

DESCRIPTION

The model 3AVT is a three-phase UL and CUL approved ac voltage transducer which provides three isolated dc outputs directly proportional to the three input voltages. The output is derived from the average absolute value of the input and is calibrated as the RMS value of an input sine wave. With the exception of models which provide 4-20mA output, models are self-powered.



5 YEAR WARRANTY

FEATURES

- Accurate, reliable voltage measurement
- Rugged metal construction
- Low Cost
- UL and CUL listed

APPLICATIONS

- Inexpensive voltage measurement.
- Industrial environments
- OEM measurement systems
- Energy management and control

MODEL SELECTION

INPUT AC VOLTS	STANDARD OUTPUTS MODEL 3AVT-				
	0-1mA _{dc}	4-20mA _{dc}	0-10V _{dc}	0-5V _{dc}	4-20mA _{dc}
0 - 90	090A	090E2	090C	090CX5	090E
0 - 150	150A	150E2	150C	150CX5	150E
0 - 300	300A	300E2	300C	300CX5	300E
0 - 600	600A	600E2	600C	600CX5	600E

"A", "C", and "CX5" models are self-powered

"E" models require 115Vac instrument power or add "-22" suffix for 230Vac

"E2" models require 15-40Vdc loop power

for an output that represents the average of the 3 inputs add suffix "Y05"



400Hz models are available - consult factory for the VT series, which is not UL and CUL approved.

ORDERING INFORMATION

Example: 0-150V Inputs, 4-20mA Outputs,
115Vac Instrument Power

3AVT-150E

SPECIFICATIONS

INPUT

Voltage Range..... See Table
 Frequency Range..... 50/60Hz
 Burden..... 90V, 150V models..... 1VA
 300V models..... 2VA
 600V models..... 3VA
 Overload..... 90V, 150V, 300V models F.S. rating
 600V models..... 575V

OUTPUT

Response 400ms
 Loading
 "A" models (0-1mA_{dc})..... 0-10kΩ
 "C", "CX5" models .. (0-5, 0-10V_{dc}) ≥10MΩ
 "E" models (4-20mA_{dc})..... 0-1kΩ
 "E2" models (4-20mA_{dc} @ 24V_{dc})... 0-600Ω
 Field Adjustable Cal. ±5%

DIELECTRIC TEST

Input/Output/Inst. Pwr./Case 2200Vac

INSTRUMENT POWER

"A", "C" and "CX5" models Self-powered
 "E2" models 15-40V_{dc} Loop Power
 "E" models 115Vac ±15%, 50/60Hz, 10VA
 "-22" Option 230Vac ±15%, 50/60Hz, 10VA

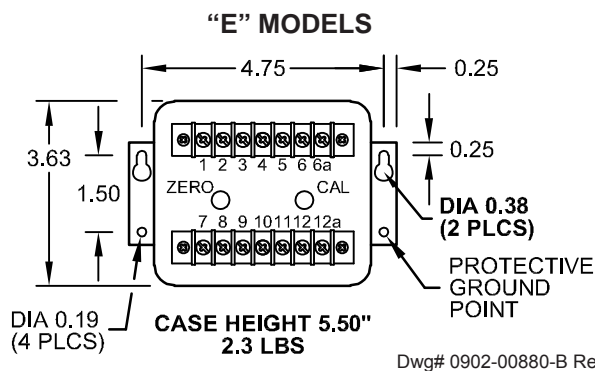
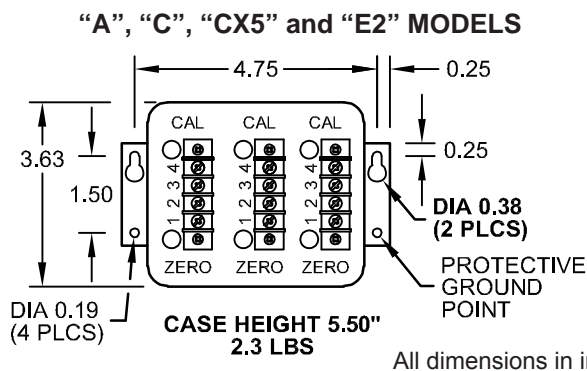
ACCURACY

Linearity/Setpoint/Repeatability.. ±0.25% F.S. @ 60Hz
 (10-100% of input range)
 Output Ripple ≤1.0% F.S.

