

# Average RMS AC Current Transducer

## DIN RAIL / PANEL MOUNT, AVERAGE RMS



Single Element - .79" Window  
0.5 to 150 AAC Input Range



Two Element - .26" Window  
0.5 to 30 AAC Input Range



Three Element - .26" Window  
0.5 to 30 AAC Input Range

Use a 5 Amp Secondary  
Current Transformer to extend  
the ranges of all CR Magnetics  
Current Transducers



All single phase current  
transducers are available in split  
core design. Simply put an "S"  
the end of the prefix\*  
I.E. CR4410S-10  
**\* Not UL Recognized**



### PART NUMBERS

|           |   |  |                                                            |
|-----------|---|--|------------------------------------------------------------|
| CR4410(S) | - |  | Single element with 0 - 5 VDC output (split core design)   |
| CR4411(S) | - |  | Single element with 0 - 10 VDC output (split core design)* |
| CR4420(S) | - |  | Single element with 4 - 20 mADC output (split core design) |
| CR4450    | - |  | Two element with 0 - 5 VDC output *                        |
| CR4460    | - |  | Two element with 4 to 20 mADC output *                     |
| CR4470    | - |  | Three element with 0 - 5 VDC output *                      |
| CR4480    | - |  | Three element with 4 - 20 mADC output *                    |

Two and three element transducers are available only in ranges of 0.5 to 30 AAC  
\* CR4411 Series not UL Recognized

Add suffix for input range

|            |   |           |
|------------|---|-----------|
| <b>5</b>   | - | 0-5 AAC   |
| <b>10</b>  | - | 0-10 AAC  |
| <b>15</b>  | - | 0-15 AAC  |
| <b>20</b>  | - | 0-20 AAC  |
| <b>25</b>  | - | 0-25 AAC  |
| <b>30</b>  | - | 0-30 AAC  |
| <b>40</b>  | - | 0-40 AAC  |
| <b>50</b>  | - | 0-50 AAC  |
| <b>75</b>  | - | 0-75 AAC  |
| <b>100</b> | - | 0-100 AAC |
| <b>150</b> | - | 0-150 AAC |

Ranges available up to and  
including 600 AAC

The **CR4400** Series, Current Transmitters produce a calibrated 4-20 mADC signal that is proportional to the average RMS input AC current. Designed for multi-point current sensing, these devices provide excellent features in a high value package. The output signal is generated from a user supplied 24 VDC power supply within the output current loop.

### Applications

Multi-point current sensing and control panels  
Monitor motor faults  
Monitor heating elements  
Monitor lighting elements

### Features

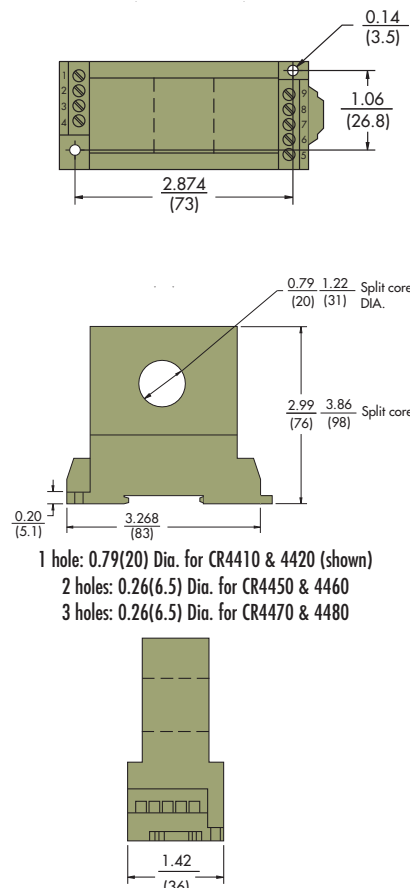
Low cost  
DIN rail or panel mount  
Available with 0-5 VDC, 0-10VDC or 4-20 mADC output  
High Accuracy  
Interfaces with most commercially available instrumentation  
Connection diagram printed on case

