



CONNECTOR CONVERSION BOX GT16H-CNB-42S

User's Manual



This manual describes the part names, dimensions, mounting, and specifications of the product. Before use, read this manual and manuals of relevant products fully to acquire proficiency in handling and operating the product. Make sure to learn all the product information, safety information, and precautions.

And, store this manual in a safe place so that you can take it out and read it whenever necessary. Always forward it to the end user. Registration

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Effective April 2015

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Safety Precaution (Read these precautions before using.)

Before using this product, please read this manual and the relevant manuals introduced in this manual carefully and pay full attention to safety to handle the product correctly.

The precautions given in this manual are concerned with this product.

In this manual, the safet	y precautions are ranked as	s MARNING a	

Indicates that incorrect handling may cause hazardous conditions, resulting in death or severe injury.			
Indicates that incorrect handling may cause hazardous conditions, resulting in medium or slight personal injury or physical damage.			

Depending on circumstances, procedures indicated by **<u>CAUTION</u>** may also be linked to serious results.

In any case, it is important to follow the directions for usage.

DESIGN PRECAUTIONS /WARNING

- Some failures of the GOT or cable may keep the outputs on or off. An external monitoring circuit should be provided to check for output signals which may lead to a serious accident.
- Not doing so can cause an accident due to false output or malfunction. • If a communication fault (including cable disconnection) occurs during
- a domination and including cable dischineducin occurs with an experimentary and the GOT becomes inoperative. A system where the GOT is used should be configured to perform any significant operation to the system by using the switches of a device other than the GOT on the assumption that a GOT communication fault will occur.
- Not doing so can cause an accident due to false output or malfunction. • Do not use the GOT as the warning device that may cause a serious accident. An independent and redundant hardware or mechanical interlock is required to configure the device that displays and outputs serious warning. Failure to observe this instruction may result in an accident due to incorrect
- output or malfunction.
 Incorrect operation of the touch switch(s) may lead to a serious accident if the GOT backlight is gone out. When the GOT backlight goes out, the POWER LED flickers (green/orange) and the display section turns black and causes the monitor screen to appear blank, while the input of the touch switch(s) remains active. This may confuse an operator in thinking that the GOT is on "screensaver" mode, who then tries to release the GOT from this mode by touching the display section, which may cause a touch switch to operate. Note that the following occurs on the GOT when the backlight goes out.
 The POWER LED flickers (green/orange) and the monitor screen appears
- blank.

DESIGN PRECAUTIONS A CAUTION

Do not bundle the control and communication cables with main-circuit, power or other wiring. Run the above cables separately from such wiring and keep them a minimum of 100mm (3.94mi,) apart.Not doing so noise can cause a malfunction.

MOUNTING PRECAUTIONS / WARNING

 Make sure to turn off the Connector Conversion Box's power before attaching o detaching it to/from the GOT.
 Failure to do so may cause unit failure or malfunctions.

MOUNTING PRECAUTIONS ACAUTION

 Use the Connector Conversion Box within the generic environment specification described in this manual. If the product is used in such conditions, electric shock fire, malfunctions, deterioration or damage may occur.

WIRING PRECAUTIONS

Be sure to shut off all phases of the external power supply used by the system before wiring. Failure to do so may result in an electric shock, product damage or malfunctions.

- Please make sure to ground FG terminal of the Connector Conversion Box power supply section by applying 100 or less which is used exclusively for the GOT. No doing so may cause an electric shock or malfunction.
- Correctly wire the Connector Conversion Box power supply section after confirming the rated voltage and terminal arrangement of the GOT. Not doing so can cause a fire or failure.
- Exercise care to avoid foreign matter such as chips and wire offcuts entering the GOT. Not doing so can cause a fire, failure or malfunction.

Plug the communication cable into the connector of the connected unit and tighten the mounting and terminal screws in the specified torque range. Undertightening can cause a short circuit or malfunction. Overtightening car

cause a short circuit or malfunction due to the damage of the screws or unit.

Before performing the test operations of the user creation monitor screen (such as turning ON or OFF bit device, changing the word device current value, changing the settings or current values of the timer or counter, and changing the buffer memory current value), read through the manual carefully and make yourself familiar with the operation method. During test operation, never change the data of the devices which are used to perform significant operation for the system. False output or malfunction can cause an accident.

STARTUP/MAINTENANCE AWARNING

- When power is on, do not touch the terminals.
- Doing so can cause an electric shock or malfunction. Before starting cleaning or terminal screw retightening, always switch off the
- bower externally in all phases. Not switching the power off in all phases can cause a unit failure or malfunction. Undertightening can cause a short circuit or malfunction. Overtightening can cause a short circuit or malfunction due to the damage of the screws or unit.

- Do not disassemble or modify the unit.
- Doing so can cause a failure, malfunction, injury or fire. • Do not touch the conductive and electronic parts of the unit directly.
- Do not touch the conductive and electronic parts of the unit directly Doing so can cause a unit malfunction or failure.
- The cables connected to the unit must be run in ducts or clamped. Not doing so can cause the unit or cable to be dramaged due to the dangling, motion or accidental pulling of the cables or can acuse a matfunction due to a
- cable connection fault. When unplugging the cable connected to the unit, do not hold and pull the cable portion. Doing so can cause the unit or cable to be damaged or can cause a
- malfunction due to a cable connection fault.

DISPOSAL PRECAUTIONS ACAUTION

When disposing of the product, handle it as industrial waste

 The Connector Conversion Box is a precision instrument. During transportation avoid impacts larger than those specified in this manual. Failure to do so may cause failures in the unit. After transportation, verify the operations of the unit.

Certification of UL, cUL standards

UL, cUL Standards are recognized in use by the following combination.

- GT1665HS-VTBD (Hardware version F or later)
 GT16H_CNB_42S
- GT16H-CNB-423
 External cable (GT16H-C30-42P, GT16H-C60-42P, GT16H-C100-42P)

General notes on power supply

This equipment must be supplied by a UL Listed or Recognized 24 V dc rated power supply and UL Listed or Recognized fuse rated not higher than 4A, or a UL Listed Class 2 power supply.

Compliance with EC directive (CE Marking)

This note does not guarantee that an entire mechanical module produced in accordance with the contents of this note will comply with the following standards. Compliance to EMC directive for the entire mechanical module should be checked by the user/manufacturer. For more details please contact the local Mitsubishi Electric sales the

Attention

This product is designed for use in industrial applications.
 Authorized Representative in the European Community:

 Authorized Representative in the European Community: Mitsubishi Electric Europe B.V. Gothaer Str. 8. 40880 Ratingen, Germany

Requirement for Compliance with EMC directive

The following products have shown compliance through direct testing (to the identified standards) and design analysis (forming a technical construction file) to the European Directive for Electromagnetic Compatibility (2004/108/EC) when used as directed by the appropriate documentation.

Type: Programmable Controller (Open Type Equipment)

Standard		Remark	
EN61131-2 : 2007	EMI	Compliance with all relevant aspects of the standard. (Radiated Emissions)	
Programmable controllers- Equipmer requirement and tests	^{it,} EMS	Compliance with all relevant aspects of the standard. (ESD, RF electromagnetic field, EFTB, Surge, RF conducted disturbances and Power frequency magnetic field)	

For more details please contact the local Mitsubishi Electric sales site.

Notes for compliance to EMC regulation

1) General notes on the control panel

Make sure to combine the G716 Handy GOT with the Connector Conversion Box to comply with the EMC directive. The Connector Conversion Box is an open type device (device installed to another device) and must be installed in a conductive control panel.

General notes on the use of communication

External cable (GT16H-C30-42P, GT16H-C60-42P, GT16H-C100-42P)
 Direct connection cable

Existing Cables User Made Cables

-	
GT01-C30R4-8P	The cable need to be independently tested by the user to demonstrate EMC compatibility when they are used with the GOT, the PLC of MELSEC-Q series, MELSEC-L series,
GTTH-C30K2-0F	MELSEC-QnA, MELSEC-A series and MELSEC-FX series.

Ethernet connection cable (Shielded twisted pair cable (STP))

- PLC (manufactured by other company), microcomputer, temperature controller, inverter, servo amplifier, CNC, MODBUS(R)/RTU or MODBUS(R)/ TCP connection Produce the cable (RS-232 cable, RS-422 / 485 cable) for connecting the GOT
- Produce the cable (RS-232 cable, RS-422 / 485 cable) for connecting the GO to a controller with reference to the following manual.

