

**BEFORE USE ....**

Thank you for choosing M-System. Before use, check the contents of the package you received as outlined below. If you have any problems or questions with the product, please contact M-System's Sales Office or representatives.

**■ PACKAGE INCLUDES:**

Noise filter ..... (1)

**■ MODEL NO.**

Confirm that the model number described on the product is exactly what you ordered.

**■ INSTRUCTION MANUAL**

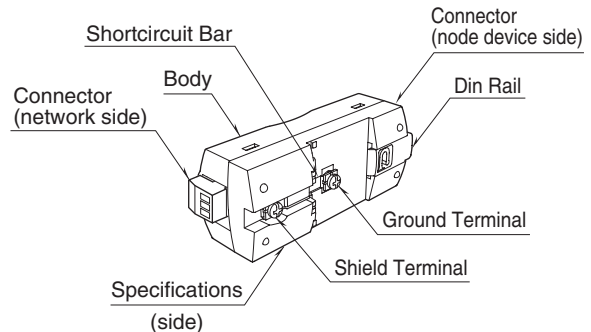
This manual describes necessary points of caution when you use this product, including installation and connection.

**POINTS OF CAUTION**

**■ 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 apply physical impact to the unit.
- Environmental temperature must be within -25 to +70°C (-13 to +158°F) with relative humidity within 10 to 90% RH in order to ensure adequate life span and operation.
- This unit can be earthed via a DIN rail. An oxide film on the surface of an aluminum rail may lower the electric conductivity between this module and the ground. Use a steel or copper rail when earthing via DIN rail.

**COMPONENT IDENTIFICATION**

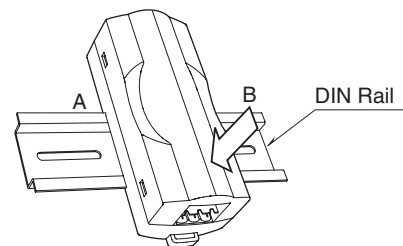


**INSTALLATION**

Mount the unit on a DIN rail such that the DIN rail adaptor is at the bottom. When grounding via DIN rail, once installed, do not move it to another DIN rail. There may be poor contact due to variation in DIN rail shape.

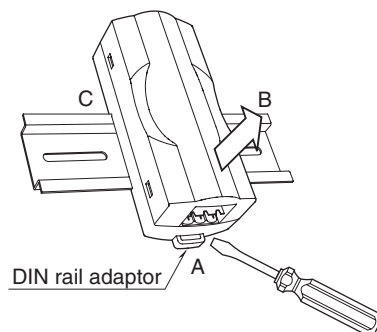
**■ MOUNTING THE UNIT ON A DIN RAIL**

- A) Hang the upper hook of the DIN rail mounting adaptor at the rear side of the unit on the DIN rail.
- B) Push in the lower while pressing the unit to the DIN rail.



**■ REMOVING THE UNIT**

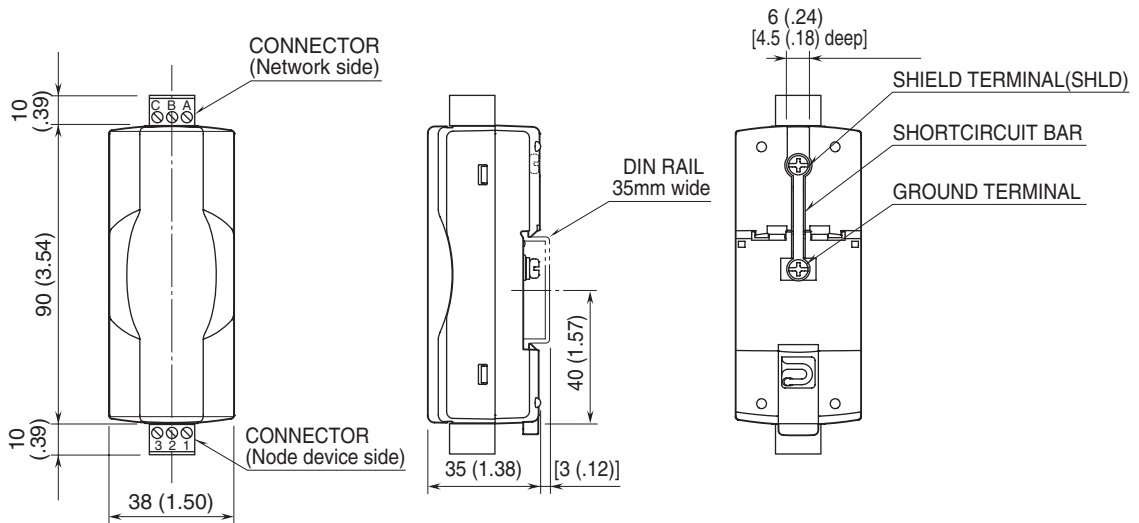
- A) Pull down the DIN rail adaptor utilizing a minus screwdriver. If it is difficult to carry out, remove the connector at node device side before pulling down the DIN rail adaptor.
- B) Pull out the lower part of the unit.
- C) Detach the upper part from the DIN rail.



