

High-density Signal Conditioners 10-RACK

CURRENT LOOP SUPPLY

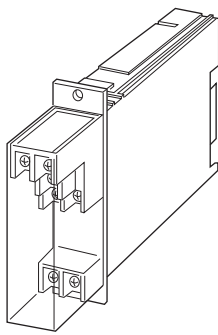
(non-isolated)

Functions & Features

- Powering a 4 – 20 mA DC current loop
- Electrically isolating output signal from power input
- Shortcircuit protection
- Applicable to smart transmitters

Typical Applications

- Various 2-wire transmitters



MODEL: 10D-A60-R[1]

ORDERING INFORMATION

- Code number: 10D-A60-R[1]
- Specify a code from below for [1].
(e.g. 10D-A60-R/Q)
- Specify the specification for option code /Q
(e.g. /C01)

INPUT

Current

A: 4 – 20 mA DC (Input resistance 250 Ω)

OUTPUT

Voltage

6: 1 – 5 V DC (Load resistance 250 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 M-System's 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 or output to power

SUPPLY OUTPUT

Output voltage: 24 – 32 V DC with no load

Current rating: ≤ 22 mA DC

- **Shortcircuit Protection**

Current limited: 30 mA max.

Protected time duration: No limit

INPUT SPECIFICATIONS

- **DC Current:** Input resistor incorporated

OUTPUT SPECIFICATIONS

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

INSTALLATION

Current consumption: Approx. 50 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: ±0.1 % (accuracy of the receiving resistor)

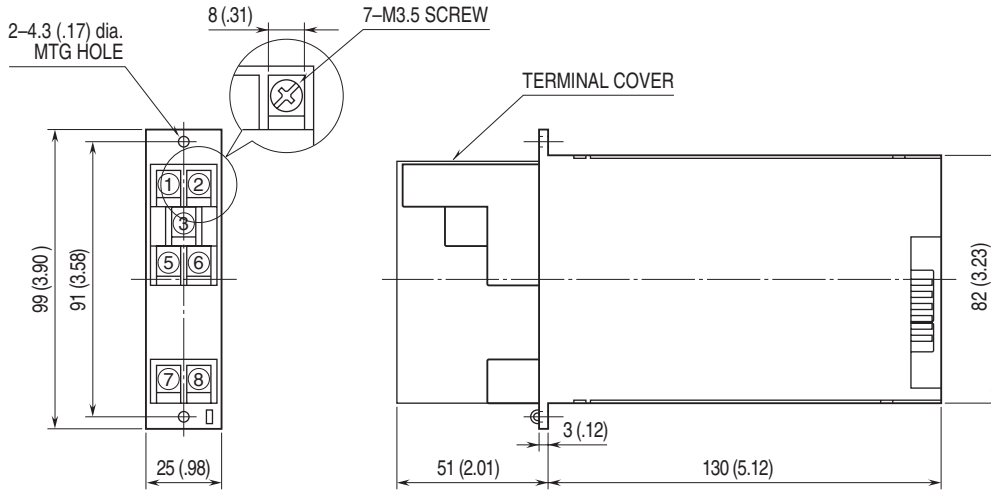
Temp. coefficient: ±0.003 %/°C (±0.002 %/°F) (temp. coefficient of the receiving resistor)

Line voltage effect to supply output: ±3 % over voltage range

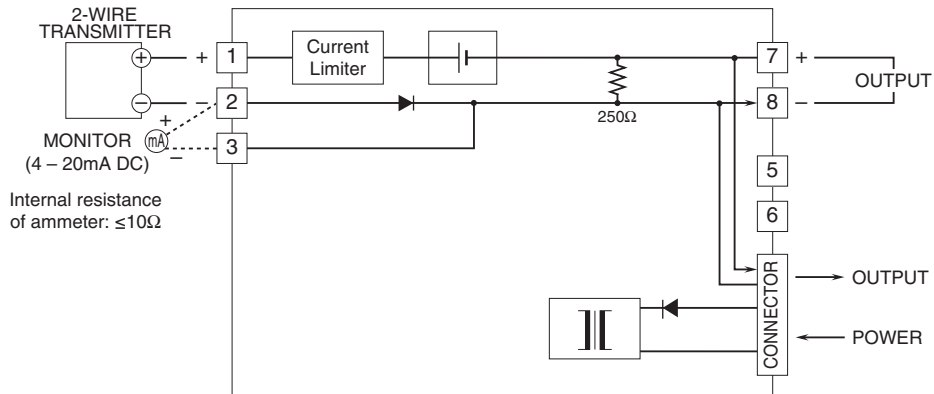


Insulation resistance: $\geq 100 \text{ M}\Omega$ with 500 V DC
 Dielectric strength: 500 V AC @ 1 minute (input or output to power)
 1500 V AC @ 1 minute (input or output or power to ground)

EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.