



YASKAWA

YASKAWA AC Drive-Option Card MECHATROLINK-II Installation Manual

Type SI-T3

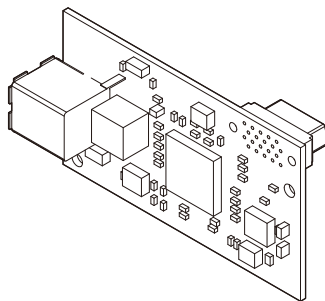
To properly use the product, read this manual thoroughly and retain for easy reference, inspection, and maintenance. Ensure the end user receives this manual.

安川インバータ オプションカード

MECHATROLINK-II 通信 取扱説明書

形式 SI-T3

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1 Preface and Safety

Yaskawa manufactures products used as components in a wide variety of industrial systems and equipment. The selection and application of Yaskawa products remain the responsibility of the equipment manufacturer or end user. Yaskawa accepts no responsibility for the way its products are incorporated into the final system design. Under no circumstances should any Yaskawa product be incorporated into any product or design as the exclusive or sole safety control. Without exception, all controls should be designed to detect faults dynamically and fail safely under all circumstances. All systems or equipment designed to incorporate a product manufactured by Yaskawa must be supplied to the end user with appropriate warnings and instructions as to the safe use and operation of that part. Any warnings provided by Yaskawa must be promptly provided to the end user. Yaskawa offers an express warranty only as to the quality of its products in conforming to standards and specifications published in the Yaskawa manual. NO OTHER WARRANTY, EXPRESS OR IMPLIED, IS OFFERED. Yaskawa assumes no liability for any personal injury, property damage, losses, or claims arising from misapplication of its products.

◆ Applicable Documentation

The following manuals are available for SI-T3 MECHATROLINK-II Option card:

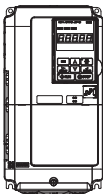
Option Card

	<p>YASKAWA AC Drive-Option Card MECHATROLINK-II Installation Manual (this book) Manual No. : TOBPC73060050</p>
	<p>Read this manual first. The installation manual is packaged with the MECHATROLINK-II Option and contains a basic overview of wiring, settings, functions, and fault diagnoses.</p>
	<p>YASKAWA AC Drive-Option Card MECHATROLINK-II Technical Manual Manual No. : SIEPC73060050</p>
	<p>The technical manual contains detailed information. To obtain the technical manual, access these sites.</p> <p>Europe: http://www.yaskawa.eu.com Japan: http://www.e-mechatronics.com U.S.: http://www.yaskawa.com Other areas: contact a Yaskawa representative.</p>

1 Preface and Safety

For the drive setup, refer to one of the documentation listed below.

Yaskawa Drive



Refer to the manual of the drive this option card is being used with. The instruction manual for the drive covers basic installation, wiring, operation procedures, functions, troubleshooting, and maintenance information. It also includes important information on parameter settings and how to tune the drive.

A Quick Start Guide is included with the drive. For the more detailed Technical Manual, visit Yaskawa's homepage or contact a Yaskawa representative.

Europe: <http://www.yaskawa.eu.com>

Japan: <http://www.e-mechatronics.com>

U.S.: <http://www.yaskawa.com>

Other areas: contact a Yaskawa representative

◆ Terms

Note: Indicates supplementary information that Yaskawa highly recommends be followed, even though equipment may not be at risk.

MECHATROLINK-II Option: Yaskawa AC Drive -SI-T3 MECHATROLINK-II option card

◆ Registered Trademarks

- MECHATROLINK-I/MECHATROLINK-II is a registered trademark of the MECHATROLINK Members Association (MMA).
- Other company names and product names listed in this manual are registered trademarks of those companies.

◆ Supplemental Safety Information

Read and understand this manual before installing, operating, or servicing this option card. The option card must be installed according to this manual and local codes.

The following conventions are used to indicate safety messages in this manual. Failure to heed these messages could result in serious or possibly even fatal injury or damage to the products or to related equipment and systems.

