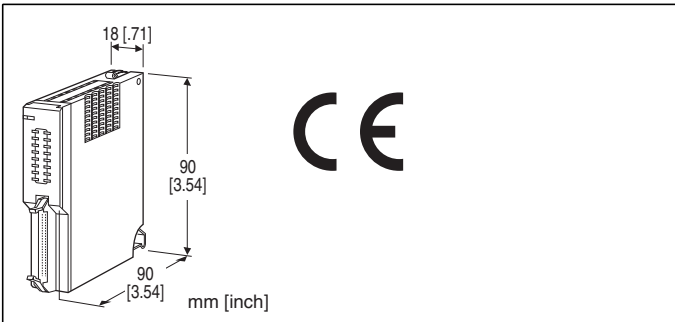


## Remote I/O R5 Series

### DISCRETE INPUT MODULE

(Di 16 points)



### MODEL: R5-DA16[1][2]

#### ORDERING INFORMATION

- Code number: R5-DA16[1][2]
- Specify a code from below for each of [1] and [2].  
(e.g. R5-DA16W/A/Q)
- Specify the specification for option code /Q  
(e.g. /C01)

#### NO. OF CHANNELS

16: 16 points

#### [1] COMMUNICATION MODE

S: Single  
W: Dual

#### [2] OPTIONS (multiple selections)

##### Excitation

Blank: Internal  
/A: External (24 V DC, positive common)

##### Other Options

blank: none  
/Q: Option other than the above (specify the specification)

#### SPECIFICATIONS OF OPTION: Q

**COATING (For the detail, refer to M-System's web site.)**

- /C01: Silicone coating
- /C02: Polyurethane coating
- /C03: Rubber coating

#### RELATED PRODUCTS

- Cable (model: MCN20)  
(in combination with Relay I/O output block, Omron Model: G7TC-ID16 or G7TC-IA16)

#### RELATED PRODUCTS

- Cable with connectors (OMRON)  
250 mm (model: G79-O25C)  
500 mm (model: G79-O50C)
- Connector/terminal block converter (OMRON)  
model: XW2D-20G6

#### GENERAL SPECIFICATIONS

##### Connection

**Internal bus:** Via the Installation Base (model: R5-BS)

**Input:** 20-pin connector

OMRON model: XG4A-2034

**Internal power:** Via the base (model: R5-BS)

**Isolation:** Input to internal bus or internal power

**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.

**Input status indicator:** Red LED; turns on with the input ON.

#### INPUT SPECIFICATIONS

##### Internal Excitation

**Input:** Dry contact, 16 points

**Common:** All negatives

**Contact detecting:** 5 V DC

**ON voltage, current:**  $\geq 3$  V,  $\geq 1$  mA

**OFF voltage, current:**  $\leq 1$  V,  $\leq 0.5$  mA

##### External Excitation

**Input:** 24 V DC, 16 points (input resistance 6 k $\Omega$ )

**Common:** All positives

**Contact detecting:** 24 V DC  $\pm 10$  %

**ON voltage, current:**  $\geq 15$  V,  $\geq 2.5$  mA

**OFF voltage, current:**  $\leq 6$  V,  $\leq 1$  mA

#### INSTALLATION

**Operating temperature:** -10 to +55°C (14 to 131°F)

**Operating humidity:** 30 to 90 %RH (non-condensing)

**Atmosphere:** No corrosive gas or heavy dust

**Mounting:** Installation Base (model: R5-BS)

**Weight:** 100 g (0.22 lb)

#### PERFORMANCE

**Data allocation:** 1

**Response time:**  $\leq 0.1$  sec.

**Insulation resistance:**  $\geq 100$  M $\Omega$  with 500 V DC

**Dielectric strength:** 1500 V AC @ 1 minute

(input to internal bus or internal power)

2000 V AC @ 1 minute (power input to FG; isolated on the power supply module)

**STANDARDS & APPROVALS**

EU conformity:

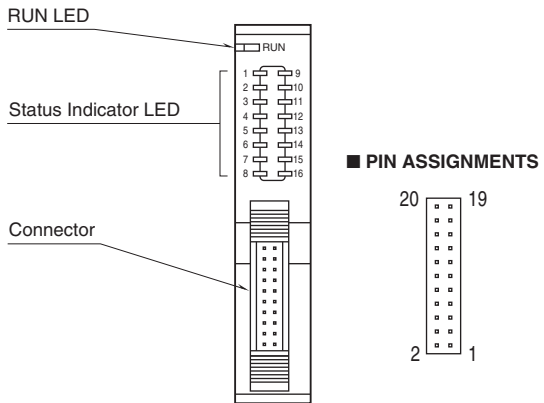
EMC Directive

EMI EN 61000-6-4

EMS EN 61000-6-2

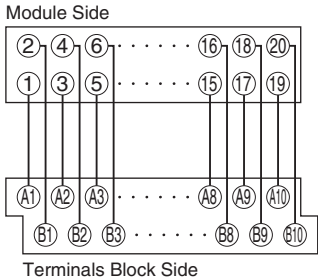
RoHS Directive

**EXTERNAL VIEW**

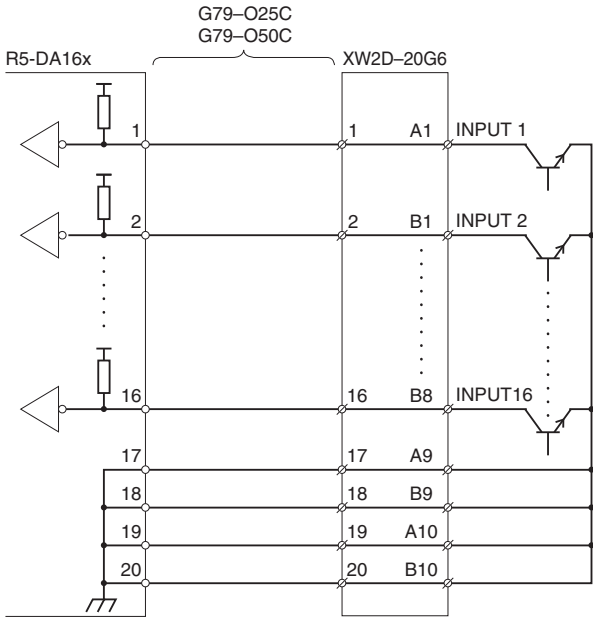


**CONNECTOR PIN ASSIGNMENT**

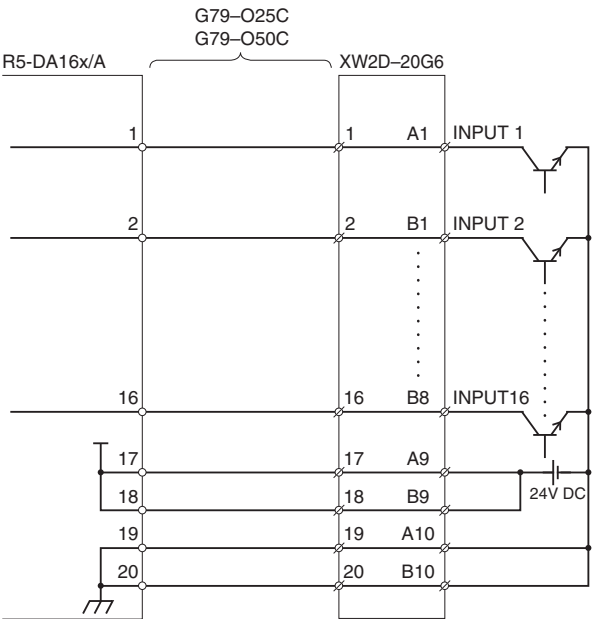
**Pin assignments**



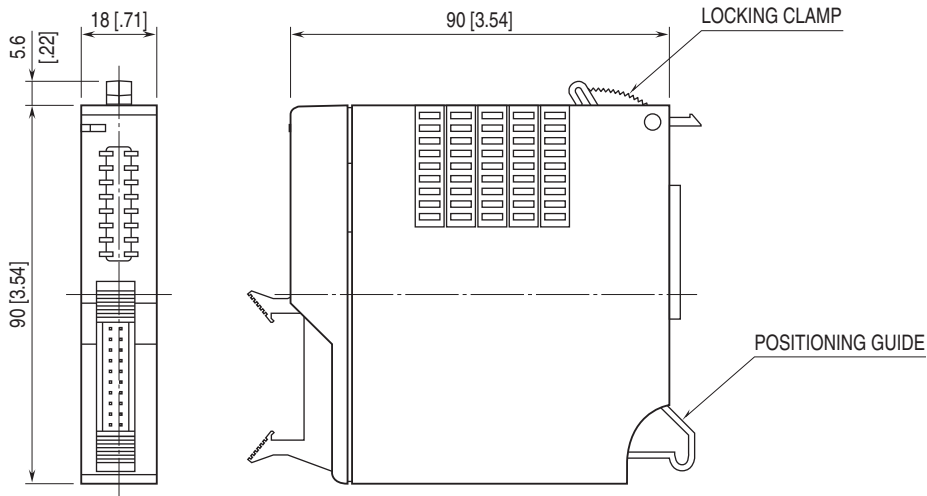
**■ R5-DA16x**



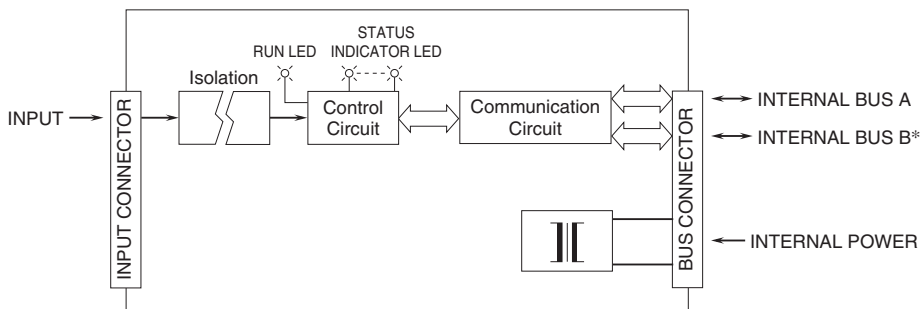
**■ R5-DA16x/A**



**EXTERNAL DIMENSIONS unit: mm [inch]**

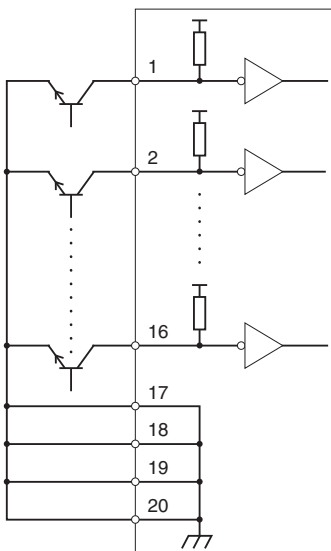


**SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**

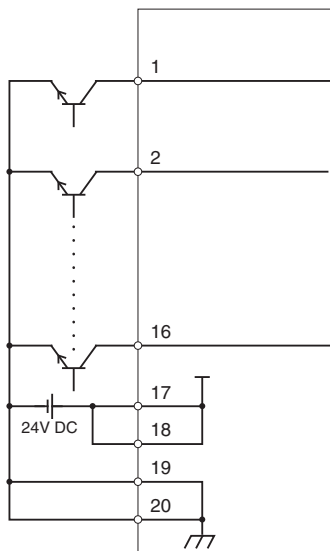


\*For dual redundant communication.

■ R5-DA16x



■ R5-DA16x/A



## INPUT CONNECTOR

### ■ R5-DA16x (internal excitation)

PIN NO.	ASSIGNMENT	PIN NO.	ASSIGNMENT
1	ch. 1	11	ch. 11
2	ch. 2	12	ch. 12
3	ch. 3	13	ch. 13
4	ch. 4	14	ch. 14
5	ch. 5	15	ch. 15
6	ch. 6	16	ch. 16
7	ch. 7	17	COM
8	ch. 8	18	COM
9	ch. 9	19	COM
10	ch. 10	20	COM

### ■ R5-DA16x/A (external excitation)

PIN NO.	ASSIGNMENT	PIN NO.	ASSIGNMENT
1	ch. 1	11	ch. 11
2	ch. 2	12	ch. 12
3	ch. 3	13	ch. 13
4	ch. 4	14	ch. 14
5	ch. 5	15	ch. 15
6	ch. 6	16	ch. 16
7	ch. 7	17	24V DC
8	ch. 8	18	24V DC
9	ch. 9	19	0V
10	ch. 10	20	0V



Specifications are subject to change without notice.