

**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:**

Discrete input extension module.....(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, connection and basic maintenance procedures.

**POINTS OF CAUTION**

**CONFORMITY WITH EU DIRECTIVES**

The actual installation environments such as panel configurations, connected devices and 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 CE conformity.

**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. 20mA

**GENERAL PRECAUTIONS**

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 -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.

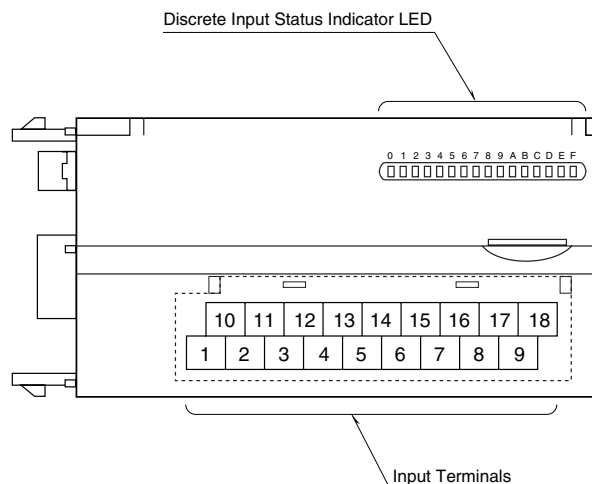
**WIRING**

- 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**



**DISCRETE INPUT STATUS INDICATOR LED**

Discrete input extension modules have LED indicators showing input signal status.  
Contact ON: LED ON  
Contact OFF: LED OFF

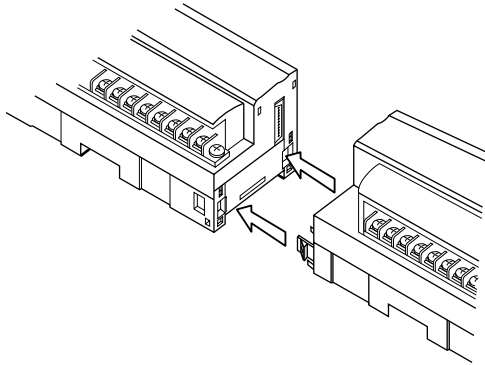
**INPUT TERMINAL ASSIGNMENT**

10	11	12	13	14	15	16	17	18
NC	X1	X3	X5	X7	X9	XB	XD	XF
1	2	3	4	5	6	7	8	9
COM	X0	X2	X4	X6	X8	XA	XC	XE

NO.	ID	FUNCTION	NO.	ID	FUNCTION
1	COM	Common	10	NC	No Connection
2	X0	Input 0	11	X1	Input 1
3	X2	Input 2	12	X3	Input 3
4	X4	Input 4	13	X5	Input 5
5	X6	Input 6	14	X7	Input 7
6	X8	Input 8	15	X9	Input 9
7	XA	Input 10	16	XB	Input 11
8	XC	Input 12	17	XD	Input 13
9	XE	Input 14	18	XF	Input 15

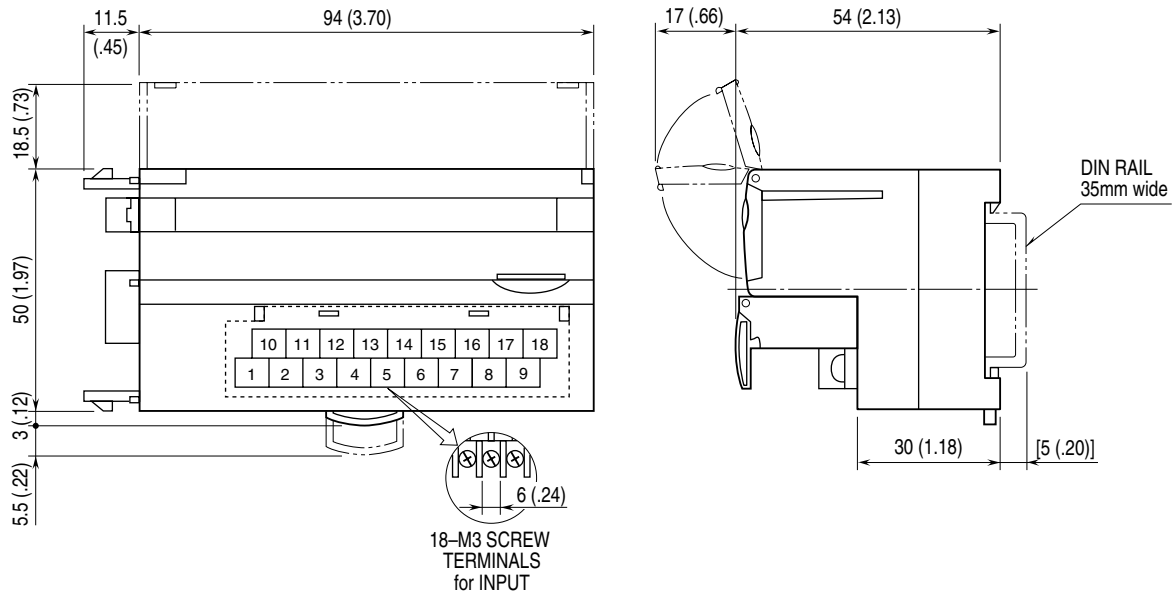
## CONNECTING THE EXTENSION MODULE

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



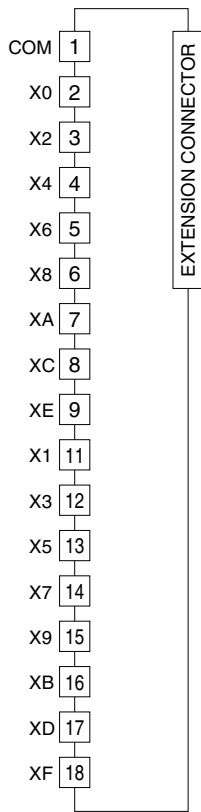
- 3) Mount the combined module on a DIN rail.

## EXTERNAL DIMENSIONS unit: mm (inch)



## CONNECTION DIAGRAM

Connect the unit as in the diagram below.



## WIRING INSTRUCTIONS

### ■ SCREW TERMINAL

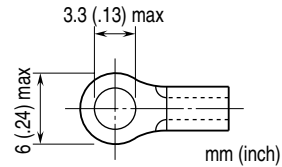
Torque: 0.5 N·m

### ■ SOLDERLESS TERMINAL mm (inch)

Refer to the drawing below for recommended ring tongue terminal size. Spade tongue type is also applicable. Solderless terminals with insulation sleeve do not fit.

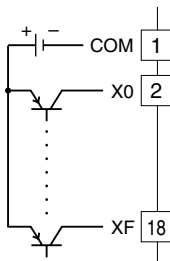
Applicable wire size: 0.25 to 1.65 mm<sup>2</sup> (AWG 22 to 16)

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



### ■ Input Connection Examples

PNP Connection



NPN Connection

