Closed Loop Hall Current Sensor CYHCS-D4V

This Hall Effect current sensor is based on closed loop compensating principle and designed with a high galvanic isolation between primary and secondary circuits. It 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 • Very good linearity • Less power consumption • Current overload capability • Goods temperature properties	• **Photovoltaic equipment** • General Purpose Inverters • AC/DC Variable Speed Drivers • Battery Supplied Applications • Uninterruptible Power Supplies (UPS) • Switched Mode Power Supplies

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ELECTRICAL CHARACTERISTICS

Part number	CYHCS-D4V-50A	CYHCS-D4V-100A
Rated current (rms)	±50A	±100A
Max. input current	±100A	±200A
Load resistance (at rated current)	10kΩ	
Rated output voltage	±4V	
Current consumption	<25mA	
Zero offset current	±20mV	
Hysteresis error	20mV	
Supply voltage	±15 VDC ±5%	
Galvanic isolation	3kV RMS/50Hz/1min,	

ACCURACY DYNAMIC PERFORMANCE

Thermal drift of offset current/voltage	±0.01%/°C
Thermal drift of output current/voltage	±0.02%/°C
Response time	<1.0µs
Accuracy	±0.5%
Linearity	≤0.1% FS
Bandwidth(-3dB)	DC ~ 150kHz

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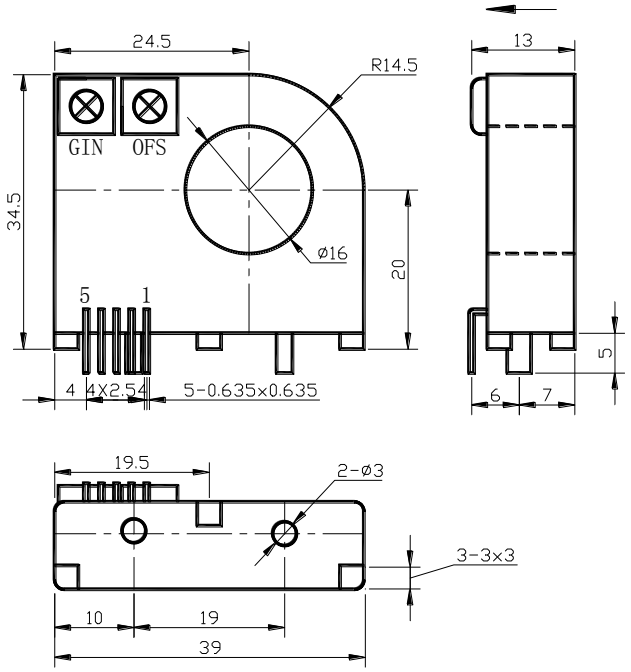
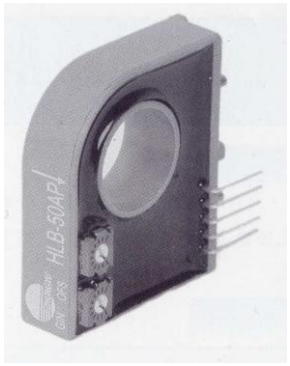
GENERAL CHARACTERISTIC

Operating temperature	-25°C～+85°C
Storage temperature	-40°C～+100°C

Dimensions (mm)





Pin Arrangement

1: +15V,
2: -15V,
3: Output,
4: ground
5: NC

Notes:

1. Connect the terminals of power source, outputs respectively and correctly, never make wrong connection.

2. Two potentiometers can be adjusted, only if necessary, by turning slowly to the required accuracy with a small screwdriver.

3. The best accuracy can be achieved when the window is fully filled with bus-bar (current carrying conductor).

4. The in-phase output can be obtained when the direction of current of current carrying conductor is the same as the direction of arrow marked on the transducer

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