

<b>POWER SUPPLY MODULE</b> (Tension clamp)	MODEL <b>R6S-PF1</b>
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**BEFORE USE ....**

Thank you for choosing M-System. 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 M-System's Sales Office or representatives.

**■ PACKAGE INCLUDES:**

Power supply module .....(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**

- This equipment is suitable for Pollution Degree 2 and Measurement Category II (RUN contact output, transient voltage 2500V). Reinforced insulation (RUN contact output to internal bus or power supply: 300V) is maintained. Prior to installation, check that the insulation class of this unit satisfies the system requirements.
- Altitude up to 2000 meters.
- The equipment must be mounted inside a panel.
- The equipment must be installed such that appropriate clearance and creepage distances are maintained to conform to CE requirements. Failure to observe these requirements may invalidate the CE conformance.
- 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.

**■ POWER INPUT RATING & OPERATIONAL RANGE**

- Locate the power input rating marked on the product and confirm its operational range as indicated below:  
 24V DC rating: 24V ±10%, approx. 1A

**■ GENERAL PRECAUTIONS**

- Before you remove the unit from its base or mount it, turn off the power supply 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°C (14 to 131°F) with relative humidity within 30 to 90% RH in order to ensure adequate life span and operation.

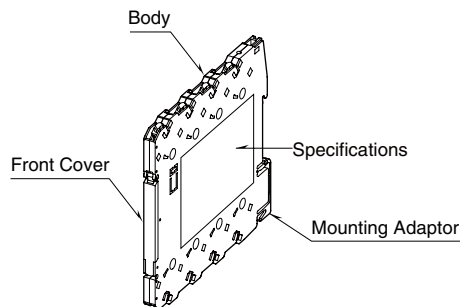
**■ WIRING**

- 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.

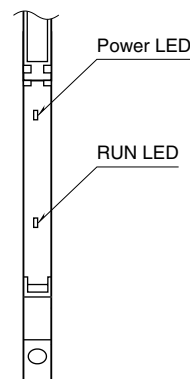
**■ AND ....**

- 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**



**■ FRONT PANEL CONFIGURATION (with the cover open)**



**■ INDICATOR LED**

ID	COLOR	FUNCTION
Power	OFF	Power supply is off
	Green ON	Power supply is on.
RUN	OFF	Abnormal communication status
	Orange ON	Normal communication status

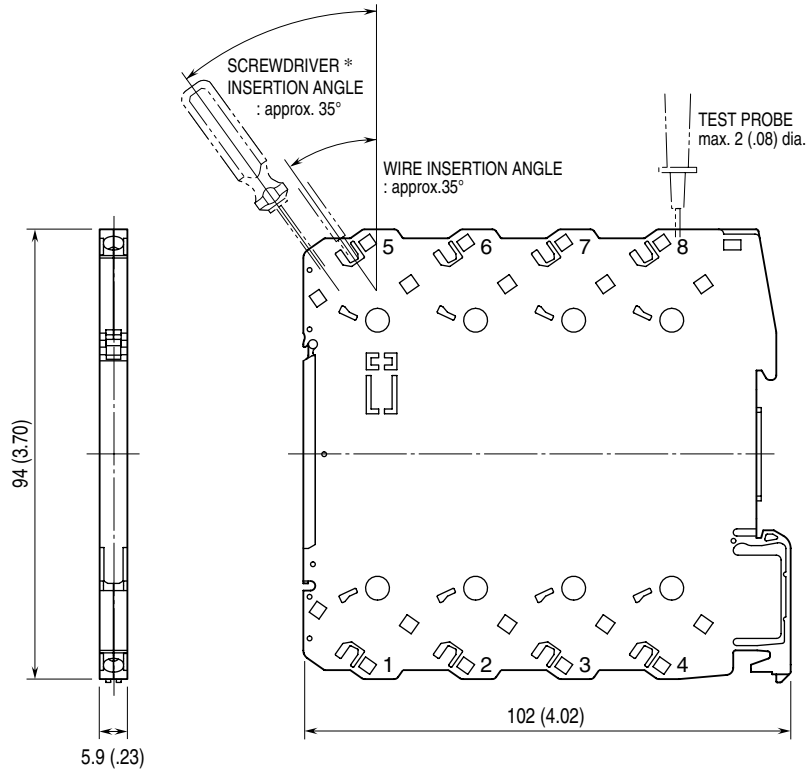
**INSTALLATION**

Mount the unit on the base (model: R6S-BS).