 \rightarrow GOT1000 Series Connection Manual for GT Works3 and a controller used

3) General notes on Power supply

The Connector Conversion Box requires an additional ferrite filter to be attached to the 24V DC power supply cables. The filter should be attached in a similar manner as shown in the figure opposite, i.e. the power cables are wrapped around the filter. However, as with all EMC situations the more correctly applied precautions the better the systems Electro-magnetic Compatibility. The ferrite recommended is a TDK ZCAT3035 1330 or similar. The ferrite should be placed as near to the 24V DC terminals of the Connector Conversion Box as possible (which should be within 75mm of the GOT terminal).



The following manuals are relevant to this product. When these loose manuals are required, please consult with our local distributor.

Manual name	Contents	Manual Number (Model Code)
Manual	Describes the Handy GOT hardware- relevant content such as part names, external dimensions, mounting, power supply wiring, specifications, and introduction to option devices	JY997D41201 JY997D41202 (09R821)

For details of a PLC to be connected, refer to the PLC user's manual respectively.

Bundled Items

Bundled item	Quantity
GT16H-CNB-42S Connector conversion box	1
Packing for panel installation	1
Flange for GT10-9PT5S	1
Screws for flange installation (M3×8)	2
CONNECTOR CONVERSION BOX GT16H-CNB-42S User's Manual (This manual)	1

1. Features

The Connector Conversion Box relays the GOT's external 42-pin connector to the power supply/switch and the PLC's connector and terminal block, while enabling users to operate the Handy GOT outside the enclosure.



2. Specifications

Other specifications are the same as the GT16 Handy GOT main unit.

Item	Specifications						
Operating ambient temperature	0 to 55°C						
Storage ambient temperature	-20 to 70°C						
Vibration ins	When	Frequency	Acceleration	Half- amplitude	Sweep Count		
	installing	5 to 9Hz		1.75mm	10 times each in X. Y		
	DIN rail	9 to 150Hz	4.9m/s ²	-	and Z directions		

Operating atmosphere Must be free of lamp black, corrosive gas, flammable gas, or excessive amount of electroconductive dust particles and must be no direct sunitoh. (Same as for savino)

be attached to the cables. The filter similar manner as siste, i.e. the power tions the better the a TDK ZCAT3035c compatibility. The a tDK ZCAT3035c terminals of the Power Supply Specifications

ltem			Specifications		
Input power supply voltage		24VDC (+1	24VDC (+10% -15%)		
Power consumption		13.7W or le	13.7W or less (570mA/24VDC) (When including the consumption current of Handy GOT)		
	Connector Conversion Box only	2.2W (90m/	A/24V) (When excluding the consumption current of Handy GOT)		
Inrush current		25A or less	25A or less (at max. load), 2ms		
Permissible instantaneous power failure time		Within 5ms	Within 5ms		
Applicable GOTs					
	Abbreviations		Model name		
COT 1000	GT16 Handy GOT		CT1655HS VTBD		

GOT 1000		Handy GOT	G11655HS-V1BD				
nternal Relay Contact Specifications							
Item	Contact rating	Specifications					
Operation switch SW1 to SW6	10mA/24VDC (resistance load only)	Each contact coordinates the operation switch status of Pressed (close)/Not pressed (open). When the external cable is not connected, contacts are always open regardless of the switch status.					
Emergency stop switch ES1A to ES3A	1A/24VDC (resistance load) 0.3A/24VDC (induction load)	connected, contacts are always open terminal which is close to the ESDA te even if the external connection cable is When using the short-circuited ESDB t • Contacts are normally operated in tf • In the following situations, contacts • When GT16H-CNB-42S is turned	ccy stop switch status of Pushed (open)/Return (close). When the external cable is no regardless of the emergency stop switch status. Causing a short circuit of the ESDE rminal by a short pin (prepared by user) enables to set each contact in the close status not connected. ¹ →GT16 Handy GOT User's Manual erminal which is close to the ESDA terminal e close status. When pushing the emergency stop switch, the contacts become open. are closed regardless of the status of the emergency stop switch and the external cable if OFF. upplied with the power supply (DC24V).				
Grip switch DSW1, DSW2	1A/24VDC (resistance load) 0.3A/24VDC (induction load)		h status of Pressed (close)/Not pressed (open). ed, contacts are always open regardless of the grip switch status.				
Keylock switch (2-position switch) KSWC, KSW1, KSW2	1A/24VDC (resistance load) 0.3A/24VDC (induction load)	Each contact coordinates the position of When the key is on the left: KSW1 a When the key is on the right: KSW2 When the external cable is not connect	ind KSWC are short-circuited.				

