

Average RMS AC Voltage Transducer

DIN RAIL / PANEL MOUNT, AVERAGE RMS



CR4810 CR4811 CR4820
Single Element
0 to 5 VDC Output or 4 - 20 mADC outputs



CR4850 CR4860 CR4870 CR4880
Three Element
0 to 5 VDC or 4 - 20 mADC outputs

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.

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 meet UL 61010B-1
Constructed to meet 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.

Average RMS AC Voltage Transducer

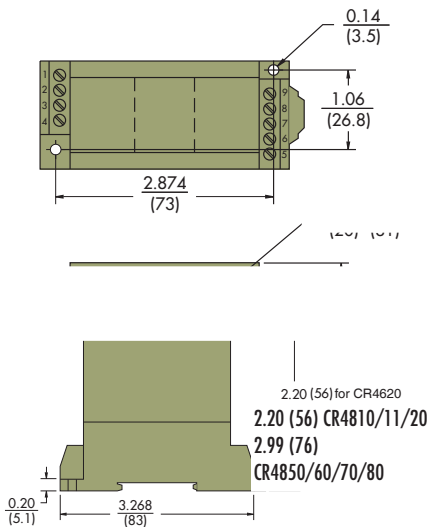
DIN RAIL / PANEL MOUNT, AVERAGE RMS

SPECIFICATIONS

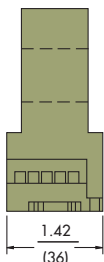
Basic Accuracy:.....	0.5%	Output Load:.....	4-20 mADC - 0 to 300 Ω
Linearity:.....	10% to 100% FS		0-5 VDC - 2K Ω or Greater
Calibration:.....	Average Sensing, RMS Calibrated	Relative Humidity:.....	80% for temperatures up to 31°C and decreasing linearly to 50% at 40°C
Thermal Drift:.....	500 PPM/°C		
Operating Temperature:.....	0°C to +60°C	Supply Current:	
Installation Category:.....	CAT II	CR4810:.....	Typical 15mA Max 30mA
Vibration Tested To:.....	IEC 60068-2-6,1995	CR4820:.....	Typical 23mA Max 45mA
Pollution Degree:.....	2	CR4850:.....	Typical 25mA Max 110mA
Response Time:.....	250 ms	CR4860:.....	Typical 55mA Max 110mA
Altitude:.....	2000 meter max.	CR4870:.....	Typical 25mA Max 110mA
Insulation Voltage:.....	2500 Vdc	CR4880:.....	Typical 55mA Max 110mA
Supply Voltage:.....	24 Vdc $\pm$ 10%	Torque Specs.:.....	3.0 inch lbs. (0.4Nm)
Frequency Range:.....	20 Hz - 400 Hz	Weight:.....	0.5 lbs.
Cleaning:.....	Water-dampened cloth		
MTBF:.....	Greater than 100 K hours		

C

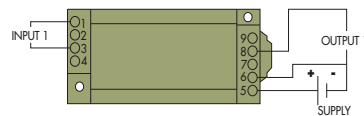
Transducers



Dimensions for Models CR4850, 4860, 4870, 4880 (shown)



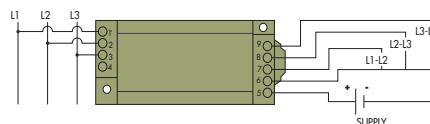
OUTLINE DRAWING



CR4810 Single Element - 0 - 5 VDC Output



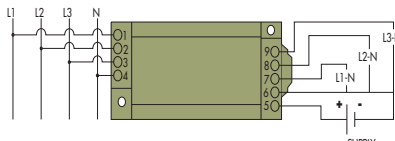
CR4820 Single Element - 4-20 mA DC Output



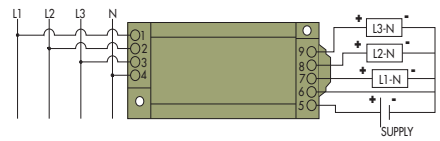
CR4850 3 Element, 3 Wire - 0 - 5 VDC Output



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.