## 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)

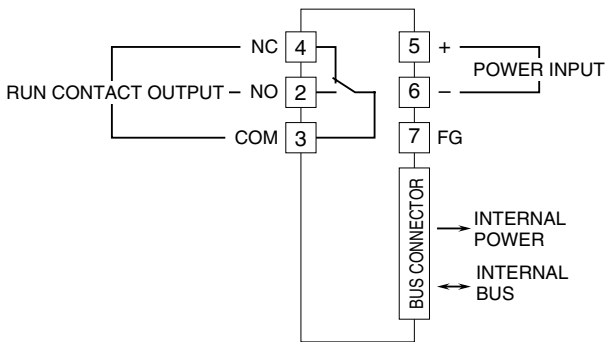


\*Use a minus screwdriver: tip width 3.8 mm max., tip thickness 0.5 to 0.6 mm

### CONNECTION DIAGRAM

Note: In order to improve EMC performance, bond the FG terminal to ground.

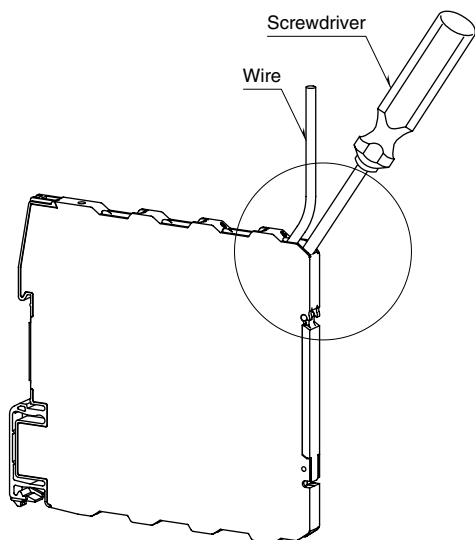
Caution: FG terminal is NOT a protective conductor terminal.



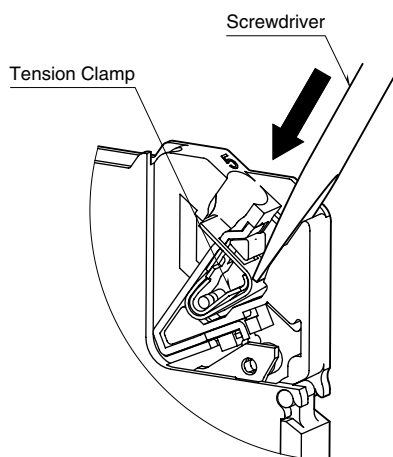
## ■ WIRING INSTRUCTIONS

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

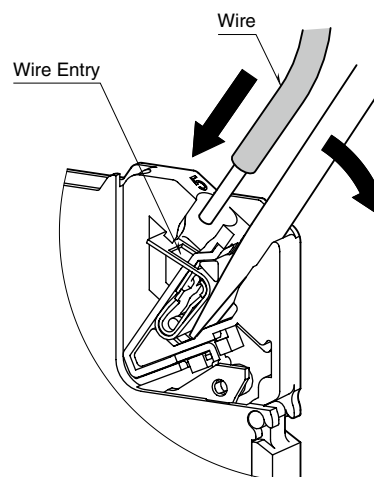
### • How to Connect Wires



- 1) Insert a minus screwdriver into the wire entry opening, between the clamp and the housing, until its tip hits the bottom where it is firmly held.

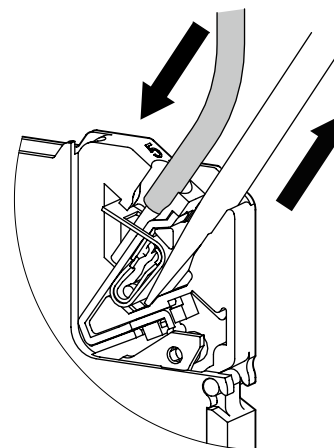


- 2) Insert a wire. Push the screwdriver toward the direction indicated with the arrow in the figure below to widen the opening if necessary.



- 3) Confirm that the wire tip hits the bottom and pull out the screwdriver in holding it in position.

Confirm that the wire's insulation tube is not caught in the clamp.



## CURRENT CONSUMPTION

The network module and I/O modules operate with 24V DC power supply via the power supply module. The total current consumption of the network module and I/O modules is required to be not more than 1A. If the total current consumption exceeds 1A, change the combination of I/O modules or reduce the number of I/O modules.

MODEL NO.	MAX. CURRENT (mA)
R6x-SV2	20
R6x-SS2	20
R6x-TS2	20
R6x-TS2A	20
R6x-RS2	20
R6x-DS1	55
R6x-YV2	25
R6x-YS2	45
R6x-DA4	10
R6x-DC4A	20
R6x-DC4B	20
R6-NC1	110
R6-NC3	110
R6-ND1	40
R6-NE1	75
R6-NE2	75
R6-NM1	50
R6-NM2	50
R6-NF1	100
R6-NP1	100

## RUN CONTACT OUTPUT

Terminals (2 – 3) turns on and (4 – 3) off in normal communications with the host PLC.

Terminals (2 – 3) turns off and (4 – 3) on in an abnormal communication status.