*1 The system may not match the safety standards. Before using the system, please check the safety standards which are required.

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		External Dimensions dimensions of each part of t		No.	Name	Specifications	
	re described below.	External cable	Terminal block	7)	Hole for the screw installation	Used for fixing on the board, etc. For M4 screw	
2		6 (2.21") 55 (2.17") 8 (2.21") 55 (2.17")	cover opened 110 (4.34")	8)	Terminal block 1	Connects the GT16H-CNB-42S, the 24VDC power supply of Handy GOT and the emergency stop switch (ES-1 to 3) with M3 terminal screw and the cover.	
				9)	Terminal block 2	Connects the operation switch of the Handy GOT (SWI to 6), the grip switch (DSW-1, 2) and the keylock switch (KSW-1, 2) with M3 terminal and the cover.	
			10)	External connection device communication connector (RS-232: D-Sub, 9-pin, male)	Connects to the external connection device via a GOT1000 series cable.		
			d for connecting the cable Unit: mm (inch) Weight: about 0.5kg	11)	External connection device communication connector (RS-422/ 485: D-Sub, 9-pin, female)	RS-422/485 connector and RS-232 connector cannot be used at the same time.	
No.	Name	Specifica	ations		External connection		
1)	Connector for Handy GOT (42-pin, female)	Connects a Handy GOT thro connection cable.	ough an external	12)	device communication connector (Ethernet: RJ-45 module jack)	Connects the external connection device via Ethernet with using a LAN cable.	
		Supplies the power to the Ha When this switch is set to O		13)	Rotary switch (U)	Sets the ID number of GT16-CNB-42S.	
2)	Power switch Turn off the power when attaching or detaching the Handy GOT.		14)	Rotary switch (L)	Sets one ID number with using both rotary switches (U) and (L).		
3)	POWER LED	D Lit in green: Power is correctly supplied. Not lit: Power is not supplied.		15)	ID number valid/ invalid selection switch	Enables the recognition function of ID number (ON=Valid, OFF=Invalid). When connecting the external connection device with	
4)	Hole for the panel installation	Used when mounting the pa 6mm	anel. For M4 screw, depth		Hole for the flange	using 10) and 11), set OFF (invalid). Used for fixing the flange when using the connector	
5)	Packing attachment chase			16)	installation	conversion adapter.	
6)	Hook for DIN rail	Used for fixing the Connect mounting DIN rail (35mm).	or Conversion Box when				

4. Installation

The Connector Conversion Box can be installed on the panel face directly or on the DIN rail.

4.1 Mounting on the panel face

(When setting the connector for Handy GOT connection and the power supply switch on the panel surface) 2) Installation of the packing

1) Direct mounting on the panel face Drill a mounting slot of the following size on the panel face







3) Mounting on the panel face

Fit the Connector Conversion Box from the back side of the panel face, and fix it with four M4 screws (prepared by user).

In the Connector Conversion Box, thread of M4, 6mm (0.23") in deeth is cut in each mounting hole. Prepare four M4 mounting screws separately while considering the thickness of the panel face. (Tightening torque: 0.69 to 0.88 N•m)

Make sure that interfering objects are not located within 65mm (2.56") from the rear face so that the connector of a PLC cable is not hindered. To wire the terminal block, keep a space of 25mm (0.98") or more on both sides of the Connector Conversion Box.



4.2 Mounting on the panel face (When installing the Connector Conversion Box on the panel surface)

1) Mounting on the nanel face

Install the Connector Conversion Box on the panel face (mounting surface). Drill screw holes on the panel face as follows. Tighten the mounting screw with the specified torque. Tightening screws too much may cause damage. (Tightening torque: 0.69 to 0.88 N·m)



4.3 Installed on the DIN rail

DIN rail

Install the Connector Conversion Box on the DIN rail with using its DIN rail hook. more than 10mm (0.4"inch) (Applicable DIN rail DIN46277 (width: 35mm (1.37")) The clearance between screws for install the DIN rail should be 150mm (5.9") or less.

