

**AC CONTACT INPUT MODULE**  
(Di 16 points)

**MODEL R3Y-DA16B**

**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:**

AC contact input module ..... (1)

■ **MODEL NO.**

Confirm that the model number described 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**

■ **HOT SWAPPABLE MODULES**

- Replacing the module does not affect other modules on the same base. Thus, the module can be replaced while the power is ON. However, replacing multiple modules at once may greatly change live voltage levels. We highly recommend to replace them one by one.

■ **GENERAL PRECAUTIONS**

- DO NOT set the switches on the module while the power is supplied. The switches are used only for maintenance without the power.

■ **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**

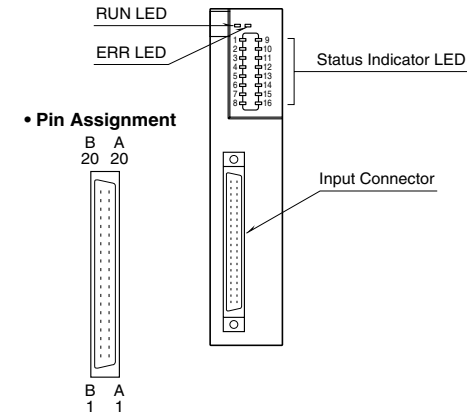
- Do not install cables close to noise sources (relay drive cable, high frequency line, etc.).
- Do not bind these cables together with those in which noises are present. Do not install them in the same duct.

**INSTALLATION**

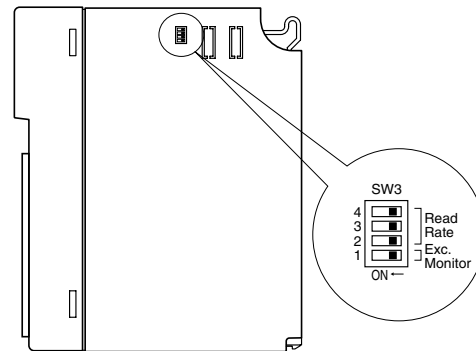
Use the Installation Base (model: R3-BSx).

**COMPONENT IDENTIFICATION**

■ **FRONT VIEW**



■ **SIDE VIEW**



■ **STATUS INDICATOR LED**

**RUN indicator:** Bi-color (red/green) LED;  
Red when the bus A operates normally;  
Green when the bus B operates normally;  
Amber when both buses operate normally.

**ERR indicator:** Bi-color (red/green) LED;  
Red with the excitation abnormality;  
Green in normal operating conditions.

**Input status indicator:** Red LED; turns on with the inputs supplied.

■ **SIDE DIP SW**

• **Excitation Monitor:** SW3

SW	EXCITATION MONITOR	
	WITH (*)	WITHOUT
SW3-1	OFF	ON

(\*) Factory setting

• **Read Rate:** SW3

SW	READ RATE (≤msec)							
	10 (*)	1	5	20	50	70	100	200
SW3-2	OFF	ON	OFF	ON	OFF	ON	OFF	ON
SW3-3	OFF	OFF	ON	ON	OFF	OFF	ON	ON
SW3-4	OFF	OFF	OFF	OFF	ON	ON	ON	ON

(\*) Factory setting

• **Excitation Monitor Active**

The input is held at the last status when the loss of excitation is detected. The excitation must be connected across CHK (4A/4B or 3A/3B) and COM (2A/2B or 1A/1B).

