

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

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

### CURRENT LOOP SUPPLY

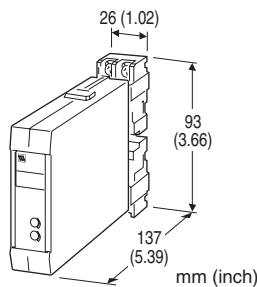
(isolated)

#### Functions & Features

- Powering a 4 - 20 mA DC current loop
- Shortcircuit protection
- Applicable to smart transmitters
- High-density mounting

#### Typical Applications

- Various 2-wire transmitters



## MODEL: HDY2-24[1]-R[2]

### ORDERING INFORMATION

- Code number: HDY2-24[1]-R[2]
- Specify a code from below for each of [1] and [2].  
(e.g. HDY2-246-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 300 Ω)

### [1] OUTPUT

Current

**A:** 4 - 20 mA DC (Load resistance 750 Ω max.)

**B:** 2 - 10 mA DC (Load resistance 1500 Ω max.)

**C:** 1 - 5 mA DC (Load resistance 3000 Ω max.)

Voltage

**1:** 0 - 10 mV DC (Load resistance 10 kΩ min.)

**2:** 0 - 100 mV DC (Load resistance 100 kΩ min.)

**3:** 0 - 1 V DC (Load resistance 1000 Ω min.)

**4:** 0 - 10 V DC (Load resistance 10 kΩ min.)

**5:** 0 - 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

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 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

(across the terminals 1 - 2)

Output voltage:

24 - 28 V DC with no load

18 V DC min. at 20 mA

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. 90 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:  $\pm 0.1\%$

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

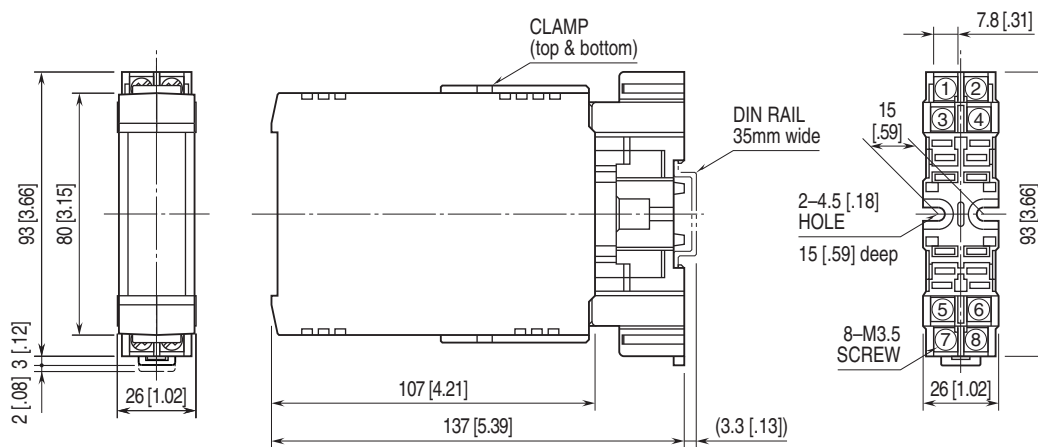
Insulation resistance:  $\geq 100\ \text{M}\Omega$  with 500 V DC

Dielectric strength: 500 V AC @ 1 minute

(input to output to power)

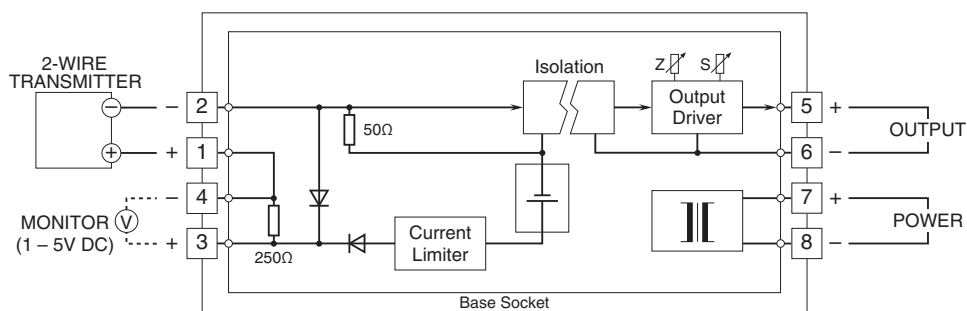
1500 V AC @ 1 minute (input or output or power to ground)

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



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

## SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.