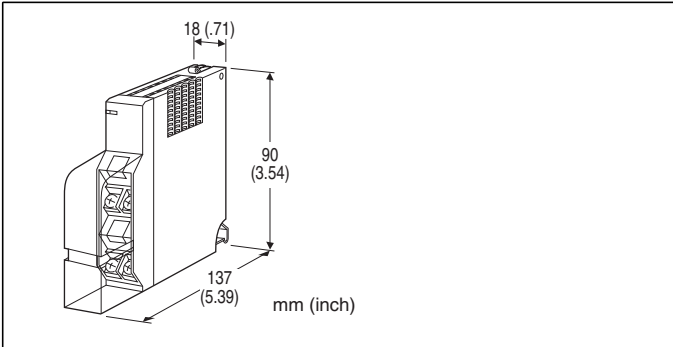


Remote I/O R5 Series

CT INPUT MODULE

(screw terminal block; true RMS sensing)



MODEL: R5T-CT[1][2]

ORDERING INFORMATION

- Code number: R5T-CT[1][2][3]
Specify a code from below for each [1] through [3].
(e.g. R5T-CT2W/Q)
- Specify the specification for option code /Q
(e.g. /C01/S01)

[1] NO. OF CHANNELS

- 1: 1 channel
- 2: 2 channels

[2] COMMUNICATION MODE

- S: Single
- W: Dual

[3] OPTIONS

- blank: none
- /Q: With options (specify the specification)

SPECIFICATIONS OF OPTION: Q (multiple selections)

COATING (For the detail, refer to M-System's web site.)

- /C01: Silicone coating
- /C02: Polyurethane coating
- /C03: Rubber coating

TERMINAL SCREW MATERIAL

- /S01: Stainless steel

GENERAL SPECIFICATIONS

Connection

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

Input: M3.5 screw terminal block
(torque 0.8 N·m)

Power supply: Via the base (model: R5-BSx)

Screw terminal: Nickel-plated steel (standard) or stainless steel

Isolation: Input 1 to input 2 to internal power

Input waveform

RMS sensing: Up to 15 % of 3rd harmonic content

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.

Low-end cutout: Converted as 0 % for the input below 2 %

INPUT SPECIFICATIONS

Input: 0 – 5 A AC

Frequency: 50 or 60 Hz

Input burden: ≤ 0.5 VA

Overload capacity: 200 % for 1 min.,
120 % continuous

Operational range: 5 – 115 % of rating
0 – 5 A is converted into 0 – 10000 at default factory setting.

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-BSx)

Weight: 110 g (0.24 lb)

PERFORMANCE

Conversion accuracy: ±0.5 % (at 5 – 100 % input)

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: ≤ 0.5 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 power)

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

The diagram illustrates the system architecture. It features two identical input channels, INPUT 1 and INPUT 2, each consisting of a voltage divider (resistors k and l) connected to a source and ground, followed by a CT (Current Transformer) and a load. The outputs of these channels are connected to an Input Circuit, which then feeds into a central Control Circuit. The Control Circuit is also connected to a RUN LED, a Communication Circuit, and a BUS CONNECTOR. The BUS CONNECTOR is further connected to BUS A, BUS B*, and INTERNAL POWER.

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Specifications are subject to change without notice.