

## 5Aac - 2000Aac RANGES

### DESCRIPTION

The CTC & CTD units provide a self-powered 5Vdc, 10Vdc, or 1mAdc output, or a loop-powered 4-20mAdc output proportional to window currents, with input ranges up to 2000 Amperes at 50-400Hz. The dc output is proportional to the average absolute value of the input and is calibrated with the sine wave inputs.

### FEATURES

- Insensitive to polarity
- Easy to install
- Accurate & reliable 50-400Hz.

### APPLICATIONS

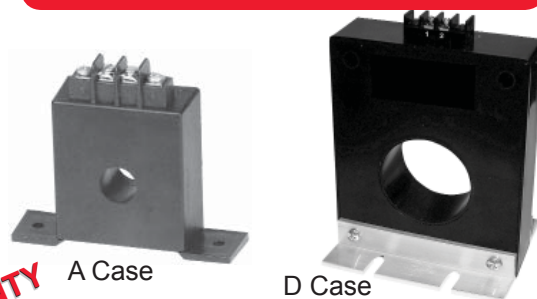
- Designed for applications requiring accurate current measurements.

INPUT AC AMPS	STANDARD OUTPUT MODEL CTC-				CASE SIZE
	0-5Vdc	0-10Vdc	0-1mAdc	4-20mAdc*	
0 - 5	005CX5	005C	-	005E2	A
0 - 10	010CX5	010C	-	010E2	A
0 - 15	015CX5	015C	-	015E2	A
0 - 20	020CX5	020C	-	020E2	A
0 - 25	025CX5	025C	-	025E2	A
0 - 30	030CX5	030C	-	030E2	A
0 - 35	035CX5	035C	-	035E2	A
0 - 40	040CX5	040C	-	040E2	A
0 - 50	050CX5	050C	-	050E2	A

INPUT AC AMPS	STANDARD OUTPUT MODEL CTD-				CASE SIZE
	0-5Vdc**	0-10Vdc**	0-1mAdc	4-20mAdc*	
0 - 50	050CX5	050C	050A	050E2	B
0 - 100	100CX5	100C	100A	100E2	B
0 - 150	150CX5	150C	150A	150E2	B
0 - 200	200CX5	200C	200A	200E2	B
0 - 300	300CX5	300C	300A	300E2	B
0 - 400	400CX5	400C	400A	400E2	B
0 - 500	500CX5	500C	500A	500E2	B
0 - 600	600CX5	600C	600A	600E2	B
0 - 800	800CX5	800C	800A	800E2	B
0 - 1000	1000CX5	1000C	1000A	1000E2	B
0 - 200	200CX5Z03	200CZ03	200AZ03	200E2Z03	C
0 - 300	300CX5Z03	300CZ03	300AZ03	300E2Z03	C
0 - 400	400CX5Z03	400CZ03	400AZ03	400E2Z03	C
0 - 500	500CX5Z03	500CZ03	500AZ03	500E2Z03	C
0 - 600	600CX5Z03	600CZ03	600AZ03	600E2Z03	C
0 - 800	800CX5Z03	800CZ03	800AZ03	800E2Z03	C
0 - 1000	1000CX5Z03	1000CZ03	1000AZ03	1000E2Z03	C
0 - 1200	1200CX5Z03	1200CZ03	1200AZ03	1200E2Z03	C
0 - 1500	1500CX5Z03	1500CZ03	1500AZ03	1500E2Z03	C
0 - 2000	2000CX5Z03	2000CZ03	2000AZ03	2000E2Z03	C

INPUT AC AMPS	STANDARD OUTPUT MODEL CTC-				CASE SIZE
	0-5Vdc	0-10Vdc	0-1mAdc	4-20mAdc*	
0 - 100	100CX5	100C	-	100E2	D**
0 - 150	150CX5	150C	-	150E2	D**
0 - 200	200CX5	200C	-	200E2	D**
0 - 300	300CX5	300C	-	300E2	D**
0 - 400	400CX5	400C	-	400E2	D**
0 - 500	500CX5	500C	-	500E2	D**
0 - 600	600CX5	600C	-	600E2	D**
0 - 800	800CX5	800C	-	800E2	D**
0 - 1000	1000CX5	1000C	-	1000E2	D**

