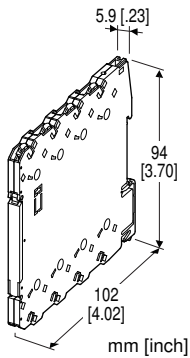


Tension-Clamp Ultra-Slim Signal Conditioners M6S Series

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



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

ORDERING INFORMATION

- Code number: M6SYV-[1][2]-[3][4]
- Specify a code from below for each of [1] through [4].
(e.g. M6SYV-4W4W-R/K/UL/Q)
- Specify the specification for option code /Q
(e.g. /C01)

[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

Other Options

blank: none

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

SPECIFICATIONS OF OPTION: Q

COATING (For the detail, refer to M-System's web site.)

/C01: Silicone coating

/C02: Polyurethane coating

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 mm², 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 indicator LED: Green LED turns on when the power is supplied.

INPUT SPECIFICATIONS

- **DC Current:** Input resistor incorporated

INSTALLATION

Power Consumption

• **AC:** Max. 2 VA

• **DC:** 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: $\pm 0.1\%$

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

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

Low Voltage Directive

EN 61010-1

Installation Category II

Pollution Degree 2

Input or output to power: Reinforced insulation (300 V)

Input to output: Basic insulation (300 V)

RoHS Directive

Approval:

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

Groups A, B, C, and D

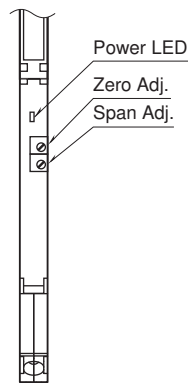
(ANSI/ISA-12.12.01, CAN/CSA-C22.2 No.213)

UL/C-UL general safety requirements

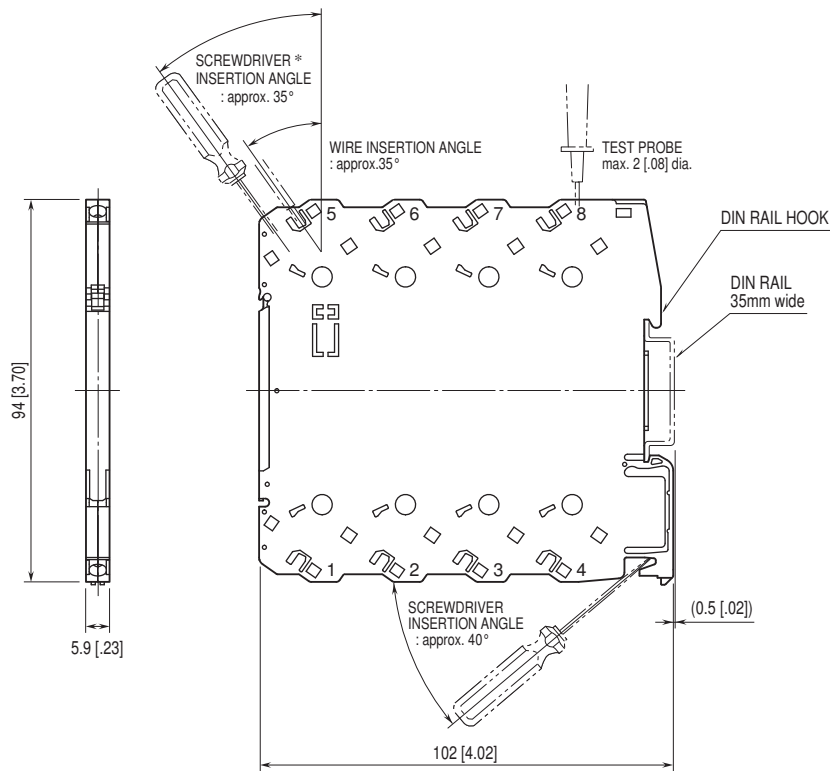
(UL 61010-1, CAN/CSA-C22.2 No.61010-1)

EXTERNAL VIEW

(With the cover open)



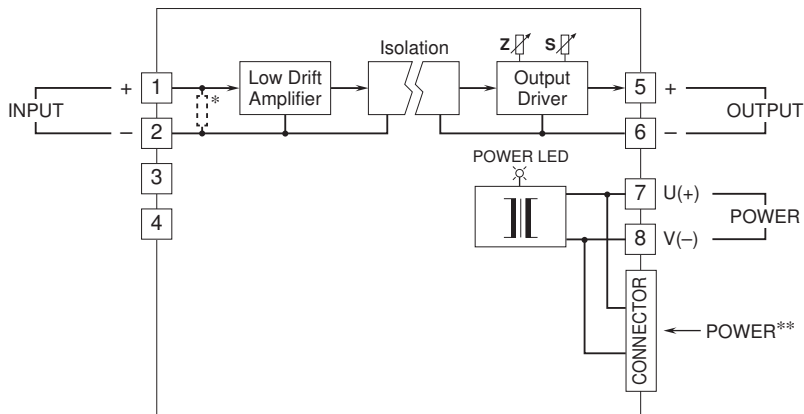
EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]



• 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



* Input shunt resistor incorporated for current input.

** Available only for DC power input type



Specifications are subject to change without notice.