When a connection is not established

When the MODBUS/TCP master device cannot establish a connection with the network interface module, check the following items.

Check item	Corrective action
Is the IP address correct?	<ul style="list-style-type: none">• Match the network part of the MODBUS/TCP master device IP address with that of the network interface module IP address.• Do not set the same IP address as that of other Ethernet devices.• Set the destination IP address of the Active open to the IP address of the network interface module.
Is the proper communication method specified?	Specify TCP/IP for the communication method of the MODBUS/TCP master device.
Is the port No. correct?	Set the destination port number of the Active open to 502.
Is the firewall set?	Check the firewall settings.
Has an error occurred in the communication with the MODBUS/TCP master device with which a connection has already established?	After 10 seconds, establish a connection with the device again.
Is the network load high?	Reduce the network load.

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When the response message does not return

When the response message from the network interface module does not return to the MODBUS/TCP master device, check the following items.

Check item	Corrective action
Has the connection with the MODBUS/TCP master device been established?	Establish the connection with the MODBUS/TCP master device. If the connection with the MODBUS/TCP master device cannot be established, refer to "When a connection is not established" mentioned above.
Is the protocol ID of the request message set to 0000H?	Specify 0000H for the protocol ID.
Is the request message length correct?	For the message length, specify the total number of bytes of the module ID, function code, and data.
Is the request message format correct?	Send the request message in the correct message format.
Is the network load high?	<ul style="list-style-type: none">• Decrease the frequency of request message transmission from the MODBUS/TCP master device.• Reduce the network load.

When an error response message returns

When the most significant bit of function code of the response message that is returned to the MODBUS/TCP master device from the network interface module is on, the request message is incorrect. Take corrective action according to the following.

☞ Page 273 Abnormal response code

12.4 How to check an error/alarm

For the network interface module specific errors/alarms, refer to the following.

- Error history: Page 97 Error history function
- Latest error code (RWr0): Page 300 Checking by Latest error code (RWr0)
- Latest alarm code (RWr1): Page 300 Checking by Latest alarm code (RWr1)

For specific network/protocol errors, refer to the following.

- Error codes for CC-Link IE TSN: MELSEC iQ-R CC-Link IE TSN User's Manual (Application)
- Error codes for CC-Link IE Field Network: MELSEC iQ-R CC-Link IE Field Network User's Manual (Application)
- Completion status of dedicated instructions (RIWT, RIRD) (CC-Link IE Field Network): MELSEC iQ-R Programming Manual (Module Dedicated Instructions)
- Error codes for CC-Link IE Field Network Basic: MELSEC iQ-R CPU Module User's Manual (Application)
- End codes for SLMP: Page 244 End code
- MODBUS/TCP error response codes: Page 273 Abnormal response code

Checking by Latest error code (RWr0)

Read Latest error code (RWr0) to check the code.

Ex.

When the refresh target device for Latest error code (RWr0) is W1000

[Online] ⇒ [Monitor] ⇒ [Device/Buffer Memory Batch Monitor]

☒ Device Name

W1000

Open Display Format...

Detailed C

☐ Buffer Memory

Unit

(HEX)

Address

Device Name	F	E	D	C	B	A	9	8	7	6	5	4	3	2	1	0	Current Value
W1 000	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	1030
W1 001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0000

Point

When multiple errors occur, the latest error code is stored in Latest error code (RWr0).

Method for clearing an error

Page 301 List of Error Codes

Checking by Latest alarm code (RWr1)

Read Latest alarm code (RWr1) to check the code.

Ex.

When the refresh target device for Latest alarm code (RWr1) is W1001

[Online] ⇒ [Monitor] ⇒ [Device/Buffer Memory Batch Monitor]

☒ Device Name

W1000

Open Display Format...

Detailed C...

☐ Buffer Memory

Unit

(HEX)

Address

Device Name	F	E	D	C	B	A	9	8	7	6	5	4	3	2	1	0	Current Value
W1 000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0000
W1 001	0	0	0	0	1	1	0	1	0	0	1	0	0	0	0	1	0D21

Point

When multiple alarms occur, the latest alarm code is stored in Latest alarm code (RWr1).

How to clear an alarm

Page 308 List of Alarm Codes

12.5 List of Error Codes

The following table lists the error classification for the network interface module.

Classification	Description
Major	An error that cannot be recovered. The RUN LED is turned off.
Moderate	An error where the network interface module cannot continue to operate. The ERR. LED is turned on.
Minor	An error where the network interface module can continue to operate. The ERR. LED flashes.

Confirm that the D LINK LED is on. Determine the cause of the error by the error code and take corrective action corresponding to the cause.

Point

When multiple errors have occurred, the corresponding error codes are stored in Latest error code (RWr0) in the following priority.

- When the classification of each error differs, the error codes are stored in the order of major error > moderate error > minor error.
- When the classification of each error is the same, the errors are stored in reverse chronological order.

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Error codes for FA3-TH

Error code	Classification	Error name	Description and cause	Corrective action	Detailed information
0010H	Major	Hardware error	Network interface module hardware error	Turn off and on the network interface module power supply. If the error occurs again, the possible cause is a failure of the network interface module. Please consult your local Mitsubishi Electric representative.	—
0200H *1	Minor	IP address/station number setting switches changed error	The settings of the IP address/station number setting switches have been changed while the network interface module power is on.	Reset the IP address/station number setting switches to the settings when the network interface module was powered on.	Detailed information 1: States of the IP address/station number setting switches when an error is detected
0201H *1	Minor	Network setting switches changed error	The settings of the network setting switches have been changed with the network interface module powered on.	Reset the network setting switches to the settings when the network interface module was powered on.	Detailed information 1: States of the network setting switches when an error is detected • 0008H: Switch 1 • 0004H: Switch 2 • 0002H: Switch 3 • 0001H: Switch 4
1020H *1	Minor	Remote buffer memory access error	<p>■CC-Link IE TSN A buffer memory area other than the remote buffer memory areas has been accessed using the REMFR/REMTO instruction.</p> <p>■CC-Link IE Field Network A buffer memory area other than the remote buffer memory areas has been accessed using the RIRD/RIWT instruction.</p>	<p>■CC-Link IE TSN Correct the setting data of the REMFR/REMTO instruction to access the remote buffer memory.</p> <p>■CC-Link IE Field Network Correct the setting data of the RIRD/RIWT instruction to access the remote buffer memory.</p>	Detailed information 1: Start address of remote buffer memory

Error code	Classification	Error name	Description and cause	Corrective action	Detailed information
2015H *2	Moderate	Non-volatile memory data error	The data saved in the non-volatile memory is abnormal.	<ul style="list-style-type: none"> The data (IP address and maintenance information) at an error occurrence is reset to the default values. Take measures to reduce noise, such as using a shielded cable for connection. If the error occurs again, the possible cause is a failure of the network interface module. Please consult your local Mitsubishi Electric representative. 	—
D000H *3*4	Minor	Communication setting error 1	Invalid network settings are received.	Turn off and on the network interface module power supply. If the error occurs again, the possible cause is a failure of the network interface module. Please consult your local Mitsubishi Electric representative.	Detailed information 1: Error code output by the communication driver
D001H *3*4	Minor	Communication setting error 2	Network processing that cannot be handled by the network interface module is received.	<ul style="list-style-type: none"> Check that the model name of the slave station set in the network configuration settings matches the model name of the actual device. If this error occurs even when the model names match, the possible cause is the failure of the network interface module. If this error persists even when the model names match, update firmware to the latest version for the network interface module. To update firmware, please consult your local Mitsubishi Electric representative. If this error occurs even with the latest firmware, the possible cause is the failure of the network interface module. Please consult your local Mitsubishi Electric representative. 	Detailed information 1: Error code output by the communication driver
D010H *2*3	Minor	IP address duplication detection	IP address duplication was detected.	Change the IP address so that no IP address duplication occurs in the access range of CC-Link IE TSN. Then turn off and on the network interface module power supply.	—
D011H *2*3*4	Moderate	IP address setting error	Values the network interface module cannot use were set for the IP address settings.	<ul style="list-style-type: none"> Without using the set IP address, the module is operated based on the previous IP address. The set IP address will not be saved in the non-volatile memory. Check the IP address again, and change the settings to values the network interface module can use. Then turn off and on the network interface module power supply. 	—
D021H *3*4	Minor	Number of RX/Ry points error	RX/Ry with a number of points that cannot be handled by the network interface module are set.	Set the following number or less for the number of points for RX and Ry in the network configuration setting. ■CC-Link IE TSN and CC-Link IE Field Network 16 points ■CC-Link IE Field Network Basic 64 points	—
D022H *3*4	Minor	Number of RWr/RWw points error	RWr/RWw with a number of points that cannot be handled by the network interface module are set.	Set the following number or less for the number of points for RWr and RWw in the network configuration setting. ■CC-Link IE TSN and CC-Link IE Field Network 16 points ■CC-Link IE Field Network Basic 32 points	—

*1 The error can be cleared by turning on and off Error clear request flag (RWw0.b10).

