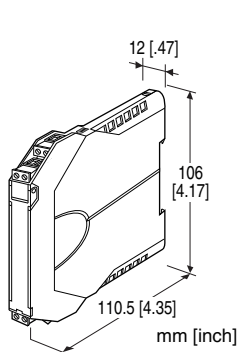


Super-space-saving Signal Conditioners M3S-UNIT Series

CURRENT LOOP SUPPLY

Functions & Features

- Powers a two-wire transmitter and galvanically isolates its output signal
- High-density mounting
- Power indicator LED



MODEL: M3SDY-[1]-R[2]

ORDERING INFORMATION

- Code number: M3SDY-[1]-R[2]
- Specify a code from below for each of [1] and [2].
(e.g. M3SDY-A-R/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
(Operational voltage range 24 V \pm 10 %, ripple 10 %p-p max.)

[2] OPTIONS

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
/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
Zero adjustment: -2 to +2 % (front)
Span adjustment: 98 to 102 % (front)
Power indicator LED: Green LED turns on when the power is supplied.

SUPPLY OUTPUT

(across the terminals 3 - 4)
Output voltage: 24 - 28 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
• DC: Approx. 1 W
Operating temperature: -20 to +55°C (-4 to +131°F)
Operating humidity: 30 to 90 %RH (non-condensing)
Mounting: DIN rail
Weight: 100 g (0.22 lb)

PERFORMANCE in percentage of span

Accuracy: \pm 0.1 %
Temp. coefficient: \pm 0.015 %/°C (\pm 0.008 %/°F)
Response time: \leq 100 msec. (0 - 90 %)
Line voltage effect: \pm 0.1 % over voltage range
Insulation resistance: \geq 100 M Ω with 500 V DC
Dielectric strength: 2000 V AC @1 minute (input to output)

to power to ground)

STANDARDS & APPROVALS

EU conformity:

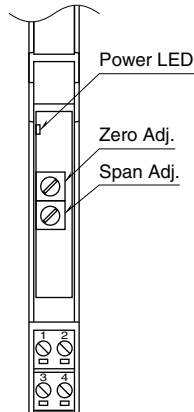
EMC Directive

EMI EN 61000-6-4

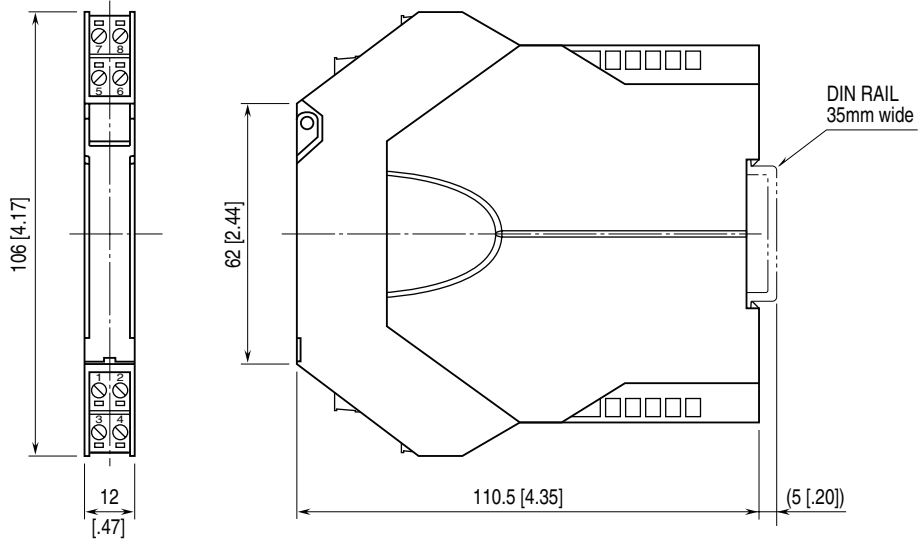
EMS EN 61000-6-2

RoHS Directive

EXTERNAL VIEW

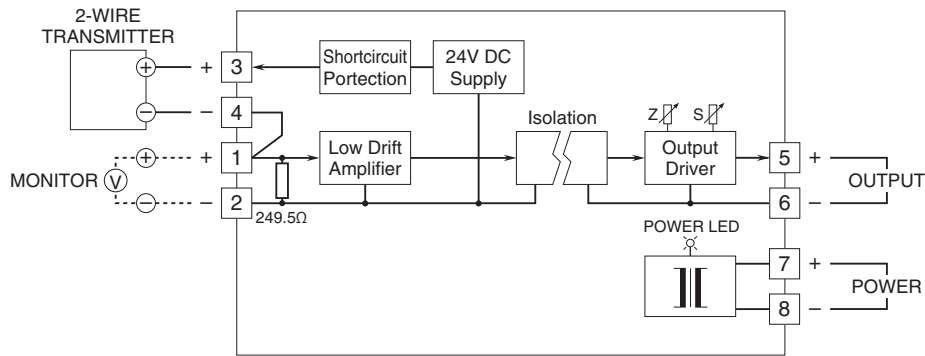


EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]

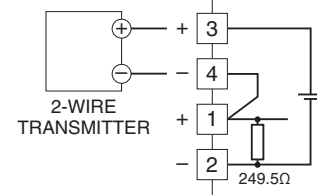


• When mounting, no extra space is needed between units.

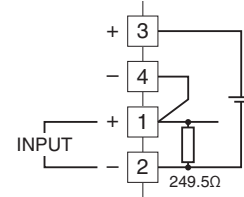
SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



■ When Used as DC Supply



■ When Used as Isolator



Specifications are subject to change without notice.