1) Pull out the hook for 2) Adapt the upper side of 3) Lock the hook for DIN rail the DIN rail installation while forcing the product on slot to the DIN rail the DIN rail When installing the DIN rail, please fix the cables Otherwise, the hook for DIN rail and other parts may be damaged by the cable load.



This manual confers no industrial property rights or any rights of any other kind, nor does it confer any patent licenses. Mitsubishi Electric Corporation cannot be held responsible for any problems involving industrial property rights which may occur as a result of using the contents noted in this manual.

Warrantv

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

/ For safe use

• This product has been manufactured as a general-purpose part for general industries, and has not been designed or manufactured to be incorporated in a device or system used in purposes related to human life.

Before using the product for special purposes such as nuclear power, electric power, aerospace, medicine or passenger movement vehicles, consult with Mitsubishi Electric

This product has been manufactured under strict quality control. However when installing the product where major accidents or losses could occur if the product fails, install appropriate backup or failsafe functions in the system.

MITSUBISHI ELECTRIC CORPORATION

HEAD OFFICE : TOKYO BUILDING, 2-7-3 MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN



ELECTRIC	Si			
	Ŀ		DESIGN PRECAUTIONS	
CONNECTOR CO GT16H-C		ON BOX	other wiring. Run the above	and communication cables with re cables separately from such v n.) apart.Not doing so noise can
	User's	Manual		Connector Conversion Box's pov
	Manual Number Date	JY997D40401E	detaching it to/from the GC Failure to do so may cause	e unit failure or malfunctions.
	Date	April 2015	MOUNTING PRECAUTIONS	
This manual describes the part names, di of the product. Before use, read this man fully to acquire proficiency in handling an	nual and manuals o	of relevant products	described in this manual.	rsion Box within the generic envi f the product is used in such cor ation or damage may occur.
learn all the product information, safety inf And, store this manual in a safe place s whenever necessary. Always forward it to	ormation, and preca o that you can take	utions.	WIRING PRECAUTIONS	
Registration Registration Ethernet is a registered trademark of XK MODBUS is a trademark of Schneider El product name to be described in this ma trademarks of each company.	erox Corporation in ectric SA. The com	pany name and the	before wiring. Failure to do malfunctions.Please make sure to grour supply section by applying doing so may cause an ele	ases of the external power supp o so may result in an electric sho nd FG terminal of the Connector 100 or less which is used exclu ectric shock or malfunction.
Effective April 2015 Specifications are subject to change witho © 2010 MI	ut notice. TSUBISHI ELECTR	 Correctly wire the Connector Conversion Box power confirming the rated voltage and terminal arrangement of can cause a fire or failure. Exercise care to avoid foreign matter such as chips and w 		
Safety Precaution (Read these	precautions before u	ising)	GOT. Not doing so can car	use a fire, failure or malfunction.
Before using this product, please read to introduced in this manual carefully and pr product correctly.	his manual and the	e relevant manuals	WIRING PRECAUTIONS	CAUTION cable into the connector of th
The precautions given in this manual are of In this manual, the safety precautions are ran			tighten the mounting and t Undertightening can cau	erminal screws in the specified to se a short circuit or malfunctio Ifunction due to the damage of the
conditions, resulting	prrect handling may g in death or severe	injury.	TEST OPERATION PRECAUTIONS	
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- Cable connection fault. When unplugging the cable connected to the unit, do not hold and pull the cable portion. Doing so can cause the unit or cable to be damaged or can cause in malfunction due to a cable connection fault.

When disposing of the product, handle it as industrial waste.

