

## **Excellent Integrated System Limited**

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

[CR Magnetics Inc.](#)  
[CR4510-250](#)

For any questions, you can email us directly:  
[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)

# True RMS AC Voltage Transducer

## DIN RAIL / PANEL MOUNT, TRUE RMS



**CR4510 CR4511 CR4520**  
Single Element  
1.0 to 600 VAC Input Range



**CR4550 CR4560  
CR4570 CR4580**

Three Element  
1.0 to 600 VAC Input Range

The **CR4500** Series, True RMS Voltage Transducers and Transmitters are designed for applications where AC voltage waveforms are not purely sinusoidal. More precise and accurate than other devices, these units are ideal in chopped wave and phase fired control systems.

### Applications

Phase fired controlled devices  
Quickly varying voltage supplies  
Chopped waveform drivers  
Harmonic voltages

### Features

35mm DIN rail mount or panel mount  
Available with 0-5 VDC, 0-10VDC or 4-20 mADC output  
24 VDC powered  
Highest precision available  
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



Transducers

Add suffix for input range

PART NUMBERS			
<b>CR4510</b>	-		Single element with 0 - 5 VDC output
<b>CR4511</b>	-		Single element with 0 - 10 VDC output
<b>CR4520</b>	-		Single element with 4 - 20 mADC output
<b>CR4550</b>	-		3-Phase 3-Wire with 0 to 5 VDC Output
<b>CR4560</b>	-		3-Phase 3-Wire with 4 - 20 mADC Output
<b>CR4570</b>	-		3-Phase 4-Wire with 0 to 5 VDC Output
<b>CR4580</b>	-		3-Phase 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**

CR Magnetics has a wide selection of Potential Transformers to extend the range of any part. Contact factory for more information.

# True RMS AC Voltage Transducer

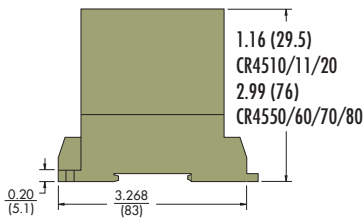
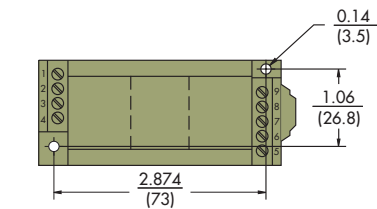
DIN RAIL / PANEL MOUNT, TRUE RMS

## SPECIFICATIONS

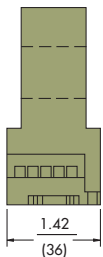
Basic Accuracy:.....	0.5%	MTBF:.....	Greater than 100 K hours
Linearity:.....	10% to 100% FS	Output Load:.....	4-20 mADC - 0 to 300 Ω
Calibration:.....	True RMS Sensing		0-5 VDC - 2K Ω or Greater
Thermal Drift:.....	500 PPM/°C	Relative Humidity:.....	80% for temperatures up to 31°C and decreasing linearly to 50% at 40°C
Operating Temperature:.....	0°C to +60°C		
Installation Category:.....	CAT II	Supply Current:	
Vibration Tested To:.....	IEC 60068-2-6,1995	CR4510:.....	Typical 15mA Max 25mA
Pollution Degree:.....	2	CR4520:.....	Typical 25mA Max 40mA
Response Time:.....	250 ms	CR4550/70:.....	Typical 20mA Max 60mA
Altitude:.....	2000 meter max.	CR4560/80:.....	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:.....	20 Hz - 5 KHz		
Cleaning:.....	Water-dampened cloth		

C

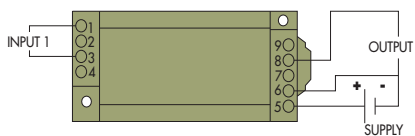
Transducers



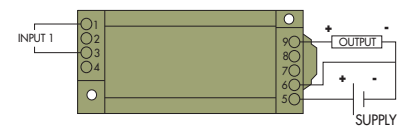
Dimensions for Models CR4550, CR4560, CR4570, CR4580 (shown)



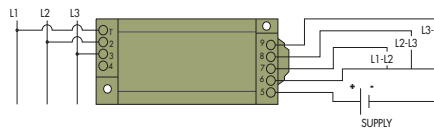
## OUTLINE DRAWING



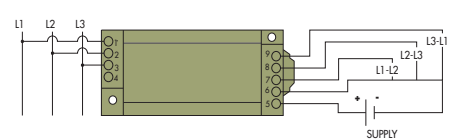
**CR4510** Single Phase - 0 - 5 VDC Output  
**CR4511** Single Phase - 0 - 10 VDC Output



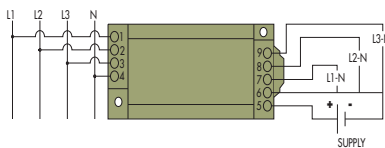
**CR4520** Single Phase - 4 - 20 mADC Output



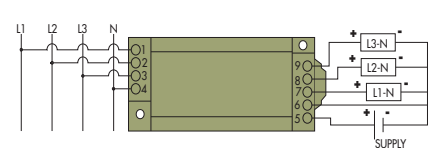
**CR4550** 3 Phase, 3 Wire - 0 - 5 VDC Output



**CR4560** 3 Phase, 3 Wire - 4-20 mADC Output



**CR4570** 3 Phase, 4 Wire - 0 - 5 VDC Output



**CR4580** 3 Phase, 4 Wire - 4 - 20 mADC Output

USE CR MAGNETICS LOW AND MEDIUM VOLTAGE POTENTIAL TRANSFORMERS (SECTION G)

## 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.