

MECHATROLINK I/O MODULE

(PNP transistor output for extension, 8 points, MECHATROLINK-I / -II use)

MODEL **R7ML-EC8B**

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:

Discrete output extension 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

■ 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 \pm 10%, approx. 10mA

■ GENERAL PRECAUTIONS

- Before you remove the unit or mount it, turn off the power supply and output signal for safety.
- Before you remove the terminal block or mount it, make sure to turn off the power supply and output 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 0 to 55°C (32 to 131°F) with relative humidity within 30 to 90% RH in order to ensure adequate life span and operation.

■ WIRING

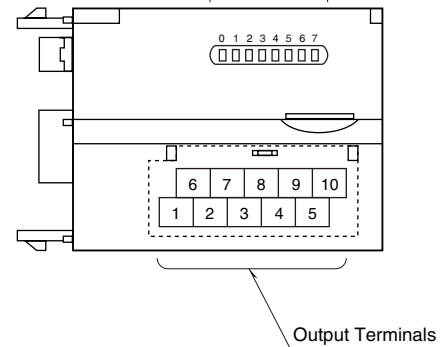
- Do not install cables close to noise sources (relay drive cable, high frequency line, etc.).
- Do not bind these cables together with those in which noises are present. Do not install them in the same duct.
- Be sure to close the terminal cover for safety.

■ 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

Discrete Output Status Indicator LED



■ DISCRETE OUTPUT STATUS INDICATOR LED

LED red indicators show the signal status.

ON : LED ON

OFF : LED OFF

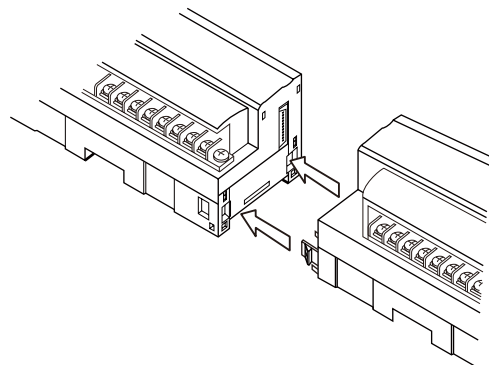
■ OUTPUT TERMINAL ASSIGNMENT

| | | | | |
|-------|----|----|----|----|
| 6 | 7 | 8 | 9 | 10 |
| +24 V | Y1 | Y3 | Y5 | Y7 |
| 1 | 2 | 3 | 4 | 5 |
| 0 V | Y0 | Y2 | Y4 | Y6 |

| NO. | ID | FUNCTION | NO. | ID | FUNCTION |
|-----|----|----------|-----|------|-----------------|
| 1 | 0V | 0V | 6 | +24V | 24V DC (common) |
| 2 | Y0 | Output 0 | 7 | Y1 | Output 1 |
| 3 | Y2 | Output 2 | 8 | Y3 | Output 3 |
| 4 | Y4 | Output 4 | 9 | Y5 | Output 5 |
| 5 | Y6 | Output 6 | 10 | Y7 | Output 7 |

CONNECTING THE EXTENSION MODULE

- 1) Remove the extension connector cover located at the side of the basic module.
- 2) Connect the extension module.

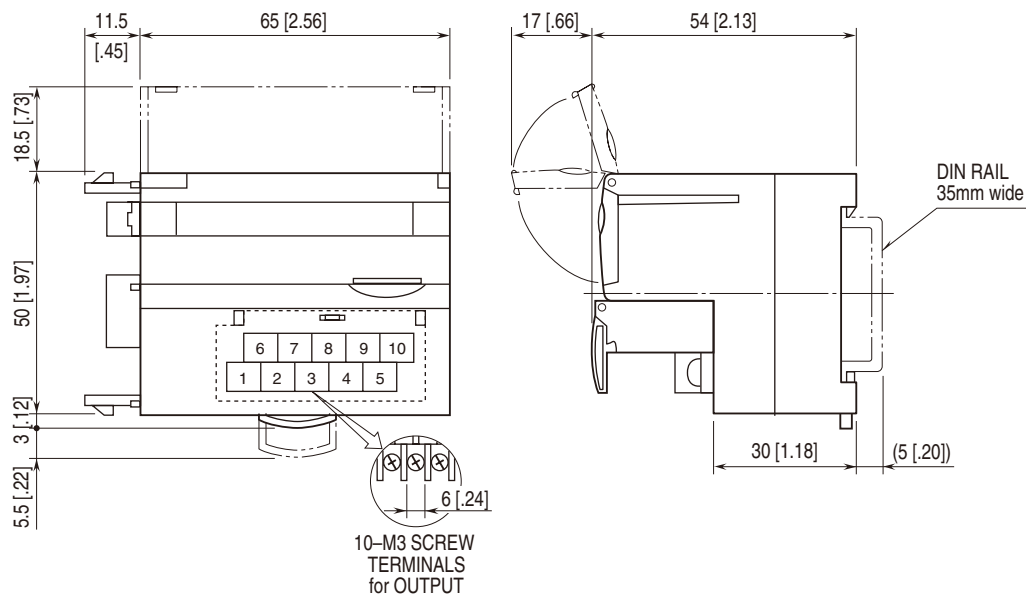


- 3) Mount the combined module on a DIN rail.

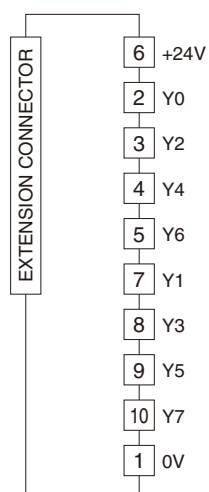
TERMINAL CONNECTIONS

Connect the unit as in the diagram below.

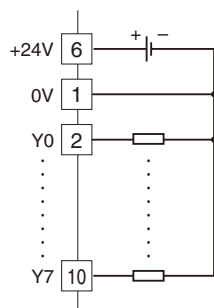
EXTERNAL DIMENSIONS unit: mm [inch]



CONNECTION DIAGRAM



Output Connection Example



WIRING INSTRUCTIONS

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.

Applicable wire size: 0.25 to 1.65 mm² (AWG 22 to 16)

Recommended manufacturer: Japan Solderless Terminal MFG. Co., Ltd, Nichifu Co., Ltd

