

## High-density Signal Conditioners 10-RACK

### CURRENT LOOP SUPPLY

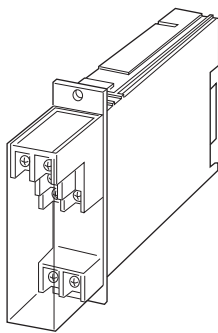
(10 – 50 mA loop)

#### Functions & Features

- Powering a 10 – 50 mA DC current loop
- Isolation
- Shortcircuit protection
- Applicable to smart transmitters

#### Typical Applications

- Various 2-wire transmitters



### MODEL: 10DU-H60-R[1]

#### ORDERING INFORMATION

- Code number: 10DU-H60-R[1]
- Specify a code from below for [1].  
(e.g. 10D-H60-R/Q)
- Specify the specification for option code /Q  
(e.g. /C01)

#### INPUT

Current  
H: 10 – 50 mA DC

#### OUTPUT 1

Voltage  
6: 1 – 5 V DC (Load resistance 50 kΩ min.)

#### OUTPUT 2

0: None

#### POWER INPUT

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

#### [1] OPTIONS

blank: none  
/Q: With options (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

#### 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

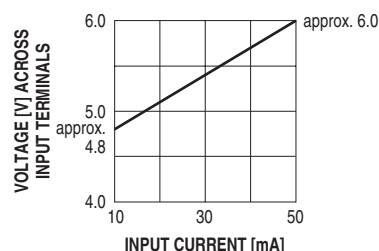
**Input:** M3.5 screw terminals (torque 0.8 N·m)  
**Output:** Card-edge connector and M3.5 screw terminals (torque 0.8 N·m)  
**Power input:** Supplied from card-edge connector  
**Screw terminal:** Nickel-plated steel  
**Housing material:** Flame-resistant resin (black)  
**Isolation:** Input to output to power  
**Overrange output:** Approx. -10 to +120 % at 1 – 5 V  
**Zero adjustment:** -5 to +5 % (front)  
**Span adjustment:** 95 to 105 % (front)

#### SUPPLY OUTPUT

**Output voltage:** 24 – 28 V DC with no load  
**Current rating:** ≤ 55mA DC  
• **Shortcircuit Protection**  
**Current limited:** Approx. 65 mA  
**Protected time duration:** No limit

#### INPUT SPECIFICATIONS

**Equivalent input impedance:** Approx. 100 Ω at 50 mA



#### OUTPUT SPECIFICATIONS

The output goes below 0 % when the input is open.

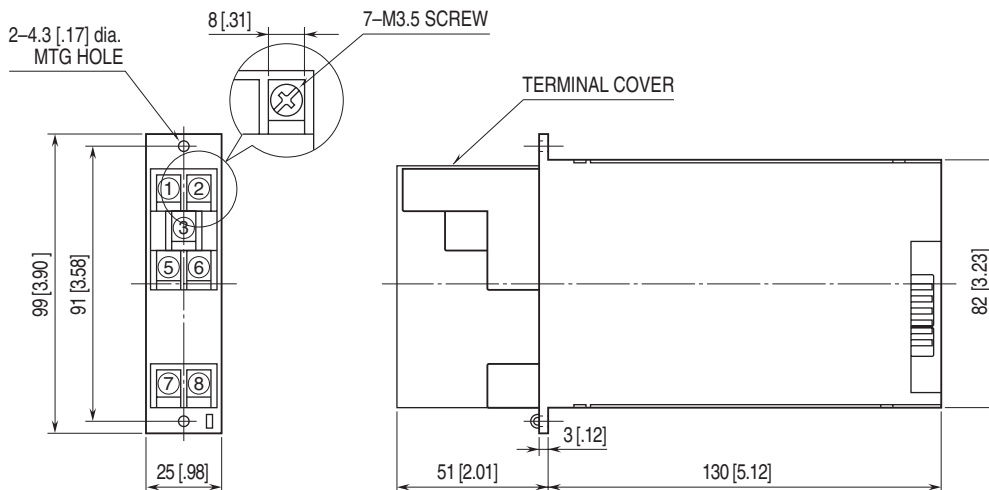
## INSTALLATION

**Current consumption:** Approx. 100 mA  
**Operating temperature:** -5 to +55°C (23 to 131°F)  
**Operating humidity:** 30 to 90 %RH (non-condensing)  
**Mounting:** Standard Rack 10BXx  
**Weight:** 200 g (0.44 lb)

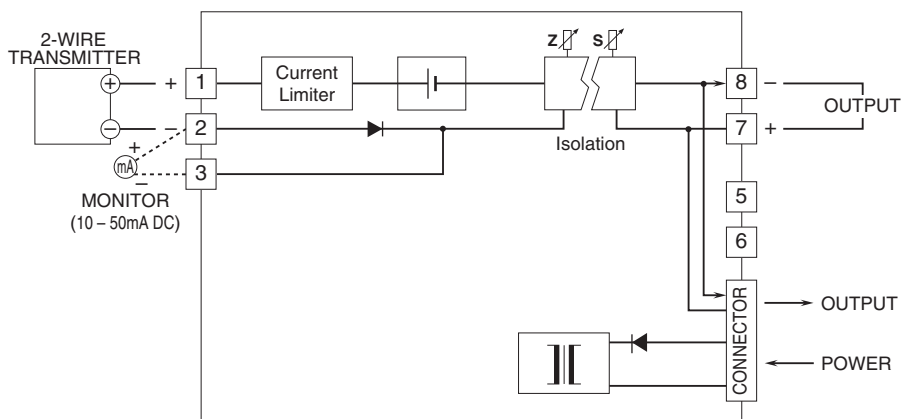
## PERFORMANCE in percentage of span

**Accuracy:**  $\pm 0.1\%$   
**Temp. coefficient:**  $\pm 0.015\%/^{\circ}\text{C}$  ( $\pm 0.008\%/^{\circ}\text{F}$ )  
**Response time:**  $\leq 0.5$  sec. (0 - 90 %)  
**Line voltage effect**  
**Supply output:**  $\pm 3\%$  over voltage range  
**Output signal:**  $\pm 0.1\%$  over voltage range  
**Insulation resistance:**  $\geq 100\ \text{M}\Omega$  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]



## SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM





Specifications are subject to change without notice.