### 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

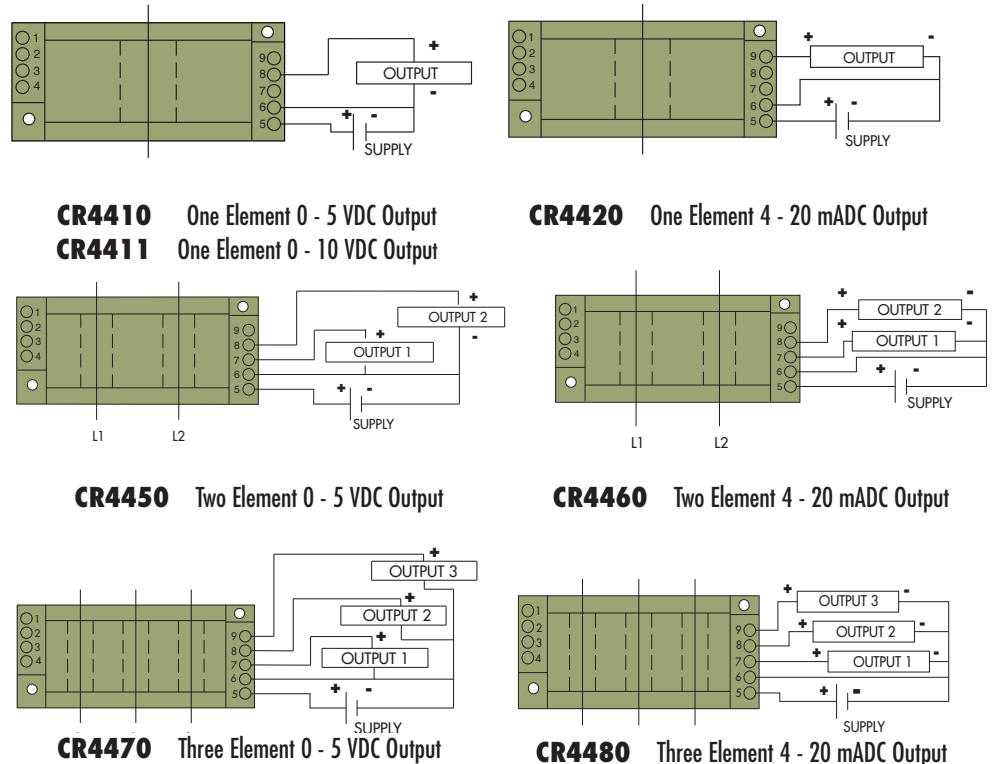
## SPECIFICATIONS DIN RAIL / PANEL MOUNT, AVERAGE RMS

|                             |                                                     |                         |                                                                        |
|-----------------------------|-----------------------------------------------------|-------------------------|------------------------------------------------------------------------|
| Basic Accuracy:.....        | 0.5%                                                | Cleaning:.....          | Water-dampened cloth                                                   |
| Linearity:.....             | 10% to 100% FS                                      | Relative Humidity:..... | 80% for temperatures up to 31°C and decreasing linearly to 50% at 40°C |
| Thermal Drift:.....         | 500 PPM/°C                                          | Supply Voltage:.....    | 24 VDC ±10%                                                            |
| Operating Temperature:..... | 0°C to +60°C                                        | Supply Current:         |                                                                        |
| Installation Category:..... | CAT II                                              | CR4410/11.....          | Typical 20mA Max 40mA                                                  |
| Vibration Tested To:.....   | IEC 60068-2-6,1995                                  | CR4420.....             | Typical 25mA Max 45mA                                                  |
| Pollution Degree:.....      | 2                                                   | CR4450.....             | Typical 20mA Max 75mA                                                  |
| Response Time:.....         | 250 ms max., 0-90% FS                               | CR4460.....             | Typical 40mA Max 90mA                                                  |
| MTBF:.....                  | Greater than 100 K hours                            | CR4470.....             | Typical 25mA Max 110mA                                                 |
| Altitude:.....              | 2000 meter max.                                     | CR4480.....             | Typical 55mA Max 120mA                                                 |
| Calibration:.....           | Average Sensing, RMS Calibrated                     | CR4410S.....            | Typical ---mA Max ----mA                                               |
| Insulation Voltage:.....    | 2500 VDC                                            | CR4420S.....            | Typical ---mA Max ----mA                                               |
| Power Source:.....          | 24 VDC                                              | Torque Specs:.....      | 3.0 inch lbs. (0.4Nm)                                                  |
| Frequency Range:.....       | 50Hz - 400Hz                                        | Weight:.....            | 0.5 lbs.                                                               |
| Output Load:.....           | 4-20 mADC - 0 to 300 Ω<br>0-5 VDC - 2K Ω or Greater |                         |                                                                        |



### OUTLINE DRAWING

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.



\*Request CR Magnetics Low & Medium Voltage Current Transformers Catalog.

### CONNECTION DIAGRAM