

True RMS AC Voltage Transducer

DIN RAIL / PANEL MOUNT, TRUE RMS



CR4510 CR4511 CR4520

Single Element
50 to 500 VAC Input Range



CR4550 CR4560
CR4570 CR4580

Three Element
50 to 500 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			
CR4510	-		Single element with 0 - 5 VDC output
CR4511	-		Single element with 0 - 10 VDC output
CR4520	-		Single element with 4 - 20 mADC output
CR4550	-		3-Phase 3-Wire with 0 to 5 VDC Output
CR4560	-		3-Phase 3-Wire with 4 - 20 mADC Output
CR4570	-		3-Phase 4-Wire with 0 to 5 VDC Output
CR4580	-		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

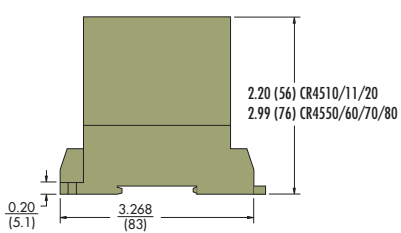
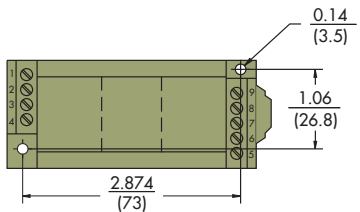
DIN RAIL / PANEL MOUNT, TRUE RMS

SPECIFICATIONS

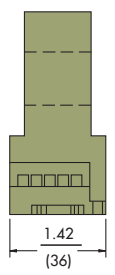
Basic Accuracy:.....	0.5%	MTBF:.....	Greater than 100 K hours
Linearity:.....	10% to 100% FS	Output Load:.....	4-20 mADC - 0 to 300 Ω
Calibration:.....	True RMS Sensing		0-5 VDC - 2K Ω or Greater
Thermal Drift:.....	500 PPM/°C	Relative Humidity:.....	80% for temperatures up to 31°C and decreasing linearly to 50% at 40°C
Operating Temperature:.....	0°C to +60°C	Supply Current:	
Installation Category:.....	CAT II	CR4510:.....	Typical 15mA Max 25mA
Vibration Tested To:.....	IEC 60068-2-6, 1995	CR4520:.....	Typical 25mA Max 40mA
Pollution Degree:.....	2	CR4550/70:.....	Typical 20mA Max 60mA
Response Time:.....	250 ms	CR4560/80:.....	Typical 55mA Max 110mA
Altitude:.....	2000 meter max.	Torque Specs:.....	3.0 inch lbs. (0.4Nm)
Insulation Voltage:.....	2500 Vdc	Weight:.....	0.5 lbs.
Supply Voltage:.....	24 Vdc ±10%		
Frequency Range:.....	20 Hz - 5 KHz		
Cleaning:.....	Water-dampened cloth		

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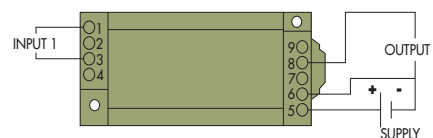
Transducers



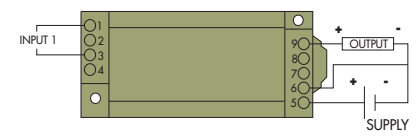
Dimensions for Models CR4550, CR4560, CR4570, CR4580 (shown)



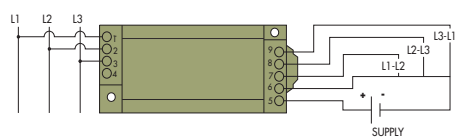
OUTLINE DRAWING



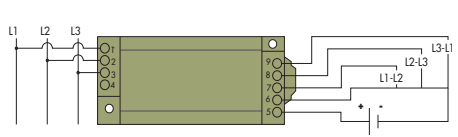
CR4510 Single Phase - 0 - 5 VDC Output
CR4511 Single Phase - 0 - 10 VDC Output



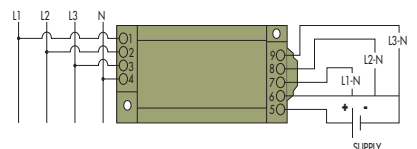
CR4520 Single Phase - 4 - 20 mADC Output



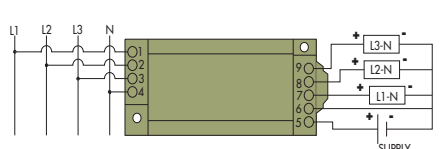
CR4550 3 Phase, 3 Wire - 0 - 5 VDC Output



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.



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41

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