

# Self Powered AC Current Transducer

## DIN RAIL / PANEL MOUNT, AVERAGE RMS



Single Element - .79" Window  
2 to 200 AAC Input Range



Single Element - 1.22" Window  
2 to 200 AAC Input Range

The **CR4210** and **CR4211** Series Current Transducers are self powered. These transducers are calibrated to provide a 0-5 VDC and 0-10 VDC 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.

### Applications

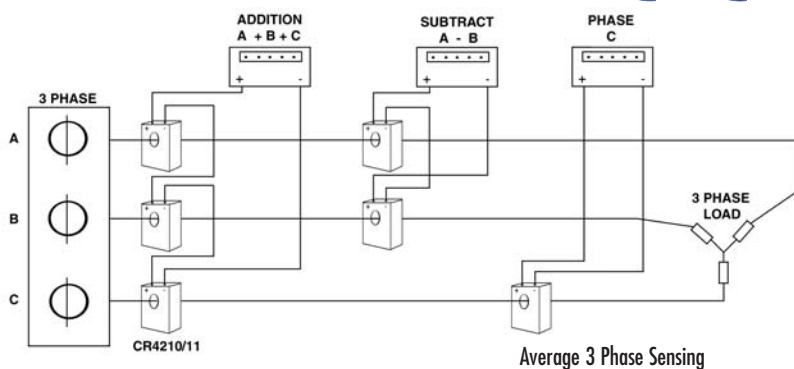
Phase fired controlled heaters  
Quickly varying motor loads  
Chopped wave form drivers  
Harmonic currents

### Features

35mm DIN Rail or Panel Mount  
Available with 0 - 5 VDC or 0-10 VDC outputs  
Self powered, requires no external power source  
Use with external current transformers  
Low cost  
Connection diagram printed on case

### Regulatory Agencies

Recognized to UL 61010B-1  
Recognized to CAN/CSA-C22.2, No. 61010-1-2004  
Meets requirement of IEC 61010-1 and BS EN 61010-1



All single phase current transducers are available in split core design. Simply put an "S" at the end of the prefix\*

I.E. CR4210S-10

\* Not UL Recognized

### PART NUMBERS

|                  |   |                                                            |
|------------------|---|------------------------------------------------------------|
| <b>CR4210(S)</b> | - | Single element with 0 - 5 VDC output (split core design)   |
| <b>CR4211(S)</b> | - | Single element with 0 - 10 VDC output (split core design)* |

\*CR4210S and CR4211S only available in ranges 20 amps and above

Add suffix for input range

|            |   |           |
|------------|---|-----------|
| <b>2</b>   | - | 0-2 AAC   |
| <b>5</b>   | - | 0-5 AAC   |
| <b>10</b>  | - | 0-10 AAC  |
| <b>20</b>  | - | 0-20 AAC  |
| <b>50</b>  | - | 0-50 AAC  |
| <b>70</b>  | - | 0-70 AAC  |
| <b>100</b> | - | 0-100 AAC |
| <b>150</b> | - | 0-150 AAC |
| <b>200</b> | - | 0-200 AAC |

Ranges available up to and including  
600 AAC



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

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

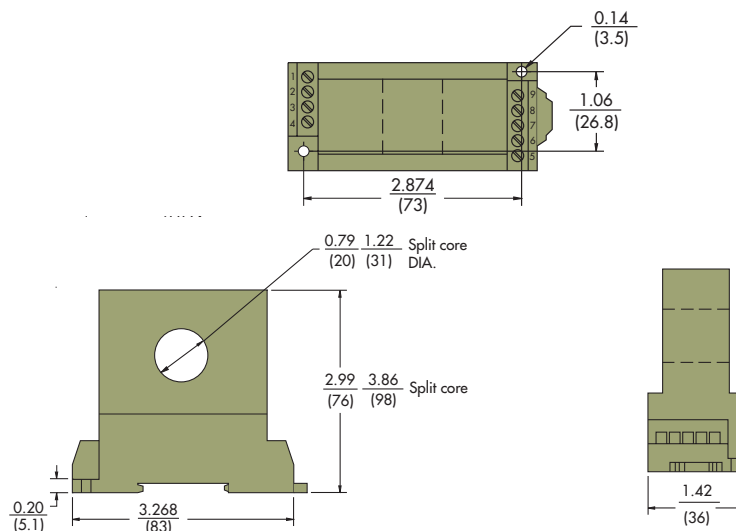
# Self Powered AC Current Transducer

DIN RAIL / PANEL MOUNT, AVERAGE RMS

## SPECIFICATIONS

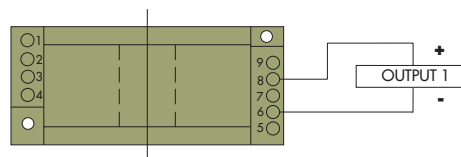
|                             |                                 |                             |                                                                          |
|-----------------------------|---------------------------------|-----------------------------|--------------------------------------------------------------------------|
| Basic Accuracy:.....        | 0.5%                            | Cleaning:.....              | Water-dampened cloth                                                     |
| Thermal Drift:.....         | 500 PPM/°C                      | Output Load:.....           | 1M $\Omega$ or Greater                                                   |
| Operating Temperature:..... | 0°C to +60°C                    | Greater Response Time:..... | 250 ms max., 0-90%FS                                                     |
| Installation Category:..... | CAT II                          | Relative Humidity:.....     | 80% for temperatures up to 31°C and decreasing linearly to 50% at 40°C   |
| Pollution Degree:.....      | 2                               | Supply Power:.....          | Self powered (output voltage is obtained from current-sensing conductor) |
| Insulation Voltage:.....    | 2500 VDC                        | Torque Specs.:.....         | 3.0 inch lbs. (0.4Nm)                                                    |
| Altitude:.....              | 2000 meter max.                 | Weight:.....                | 0.5 lbs.                                                                 |
| Frequency Range:.....       | 50Hz - 400Hz                    |                             |                                                                          |
| Calibration:.....           | Average Sensing, RMS Calibrated |                             |                                                                          |
| MTBF:.....                  | Greater than 100 K hours        |                             |                                                                          |

## OUTLINE DRAWING



1 hole: 0.79(20) Dia. for CR4210 & 4211 (shown)

## CONNECTION DIAGRAM



**CR4210** Single Element 0 - 5 VDC Output

**CR4211** Single Element 0 - 10 VDC Output

Request CR Magnetics Low & Medium Voltage Current Transformers Catalog.

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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