DATA SHEET
Hall Effect Current Sensor

PN : BJHCS151-100/100B

IPN = 25A - 50A

Features

- Closed loop
- High accuracy
- Very good linearity
- Low power consumption
- Good over-current capability
- Supply voltage : ±15V DC
- Current output
- Small PCB mounting
- Can be customized

Applications

- Frequency drive control home appliances
- Solar power management system
- Inverter applications
- Uninterruptible power supplies (UPS)
- Current monitoring

ELECTRICAL DATA

BJHCS-151-…	100	100B
Nominal rms current I_{PN} (A)	25	50
Sensed current range I_{PM} (A)	± 55	± 100
Measuring resistance R_M (Ω) wiht V_C = ± 15 V	54 to 360	68 to 180
Coil turns ratio K (P^{ry}:S^{ry})	1 - 2 - 3 - 4 : 1000	1 - 2 - 3 - 4 : 1000
Secondary coil resistance (Ω)	30	
Nominal analog output current I_{SN} (mA)	25	50
Static current consuption I_{C0} (mA)	≤ 15	
Supply voltage V_C (Vdc)	±15 $^{±5\%}$	

ACCURACY DYNAMIC PERFORMANCE			GENERAL & ISOLATION CHARACTERISTICS		
Accuracy X_G @ I_{PN}, T=25℃	± 0,5%	%	Operating temperature	-40 to +85	℃
Zero offset Current I_O @ I_P=0, T=25℃	≤ ± 0,2	mA	Storage temperature	-40 to +125	℃
Zero current drift @ - 40℃ to 85℃	≤ ± 0,5	mA	Weight	15	g
Linearity error ε_L	≤ 0,1	% FS	Insulation voltage (50Hz, 1mn)	5	KV
di/dt accurately followed	> 50	A/µs			
Response time tr	≤ 1	µs			
Bandwidth (- 3db)	DC to 200	kHz			

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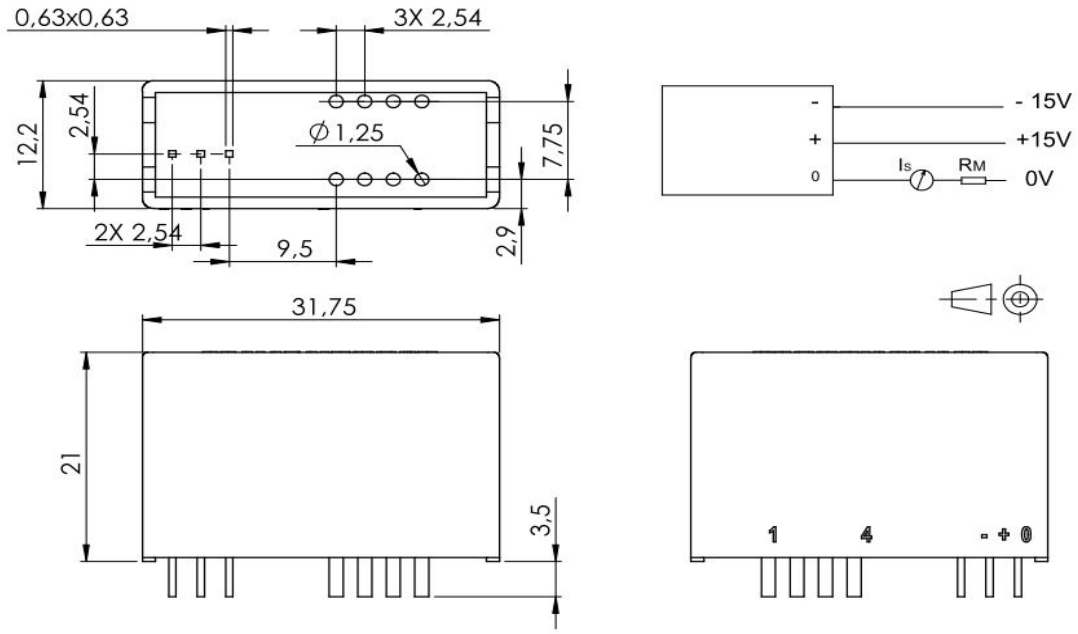
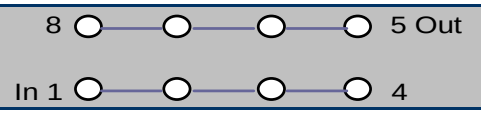
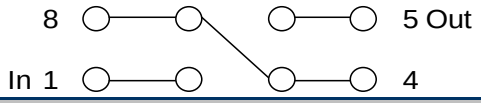
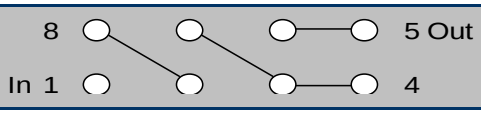
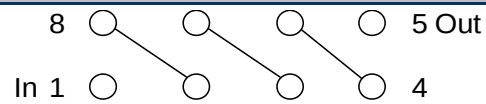
DIMENSIONS



WIRING DIAGRAM

Number of Primary turns	Primary current I_{PN} (A)		Peak Current I_{PM} (A)		Output Current I_{SN} (mA)		Primary pin
	100	**100B**	**100**	**100B**	**100**	**100B**	**BJSH-151-100 & 100B**
1	25	50	55	100	25	50	
2	12	25	27	50	24	50	
3	8	16	18	33	24	48	
4	6	12	13	25	24	48	

MECHANICAL CHARACTERISTICS

General tolerance	± 0,2 mm
Primary pins	8 x ∅ 1,25 mm
Terminal connection	3 x 0,635*0,635

Cautions :

- Do respect the wiring diagram in accordance whith the current value and its flow direction.

WARNING : Incorrect wiring may cause damage to the sensor.

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