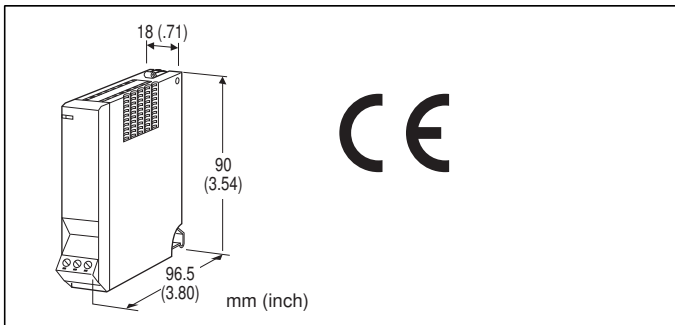


Remote I/O R5 Series

DC VOLTAGE OUTPUT MODULE



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

ORDERING INFORMATION

- Code number: R5-YV[1][2][3]
- Specify a code from below for each [1] through [3].
(e.g. R5-YV2W/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

- blank: none
/Q: With options (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
(Applicable wire size: 0.2 - 2.5 mm² (AWG24 - 12),
stripped length 7 mm)
Internal power: Via the base (model: R5-BS)
Isolation: Output 1 to output 2 to internal bus or internal

power

- Output range:** Selectable with the side DIP SW
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

- **Narrow Span:** -1 - +1 V, 0 - 1 V DC
Load resistance: 10 kΩ min.
- **Wide Span:** -10 - +10 V, -5 - +5 V, 0 - 10 V, 0 - 5 V, 1 - 5 V DC
Load resistance: 10 kΩ min.
- **Output Range**
Except -10 to +10 V DC: -15 to +115 % of output range
-10 to +10 V DC: Approx. -11.5 to +11.5 V DC

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

Output range v.s. conversion accuracy

- (Narrow span) -1 - +1 V DC : ±0.1 (%)
0 - 1 V DC : ±0.1
(Wide span) -10 - +10 V DC : ±0.05
-5 - +5 V DC : ±0.05
0 - 10 V DC : ±0.05
0 - 5 V DC : ±0.05
1 - 5 V DC : ±0.05

Data range: 0 - 10000 of the output 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

(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

EU conformity:

EMC Directive

EMI EN 61000-6-4

EMS EN 61000-6-2

RoHS Directive

EN 50581

FUNCTIONS

Output hold function:

In normal conditions, the module outputs the signal from the preferred bus A.

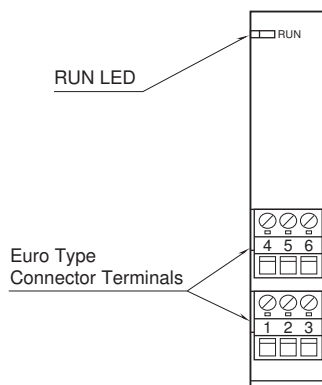
When an error is detected, the output is switched to the data from the bus B.

If both are in error, the module holds the signal and stands by until one of the communications recovers.

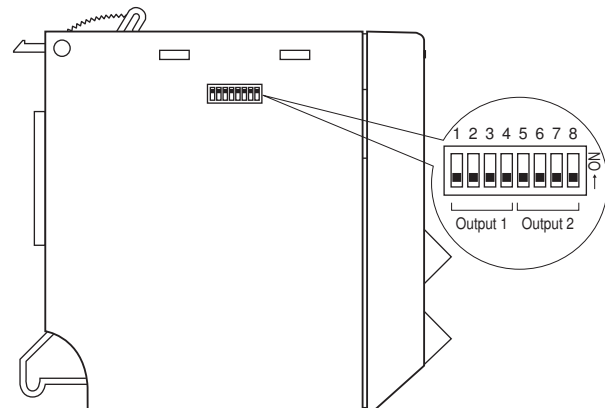
At the startup, it outputs -15 % (or approx. -11.5 V) of the selected range until the communication is established and normal data is received.

EXTERNAL VIEW

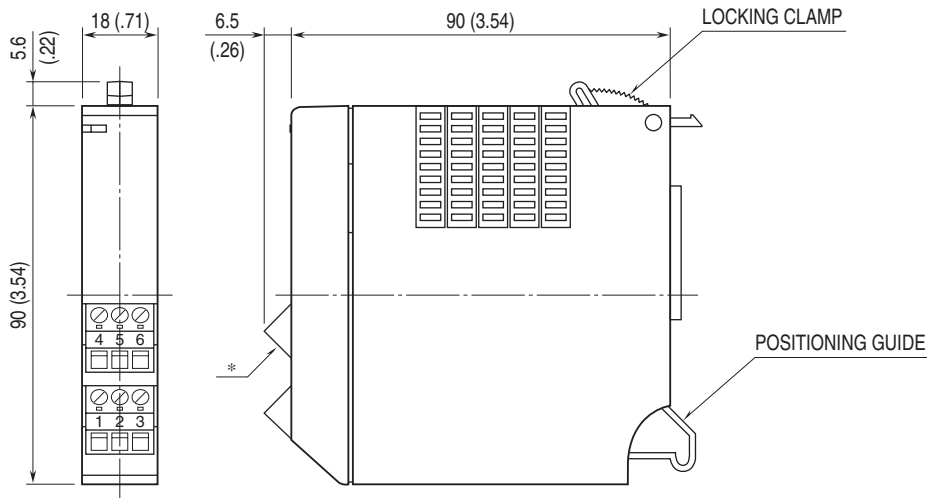
FRONT VIEW



SIDE VIEW

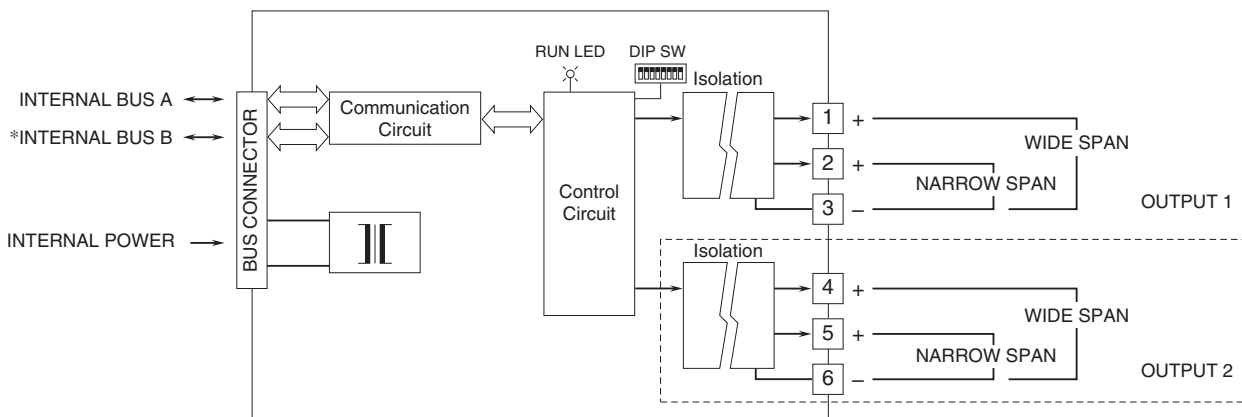


EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)



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

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



*For dual redundant communication.
 Note: Connect either wide or narrow span terminals for each channel.
 The section enclosed by broken line is with 2-ch. option.



Specifications are subject to change without notice.