

Closed Loop Hall Current Sensor CYHCS-B8S

This Hall Effect current sensor is based on the 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
<ul style="list-style-type: none"> • Excellent accuracy • Very good linearity • Small size and encapsulated • Less power consumption • Current overload capability 	<ul style="list-style-type: none"> • General Purpose Inverters • AC/DC Variable Speed Drivers • Battery Supplied Applications • Uninterruptible Power Supplies • Switched Mode Power Supplies

ELECTRICAL CHARACTERISTICS

Primary rated RMS Current I_r (A)	Primary Current Measuring Range I_p (A) at $V_{cc}=5V$	Primary Conductor \varnothing (mm)	Part number	Turns ratio	Measuring resistance (Ω)
5	± 15	$\varnothing 0.8$	CYHCS-B8S-05A	1:800	100 \pm 0.5%
10	± 30	$\varnothing 1.0$	CYHCS-B8S-10A	1:1600	100 \pm 0.5%
15	± 45	$\varnothing 1.0$	CYHCS-B8S-15A	1:1200	50 \pm 0.5%
25	± 75	$\varnothing 1.4$	CYHCS-B8S-25A	1:1500	37.5 \pm 0.5%

(Rated input current can be selected between 5A and 25A)

ELECTRICAL CHARACTERISTICS

Rated output current	2.5V \pm 0.625 \pm 0.5%
Supply voltage	+5 VDC \pm 5%
Galvanic isolation	2.5kV RMS/50Hz/1min,

ACCURACY DYNAMIC PERFORMANCE

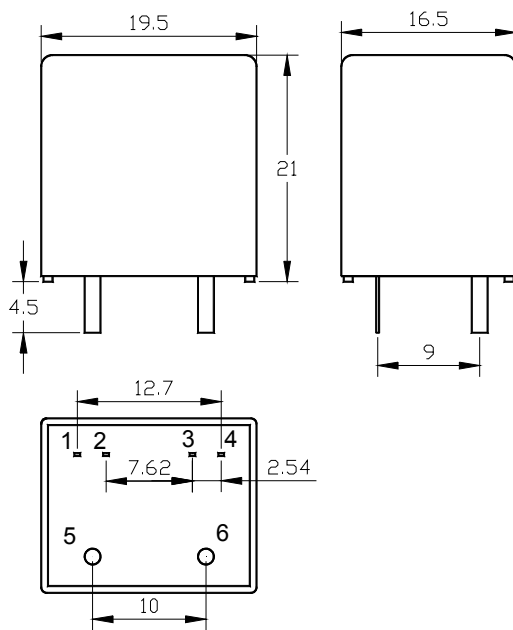
Zero offset voltage	2.5V \pm 0.5%
Thermal drift of zero offset voltage	\leq \pm 0.5mV/ $^{\circ}$ C
Response time	<0.5 μ s
Accuracy	\pm 0.7%
Linearity	\leq 0.1% FS
Hysteresis error	<20mV
Bandwidth(-3dB)	DC ~ 200kHz
di/dt accuracy	>50 A/ μ s

BB AUTOMACAO

GENERAL CHARACTERISTIC

Operating temperature	-40°C~+85°C
Storage temperature	-40°C~+125°C
Current consumption	<20mA

Dimensions (mm)



- 1: OUTPUT
- 2: +5V DC
- 3: GND
- 4: GND

- 5: IN-
- 6: IN+

