

Description

The OM-ACCT is a loop-powered, split-core Current Transducer for measuring 50/60Hz alternating current. It has a selectable input current range of 0-10, 0-20 and 0-40 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 OPTimizer². The milliamp signal power supply voltage must be 12 – 30 volts DC. The current measurement is accurate to within +/-2% from 10% to 100% of full scale.

Tools Needed

Straight-Blade Screwdriver
Wire Strippers

Wiring

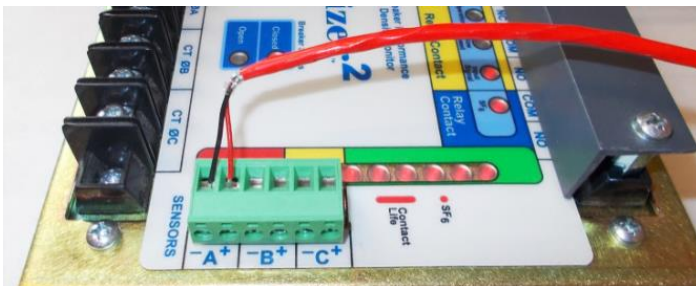
Cut twisted-pair signal cable to length and strip both ends. (Shielded twisted-pair cable can be used, but not required.)

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. (The Transducer’s split-core can be opened to allow clamping around a fixed conductor.)

At the OPTimizer² end of the signal cable, connect the positive wire to the “+” sensor input connection and the negative wire to the “-” connection, as shown below:



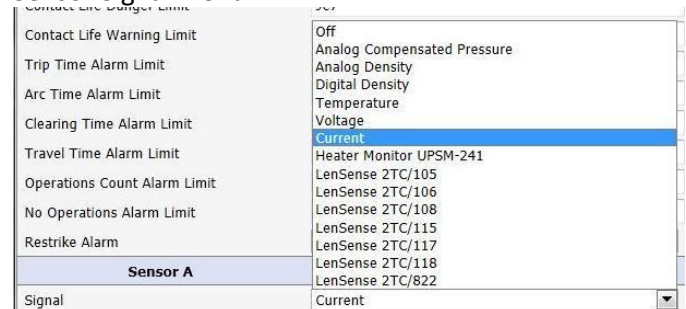
Select Current Range

The OM-ACCT has three selectable amperage ranges: 10, 20 and 40 amps. These are selected by a slide switch, next to the output terminals:



OPTimizer² Programming

On the OPTimizer² Configuration Page, click “Edit” in the upper right corner. Select “Voltage” from the Sensor Signal menu:



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, “10”, “20” or “40” 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 OPTImizer² 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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