

**Closed Loop Hall Current Sensor CYHCS-D5-300A**

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</li> <li>• Switched Mode Power Supplies</li> </ul>

**ELECTRICAL DATA**

Nominal current	300	A
Measuring range	500	A
Turns ratio	1:2000	
Measuring resistance	with±12V @±300Amax 30(max)	Ω
	@±550Amax 7 (max)	Ω
	with±15V @±300Amax 43(max)	Ω
	@±500Amax 17(max)	Ω
Supply voltage	±15±5%	V
Nominal analogue output current	150±0.5%	mA
Accuracy at +25°C	0.1	%
Current consumption	≤25mA + output current	mA
Galvanic isolation	50HZ, 1min, 6	KV

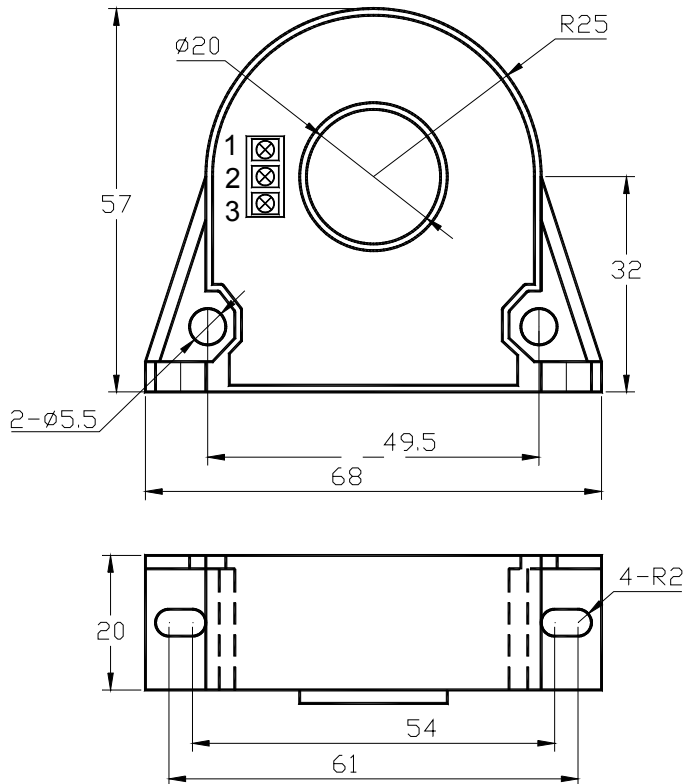
**ACCURACY DYNAMIC PERFORMANCE**

Zero offset current	±0.1	mA
Thermal drift of offset current	-40°C ~ +85°C, ±0.5	mA
Response time	<1	µs
Linearity	≤0.1	%FS
Bandwidth(-3dB)	DC...100	KHz
di/dt	>200	A/µs

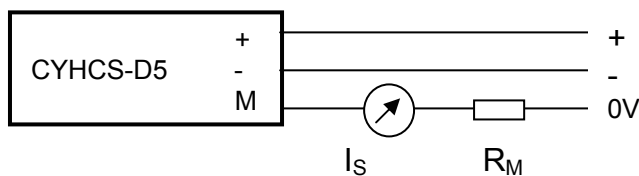
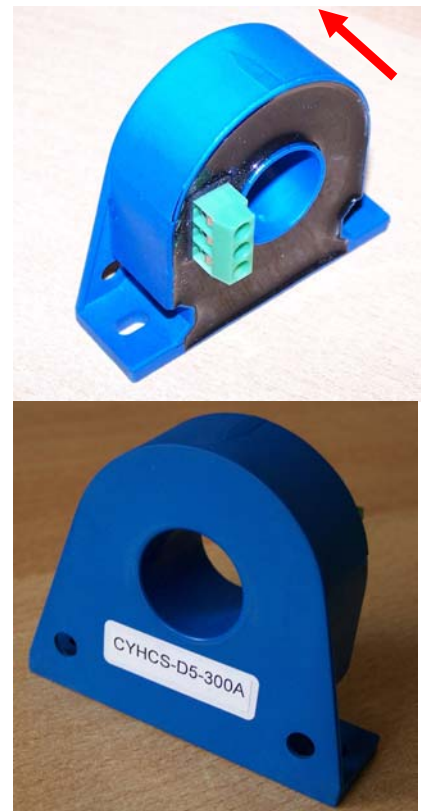
**GENERAL DATA**

Secondary internal resistance	21	Ω
Operating temperature	-40 ~ +85	°C
Storage temperature	-55 ~ +125	°C

**Dimensions (mm)**



Current direction



+ +15V  
 - -15V  
 M: Output

**Operating instructions**

1. Connect the terminals of power source, outputs respectively and correctly, never make wrong connection for DC current.
2. Temperature of the primary conductor should not exceed 100 °C.
3. Dynamic performances ( $di/dt$  and the response time) are best with a single bar completely filling the primary hole.
4. In order to achieve the best magnetic coupling, the primary windings have to be wound over the top edge of the device.