DANGER

Indicates a hazardous situation, which, if not avoided, will result in death or serious injury.

WARNING

Indicates a hazardous situation, which, if not avoided, could result in death or serious injury.

CAUTION

Indicates a hazardous situation, which, if not avoided, could result in minor or moderate injury.

NOTICE

Indicates an equipment damage message.

1 Preface and Safety

■ General Safety

General Precautions

- The diagrams in this section may include drives without covers or safety shields to illustrate details. Be sure to reinstall covers or shields before operating any devices. The option board should be used according to the instructions described in this manual.
- Any illustrations, photographs, or examples used in this manual are provided as examples only and may not apply to all products to which this manual is applicable.
- The products and specifications described in this manual or the content and presentation of the manual may be changed without notice to improve the product and/or the manual.
- When ordering a new copy of the manual due to damage or loss, contact your Yaskawa representative or the nearest Yaskawa sales office and provide the manual number shown on the front cover.

DANGER

Heed the safety messages in this manual.

Failure to comply will result in death or serious injury.

The operating company is responsible for any injuries or equipment damage resulting from failure to heed the warnings in this manual.

NOTICE

Do not expose the drive to halogen group disinfectants.

Failure to comply may cause damage to the electrical components in the option card.

Do not pack the drive in wooden materials that have been fumigated or sterilized.

Do not sterilize the entire package after the product is packed.

Do not modify the drive circuitry.

Failure to comply could result in damage to the drive and will void warranty.

YASKAWA is not responsible for any modification of the product made by the user. This product must not be modified.

2 Product Overview

◆ About This Product

MECHATROLINK-II Option (Model: SI-T3) is designed for connecting a drive to a field network using the MECHATROLINK protocol.

By installing the MECHATROLINK-II Option to a drive, it is possible to do the following from a MECHATROLINK master device:

- operate the drive
- monitor the operation status of the drive
- change parameter settings

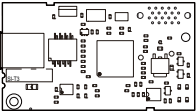



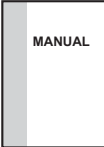
3 Receiving

Please perform the following tasks after receiving the MECHATROLINK-II Option:

- Inspect the MECHATROLINK-II Option for damage.
If the MECHATROLINK-II Option appears damaged upon receipt, contact the shipper immediately.
- Verify receipt of the correct model by checking the information on the PCB (see [Figure 1](#)).
- If you have received the wrong model or the MECHATROLINK-II Option does not function properly, contact your supplier.

◆ Contents and Packaging

Table 1 Contents of Package

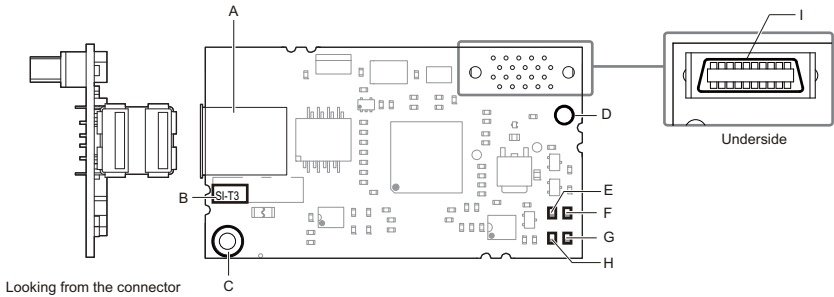
Description:	Option Card	Ground Cable	Screws (M3)	LED Label	Installation Manual
					
Quantity:	1	1	3	1	1

◆ Tool Requirements

A Phillips screwdriver (#2 (M3)) U.S. standard size is required to install the MECHATROLINK-II Option.

