

OSI THREE-PHASE AC CURRENT TRANSDUCER MODEL 3ACT-

DESCRIPTION

The model 3ACT is a three-phase UL-, CUL-, and CE-approved ac current transducer which provides three isolated dc outputs which are directly proportional to the three current inputs. The output is derived from the average absolute value of the input and is calibrated in terms of the RMS value of the input sine wave. Models with full-scale input ranges of 25A and higher use external sensors (CTs). With the exception of models which provide 4-20mA outputs, all models are self-powered from the measured line.

5 YEAR WARRANTY

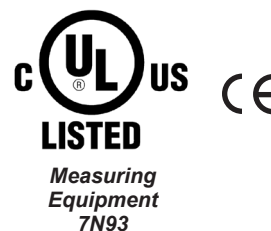
FEATURES

- Accurate, reliable current measurement
- Rugged metal construction
- Designed to withstand motor start-up transients
- Average reading calibrated RMS
- Low Cost

APPLICATIONS

- Designed for use in applications which require inexpensive current measurement.
- Designed for use in applications where UL, CUL, or CE compliance is required.

INPUT AC AMPS	SENSOR SIZE	STANDARD OUTPUT MODELS 3ACT-				
		UL, CUL & CE				UL & CUL
		0 - 1mAdc*	4 - 20mA**	0 - 10Vdc*	0 - 5Vdc*	4 - 20mA
0 - 1	INT	001A	001E2	001C	001CX5	001E
0 - 5	INT	005A	005E2	005C	005CX5	005E
0 - 10	INT	010A	010E2	010C	010CX5	010E
0 - 20	INT	020A	020E2	020C	020CX5	020E
0 - 25†	W	025A	025E2	025C	025CX5	025E
0 - 50	W	050A	050E2	050C	050CX5	050E
0 - 100	W	100A	100E2	100C	100CX5	100E
0 - 200	W	200A	200E2	200C	200CX5	200E
0 - 300	W	300A	300E2	300C	300CX5	300E
0 - 400	X	400A	400E2	400C	400CX5	400E
0 - 500	X	500A	500E2	500C	500CX5	500E
0 - 600	X	600A	600E2	600C	600CX5	600E
0 - 800	X	800A	800E2	800C	800CX5	800E
0 - 1000	Y	1000A	1000E2	1000C	1000CX5	1000E
0 - 1500	Y	1500A	1500E2	1500C	1500CX5	1500E



* "A", "C", and "CX5" models are self-powered from measured line.

** "E2" models are 4-20mA loop-powered, and require 15-24Vdc.

† Indicates two turns required through transformer window.

Standard "E" models require 115Vac instrument power.
For optional 230Vac instrument power - add suffix "- 22".

For optional "3 outputs summed" - add suffix "Y05".
(NOTE: Not UL, CUL or CE listed.)

ORDERING INFORMATION

Example: Three 200-Amp AC Inputs
with Three 4-20mA Outputs.
3ACT-200E

SPECIFICATIONS

INPUT

Frequency Range 50/60Hz
Burden 1.0VA F.S. (each input)
Current Overload (continuous)
20A model 2 X F.S. rating
All other models 1.25 X F.S. rating

DIELECTRIC TEST

Input/Output/Case 2200Vac

INSTRUMENT POWER

"E" models....Standard..... 115Vac, 50/60Hz, ±15%, 10VA
"-22" option230Vac, 50/60Hz, ±15%, 10VA
"E2" models..... 15-24Vdc loop powered
All other models Self-powered

OUTPUT

Response 400ms
Loading
"A" models (0-1mAdc) 0-10kΩ
"E" models (4-20mAdc) 0-1kΩ
"E2" models (4-20mAdc) 0-600Ω at 24V
"C", "CX5" models (0-5Vdc, 0-10Vdc) ≥10MΩ
Field Adjustable Cal. ±5%

ACCURACY

Internal sensor ±0.25% F.S. @ 60Hz
External sensor ±0.5% F.S. @ 60Hz
Includes effects of linearity and setpoint
Output Ripple <1.0% F.S.

TEMPERATURE

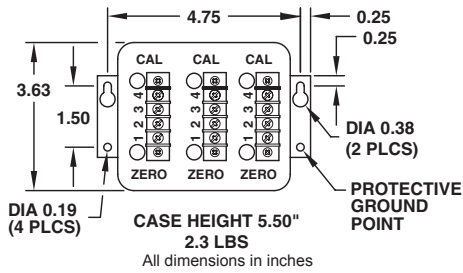
Operating Range -20°C to +60°C
Effect ±1.0% Rdg.

OHIO SEMITRONICS, INC.