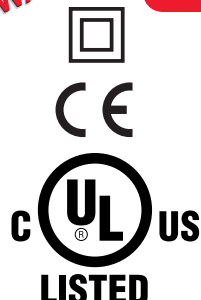
### CTC CASE STYLES



### CTD CASE STYLES



**5 YEAR WARRANTY**



**LISTED**  
Measuring Equipment  
7N93  
(D case not included in UL/CE listing.)

### ORDERING INFORMATION

Example: 25 Amps ac Input with 4-20mA loop-powered Output  
**CTC-025E2**

### SPECIFICATIONS

**INPUT**  
Current ..... See Table  
Current Overload ..... Continuous ..... 1.3 X Rating  
Transient ..... 5 X Rating (10s/hr)  
Frequency Range ..... CTC ..... 50-60Hz  
CTD ..... 50-400Hz

**DIELECTRIC TEST**  
Input/Output/Case ..... 1800Vac

**INSTRUMENT POWER**  
"A", "C", "CX5" models ..... Self-Powered  
"E2" models ..... 24Vdc, ±4Vdc, loop powered

**OUTPUT**  
Type ..... See Table  
Loading ..... "A" models ..... 0-10kΩ  
"C", "CX5" models ..... >10MΩ  
"E2" models ..... 0-500Ω  
Response Time (to 90% F.S.) ..... Typical 300ms  
5A & 10A models ..... <750ms

**ACCURACY** (linearity, setpoint, repeatability @ 60Hz)  
CTC ..... 5A-50A models ..... ±0.25% F.S.  
All others ..... ±0.5% F.S.  
Output Ripple ..... All models ..... <±0.5% F.S.

**TEMPERATURE**  
Operating Range ..... -20 to 60°C  
Effect ..... ±1.0% Rdg.

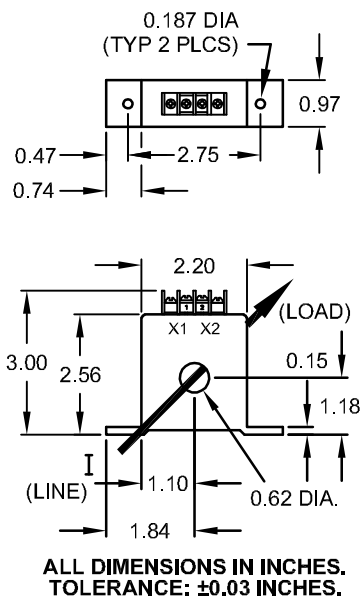
\*4-20mA loop-powered models require an external 24Vdc power supply. These models are not CE-Compliant.

\*\*CTC D-case models are not included in UL/CE listing. CTD voltage output models are not included in UL listing.

