

## Description

The OM-ACLCT is a loop-powered, Current Transducer for measuring 50/60Hz alternating current. It has a selectable input current range of 0-2 amps or 0-5 amps. This transducer accurately converts measured AC current to 4-20 milliamp signal, which can be monitored by an intelligent electronic device (IED) such as the OPTIMIZER. The milliamp signal power supply voltage can be 15 – 40 volts DC. The current measurement is accurate to within +/-2% of full scale in the Low Current range and within +/-1% of full scale in the High Current range.

## Tools Needed

Straight-Blade Screwdriver  
Wire Strippers

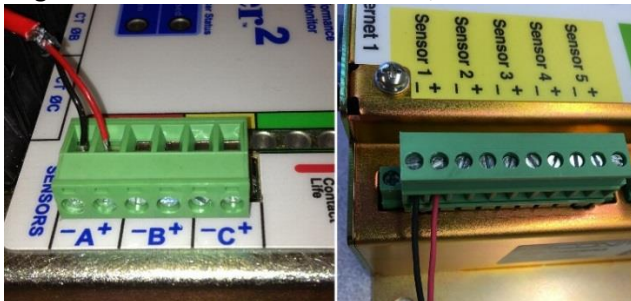
## Wiring

Cut twisted-pair signal cable to length and strip both ends. (Shielded twisted-pair cable can be used, but not required.) Connect the positive wire (red) to the “+” connection and the negative wire (black) to the “-” connection on the transducer as shown.



Feed the current-carrying wire through the aperture in the transducer.

At the OPTIMIZER end of the signal cable, connect the positive wire to the “+” sensor input connection and the negative wire to the “-” connection, as shown below:



## Select Current Range

The OM-ACLCT has two selectable amperage ranges: Low (0-2 amps) and High (0-5 amps). These are selected by a push-jumper, next to the output terminals:



## OPTImizer<sup>2</sup> Programming

On the OPTImizer<sup>2</sup> Configuration Page, click “Edit” in the upper right corner. Select “Voltage” from the Sensor Signal menu:

Contact Life Warning Limit	Off
Trip Time Alarm Limit	Analog Compensated Pressure
Arc Time Alarm Limit	Analog Density
Clearing Time Alarm Limit	Digital Density
Travel Time Alarm Limit	Temperature
Operations Count Alarm Limit	Voltage
No Operations Alarm Limit	Current
Restrike Alarm	Heater Monitor UPSM-241
	LenSense 2TC/105
	LenSense 2TC/106
	LenSense 2TC/108
	LenSense 2TC/115
	LenSense 2TC/117
	LenSense 2TC/118
	LenSense 2TC/822
Signal	Current

Four new fields will appear:

Sensor A			
Signal	Current		
Signal Low	4.0	4.0 .. 19.0 mA	
Signal Low Represents	0	0.0 .. 299.0 A	
Signal High	20.0	Signal Low + 1.0 .. 20.0 mA	
Signal High Represents	30	Signal Low Represents + 1.0 .. 300.0 A	

Program the Signal Low to “4.0”mA.  
Program the Signal Low Represents to “0.0” amps.  
Program the Signal High to “20.0”mA.  
Program the Signal High Represents to the amperage range selected, “2” or “5” amps.

The Low Current and High Current Alarm Limits can be set as desired:

Current Monitor		
Low Current Alarm Limit	0.0	0.0 .. 300.0 A
High Current Alarm Limit	0.0	0.0 .. 300.0 A

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When programming is complete, click the “Yes” button in the upper right corner to confirm the configuration changes. The password will need to be given, if not already entered. Click “Yes” again to confirm the changes.



When the OPTImizer<sup>2</sup> is set and running, the measured current and alarm status will be shown on the Status Page in the Current Monitor section:

Current Monitor	Channel A
Current	17.2
Alarm Status	
Low Current	Ok
High Current	Ok
Sensor Malfunction	Ok

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## OPTIMIZER3 Programming

On the OPTIMIZER3 Configuration Page, click on “Sensors >>”. The Sensor menu will open. Click on the “Off” for the sensor input to be configured (1-5, A, B, C). A pull-down menu will appear. Select “Current” from this menu. Current configuration fields will appear.

Program the Signal Low to “4.0”mA.  
 Program the Signal Low Represents to “0.0” amps.

Program the Signal High to “20.0”mA.  
 Program the Signal High Represents to the amperage range selected, “2” or “5” amps.

If desired, Low and High Current alarm limits can be programmed.

Click the “SAVE” button at the top of the Configuration Page to save all programming changes:



When the OPTIMIZER3 is set and running, the measured current will be shown on the Sensors Page:

