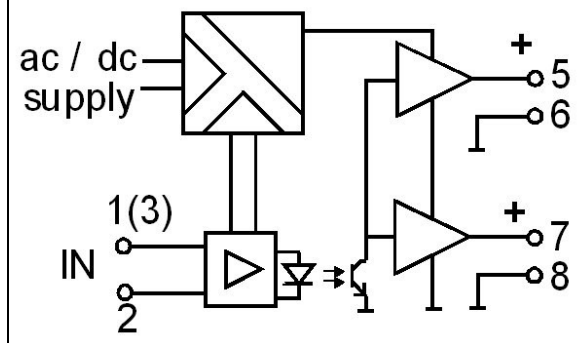


**DESCRIPTION**

The 5KV Isolator BHVI237 is an isolating converter providing true 3-way galvanic isolation up to 5kV r.m.s. The BHVI237 produces two unipolar output signals from one input signal (no isolation between outputs). The high input output isolation makes the unit suitable for monitoring DC power supplies used in transport and mining machinery. Final calibration is trimmed using the front accessible zero and span 15-turn trim adjustments. Maximum current drive is 20mA and maximum voltage drive is 16V. All units are fitted with a 500mS filter that can be changed on request. The unit is powered from a wide range auxiliary supply (10-60Vdc/16- 48Vac or 80-300Vdc/80-280Vac) through a removable side plug in connector.

**General Specifications**

Size:	23.5W x 71.5H x 109D (mm).
Mounting:	Clip for 35mm DIN-Rail.
Housing material:	ABS.
Input / output termination:	Top mounted screw terminals.
Power termination:	2-way pluggable screw terminals
Protection class:	IP40 (IP55 Enclosure Opt).
Weight:	120 g.
Protection class:	IP40.
Calibration accuracy:	<0.2%.
Front 'SPAN' adjust:	±25% typical.
Front 'ZERO' adjust:	+20/ -10% typical.
Linearity:	<0.1%.
Long term drift:	<0.1%.
Temperature effect:	Typically 0.025% of span per °C.
Operating temperature:	-10...+60°C.
Current input impedance:	Current 51 Ω (20mA)
Voltage input impedance:	100kΩ/V, 100k minimum (< 100V) 10MΩ (> 100V)
Output drive:	10mA into 0 – 1.6k Ω 20mA into 0 – 800 Ω
Overload conditions:	Span ≤ 10Vdcx20 Span ≤ 1000Vdcx3 Span 20mA x 20 Span 100mA x 3 Span Vac x 3 Span Iac x 3 (5sec)
Response time:	500ms (250µs to 5s optional)
Input/output isolation:	5kV RMS.
Supply//Input/output isolation:	4kV RMS.
Electromagnetic compatibility:	Complies with EN 50081-1, EN 50082-2, EN 61010-1

**Block Diagram**

CE

## TYPE NO. DESIGNATION BHVI237 - X X X X X

### Power Supply:

- 1 = 10-60Vdc / 16-48Vac 50/60Hz
- 2 = 80-300Vdc / 80-280Vac 50/60Hz

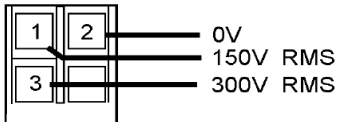
### Input:

- 1 = mA up to 100mA dc (4-20mA default)
  - 2 = Vdc 100mV to 100Vdc (0-10V default)
- 

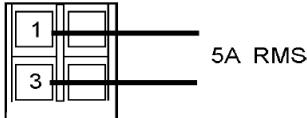
- \*) 3 = mV link selectable select range from +/-100mV, 100mV, +/-250mV, 0-250mV

- 4 = High dc voltage specify range 100V to 2000V
  - \*) 6 = 1000Vdc (1000V specified on top label)
- 

- \*) 7 = 150/300V true RMS



- \*) 8 = 0-5A true RMS

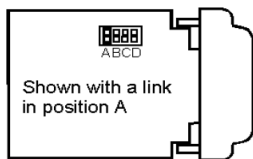


- \*) 9 = Other. (Specify).

### mV Link Selectable Range Only

Four link selectable ranges are available when ordered with "Input: = 3"

Input	A	B	C	D
0-250mV	X			
0-100mV	X	X	X	
+/-250mV		X		X
+/-100mV	X		X	X



### Options

- 0 = None.
- \*) 1 = Customised response time (Specify 250µs to 5s).
- \*) 4 = 24V aux on terminal 4 to power field sensor.
- \*) 9 = Other.

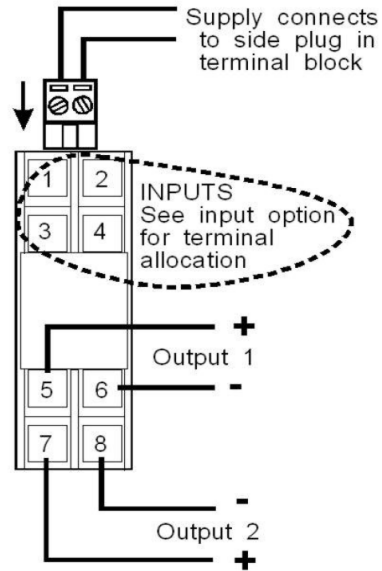
### Output 2

- 1 = 4-20mA (source).
- 2 = 0-10V (source).
- 3 = 4-20mA (loop powered signal)
- \*) 9 = Other specify

### Output 1

- 1 = 4-20mA (source).
- 2 = 0-10V (source).
- 3 = 4-20mA (loop powered signal)
- \*) 9 = Other specify

### Connection



\*) = Price Extra..

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