

Space-saving Plug-in Signal Conditioners H-UNIT

RTD TRANSMITTER

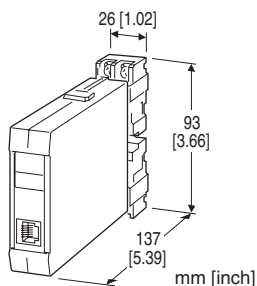
(field-programmable)

Functions & Features

- Accepting direct input from an RTD and providing a standard process signal
- Micro-processor based
- Field-programmable temperature range
- Linearization
- Burnout protection
- Loop testing via hand-held programmer PU-2x
- High-density mounting

Typical Applications

- Ideal for quick spare part



MODEL: HJR-[1][2]-R[3]

ORDERING INFORMATION

- Code number: HJR-[1][2]-R[3]

Specify a code from below for each of [1] through [3].

- (e.g. HJR-4A-R/BL/Q)
- Temperature range (e.g. 0 - 500°C)
- Specify the specification for option code /Q (e.g. /C01/S01)

[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)

6: Ni 508.4 Ω

(Usable range: -50 to +200°C, -58 to +392°F; min.span: 30°C, 54°F)

0: Specify

Note: Consult us for 2-wire RTD

[2] OUTPUT

Current

A: 4 - 20 mA DC (Load resistance 600 Ω max.)

Voltage

6: 1 - 5 V DC (Load resistance 500 Ω min.)

POWER INPUT

DC Power

R: 24 V DC

(Operational voltage range 24 V ±10 %, ripple 10 %p-p max.)

[3] OPTIONS (multiple selections)

Burnout

blank: Upscale burnout

/BL: Downscale burnout

Other Options

blank: none

/Q: Option other than the above (specify the specification)

SPECIFICATIONS OF OPTION: Q (multiple selections)

COATING (For the detail, refer to our web site.)

/C01: Silicone coating

/C02: Polyurethane coating

/C03: Rubber coating

TERMINAL SCREW MATERIAL

/S01: Stainless steel

RELATED PRODUCTS

- Programming Unit (model: PU-2x)
- PC configurator software (model: JXCON)

Downloadable at our web site.

A dedicated cable is required to connect the module to the PC. Please refer to the internet software download site or the users manual for the PC configurator for applicable cable types.

GENERAL SPECIFICATIONS

Construction: Plug-in

Connection: M3.5 screw terminals (torque 0.8 N·m)

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

Housing material: Flame-resistant resin (black)

Isolation: Input to output to power

Overrange output: Approx. -10 to +120 % at 1 - 5 V

Linearization: Standard

Adjustments: Programming Unit (model: PU-2x);

(Refer to the users manual of JXCON for the adjustments configurable with JXCON.)

- RTD type (between Pt 100 and JPt 100 only)
- temp. range

- zero and span
- simulating output
- Others

INPUT SPECIFICATIONS

Maximum leadwire resistance: 20 Ω per wire (3-wire)

Sensing current: 2 mA (Pt)

If not specified, the input range is shown below.

- 1: JPt 100 (JIS '89) 0 – 100°C
- 3: Pt 100 (JIS '89) 0 – 100°C
- 4: Pt 100 (JIS '97, IEC) 0 – 100°C
- 5: Pt 50 Ω (JIS '81) 0 – 200°C
- 6: Ni 508.4 Ω 0 – 100°C

INSTALLATION

Current consumption: Approx. 90 mA

Operating temperature: -5 to +55°C (23 to 131°F)

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

Mounting: Surface or DIN rail; Standard Rack Mounting

Frame BX-16H available

Weight: 220 g (0.49 lb)

PERFORMANCE in percentage of span

Accuracy: ± 0.1 % or $\pm 0.1^\circ\text{C}$ ($\pm 0.18^\circ\text{F}$), whichever is greater

Temp. coefficient: ± 0.015 %/ $^\circ\text{C}$ (± 0.008 %/ $^\circ\text{F}$)

Response time: ≤ 0.5 sec. (0 – 90 %)

Burnout response: ≤ 10 sec.

Line voltage effect: ± 0.1 % over voltage range

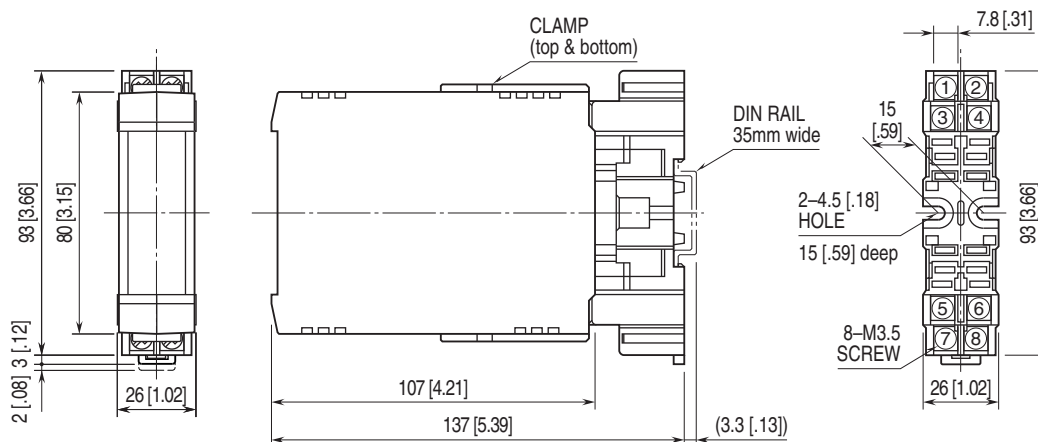
Insulation resistance: ≥ 100 M Ω with 500 V DC

Dielectric strength: 500 V AC @ 1 minute

(input to output to power)

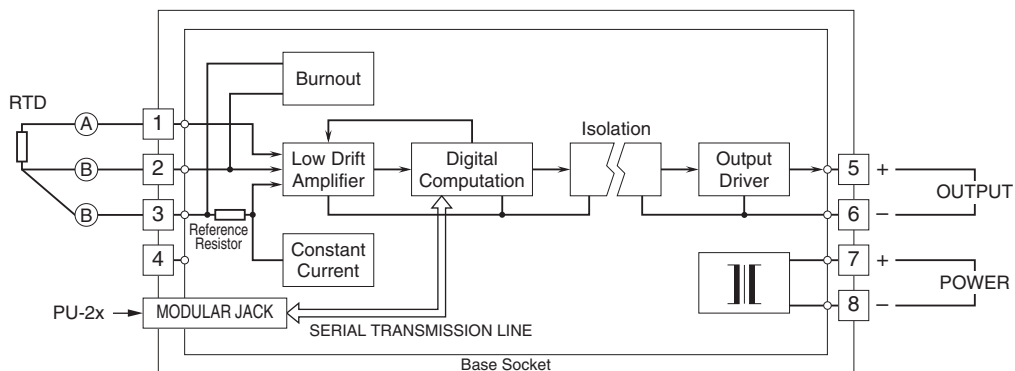
1500 V AC @ 1 minute (input or output or power to ground)

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.