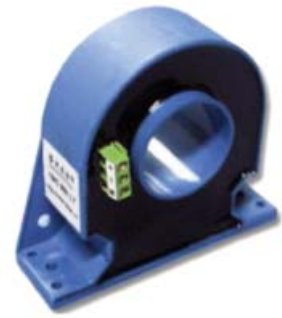




## Current Sensors

# CYHCS-D8

Solid Core Hall Effect AC/DC Current Sensor



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
<ul style="list-style-type: none"> <li>• Excellent accuracy</li> <li>• Very good linearity</li> <li>• Small size and encapsulated</li> <li>• Less power consumption</li> <li>• Current overload capability</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Photovoltaic equipment</b></li> <li>• General Purpose Inverters</li> <li>• AC/DC Variable Speed Drivers</li> <li>• Battery Supplied Applications</li> <li>• Uninterruptible Power Supplies</li> <li>• Switched Mode Power Supplies</li> </ul>

## ELECTRICAL DATA

Part number	CYHCS-D8-500A	CYHCS-D8-1000A
Nominal input current	500A	1000A
Measuring range	800A	0-1500A ~ 0-2000A
Turns ratio	1:5000	1:5000
Measuring resistance	with Vc=±15V, @±500Amax, 0-60Ω, @±800Amax, 0-12Ω,	with Vc=±15V, @±1000Amax, 0-15Ω, @±1200Amax, 0-4Ω
	with Vc=±24V, @±500Amax, 5-150Ω, @±800Amax, 5-65Ω	with Vc=±24V, @±1000Amax, 5-55Ω, @±1500Amax, 5-24Ω @±2000Amax, 5-16Ω
Nominal output current	100mA ± 0.5%	200mA ± 0.5%
Supply voltage	±15VDC ~ ±24VDC	
Current consumption	≤28mA + Output current at Vc=±15V	
Galvanic isolation	50Hz, 1min, 6KV	
Secondary internal resistance	Ta=25°C, 40 Ω	

## ACCURACY DYNAMIC PERFORMANCE

Zero offset current Ta=25°C	< ±0.4mA
Magnetic Offset current IP→0	< ±0.2mA
Thermal drift of offset current	IP=0, Ta=-40°C ~ +85°C, ±0.8mA
Response time	<1μs
Linearity	≤0.1%FS
Accuracy at +25°C	± 0.5% FS
Bandwidth(-3dB)	DC...150kHz
di/dt	>100A/μs

## GENERAL DATA

Operating temperature	-40°C ~ +85°C
Storage temperature	-40°C ~ +125°C
Unit weight	510g

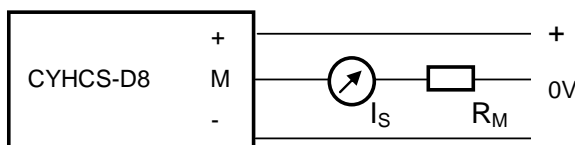
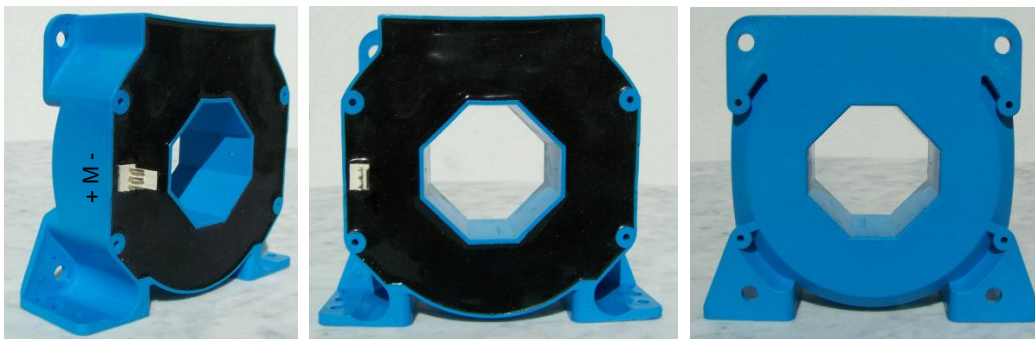
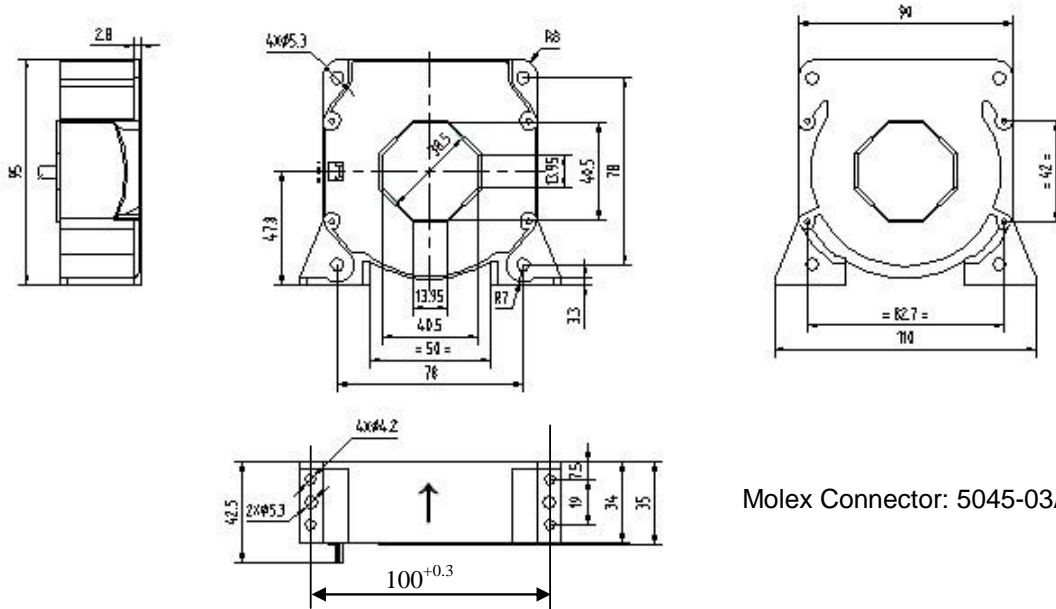
Products constantly update. All specifications are subject to change without notice.  
For more information on this product, please contact:

PC&S, Inc. at +1 (800) 523-9194 or +1 (973) 448-9400

www.pc-s.com

# CYHCS-D8 Current Sensor

## Dimensions (mm)



### Pin Definition:

- + +15~+24VDC
- -15~-24VDC
- M: Output current

## Operating instructions

1. Connect the terminals of power source, outputs respectively and correctly, never make wrong connection for DC current.
2. Temperature of the primary conductor should not exceed 100 °C.
3. Dynamic performances (di/dt and the response time) are the best with a single bar completely filling the primary hole.
4. In order to achieve the best magnetic coupling, the primary windings have to be wound over the top edge of the device.



www.pc-s.com

For more information and certifications, please contact:

Panel Components & Systems, Inc. ■ Phone: (800) 523-9194 ■ info@pc-s.com

Main Office:

Stanhope, NJ

Phone: (973) 448-9400