*2 The error cannot be cleared even by turning on and off Error clear request flag (RWw0.b10). After eliminating the cause of the error, turn off and on the power supply or perform a remote reset.

*3 This error occurs only once when an abnormality is detected. Before clearing the error, eliminate the cause and check that a data link is established.

*4 While this error is occurring, an error other than this error may not occur. When this error occurs, eliminate the causes one by one until a data link is established.

Error codes for FA3-AT1T8X, FA3-AT1M8X

□ indicates the channel number where the error occurred.

Error code	Classification	Error name	Description and cause	Corrective action	Detailed information
1020H *1	Minor	Remote buffer memory access error	<p>■CC-Link IE TSN A buffer memory area other than the remote buffer memory areas has been accessed using the REMFR/REMT instruction.</p> <p>■CC-Link IE Field Network A buffer memory area other than the remote buffer memory areas has been accessed using the RIRD/RIWT instruction.</p>	<p>■CC-Link IE TSN Correct the setting data of the REMFR/REMT instruction to access the remote buffer memory.</p> <p>■CC-Link IE Field Network Correct the setting data of the RIRD/RIWT instruction to access the remote buffer memory.</p>	Detailed information 1: Start address of remote buffer memory
1030H *1	Minor	IP address/station number setting switches changed error	The settings of the IP address/station number setting switches have been changed with the network interface module powered on.	Reset the IP address/station number setting switches to the settings when the network interface module was powered on.	Detailed information 1: States of the IP address/station number setting switches when an error is detected
1031H *1	Minor	Network setting switches changed error	The settings of the network setting switches have been changed with the network interface module powered on.	Reset the network setting switches to the settings when the network interface module was powered on.	Detailed information 1: States of the network setting switches when an error is detected • 0008H: Switch 1 • 0004H: Switch 2 • 0002H: Switch 3 • 0001H: Switch 4
2015H	Moderate	Non-volatile memory data error	The data saved in the non-volatile memory is abnormal.	<ul style="list-style-type: none"> The data (IP address and maintenance information) at an error occurrence is reset to the default values. Take measures to reduce noise, such as using a shielded cable for connection. If the error occurs again, the possible cause is a failure of the network interface module. Please consult your local Mitsubishi Electric representative. 	—
320□H *1*5	Moderate	CH□ Time average setting out-of-range	The time average setting in CH□ Time average/Count average/Moving average (0107H to 010EH) is out of the range of 2 to 10000ms.	Set the CH□ time averaging setting to 2 to 10000ms.	Detailed information 1: Time averaging setting
321□H *1*5	Moderate	CH□ Count average setting out-of-range	The count average setting in CH□ Time average/Count average/Moving average (0107H to 010EH) is out of the range of 4 to 65000.	Set the CH□ count average setting to 4 to 65000.	Detailed information 1: Count averaging setting
322□H *1*5	Moderate	CH□ Moving average setting out-of-range	The moving average count setting in CH□ Time average/Count average/Moving average (0107H to 010EH) is out of the range of 2 to 128.	Set the CH□ moving average count setting to 2 to 128.	Detailed information 1: Moving averaging setting

