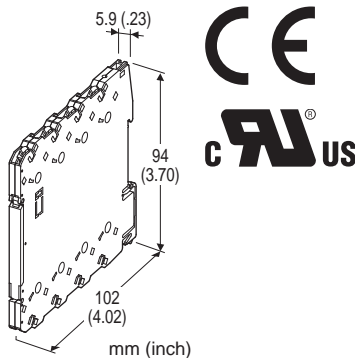


## Tension-Clamp Ultra-Slim Signal Conditioners M6S Series

### ISOLATOR

#### 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
- Galvanically isolates process instrumentation signals
- High-density mounting
- Power indicator LED
- UL approval



### MODEL: M6SYV-[1][2]-[3][4]

#### ORDERING INFORMATION

- Code number: M6SYV-[1][2]-[3][4]  
Specify a code from below for each [1] through [4].  
(e.g. M6SYV-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:** Tension clamp
- Power input:** Via the Installation Base (model: M6SBS)  
(not available for AC power input)  
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)  
(Output code 4W: Adjustable at 0 V.)
- Span adjustment:** 98 to 102 % (front)
- Power LED:** Green light turns on when the power is supplied.

#### 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: 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)
- 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)

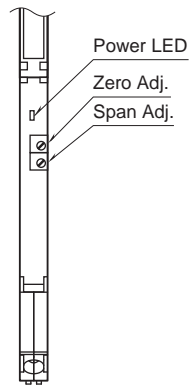
EN 61000-6-4 (EMI)  
EN 61000-6-2 (EMS)  
Low Voltage Directive (2006/95/EC)  
EN 61010-1  
Installation Category II  
Pollution Degree 2  
Max. operating voltage 300 V  
Input or output to power: Reinforced insulation  
Input to output: Basic insulation

**Approval:**

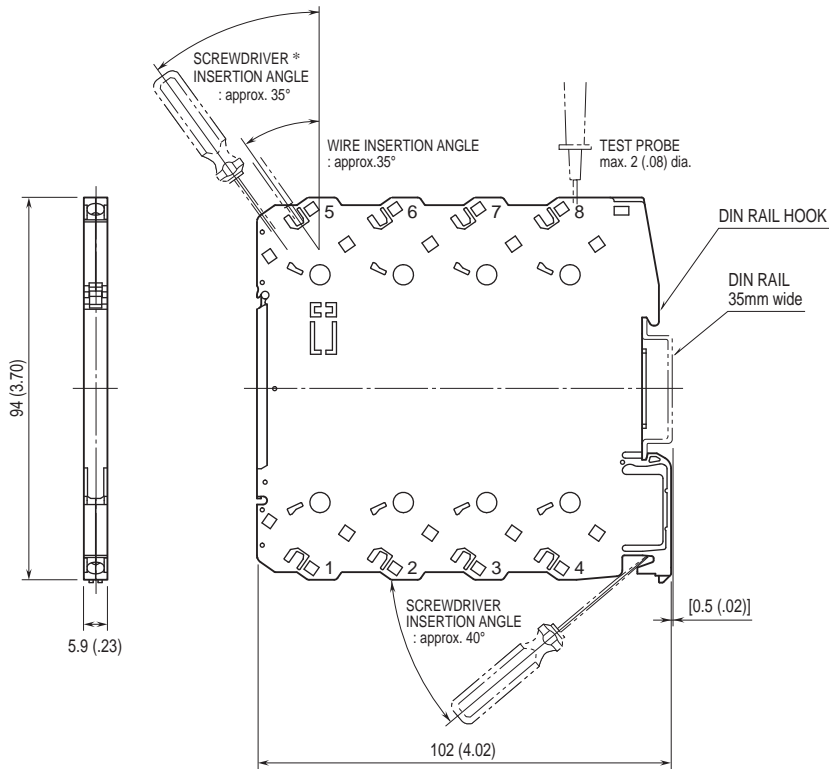
UL/C-UL nonincendive Class I, Division 2,  
Groups A, B, C, and D hazardous locations  
(ANSI/ISA-12.12.01, CAN/CSA-C22.2 No.213)  
UL/C-UL general safety requirements  
(UL 61010-1, CAN/CSA-C22.2 No.61010-1)

## EXTERNAL VIEW

(With the cover open)



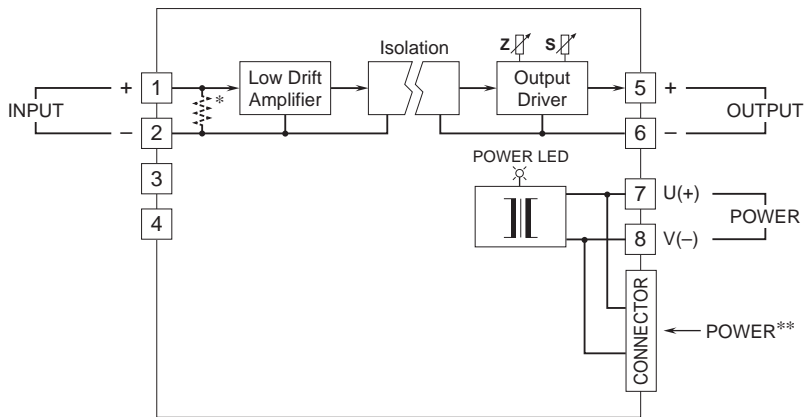
## DIMENSIONS unit: mm (inch)



• 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



\*Input shunt resistor incorporated for current input.

\*\*Available only for DC power input type



Specifications are subject to change without notice.