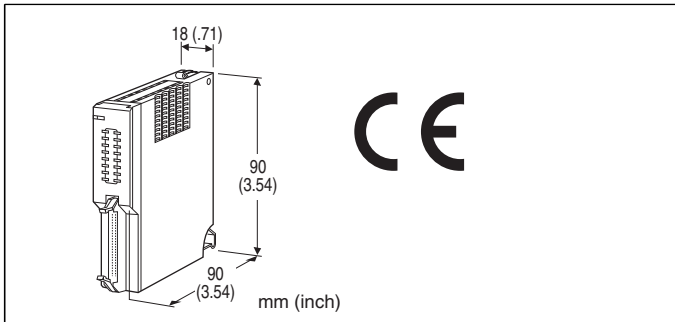


## Remote I/O R5 Series

### 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 [1], [2].  
(e.g: R5-DA16W/A)

### [1] COMMUNICATION MODE

**S:** Single

**W:** Dual

### [2] OPTIONS

#### Excitation

**Blank:** Internal

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

- 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-BSx)

**Input:** 20-pin connector  
OMRON model: XG4A-2034

**Power supply:** Via the base (model: R5-BSx)

**Isolation:** Input to 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 inputs supplied.

### INPUT SPECIFICATIONS

#### ■ Internal Excitation

**Input:** Dry contact, 16 points

**Common:** All negatives

**Contact detecting:** 5 V DC

**ON current/resistance:**  $\geq 1 \text{ mA}$ ,  $\leq 1 \text{ k}\Omega$

**OFF current/resistance:**  $\leq 0.5 \text{ mA}$ ,  $\geq 10 \text{ k}\Omega$

#### ■ External Excitation

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

**Common:** All positives

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

**ON current/resistance:**  $\geq 2.5 \text{ mA}$ ,  $\leq 2 \text{ k}\Omega$

**OFF current/resistance:**  $\leq 1 \text{ mA}$ ,  $\geq 18 \text{ k}\Omega$

### 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-BSx)

**Weight:** 100 g (3.53 oz)

### PERFORMANCE

**Data allocation:** 1

**Response time:**  $\leq 0.1 \text{ sec.}$

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

**Dielectric strength:** 1500 V AC @ 1 minute  
(input to internal power)

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

### STANDARDS & APPROVALS

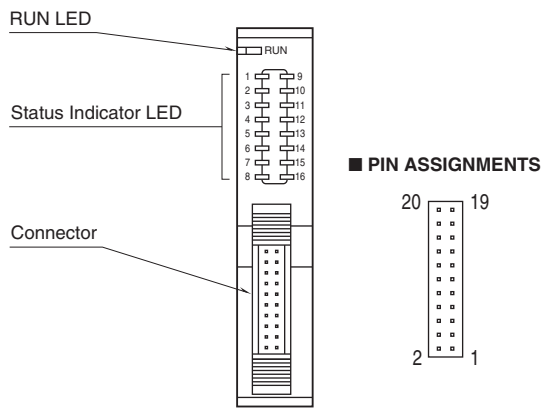
#### CE conformity:

EMC Directive (2004/108/EC)