TEMPERATURE (operating range and effect)

"A"/"C"/"CX5" -20 to +60°C..... ±1.0% Rdg.
 "E" / "E2" -20 to +60°C.... ±1.0% Rdg., ±0.02mA

DIMENSIONS

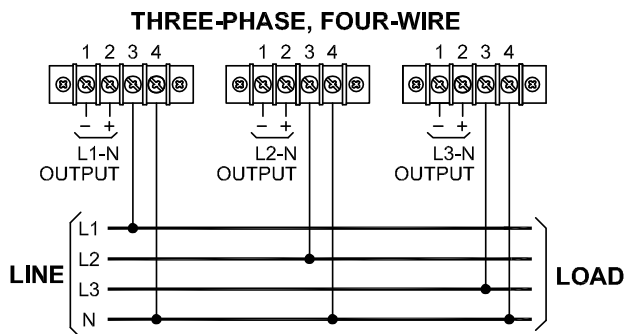
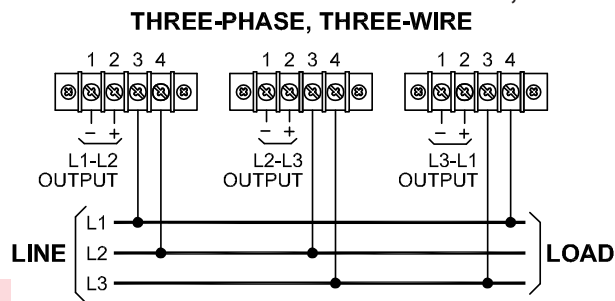


All dimensions in inches

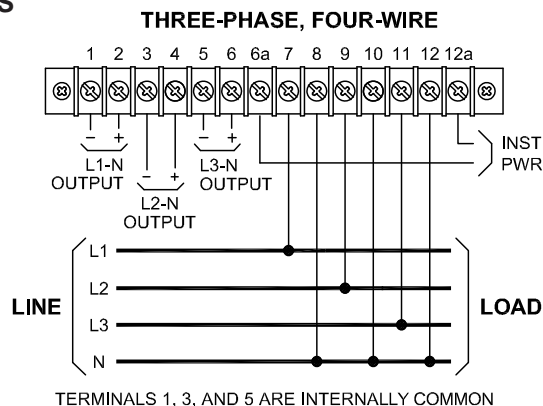
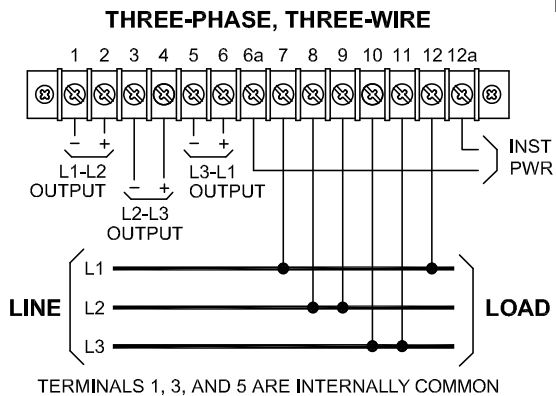
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CONNECTIONS

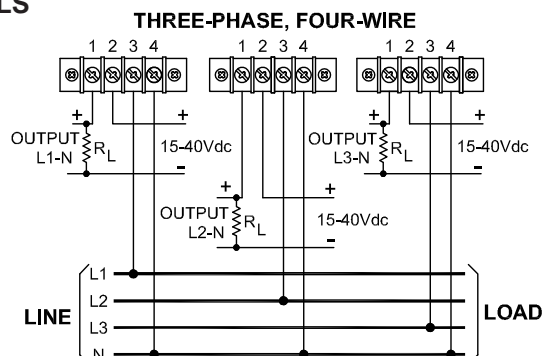
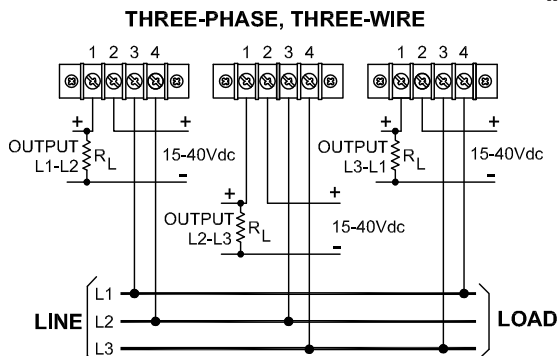
"A", "C" and "CX5" MODELS



"E" MODELS



"E2" MODELS



With "Y05" suffix, output is at terminals 1 and 2

INSTALLATION INSTRUCTIONS

1. Installation should be performed by qualified electricians only!
2. Electrical service must be 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 (\oplus) 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) 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 must 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 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.