4 MECHATROLINK-II Option Components

◆ MECHATROLINK-II Option



- | | |
|---|------------------------------|
| A – Communication cable connector | E – LED (ERR) |
| B – Model number | F – LED (RUN) |
| C – Ground terminal
(installation hole) | G – LED (TX) |
| D – Installation hole | H – LED (RX) |
| | I – Connector (CN101) |

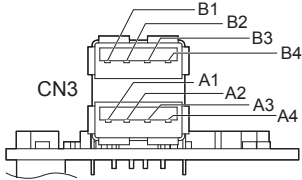
Figure 1 Option Card

For details on the LEDs, Refer to [MECHATROLINK-II Option LED Display on page 12](#).

4 MECHATROLINK-II Option Components

◆ Communication connector

Table 2 Communication connector

MECHATROLINK-II Connector	Pin No.	Signal Name	I/O	Function
	A1	(NC)	–	Not used.
	A2	SRD–	I/O	Send/receive data (–)
	A3	SRD+	I/O	Send/receive data (+)
	A4	(NC)	–	Not used.
	Shell	SLD	–	Shield
	B1	(NC)	–	Not used.
	B2	SRD–	I/O	Send/receive data (–)
	B3	SRD+	I/O	Send/receive data (+)
	B4	(NC)	–	Not used.
	Shell	SLD	–	Shield

◆ MECHATROLINK-II Option LED Display

The MECHATROLINK-II Option has four LEDs that indicate the option card or communication status.

■ Checking LED Operation

Table 3 LED Display

LED	Color	Display	Status	Remarks
RUN	Green	ON	Power supply on	SI-T3 has been successfully powered up
		OFF	No power	<ul style="list-style-type: none"> The drive has no power SI-T3 is not properly connected to the drive, or SI-T3 has no power An internal, self-diagnostic error occurred in the SI-T3
ERR	Red	ON	Connection error	<ul style="list-style-type: none"> SI-T3 is not properly connected to the drive Communication error
		Flashing	SI-T3 error	Error found during SI-T3's self-diagnostic check
		OFF	Normal operation	<ul style="list-style-type: none"> SI-T3 is properly connected to the drive Communication normal
TX	Green	ON	Sending data	Data is being sent (LED may appear to be flashing)
		OFF	Not sending data	<ul style="list-style-type: none"> No data is being sent During reset
RX	Green	ON	Receiving data	Data is being received (LED may appear to be flashing)
		OFF	Not receiving data	<ul style="list-style-type: none"> No data is being received During reset

5 Installation Procedure

◆ Section Safety

DANGER

Electric Shock Hazard

Power to the drive must be shut off when installing this option card.

Even though the power has been shut off, voltage still remains in the drive's DC bus. Wait before removing the front cover once the drive has been turned off.

The CHARGE light on the drive will go out after voltage in the DC bus drops below 50 V, at which point it is safe to remove the front cover.

Due to the risk of electric shock, be sure that all LEDs have gone out and that the DC bus voltage has reached a safe level prior to performing any work on the drive.

WARNING

Electrical Shock Hazard

Do not remove the front cover of the drive while the power is on.

Failure to comply could result in death or serious injury.

The diagrams in this section may include drives without covers or safety shields to show details. Be sure to reinstall covers or shields before operating any devices. The option board should be used according to the instructions described in this manual.

Do not allow unqualified personnel to use equipment.

Failure to comply could result in death or serious injury.

Maintenance, inspection, and replacement of parts must be performed only by authorized personnel familiar with installation, adjustment, and maintenance of this product.

WARNING

Electrical Shock Hazard

Do not touch the option card while the power supply to the drive is switched on.

Failure to comply could result in death or serious injury.

Do not use damaged wires, place excessive stress on wiring, or damage the wire insulation.

Failure to comply could result in death or serious injury.

NOTICE

Damage to Equipment

Observe proper electrostatic discharge procedures (ESD) when handling the option card, drive, and circuit boards.

Failure to comply may result in ESD damage to circuitry.

Never shut the power off while the drive is outputting voltage.

Failure to comply may cause the application to operate incorrectly or damage the drive.

Do not operate damaged equipment.

Failure to comply may cause further damage to the equipment.

