

5Aac - 2000Aac RANGES

DESCRIPTION

The CTC & CTD units provide a self-powered 5Vdc, 10Vdc, or 1mAac output, or a loop-powered 4-20mAac 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

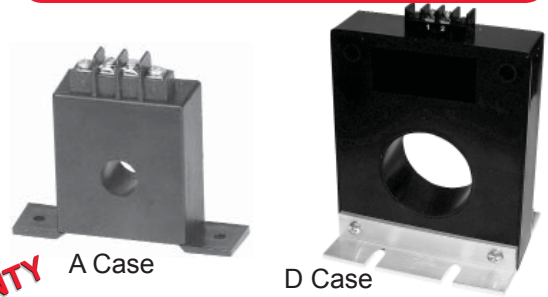
- Designed for applications requiring accurate current measurements.

| INPUT AC AMPS | STANDARD OUTPUT MODEL CTC- | | | | CASE SIZE |
|---------------|----------------------------|-------|-------|-----------|-----------|
| | 5Vdc | 10Vdc | 1mAac | 4-20mAac* | |
| 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 |

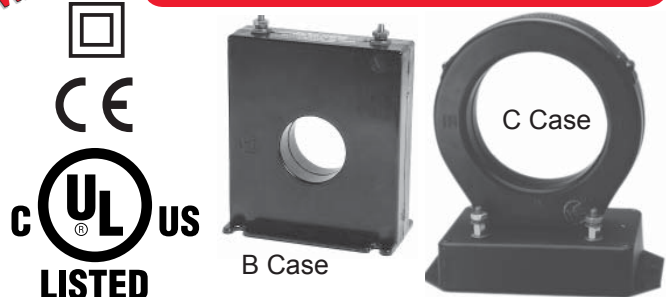
| INPUT AC AMPS | STANDARD OUTPUT MODEL CTD- | | | | CASE SIZE |
|---------------|----------------------------|----------|----------|-----------|-----------|
| | 5Vdc** | 10Vdc** | 1mAac | 4-20mAac* | |
| 0 - 50 | 050CX5 | 050C | 050A | 050E2 | B |
| 0 - 100 | 100CX5 | 100C | 100A | 100E2 | B |
| 0 - 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 |
|---------------|----------------------------|-------|-------|-----------|-----------|
| | 5Vdc | 10Vdc | 1mAac | 4-20mAac* | |
| 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

CE
UL US
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.

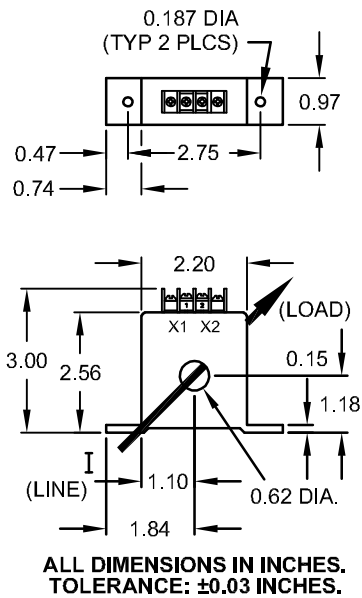
*4-20mA loop-powered models require an external 24Vdc power supply. These models are not CE-Compliant.

