## **MITSUBISHI**

## **GT15 RS-422 CONVERSION UNIT**

User's Manual

GT15-RS2T4-9P GT15-RS2T4-25P

Thank you for purchasing the GOT1000 Series

Prior to use, please read both this manual and detailed manual thoroughly to fully understand the product.

MODEL	GT15-RS2T4-U
MODEL CODE	1D7M05
ID(NA) 0000000 D(0504)MEE	



#### ◆SAFETY PRECAUTIONS●

(Always read these precautions before using this equipment.)

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 prod-

In this manual, the safety precautions are ranked as "DANGER" and "CAUTION".

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

Note that the extstyle extstyleaccording to the circumstances.

Always follow the precautions of both levels because they are impor-tant to personal safety.

Please save this manual to make it accessible when required and always forward it to the end user

3. Part Names and External Dimensions

### [DESIGN PRECAUTIONS]

## **⚠** CAUTION

Do not bunch the control wires or communication cables with the main circuit or power wires, or install them close to each They should be installed 100mm (3.9inch) or more from each

Not doing so could result in noise that may cause malfunction

## [INSTALLATION PRECAUTIONS]

### **DANGER**

Before mounting or dismounting this unit to or from the GOT, always shut off GOT power externally in all phases. Not doing so can cause a unit failure or malfunction

## **⚠** CAUTION

- Use this module in the environment given in the general specifications of the GT15 User's Manual. Not doing so can cause an electric shock, fire, malfunction or product damage or deterioration.
- When installing this unit to the GOT, fit it to the connection interface of the GOT and tighten the mounting screws in the specified torque range.
- Undertightening can cause a drop, failure or malfunction Overtightening can cause a drop, failure or malfunction due to screw or GOT damage.

## [WIRING PRECAUTIONS]

## **DANGER**

When connecting the communication cable to this unit, be sure to power off the GOT externally in all phases Failure to do so may cause a malfunction.

## **⚠** CAUTION

Connect the communication cable to the connector of the target unit, and tighten the connector mounting screw in the specified torque range.

# Undertightening may cause a short circuit or malfunction. Overtightening may cause a short circuit or malfunction due to damage to the screw or GOT. [STARTUP AND MAINTENANCE PRECAUTIONS]

## **DANGER**

Before starting cleaning, always shut off GOT power externally in all phases. Not doing so can cause a unit failure or malfunction.

## **⚠** CAUTION

- Do not disassemble or modify any module This will cause failure, malfunction, injuries, or fire
- Do not touch the conductive areas and electronic parts of this
- Doing so can cause a unit malfunction or failure Always secure the cables connected to the unit, e.g. run them in conduits or clamp them. Not doing so can cause unit or cable
- damage due to dangling, moved or accidentally pulled cables of can cause a malfunction due to a cable contact fault. Do not hold the cable part when unplugging any cable
- connected to the unit. Doing so can cause unit or cable damage or a malfunction due to a cable contact fault. Always make sure to touch the grounded metal to discharge the electricity charged in the body, etc., before touching the unit. Failure to do so may cause a failure or malfunctions of the unit.

### [DISPOSAL PRECAUTIONS]

#### **⚠** CAUTION

Dispose of this product as industrial waste

## [TRANSPORTATION PRECAUTIONS]

## **⚠** CAUTION

 Make sure to transport the GOT main unit and/or relevant unit(s) in the manner they will not be exposed to the impact exceeding the impact resistance described in the general specifications of the GT15 User's Manual, as they are precision devices. Failure to do so may cause the unit to fail. Check if the unit operates correctly after transportation

## **Manuals**

The following shows manuals relevant to this product.