Do not connect or operate any equipment with visible damage or missing parts.

Do not use unshielded cable for control wiring.

Failure to comply may cause electrical interference resulting in poor system performance.

Use shielded twisted-pair wires and ground the shield to the ground terminal of the drive.

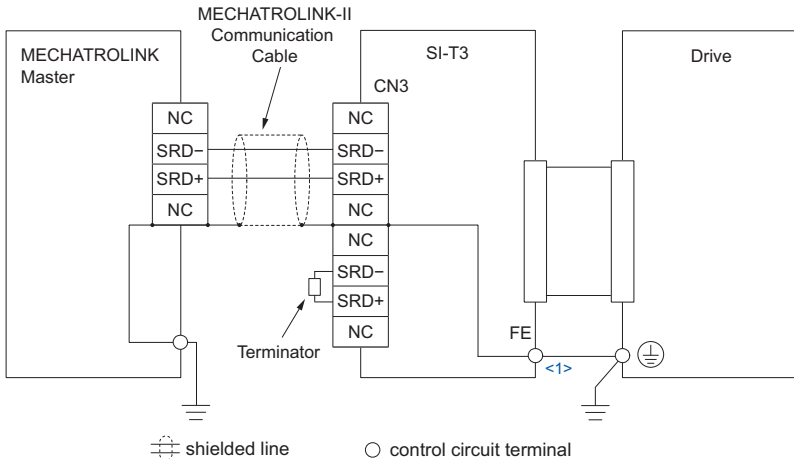
Properly connect connectors.

Failure to comply may prevent proper operation and possibly damage equipment.

Check wiring to ensure that all connections are correct after installing the option card and connecting any other devices.

Failure to comply may result in damage to the option card.

◆ Wiring the Network Cable Connectors



<1> The FE terminal on the MECHATROLINK-II Option is supplied with a ground cable that should be connected to the ground terminal on the drive.
If there are noise influences on communication, remove the grounding cable.

Figure 2 Wiring Diagram

◆ Prior to Installing the Option Card

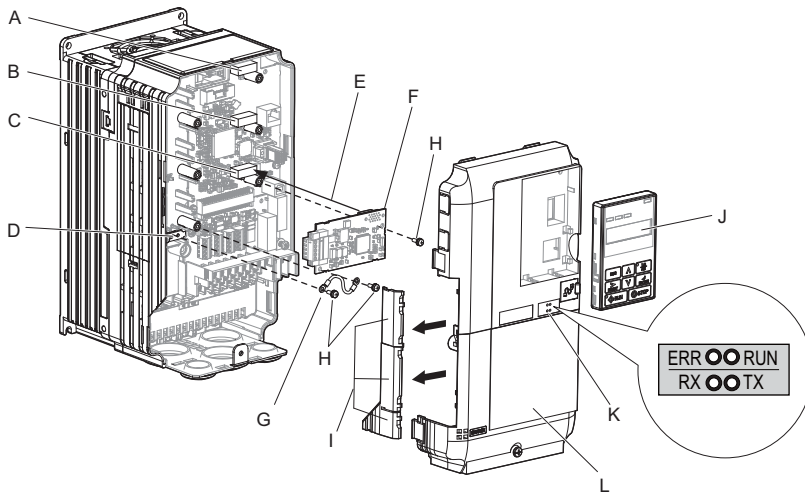
Prior to installing the MECHATROLINK-II Option, wire the drive and make necessary connections to the drive terminals. For more information on wiring and connecting the drive, refer to the technical manual for the drive the MECHATROLINK-II option card is connected to. Verify that the drive runs normally without the option installed.

5 Installation Procedure

◆ Installing the Option Card

Insert the option card in the CN5-A connector located on the drive's control board. See the drive manual for directions on removing the front cover.

1. Shut off power to the drive, wait the appropriate amount of time for voltage to dissipate, then remove the operator and front cover. Refer to the drive technical manual for direction on removing the front cover.
2. Insert the CN101 connector on the option card into the CN5-A connector on the drive, then fasten it into place using one of the screws included with the option card.



