

Field-mounted Two-wire Signal Conditioners 6-UNIT

RTD TRANSMITTER

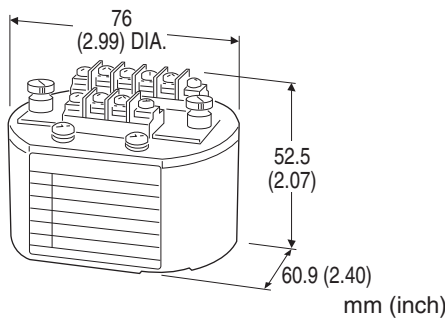
(field-selectable temp. range)

Functions & Features

- Accepting direct input from an RTD and providing a standard 4 - 20 mA DC signal
- Field selectable temperature range
- Linearization
- Burnout protection
- Rugged enclosure

Typical Applications

- Converting into standard output



MODEL: 6R-[1][2]

ORDERING INFORMATION

- Code number: 6R-[1][2]
- Specify a code from below for each of [1] and [2]. (e.g. 6R-4/BL)
- Temperature range (e.g. 0 - 100°C)
- Mounting adapter (e.g. surface mounting adapter plate, model: A-01)

Note: When a mounting adapter is required, specify mounting adapter. Not included without specifying.

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

3: Pt 100 (JIS'89)

4: Pt 100 (JIS'97, IEC)

Note: Consult us for 2-wire RTD

[2] OPTIONS

Burnout

blank: Upscale burnout

/BL: Downscale burnout

RELATED PRODUCTS

- Outdoor enclosure (model: 6BX-E)

PACKAGE INCLUDES...

- **Mounting adapter**
surface mounting adapter plate (model: A-01)
Spring clip (model: A-02)
DIN rail mounting plate (model: A-31)

Note: When a mounting adapter is required, specify mounting adapter. Not included without specifying.

When using in combination with outdoor enclosure (model: 6BX-E), use a spring clip (model: A-02).

GENERAL SPECIFICATIONS

Connection: M3 screw terminals (torque 0.6 N·m)

Screw terminal: Nickel-plated steel

Housing material: Diecast aluminum

Output limit: Approx. 120 %

Zero adjustment: -3 - +15 % (behind the access cover)

Span adjustment: 90 to 110 % (behind the access cover)

DIP/rotary switches: For input calibration

(Refer to the instruction manual)

Linearization: Standard

INPUT SPECIFICATIONS

Maximum leadwire resistance: 5 Ω per wire (3-wire)

Sensing current: 1 mA

• 100°C or Wider Span (180°F or Wider Span)

0% TEMP.		100% TEMP.		UNIT	
°C	°F	°C	°F	°C	°F
0 - 50	32 - 122	100 - 500	212 - 932	10	18
50 - 100	122 - 212	150 - 350	302 - 662	10	18
100 - 150	212 - 302	200 - 400	392 - 752	10	18
200 - 250	392 - 482	300 - 500	572 - 932	10	18
300	572	500	932	---	---
-50 - 0	-58 - 32	50 - 350	122 - 662	10	18
-100 - -50	-148 - -58	0 - 50	32 - 122	10	18

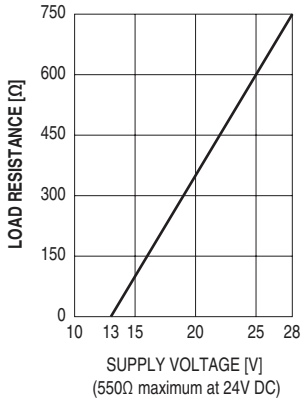
• 50 - 100°C Span (90 - 180°F Span)

0% TEMP.		100% TEMP.		UNIT	
°C	°F	°C	°F	°C	°F
0 - 50	32 - 122	50 - 100	122 - 212	5	9
50 - 100	122 - 212	100 - 150	212 - 302	5	9
100 - 150	212 - 302	150 - 200	302 - 392	5	9
-50 - 0	-58 - 32	0 - 50	32 - 122	5	9
-100 - -50	-148 - -58	-50 - 0	-58 - 32	5	9

OUTPUT SPECIFICATIONS

Output: 4 - 20 mA DC

Load resistance vs. supply voltage: Load Resistance (Ω) =
 (Supply Voltage (V) - 13 (V)) \div 0.02 (A)
 (including leadwire resistance)



INSTALLATION

Supply voltage: 13 - 28 V DC

Operating temperature: -5 to +70°C (23 to 158°F)

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

Mounting: DIN rail with mounting plate A-31; surface mounting with adapter plate A-01; spring clip A-02 for 3-inch hub

Weight: 220 g (0.49 lb)

PERFORMANCE in percentage of span

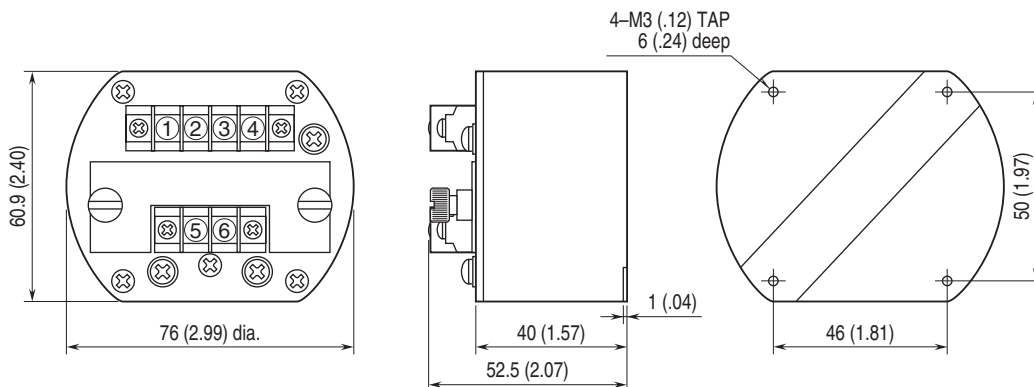
Accuracy: ± 0.2 %

Temp. coefficient: ± 0.015 %/°C (± 0.008 %/°F)

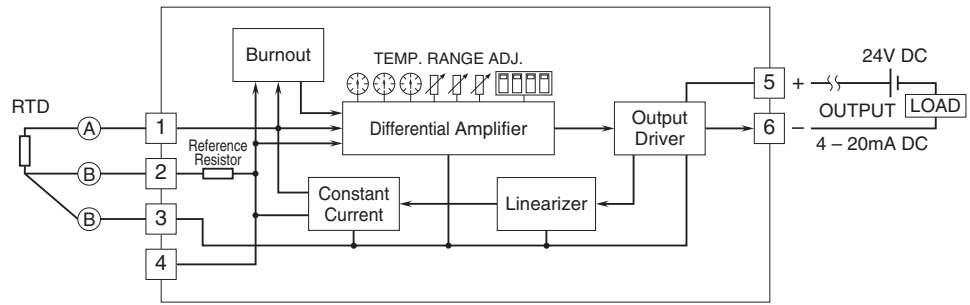
Response time: ≤ 0.5 sec. (0 - 90 %)

Burnout response: Approx. 1 sec.

EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.