### INSTRUCTION MANUAL

# **INSTALLATION BASE**

### **BEFORE USE ....**

Thank you for choosing us. Before use, please check contents of the package you received as outlined below. If you have any problems or questions with the product, please contact our sales office or representatives.

#### ■ PACKAGE INCLUDES:

Installation base(1)	
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#### MODEL NO.

Confirm Model No. marking on the product to be exactly what you ordered.

#### ■ INSTRUCTION MANUAL

This manual describes necessary points of caution when you use this product, including installation, connection and basic maintenance procedures.

### **POINTS OF CAUTION**

#### ■ CONFORMITY WITH EU DIRECTIVES

- The equipment must be mounted inside the instrument panel of a metal enclosure.
- The actual installation environments such as panel configurations, connected devices, connected wires, may affect the protection level of this unit when it is integrated in a panel system. The user may have to review the CE requirements in regard to the whole system and employ additional protective measures to ensure the CE conformity.

#### ■ GENERAL PRECAUTIONS

• Before you remove the unit or mount it, turn off the power supply, input and output signals for safety.

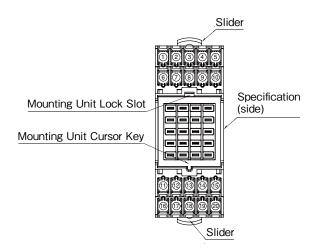
#### ■ ENVIRONMENT

- Indoor use.
- When heavy dust or metal particles are present in the air, install the unit inside proper housing with sufficient ventilation.
- Do not install the unit where it is subjected to continuous vibration. Do not subject the unit to physical impact.
- Environmental temperature must be within -10 to  $+55^{\circ}$ C (14 to  $131^{\circ}$ F) with relative humidity within 10 to 90% RH in order to ensure adequate life span and operation.

#### ■ WIRING

- Do not install cables close to noise sources (relay drive cable, high frequency line, etc.).
- Do not bind these cables together with those in which noises are present. Do not install them in the same duct.

## INSTALLATION



MODEL

**R10-BS1** 

Note: The side of mounting unit lock slot have No. 1 - 10 terminal connections.

#### ■ TERMINAL ASSIGNMENT

1 IO1	2 102	3 103	4 104	5 IO5			
6	7		8 9 10				
106	107	108	109	IO10			
		_ر					
11	12	13	14	15			
11 FE	12 DB	13 DA	14 NC	15 FE1			
				-			

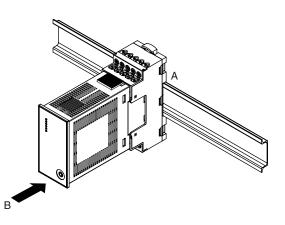
PIN NO.	ID	FUNCTION	PIN NO.	ID	FUNCTION
1	101	I/O Terminal 1	11	FE	Modbus ground
2	102	I/O Terminal 2	12	DB	DB
3	103	I/O Terminal 3	13	DA	DA
4	IO4	I/O Terminal 4	14	NC	Unused
5	105	I/O Terminal 5	15	FE1	Power ground
6	106	I/O Terminal 6	16	SLD	Shield
7	107	I/O Terminal 7	17	DG	DG
8	108	I/O Terminal 8	18	NC	Unused
9	109	I/O Terminal 9	19	24V	Power supply 24V DC
10	IO10	I/O Terminal 10	20	0V	Power supply 0V DC

### MOUNTING

#### ■ DIN RAIL MOUNTING (SIDE)

• Mounting the unit

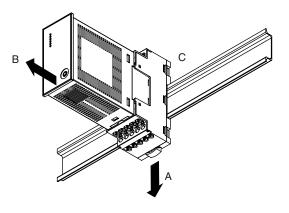
- A)Hang the upper hook at the rear side of unit on the DIN rail.
- B)Push the lower part of the unit in the direction of the arrow until the unit is firmly fixed to the DIN rail.



#### • Removing the unit

A)Push down the DIN rail adaptor using a minus screwdriver.

- B)Pull out the lower part of the unit.
- C)Remove the upper part from the DIN rail.



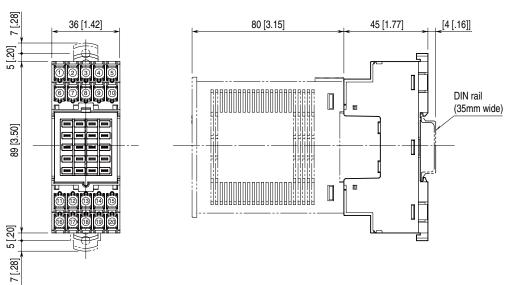
#### ■ WALL MOUNTING

Referring to "MOUNTING REQUIREMENTS unit: mm [inch]" on page 3, pull out the upper and lower sliders of the unit and fix them with M4 screws (Torque:  $1.4 \text{ N} \cdot \text{m}$ ).

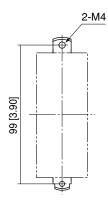
## **TERMINAL CONNECTIONS**

Connect the unit as in the diagram below.

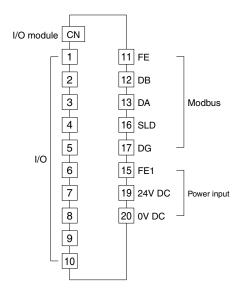
#### EXTERNAL DIMENSIONS unit: mm [inch]



■ MOUNTING REQUIREMENTS unit: mm [inch]



#### ■ CONNECTION DIAGRAM



## WIRING INSTRUCTIONS FOR BASE

SCREW TERMINAL

Torque: 0.5 N·m

#### ■ SOLDERLESS TERMINAL

Refer to the drawing below for recommended ring tongue terminal size. Spade tongue type is also applicable. Recommended manufacturer: Japan Solderless Terminal MFG.Co.Ltd, Nichifu Co., ltd (Solderless terminals with insulation sleeve do not fit)

Applicable wire size: 0.25 to 1.65 mm<sup>2</sup>