Error code	Classification	Error name	Description and cause	Corrective action	Detailed information
330□H *1*5	Moderate	CH□ Process alarm setting error (Process alarm lower limit value > Process alarm lower upper limit value)	Magnitude correlation between CH□ Process alarm lower limit (01××H) and CH□ Process alarm lower upper limit (01××H) is invalid.	Set CH□ Process alarm lower limit value (01××H) and CH□ Process alarm lower upper limit value (01××H) correctly.	Detailed information 1: Process alarm lower upper limit value Detailed information 2: Process alarm lower lower limit value
331□H *1*5	Moderate	CH□ Process alarm setting error (Process alarm lower upper limit value > Process alarm upper lower limit value)	Magnitude correlation between CH□ Process alarm lower upper limit (01××H) and CH□ Process alarm upper lower limit (01××H) is invalid.	Set CH□ Process alarm lower upper limit value (01××H) and CH□ Process alarm upper lower limit value (01××H) correctly.	Detailed information 1: Process alarm upper lower limit value Detailed information 2: Process alarm lower upper limit value
332□H *1*5	Moderate	CH□ Process alarm setting error (Process alarm upper lower limit value > Process alarm upper upper limit value)	Magnitude correlation between CH□ Process alarm upper lower limit (01××H) and CH□ Process alarm upper upper limit (01××H) is invalid.	Set CH□ Process alarm upper lower limit value (01××H) and CH□ Process alarm upper upper limit value (01××H) correctly.	Detailed information 1: Process alarm upper upper limit value Detailed information 2: Process alarm upper lower limit value
350□H *5	Moderate	CH□ Scaling setting out-of-range	CH□ Scaling lower limit value (01××H) and CH□ Scaling upper limit value (01××H) are set to values out of the range of -32000 to 32000.	Set CH□ Scaling lower limit value (01××H) and CH□ Scaling upper limit value (01××H) to values in the range of -32000 to 32000.	Detailed information 1: Scaling lower limit value Detailed information 2: Scaling upper limit value
351□H *1*5	Moderate	CH□ Scaling setting upper/lower limit inversion	CH□ Scaling lower limit value (01××H) and CH□ Scaling upper limit value (01××H) are set such that the scaling lower limit value is equal to or greater than the scaling upper limit value.	Set CH□ Scaling lower limit value (01××H) and CH□ Scaling upper limit value (01××H) such that the scaling lower limit value is smaller than the scaling upper limit value.	Detailed information 1: Scaling lower limit value Detailed information 2: Scaling upper limit value
370□H *1*5	Moderate	CH□ Logging cycle setting value error	A value other than 0 and 1 is set in CH□ Logging cycle unit setting (4010H to 4017H) or an invalid value is set in CH□ Logging cycle setting (4108H to 410FH).	Refer to the following to set a valid value. ☞ Page 107 Logging cycle	Detailed information 1: CH□ Logging cycle unit setting Detailed information 2: CH□ Logging cycle setting value
3C00H	Major	Hardware error	Network interface module hardware error	Turn off and on the network interface module power supply. If the error occurs again, the possible cause is a failure of the network interface module. Please consult your local Mitsubishi Electric representative.	—
D000H *3*4	Minor	Communication setting error 1	Invalid network settings are received.	Turn off and on the network interface module power supply. If the error occurs again, the possible cause is a failure of the network interface module. Please consult your local Mitsubishi Electric representative.	Detailed information 1: Error code output by the communication driver
D001H *3*4	Minor	Communication setting error 2	Network processing that cannot be handled by the network interface module is received.	Check that the model name of the slave station set in the network configuration settings matches the model name of the actual device. If this error occurs even when the model names match, the possible cause is the failure of the network interface module. Please consult your local Mitsubishi Electric representative.	Detailed information 1: Error code output by the communication driver

Error code	Classification	Error name	Description and cause	Corrective action	Detailed information
D010H *2*3	Minor	IP address duplication detection	IP address duplication was detected.	Change the IP address so that no IP address duplication occurs in the access range of CC-Link IE TSN. Then turn off and on the network interface module power supply.	—
D011H *2*3*4	Moderate	IP address setting error	Values the network interface module cannot use were set for the IP address settings.	<ul style="list-style-type: none"> Without using the set IP address, the module is operated based on the previous IP address. The set IP address will not be saved in the non-volatile memory. Check the IP address again, and change the settings to values the network interface module can use. Then turn off and on the network interface module power supply. 	—
D021H *3*4	Minor	Number of RX/Ry points error	RX/Ry with a number of points that cannot be handled by the network interface module are set.	Set the following number or less for the number of points for RX and Ry in the network configuration setting. <ul style="list-style-type: none"> ■CC-Link IE TSN and CC-Link IE Field Network 32 points ■CC-Link IE Field Network Basic 64 points 	—
D022H *3*4	Minor	Number of RWr/RWw points error	RWr/RWw with a number of points that cannot be handled by the network interface module are set.	Set the following number or less for the number of points for RWr and RWw in the network configuration setting. <ul style="list-style-type: none"> ■CC-Link IE TSN and CC-Link IE Field Network 32 points ■CC-Link IE Field Network Basic 32 points 	—

*1 The error can be cleared by turning on and off Error clear request flag (RYA) or turning on and off Initial data setting request flag (RY9).

*2 The error cannot be cleared by turning on and off Error clear request flag (RYA) or turning on and off Initial data setting request flag (RY9). After eliminating the cause of the error, turn off and on the power supply or perform a remote reset.

*3 This error occurs only once when an abnormality is detected. Before clearing the error, eliminate the cause and check that a data link is established.

