

Split Core Hall Effect AC/DC Current Sensor CYHCS-WLY-300A-14

The sensor CYHCS-WLY-300A-14 is a open loop split core Hall Effect sensor for the measurement of AC/DC current of 250A~350A. The sensor has a galvanic isolation between the primary conductor and the secondary electronic circuits.

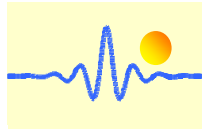
Features and Advantages	Applications
<ul style="list-style-type: none">• AC/DC current measurement• Output signal option ($\pm 5V$ AC/DC)• 35mm DIN Rail• High isolation between primary and secondary circuits• No insertion losses• Split Core, easy installation	<ul style="list-style-type: none">• Photovoltaic equipment• Battery banks, such as, monitoring load current and charge current, verifying operation• Transportation, measuring traction power or auxiliary loads• Phase fired controlled heaters• Directly connect to PLC• Sense motor stalls and short circuits

Specifications

Rated input current (DC current calibration)	250A, 300A, 350A
Output signals	$\pm 5V$ AC/DC
Power supply	+24V DC
Measuring accuracy	$\pm 1.0\%$
Linearity (10% - 100%), 25°C	$\leq \pm 0.5\%$
Zero offset voltage	$\pm 25mV$
Hysteresis error	$\pm 10mV$
Thermal drift of offset voltage	$\leq 400PPM/^\circ C$
Galvanic isolation	6 kV AC, 50Hz, 1min
Isolation resistance	$\geq 100M\Omega$
Response time	$\leq 3\mu s$
Frequency range	DC ~ 10kHz
di/dt following accuracy	50A/ μs
Overload capacity	20 times
Current consumption	$\leq 50mA$
Output load	Voltage output : $\geq 2k\Omega$
Mounting	35mm DIN Rail
Case style and Window size	WLY with aperture $\varnothing 25mm$
Operating temperature	$-25^\circ C \sim +70^\circ C$
Storage temperature	$-45^\circ C \sim +85^\circ C$
Relative humidity	$\leq 90\%$
Mean Time Between Failures (MTBF)	$\geq 100k$ hours

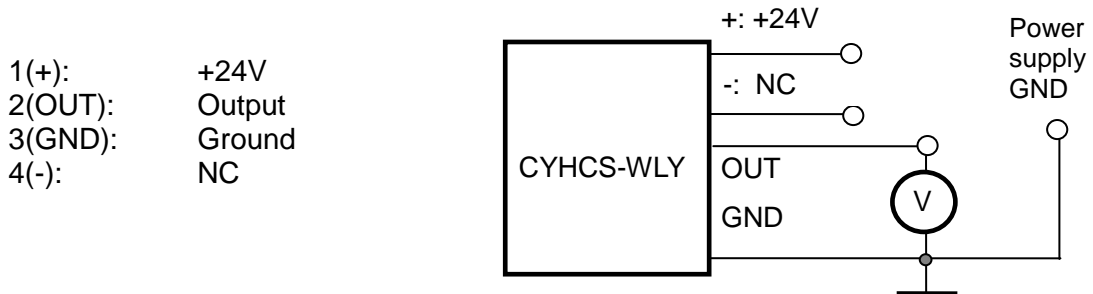
Definition of Part number:

Input current 250A: CYHCS-WLY-250A-14
Input current 300A: CYHCS-WLY-300A-14
Input current 350A: CYHCS-WLY-350A-14



CONNECTIONS

The current carrying cable must pass through the window. The phase of output is the same as that of the current passing the window in the direction of the arrow indicated on the case.



Relation between Input and Output:

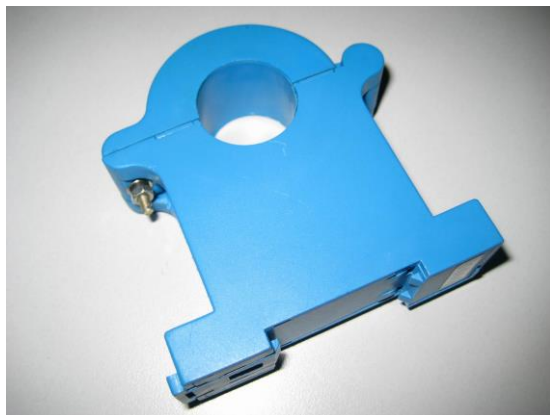
Sensor CYHCS-WLY-300A-14	
Input current (A)	Output voltage (V)
-300	-5
-150	-2.5
0	0
150	2.5
300	5

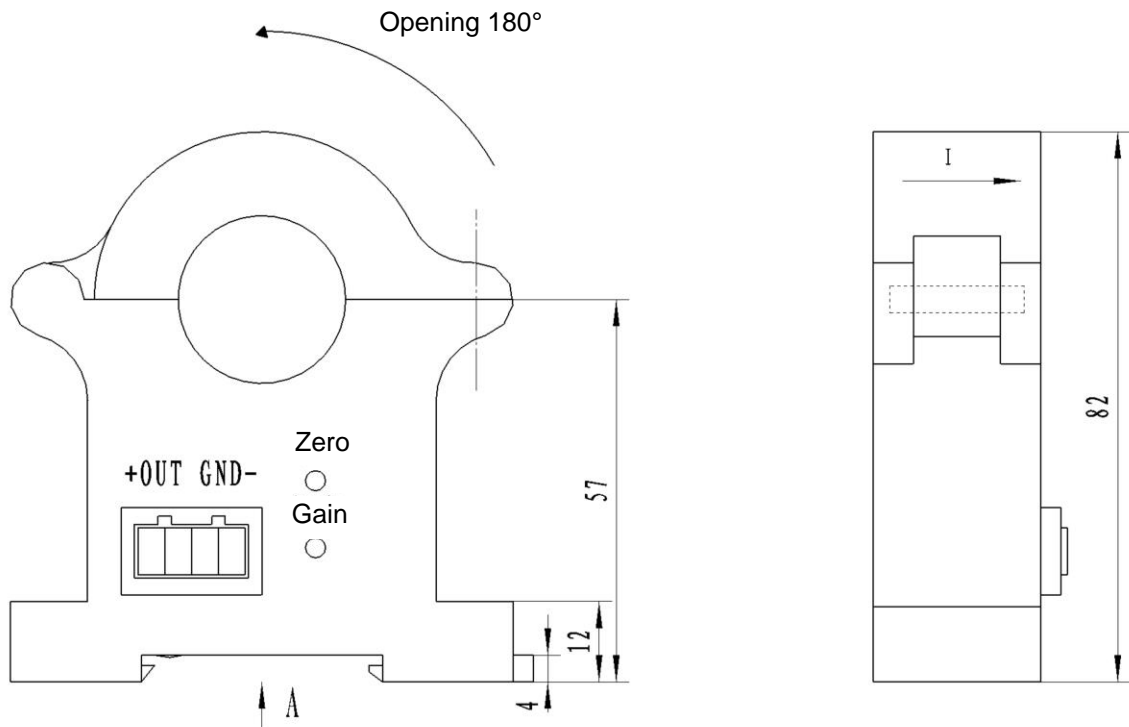
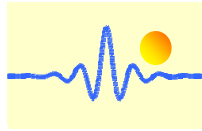
Notes:

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 case.

DIMENSIONS (mm)

LxWxH: 74mm x 83mm x 25mm
Window Size: 25mm
35mm DIN Rail





Pin Arrangement:

- +: V+
- : NC
- OUT: Output
- GND: Ground

