

Average RMS AC Voltage Transducer

DIN RAIL / PANEL MOUNT, AVERAGE RMS



CR4810 CR4811 CR4820
Single Element
1.0 to 600 VAC Input Range



CR4850 CR4860 CR4870 CR4880
Three Element
1.0 to 600 VAC Input Range

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



Transducers

Add suffix for input range

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

- 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

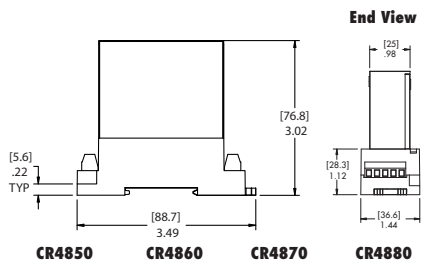
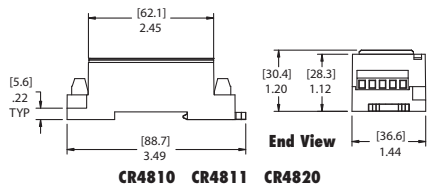
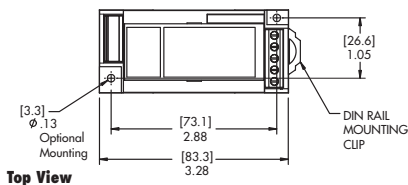
CR Magnetics has a wide selection of Potential Transformers to extend the range of any part. See Section G for details.

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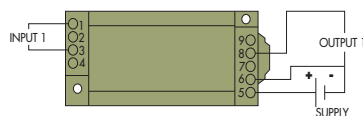
DIN RAIL / PANEL MOUNT, AVERAGE RMS

SPECIFICATIONS

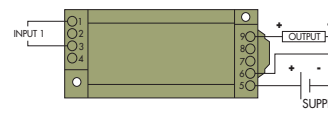
Basic Accuracy:.....	0.5%	Output Load:.....	4-20 mADC - 0 to 300 Ω
Linearity:.....	10% to 100% FS		0-5 VDC - 2K Ω or Greater
Calibration:.....	Average Sensing, RMS Calibrated	Relative Humidity:.....	5% to 95%, Non-Condensing
Thermal Drift:.....	500 PPM/ $^{\circ}$ C	Supply Current:	
Operating Temperature:.....	0 $^{\circ}$ C to +60 $^{\circ}$ C	CR4810:.....	Typical 15mA Max 30mA
Installation Category:.....	CAT II	CR4820:.....	Typical 23mA Max 45mA
Vibration Tested To:.....	IEC 60068-2-6,1995	CR4850:.....	Typical 25mA Max 110mA
Pollution Degree:.....	2	CR4860:.....	Typical 55mA Max 110mA
Response Time:.....	250 ms	CR4870:.....	Typical 25mA Max 110mA
Altitude:.....	2000 meter max.	CR4880:.....	Typical 55mA Max 110mA
Insulation Voltage:.....	2500 Vdc	Torque Specs:.....	3.0 inch lbs. (0.4Nm)
Supply Voltage:.....	24 Vdc \pm 10%	Weight:.....	0.5 lbs.
Frequency Range:.....	50 Hz - 400 Hz		
Cleaning:.....	Water-dampened cloth		
MTBF:.....	Greater than 100 K hours		



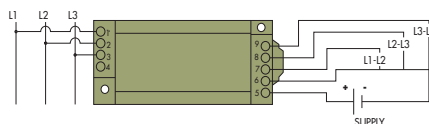
OUTLINE DRAWING



CR4810 Single Element - 0 - 5 VDC Output



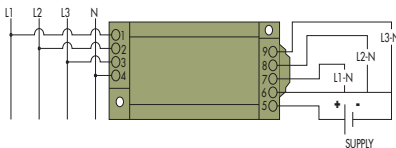
CR4820 Single Element - 4-20 mA DC Output



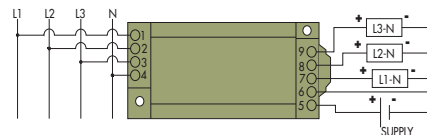
CR4850 3 Element, 3 Wire - 0 - 5 VDC Output



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

CONNECTION DIAGRAM

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

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.

Transducers