# 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

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







E199795

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" at 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

5 - 0-5 AAC 10 - 0-10 AAC 15 - 0-15 AAC 20 - 0-20 AAC 25 - 0-25 AAC 30 - 0-30 AAC 40 - 0-40 AAC

**50** - 0-50 AAC **75** - 0-75 AAC **100** - 0-100 AAC **150** - 0-150 AAC

Ranges available up to and including 600 AAC

#### ISweek www.isweek.com

OUTPUT

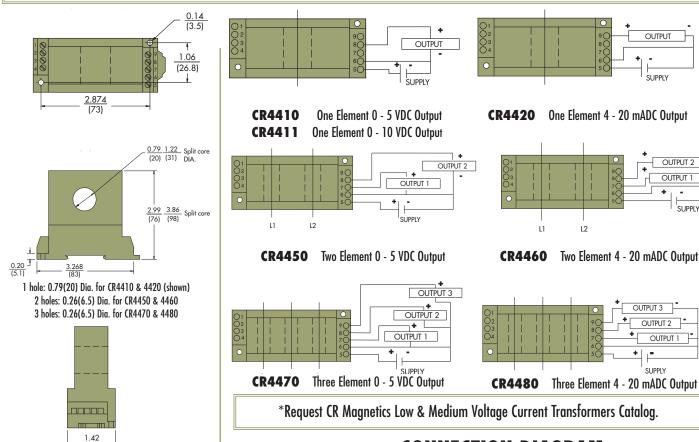
OUTPUT 2

# Average RMS AC Current Transducer

## **SPECIFICATIONS**

## DIN RAIL / PANEL MOUNT, AVERAGE RMS

| Pagia Aggurgay         | 0.50/                            | Observation .      | \A/- ( I         |             |
|------------------------|----------------------------------|--------------------|------------------|-------------|
| Basic Accuracy:        | 0.5%                             | Cleaning:          |                  |             |
| Linearity:             |                                  | Relative Humidity: | . 80% for temp   | eratures up |
| Thermal Drift:         | 500 PPM/°C                       |                    | to 31°C and      | decreasing  |
| Operating Temperature: | 0°C to +60°C                     |                    | linearly to 50   | % at 40°C   |
| Installation Category: | CAT II                           | Supply Voltage:    | 24 VDC ±10%      |             |
| Vibration Tested To:   | IEC 60068-2-6,1995               | Supply Current:    |                  |             |
| Pollution Degree:      | 2                                | CR4410/11          | Typical 20mA     | Max 40mA    |
| Response Time:         |                                  | CR4420             |                  | Max 45mA    |
| MTBF:                  | Greater than 100 K hours         | CR4450             | Typical 20mA     | Max 75mA    |
| Altitude:              |                                  | CR4460             |                  | Max 90mA    |
| Calibration: Average   | e Sensing, RMS Calibrated        | CR4470             | Typical 25mA     | Max 110mA   |
| Insulation Voltage:    | 2500 VDC                         | CR4480             | Typical 55mA     | Max 120mA   |
| Power Source:          | 24 VDC                           | CR4410S            | TypicalmA        | MaxmA       |
| Frequency Range:       | 50Hz - 400Hz                     | CR4420S            | TypicalmA        | MaxmA       |
| Output Load:           | 4-20 mADC - 0 to 300 $\Omega$    | Torque Specs.: 3.0 | inch lbs. (0.4Nr | n)          |
|                        | 0-5 VDC - 2K $\Omega$ or Greater | Weight:0.5         | b lbs.           |             |



OUTPUT 2 OUTPUT 1 Three Element 4 - 20 mADC Output

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

## 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.

OUTLINE DRAWING