

AC/DC Closed Loop Hall Current Sensor CYHCS-B3V

This Hall Effect current sensor is based on closed loop compensating principle and designed with a high galvanic isolation between primary conductor and secondary circuit. 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
<ul style="list-style-type: none"> • Excellent accuracy • Very good linearity • Small size and encapsulated • Less power consumption • Current overload capability 	<ul style="list-style-type: none"> • Photovoltaic equipment • General Purpose Inverters • AC/DC Variable Speed Drivers • Battery Supplied Applications • Uninterruptible Power Supplies (UPS) • Switched Mode Power Supplies

ELECTRICAL CHARACTERISTICS

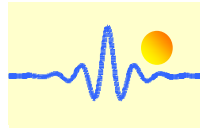
Part number	CYHCS-B3V-50A	CYHCS-B3V-100A	CYHCS-B3V-200A	CYHCS-B3V-300A
Rated current (RMS)	±50A	±100A	±200A	±300A
Max. input current	±100A	±200A	±400A	±450A
Load resistance	>10kΩ			
Rated output voltage	±4V			
Supply voltage	±15 VDC ±5%			
Galvanic isolation	3kV RMS/50Hz/1min,			

ACCURACY DYNAMIC PERFORMANCE

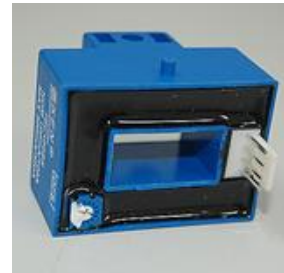
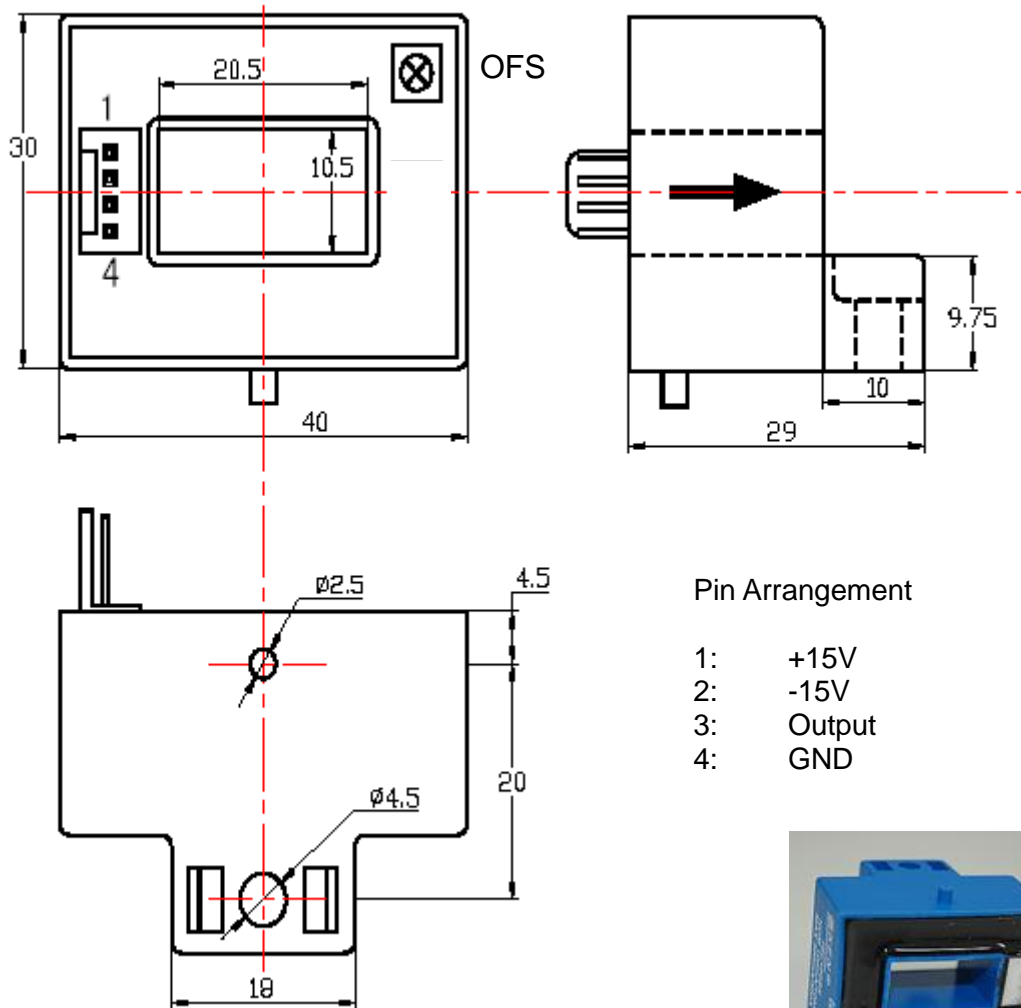
Zero offset voltage	<±20mV
Thermal drift of output voltage	±0.02%/°C
Thermal drift of zero offset voltage	±0.01%/°C
Response time	<1.0μs
Accuracy	±0.5%
Linearity	≤0.1% FS
Hysteresis	<20mV
Bandwidth(-3dB)	DC ~ 150kHz

GENERAL CHARACTERISTIC

Operating temperature	-25°C~+85°C
Storage temperature	-40°C~+100°C
Current consumption	<70 ~120 mA



Dimensions (mm)



Notes:

1. Connect the terminals of power source, output 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