*4 While this error is occurring, an error other than this error may not occur. When this error occurs, eliminate the causes one by one until a data link is established.

*5 □= 1 (CH1) to 8 (CH8) is stored.

Error codes for FA3-AT1T8Y, FA3-AT1M8Y

□ indicates the channel number where the error occurred.

Error code	Classification	Error name	Description and cause	Corrective action	Detailed information
1020H *1	Minor	Remote buffer memory access error	<p>■CC-Link IE TSN A buffer memory area other than the remote buffer memory areas has been accessed using the REMFR/REMTO instruction.</p> <p>■CC-Link IE Field Network A buffer memory area other than the remote buffer memory areas has been accessed using the RIRD/RIWT instruction.</p>	<p>■CC-Link IE TSN Correct the setting data of the REMFR/REMTO instruction to access the remote buffer memory.</p> <p>■CC-Link IE Field Network Correct the setting data of the RIRD/RIWT instruction to access the remote buffer memory.</p>	Detailed information 1: Start address of remote buffer memory
1030H *1	Minor	IP address/station number setting switches changed error	The settings of the IP address/station number setting switches have been changed with the network interface module powered on.	Reset the IP address/station number setting switches to the settings when the network interface module was powered on.	Detailed information 1: States of the IP address/station number setting switches when an error is detected
1031H*1	Minor	Network setting switches changed error	The settings of the network setting switches have been changed with the network interface module powered on.	Reset the network setting switches to the settings when the network interface module was powered on.	Detailed information 1: States of the network setting switches when an error is detected • 0008H: Switch 1 • 0004H: Switch 2 • 0002H: Switch 3 • 0001H: Switch 4
190□H *5	Minor	CH□ Out-of-range digital value	The value in CH□ Digital value (RWw2 to RWw9) is out of the range.	Set a value in CH□ Digital value (RWw2 to RWw9) within the allowable range.	Detailed information 1: Digital value
2015H	Moderate	Non-volatile memory data error	The data saved in the non-volatile memory is abnormal.	<ul style="list-style-type: none"> The data (IP address and maintenance information) at an error occurrence is reset to the default values. Take measures to reduce noise, such as using a shielded cable for connection. If the error occurs again, the possible cause is a failure of the network interface module. Please consult your local Mitsubishi Electric representative. 	—
330□H *1*5	Moderate	CH□ Warning output upper/lower limit value inversion	CH□ Warning output upper limit value (01××H) and CH□ Warning output lower limit value (01××H) are set such that the lower limit value is equal to or greater than the upper limit value.	Set CH□ Warning output upper limit value (01××H) and CH□ Warning output lower limit value (01××H) such that the lower limit value is smaller than the upper limit value.	Detailed information 1: Warning output upper limit value Detailed information 2: Warning output lower limit value
350□H *1*5	Moderate	CH□ Scaling setting out-of-range	CH□ Scaling lower limit value (01××H) and CH□ Scaling upper limit value (01××H) are set to values out of the range of -32000 to 32000.	Set CH□ Scaling lower limit value (01××H) and CH□ Scaling upper limit value (01××H) to values in the range of -32000 to 32000.	Detailed information 1: Scaling lower limit value Detailed information 2: Scaling upper limit value
351□H *1*5	Moderate	CH□ Scaling setting upper/lower limit inversion	CH□ Scaling lower limit value (01××H) and CH□ Scaling upper limit value (01××H) are set such that the scaling lower limit value is equal to or greater than the scaling upper limit value.	Set CH□ Scaling lower limit value (01××H) and CH□ Scaling upper limit value (01××H) such that the scaling lower limit value is smaller than the scaling upper limit value.	Detailed information 1: Scaling lower limit value Detailed information 2: Scaling upper limit value