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

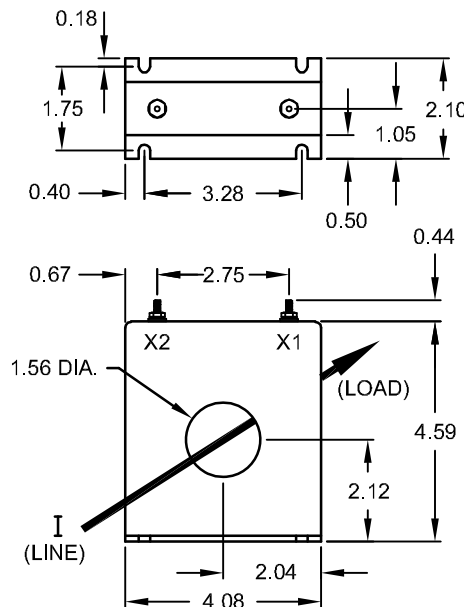
OSI CONNECTIONS & CASE DIMENSIONS

MODEL CTC- & CTD-

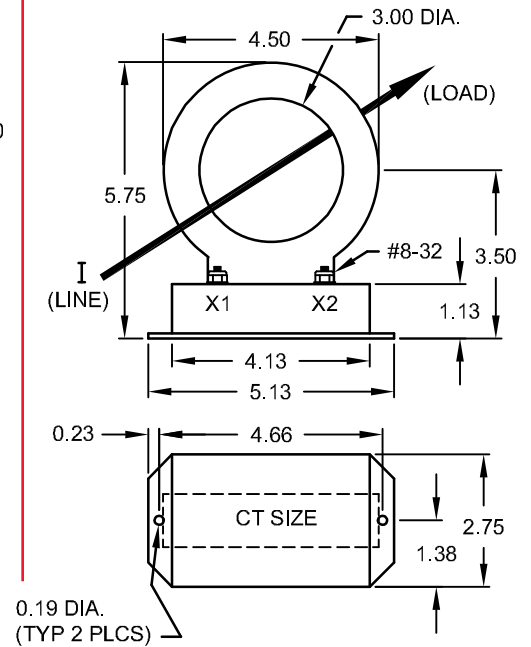
A CASE



B CASE



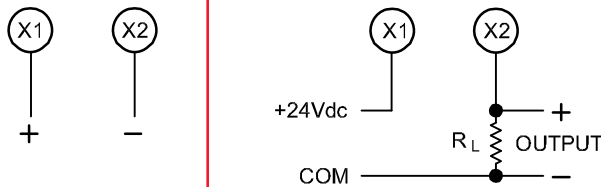
C CASE



Dwg# 0902-00848-B Rev B

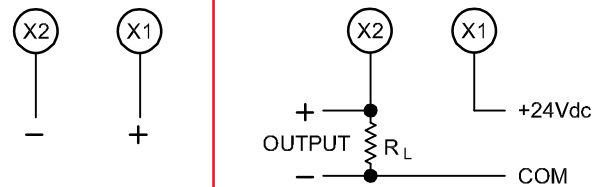
A & C CASE CONNECTIONS

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

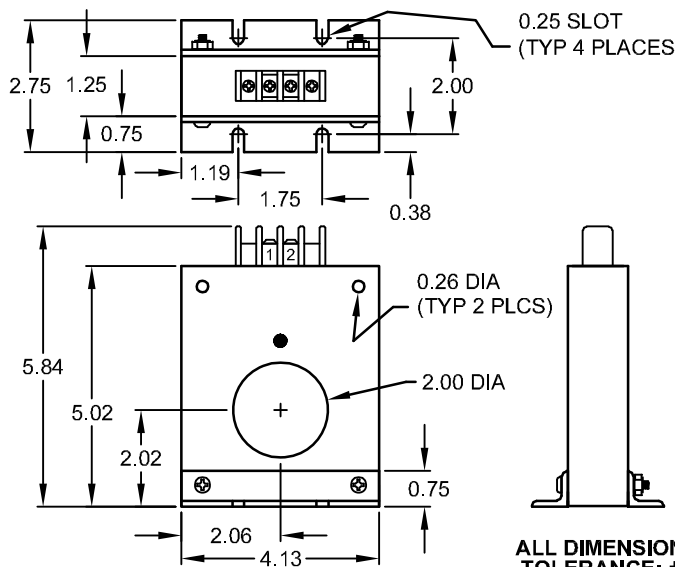


B CASE CONNECTIONS

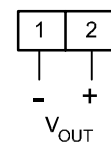
A, C, CX5 MODELS | LOOP-POWERED OPTION E2



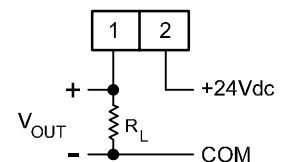
D CASE DIMENSIONS AND CONNECTIONS



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



E2 MODELS
4-20mAdc
LOOP POWER



Dwg# 0902-00848-B Rev B

OHIO SEMITRONICS, INC.

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INSTALLATION INSTRUCTIONS

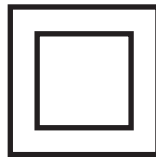
1. Installation should be performed by qualified electricians only!
2. Make sure electrical service is disconnected before making any electrical connections.
3. Branch circuit protection is required to be provided in accordance with the National and Local codes of the inspection authority.
4. Route wires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