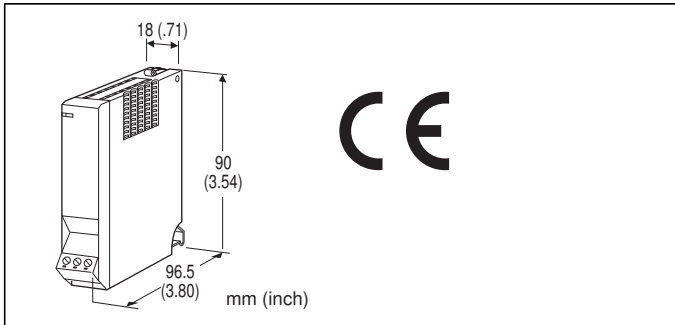


Remote I/O R5 Series

4 - 20 mA OUTPUT MODULE



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

ORDERING INFORMATION

- Code number: R5-YS[1][2][3]
- Specify a code from below for each [1] through [3]. (e.g. R5-YS1W/H/Q)
- Specify the specification for option code /Q (e.g. /C01)

[1] NO. OF CHANNELS

- 1: 1
- 2: 2

[2] COMMUNICATION MODE

- S: Single
- W: Dual

[3] OPTIONS (multiple selections)

Load Resistance

- blank: $\leq 300 \Omega$
- /H: $\leq 600 \Omega$ (available only for 1-channel output type)

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)

- Output: 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: Output 1 to output 2 to internal bus or 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.

OUTPUT SPECIFICATIONS

- Output range: 4 - 20 mA DC
- Load resistance: 300 Ω max. (600 Ω max. with Option /H)

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: $\pm 0.1 \%$
- Data range: 0 - 10000 of the output range
- Data allocation: 1 (2 for 2-channel type)
- Temp. coefficient: $\pm 0.015 \%/^{\circ}\text{C}$ ($\pm 0.008 \%/^{\circ}\text{F}$)
- With Option /H, $\pm 0.02 \%/^{\circ}\text{C}$ ($\pm 0.01 \%/^{\circ}\text{F}$)
- Response time: ≤ 0.2 sec. (0 - 90 %)
- Insulation resistance: $\geq 100 \text{ M}\Omega$ with 500 V DC
- Dielectric strength: 1500 V AC @ 1 minute (output 1 to output 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
- EMS EN 61000-6-2: 2005

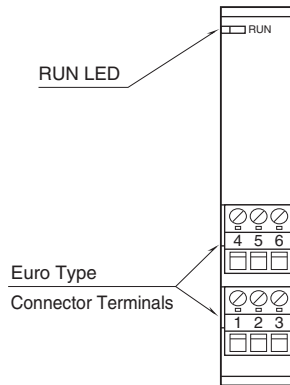
FUNCTIONS

Output hold function:

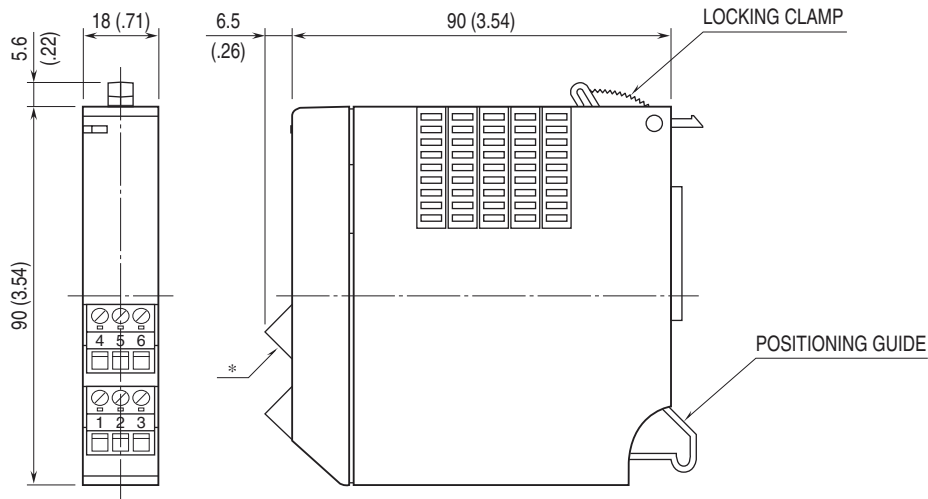
- In normal conditions, the module outputs the signal from the preferred bus A.
- When an error is detected, the output is switched to the data from the bus B.
- If both are in error, the module holds the signal and stands by until one of the communications recovers.
- At the startup, it outputs -15 % of the selected range until the communication is established and normal data is received.



EXTERNAL VIEW

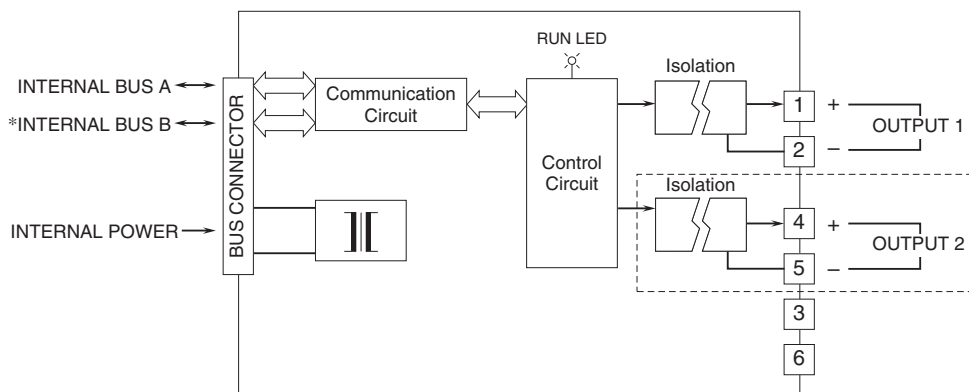


EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)



*Terminal block (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.



Specifications are subject to change without notice.