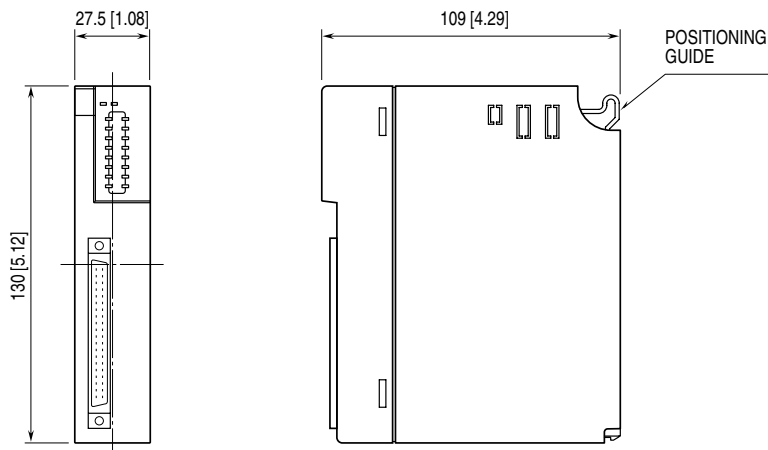
• **Excitation Monitor Inactive**

All input signals are turned off when the loss of excitation is detected.

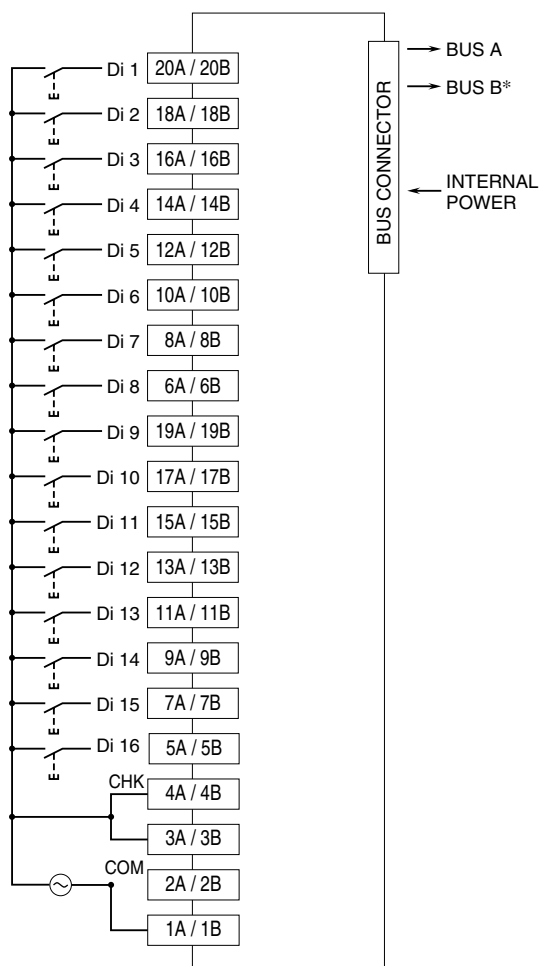
# TERMINAL CONNECTIONS

Connect the unit as in the diagram below.

## EXTERNAL DIMENSIONS mm [inch]

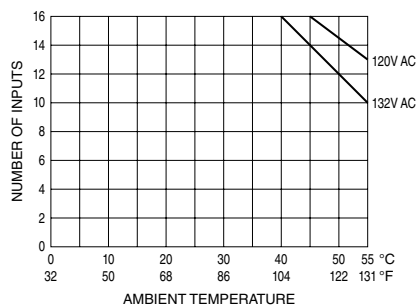


## CONNECTION DIAGRAM



\*For dual redundant communication.

## DERATING



## INPUT CONNECTOR

PIN No.	ASSIGNMENT	PIN No.	ASSIGNMENT
1A	COM	1B	COM
2A	COM	2B	COM
3A	CHK	3B	CHK
4A	CHK	4B	CHK
5A	Di16	5B	Di16
6A	Di8	6B	Di8
7A	Di15	7B	Di15
8A	Di7	8B	Di7
9A	Di14	9B	Di14
10A	Di6	10B	Di6
11A	Di13	11B	Di13
12A	Di5	12B	Di5
13A	Di12	13B	Di12
14A	Di4	14B	Di4
15A	Di11	15B	Di11
16A	Di3	16B	Di3
17A	Di10	17B	Di10
18A	Di2	18B	Di2
19A	Di9	19B	Di9
20A	Di1	20B	Di1