A – Connector CN5-C

B – Connector CN5-B

C – Connector CN5-A

D – Drive grounding terminal (FE)

E – Insert connector CN101 here

F – Option card

G – Lead line

H – Mounting screw (M3)

I – Use wire cutters to create an opening for cable lines

J – Operator

K – LED label

L – Front cover

Figure 3 Installing the Option Card

3. Connect the ground lead line to the ground terminal using one of the screws delivered with the option card.

Note: There are only two screw holes on the drive for ground terminals. If three option cards are connected, two of the lead lines will need to share the same ground terminal.

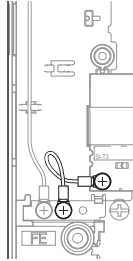


Figure 4 Connecting the Ground Terminal

4. Wire the MECHATROLINK-II to the connector on the option card.
When installing option cards to drive models CIMR-A□4A0002 through 0023, the cables connected to the option might need to be routed through the top cover to the outside. In this case, cut out the perforated openings on the left side of the drive top cover. Make sure no sharp edges are left that may damage the cable.
Models CIMR-A□2A0056 through 0211 and 4A0031 through 0165 have enough space to keep all wiring inside the unit.

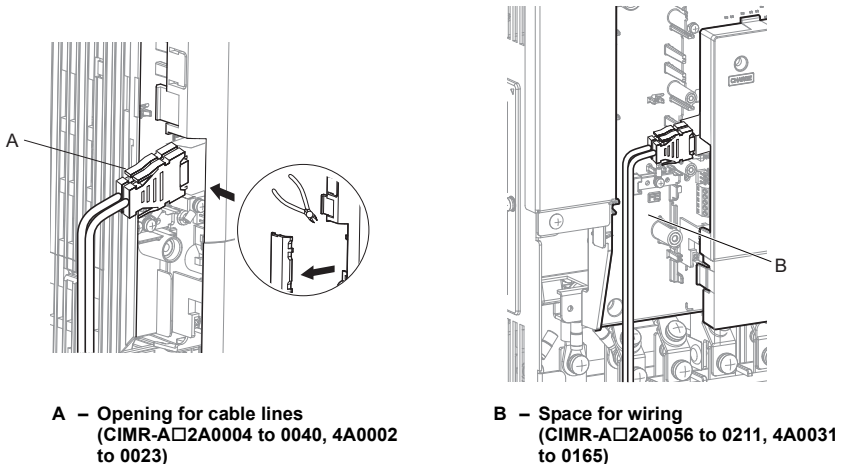


Figure 5 Wiring space

5 Installation Procedure

5. Place the front cover back onto the drive as it was before.

Note: 1. Take care when wiring the option card so that the front cover easily fits back onto the drive.
2. Install Cable Cover option to maintain the drive Enclosure Type.

6. Attach the LED label packaged with the option card as shown in [Figure 3](#).

◆ MECHATROLINK-II Communications Cables

Wire the MECHATROLINK-II communications cables to the communications connector (CN3). Install MECHATROLINK-II communications cables apart from main-circuit wiring and other electrical and power lines.

Note: 1. For communications cables, use special shielded twisted-pair cables for MECHATROLINK communications.

Recommended cable: JEPMC-W6002-□□-E <1>

JEPMC-W6003-□□-E (with a core) <1>

2. Connect the terminator (model No.: JEPMC-W6022-E) on the end of the communication lines.
3. Maximum transmission distance is 50 m. Minimum wiring distance between stations is 0.5 m.

<1> □□ is the length (m).

6 MECHATROLINK Option Drive Parameters

Confirm proper setting of the all parameters in *Table 4* before starting network communications.

