



True RMS AC Voltage Transducer

DIN RAIL / PANEL MOUNT, TRUE RMS

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.



Regulatory Agencies

- Approved to UL3111-1, First Edition, Amendment 2
- Approved to CAN/CSA-C22.2, No. 1010.1-92
- Meets requirement of IEC 61010-1 and BS EN 61010-1

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 or 4-20 mA DC outputs
- 24 Vdc powered
- Highest precision available
- Outputs isolated from inputs
- Connection diagram printed on case

Internet Resources <http://www.crmagnetics.com/>

- Pricing: [pricing/4500.html](http://www.crmagnetics.com/pricing/4500.html)



CR4510 CR4520
Single Phase



CR4550 CR4560
CR4570 CR4580
Three Phase

Part Numbers

- CR4510** - ☐ Single Phase with 0 to 5 Vdc Output
CR4520 - ☐ Single Phase with 4 - 20 mA DC Output
CR4550 - ☐ 3-Phase 3-Wire with 0 to 5 Vdc Output
CR4560 - ☐ 3-Phase 3-Wire with 4 - 20 mA DC Output
CR4570 - ☐ 3-Phase 4-Wire with 0 to 5 Vdc Output
CR4580 - ☐ 3-Phase 4-Wire with 4 - 20 mA DC Output

☐ Add suffix for input range

- 50** - 0-50 Vac
150 - 0-150 Vac
250 - 0-250 Vac
500 - 0-500 Vac *
Other Ranges Available

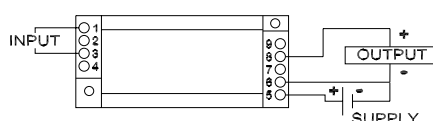
* not UL recognized

True RMS AC Voltage Transducer

Specifications

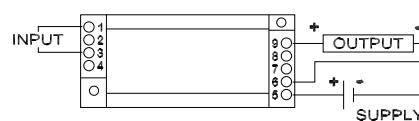
Basic Accuracy:.....	0.5%	Supply Voltage:.....	24 Vdc $\pm$ 10%
Calibration:.....	True RMS sensing	Frequency Range:.....	20 Hz - 5 KHz
Thermal Drift:.....	500 PPM/ $^{\circ}$ C	Cleaning:.....	Water-dampened cloth
Operating Temperature:.....	0 $^{\circ}$ C to +60 $^{\circ}$ C	MTBF:.....	Greater than 100 K hours
Installation Catagory:.....	CAT II	Output Load:.....	0-5 Vdc - 2 K Ω or greater
Polution Degree:.....	2		4-20 mA dc - 0 to 300 Ω
Response Time:	250 ms	Relative Humidity:....	80% for temperatures up to
Altitude:.....	2000 meter max.		31 $^{\circ}$ C and decreasing linearly to 50% at 40 $^{\circ}$ C
Insulation Voltage:.....	2500 Vdc		

Connection Drawings



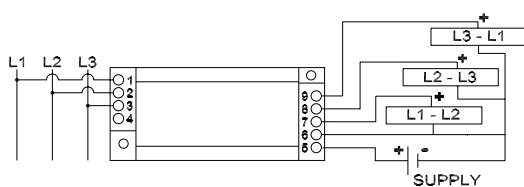
CR4510

Single Phase - 0 - 5 Vdc Output



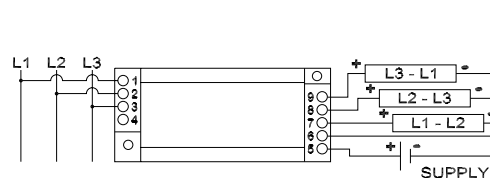
CR4520

Single Phase - 4 - 20 mA DC Output



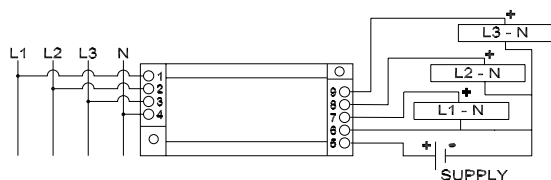
CR4550

3 Phase, 3 Wire - 0 - 5 Vdc Output



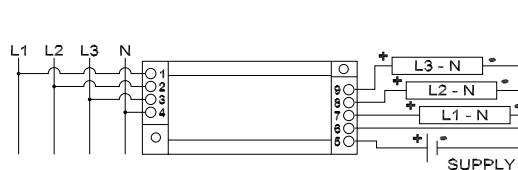
CR4560

3 Phase, 3 Wire - 4-20 mA DC Output



CR4570

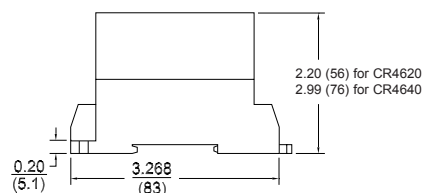
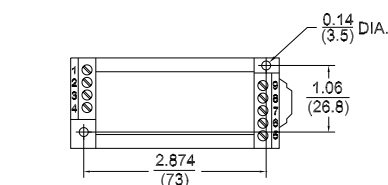
3 Phase, 4 Wire - 0 - 5 Vdc Output



CR4580

3 Phase - 4 Wire - 4 - 20 mA DC Output

Outline Drawing



inch (mm)