

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:

Signal conditioner(1)
Shortcircuit bar(1)

■ 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

- Functional insulation is maintained between the input and output.
- The equipment must be mounted inside a panel.
- Insert noise filters for the input and output connected to the unit. TDK-Lambda Model RSAN-2006, TDK Model ZCAT 3035-1330 or equivalent is recommended.
- Be sure to ground the shield wire of PROFIBUS-PA cable.
- 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.
- Install lightning surge protectors for those wires connected to remote locations.

■ GENERAL PRECAUTION

- Before you remove the unit or mount it, turn off the power supply and input signal 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 -40 to +85°C (-40 to +185°F) with relative humidity within 0 to 95% RH in order to ensure adequate life span and operation.
- Be sure that the ventilation slits are not covered with cables, etc.

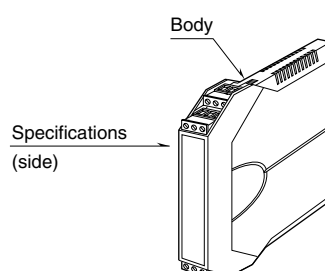
■ WIRING

- 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.

■ AND

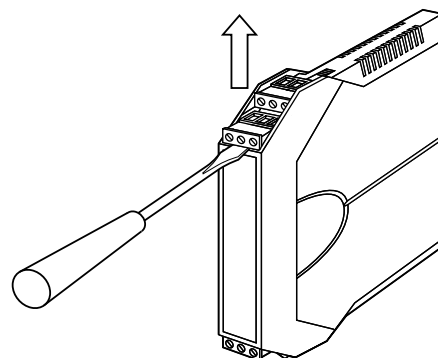
- The unit is designed to function as soon as power is supplied, however, a warm up for 10 minutes is required for satisfying complete performance described in the data sheet.

COMPONENT IDENTIFICATION



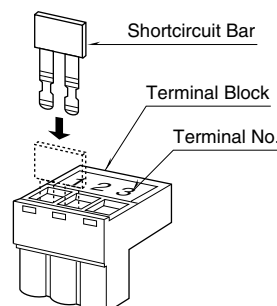
■ HOW TO SEPARATE THE EURO TYPE CONNECTOR TERMINAL BLOCKS

When you need to separate the euro type connector terminal blocks from the transmitter body for wiring, insert a minus driver between the euro type connector terminal block and the housing body, pull up the driver and pull out the euro type connector terminal block.



■ RTD/RESISTANCE SHORTCIRCUIT BAR

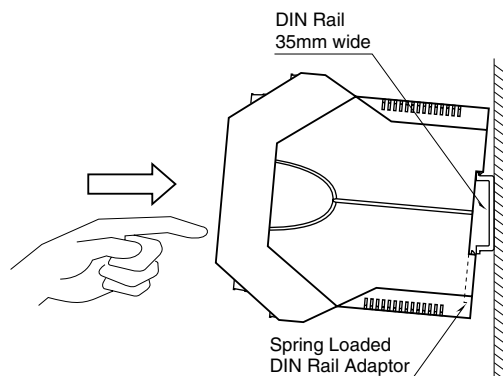
For a RTD/resistance input with 2- or 3-wire connection, short across the terminals 1 and 2 with the shortcircuit bar included in the product package. Remove it for other inputs/connection.



INSTALLATION

■ DIN RAIL MOUNTING

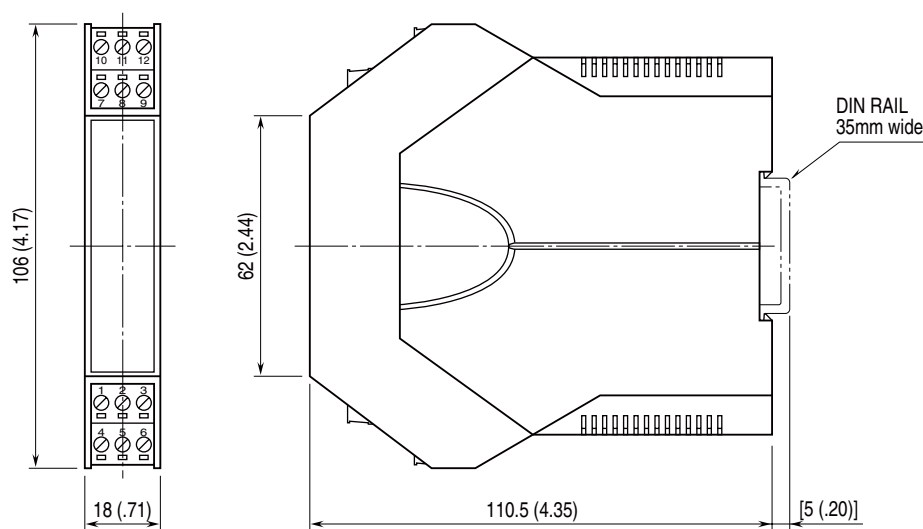
Set the unit so that its DIN rail adaptor is at the bottom. Position the upper hook at the rear side of the unit on the DIN rail and push in the lower. When removing the unit, push down the DIN rail adaptor utilizing a minus screwdriver and pull.



