

## Dual Channel Input/Output Isolators 15-RACK

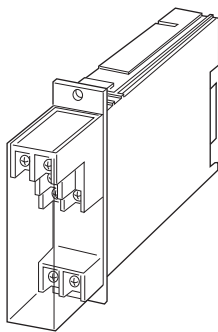
### RTD CONVERTER

#### Functions & Features

- Accepting direct input from an RTD and providing a standard process signal
- Linearization
- Burnout protection
- 2 channels available; accomplishing economical and space-saving multi-input processing

#### Typical Applications

- Converting into standard signals
- Power plant



### MODEL: 15RS-[1]6-R[2]

#### ORDERING INFORMATION

- Code number: 15RS-[1]6-R[2]
- Specify a code from below for each of [1] and [2].  
(e.g. 15RS-46-R/BL/Q)
- Temperature range (e.g. 0 - 100°C)
- Specify the specification for option code /Q  
(e.g. /C01)

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

- 1:** JPt 100 (JIS'89)  
(Usable range: -200 to +500°C, -328 to +932°F; min.span: 30°C, 54°F)
- 3:** Pt 100 (JIS'89)  
(Usable range: -200 to +650°C, -328 to +1202°F; min.span: 30°C, 54°F)
- 4:** Pt 100 (JIS'97, IEC)  
(Usable range: -200 to +650°C, -328 to +1202°F; min.span: 30°C, 54°F)
- 5:** Pt 50 Ω (JIS'81)  
(Usable range: -200 to +500°C, -328 to +932°F; min.span: 60°C, 108°F)
- 6:** Ni 508.4 Ω  
(Usable range: -50 to +200°C, -58 to +392°F; min.span: 20°C, 36°F)
- 0:** Specify  
Note: Consult us for 2-wire RTD

### OUTPUT

Voltage  
6: 1 - 5 V DC (Load resistance 5000 Ω min.)

### POWER INPUT

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

### [2] 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

COATING (For the detail, refer to our web site.)  
**/C01:** Silicone coating  
**/C02:** Polyurethane coating  
**/C03:** Rubber coating

#### RELATED PRODUCTS

- Extender card (model:10EC)  
Necessary to adjust span.

#### GENERAL SPECIFICATIONS

**Construction:** Rack-mounted; terminal access via screw terminals at the front and via card-edge connector at the rear; terminal cover provided

**Connection:**  
**Input:** M3.5 screw terminals (torque 0.8 N·m)  
**Output:** Card-edge connector  
**Power input:** Supplied from card edge connector

