

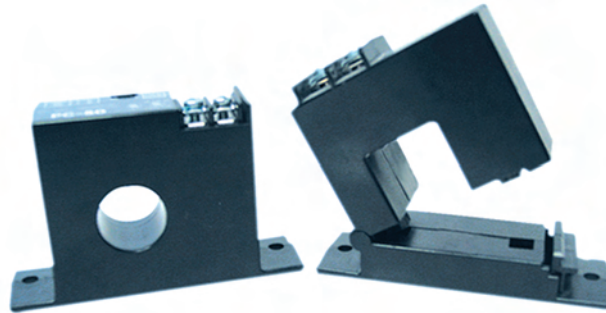
Model PC and PCS

Current Sensors

AC Current Sensors

Description

The PC/PCS Series current sensors accurately measure sinusoidal AC current and provide a 4-20 mA DC output proportional to the RMS value. They are loop powered requiring only a two wire connection. The PCS-50 and PCS-200 clamp over existing wiring for easy installation.



Features

- UL Listed • Loop Powered • Range Selected on Sensor
- Only Requires Two Wire Connection • Features Split Core for Easy Installation

Electrical Specifications

	Units	PC-50	PC-200	PCS-50	PCS-200
Current Range (1)	A AC rms	50	200	50	200
Output (2)	mA DC		4 to 20		
Frequency Range	Hz		20 to 100		
Supply Voltage (3)	VDC		5 to 40		
Accuracy	±% Full Scale (FS)		0.5		
Repeatability	±% FS		0.1		
Linearity	±% FS	0.1	0.1	0.3	0.3
Response time (Max.)	ms		300		
Ripple and Noise (Max.)	mV Peak to Peak		8		
Output Current Limit (4)	mA		40 Max.		
Internal Protection		Reverse voltage protection, High over-current capability			
Dielectric test (6)	kV		5		

General Information

Operating Temperature (5)	°C	-20 to +50			
Aperture Opening	inches(mm)	0.73 (18.5)	0.73 (18.5)	0.85 (21.6)	0.85 (21.6)
Weight	grams	92	92	121	121
Mounting		Panel mount via two #6 screws			
Package		ABS plastic case meets UL flammability rating 94V-0			

Notes:

1. Refer to Table 1 for choice of current ranges.
2. Refer to Table 2
3. Minimum voltage is 5 volts (for the sensor) plus voltage dropped across total load resistance when sensor is at 20 mA. Example: 20 mA will drop 16 volts across 800 ohms total load resistance. 16 volts plus 5 volts equals 21 volts minimum requirement.
4. Sensor self-limits output current to 40 mA maximum.
5. The UL approval is for an operating temperature range of -10°C to +40°C.
6. The dielectric test consists of 5.0 kVac 60 Hz for one minute between a bare 0.8 inch diameter conductor (located concentrically through the aperture) and the output of the sensor.

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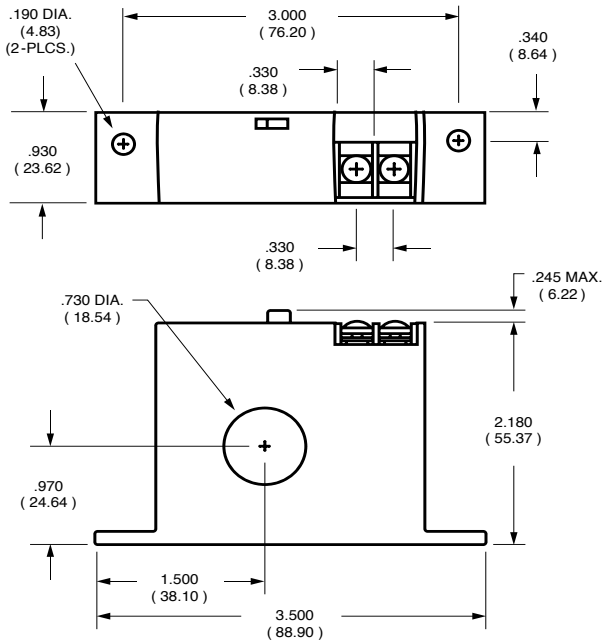


Mechanical Dimensions

All dimensions are in inches (millimeters)

Models PC and PCS

PC



PCS

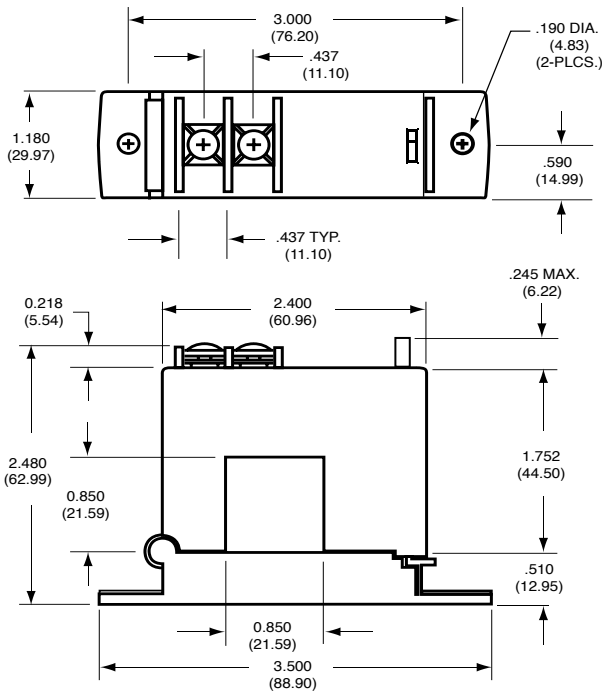
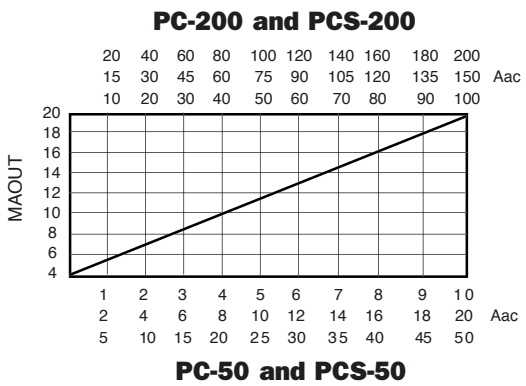


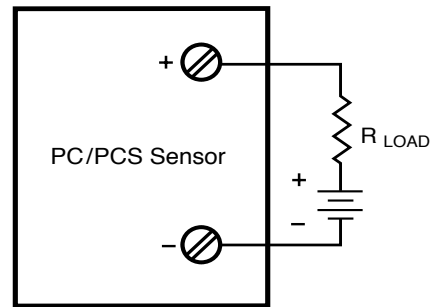
Table 1

Model	Range	Jumper	Maximum Continuous Currents
PC-50	0 to 10 Amps	None	80 Amps
PCS-50	0 to 20 Amps	Mid	110 Amps
	0 to 50 Amps	High	175 Amps
PC-200	0 to 100 Amps	None	200 Amps
PCS-200	0 to 150 Amps	Mid	300 Amps
	0 to 200 Amps	High	400 Amps

Table 2



Connection Schematic



Connection to sensor is made via two 6-32 screw terminals

