

Super-mini Two-wire Signal Conditioners T-UNIT

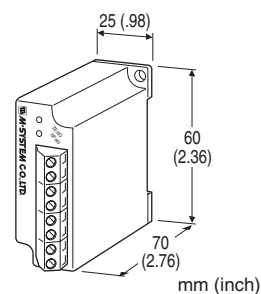
RTD TRANSMITTER

Functions & Features

- Accepting direct input from an RTD and providing a standard 4 - 20 mA DC signal
- Linearization
- Burnout protection
- Monitor terminals
- Highdensity mounting

Typical Applications

- Converting into standard output



MODEL: TR-[1][2]

ORDERING INFORMATION

- Code number: TR-[1][2]
- Specify a code from below for [1] and [2] (e.g. TR-4/BL)
- Temperature range (e.g. 0 - 100°C)

[1] INPUT RTD (2- or 3-wire)

1: JPt 100 (JIS'89)

(Usable range: -200 to +500°C, -328 to +932°F; min.span: 50°C, 90°F)

3: Pt 100 (JIS'89)

(Usable range: -200 to +650°C, -328 to +1202°F; min.span: 50°C, 90°F)

4: Pt 100 (JIS'97, IEC)

(Usable range: -200 to +650°C, -328 to +1202°F; min.span: 50°C, 90°F)

5: Pt 50 Ω (JIS'81)

(Usable range: -200 to +500°C, -328 to +932°F; min.span: 100°C, 180°F)

Note: Consult M-System for 2-wire RTD

[2] OPTIONS

Burnout

blank: Upscale burnout

/BL: Downscale burnout

GENERAL SPECIFICATIONS

Construction: Stand-alone; terminal access at the front

Connection: Euro terminal

Housing material: Flame-resistant resin (black)

Zero adjustment: -5 to +5 % (front)

Span adjustment: 95 to 105 % (front)

Linearization: Standard

INPUT SPECIFICATIONS

Maximum leadwire resistance

3-wire Pt 100 Ω: 5 Ω per wire

3-wire Pt 50 Ω: 2.5 Ω per wire

Sensing current: 1 mA

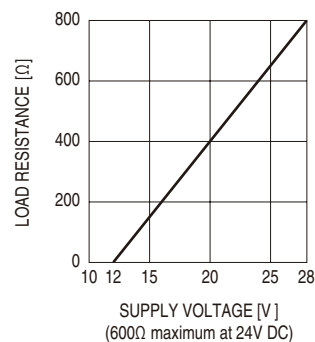
OUTPUT SPECIFICATIONS

Output: 4 - 20 mA DC

Load resistance vs. supply voltage:

Load Resistance (Ω) = (Supply Voltage (V) - 12 (V)) ÷ (0.02 (A))

(including leadwire resistance)



INSTALLATION

Supply voltage: 12 - 28 V DC

Operating temperature: -5 to +60°C (23 to 140°F)

Operating humidity: 30 to 90 %RH (non-condensing)

Mounting: Surface or DIN rail

Weight: 120 g (0.26 lbs)

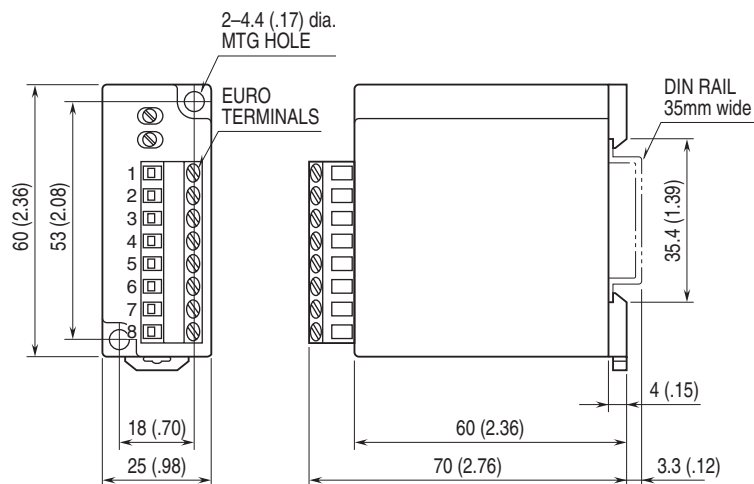
PERFORMANCE in percentage of span

Accuracy: ±0.2 %

Temp. coefficient: ±0.02 %/°C (±0.01 %/°F)

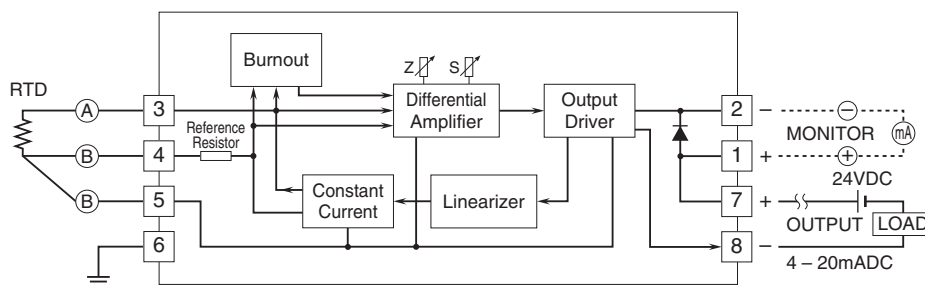
Response time: ≤ 0.5 sec. (0 - 90 %)

EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)



•When mounting, no extra space is needed between units.

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.