TERMINAL CONNECTIONS

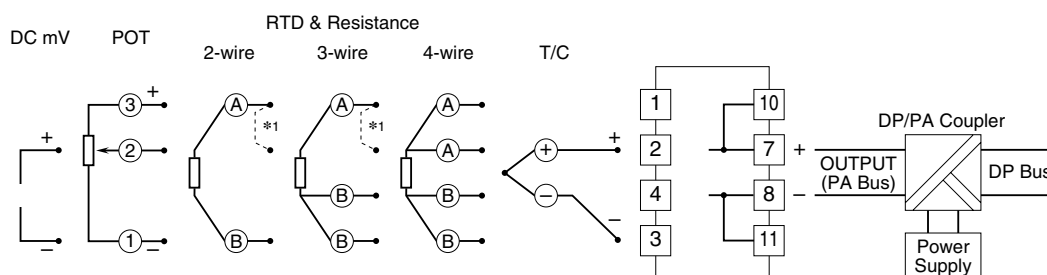
Connect the unit as in the diagram below or refer to the connection diagram on the side of the unit.

■ EXTERNAL DIMENSIONS unit: mm (inch)



• When mounting, no extra space is needed between units.

■ CONNECTION DIAGRAM



*1. Short across the terminals 1 & 2 for a resistance or RTD input with 2- or 3-wire connection.

■ WIRING INSTRUCTIONS

- Applicable wire size

Solid: 0.2 to 2.5 mm² (0.55 to 1.75 dia.)

Stranded: 0.2 to 2.5 mm² (Tinning wire ends may cause contact failure and therefore is not recommended.)

Ferruled: 0.2 to 1.5 mm² (0.55 to 1.35 dia.)

The following Phoenix Contact terminals are recommended:

AI 0,25-8YE 0.2 to 0.25 mm²

AI 0,34-8TQ 0.25 to 0.34 mm²

AI 0,5-8WH 0.34 to 0.5 mm²

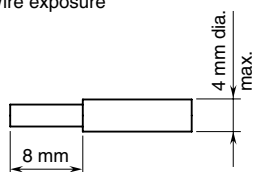
AI 0,75-8GY 0.5 to 0.75 mm²

AI 1,0-8RD 0.75 to 1.0 mm²

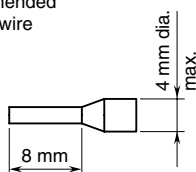
AI 1,5-8BK 1.0 to 1.5 mm²

- Expose wire conductors by 8 mm (0.31").

Wire exposure



Recommended
ferruled wire



CHECKING

- 1) Terminal wiring: Check that all cables are correctly connected according to the connection diagram.
- 2) Input type and range: Check that the input type and range is correctly programmed.
- 3) Input signal: Confirm that the input signal is in normal status.
- 4) Output signal: Confirm that the output signal is in normal status. Check that the PROFIBUS-PA communication is established.

ADJUSTMENT PROCEDURE

■ SIEMENS SIMATIC PDM

EDDL file that enables the B3PU to be identified, programmed and calibrated by Siemens Simatic PDM program is available.

For detailed information, refer to the B3PU Configuration Manual (EM-7503-B). The EDDL file and the B3PU Configuration Manual are downloadable at our web site.

LIGHTNING SURGE PROTECTION

We offer a series of lightning surge protector for protection against induced lightning surges. Please contact us to choose appropriate models.