

# OSI SINGLE PHASE AC RMS VOLTAGE TRANSDUCER *MODEL AVTR-*

**ACCURATE TO 0.25% FULL SCALE**

## FEATURES

- Accurate measurement of the **true RMS** value of input signals over a wide frequency range.

## APPLICATIONS

- For use in applications where measurement of non-sinusoidal waveforms is required.



INPUT	STANDARD OUTPUTS MODEL AVTR-			
AC VOLTS	0-1mAdc	0-10Vdc	4-20mA	0-5Vdc
0 to 150	001B	001D	001E	001X5
0 to 300	002B	002D	002E	002X5
0 to 600	004B	004D	004E	004X5



All std. units require 115Vac instrument power.  
 Optional 230Vac instrument power-Add suffix "-22".  
 For suppressed voltage scale, 95Vac to 135Vac-  
 Model VTRXP-001\* Consult Factory

**5 YEAR WARRANTY**

## ORDERING INFORMATION

Example: Single Phase 120Vac Input with 0-10Vdc Output.  
**AVTR-001D**

## SPECIFICATIONS

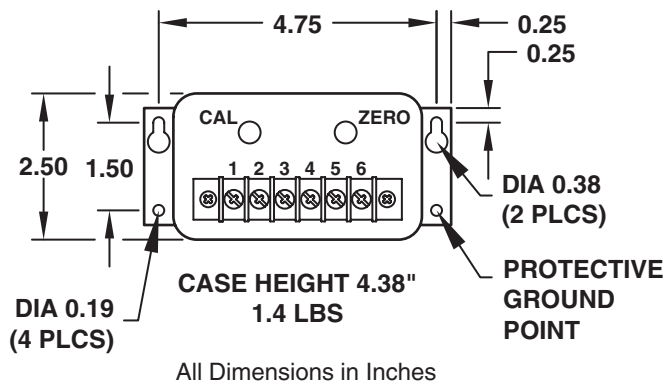
### INPUT

Voltage ..... See Table  
 Frequency Range ..... 48 to 420 Hz  
 Burden ..... 150Vac Range ..... < 0.15VA  
 ..... 300Vac Range ..... < 0.30VA  
 ..... 600Vac Range ..... < 0.60VA  
 Overload ..... 150Vac & 300Vac Model ..... F.S. Rating  
 ..... 600Vac Model ... Overload Rating...575V  
 Dielectric Test.....(Input/Output/Case) ..... 2200Vac  
 Instrument Power  
 Standard ..... 115Vac, ±15%,50/60 Hz,3.5VA  
 Option "-22" ..... 230Vac, ±15%,50/60 Hz,3.5VA

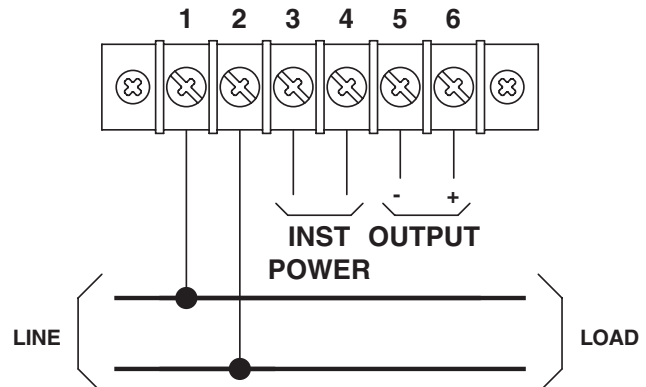
### OUTPUT

**ACCURACY** ..... ± 0.25% F.S. @ 60 Hz  
 Includes effects of linearity and setpoint.  
 Typical ± 0.5% over frequency range  
 Output Ripple ..... < 1.0% F.S.  
 Response Time (90%) ..... 100 milliseconds  
 Output Loading (Ohms)  
 0-1mA ..... 0-10K  
 0-5Vdc, 0-10Vdc ..... 2K min.  
 4-20mA ..... 0-500  
 Field Adjustable Cal. .... ±10%  
 Temperature Effect.....(-20°C to +60°C) ..... ± 1.0% Rdg.

## CASE DIMENSIONS



## CONNECTION DIAGRAM





### **INSTALLATION INSTRUCTIONS**

1. Installation should be performed by qualified electricians only!
2. Verify that 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 lockwasher 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, 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.