## DIN RAIL / PANEL MOUNT, AVERAGE RMS



Single Element 1.0 to 600 VAC Input Range



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







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

E-mail: sales@crmagnetics.com

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

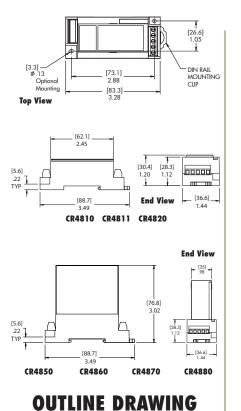




# DIN RAIL / PANEL MOUNT, AVERAGE RMS

#### **SPECIFICATIONS**

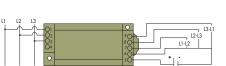
| Basic Accuracy:        | 0.5%                    | Output Load:4-20 mADC - 0 to 300 $\Omega$ |                       |             |
|------------------------|-------------------------|---|-----------------------|-------------|
| Linearity:             | 10% to 100% FS          | 0-5 VDC - 2K $\Omega$ or Greater          |                       |             |
| Calibration:Average S  | Sensing, RMS Calibrated | Relative Humidity:                        | 5% to 95%, Non        | -Condensing |
| Thermal Drift:         | 500 PPM/°C              | Supply Current:                           |                       |             |
| Operating Temperature: | 0°C to +60°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 ±10%             | Weight:                                   | 0.5 lbs.              |             |
| Frequency Range:       | 50 Hz - 400 Hz          |   |                       |             |
| Cleaning:              | Water-dampened cloth    |   |                       |             |
| MTBF:                  | Greater than 100 K hou  | rs  |                       |             |





Single Element - 0 - 5 VDC Output

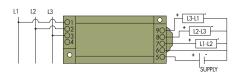




**CR4850** 3 Element, 3 Wire - 0 - 5 VDC Output

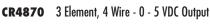


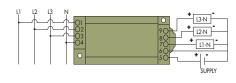
Single Element - 4-20 mA DC CR4820 **Output** 



**CR4860** 3 Element, 3 Wire - 4-20 mA DC 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.



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