Table 4 Parameter Settings

No.	Name	Description	Default
b1-01 <>	Frequency Reference Selection 1	Selects the frequency reference input source 0: Operator - Digital preset speed d1-01 to d1-17 1: Terminals - Analog input terminal A1 or A2 2: MEMOBUS/Modbus communications 3: Option PCB 4: Pulse Input (Terminal RP)	1
b1-02 <>	Run Command Selection 1	Selects the run command input source 0: Digital Operator - RUN and STOP keys 1: Digital input terminals S1 to S8 2: MEMOBUS/Modbus communications 3: Option PCB	1
F6-01 <>	Communications Error Operation Selection	Determines drive response when a bUS error is detected during communications with the MECHATROLINK-II Option 0: Ramp to Stop. Decelerate to stop using the deceleration time in C1-02. 1: Coast to Stop 2: Fast-Stop. Decelerate to stop using the deceleration time in C1-09. 3: Alarm Only	1
F6-02	External Fault from Comm. Option Detection Selection	Sets the condition for external fault detection (EF0) 0: Always detected. 1: Detection during run only.	0
F6-03 <>	External Fault from Comm. Option Operation Selection	Determines drive response for external fault input (EF0) detection during MECHATROLINK-II communication 0: Ramp to Stop. Decelerate to stop using the deceleration time in C1-02. 1: Coast to Stop 2: Fast-Stop. Decelerate to stop using the deceleration time in C1-09. 3: Alarm Only	1
F6-07	Multi-Step Speed Enable/Disable Selection when NetRef/ComRef is Selected	0: Multi-step speed reference disabled (Same as F7) 1: Multi-step speed reference enabled (Same as V7)	0

6 MECHATROLINK Option Drive Parameters

No.	Name	Description	Default
F6-08	Reset Communication Parameters	Determines which communication-related parameters are set back to their original default values when the drive is initialized. 0: Do not reset F6-□□ parameters when the drive is initialized using parameter A1-03. 1: Rest F6-□□ parameters when the drive is initialized using parameter A1-03. Note: Setting this parameter does not affect communication-related parameters.	0
F6-20 <3> <4>	MECHATROLINK Station Address	20 to 3FH	21
F6-21 <3>	MECHATROLINK Frame Size	0: 32 byte 1: 17 byte	0
F6-22 <3>	MECHATROLINK Link Speed	0: 10 Mbps 1: 4 Mbps	0
F6-23 <3> <4>	MECHATROLINK Monitor Selection (E)	0 to FFFFH	0
F6-24 <3> <6>	MECHATROLINK Monitor Selection (F)	0 to FFFFH	0
F6-25	Operation Selection at Watchdog Error (E5)	0: Ramp to stop. Decelerate to stop using the deceleration time in C1-02. 1: Coast to stop. 2: Fast Stop. Decelerate to stop using the deceleration time in C1-09. 3: Alarm only.	1
F6-26	MECHATROLINK bUS Errors Detected	Sets the number of option communication errors (bUS). 2 to 10	2

- <1> To start and stop the drive with the MECHATROLINK master device using serial communications, set b1-02 to 3. To control the frequency reference of the drive via the master device, set b1-01 to 3.
- <2> If set to 3, then the drive will continue to operate when a fault is detected. Take proper measures such as installing an emergency stop switch.
- <3> Power must be cycled in order for any setting changes to take affect.
- <4> All station addresses must be unique. If set to 20 or 3F, a Station Address Error (Aer) will occur and the ERR light will turn on.
- <5> Setting byte 10 of INV_CTL to 0EH enables the register set by F6-23. Byte 11 and 12 of the response data enable the register content set by F6-23.
Refer to the SI-T3 Technical Manual for detail.
- <6> Setting byte 10 of INV_CTL to 0FH enables the register set by F6-24. Byte 11 and 12 of the response data enable the register content set by F6-24.
Refer to the SI-T3 Technical Manual for detail.

7 Troubleshooting

◆ Drive-Side Error Codes

Drive-side error codes appear on the drive's operator. Causes of the errors and corrective actions are listed in [Table 5](#).

