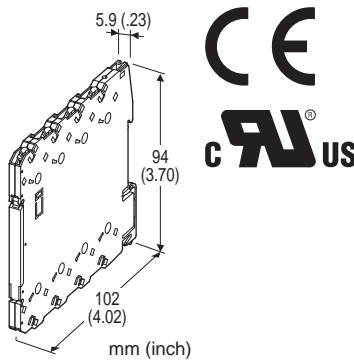


## Tension-Clamp Ultra-Slim Signal Conditioners M6S Series

### CURRENT LOOP SUPPLY

#### Functions & Features

- Maintenance-free tension clamp connection
- 5.9-mm wide ultra-slim design
- Low profile allows the M6S module mounted in a 120-mm deep panel
- Powers a two-wire transmitter and galvanically isolates its output signal
- High-density mounting
- Power indicator LED
- UL approval



### MODEL: M6SDY-[1]-R[2]

#### ORDERING INFORMATION

- Code number: M6SDY-[1]-R[2]
- Specify a code from below for each [1] and [2].  
(e.g. M6SDY-A-R/UL)

#### INPUT

##### Current

4 - 20 mA DC (Input resistance 249.5 Ω)

#### [1] OUTPUT

##### Current

A: 4 - 20 mA DC (Load resistance 550 Ω max.)

##### Voltage

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

5: 0 - 5 V DC (Load resistance 5000 Ω min.)

6: 1 - 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

#### STANDARDS & APPROVALS

blank: CE marking

/UL: UL approval (CE marking)

#### GENERAL SPECIFICATIONS

##### Connection

**Input and output:** Tension clamp

**Power input:** Via the Installation Base (model: M6SBS) or Tension clamp

**Applicable wire size:** 0.2 to 2.5 mm<sup>2</sup>, stripped length 8 mm

**Housing material:** Flame-resistant resin (black)

**Isolation:** Input to output to power

**Zero adjustment:** -2 to +2 % (front)

**Span adjustment:** 98 to 102 % (front)

**Power LED:** Green light turns on when the power is supplied.

#### SUPPLY OUTPUT

(across the terminals 3 - 4)

**Output voltage:** 24 - 30 V DC with no load

18 V DC min. at 20 mA

**Current rating:** 22 mA DC max.

- **Shortcircuit Protection**

**Current limited:** 45 mA max.

**Protected time duration:** No limit

#### INPUT SPECIFICATIONS

- **DC Current:** Input resistor incorporated

#### INSTALLATION

**Power consumption:** Approx. 1 W (1.1 W for UL approval)

**Operating temperature:** -20 to +55°C (-4 to +131°F)

**Operating humidity:** 30 to 90 %RH (non-condensing)

**Mounting:** Installation Base (model: M6SBS) or DIN rail

**Weight:** 60 g (2.1 oz)

#### PERFORMANCE in percentage of span

**Accuracy:** ±0.1 %

**Temp. coefficient:** ±0.01 %/°C (±0.006 %/°F)

**Response time:** ≤ 100 msec. (0 - 90 %)

**Line voltage effect:** ±0.1 % over voltage range

**Insulation resistance:** ≥ 100 MΩ with 500 V DC

**Dielectric strength:** 2000 V AC @1 minute (input to output to power to ground)

#### STANDARDS & APPROVALS

**CE conformity:**

EMC Directive (2004/108/EC)

EN 61000-6-4 (EMI)

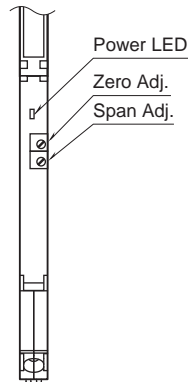
EN 61000-6-2 (EMS)

