

Plug-in Signal Conditioners M-UNIT

50 mA OUTPUT TRANSMITTER

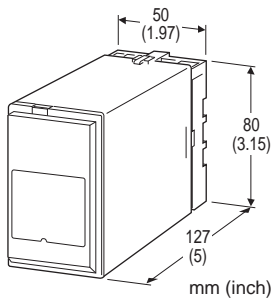
(non-isolated)

Functions & Features

- Converting a DC input into a 10 – 50 mA DC signal
- High-density mounting

Typical Applications

- Interfacing between 10 – 50 mA and 4 – 20 mA systems



MODEL: VA-[1]-[2]

ORDERING INFORMATION

- Code number: VA-[1]-[2]
Specify a code from below for each [1], [2].
(e.g. VA-6-B)
- Special input range (For codes Z & 0)

[1] INPUT

Current

- A: 4 – 20 mA DC (Input resistance 250 Ω)
- A1: 4 – 20 mA DC (Input resistance 50 Ω)
- B: 2 – 10 mA DC (Input resistance 500 Ω)
- C: 1 – 5 mA DC (Input resistance 1000 Ω)
- D: 0 – 20 mA DC (Input resistance 50 Ω)
- E: 0 – 16 mA DC (Input resistance 62.5 Ω)
- F: 0 – 10 mA DC (Input resistance 100 Ω)
- G: 0 – 1 mA DC (Input resistance 1000 Ω)
- H: 10 – 50 mA DC (Input resistance 100 Ω)
- Z: Specify current (See INPUT SPECIFICATIONS)

Voltage

- 1: 0 – 10 mV DC (Input resistance 10 kΩ min.)
- 2: 0 – 100 mV DC (Input resistance 100 kΩ min.)
- 3: 0 – 1 V DC (Input resistance 1 MΩ min.)
- 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.)
- 0: Specify voltage (See INPUT SPECIFICATIONS)

OUTPUT

Current

10 – 50 mA DC (Load resistance 300 Ω max.)

[2] POWER INPUT

AC Power

- B: 100 V AC
- C: 110 V AC
- F: 120 V AC
- G: 200 V AC
- H: 220 V AC
- J: 240 V AC

GENERAL SPECIFICATIONS

- Construction:** Plug-in
- Connection:** M3.5 screw terminals
- Housing material:** Flame-resistant resin (black)
- Isolation:** Input or output to power
- Overrange output:** Approx. -10 to +120 % at 100 Ω load
- Zero adjustment:** -5 to +5 % (front)
- Span adjustment:** 95 to 105 % (front)

INPUT SPECIFICATIONS

- **DC Current:**
Shunt resistor attached to the input terminals (0.5 W)
Specify input resistance value for code Z.
- **DC Voltage:** -300 – +300 V DC
- Minimum span:** 10 mV
- Offset:** Max. 1.5 times span
- Input resistance**
Span 10 – 100 mV : ≥ 10 kΩ
Span 0.1 – 1 V : ≥ 100 kΩ
Span ≥ 1 V : ≥ 1 MΩ

INSTALLATION

Power input

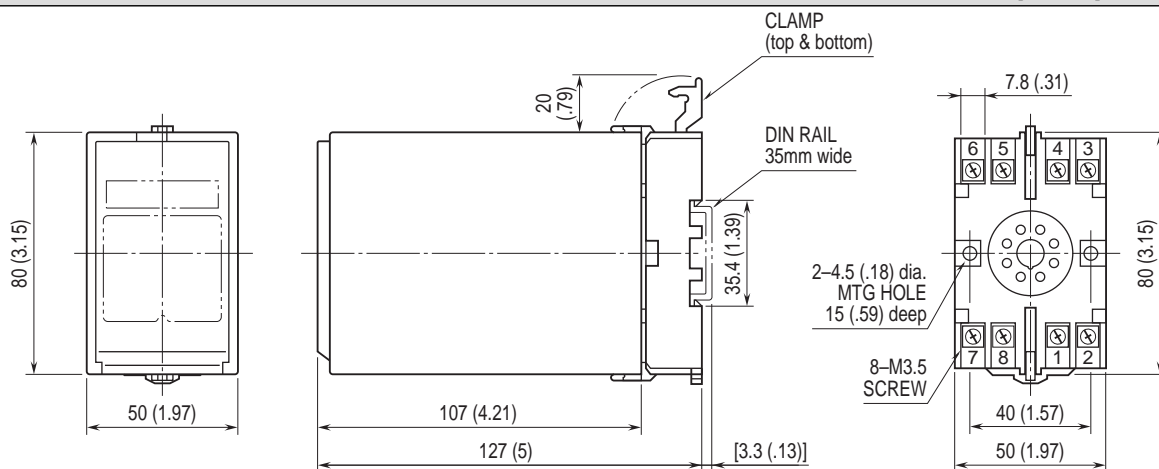
- **AC:** Operational voltage range: rating ±10 %, 50/60 ±2 Hz, approx. 3 VA
- Operating temperature:** -5 to +55°C (23 to 131°F)
- Operating humidity:** 30 to 90 %RH (non-condensing)
- Mounting:** Surface or DIN rail
- Weight:** 400 g (0.88 lbs)

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:** 1000 V AC @ 1 minute

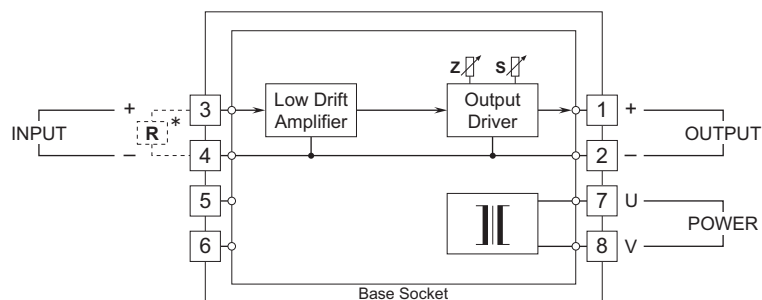
(input or output to power)
 2000 V AC @ 1 minute (input or output or power to ground)

EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)



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

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



*Input shunt resistor attached for current input.



Specifications are subject to change without notice.