Super-mini Two-wire Signal Conditioners T-UNIT

SIGNAL TRANSMITTER

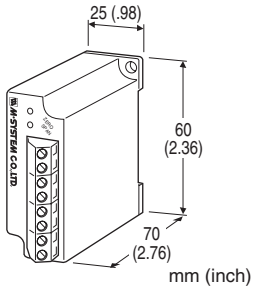
(isolated)

Functions & Features

- Converting a DC input into an isolated 4 – 20 mA DC signal
- Monitor terminals
- High-density mounting

Typical Applications

- mV, voltage and current scaling



MODEL: TVS-[1]

ORDERING INFORMATION

- Code number: TVS-[1]

Specify a code from below for [1].
(e.g. TVS-6)

- Special input range (For code 0)

[1] INPUT

Voltage

1: 0 – 10 mV DC (Input resistance 10 kΩ min.)
2: 0 – 100 mV DC (Input resistance 100 kΩ min.)
3: 0 – 1 V DC (Input resistance 1 MΩ min.)
4: 0 – 10 V DC (Input resistance 1 MΩ min.)
5: 0 – 5 V DC (Input resistance 1 MΩ min.)
6: 1 – 5 V DC (Input resistance 1 MΩ min.)
0: Specify voltage (0 % or 50 % input must be equal to 0 V.)

GENERAL SPECIFICATIONS

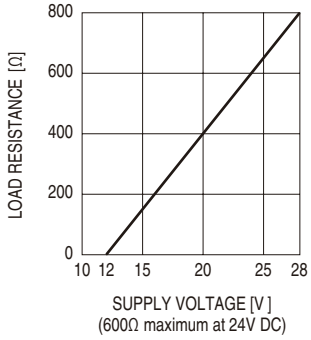
Construction: Stand-alone; terminal access at the front
Connection: Euro type terminal
(applicable wire size: 0.25 to 1.5 mm^2, stripped length 7 mm)
Housing material: Flame-resistant resin (black)
Isolation: Input to output
Zero adjustment: -5 to +5 % (front)
Span adjustment: 95 to 105 % (front)

INPUT SPECIFICATIONS

Input: -300 – +300 V DC
Minimum span: 10 mV
Input resistance
(Input Span: Input Resistance)
10 – 100 mV: ≥ 10 kΩ
0.1 – 1 V: ≥ 100 kΩ
≥1 V: ≥ 1 MΩ

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)



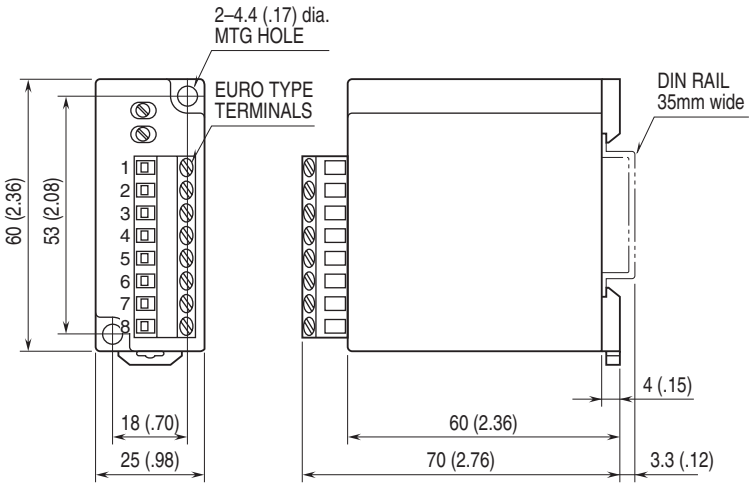
INSTALLATION

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 lb)

PERFORMANCE in percentage of span

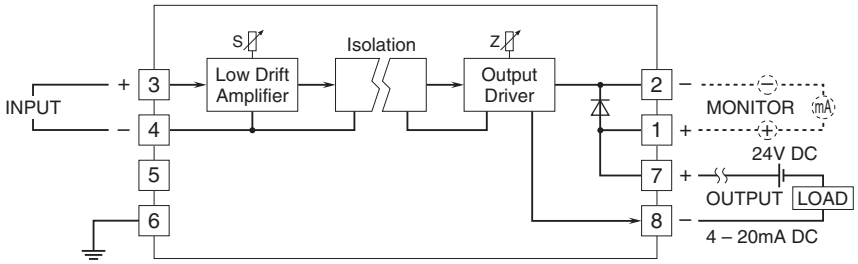
Accuracy: ±0.1 %
Temp. coefficient: ±0.015 %/°C (±0.008 %/°F)
Response time: ≤ 0.5 sec. (0 – 90 %)
Insulation resistance: ≥ 100 MΩ with 500 V DC
Dielectric strength: 500 V AC @ 1 minute (input to output)

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.