

Model PCL

AC Current Transducer
0-75 Amps ac to produce 4-20 mA dc

Operating Range

Input 5 thru 75 Amps ac
Output: 4-20 mA dc.

Frequency

50-60 Hz.

Ambient Temperature Range

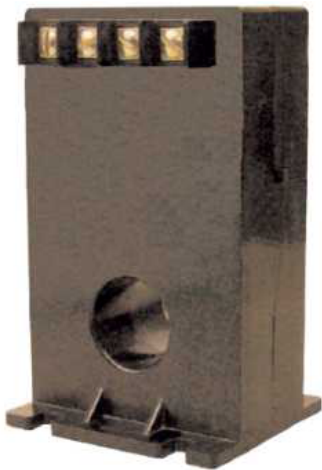
Effect on accuracy + 0.02%/°C
Operating: -30 °C to +60 °C
Storage: -55 °C to +85 °C

Insulation Level

600 Volts, 10 kV BIL full wave

Accuracy

+ 0.5% F.S. maximum.
1% max. peak ripple on output.
Response Time: <150 ms (10 % to 90 %)
Output load (R_L): 0-1000 Ω.
Maximum output: 30 mA dc.
Supply Voltage Range: 120 Vac + 10 %.
Terminal are brass studs No. 10-32
with one flatwasher, lockwasher and
regular nut.
Approximate weight: 1.0 lbs.



REGULATORY AGENCY APPROVALS

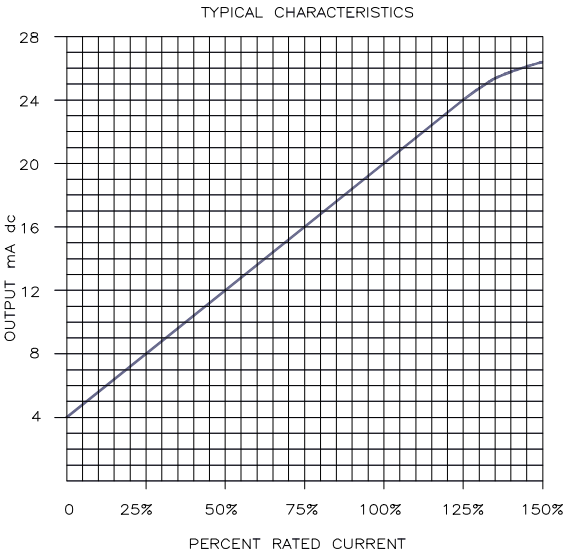


The PCL transducer accurately converts a sinusoidal ac input current to a proportional dc output current. The high performance integrated circuit amplifiers achieve a constant current output, insensitive to a variable impedance load. This allows the PCL to be easily applied to remote instrumentation, motor control and energy management installations. The output signal (4 to 20 mA dc) can be transmitted over long distances with no loss in accuracy. Model numbers PCL 20 and PCL 75 have been provided with a range selector switch for customer selectable current ranges. The input circuit is average responding. The output is calibrated to read true RMS for a pure sinus waveform.

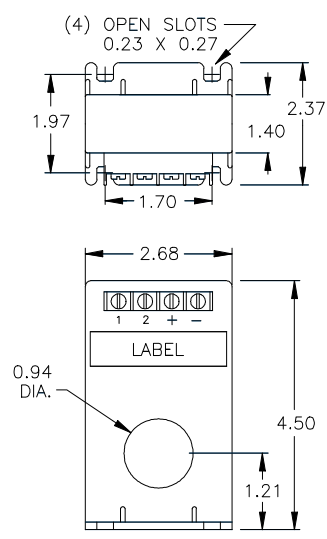
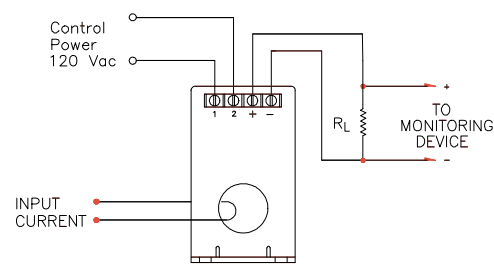
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Model	Input Current
PCL 5	0 - 5
* PCL 20	0 - 10, 0 - 15, 0 - 20
* PCL 75	0 - 25, 0 - 50, 0 - 75
See Next Page for 0-100 thru 0-600	

* Switch selectable current ranges.



Model PCL - Typical Connection Diagram



Do not apply around or remove from Hazardous LIVE conductors.

Cleaning

Remove dust with a damp cloth. Do not spray with any chemicals.

Caution

Proper safety precautions must be followed during installation by a trained electrician. Never install or remove while bus is energized. Protective equipment must be used if hazardous parts in the installation where measurement is to be carried out could be accessible.

Application

Calculating	I_m = ac Amps measured I_o = mA dc out of PCL
Rated Input	CT primary Rating (when monitoring a CT)
Rated Input	PCL Primary Rating (when monitoring direct)
Where:	I_m = Rated input X $\frac{(I_o - 4)}{16}$