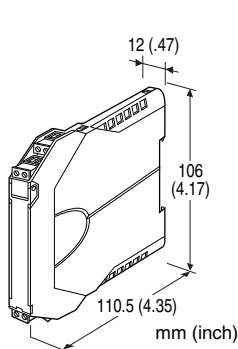


Super-space-saving Signal Conditioners M3S-UNIT Series

ISOLATOR

Functions & Features

- Galvanically isolates the process instrumentation signals
- High-density mounting



MODEL: M3SYV-[1][2]-R[3]

ORDERING INFORMATION

- Code number: M3SYV-[1][2]-R[3]

Specify a code from below for each [1] through [3].

- (e.g. M3SYV-6A-R/Q)
- Specify the specification for option code /Q (e.g. /C01)

[1] INPUT

Current

- A: 4 - 20 mA DC (Input resistance 250 Ω)
- D: 0 - 20 mA DC (Input resistance 250 Ω)
- DW: -20 - +20 mA DC (Input resistance 250 Ω)

Voltage

- 4: 0 - 10 V DC (Input resistance 1 MΩ min.)
- 5: 0 - 5 V DC (Input resistance 1 MΩ min.)
- 6: 1 - 5 V DC (Input resistance 1 MΩ min.)
- 4W: -10 - +10 V DC (Input resistance 1 MΩ min.)
- 5W: -5 - +5 V DC (Input resistance 1 MΩ min.)

[2] OUTPUT

Current

- A: 4 - 20 mA DC (Load resistance 550 Ω max.)
- D: 0 - 20 mA DC (Load resistance 550 Ω max.)

Voltage

- 4: 0 - 10 V DC (Load resistance 10 kΩ min.)
- 6: 1 - 5 V DC (Load resistance 5000 Ω min.)
- 4W: -10 - +10 V DC (Load resistance 10 kΩ min.)

POWER INPUT

DC Power

R: 24 V DC

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

[3] OPTIONS

blank: none

/Q: With options (specify the specification)

SPECIFICATIONS OF OPTION: Q

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

/C01: Silicone coating

/C02: Polyurethane coating

/C03: Rubber coating

GENERAL SPECIFICATIONS

Construction: Small-sized front terminal structure

Connection: Euro type connector terminal

Applicable wire size: 0.2 to 2.5 mm², stripped length 8 mm

Housing material: Flame-resistant resin (gray)

Isolation: Input to output to power

Overrange output: Approx. -10 to +120 % at 1 - 5 V

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

Span adjustment: 98 to 102 % (front)

INPUT SPECIFICATIONS

- DC Current: Input resistor incorporated

INSTALLATION

Power consumption

- DC: 1 W

Operating temperature: -10 to +55°C (14 to 131°F)

Operating humidity: 30 to 90 %RH (non-condensing)

Mounting: DIN rail

Weight: 100 g (3.53 oz)

PERFORMANCE in percentage of span

Accuracy: ±0.1 %

Temp. coefficient: ±0.015 %/°C (±0.008 %/°F)

Response time: ≤ 0.5 sec. (0 - 90 %)

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

EU conformity:

EMC Directive

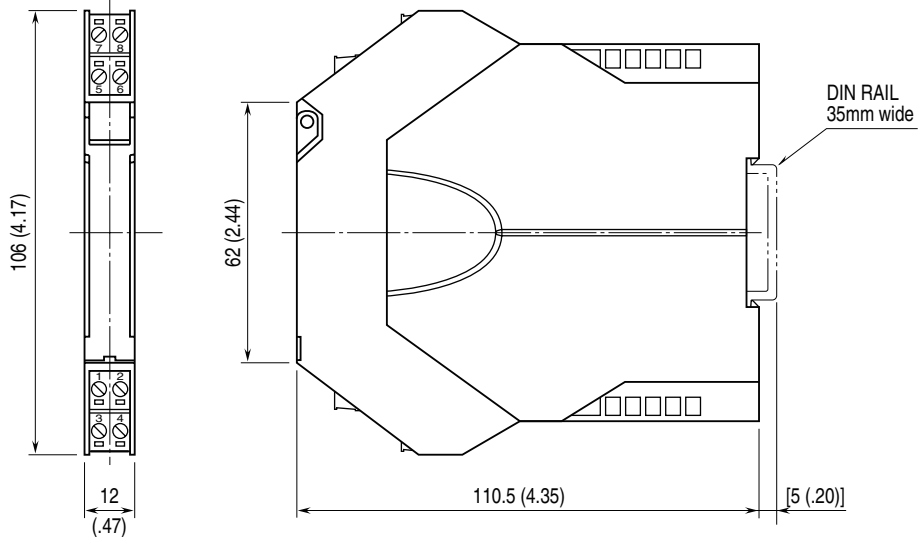
EMI EN 61000-6-4

EMS EN 61000-6-2

RoHS Directive

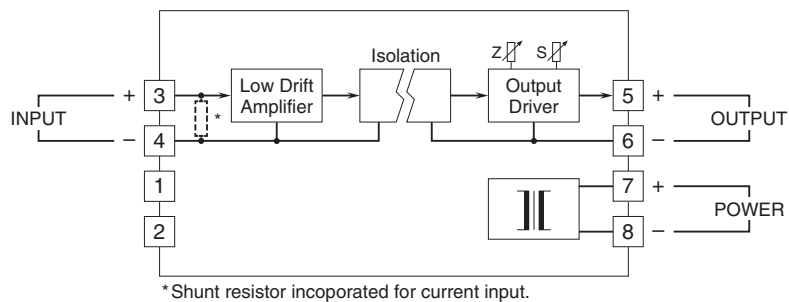
EN 50581

EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)



• When mounting, no extra space is needed between units.

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



* Shunt resistor incorporated for current input.



Specifications are subject to change without notice.