**Screw terminal:** Nickel-plated steel

**Housing material:** Flame-resistant resin (black)

**Isolation:** Input to output or power; ch.1 input to ch.2 input

**Overrange output:** Approx. -10 to +120 %

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

**Span adjustment:** 95 to 105 % (top)

**At burnout:** Downscale ≤ -10 %, Upscale ≥ 110 %

**Linearization:** Standard

#### INPUT SPECIFICATIONS

**Maximum leadwire resistance:** 20 Ω per wire (3-wire)  
**Sensing current:** 2 mA (Pt)

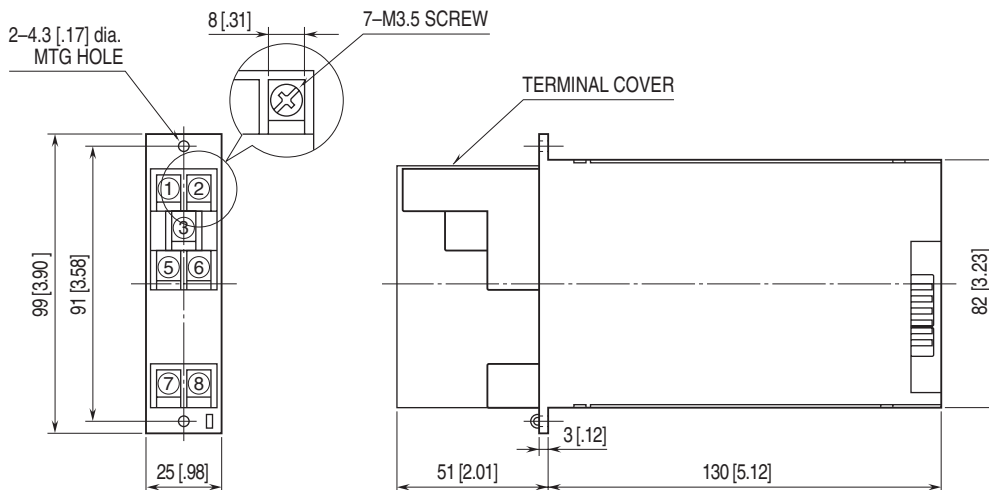
## INSTALLATION

**Current consumption:** Approx. 30 mA  
**Operating temperature:** -5 to +55°C (23 to 131°F)  
**Operating humidity:** 30 to 90 %RH (non-condensing)  
**Mounting:** Standard Rack 15BX  
**Weight:** 180 g (0.40 lb)

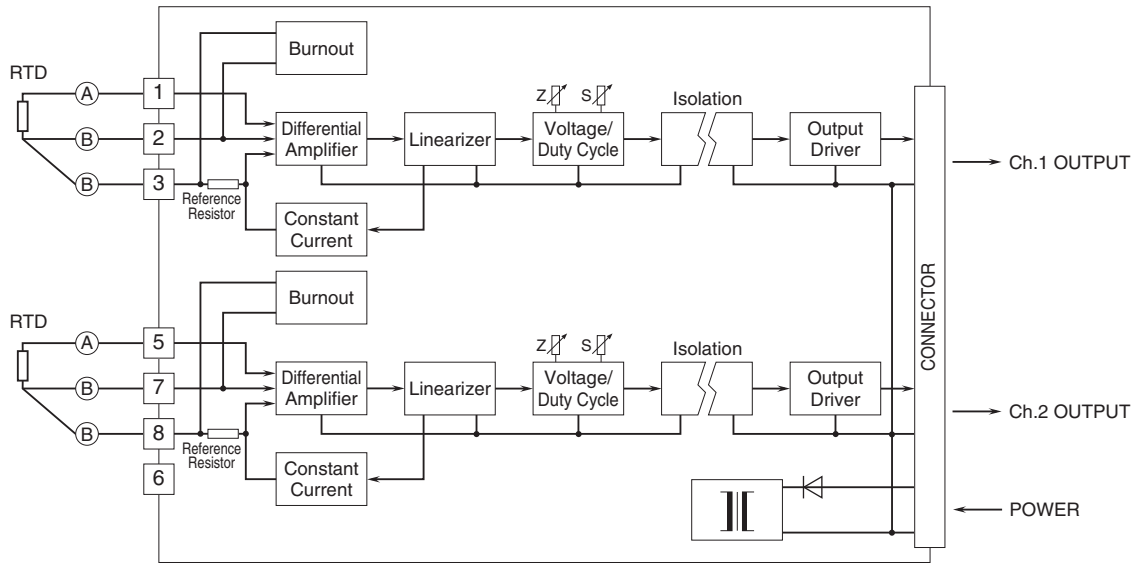
## PERFORMANCE in percentage of span

**Accuracy:**  $\pm 0.2\%$   
**Temp. coefficient:**  $\pm 0.015\%/^{\circ}\text{C}$  ( $\pm 0.008\%/^{\circ}\text{F}$ )  
**Response time:**  $\leq 0.5$  sec. (0 - 90 %)  
**Burnout response:**  $\leq 10$  sec.  
**Line voltage effect:**  $\pm 0.2\%$  over voltage range  
**Insulation resistance:**  $\geq 100\ \text{M}\Omega$  with 500 V DC  
**Dielectric strength:** 500 V AC @ 1 minute  
 (input to output or power)  
 500 V AC @ 1 minute (ch.1 to ch.2 input)  
 500 V AC @ 1 minute (output to ground)

## EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]



**SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**



Specifications are subject to change without notice.