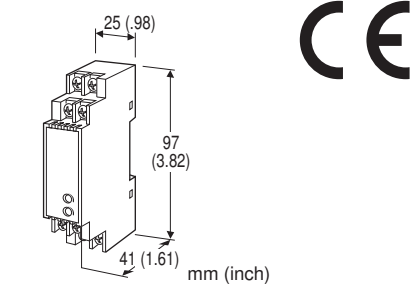


## Super-mini Two-wire Terminal Block Signal Conditioners B5-UNIT

### INPUT LOOP POWERED ISOLATOR

#### Functions & Features

- Input-loop-powered design eliminates need for an output loop power supply
- 350 Ω output drive
- High-density mounting



### MODEL: B5SN-AA[1]

#### ORDERING INFORMATION

- Code number: B5SN-AA[1]
- Specify a code from below for [1].  
(e.g. B5SN-AA/Q)
- Specify the specification for option code /Q  
(e.g. /C01)

#### INPUT

##### Current

A: 4 - 20 mA DC

#### OUTPUT

##### Current

A: 4 - 20 mA DC

#### [1] 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:** 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:** -0.5 to +0.5 % (front)

**Span adjustment:** 98.5 to 101.5 % (front)

#### INPUT & OUTPUT

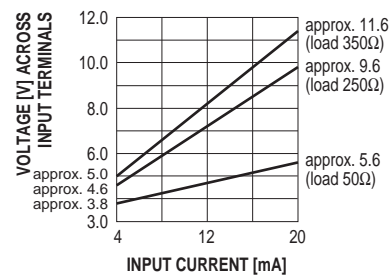
- Input 4 - 20 mA DC / Output 4 - 20 mA DC

**Equivalent input impedance:** 230 Ω plus load resistance with 20 mA input

**Operational range:** 3 - 22 mA DC

(Accuracy is assured within 4 - 22 mA)

**Load resistance:** 350 Ω maximum; min. 50 Ω required for adequate operation



#### INSTALLATION

**Operating temperature:** -5 to +55°C (23 to 131°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:** ±0.02 %/°C (±0.01 %/°F)

**Response time:** Approx. 15 msec. (0 - 90 %)

**Load effect:** (factory-calibrated with 250 Ω load)

0.015 %/Ω (50 - 150 Ω)

0.003 %/Ω (150 - 350 Ω)

**Insulation resistance:** ≥ 100 MΩ with 500 V DC

**Dielectric strength:**

500 V AC @1 minute (input to output)

2000 V AC @1 minute (input or output to ground)

#### STANDARDS & APPROVALS

**EU conformity:**

EMC Directive

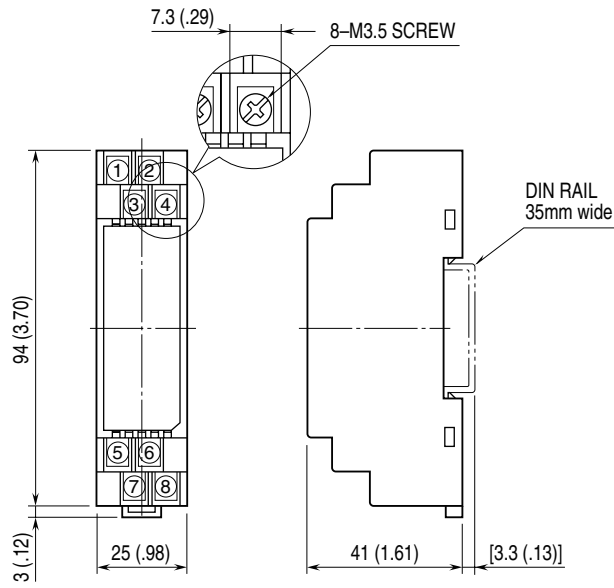
EMI EN 61000-6-4

EMS EN 61000-6-2

RoHS Directive

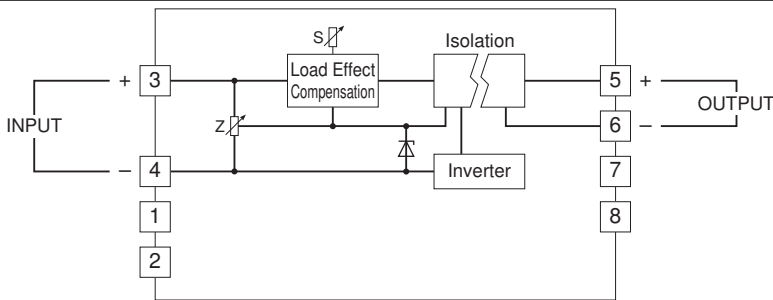
EN 50581

## EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)



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

## SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.