

## Closed Loop Hall Current Sensor CYHCS-25LTS

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 CHARACTERISTIC

Part number	CYHCS-05LTS	CYHCS-10LTS	CYHCS-15LTS	CYHCS-25LTS
Nominal current $I_r$	5A	10A	15A	25A
Measuring range	±15A	±30A	±45A	±75A
Nominal analogue output voltage	2.5V+0.625V±0.5% at $I = +I_r$ , 2.5V-0.625V±0.5% at $I = -I_r$			
Supply voltage	+5V DC ±5%			
Galvanic isolation	50Hz, 1min, 2.5kV			
Isolation resistance	500MΩ, 1min, at 500V DC			

### ACCURACY DYNAMIC PERFORMANCE

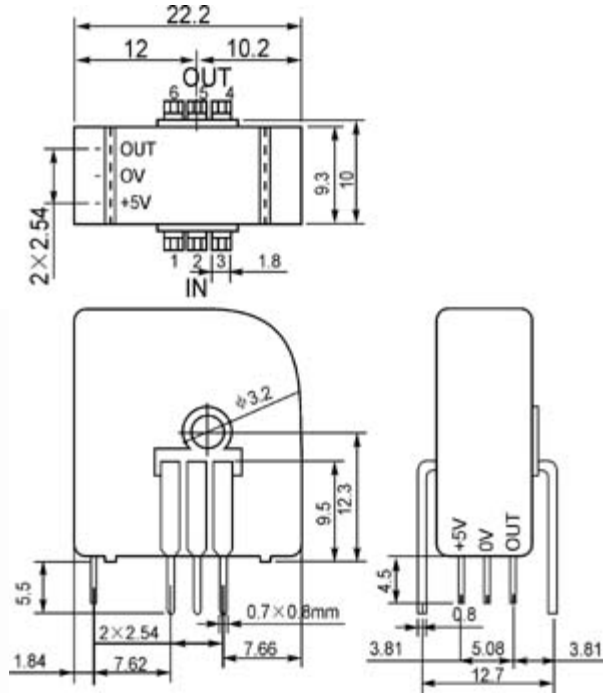
Part number	CYHCS-05LTS	CYHCS-10LTS	CYHCS-15LTS	CYHCS-25LTS
Zero offset voltage	2.5V±1.0% at $I_r=0$			
Thermal drift of output voltage	≤50ppm/°C			
Thermal drift of offset voltage	150ppm/°C		100ppm/°C	
Linearity	≤0.2% FS			
Response time	<1.0μs			
Bandwidth (-1db)	DC ~ 200kHz			

### GENERAL CHARACTERISTIC

Operating temperature	-10°C ~ +80°C
Storage temperature	-15°C ~ +85°C
Current consumption	10mA

**Dimensions (mm)**

+ +5V  
 0 0V  
 OUT: Output



**Wiring diagram**

Primary	Nominal current (A)	Output voltage (V)	Pin connection
1	15A, 25A	2.5±0.625	<pre>         6   5   4 OUT         ○---○---○                           ○---○---○         IN 1  2  3                     </pre>
2	10A	2.5±0.625	<pre>         6   5   4 OUT         ○---○---○                           ○---○---○         IN 1  2  3                     </pre>
3	5A	2.5±0.625	<pre>         6   5   4 OUT         ○---○---○                           ○---○---○         IN 1  2  3                     </pre>