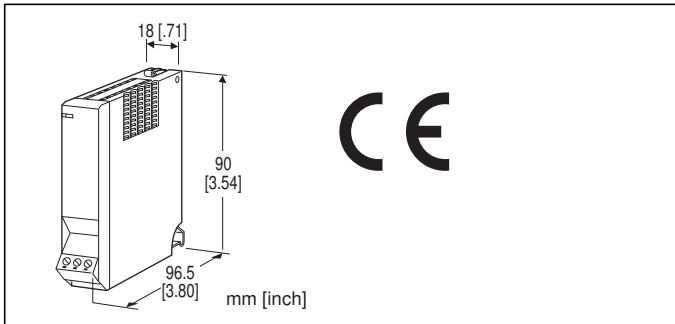


## Remote I/O R5 Series

### 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 of [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 our 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 mm<sup>2</sup> (AWG24 - 12),  
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 (0.22 lb)

#### 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

**EU conformity:**

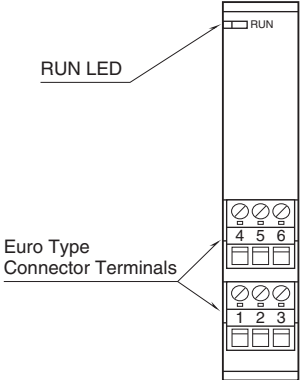
EMC Directive

EMI EN 61000-6-4

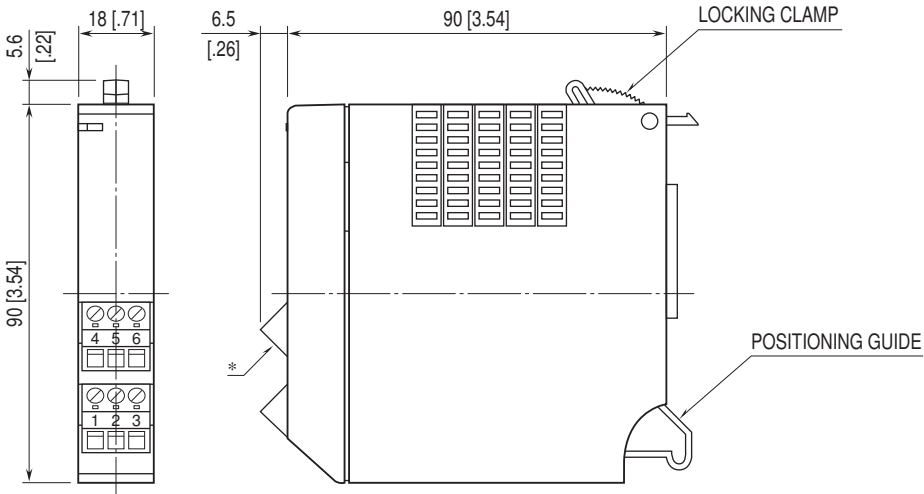
EMS EN 61000-6-2

RoHS Directive

**EXTERNAL VIEW**

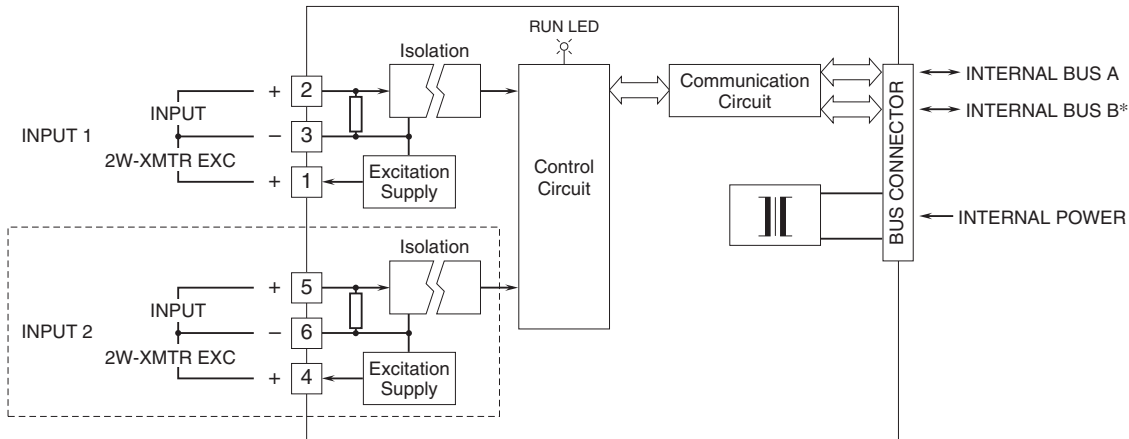


**EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]**



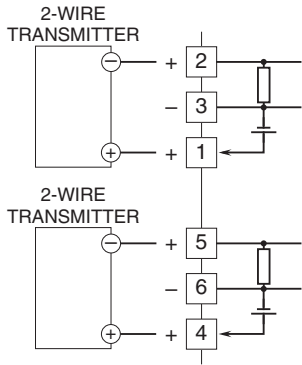
\*Euro type connector terminals [4, 5 and 6] provided only with 2-ch. option.

**SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**

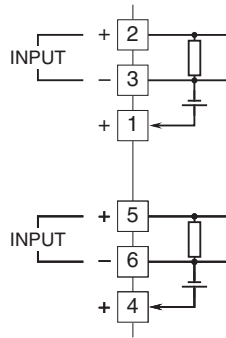


\*For dual redundant communication.  
 Note: The section enclosed by broken line is with 2-ch. option.

■ When Used as DC Supply



■ When Used as Current Input



Specifications are subject to change without notice.