For additional error codes that may appear on the operator screen, refer to the technical manual for the drive the MECHATROLINK-II Option is connected to.

■ Faults

Both bUS (MECHATROLINK-II Option Communication Error), EF0 (External Fault Input from the MECHATROLINK-II Option) and E5 (SI-T3 Watchdog Timer Error) can appear as an alarm or as a fault. When a fault occurs, the digital operator ALM LED remains. When an alarm occurs, the digital operator ALM LED flashes.

If communication stops while the drive is running, answer the following questions to help remedy the fault:

- Is the MECHATROLINK-II Option properly installed?
- Is the communication line properly connected to the MECHATROLINK-II Option? Is it loose?
- Is the PLC program working? Has the PLC CPU stopped?
- Did a momentary power loss interrupt communications?

Table 5 Fault Display and Possible Solutions

Operator Display		Fault Name
bUS	bUS	MECHATROLINK-II Option Communication Error
		After establishing initial communication, the connection was lost. Only detected when the run command or frequency reference is assigned to the option (b1-03 = 3 or b1-02 = 3).
Cause		Possible Solution
Master controller (PLC) has stopped communicating.		Check for faulty wiring. ⇒ Correct any wiring problems.
Communication cable is not connected properly.		
A data error occurred due to noise		Check the various options available to minimize the effects of noise. ⇒ Take steps to counteract noise in the control circuit wiring, main circuit lines, and ground wiring. ⇒ If a magnetic contactor is identified as a source of noise, install a surge absorber to the contactor coil. ⇒ Use cables specified.
MECHATROLINK-II Option is damaged.		⇒ If there are no problems with the wiring and the error continues to occur, replace the MECHATROLINK-II Option.

7 Troubleshooting

Operator Display		Fault Name
E5	E5	SI-T3 Watchdog Timer Error
		The watchdog has timed out.
Cause		Possible Solution
Data has not been received from the PLC, triggering the watchdog timer.		⇒ Execute DISCONNECT or ALM_CLR, then issue a CONNECT command or SYNC_SET command and proceed to phase 3.
Operator Display		Fault Name
EF0	EF0	External Fault Input from MECHATROLINK-II Option
		The alarm function for an external device has been triggered.
Cause		Possible Solution
An external fault is being sent from the master controller (PLC).		⇒ Remove the cause of the external fault. ⇒ Reset the external fault input from the PLC device.
Problem with the PLC program		⇒ Check the program used by the PLC and make the appropriate corrections.
Operator Display		Fault Name
oFA00	oFA00	MECHATROLINK-II Option Fault (CN5-A)
		MECHATROLINK-II Option is not properly connected.
Cause		Possible Solution
Non-compatible option connected to the drive		⇒ Connect an option that is compatible with the drive.
Operator Display		Fault Name
oFA01	oFA01	MECHATROLINK-II Option Fault (CN5-A)
		MECHATROLINK-II Option is not properly connected.
Cause		Possible Solution
Problem with the connectors between the drive and MECHATROLINK-II Option		⇒ Turn the power off and check the connectors between the drive and MECHATROLINK-II Option.
Operator Display		Fault Name
oFA30 to oFA43	oFA30 to oFA43	MECHATROLINK-II Option Fault (CN5-A)
		Communication ID error
Cause		Possible Solution
MECHATROLINK-II Option hardware fault		⇒ Replace the MECHATROLINK-II Option. Contact Yaskawa for assistance.