EMI EN 61000-6-4: 2007

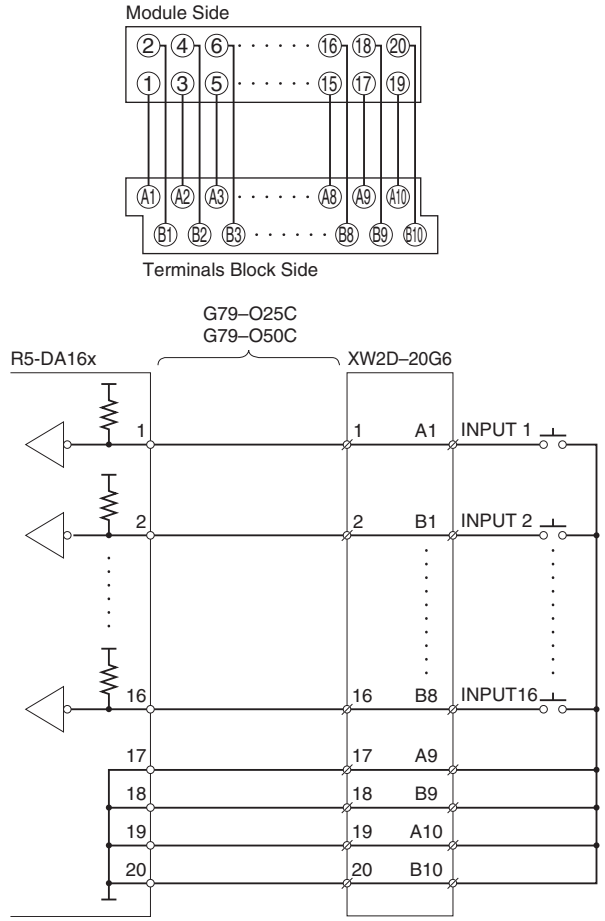
EMS EN 61000-6-2: 2005

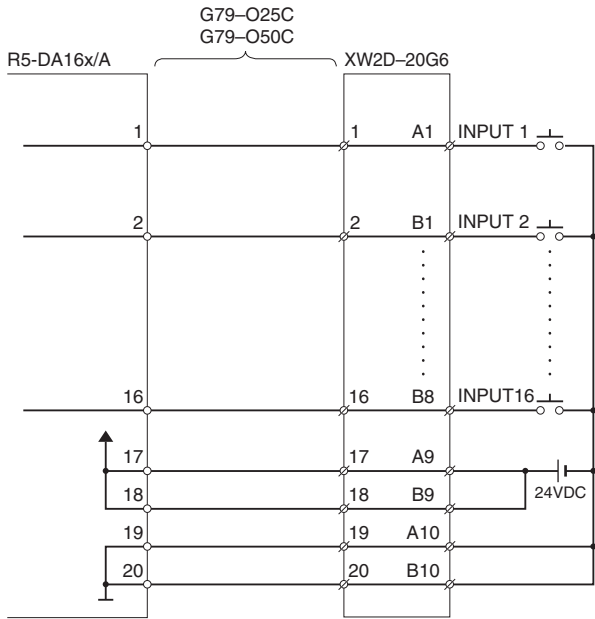
EXTERNAL VIEW



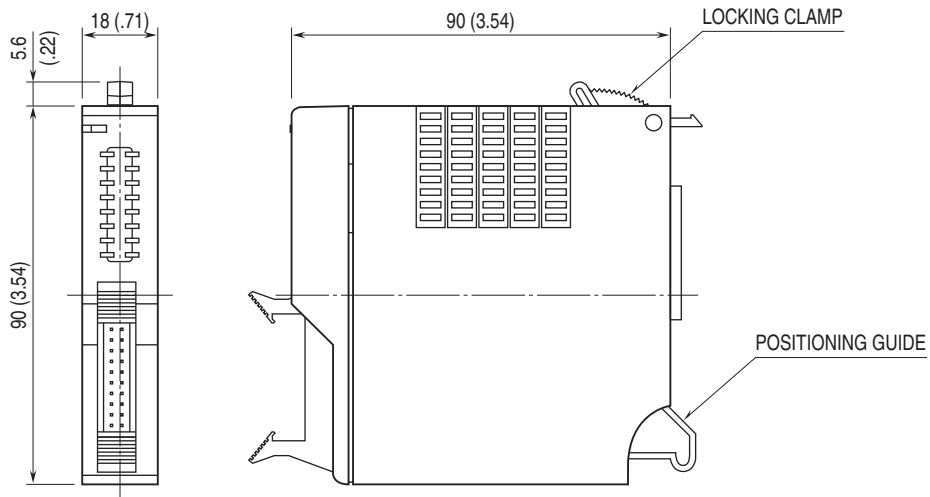
CONNECTOR PIN ASSIGNMENT

Pin assignments

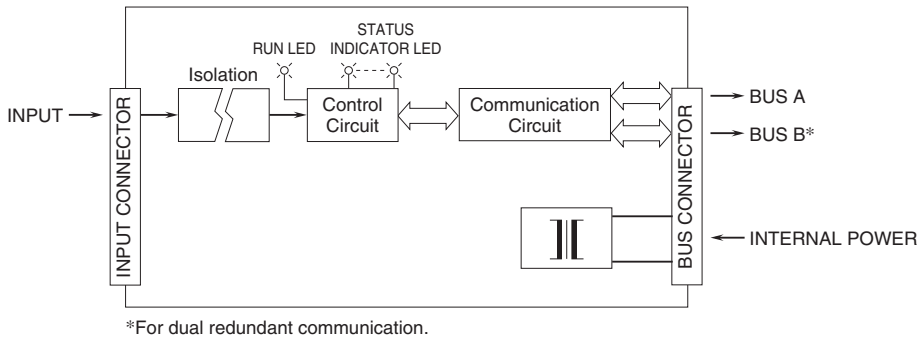




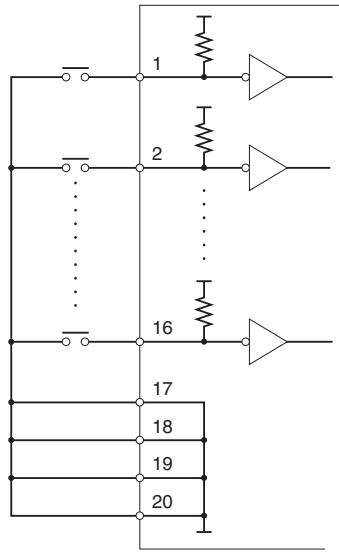
**DIMENSIONS unit: mm (inch)**



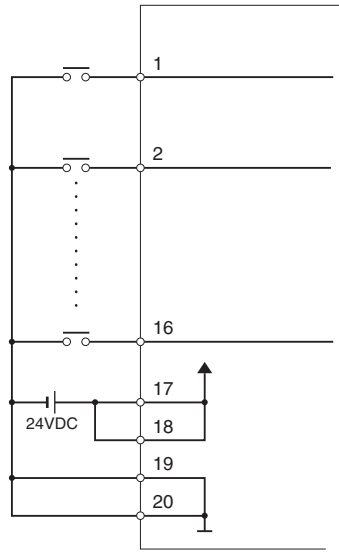
SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



■ 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.