

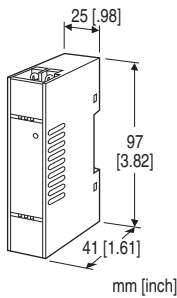
Super-mini Terminal Block Signal Conditioners M5-UNIT

CURRENT LOOP SUPPLY

(non-isolated)

Functions & Features

- Powers a 4 - 20 mA DC current loop
- Electrically isolating output signal from power input
- Shortcircuit protection
- Applicable to smart transmitters
- High-density mounting
- Power LED



MODEL: M5D-24-R[1]

ORDERING INFORMATION

- Code number: M5D-24-[1]
- Specify a code from below for [1].
(e.g. M5D-24-R/Q)
- Specify the specification for option code /Q
(e.g. /C01/S01)

SUPPLY OUTPUT

24: 24 V DC

INPUT

Current

4 - 20 mA DC (Input resistance 250 Ω)

OUTPUT 1 / OUTPUT 2

1-5 V DC (Load resistance 250 kΩ min.)

4-20 mA DC (Load resistance 250 Ω max.)

Use either output 1 or output 2.

Shortcircuit the unused output.

POWER INPUT

DC Power

R: 24 V DC

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

[1] OPTIONS

blank: none

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

SPECIFICATIONS OF OPTION: Q (multiple selections)

COATING (For the detail, refer to our web site.)

/C01: Silicone coating

/C02: Polyurethane coating

/C03: Rubber coating

TERMINAL SCREW MATERIAL

/S01: Stainless steel

GENERAL SPECIFICATIONS

Construction: Terminal block

Connection: M3.5 screw terminals (torque 0.8 N·m)

Screw terminal: Nickel-plated steel (standard) or stainless steel

Housing material: Flame-resistant resin (black)

Isolation: Input or output to power

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

Current rating: ≤ 22 mA DC

- Shortcircuit Protection

Current limited: 30 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 +65°C (-4 to +149°F)

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

Mounting: DIN rail

Weight: 80 g (2.8 oz)

PERFORMANCE in percentage of span

Accuracy: ±0.1 % (accuracy of the receiving resistor)

Temp. coefficient: ±0.003 %/°C (±0.002 %/°F) (temp. coefficient of the receiving resistor)

Line voltage effect to supply output: ±3 % over voltage range

Insulation resistance: ≥ 100 MΩ with 500 V DC

Dielectric strength: 2000 V AC @1 minute (input or output)

to power to ground)

STANDARDS & APPROVALS

EU conformity:

EMC Directive

EMI EN 61000-6-4

EMS EN 61000-6-2

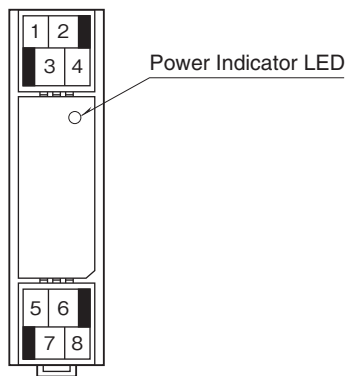
RoHS Directive

UK conformity (UKCA):

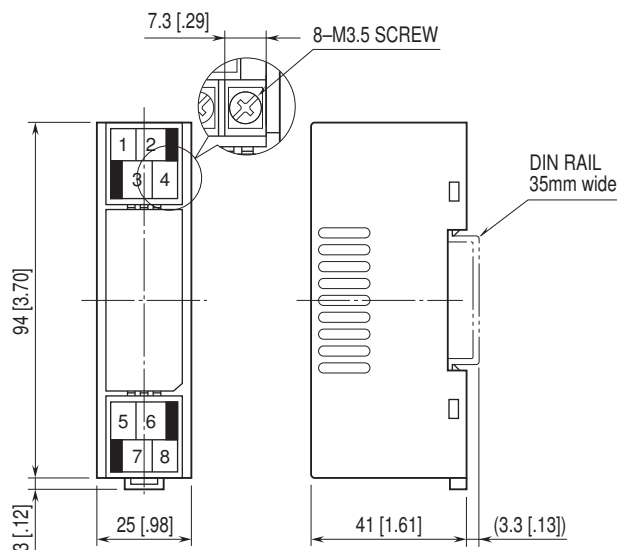
The UK legislations and designated standards are equivalent to the applicable EU directives.

(Refer to our website for more information about the legislations and designated standards.)

EXTERNAL VIEW

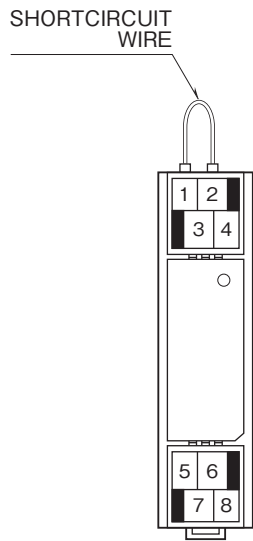


EXTERNAL DIMENSIONS unit: mm [inch]

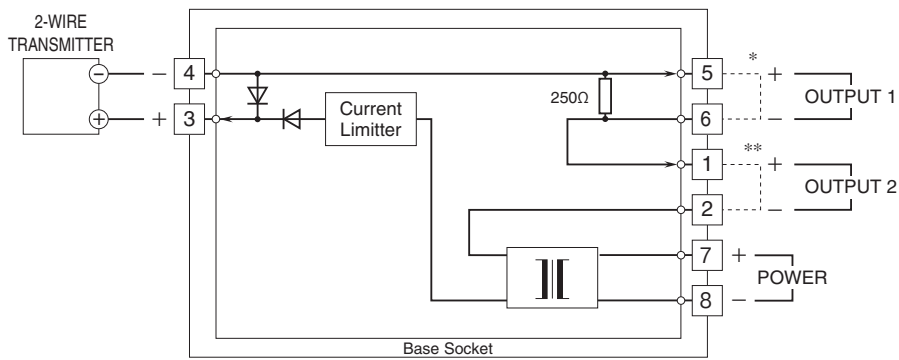


• When mounting, no extra space is needed between units.

TERMINAL ASSIGNMENTS



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



- * Short across these terminals for large voltage allowance at Output 2.
Be sure to match specifications of smart transmitter.
Do not connect a capacitive load to Output 1.
- ** Short across these terminals when not using output 2.



Specifications are subject to change without notice.