



**THE DATASHEET OF  
CR4410-50**



# Average RMS AC Current Transducer

DIN RAIL / PANEL MOUNT, AVERAGE RMS



CR4410 CR4411 CR4420

Single Element - .79" Window  
0.5 to 600 AAC Input Range



CR4450 CR4460

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



CR4470 CR4480

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" at the end of the prefix\*  
I.E. CR4410S-10  
**\* Not UL Recognized**

The **CR4400** Series, Current Transducers and Transmitters are designed to produce a DC output signal that is proportional to the average RMS input AC current. Designed for multi-point current sensing, these devices provide excellent features in a value package .

## 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



| 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

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

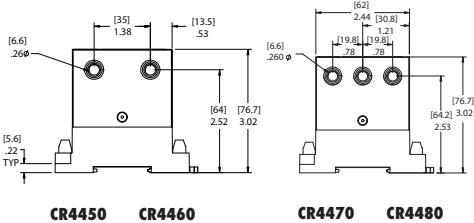
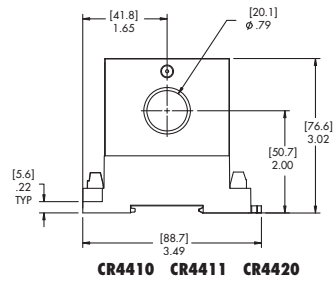
Transducers

# Average RMS AC Current Transducer

DIN RAIL / PANEL MOUNT, AVERAGE RMS

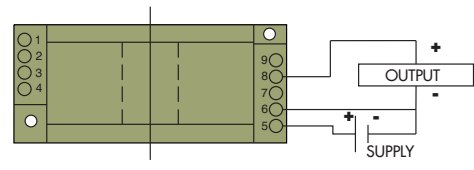
## SPECIFICATIONS

|                             |                                 |                         |                           |
|-----------------------------|---------------------------------|-------------------------|---------------------------|
| Basic Accuracy:.....        | 0.5%                            | Cleaning:.....          | Water-dampened cloth      |
| Linearity:.....             | 10% to 100% FS                  | Relative Humidity:..... | 5% to 95%, Non-Condensing |
| 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 500 Ω          |                         |                           |
|                             | 0-5 VDC - 2K Ω or Greater       |                         |                           |

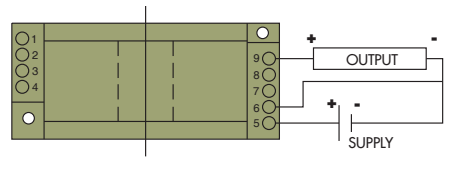


## OUTLINE DRAWING

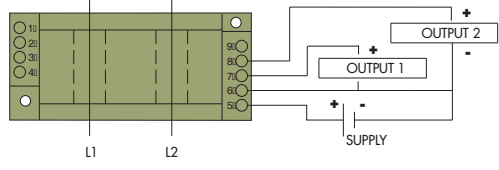
NOTE: The building installation must have a switch or circuit-breaker that is in close proximity and within easy reach of the operator. The switch or circuit breaker shall be marked as the disconnecting device for the equipment.



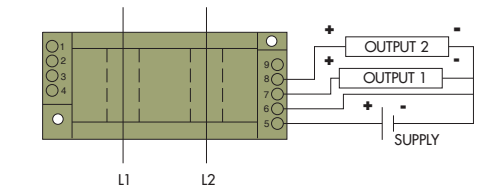
**CR4410** One Element 0 - 5 VDC Output  
**CR4411** One Element 0 - 10 VDC Output



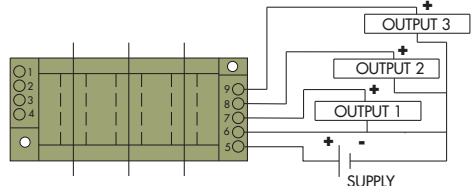
**CR4420** One Element 4 - 20 mADC Output



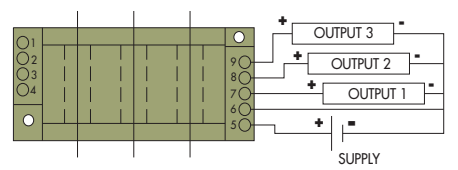
**CR4450** Two Element 0 - 5 VDC Output



**CR4460** Two Element 4 - 20 mADC Output



**CR4470** Three Element 0 - 5 VDC Output



**CR4480** Three Element 4 - 20 mADC Output

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

## CONNECTION DIAGRAM



3500 Scarlet Oak Blvd. St. Louis MO USA 63122 V: 636-343-8518 F: 636-343-5119



Web: <http://www.crmagnetics.com>

E-mail: [sales@crmagnetics.com](mailto:sales@crmagnetics.com)

Transducers

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