Closed Loop Hall Current Sensor CYHCS-B1-50A

This Hall Effect current sensor is based on closed loop compensating principle and can be used for measurement of DC and AC current, pulse currents etc. The output of the transducer reflects the real wave of the current carrying conductor.

Product Characteristics	Applications
• Excellent accuracy • Very good linearity • Small size and encapsulated • Less power consumption • Current overload capability	• General Purpose Inverters • AC/DC Variable Speed Drivers • Battery Supplied Applications • Uninterruptible Power Supplies (UPS) • Switched Mode Power Supplies • Motors etc.

ELECTRICAL CHARACTERISTIC

Nominal current	50	A
Measuring range	0 ~ ±100	A
Measuring resistance (at rated current)	68~180（±15V）	Ω
Nominal analogue output current Is	50±0.5%	mA
Supply voltage	±15 ±5%	V
Turns ratio	1-2-3-4:1000	
Galvanic isolation	50(60)Hz,1min, 5	kV
Secondary internal resistance(at+70°C)	30	Ω

ACCURACY DYNAMIC PERFORMANCE

Zero offset current at +25°C	±0.15	mA
Thermal drift of offset current	≤±0.5 (-40°C~ +85°C)	mA
Linearity	≤0.1	%FS
di/dt accuracy followed	>50	A/μs
Response time	<1	μs
Bandwidth (-3db)	DC ~ 200	kHz

GENERAL CHARACTERISTIC

Operating temperature	-40 ~ +85	°C
Storage temperature	-40 ~ +125	°C
Current consumption	10 + Is	mA

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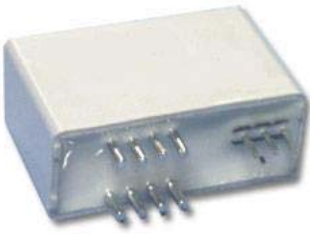
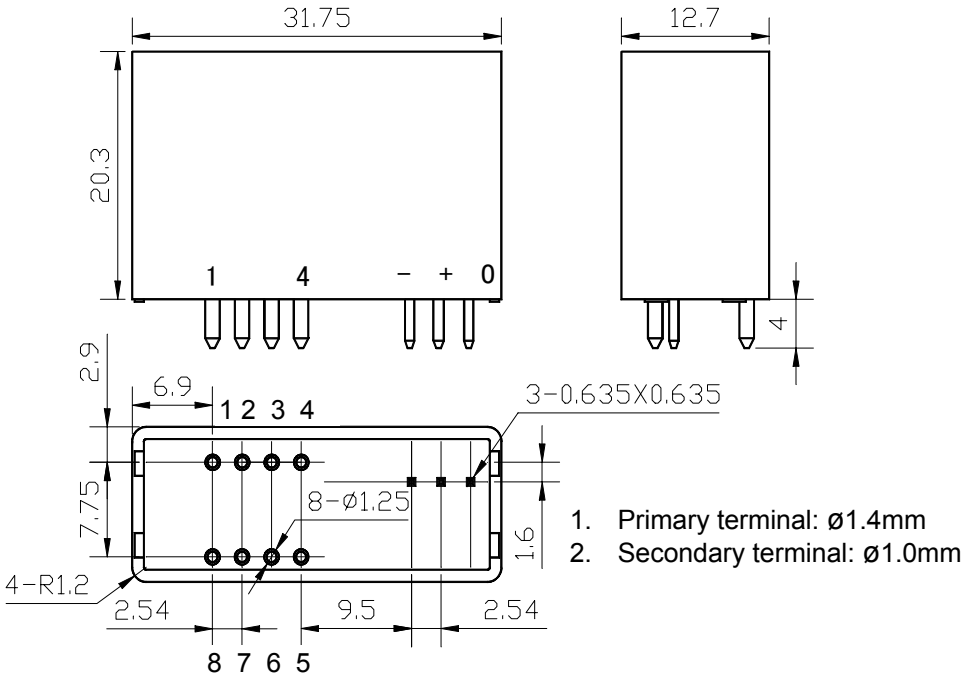
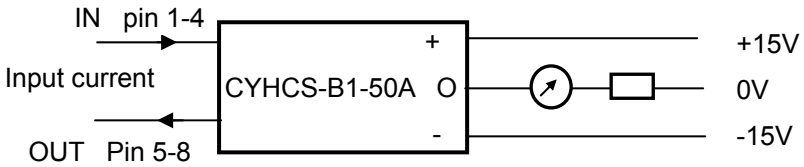
Dimensions (mm)

+	+15V
-	-15V
O:	Output

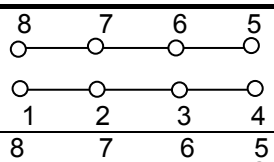
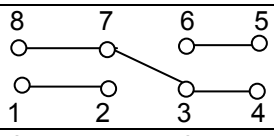
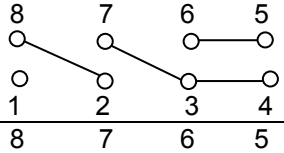
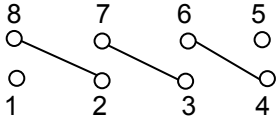




1. Primary terminal: ø1.4mm
2. Secondary terminal: ø1.0mm



Wiring diagram

Primary Terminal	Nominal current (A)	Measuring range (A)	Output current (mA)	Pin connection
1	50	100	50	
2	25	50	50	
3	16	33	48	
4	12	25	48	

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