#### Space-saving Plug-in Signal Conditioners H-UNIT

# **CURRENT LOOP SUPPLY**

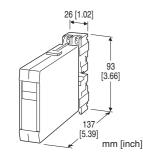
#### (non-isolated)

#### **Functions & Features**

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

#### **Typical Applications**





# MODEL: HD-24-R[1]

## **ORDERING INFORMATION**

- Code number: HD-24-[1] Specify a code from below for [1].
- (e.g. HD-24-R/Q)Specify the specification for option code /Q
- (e.g. /C01/S01)

## **SUPPLY OUTPUT**

24: 24 V DC

## INPUT

Current 4 - 20 mA DC (Input resistance 250  $\Omega$ )

# OUTPUT

Voltage 1 - 5 V DC (Load resistance 250 k $\Omega$  min.)

# **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 (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

## **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 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

## 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: Surface or DIN rail; Standard Rack Mounting Frame BX-16H available Weight: 200 g (0.44 lb)

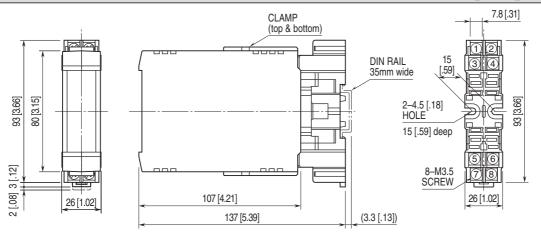
#### **PERFORMANCE** in percentage of span

Accuracy:  $\pm 0.1$  % (accuracy of the receiving resistor) Temp. coefficient:  $\pm 0.003$  %/°C ( $\pm 0.002$  %/°F) (temp. coefficient of the receiving resistor) Line voltage effect to supply output:  $\pm 3$  % over voltage range Insulation resistance:  $\geq 100$  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)

# MODEL: HD

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



•When mounting, no extra space is needed between units.

# SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM

