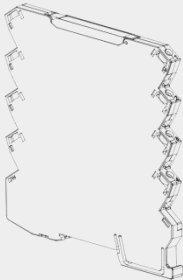


BM800-VI/V1-11

VI.0

Signal Isolator Installation

Supports 4-wire transmitters



Product Description

The BM800-VI/V1-11 is a signal isolator with a thickness of 6.2 mm and designed for DIN 35 mm rail mounting. It adopts a 1-in-1-out channel design and provides galvanic isolation among the input, output and power supply circuits. It isolates and converts DC input signals of 0/4-20 mA, 0/1-5 V and 0/2-10 V into DC output signals of 0/4-20 mA, 0/1-5 V and 0/2-10 V. Arbitrary combinations of signal conversion can be configured via DIP switches. The rated supply voltage is 24 V DC.

Electrical Specifications

Model	BM800-VI/V1-11
Input Specifications	
Input channel	1
Input signal	DC 0/4~20mA、0/1-5V、0/2-10V
Maximum Input Current	DC 100mA
Maximum Input Voltage	DC 13V
Maximum Input Impedance	Current Input: 50 Ω; 0/1-5 V Input: 1 MΩ; 0/2-10 V Voltage Input: 2 MΩ
Output Specifications	
Output channel	1
Available outputs	DC 0/4-20mA, 0/1-5V, 0/2-10V (Active Signals)
Max output current	DC 40mA
Max output Voltage	DC 16V
Output ripple	≤50mVpp(@250Ω)
Load capacity	Current output ≤550Ω; Voltage output ≥10kΩ

Wiring Specifications

Connection Type	Screw terminal connection
Solid single-core wire size	0.5~2.5mm ²
Stranded flexible wire size	0.5~2.5mm ²
AWG wire gauge	20~13
Wire stripping length	8mm
Ambient Specifications	
Operating ambient temperature	-20~60℃
Storage ambient temperature	-40~80℃
Max operating altitude	≤2000m
Relative ambient humidity	≤95%RH,non-condensing

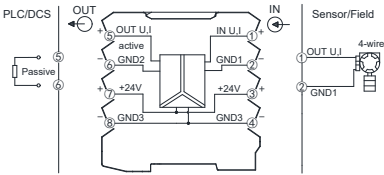
Disclaimer

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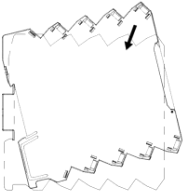
Power Supply Parameters	
Nominal supply	24V DC
Operating supply range	20~35V DC
Power consumption	≤2 W (Iout=20 mA, 24 V DC, 550 Ω load)
General Performance	
Conversion Accuracy	≤0. 1% (F. S.)
Temperature drift	50ppm/℃
Response time(10-90%)	≤5ms
Overvoltage category	II
Pollution degree	2
Ingress protection	IP20
Dielectric strength	1.5kV AC, 50Hz, 60s (between input, output and power circuits)
Insulation resistance	100MΩ
Overall dimension	W6.2mm × H97mm × D100mm
Weight	approx.70g
Mounting	DIN35 standard rail

The manufacturer reserves the right to revise product specifications without prior notice. Please consult local authorized distributors for the latest specifications before placing orders.

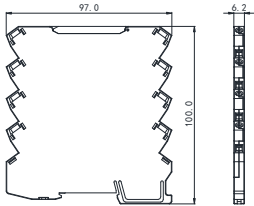
Product Application



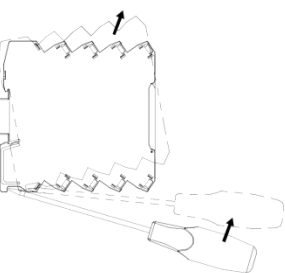
Installation



Product Dimensions (Unit: mm)



Removal



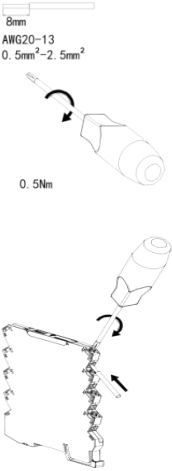
DIP Switch Configuration

■ON □OFF

DIP Switch Setting	Output																																
Input	0-20mA										4-20mA										0-5V												
	DIP Switch	1	2	3	4	5	6	7	8	9	10	DIP Switch	1	2	3	4	5	6	7	8	9	10	DIP Switch	1	2	3	4	5	6	7	8	9	10
0-20mA	SW1	■	■	□	□	□	■	□	■	\	\	SW1	■	■	□	□	□	■	■	□	\	\	SW1	■	■	□	□	□	■	□	■	\	\
	SW2	■	■	■	□	□	□	□	□	□	□	SW2	■	■	■	□	□	□	□	□	□	□	SW2	□	□	□	■	□	■	■	■	■	■
4-20mA	SW1	■	■	□	□	■	□	□	□	\	\	SW1	■	■	□	□	□	■	□	■	\	\	SW1	■	■	□	□	■	□	□	□	\	\
	SW2	■	■	■	□	□	□	□	□	□	□	SW2	■	■	■	□	□	□	□	□	□	□	SW2	□	□	□	■	□	■	■	■	■	■
0-5V	SW1	□	□	■	■	□	■	□	■	\	\	SW1	□	□	■	■	□	■	■	□	\	\	SW1	□	□	■	■	□	□	□	■	\	\
	SW2	■	■	■	□	□	□	□	□	□	□	SW2	■	■	■	□	□	□	□	□	□	□	SW2	□	□	□	■	□	■	■	■	■	■
1-5V	SW1	□	□	■	■	■	□	□	□	\	\	SW1	□	□	■	■	□	■	□	■	\	\	SW1	□	□	■	■	■	□	□	□	\	\
	SW2	■	■	■	□	□	□	□	□	□	□	SW2	■	■	■	□	□	□	□	□	□	□	SW2	□	□	□	■	□	■	■	■	■	■
0-10V	SW1	□	□	□	□	■	□	□	■	\	\	SW1	□	□	□	□	□	■	■	□	\	\	SW1	□	□	□	□	□	■	□	■	\	\
	SW2	■	■	■	□	□	□	□	□	□	□	SW2	■	■	■	□	□	□	□	□	□	□	SW2	□	□	□	■	□	■	■	■	■	■
2-10V	SW1	□	□	■	□	■	□	□	\	\		SW1	□	□	■	□	□	■	□	■	\	\	SW1	□	□	■	□	■	□	□	\	\	
	SW2	■	■	■	□	□	□	□	□	□		SW2	■	■	■	□	□	□	□	□	□		SW2	□	□	□	■	□	■	■	■	■	■

DIP Switch Setting	Output																																
Input	1-5V										0-10V										2-10V												
	DIP Switch	1	2	3	4	5	6	7	8	9	10	DIP Switch	1	2	3	4	5	6	7	8	9	10	DIP Switch	1	2	3	4	5	6	7	8	9	10
0-20mA	SW1	■	■	□	□	□	■	■	□	\	\	SW1	■	■	□	□	□	■	□	■	\	\	SW1	■	■	□	□	□	■	■	□	\	\
	SW2	□	□	□	■	□	■	■	■	■	■	SW2	□	□	□	■	■	□	□	□	■	■	SW2	□	□	□	■	■	□	□	□	■	■
4-20mA	SW1	■	■	□	□	□	■	□	■	\	\	SW1	■	■	□	□	■	□	□	□	\	\	SW1	■	■	□	□	□	■	□	■	\	\
	SW2	□	□	□	■	□	■	■	■	■	■	SW2	□	□	□	■	■	□	□	□	■	■	SW2	□	□	□	■	■	□	□	□	■	■
0-5V	SW1	□	□	■	■	□	■	■	□	\	\	SW1	□	□	■	■	□	■	□	■	\	\	SW1	□	□	■	□	□	■	■	□	\	\
	SW2	□	□	□	■	□	■	■	■	■	■	SW2	□	□	□	■	■	□	□	□	■	■	SW2	□	□	□	■	■	□	□	□	■	■
1-5V	SW1	□	□	■	■	□	■	□	■	\	\	SW1	□	□	■	■	■	□	□	□	\	\	SW1	□	□	■	■	□	■	□	■	\	\
	SW2	□	□	□	■	□	■	■	■	■	■	SW2	□	□	□	■	■	□	□	□	■	■	SW2	□	□	□	■	■	□	□	□	■	■
0-10V	SW1	□	□	■	■	□	■	■	□	\	\	SW1	□	□	■	■	□	■	□	■	\	\	SW1	□	□	■	□	□	■	■	□	\	\
	SW2	□	□	□	■	□	■	■	■	■	■	SW2	□	□	□	■	■	□	□	□	■	■	SW2	□	□	□	■	■	□	□	□	■	■
2-10V	SW1	□	□	■	■	□	■	□	■	\	\	SW1	□	□	■	□	■	□	□	□	\	\	SW1	□	□	■	□	□	■	□	■	\	\
	SW2	□	□	□	■	□	■	■	■	■	■	SW2	□	□	□	■	■	□	□	□	■	■	SW2	□	□	□	■	■	□	□	□	■	■

Product Wiring



Notes

The product shall be installed in an area where the ambient air contains no corrosive substances that damage chromium, nickel and silver platings.

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