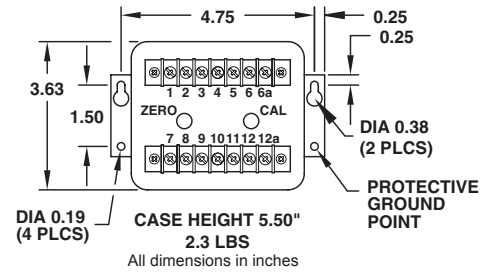
4242 REYNOLDS DRIVE * HILLIARD, OHIO * 43026-1264
PHONE: (614) 777-1005 * FAX: (614) 777-4511
WWW.OHIOSEMITRONICS.COM * 1-800-537-6732

OSI CASE DIMENSIONS & CONNECTION DIAGRAMS MODEL 3ACT-

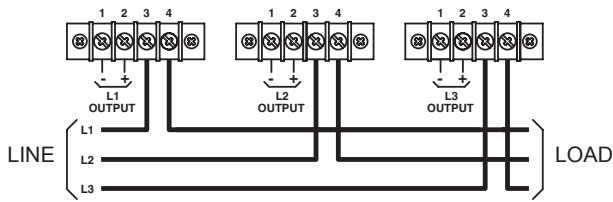
Models with A, C, CX5 or E2 Option



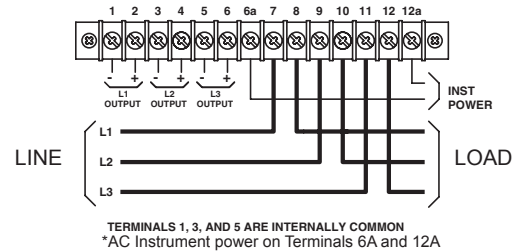
Models with E Option



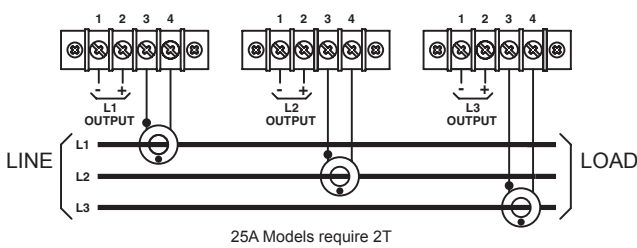
Models with A, C, & CX5 Options Internal Sensor



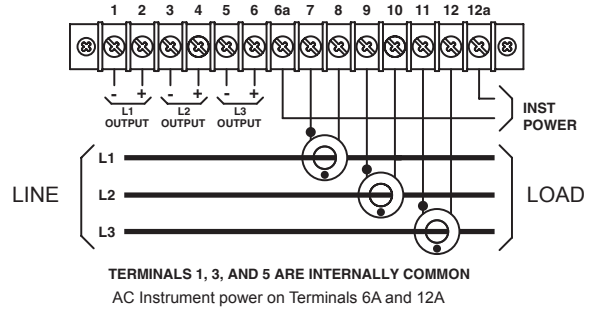
Models with E Option Internal Sensor



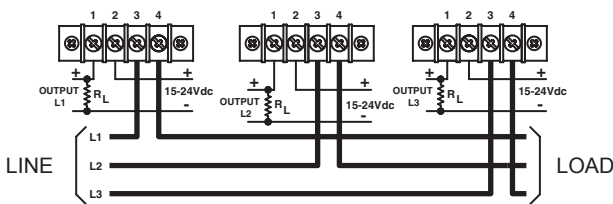
Models with A, C, & CX5 Options External Sensor



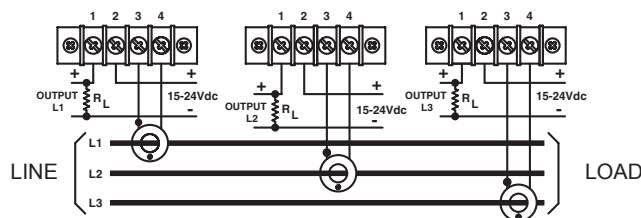
Models with E Option External Sensor



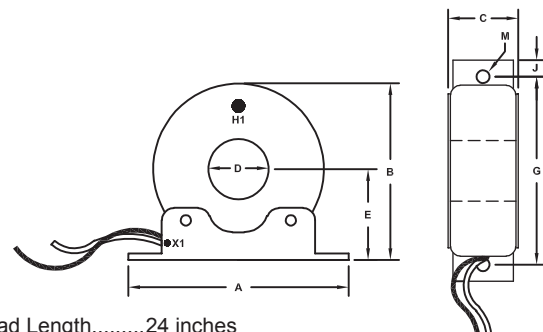
Models with E2 Option Internal Sensor



Models with E2 Option External Sensor



EXTERNAL SENSOR DIMENSIONS



Lead Length.....24 inches

SENS. SIZE	SENSOR DIMENSIONS (INCHES)								WT. LBS.
	A	B	C	D	E	G	J	M	
W	4.50	3.7	1.25	1.25	1.94	3.88	0.34	0.27 x 0.44	1.35
X	6.50	4.7	1.25	2.50	2.46	5.75	0.39	0.28	1.61
Y	6.50	4.7	1.25	3.00	2.46	5.75	0.39	0.28	1.10

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. Attach the Protective Ground Point (Ⓧ) to earth ground by mounting to a grounded enclosure or by attaching a ground wire. Paint barrier on can must be broken by using an internal-tooth lock-washer or similar device.

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. The output signal is intended to be "Not accessible to the user." To prevent contact with live circuits, the transducer is required to be mounted in an enclosure that requires the use of a tool for access.
4. 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.
5. Maximum relative humidity 80 percent for temperatures up to 31° C decreasing linearly to 50 percent relative humidity at 40° C.
6. Maximum operating temperature range is -20°C to 60°C.

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.