

AC/DC Closed Loop Hall Current Sensor CYHCS-B4V

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
<ul style="list-style-type: none"> • Excellent accuracy • Very good linearity • Less power consumption • Current overload capability • Goods temperature properties 	<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

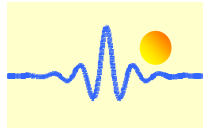
Part number	CYHCS-B4V-200A	CYHCS-B4V-300A	CYHCS-B4V-400A
Rated current (RMS)	±200A	±300A	±400A
Max. input current	±300A	±450A	±600A
Turns ratio	1:2000	1:3000	1:4000
Load resistance (at rated current)	≥10kΩ		
Rated output voltage	±4V		
Supply voltage	±15V~ ±18 VDC ±5%		
Galvanic isolation	3kV RMS/50Hz/1min,		

ACCURACY DYNAMIC PERFORMANCE

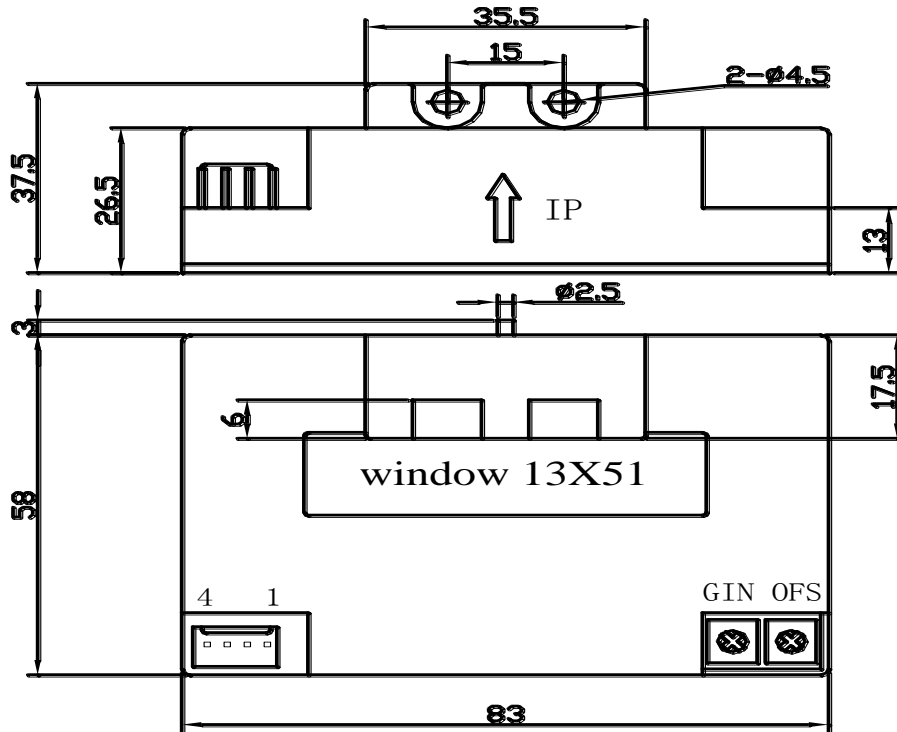
Zero offset voltage	±10mV
Thermal drift of offset current	±0.01%/°C
Thermal drift of output current	±0.02%/°C
Response time	<1.0μs
Accuracy	±0.5%
Linearity	≤0.1% FS
Bandwidth(-3dB)	DC ~ 100kHz

GENERAL CHARACTERISTIC

Operating temperature	-25°C~+85°C
Storage temperature	-40°C~+100°C
Current consumption	<20mA+100mA=120mA



Dimensions (mm)



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



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