	Item		Specifications		
Input power supply voltage			24VDC (+10% -15%)		
Power consumption	ו		13.7W or le	ss (570mA/24VDC) (When including the consumption current of Handy GOT)	
	Conne	ctor Conversion Box only	2.2W (90m/	A/24V) (When excluding the consumption current of Handy GOT)	
Inrush current			25A or less	(at max. load), 2ms	
Permissible instanta	aneous power failure time	9	Within 5ms		
Applicable GOTs					
	Abbrevia	ations		Model name	
GOT 1000	GT16 F	landy GOT		GT1655HS-VTBD	
Internal Relay Conta	act Specifications				
Item	Contact rating			Specifications	
Operation switch SW1 to SW6	10mA/24VDC (resistance load only)			switch status of Pressed (close)/Not pressed (open). d, contacts are always open regardless of the switch status.	
Emergency stop switch ES1A to ES3A	1A/24VDC (resistance load) 0.3A/24VDC (induction load)	Each contact coordinates the emergency stop switch status of Pushed (open)/Return (close). When the external cable is not connected, contacts are always open regardless of the emergency stop switch status. Causing a short circuit of the ES□B terminal which is close to the ES□A terminal by short pin (prepared by user) enables to set each contact in the close status even if the external connection. The close status of the ES□A terminal by a short-circuited ES□B terminal which is close to the ES□A terminal by a short-circuited ES□B terminal which is close to the ES□A terminal by a short-circuited ES□B terminal which is close to the ES□A terminal by a short-circuited ES□B terminal by the terminal which is close to the ES□A terminal by a short-circuited the close tatus. When pushing the emergency stop switch, the contacts become open. In the following situations, contacts are closed regardless of the status of the emergency stop switch and the external cable. When GT16H-CNB-42S is turned OFF. When GT16H-CNB-42S is supplied with the power supply (DC24V).			
Grip switch DSW1, DSW2	1A/24VDC (resistance load) 0.3A/24VDC (induction load)	Each contact coordinates the grip switch status of Pressed (close)/Not pressed (open). When the external cable is not connected, contacts are always open regardless of the grip switch status.			
Keylock switch (2-position switch) KSWC, KSW1, KSW2	1A/24VDC (resistance load) 0.3A/24VDC (induction load)	Each contact coordinates the position of the keylock switch. When the key is on the left: KSW1 and KSWC are short-circuited. When the key is on the right: KSW2 and KSWC are short-circuited. When the external cable is not connected, contacts are always open regardless of the keylock switch.			

3. Part Names and External Dimensions	No.	Name	Specifications
The name and the external dimensions of each part of the Connector Conversion			
Box are described below		Hole for the screw	

TRANSPORTATION PRECAUTIONS

do so may
nsportation

UL, cUL Standards are recognized in use by the following combination.

 GT1665HS-VTBD (Hardware version F or later) GT16H-CNB-42S

• External cable (GT16H-C30-42P, GT16H-C60-42P, GT16H-C100-42P)

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Requirement for Compliance with EMC directive

The following products have shown compliance with through direct testing (to the identified standards) and design analysis (forming a technical construction file) to the European Directive for Electromagnetic Compatibility (2004/108/EC) when used as directed by the appropriate documentation.

Type: Programmable Controller (Open Type Equipment)
Standard	Remark

otantaara		
EN61131-2 : 2007	EMI	Compliance with all relevant aspects of the standard. (Radiated Emissions)
Programmable controllers- Equipment	EMS	Compliance with all relevant aspects of the standard. (ESD, RF electromagnetic field, EFTB, Surge, RF conducted disturbances and Power frequency magnetic field)

For more details please contact the local Mitsubishi Electric sales site

Notes for compliance to EMC regulation

1) General notes on the control panel Make sure to combine the GT16 Handy GOT with the Connector Conversion Box to comply with the EMC directive. The Connector Conversion Box is an open type device (device installed to another device) and must be installed in a conductive control panel.

2) General notes on the use of communication cables • External cable (GT16H-C30-42P, GT16H-C60-42P, GT16H-C100-42P) Direct connection cable

Existing Cables User Made Cables The cable need to be independently tested by the user to

GT01-C30R4-8P demonstrate EMC compatibility when they are used with GT11H-C30R2-6P the GOT, the PLC of MELSEC-Q series, MELSEC-L series MELSEC-QnA, MELSEC-A series and MELSEC-FX series

- Ethernet connection cable (Shielded twisted pair cable (STP))
 PLC (manufactured by other company), microcomputer, temperature controller, inverter, servo amplifier, CNC, MODBUS(R)/RTU or MODBUS(R)/TCP connection
 Produce the cable (RS-232 cable, RS-422 / 485 cable) for connecting the GOT to a controller with reference to the following manual.
 → GOT1000 Series Connection Manual for GT Works3 and a controller used

3) General notes on Power supply

The Connector Conversion Box requires an additional ferrite filter to be attached to the additional ferrite filter to be attached to the 24V DC power supply cables. The filter should be attached in a similar manner as shown in the figure opposite, i.e. the power cables are wrapped around the filter. However, as with all EMC situations the more correctly applied precautions the better the systems Electro-magnetic Compatibility. The ferrite recommended is a TDK ZCAT3035-1330 or similar. The farrite should be placed 1330 or similar. The ferrite should be placed as near to the 24V DC terminals of the Connector Conversion Box as possible (which should be within 75mm of the GOT terminal).