## TERMINAL CONNECTION

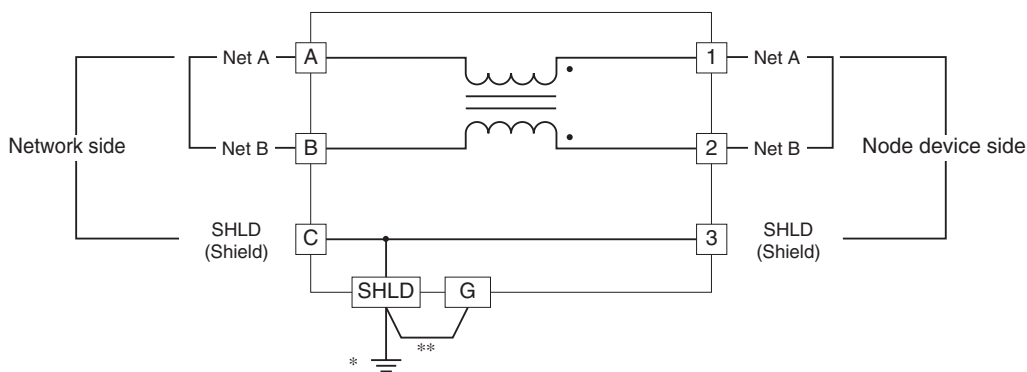
Connect the unit as in the diagram below.

### ■ DIMENSIONS mm (inch)



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

### ■ CONNECTION DIAGRAM



- \* When grounding the shield wire via shield terminal. Provide a grounding circuit separately and connect it, when grounding the shield wire via capacitors or resistors.
- \*\* When the unit is earthed via DIN rail, connect a shortcircuit bar. In that case, the DIN rail must be steel or copper rail. The shortcircuit bar is connected as factory default.

### ■ WIRING INSTRUCTIONS

Applicable wire size range for euro type connector terminal of communication is as shown below.

#### • Applicable wire size

- Solid: 0.2 to 2.5 mm<sup>2</sup> (0.55 to 1.75 dia.)
- Stranded: 0.2 to 2.5 mm<sup>2</sup>

Tinning wire ends may cause contact failure and therefore is not recommended.

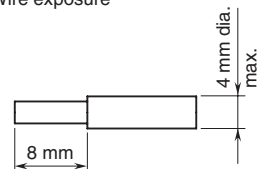
- Ferruled: 0.2 to 1.5 mm<sup>2</sup> (0.55 to 1.35 dia.)

The following Phoenix Contact terminals are recommended:

AI 0.25-8YE	0.2 to 0.25 mm <sup>2</sup>
AI 0.34-8TQ	0.25 to 0.34 mm <sup>2</sup>
AI 0.5-8WH	0.34 to 0.5 mm <sup>2</sup>
AI 0.75-8GY	0.5 to 0.75 mm <sup>2</sup>
AI 1.0-8RD	0.75 to 1.0 mm <sup>2</sup>
AI 1.5-8BK	1.0 to 1.5 mm <sup>2</sup>

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

Wire exposure



Recommended ferruled wire

