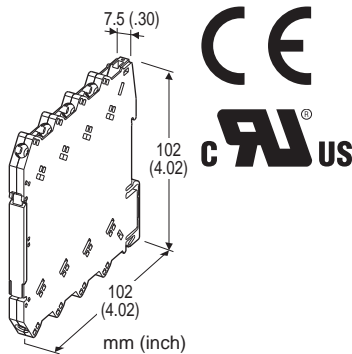


Screw Terminal Ultra-Slim Signal Conditioners M6N Series

CURRENT LOOP SUPPLY

Functions & Features

- 7.5-mm wide ultra-slim design
- Low profile allows the M6N 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: M6NDY-[1]-R[2]

ORDERING INFORMATION

- Code number: M6NDY-[1]-R[2]
- Specify a code from below for each [1] and [2].
(e.g. M6NDY-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 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

STANDARDS & APPROVALS

blank: CE marking

/UL: UL approval (CE marking)

GENERAL SPECIFICATIONS

Connection

Input and output: M3 screw terminal (torque 0.5 N·m)

Power input: Via the Installation Base (model: M6NBS) or M3 screw terminal (torque 0.5 N·m)

Recommended solderless terminal: Max. 5.8 mm (0.23") wide; Ones with insulation sleeve do not fit.

Applicable wire size 0.2 - 2.5 mm²

Housing material: Flame-resistant resin (black)

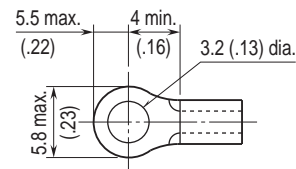
Isolation: Input to output to power

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

Span adjustment: 98 to 102 % (front)

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

Recommended solderless terminal



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: M6NBS) or DIN rail

Weight: 60 g (2.1 oz)

PERFORMANCE in percentage of span

Accuracy: \pm 0.1 %

Temp. coefficient: \pm 0.01 %/°C (\pm 0.006 %/°F)

Response time: \leq 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

CE conformity:

EMC Directive (2004/108/EC)

EN 61000-6-4 (EMI)

EN 61000-6-2 (EMS)

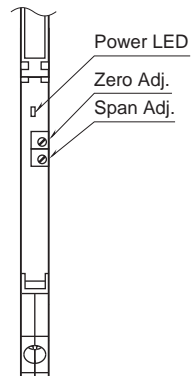
Approval:

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)

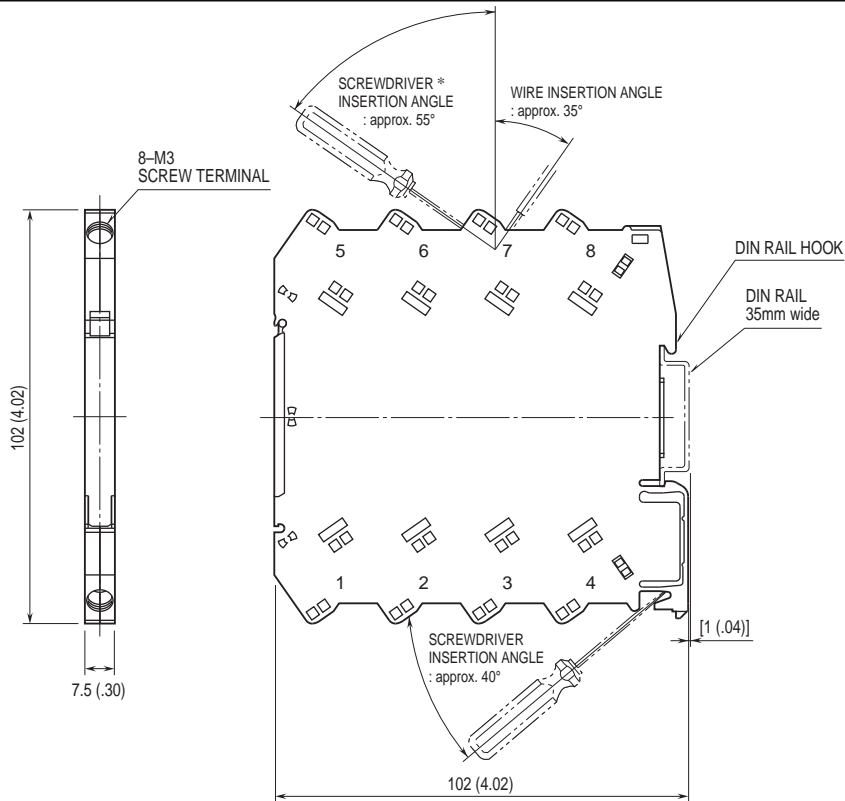
UL/C-UL general safety requirements
(UL 61010-1, CAN/CSA-C22.2 No.61010-1)

EXTERNAL VIEW

(With the cover open)

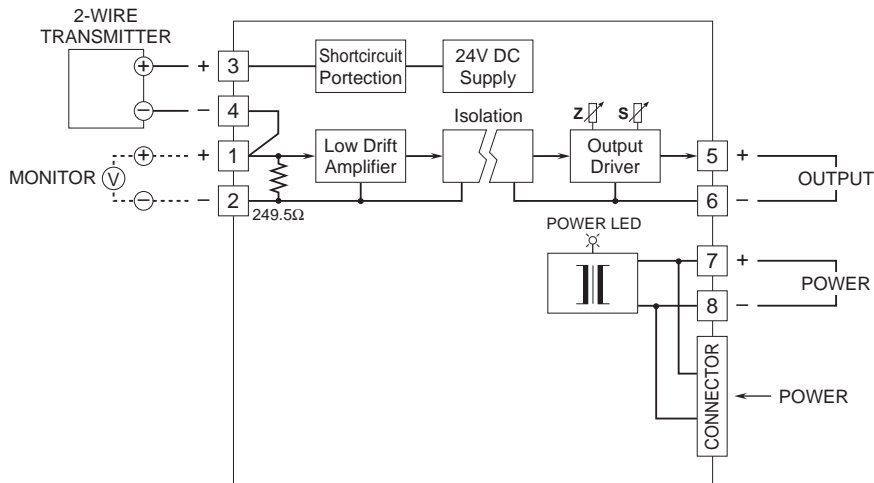


DIMENSIONS unit: mm (inch)

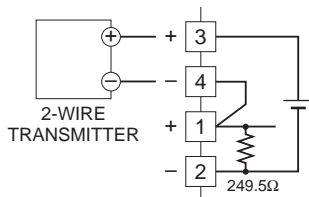


*Screwdriver stem diameter: 6 mm (.24") or less • When mounting, no extra space is needed between units.

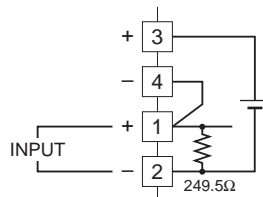
SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



■ When Used as DC Supply



■ When Used as Isolator





Specifications are subject to change without notice.