

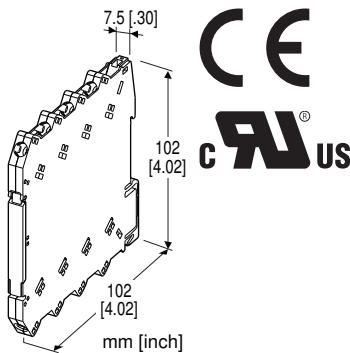
Screw Terminal Ultra-Slim Signal Conditioners M6N Series

(Operational voltage range 24 V \pm 10 %, ripple 10 %p-p max.)

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



MODEL: M6NDY-[1]-R[2]

ORDERING INFORMATION

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

[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: 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)

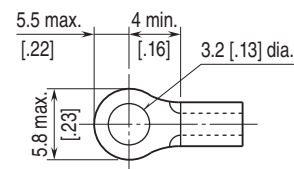
Isolation: Input to output to power

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

Span adjustment: 98 to 102 % (front)

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

■ Recommended solderless terminal (unit: mm [inch])



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: M6NBS) 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

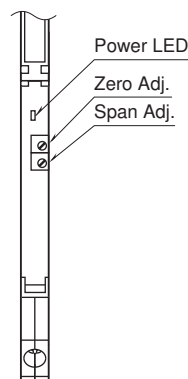
RoHS Directive

Approval:

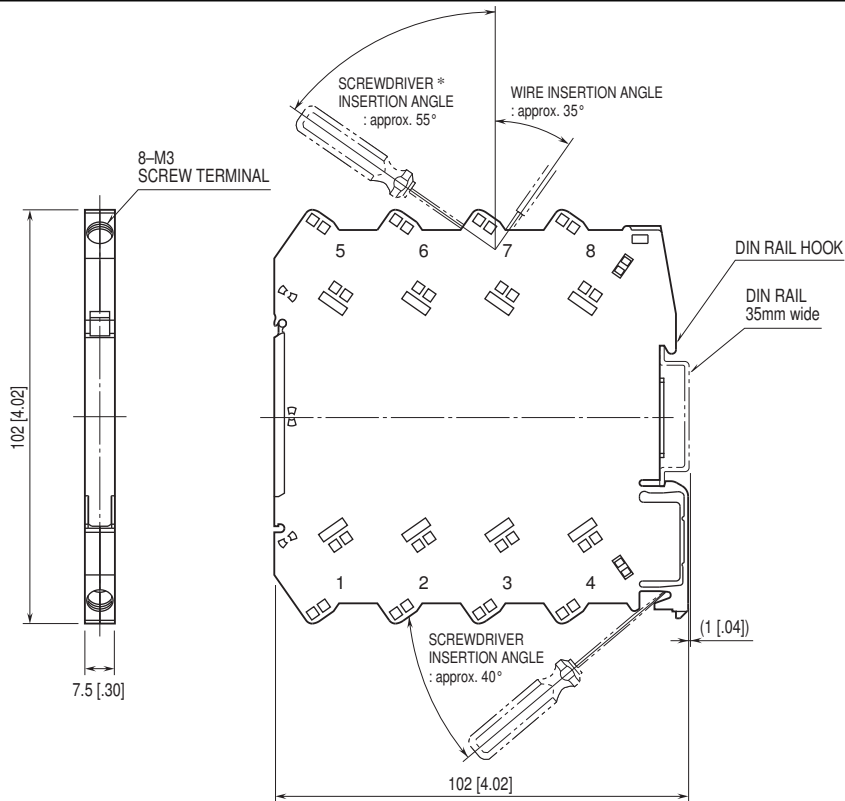
UL/C-UL nonincendive Class I, Division 2,
Groups A, B, C, and D hazardous locations
(ANSI/ISA-12.12.01, CAN/CSA-C22.2 No.213)
UL/C-UL general safety requirements
(UL 61010-1, CAN/CSA-C22.2 No.61010-1)

EXTERNAL VIEW

(With the cover open)

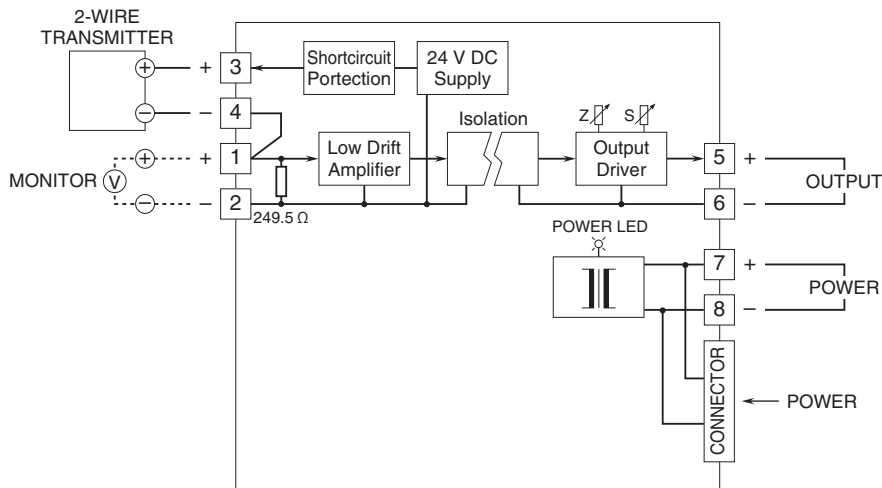


EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]

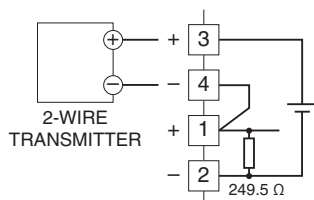


*Screwdriver stem diameter: 6 mm [.24"] or less • When mounting, no extra space is needed between units.

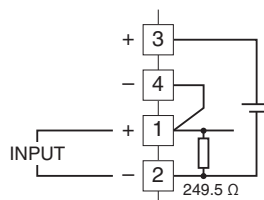
SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



■ When Used as DC Supply



■ When Used as Isolator





Specifications are subject to change without notice.