

Average RMS AC Voltage Transducer

DIN RAIL / PANEL MOUNT, AVERAGE RMS

The **CR4800** Series, Average RMS Voltage Transducers and Transmitters are designed to provide a DC output proportional to the AC voltage input. These devices are best suited for general applications, such as fixed frequency voltage supplies.



Single Element
0 to 5 VDC Output or 4 - 20 mADC outputs



Three Element
0 to 5 VDC or 4 - 20 mADC outputs

Applications

Monitor Motor Faults
Monitor Heating Elements
Monitor Lighting Elements
Remote Voltage Sensing

Features

35mm DIN Rail or Panel Mount
Available with 0-5 Vdc, 0-10Vdc or 4-20 mADC outputs
24 Vdc powered
Outputs isolated from inputs
Connection diagram printed on case

Regulatory Agencies

Recognized to UL 61010B-1
Recognized to CAN/CSA-C22.2, No. 61010-1-2004
Meets requirement of IEC 61010-1 and BS EN 61010-1



PART NUMBERS

CR4810	-		Single Element with 0 - 5 VDC output
CR4811	-		Single Element with 0 - 10 VDC output*
CR4820	-		Single Element with 4 - 20 mADC output
CR4850	-		3-Element 3-Wire with 0 to 5 VDC Output
CR4860	-		3-Element 3-Wire with 4 - 20 mADC Output
CR4870	-		3-Element 4-Wire with 0 to 5 VDC Output
CR4880	-		3-Element 4-Wire with 4 - 20 mADC Output
* CR4811 Series not UL Recognized			

☐ Add suffix for input range

50 - 0-50 VAC
150 - 0-150 VAC
250 - 0-250 VAC
500 - 0-500 VAC
Ranges available up to and including 600 VAC

* **UL Recognized up to 300 Vac**

CR Magnetics has a wide selection of Potential Transformersto extend the range of any part. See Section G for details.



CR Magnetics, Inc. 3500 Scarlet Oak Blvd. St. Louis MO USA 63122 V: 636-343-8518 F: 636-343-5119

Web: <http://www.crmagnetics.com>

E-mail: sales@crmagnetics.com

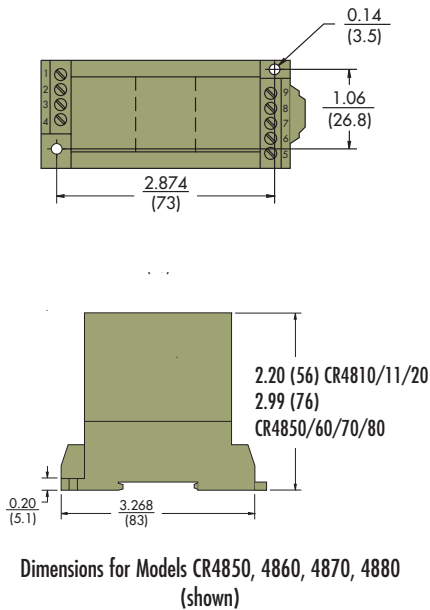
Average RMS AC Voltage Transducer

DIN RAIL / PANEL MOUNT, AVERAGE RMS

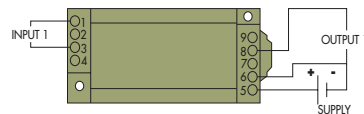
SPECIFICATIONS

Basic Accuracy:.....	0.5%	Output Load:.....0-5 VDC.....	2 K Ω or greater
Calibration:.....Average Sensing, RMS Calibrated		4-20 mADC.....	0 - 300 Ω
Thermal Drift:.....	500 PPM/ $^{\circ}$ C	Relative Humidity:.....80% for temperatures up to	
Operating Temperature:.....	0 $^{\circ}$ C to +60 $^{\circ}$ C	31 $^{\circ}$ C and decreasing linearly to 50% at 40 $^{\circ}$ C	
Installation Category:.....	CAT II	Supply Current:	
Pollution Degree:.....	2	CR4810:.....Typical 15mA	Max 30mA
Response Time:	250 ms	CR4820:.....Typical 23mA	Max 45mA
Altitude:.....	2000 meter max.	CR4850:.....Typical 25mA	Max 110mA
Insulation Voltage:.....	2500 Vdc	CR4860:.....Typical 55mA	Max 110mA
Supply Voltage:.....24 Vdc \pm 10%		CR4870:.....Typical 25mA	Max 110mA
Frequency Range:.....20 Hz - 5 KHz		CR4880:.....Typical 55mA	Max 110mA
Cleaning:.....Water-dampened cloth		Torque Specs.:.....	3.0 inch lbs. (0.4Nm)
MTBF:.....	Greater than 100 K hours	Weight:.....	0.5 lbs.

Transducers



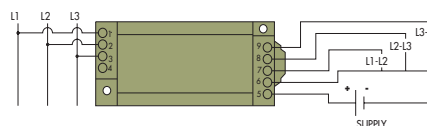
OUTLINE DRAWING



CR4810 Single Element - 0 - 5 VDC Output



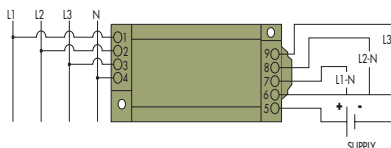
CR4820 Single Element - 4-20 mA DC Output



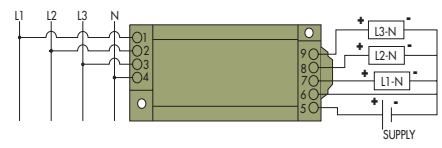
CR4850 3 Element, 3 Wire - 0 - 5 VDC Output



CR4860 3 Element, 3 Wire - 4-20 mA DC Output



CR4870 3 Element, 4 Wire - 0 - 5 VDC Output



CR4880 3 Element, 4 Wire - 4 - 20 mA DC Output

USE CR MAGNETICS LOW AND MEDIUM VOLTAGE POTENTIAL TRANSFORMERS (SECTION G)

CONNECTION DIAGRAM

NOTE: The building installation must have a switch or circuit-breaker that is in close proximity and within easy reach of the operator. The switch or circuit breaker shall be marked as the disconnecting device for the equipment.



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