Operator Display		Fault Name
oFb00	oFb00	MECHATROLINK-II Option Fault (CN5-B)
		Non-compatible option card is connected.
Cause		Possible Solution
Non-compatible option connected to the drive.		⇒ Connect the correct option card to CN5-A.
Operator Display		Fault Name
oFb02	oFb02	MECHATROLINK-II Option Fault (CN5-B)
		Two of the same option cards are connected at the same time.
Cause		Possible Solution
Option cards AI-A3 or DI-A3 were connected to the CN5-B port while an option card was already connected to CN5-A.		⇒ Only one type of option input card AI-A3 or DI-A3 can be connected to the drive. Only this option card for MECHATROLINK-II can be connected to CN5-A.
Operator Display		Fault Name
oFc00	oFc00	MECHATROLINK-II Option Fault (CN5-C)
		Non-compatible option card is connected.
Cause		Possible Solution
Non-compatible option connected to the drive.		⇒ Connect the correct option card to CN5-A.
Operator Display		Fault Name
oFc02	oFc02	MECHATROLINK-II Option Fault (CN5-C)
		Two of the same option cards are connected at the same time.
Cause		Possible Solution
Option cards AI-A3 or DI-A3 were connected to the CN5-C port while an option card was already connected to CN5-A.		⇒ Only one type of option input card AI-A3 or DI-A3 can be connected to the drive. Only this option card for MECHATROLINK-II can be connected to CN5-A.

7 Troubleshooting

■ Minor Faults and Alarms

Operator Display		Minor Fault Name	
AEr	AEr	Station Address Error	
		MECHATROLINK-II Option is set to an address outside the allowable setting range.	
Cause		Possible Solution	Minor Fault (H2-□□ = 10)
Address outside the specified address range		⇒ Set F6-20 to an address within the specified range.	YES
Operator Display		Minor Fault Name	
CALL	CALL	Serial Communication Transmission Error	
		Communication has not yet been established.	
Cause		Possible Solution	Minor Fault (H2-□□ = 10)
Communication wiring is faulty, there is a short circuit, or something is not connected properly.		Check for wiring errors. ⇒ Correct the wiring. ⇒ Remove and ground shorts and reconnect loose wires.	YES
Programming error on the master side		⇒ Check communications at start-up and correct programming errors.	
Communication circuitry is damaged.		Perform a self-diagnostics check. ⇒ Replace the drive if the fault continues to occur.	

8 Specifications

◆ Specifications

Table 6 Option Specifications

Model	SI-T3
Access mode	Start-stop synchronization, master/slave method
Communication Speed	10 Mbps (MECHATROLINK-II), 4 Mbps (MECHATROLINK-I)
Transmission cycle	500 μs to 8 ms <1>
Maximum transmission distance	50 m <2>
Minimum wiring distance between stations	0.5 m
Data length	17-byte data transmission or 32-byte data transmission <3>
Maximum number of stations	30 <2> <4>
Ambient Temperature	-10°C to +50°C
Humidity	up to 95% RH (no condensation)
Storage Temperature	-20°C to +60°C (allowed for short-term transport of the product)
Area of Use	Indoors (free of corrosive gas, airborne particles, etc.)
Altitude	Up to 1000 m

<1> For MECHATROLINK-I, a cycle is 2 ms. For MECHATROLINK-II, a cycle is 1 ms to 8 ms for a 32-byte data transmission, and 500 μs to 8 ms for a 17-byte data transmission.

<2> At the maximum transmission distance of 50 m, the maximum number of stations is 15.

<3> For MECHATROLINK-I, only a 17-byte data transmission can be selected.

<4> The maximum number of connectable stations changes depending on the types and settings of the host master, baud rate, or communications cycle. For details, refer to the manuals of your master.
Communications cycle: Integral multiple of transmission cycles (depending on the host master settings).

Example: If the host master is an MP2300

- For MECHATROLINK-II (32-byte transmission, 2.0 ms communications cycle): 21 stations max. (21 stations can be set, but then the maximum number of connectable drives will be 16.)

- For MECHATROLINK-II (32-byte transmission, 1.0 ms communications cycle): 9 stations max.

- For MECHATROLINK-II (17-byte transmission, 1.0 ms communications cycle): 15 stations max.

- For MECHATROLINK-I: 14 stations max.

8 Specifications

◆ Revision History

The revision dates and the numbers of the revised manuals appear on the bottom of the back cover.

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YASKAWA AC Drive-Option Card

MECHATROLINK-II

Installation Manual

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