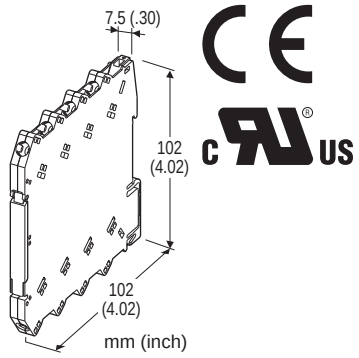
Screw Terminal Ultra-Slim Signal Conditioners M6N Series

ISOLATOR

Functions & Features

- 7.5-mm wide ultra-slim design
- Low profile allows the M6N module mounted in a 120-mm deep panel
- Galvanically isolates process instrumentation signals
- High-density mounting
- Power indicator LED
- UL approval



MODEL: M6NYV-[1][2]-[3][4]

ORDERING INFORMATION

- Code number: M6NYV-[1][2]-[3][4]
  Specify a code from below for each [1] through [4].
  (e.g. M6NYV-4W4W-R/K/UL)

[1] INPUT / [2] OUTPUT

AA: 4 - 20 mA DC (Input resistance 50 Ω)
/ 4 - 20 mA DC (Load resistance 550 Ω max.)
A6: 4 - 20 mA DC (Input resistance 50 Ω)
/ 1 - 5 V DC (Load resistance 5000 Ω min.)
6A: 1 – 5 V DC (Input resistance 1 MΩ min.)
/ 4 - 20 mA DC (Load resistance 550 Ω max.)
66: 1 - 5 V DC (Input resistance 1 MΩ min.)
/ 1 - 5 V DC (Load resistance 5000 Ω min.)
4W4W: -10 - +10 V DC (Input resistance 1 MΩ min.)
/ -10 - +10 V DC (Load resistance 20 kΩ min.)

[3] POWER INPUT

AC Power
M2: 100 – 240 V AC (Operational voltage range 90 – 264 V, 47 – 66 Hz)
(UL not available)
DC Power
R: 24 V DC
(Operational voltage range 24 V ±10 %, ripple 10 %p-p max.)

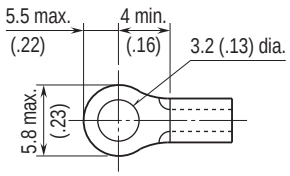
[4] OPTIONS (multiple selections)

RESPONSE TIME (0 – 90 %)
blank: Standard (≤ 0.5 sec.)
/K: Fast Response (Approx. 3.5 msec. voltage output; Approx. 25 msec. current output)
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) (not available for AC power input)
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 mm^2
Housing material: Flame-resistant resin (black)
Isolation: Input to output to power
Zero adjustment: -2 to +2% (front)
(Output code 4W: Adjustable at 0 V.)
Span adjustment: 98 to 102 % (front)
Power LED: Green light turns on when the power is supplied.

■**Recommended solderless terminal**



INPUT SPECIFICATIONS

- **DC Current**: Input resistor incorporated

INSTALLATION

Power Consumption
•**AC Power input**: Max. 2 VA
•**DC Power input**: Approx. 0.45 W
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: ±0.1 %
Temp. coefficient: ±0.01 %/°C (±0.006 %/°F)
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:

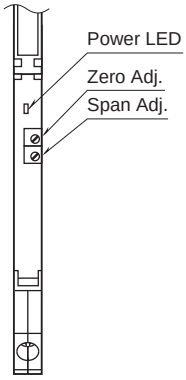
EMC Directive (2004/108/EC)
EN 61000-6-4 (EMI)
EN 61000-6-2 (EMS)
Low Voltage Directive (2006/95/EC)
EN 61010-1
Installation Category II
Pollution Degree 2
Max. operating voltage 300 V
Input or output to power: Reinforced insulation
Input to output: Basic insulation

Approval:

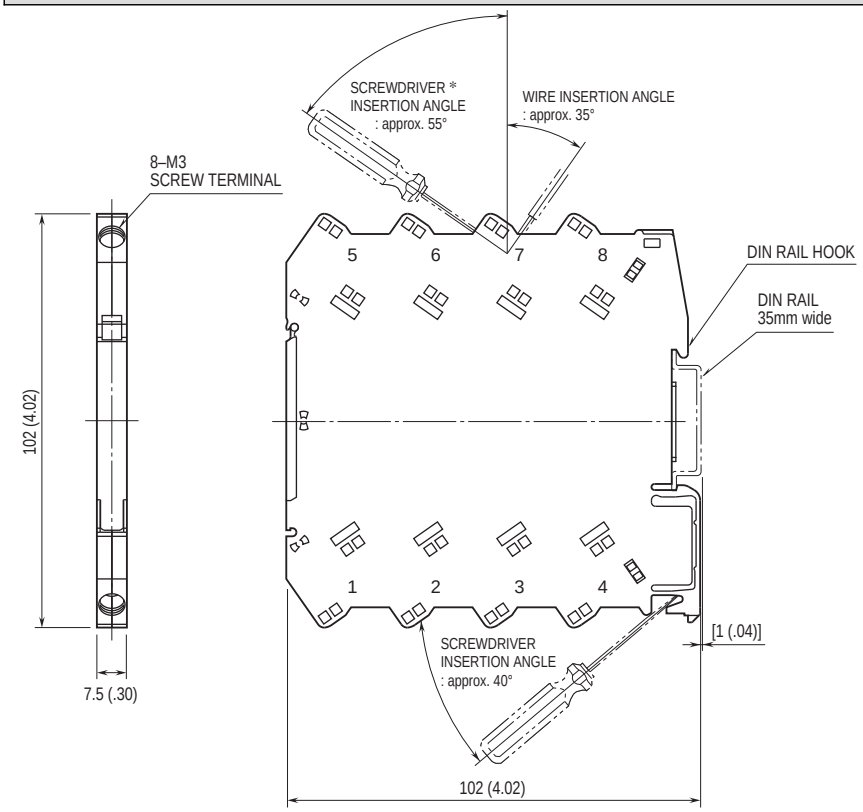
UL/C-UL nonincendive Class I, Division 2,
Groups A, B, C, and D hazardous locations
(ANSI/ISA-12.12.01, CAN/CSA-C22.2 No.213)
UL/C-UL general safety requirements
(UL 61010-1, CAN/CSA-C22.2 No.61010-1)

EXTERNAL VIEW

(With the cover open)

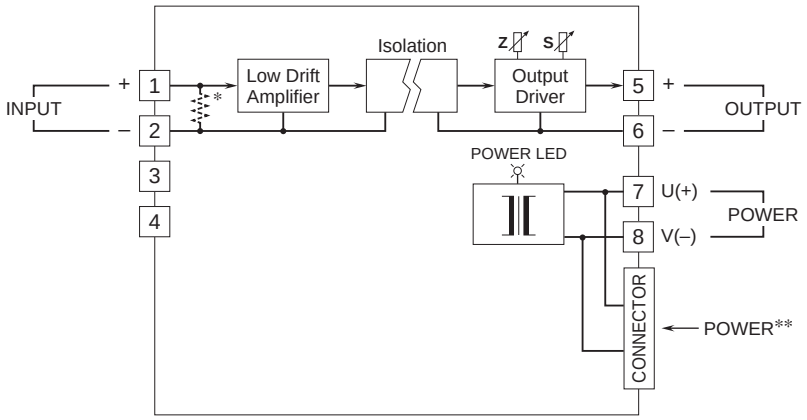


DIMENSIONS unit: mm (inch)



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

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



*Input shunt resistor incorporated for current input.
**Available only for DC power input type

Specifications are subject to change without notice.