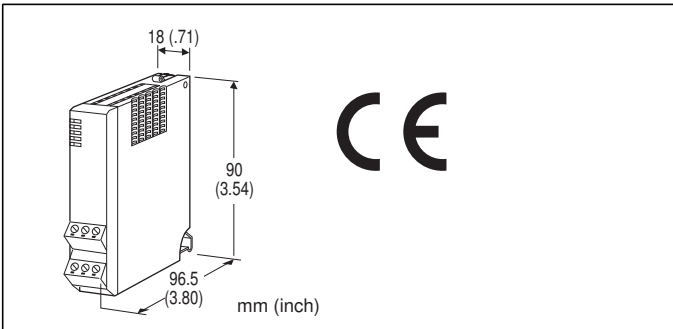


Remote I/O R5 Series

DISCRETE INPUT MODULE

(Di 4 points)



MODEL: R5-DA4[1][2]

ORDERING INFORMATION

- Code number: R5-DA4[1][2]
Specify a code from below for each [1] and [2].
(e.g. R5-DA4W/A/Q)
- Specify the specification for option code /Q
(e.g. /C01)

NO. OF CHANNELS

4: 4

[1] COMMUNICATION MODE

S: Single

W: Dual

[2] OPTIONS (multiple selections)

Excitation

Blank: Internal

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

/B: External (24 V DC, negative 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

GENERAL SPECIFICATIONS

Connection

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

Input: Euro type connector terminal

(Applicable wire size: 0.2 – 2.5 mm² (AWG24 - 12),
stripped length 7 mm)

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

Isolation: Di1 or Di2 to Di3 or Di4 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 inputs ON.

INPUT SPECIFICATIONS

■ Internal Excitation

Input: Dry contact, 4 points

Common: Negative, every 2 points

Contact detecting: Max. 24 V DC

ON voltage, current: ≥ 15 V, ≥ 2.5 mA

OFF voltage, current: ≤ 6 V, ≤ 1 mA

■ External Excitation (Positive common)

Input: 24 V DC, 4 points (input resistance 6 k Ω)

Common: every 2 points

Contact detecting: external 24 V DC ± 10 %

ON voltage, current: ≥ 15 V, ≥ 2.5 mA

OFF voltage, current: ≤ 6 V, ≤ 1 mA

■ External Excitation (Negative common)

Input: 24 V DC, 4 points (input resistance 6 k Ω)

Common: every 2 points

Contact detecting: external 24 V DC ± 10 %

ON voltage, current: ≥ 15 V, ≥ 2.5 mA

OFF voltage, current: ≤ 6 V, ≤ 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 (3.53 oz)

PERFORMANCE

Data allocation: 1

Response time: ≤ 0.1 sec.

Insulation resistance: ≥ 100 M Ω with 500 V DC

Dielectric strength: 1500 V AC @ 1 minute (Di 1 or Di 2 to Di 3 or Di 4 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

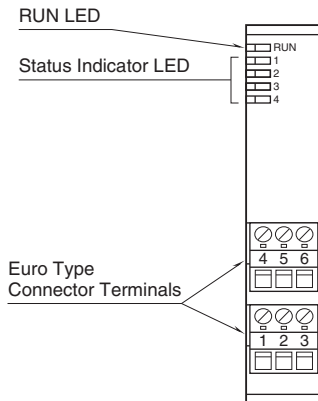
EMS EN 61000-6-2

RoHS Directive

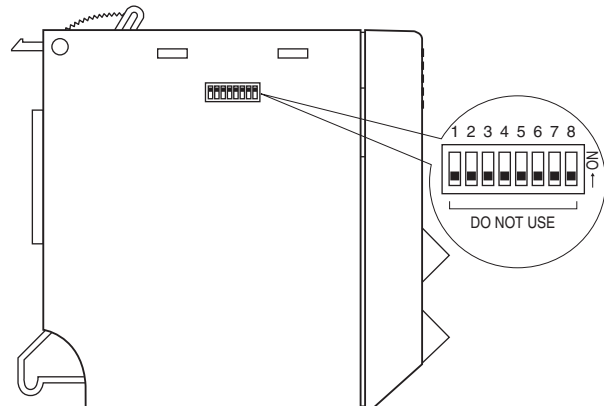
EN 50581

EXTERNAL VIEW

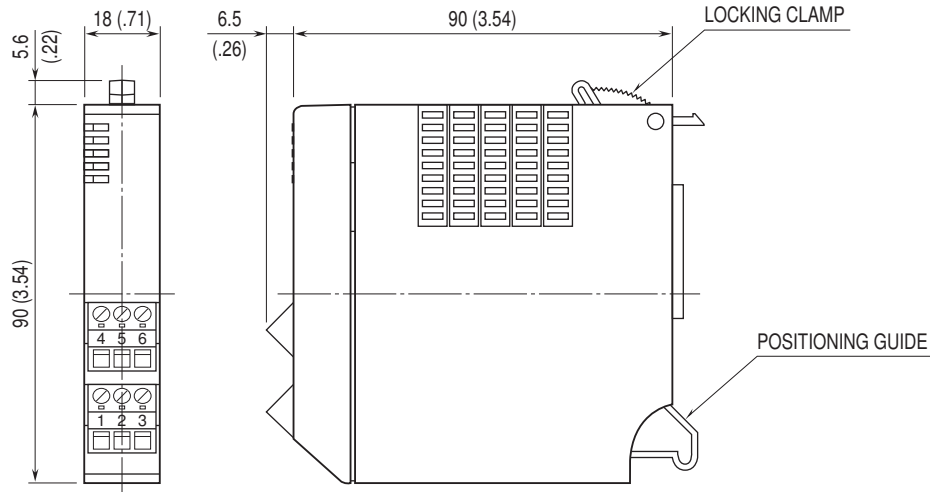
■ FRONT VIEW



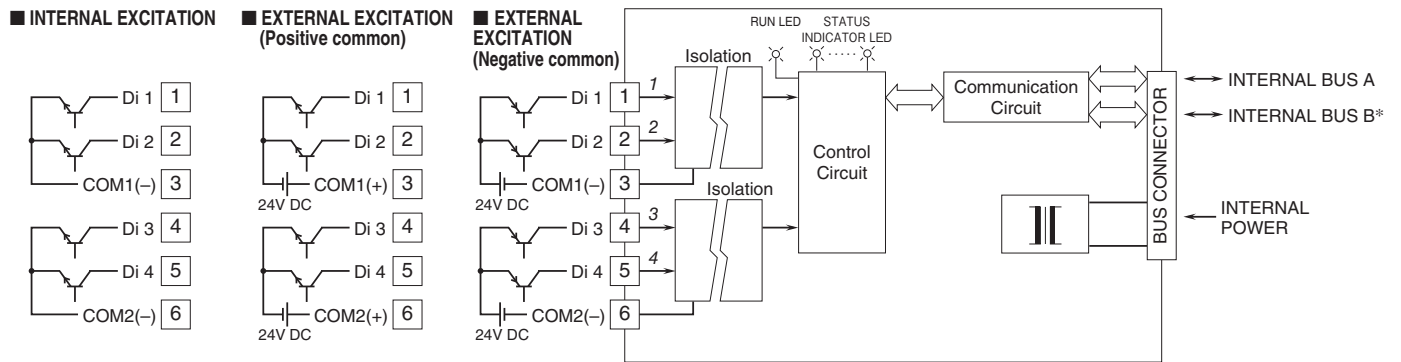
■ SIDE VIEW



EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



*For dual redundant communication.

Note: Italic typed numbers correspond to the LEDs on the front panel.



Specifications are subject to change without notice.