The following manuals are relevant to this product. When these loose manuals are required, please consult with our local distributor.

Manual name	Contents	Manual Number (Model Code)
Manual	Describes the Handy GOT hardware- relevant content such as part names, external dimensions, mounting, power supply wiring, specifications, and introduction to option devices	JY997D41201 JY997D41202 (09R821)

For details of a PLC to be connected, refer to the PLC user's manual respectively.

Bundled Items

Bundled item	Quantity
GT16H-CNB-42S Connector conversion box	1
Packing for panel installation	1
Flange for GT10-9PT5S	1
Screws for flange installation (M3×8)	2
CONNECTOR CONVERSION BOX GT16H-CNB-42S User's Manual (This manual)	1

1. Features

The Connector Conversion Box relays the GOT's external 42-pin connector to the power supply/switch and the PLC's connector and terminal block, while enabling users to operate the Handy GOT outside the enclosure.



2. Specifications

Item	Specifications				
Operating ambient temperature	0 to 55°C				
Storage ambient temperature	-20 to 70°C				
Vibration resistance	When	Frequency	Acceleration	Half- amplitude	Sweep Count
	installing	5 to 9Hz		1.75mm	10 times
	DIN rail	9 to 150Hz	4.9m/s ²		each in X, Y and Z directions
Operating atmosphere	Must be free of lamp black, corrosive gas, flammable gas, excessive amount of electroconductive dust particles and must be direct sunlight. (Same as for saving)				

Connector Conversion Box. Be sure to install the packing.

Elevation view

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Packing attachment chase

4. Installation

The Connector Conversion Box can be installed on the panel face directly or on the DIN rail.

4.1 Mounting on the panel face

(When setting the connector for Handy GOT connection and the power supply switch on the panel surface)

1) Direct mounting on the panel face 2) Installation of the packing Drill a mounting slot of the following size on the panel face. Install the accessory packing to the packing attachment chase of the



4-R3 max (Panel opening) 61+1,-0 (2.41"+0.04",-0) Unit: mm (inch (Panel opening)

3) Mounting on the panel face Fit the Connector Conversion Box from the back side of the panel face, and fix it with four M4 screws (prepared by user). In the Connector Conversion Box, thread of M4, 6mm (0.23°) in depth is cut in each mounting hole. Prepare four M4 mounting screws separately while considering the thickness of the panel face. (Tightening torque: 0.69 to 0.88 N·m) Make sure that interfering objects are not located within 65mm (2.56°) from the rear face so that the connector of a PLC cable is not hindered. To wire the terminal block, keep a space of 25mm (0.98°) or more on both sides of the Connector Conversion Box.



4.2 Mounting on the panel face (When installing the Connector Conversion Box on the panel surface)

TDK Up to 75mn (2.95inch) 00000 00000 Ē

Side B







4.3 Installed on the DIN rail

Install the Connector Conversion Box on the DIN rail with using its DIN rail hook. with using its DIN rail hook. (Applicable DIN rail DIN46277 (width: 35mm (1.37")) The clearance between screws for install the DIN rail should be 150mm (5.9") or less. re than 10mm (0.4"inch)

1) Pull out the hook for 2) Adapt the upper side of 3) Lock the hook for DIN rail DIN rail. the DIN rail installation while forcing the product on slot to the DIN rail.

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the DIN rail When installing the DIN rail please fix the cables Otherwise the book for DIN rail and other parts may be damaged by the cable load

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Before using the product for special purposes such as nuclear power, electric power, aerospace, medicine or passenger movement vehicles, consult with Mitsubishi Electric.

This product has been manufactured under strict quality control. However when installing the product where major accidents or losses could occur if the product fails, install appropriate backup or failsafe functions in the system.

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