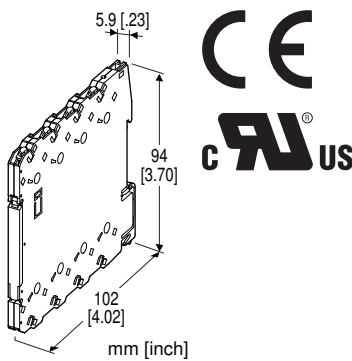


Tension-Clamp Ultra-Slim Signal Conditioners M6S Series

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



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

ORDERING INFORMATION

- Code number: M6SDY-[1]-R[2]

Specify a code from below for each of [1] and [2].

- (e.g. M6SDY-A-R/UL/Q)
- Specify the specification for option code /Q (e.g. /C01)

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 k Ω 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 \pm 10 %, ripple 10 %p-p max.)

[2] OPTIONS (multiple selections)

Standards & Approvals

blank: CE marking

/UL: UL approval, CE marking

Other Options

blank: none

/Q: Option other than the above (specify the specification)

SPECIFICATIONS OF OPTION: Q

COATING (For the detail, refer to our web site.)

/C01: Silicone coating

/C02: Polyurethane coating

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 mm², 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 indicator LED: Green LED 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: \leq 22 mA DC

• 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: $\pm 0.1\%$

Temp. coefficient: $\pm 0.01\%/^{\circ}\text{C}$ ($\pm 0.006\%/^{\circ}\text{F}$)

Response time: ≤ 100 msec. (0 - 90 %)

Line voltage effect: $\pm 0.1\%$ over voltage range

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

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

STANDARDS & APPROVALS

EU conformity:

EMC Directive

EMI EN 61000-6-4

EMS EN 61000-6-2

RoHS Directive

Approval:

UL/C-UL nonincendive Class I, Division 2,

Groups A, B, C, and D hazardous locations

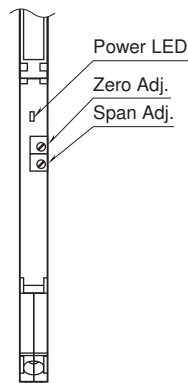
(ANSI/ISA-12.12.01, CAN/CSA-C22.2 No.213)

UL/C-UL general safety requirements

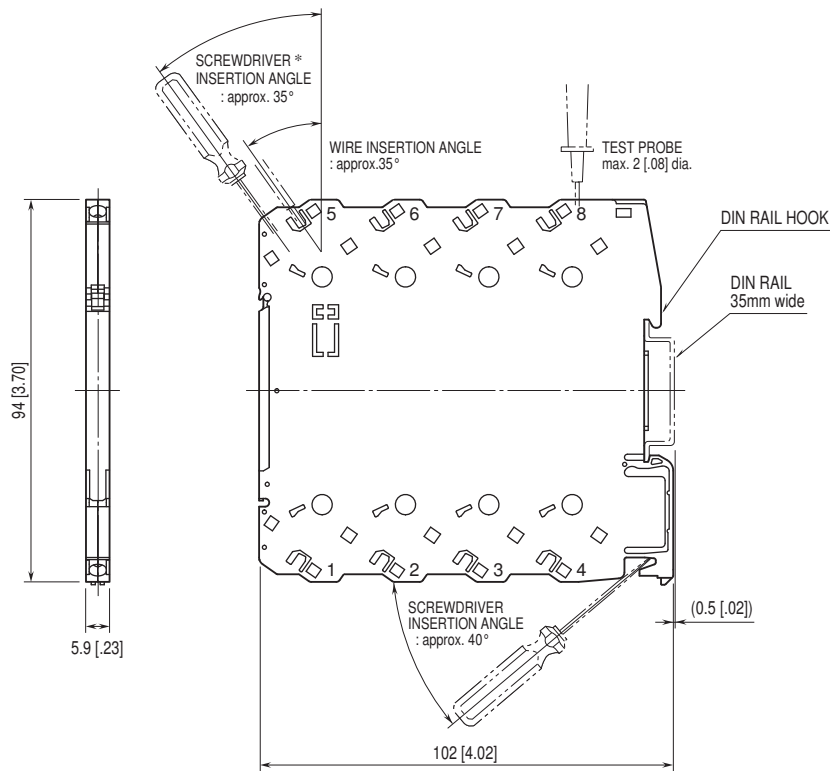
(UL 61010-1, CAN/CSA-C22.2 No.61010-1)

EXTERNAL VIEW

(With the cover open)



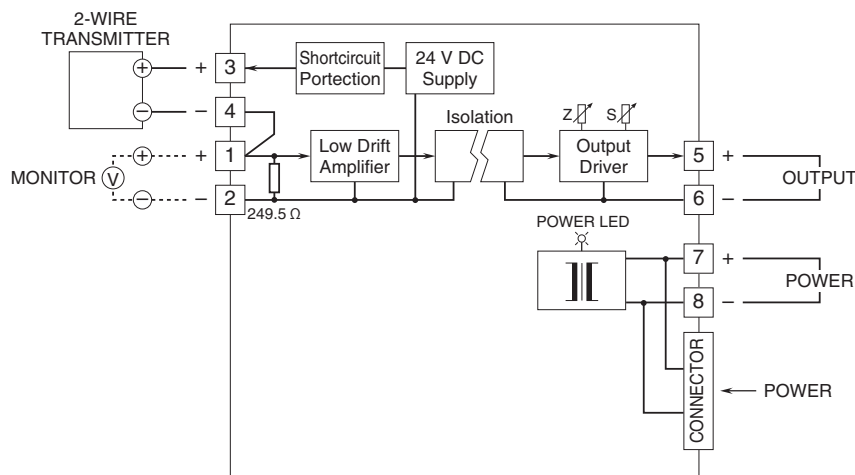
EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]



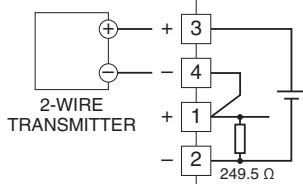
• When mounting, no extra space is needed between units.

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

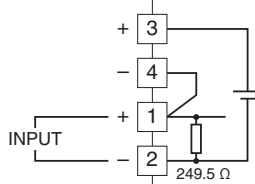
SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



■ When Used as DC Supply



■ When Used as Isolator





Specifications are subject to change without notice.