Error code	Classification	Error name	Description and cause	Corrective action	Detailed information
3C00H	Major	Hardware error	Network interface module hardware error	Turn off and on the network interface module power supply. If the error occurs again, the possible cause is a failure of the network interface module. Please consult your local Mitsubishi Electric representative.	—
D000H *3*4	Minor	Communication setting error 1	Invalid network settings are received.	Turn off and on the network interface module power supply. If the error occurs again, the possible cause is a failure of the network interface module. Please consult your local Mitsubishi Electric representative.	Detailed information 1: Error code output by the communication driver
D001H *3*4	Minor	Communication setting error 2	Network processing that cannot be handled by the network interface module is received.	Check that the model name of the slave station set in the network configuration settings matches the model name of the actual device. If this error occurs even when the model names match, the possible cause is the failure of the network interface module. Please consult your local Mitsubishi Electric representative.	Detailed information 1: Error code output by the communication driver
D010H *2*3	Minor	IP address duplication detection	IP address duplication was detected.	Change the IP address so that no IP address duplication occurs in the access range of CC-Link IE TSN. Then turn off and on the network interface module power supply.	—
D011H *2*3*4	Moderate	IP address setting error	Values the network interface module cannot use were set for the IP address settings.	<ul style="list-style-type: none"> Without using the set IP address, the module is operated based on the previous IP address. The set IP address will not be saved in the non-volatile memory. Check the IP address again, and change the settings to values the network interface module can use. Then turn off and on the network interface module power supply. 	—
D021H *3*4	Minor	Number of RX/Ry points error	RX/Ry with a number of points that cannot be handled by the network interface module are set.	Set the following number or less for the number of points for RX and Ry in the network configuration setting. ■CC-Link IE TSN and CC-Link IE Field Network 32 points ■CC-Link IE Field Network Basic 64 points	—
D022H *3*4	Minor	Number of RWr/RWw points error	RWr/RWw with a number of points that cannot be handled by the network interface module are set.	Set the following number or less for the number of points for RWr and RWw in the network configuration setting. ■CC-Link IE TSN and CC-Link IE Field Network 32 points ■CC-Link IE Field Network Basic 32 points	—

*1 The error can be cleared by turning on and off Error clear request flag (RYA) or turning on and off Initial data setting request flag (RY9).

*2 The error cannot be cleared by turning on and off Error clear request flag (RYA) or turning on and off Initial data setting request flag (RY9). After eliminating the cause of the error, turn off and on the power supply or perform a remote reset.

*3 This error occurs only once when an abnormality is detected. Before clearing the error, eliminate the cause and check that a data link is established.

*4 While this error is occurring, an error other than this error may not occur. When this error occurs, eliminate the causes one by one until a data link is established.

*5 □= 1 (CH1) to 8 (CH8) is stored.

12.6 List of Alarm Codes

An alarm sends notification of an error that is detected using the following functions.

Function	Remarks	Reference	Description
Maintenance alarm function	Common functions	☞ Page 110 Maintenance alarm function	An error where the network interface module can continue to operate. The ALM LED flashes.
Input signal error detection function	FA3-AT1T8X, FA3-AT1M8X	☞ Page 122 Input signal error detection function	An error where the network interface module can continue to operate. The ALM LED is turned on.
Warning output function (process alarm)	FA3-AT1T8X, FA3-AT1M8X	☞ Page 124 Warning output function (process alarm)	
Warning output function	FA3-AT1T8Y, FA3-AT1M8Y	☞ Page 136 Warning output function	
Communication status monitoring function	SLMP	☞ Page 240 Communication status monitoring function	
Alive check function	MODBUS/TCP	☞ Page 267 Alive check function	
Split reception monitoring function	MODBUS/TCP	☞ Page 269 Split reception monitoring function	

Confirm that the D LINK LED is on. Determine the cause of the error by the alarm code and take corrective action corresponding to the cause.

Point

When multiple alarms have occurred, the alarms are stored in Latest alarm code (RW1) in reverse chronological order.

Alarm codes for the FA3-TH1T16XC and FA3-TH1M16XC

Alarm code	Classification	Alarm name	Description and cause	Corrective action	Detailed information
0E00H	Minor	Elapsed operation time excess detection	The network interface module operation time has exceeded the specified threshold.	Consider replacing the network interface module. To clear the alarm, set a larger value than the present threshold in Elapsed operation time threshold setting (4122H, 4123H) and turn on and off Error clear request flag (RWw0.b10).	Detailed information 1: Elapsed operation time (lower words shown in hexadecimal) Detailed information 2: Elapsed operation time (upper words shown in hexadecimal)
0E1□H ^{*1}	Minor	Relay ON count excess detection	The relay ON count of the relay connected to X□ exceeds the specified threshold.	Replace the target relay with the new one and reset the relay ON count for the target relay. To clear the alarm, reset the relay ON count for the target relay or set a larger value than the present threshold, and turn on and off Error clear request flag (RWw0.b10).	Detailed information 1: Elapsed operation time (lower words shown in hexadecimal) Detailed information 2: Elapsed operation time (upper words shown in hexadecimal)
0E20H	Minor	Communication status monitoring time excess detection	A request message is not received within the request message monitoring interval.	Set a larger value for the request message monitoring interval or send the request message to the network interface module within the request message monitoring interval specified. To clear the alarm, turn on and off Error clear request flag (RWw0.b10).	Detailed information 1: Request message monitoring interval
0E30H	Minor	Alive check error detection	Alive check with the MODBUS/TCP master device failed.	Check the status of connection with the MODBUS/TCP master device. To clear the alarm, turn on and off Error clear request flag (RWw0.b10).	Detailed information 1: Destination alive check start interval timer Detailed information 2: Destination alive check interval timer Detailed information 3: Destination alive check count

Alarm code	Classification	Alarm name	Description and cause	Corrective action	Detailed information
0E40H	Minor	Split reception monitoring error detection	A request message is not received within the time specified in the split reception monitoring timer.	<ul style="list-style-type: none"> Correct the request data length. The network load may be high. After a while, send the request message from the MODBUS/TCP master device again. To clear the alarm, turn on and off Error clear request flag (RWw0.b10).	Detailed information 1: Split reception monitoring timer

*1 □ = 0 (X0) to F (XF) is stored.

Alarm codes for the FA3-TH1T16Y, FA3-TH1T16YE, FA3-TH1M16Y, FA3-TH1M16YE

Alarm code	Classification	Alarm name	Description and cause	Corrective action	Detailed information
0E00H	Minor	Elapsed operation time excess detection	The network interface module operation time has exceeded the specified threshold.	Consider replacing the network interface module. To clear the alarm, set a larger value than the present threshold in Elapsed operation time threshold setting (4122H, 4123H) and turn on and off Error clear request flag (RWw0.b10).	Detailed information 1: Elapsed operation time (lower words shown in hexadecimal) Detailed information 2: Elapsed operation time (upper words shown in hexadecimal)
0E1□H ^{*1}	Minor	Relay ON count excess detection	The relay ON count of the relay connected to Y□ exceeds the specified threshold.	Replace the target relay with the new one and reset the relay ON count for the target relay. To clear the alarm, reset the relay ON count for the target relay or set a larger value than the present threshold, and turn on and off Error clear request flag (RWw0.b10).	Detailed information 1: Elapsed operation time (lower words shown in hexadecimal) Detailed information 2: Elapsed operation time (upper words shown in hexadecimal)
0E20H	Minor	Communication status monitoring time excess detection	A request message is not received within the request message monitoring interval.	Set a larger value for the request message monitoring interval or send the request message to the network interface module within the request message monitoring interval specified. To clear the alarm, turn on and off Error clear request flag (RWw0.b10).	Detailed information 1: Request message monitoring interval
0E30H	Minor	Alive check error detection	Alive check with the MODBUS/TCP master device failed.	Check the status of connection with the MODBUS/TCP master device. To clear the alarm, turn on and off Error clear request flag (RWw0.b10).	Detailed information 1: Destination alive check start interval timer Detailed information 2: Destination alive check interval timer Detailed information 3: Destination alive check count
0E40H	Minor	Split reception monitoring error detection	A request message is not received within the time specified in the split reception monitoring timer.	<ul style="list-style-type: none"> Correct the request data length. The network load may be high. After a while, send the request message from the MODBUS/TCP master device again. To clear the alarm, turn on and off Error clear request flag (RWw0.b10).	Detailed information 1: Split reception monitoring timer

*1 □ = 0 (Y0) to F (YF) is stored.

