

## Closed Loop Hall Current Sensor CYHCS-B100

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
<ul style="list-style-type: none"><li>• Excellent accuracy</li><li>• Very good linearity</li><li>• Small size and encapsulated</li><li>• Less power consumption</li><li>• Current overload capability</li></ul>	<ul style="list-style-type: none"><li>• General Purpose Inverters</li><li>• AC/DC Variable Speed Drivers</li><li>• Battery Supplied Applications</li><li>• Uninterruptible Power Supplies (UPS)</li><li>• Switched Mode Power Supplies</li></ul>

### ELECTRICAL CHARACTERISTIC

	CYHCS-B100-6A	CYHCS-B100-25A	
Nominal current	6	25	A
Measuring range	19.2	80	A
Number of secondary turns	960±1%	2000±1%	
Measuring resistance	100±0.5%	50±0.5%	Ω
Nominal analogue output voltage	0.625±0.5%	0.625±0.5%	V
Supply voltage	+5±5%		V
Accuracy at +25°C	0.1		%
Galvanic isolation	50HZ, 1min, 2.5		kV

### ACCURACY DYNAMIC PERFORMANCE

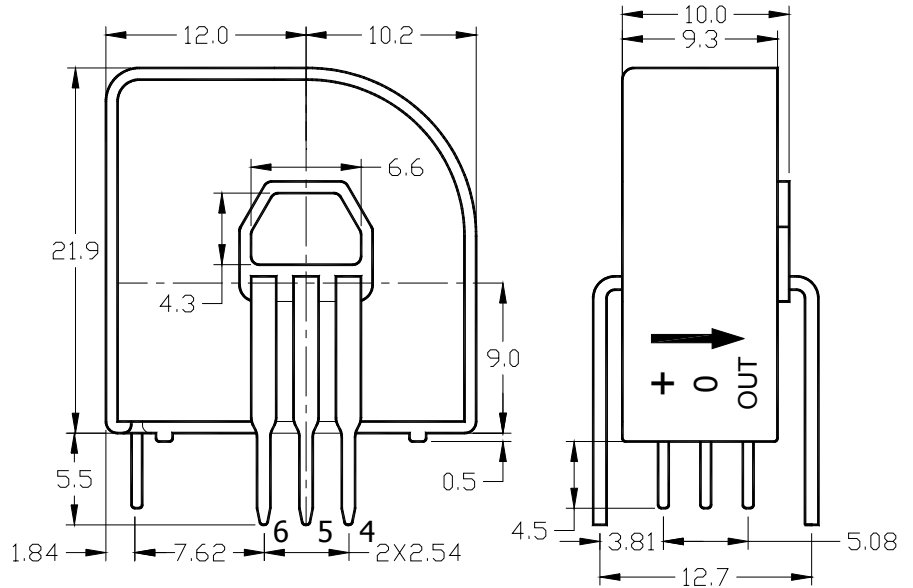
Zero offset voltage at +25°C	2.5±0.5%	V
Thermal drift of offset voltage	≤±0.5	mV/°C
Linearity	≤0.1	%FS
di/dt accuracy followed	>50	A/μS
Response time	<500	nS
Bandwidth (-1db)	DC ~ 200	kHz

### GENERAL CHARACTERISTIC

Operating temperature	-40 ~ +85	°C
Storage temperature	-55 ~ +125	°C
Current consumption	10	mA

**Dimensions (mm)**

+     +5V  
 0     0V  
 OUT: Output



**Wiring diagram**

Primary	Nominal current (A)	Output voltage (V)	Primary resistance (mΩ)	Primary inductance (μH)	Pin connection
1	±6 (±25)	2.5±0.625	0.18	0.013	
2	±3 (±12)	2.5±0.625	0.81	0.05	
3	±2 (±8)	2.5±0.625	1.62	0.12	