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

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_f=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

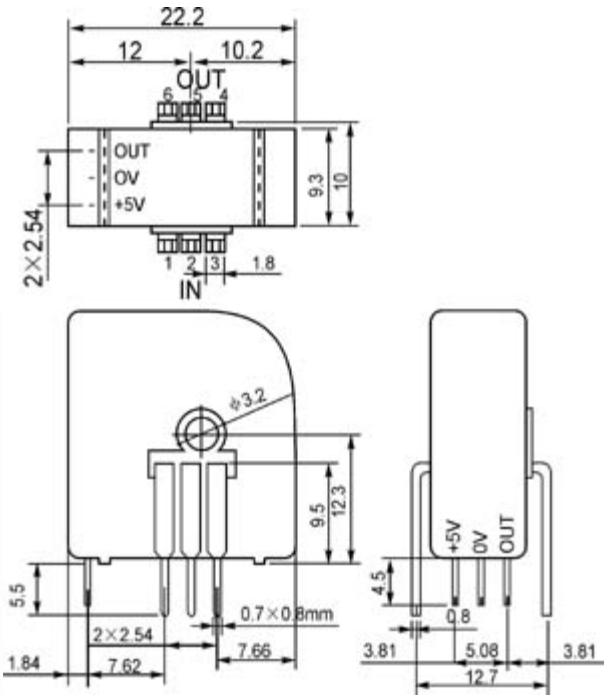
Operating temperature	-10°C ~ +80°C
Storage temperature	-15°C ~ +85°C
Current consumption	10mA

Markt Schwabener Str. 8
D-85464 Finsing
Germany

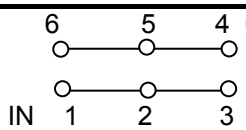
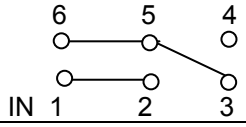
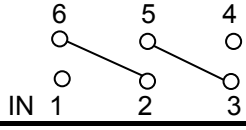
Tel.: +49 (0)8121 – 2574100
Fax: +49 (0)8121– 2574101
Email: info@cy-sensors.com
http://www.cy-sensors.com

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	
2	10A	2.5±0.625	
3	5A	2.5±0.625	

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