Alarm codes for the FA3-AT1T8X and FA3-AT1M8X

Alarm code	Classification	Alarm name	Description and cause	Corrective action	Detailed information
0C0□H ^{*1}	Minor	CH□ Process alarm (upper limit) occurrence	A process alarm (upper limit) has occurred in CH□. □ indicates the number of the channel where a process alarm has occurred.	When the digital operation value returns within the setting range, the corresponding bit of Warning output flag (RWrb) and Warning output signal (RX18) is turned off automatically. To clear Latest alarm code (RWr1), turn on and off Error clear request flag (RYA) after the digital operation value returns within the setting range.	Detailed information 1: Digital operation value
0C1□H ^{*1}	Minor	CH□ Process alarm (lower limit) occurrence	A process alarm (lower limit) has occurred in CH□. □ indicates the number of the channel where a process alarm has occurred.	When the digital operation value returns within the setting range, the corresponding bit of Warning output flag (RWrb) and Warning output signal (RX18) is turned off automatically. To clear Latest alarm code (RWr1), turn on and off Error clear request flag (RYA) after the digital operation value returns within the setting range.	Detailed information 1: Digital operation value
0D2□H ^{*1}	Minor	CH□ Input signal error detection	An input signal error has occurred in CH□. □ indicates the number of the channel where an input signal error has occurred. This alarm code is stored when an input signal error is detected according to the setting of the input signal error detection function.	Turning on and off Error clear request flag (RYA) after the analog input value returns within the setting range clears the value in Latest alarm code (RWr1). Then, the corresponding bit of Input signal error detection flag (RWra) and Input signal error detection signal (RX1C) are turned off.	—
0E00H	Minor	Elapsed operation time excess detection	The network interface module operation time has exceeded the specified threshold.	Consider replacing the network interface module. To clear the alarm, set a larger value than the present threshold in Elapsed operation time threshold setting (4122H, 4123H) and turn on and off Error clear request flag (RYA).	Detailed information 1: Elapsed operation time (lower words shown in hexadecimal) Detailed information 2: Elapsed operation time (upper words shown in hexadecimal)
0E20H	Minor	Communication status monitoring time excess detection	A request message is not received within the request message monitoring interval.	Set a larger value for the request message monitoring interval or send the request message to the network interface module within the request message monitoring interval specified. To clear the alarm, turn on and off Error clear request flag (RYA).	Detailed information 1: Request message monitoring interval
0E30H	Minor	Alive check error detection	Alive check with the MODBUS/TCP master device failed.	Check the status of connection with the MODBUS/TCP master device. To clear the alarm, turn on and off Error clear request flag (RYA).	Detailed information 1: Destination alive check start interval timer Detailed information 2: Destination alive check interval timer Detailed information 3: Destination alive check count
0E40H	Minor	Split reception monitoring error detection	A request message is not received within the time specified in the split reception monitoring timer.	<ul style="list-style-type: none"> Correct the request data length. The network load may be high. After a while, send the request message from the MODBUS/TCP master device again. To clear the alarm, turn on and off Error clear request flag (RYA).	Detailed information 1: Split reception monitoring timer

*1 □= 1 (CH1) to 8 (CH8) is stored.

Alarm codes for the FA3-AT1T8Y and FA3-AT1M8Y

Alarm code	Classification	Alarm name	Description and cause	Corrective action	Detailed information
0C0□H ^{*1}	Minor	CH□ Warning output (upper limit) occurrence	CH□ Warning output (upper limit) has occurred. □ indicates the number of the channel where the warning output has occurred.	Reset CH□ Digital value (RWw2 to RWw9) to a value within the setting range, and turn on and off Error clear request flag (RYA).	Detailed information 1: Digital value
0C1□H ^{*1}	Minor	CH□ Warning output (lower limit) occurrence	CH□ Warning output (lower limit) has occurred. □ indicates the number of the channel where the warning output has occurred.	Reset CH□ Digital value (RWw2 to RWw9) to a value within the setting range, and turn on and off Error clear request flag (RYA).	Detailed information 1: Digital value
0E00H	Minor	Elapsed operation time excess detection	The network interface module operation time has exceeded the specified threshold.	Consider replacing the network interface module. To clear the value in Latest alarm code (RWr1), set a larger value than the present threshold in Elapsed operation time threshold setting (4122H, 4123H) and turn on and off Error clear request flag (RYA).	Detailed information 1: Elapsed operation time (lower words shown in hexadecimal) Detailed information 2: Elapsed operation time (upper words shown in hexadecimal)
0E20H	Minor	Communication status monitoring time excess detection	A request message is not received within the request message monitoring interval.	Set a larger value for the request message monitoring interval or send the request message to the network interface module within the request message monitoring interval specified. To clear the alarm, turn on and off Error clear request flag (RYA).	Detailed information 1: Request message monitoring interval
0E30H	Minor	Alive check error detection	Alive check with the MODBUS/TCP master device failed.	Check the status of connection with the MODBUS/TCP master device. To clear the alarm, turn on and off Error clear request flag (RYA).	Detailed information 1: Destination alive check start interval timer Detailed information 2: Destination alive check interval timer Detailed information 3: Destination alive check count
0E40H	Minor	Split reception monitoring error detection	A request message is not received within the time specified in the split reception monitoring timer.	<ul style="list-style-type: none"> Correct the request data length. The network load may be high. After a while, send the request message from the MODBUS/TCP master device again. To clear the alarm, turn on and off Error clear request flag (RYA).	Detailed information 1: Split reception monitoring timer

*1 □ = 1 (CH1) to 8 (CH8) is stored.