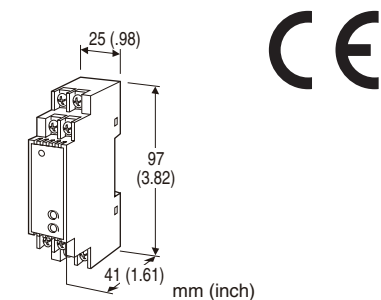


Super-mini Two-wire Terminal Block Signal Conditioners B5-UNIT

POTENTIOMETER TRANSMITTER

Functions & Features

- Provides an isolated 4 - 20 mA DC output proportional to a potentiometer or slidewire position input
- Constant voltage excitation
- Monitor terminals
- High-density mounting
- Power LED



MODEL: B5MS[1]

ORDERING INFORMATION

- Code number: B5MS[1]
Specify a code from below for [1].
(e.g. B5MS/K/Q)
- Specify the specification for option code /Q
(e.g. /C01)

[1] OPTIONS (multiple selections)

Response Time (0 - 90 %)

blank: Standard (≤ 0.5 sec.)

/K: Fast Response (Approx. 25 msec.)

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

/C03: Rubber coating

GENERAL SPECIFICATIONS

Construction: Terminal block

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

Screw terminal: Nickel-plated steel

Housing material: Flame-resistant resin (black)

Isolation: Input to output

Zero adjustment: 0 - 30 % of total resistance (front)

Span adjustment: 70 - 100 % of total resistance (front)

Power LED: Orange light turns on when the power is supplied.

INPUT SPECIFICATIONS

Input: Potentiometer; 100 Ω - 10 k Ω

Minimum span: 70 % of total resistance

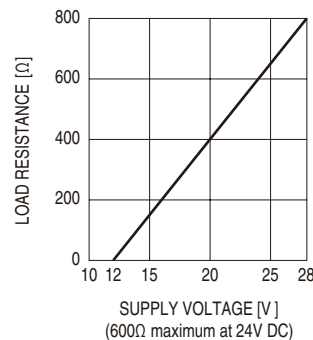
Excitation: 0.2 V DC

OUTPUT SPECIFICATIONS

Output: 4 - 20 mA DC

Load resistance vs. supply voltage:

Load Resistance (Ω) = (Supply Voltage (V) - 12 (V)) \div 0.02
(A) (including leadwire resistance)



INSTALLATION

Supply voltage: 12 - 28 V DC

Operating temperature: -40 to +80°C (-40 to +176°F)

Operating humidity: 0 to 90 %RH (non-condensing)

Mounting: DIN rail

Weight: 60 g (2.1 oz)

PERFORMANCE in percentage of span

Accuracy: ± 0.1 %

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

Insulation resistance: ≥ 100 M Ω with 500 V DC

Dielectric strength: 2000 V AC @1 minute

(input to output to ground)

STANDARDS & APPROVALS

CE conformity:

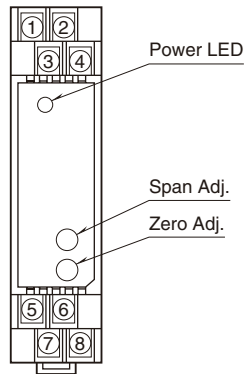
EMC Directive (2004/108/EC)

EMI EN 61000-6-4: 2007

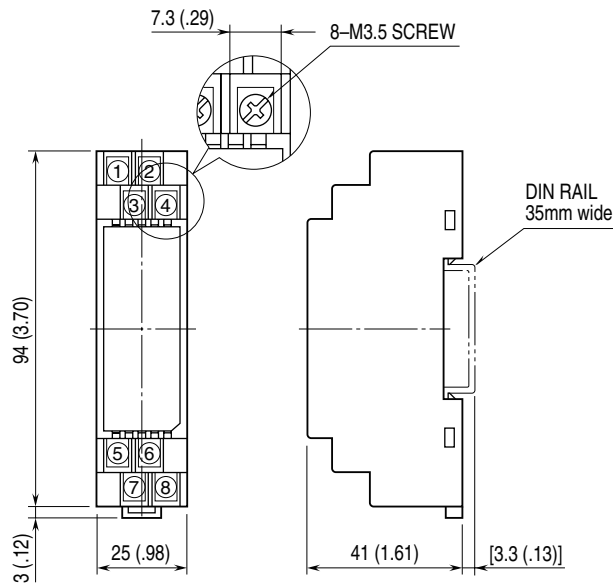
EMS EN 61000-6-2: 2005



EXTERNAL VIEW

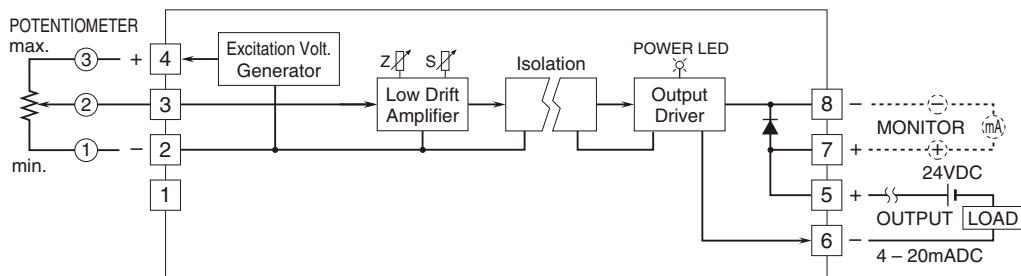


EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)



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

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.