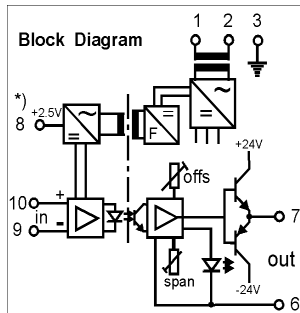


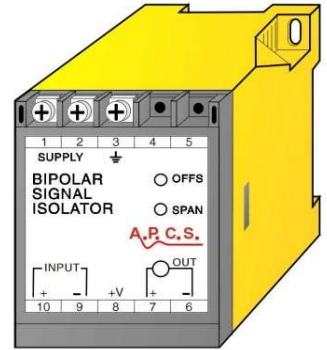
Bipolar Signal Isolator v3 BSI134

The BSI134 produces an isolated bipolar output signal from any type of input signal. Input signals can be bipolar or unipolar process signals such as -10 to +10V or 4 to 20mA. The output drive circuit is factory configured to provide load independent voltage or load independent bipolar current output. Maximum current drive for voltage output is 20mA at



*) The 2.5V reference on pin 8 is only available with input 28

±20V output. Applications requiring output >20mA up to 2A as is the case with hydraulic drive solenoids, can be accommodated using an external bipolar DC-power supply with a separate heat sink, carrying the drive transistors. Final calibration is trimmed using the front accessible OFFS and SPAN 15-turn trim adjustments. The output signal level is indicated by a green L.E.D. on the front, giving a clear indication of module function. All units are fitted with a 0.5 second filter. This filter constant can be increased or decreased if required. RF and power transient protection are with all A.P.C.S. modules. Power supply isolation is achieved by the use of transformers for AC power and DC/DC converter for DC power.



General Specifications

Size:	52 W x 70 H x 110 D (mm).
Mounting:	DIN-Rail, gear plate.
Termination:	Screw terminals on front.
Protection class:	IP40 (IP65 Enclosure opt.)
Weight:	0.330 kg.
Dimensions standard unit:	52 x 70 x 110mm.
Dimensions 100mA unit:::	85 x 70 x 110mm.
Housing material:	Polycarbonate.
Accuracy:	0.1% of span.
Front 'OFFS' adjust:	±25% typical.
Front 'SPAN' adjust:	±25% typical.
Temperature effect:	0.02% per °C.
Operating temperature:	0...+60°C.
Output load effect:	less than 0.25% up to max. load.
Output loop drive:	±10mA into 0 - 2000 Ω ±20mA into 0 - 1000 Ω.
Output voltage load:	±10V into 500 Ω minimum ±20V into 1k Ω minimum Short circuit duration 10 minutes max.
Input/output isolation:	2kV r.m.s.
Line Regulation:	Less than 0.02% change for ±10% supply voltage change.
Linearity:	0.05% of span.
Repeatability:	0.05% of span.
Storage temperature:	-20 to +70°C.
Response time:	0.5 sec for 0 - 90% of step input. Faster or slower response on request.
Power requirements:	ac supply 4W, dc supply 3W.
Electromagnetic compatibility:	Complies with AS/NZS 4251.1 (EN 50081.1)

BSI134 - X XX X 0 XX

Power Supply:

1 = 240V, 50/60Hz ±10%.	*) 6 = 8 - 60Vdc.
2 = 120V, 50/60Hz ±10%.	*) 7 = (use '6').
3 = 24V, 50/60Hz ±10%.	*) 8 = 60 - 240Vdc
*) 5 = 12Vdc (use '6').	*) 9 = Other specify.

Input:

Unipolar

*)01 = 0 - 100mV (1M)	11 = 0 - 100µA (1k)
*)02 = 0 - 200mV (1M)	12 = 0 - 1mA (220R)
*)03 = 0 - 500mV (1M)	13 = 0 - 5mA (240R)
04 = 0 - 1V (1M)	14 = 0 - 10mA (100R)
05 = 0 - 2V (1M)	15 = 0 - 20mA (51R)
06 = 0 - 5V (1M)	16 = 0 - 50mA (20R)
07 = 0 - 10V (1M)	17 = 4 - 20mA (51R)
08 = 0 - 20V (1M)	18 = 10 - 50mA (20R)
09 = 0 - 50V (1M)	
10 = 0 - 100V (1M)	*) 19 = Other specify

Bipolar

*)20 = ±50mV (100k)	25 = ±10V (1M)
*)21 = ±100mV (470k)	26 = ±20V (1M)
*)22 = ±200mV (1M)	27 = ±10mA (100R)
23 = ±1V (100k)	*) 28 = 3 wire pot 1k min
24 = ±5V (470k)	*) 29 = Other ± specify

Output:

1 = ±1V (50 Ω min)	5 = ±1mA (20k Ω max).
2 = ±5V (250 Ω min)	6 = ±5mA (4k Ω max).
3 = ±10V (500 Ω min)	7 = ±10mA (2k Ω max).
4 = ±20V (1k Ω min)	8 = ±20mA (1k Ω max).
	*) 9 = Other specify.

Output Options:

- 00 = None.
- *) 01 = Output ramp.
- *) 02 = Output >20...500mA (External bipolar supply)
- *) 03 = Output 500mA-2A External bipolar supply.
- *) 04 = Dither for hydraulic applications.
- *) 05 = External ratio adjust, Specify range
- *) 06 = Zero output for loop loss (4 - 20mA input).
- *) 08 = Customised response time (Specify).
- *) 09 = Output 2A-5A External bipolar supply.
- *) 99 = Other (Specify).

*) Price Extra..

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