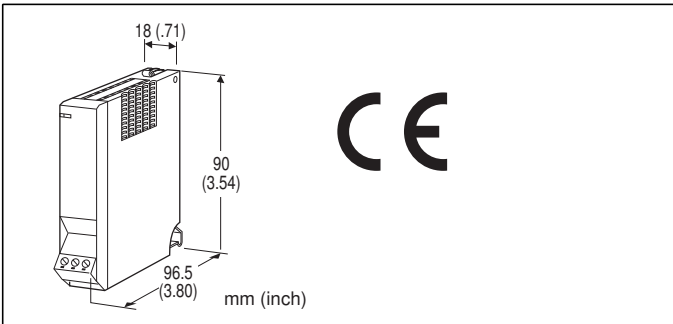


Remote I/O R5 Series

4 - 20 mA INPUT MODULE

(2-wire transmitter excitation supply)



MODEL: R5-DS[1][2][3]

ORDERING INFORMATION

- Code number: R5-DS[1][2][3]
- Specify a code from below for each [1] through [3].
(e.g. R5-DS2W/S/Q)
- Specify the specification for option code /Q
(e.g. /C01)

[1] NO. OF CHANNELS

- 1: 1 channel
- 2: 2 channels

[2] COMMUNICATION MODE

- S: Single
- W: Dual

[3] OPTIONS (multiple selections)

Input resistance

- blank: 100 Ω
- /S: 250 Ω (for smart transmitters)

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

Wire size AWG24-12 (0.2 - 2.5 mm²), stripped length 7 mm

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

Isolation: Input 1 to input 2 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.

SUPPLY OUTPUT

Output voltage: 24 - 29 V DC with no load

Current rating: ≤ 22 mA DC

• **Shortcircuit Protection**

Current limited: 30 mA max.

Protected time duration: No limit

INPUT SPECIFICATIONS

Input: 4 - 20 mA DC; input resistor incorporated

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

Conversion accuracy: ±0.05 %

Data range: 0 - 10000 of the input range

Data allocation: 1 (2 for 2-channel type)

Temp. coefficient: ±0.015 %/°C (±0.008 %/°F)

Response time: ≤ 0.2 sec. (0 - 90 %)

Insulation resistance: ≥ 100 MΩ with 500 V DC

Dielectric strength: 1500 V AC @ 1 minute (input 1 to input 2 to internal bus or internal power)

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

STANDARDS & APPROVALS

CE conformity:

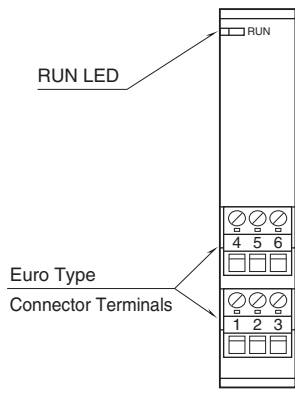
EMC Directive (2004/108/EC)

EMI EN 61000-6-4: 2007/A1: 2011

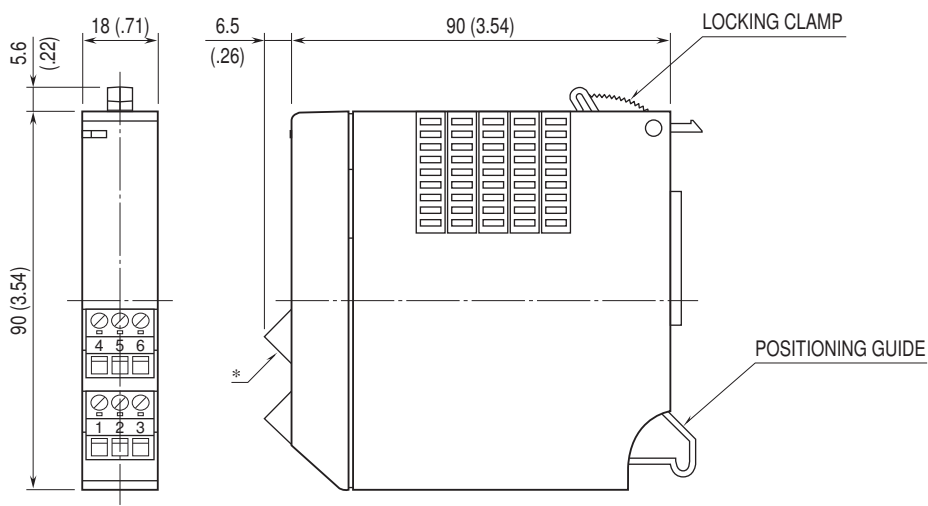
EMS EN 61000-6-2: 2005



EXTERNAL VIEW



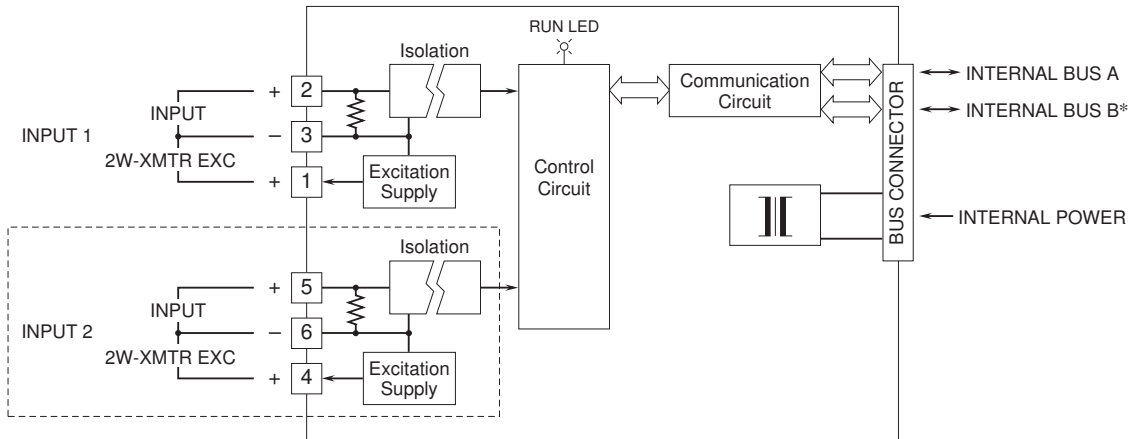
EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)



*Euro type connector terminals (4, 5 and 6) provided only with 2-ch. option.

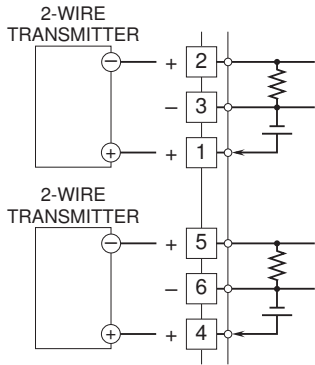


SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM

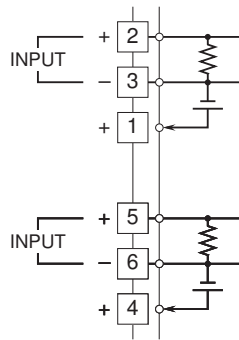


*For dual redundant communication.
NOTE: The section enclosed by broken line is with 2-ch. option.

When Used as DC Supply



When Used as Current Input



Specifications are subject to change without notice.

