MODEL: HD

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

# **CURRENT LOOP SUPPLY**

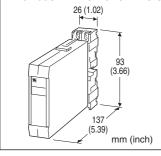
(non-isolated)

#### **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**

• Various 2-wire transmitters



**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 kΩ min.)

### **POWER INPUT**

DC Power

**R**: 24 V DC

(Operational voltage range 24 V  $\pm 10$  %, 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**: ±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

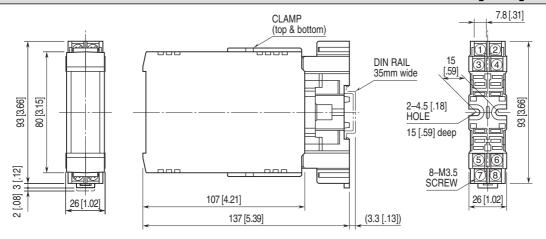
**Insulation resistance**:  $\geq 100 \text{ M}\Omega$  with 500 V DC

Dielectric strength: 500 V AC @ 1 minute (input or output to

power)

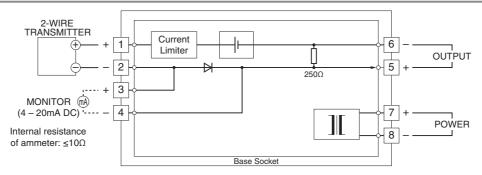
1500 V AC @ 1 minute (input or output or power to ground)

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



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

# **SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**



 $\Lambda$ 

Specifications are subject to change without notice.