## Detailed Manual

Manual name	Manual Number (Type code)
074514 4 44	, ,, ,
GT15 User's Manual (Option)	SH-080528ENG (1D7M23)
GOT1000 Series Connection Manual (Option)	SH-080532ENG (1D7M26)
	•

For relevant manuals, refer to the PDF manual stored within the

© 2004 MITSUBISHI ELECTRIC CORPORATION

#### Compliance with the EMC and Low Voltage **Directives**

When incorporating the Mitsubishi GOT into other machinery or equipment and keeping compliance with the EMC and low voltage directives, refer to Chapter 4, "EMC Directives and Low Voltage Directives" of the manual (GT15 General Description) included with the GOT used.

The CE logo is printed on the rating plate of the GOT, indicating compliance with the EMC and low voltage directives.

By making this product conform to the EMC directive and low struction, it is not necessary to make those steps

### 1. Overview

conversion unitThis User's Manual describes the GT15 RS-422 conversion unit (hereafter abbreviated to the RS-422 conversion unit).

interface of the GOT to make RS-232/RS-422 conversion to

enable RS-422 communication.

There are the following RS-422 conversion unit types.

Refer to the GT15 User's Manual for the applicable GOT.

	Product name	Model name	Description
	RS-422 conversion unit	GT15-RS2T4-9P	RS-422 side connector, 9 pins
		GT15-RS2T4-25P	RS-422 side connector, 25 pins (for conversion of GOT-A900 series into GOT1000 series)

Use the GT15-RS2T4-25P when converting the GOT-A900 series into the GOT1000 series

Use the GT15-RS2T4-9P when newly using the  $\ensuremath{\mathsf{GOT1000}}$ 

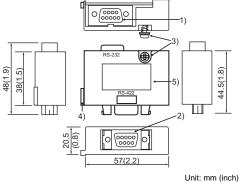
## 2. Specifications

The performance specifications of the RS-422 conversion unit are indicated below.

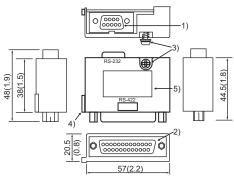
For the general specifications of the RS-422 conversion unit, refer to the GT15 User's Manual.

L	Item	GT15-RS2T4-9P	GT15-RS2T4-25P
	RS-322 connector	D-sub 9 pins (female) DDK make (17LE-13090-27 (D41))	D-sub 9 pins (female) DDK make (17LE-13090-27 (D41))
	RS-422 connector	D-sub 9 pins (female) DDK make (17LE-13090-27 (D2AC))	D-sub 25 pins (female) DDK make (17LE-13250-27 (D3AC))

(1) GT15-RS2T4-9P



(2) GT15-RS2T4-25P

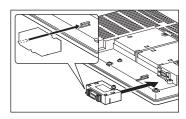


Unit: mm (inch)

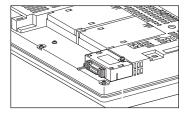
No.	Name	Description
1)	Communication connector (RS-232 side)	For connecting the RS-232 interface of the GOT
2)	Communication connector (RS-422 side)	For connecting the RS-422 cable of the communication device
3)	Fixing screw	Screw for fixing the unit to the GOT (M3 screw)
4)	Hook	For hooking on the GOT
5)	Rating plate	-

## 4. Installation Procedure

- (1) Power off the GOT.
- (2) While sliding the hook of the RS-422 conversion unit along the RS-422 conversion unit mounting rail of the GOT, install the RS-422 conversion unit to the RS-232 interface of the GOT



(3) After installation, tighten the fixing screw within the specified torque range (0.43 to 0.58 N•m).



## Warranty

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

#### **⚠** For safe use This product has been manufactured as a general-purpose part for

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

## Country/Region Sales office/Tel U.S.A Brazil

Germany

1 Sales office/Tel
Mitsubish Electric Automation Inc.
500 Corporate Woods Parkway Vernon Hills, IL 60061
Tel: +1-847-478-2100
MELCO-TEC Rep. Come Assessoria Tecnica Ltda.
Rua Correia Dias, 184, Edificio Paraiso Trade Center-8 andar
Paraiso, Sao Paulo, SP Brazil
Tel: +55-11-5908-8331
Mitsubishi Electric Europe B.V. German Branch
Gothaer Strasse 8 D-40880 Ratingen, GERMANY
Tel: +49-2102-486-0
Mitsubishi Electric Europe B.V. UK Branch
Travellers Lane, Haffield, Herts, AL10 8XB,UK
Tel: +44-1707-276100
Mitsubishi Electric Europe B.V. Italian Branch

U.K Tel: +44.1707-276100
Mitsubishi Electric Europe B.V. Italian Branch
Centro Dir. Colleoni, Pal. Perseo-Ingr.2
Via Paracelso 12, 20041 Agrate B., Milano, Italy
Tel: +39-039-605344
Mitsubishi Electric Europe B.V. Spanish Branch
Carretera de Rubi 76-80
081016, Sept. 1001-611, Chr. 1001-61 Italy

08190 - Sant Cugat del Valles, Barcelona, Spain Tel: +34-93-565-3131 Mitsubishi Electric Europe B.V. French Branch 25 Boulevard des Bouvets, F-92741 Nanterre Cedex, France TEL: +33-1-5568-5568 France Circuit Breaker Industries LTD. Tripswitch Drive, Elandsfontein Gauteng, South Africa Tel: +27-11-928-2000 South Africa

Hona Kona 10th Floor, Manulife Tower, 16s Road, North Point, HongKong Tel: +852-2887-8870

Tel: +852-2887-8870.

Ryoden Automation Shanghai Ltd.

3F Block5 Building Automation
Instrumentation Plaza 103 Cao Bao Rd. Shanghai 200233 China
Tel: +86-21-6120-0808
Setsuyo Enterprise Co., Ltd.
6F., No. 105 Wu-Kung 3rd.RD, Wu-Ku Hsiang,
Tainat Hisina Taiwan China

Korea

6-r., No.105 Wu-Kung 3rd.RD, Wu-Ku Hsiang, Taipei Hsine, Taiwan Tel:+886-2-2299-2499 HAN NEUNG TECHNO CO.,LTD. 1F Dong Seo Game Channel Bldg.,660-11, Deungchon-dong Kangser-ku, Seoul, Korea Tel:+82-2-3660-9552 Mitsubishi Electric Asia Pte, Ltd. 307 Alexandra Road #05-01/02, Singapore

307 Alexandra Road #05-01/02. Mitsubish Electric Building Singapore 159943 Tel: +65-6473-2308 F.A. Tech Co.,Ltd. 898/22.29.30 S.V. City Building, Office Tower 2, Floor 17-18 Rama 3 Road, Bangkpongpang, Yannawa, Bangkok 10120 Tel: +662-6582-652

rei : +bo-z-082-bb22 P.T. Autoteknindo SUMBER MAKMUR Jl. Muara Karang Selatan Block a Utara No.1 Kav. No.11 Kawasan Industri/Pergudangan Jakarta - Utara 14440 Tel : +662-21-663-0833 Indonesia

lei: +62-21-663-0833 Messung Systems Put,Ltd. Electronic Sadan NO:111 Unit No15, M.I.D.C BHOSARI, PUNE-411026, India Tei: +91-20-712-2807 Mitsubish Electric Australia Pty, Ltd. 348 Victoria Road, PostalBag, No 2, Rydalmer, N.S.W 2116, Australia Tei: +61-2-9684-7777 India

## **★**MITSUBISHI ELECTRIC CORPORATION

HEAD OFFICE : 1-8-12, OFFICE TOWER Z 14F HARUMI CHUO-KU 104-6212, JAPAN NAGOYA WORKS : 1-14, YADA-MINAMI 5-CHOME, HIGASHI-KU, NAGOYA, JAPAN

When exported from Japan, this manual does not require application to the Ministry of Economy, Trade and Industry for service transaction permission.