

### CIRCULAR WINDOW MODELS

CURRENT RANGE	MODEL NUMBER	TYPICAL OUTPUT	SENSOR SIZE
0 to 500A	CTL-601FS/500	40mV	F
0 to 600A	CTL-601FS/600	50mV	F
0 to 800A	CTL-202FS/800	40mV	F
0 to 1000A	CTL-202FS/1000	50mV	F
0 to 1000A	CTL-202EES/1000	100mV	EE
0 to 1500A	CTL-202FS/1500	75mV	F
0 to 1500A	CTL-202EES/1500	150mV	EE
0 to 2000A	CTL-202FS/2000	100mV	F
0 to 2000A	CTL-202EES/2000	200mV	EE
0 to 2500A	CTL-302EES/2500	85mV	EE
0 to 3000A	CTL-302EES/3000	100mV	EE

Split core standard on all models.



Window Size  
 F ..... 2 1/4"  
 EE ..... 4 1/4"

### ORDERING INFORMATION

Example: 2000Amp split-core current sensor with extended temperature range and 4 1/4" window.

#### CTL-202EETS/2000

(Order in combination with appropriate CTA Signal Conditioner)

### SPECIFICATIONS

#### INPUT

Current Range ..... up to 2000A models ..... dc/RMS  
 2500A & above ..... dc/peak ac  
 Over-current (without damage) ..... 50 X rating  
 Resistance ..... 23Ω ±5Ω  
 Excitation Current ..... 200mA

#### OUTPUT

Typical Output (@ 200mA excitation) ..... Nominal ±30%  
 Response Time (to 90% F.S.) ..... 50μs, typical  
 Resistance ..... 25Ω ±15Ω  
 Initial Offset ..... <±2mV

#### DIELECTRIC TEST

Conductor Through Window to Output ..... 2200Vac  
 Suitable for installation on 600Vac or 850Vdc uninsulated bus.

#### ACCURACY & LINEARITY

When Calibrated with CTA ..... ±0.5% F.S.

#### TEMPERATURE

Operating Range  
 Standard ..... -10°C to +40°C  
 Extended ..... Add Suffix "T" ..... -40°C to +65°C  
 Effect ..... ±1% F.S.

#### CABLE LENGTHS

All models are supplied with detachable 8-foot cable.  
 Longer cables are available - Consult factory.

#### NOTES:

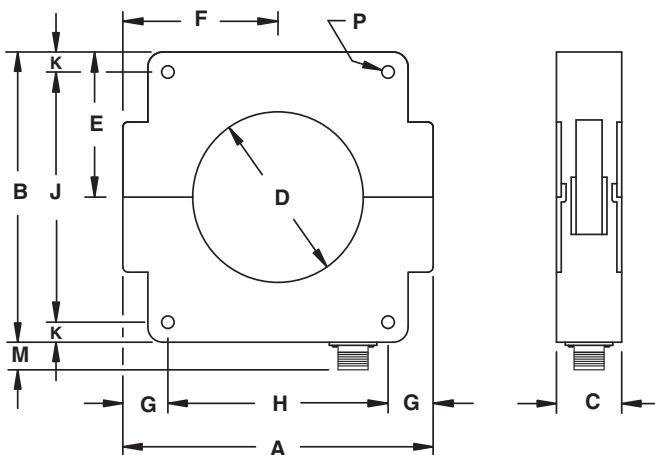
CTL specifications are for unidirectional operation.  
 For bidirectional, add suffix "Y122". (use with direct model CTA)  
 CTA signal conditioners provide the excitation current (instrument power) that the CTL sensor requires, as well as amplifying the low-level (mV) signal into a more typical signal.  
 See CTA spec sheet for details.

**5 YEAR WARRANTY**



Measuring Equipment 7N93

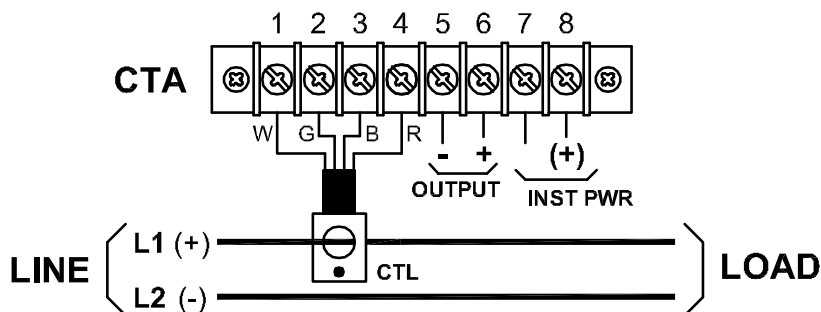
### CASE DIMENSIONS EE & F



SENS. SIZE	SENSOR DIMENSIONS (inches)												WT LBS.
	A	B	C	D	E	F	G	H	J	K	M	P	
F	5 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>4</sub>	1 <sup>5</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>4</sub>	2 <sup>5</sup> / <sub>8</sub>	2 <sup>11</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>8</sub>	9 <sup>9</sup> / <sub>16</sub>	5 <sup>5</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>4</sub>	2.8
EE	7 <sup>3</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>4</sub>	1 <sup>5</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>4</sub>	3 <sup>5</sup> / <sub>8</sub>	3 <sup>7</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	6 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	5 <sup>5</sup> / <sub>8</sub>	5 <sup>5</sup> / <sub>16</sub>	4.5

**CONNECTION DIAGRAM**

<u>PIN</u>	<u>COLOR</u>	<u>SIGNAL</u>
A.....	WHITE.....	OUTPUT (-)
B.....	GREEN.....	OUTPUT (+)
C.....	BLACK.....	EXCITATION (-)
D.....	RED.....	EXCITATION (+)
E.....	SHIELD.....	SHIELD



Dwg. # 0902-00922-B Rev A

“Red dot” side of CTL must face positive supply.  
 All shields must be tied to terminal 3.  
 DC Instrument Power is positive on terminal 8.

**INSTALLATION AND OPERATION**

**INSTALLATION INSTRUCTIONS**

1. Installation should be performed by qualified electricians only!
2. Make sure electrical service is disconnected before making any electrical connections.
3. Branch circuit protection is required to be provided in accordance with the National and Local codes of the inspection authority.
4. Route wires as required and secure to terminals per connection diagram on this sheet and on the unit.
5. Transducers are suitable for installation on 600Vac lines.
6. To prevent contact with live circuits, when installed on a bare bus bar, the transducer is required to be mounted in an enclosure that requires the use of a tool for access. When installed on an insulated cable this second enclosure is not required.

**OPERATING INSTRUCTIONS**

1. This unit is intended for indoor use at altitudes up to 2000 meters.
2. Transient overvoltages according to Installation Category (overvoltage category) II, pollution Degree 2.
3. If cleaning of the exterior surface is necessary, de-energize all services of supply (both measuring and instrument power circuits) and brush with a soft brush or blow off with low-pressure air. Use appropriate eye protection. Not suitable for hose-down cleaning.
4. Maximum relative humidity 80 percent for temperatures up to 31°C decreasing linearly to 50 percent relative humidity at 40°C.
5. Maximum operating temperature range is -20°C to 60°C.



UL approved for USA and Canada



Both Direct (dc) and Alternating (ac) current

**WARRANTY STATEMENT**

Ohio Semitronics Inc. warrants this unit to be free of defects in material and workmanship for a period of five years from date of shipment. This unit must not be used in any manner other than as specified in this document.