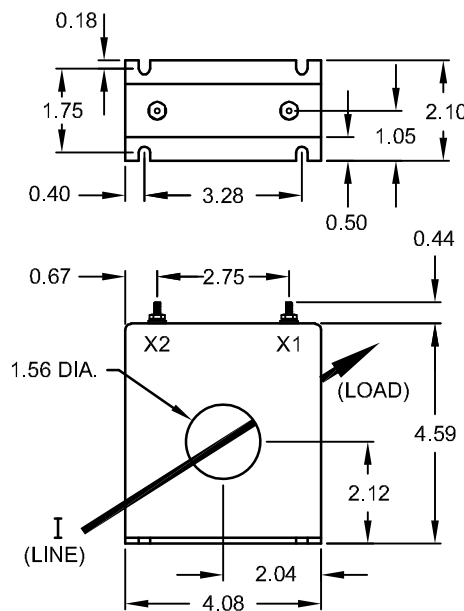
# OSI CONNECTIONS & CASE DIMENSIONS

MODEL CTC- & CTD-

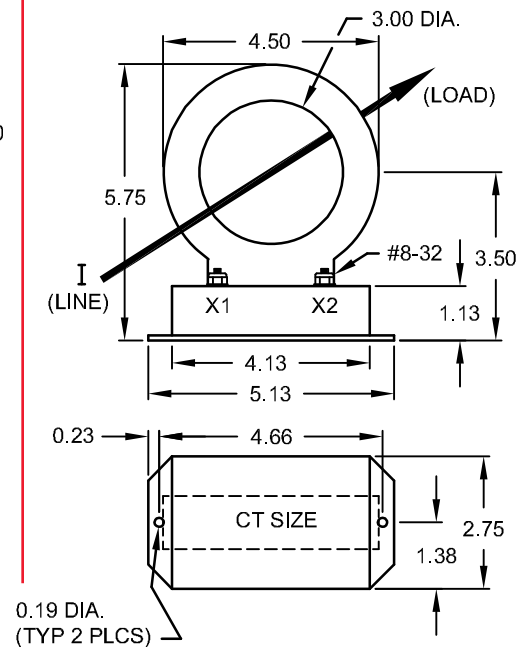
## A CASE



## B CASE



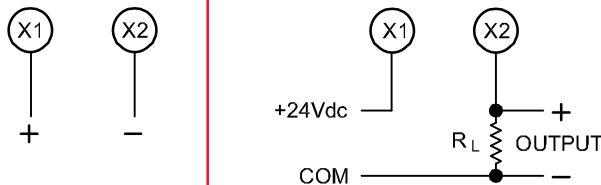
## C CASE



Dwg# 0902-00848-B Rev B

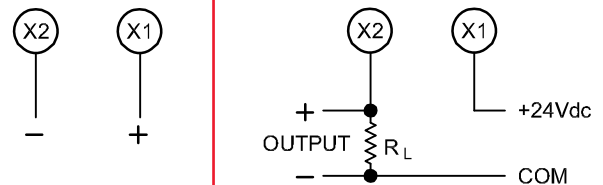
## A & C CASE CONNECTIONS

A, C, CX5 MODELS | LOOP-POWERED OPTION E2

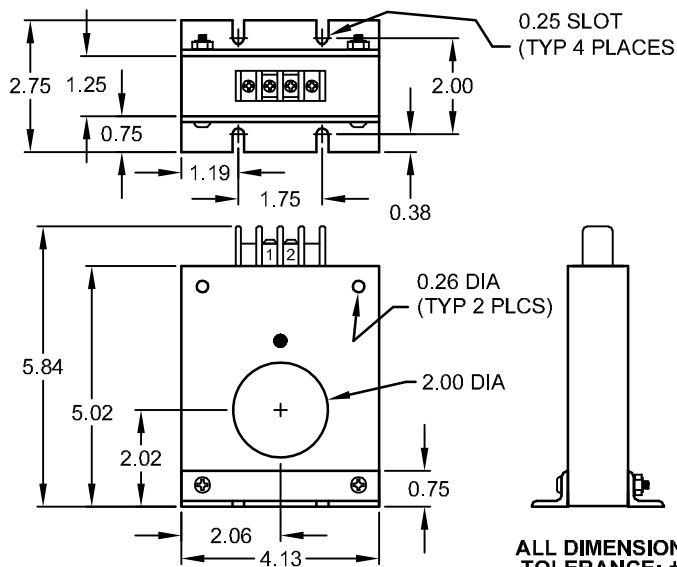


## B CASE CONNECTIONS

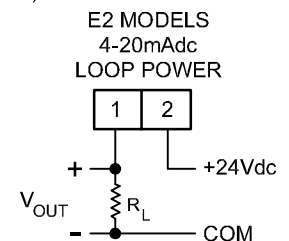
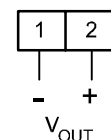
A, C, CX5 MODELS | LOOP-POWERED OPTION E2



## D CASE DIMENSIONS AND CONNECTIONS



A, C, CX5 MODELS  
5Vdc & 10Vdc  
OUTPUT



Dwg# 0902-00848-B Rev B

# OHIO SEMITRONICS, INC.

4242 REYNOLDS DRIVE \* HILLIARD, OHIO \* 43026-1264  
PHONE: (614) 777-1005 \* FAX: (614) 777-4511  
WWW.OHIOSEMITRONICS.COM \* 1-800-537-6732

**INSTALLATION INSTRUCTIONS**

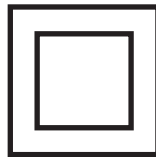
1. Installation should be performed by qualified electricians only!
2. Make sure electrical service is disconnected before making any electrical connections.
3. Branch circuit protection is required to be provided in accordance with the National and Local codes of the inspection authority.
4. Route wires 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



Equipment approved as Double Insulated



Direct 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.