

Plug-in Signal Conditioners M-UNIT

50mA OUTPUT TRANSMITTER

MODEL

VA

MODEL & SUFFIX CODE SELECTION

MODEL _____

INPUT _____

Current **VA**—□—□

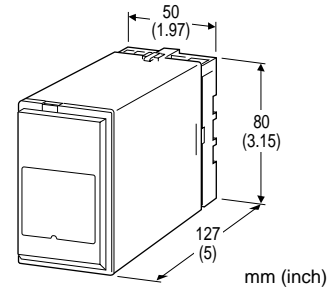
Current	Voltage
A : 4 – 20mA DC	1 : 0 – 10mV DC
A1 : 4 – 20mA DC*	2 : 0 – 100mV DC
B : 2 – 10mA DC	3 : 0 – 1V DC
C : 1 – 5mA DC	4 : 0 – 10V DC
D : 0 – 20mA DC	5 : 0 – 5V DC
E : 0 – 16mA DC	6 : 1 – 5V DC
F : 0 – 10mA DC	4W : -10 – +10V DC
G : 0 – 1mA DC	0 : Specify voltage
H : 10 – 50mA DC	
Z : Specify current	

*50Ω input resistance for Code A1

OUTPUT
10 – 50mA DC

POWER INPUT

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



Functions & Features

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

Typical Applications

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

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 – +120% at 100Ω load

Front adjustments: zero and span; ±5%

ORDERING INFORMATION

Specify code number and variables.

- **Code number** (e.g. VA-6-B)
- **Special input range** (For codes Z & 0)

INPUT & OUTPUT

INPUT

• **DC Current:** shunt resistor attached to input terminals (0.5W)

Input resistance: For resistance values other than listed below, specify when ordering.

Input	Input Resistance
4 – 20mA	: 250 (Ω) (50 Ω for Code A1)
2 – 10mA	: 500
1 – 5mA	: 1000
0 – 20mA	: 50
0 – 16mA	: 62.5
0 – 10mA	: 100
0 – 1mA	: 1000
10 – 50mA	: 100

• **DC Voltage:** -300 – +300V DC

Minimum span: 10mV

Zero suppression/elevation: max. 1.5 times span

Input resistance

Input Span	Input Resistance
10 – 100mV	: 10k (Ω minimum)
0.1 – 1V	: 100k
$\geq 1V$: 1M

■ **OUTPUT:** 10 – 50mA DC

Load resistance: 300 Ω maximum

INSTALLATION

Power input: rating $\pm 10\%$, 50/60 ± 2 Hz, approx. 3VA

Operating temperature: -5 to +55°C (23 to 131°F)

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

Mounting: surface or DIN rail

Dimensions: W50×H80×D127 mm (1.97"×3.15"×5")

See General Spec. Sheet Figure A-1.

Weight: 400 g (0.88 lbs)

Terminal assignment: See General Spec. Sheet Figure B-2.

PERFORMANCE in percentage of span

Accuracy: $\pm 0.1\%$

Temp. coefficient: $\pm 0.015\%/^{\circ}\text{C}$ ($\pm 0.008\%/^{\circ}\text{F}$)

Response time: ≤ 0.5 seconds (0 – 90%)

Line voltage effect: $\pm 0.1\%$ over voltage range

Insulation resistance: $\geq 100\text{M}\Omega$ with 500V DC

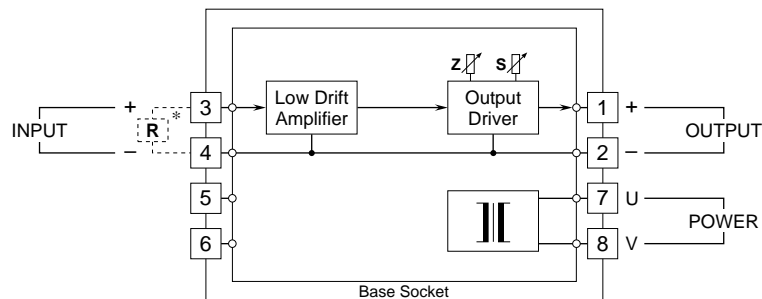
Dielectric strength: 1000V AC @1 minute

(input or output to power)

2000V AC @1 minute

(input or output or power to ground)

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



*Input shunt resistor attached for current input.