**Approval:**

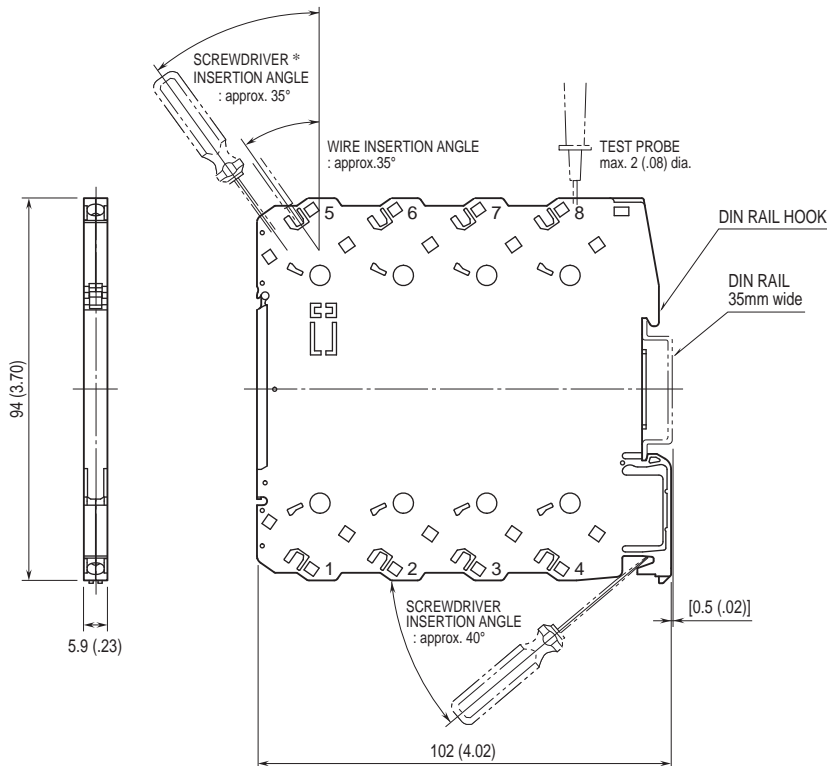
UL/C-UL nonincendive Class I, Division 2,  
 Groups A, B, C, and D hazardous locations  
 (ANSI/ISA-12.12.01, CAN/CSA-C22.2 No.213)  
 UL/C-UL general safety requirements  
 (UL 61010-1, CAN/CSA-C22.2 No.61010-1)

**EXTERNAL VIEW**

(With the cover open)



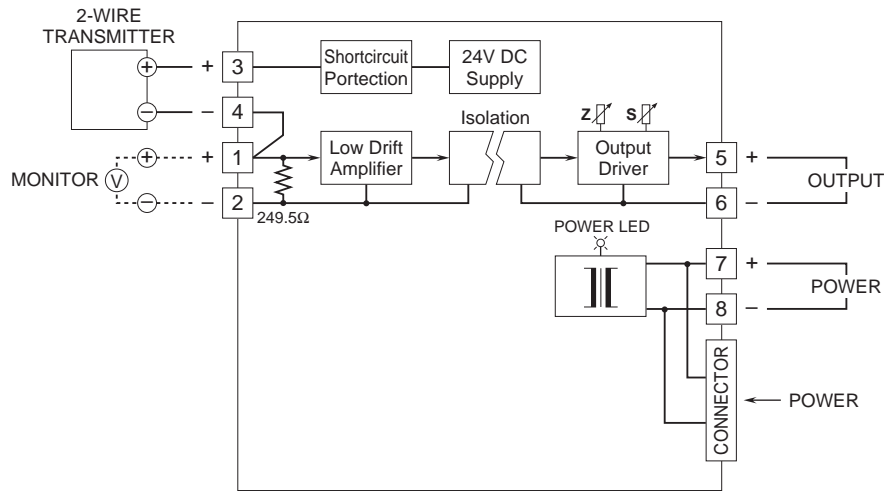
**DIMENSIONS unit: mm (inch)**



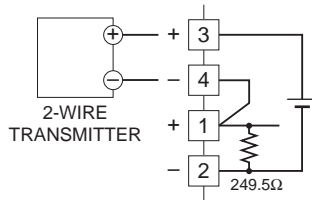
• When mounting, no extra space is needed between units.

\*Use a minus screwdriver: tip width 3.8 mm max., tip thickness 0.5 to 0.6 mm

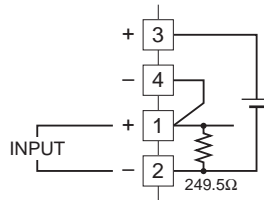
## SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



### ■ When Used as DC Supply



### ■ When Used as Isolator



Specifications are subject to change without notice.