

# High Ratio Vertical PCB Mount Current Transformer

CR Magnetics **CR8300** Series of PCB Mounted Current Transformers are available in a wide range of sizes and materials to meet any AC current sensing needs. Our **General Purpose** designs are made from the highest quality silicon steel cores available, and meet most of the common AC current measurement needs. Our **Revenue Grade** Cts (**-N**) are made from a nickel alloy core which provides the most linear response over temperature and current level. The **High Frequency** (**-F**) products are designed for high frequency applications such as high frequency power supplies and motor drives. CR Magnetics offers **DC Immune** (**-D**) models that are designed to provide sensing of AC currents where DC offsets also exist. All products are offered in standard sizes, with the most popular turns ratios. UL, CSA, CE, and RoHS acceptance are all standard.

## CR8300 SERIES



### Applications

Motor Load Measurement  
Power Meters  
High Frequency Current Sensing

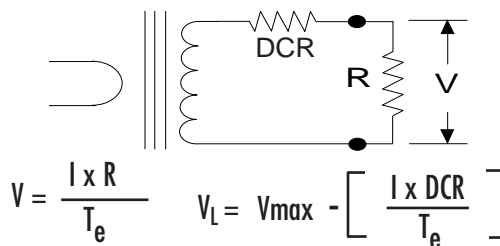
### Features

High Ratio  
Standard Footprints

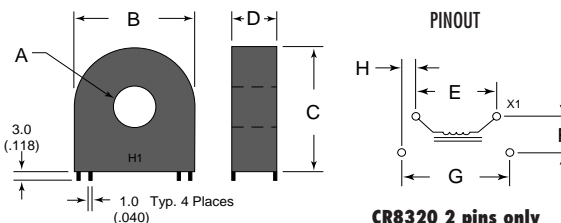
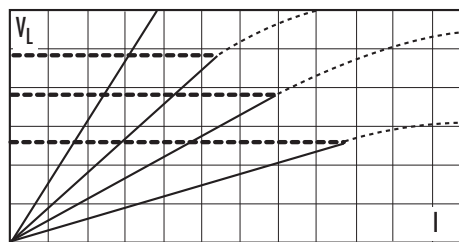
### Specifications

Maximum Continuous Primary Current 4 X I<sub>r</sub>  
Storage Temp -20° to +80°C  
Operating Temp -10° to +70° C

### Regulatory Agencies



For best linearity, choose R such that  $V < 0.8 V_L$



### GENERAL PURPOSE VERTICAL PCB CURRENT TRANSFORMERS

Part Number	I <sub>r</sub>	V <sub>max</sub> RMS	T <sub>e</sub> (typ.)	DCR	Frequency
CR8320-1600	10	1.6	1613	95	20 - 1 KHz
CR8348-1000	20	7.0	1023	24	20 - 1 KHz
CR8348-2000	50	10.2	2046	106	20 - 1 KHz
CR8349-1000	50	6.8	1016	35	20 - 1 KHz
CR8349-1500	75	12.8	1520	80	20 - 1 KHz
CR8350-1000	100	8.1	1021	22	20 - 1 KHz
CR8350-2000	200	16.7	2037	73	20 - 1 KHz

### REVENUE GRADE VERTICAL PCB CURRENT TRANSFORMERS

Part Number	I <sub>r</sub>	V <sub>max</sub> RMS	T <sub>e</sub> (typ.)	DCR	Frequency
CR8348-2500-N	40	4.1	2510	134	20 - 1 KHz
CR8349-1000-N	50	3.2	1009	32	20 - 1 KHz
CR8349-2500-N	75	7.9	2512	190	20 - 1 KHz
CR8350-2500-N	100	9.6	2511	57	20 - 1 KHz

### HIGH FREQUENCY VERTICAL PCB CURRENT TRANSFORMERS

Part Number	I <sub>r</sub>	V <sub>max</sub> RMS	T <sub>e</sub> (typ.)	DCR	Frequency
CR8348-2000-F	50	4.2	2022	88	20 - 200KHz
CR8349-2000-F	75	7.1	2024	109	20 - 200KHz
CR8350-2000-F	100	10.5	2027	73	20 - 200KHz

### DC IMMUNE VERTICAL PCB CURRENT TRANSFORMERS

Part Number	I <sub>r</sub>	V <sub>max</sub> RMS	T <sub>e</sub> (typ.)	DCR	Frequency
CR8348-2000-D	50	4.5	2015	57	20 - 1 KHz
CR8349-2000-D	75	7.6	2017	48	20 - 1 KHz
CR8350-2000-D	100	6.7	2020	25	20 - 1 KHz

I<sub>r</sub> = Maximum Input Current to be linearly sensed V<sub>max</sub> = Maximum Voltage (Saturation) CT will develop

T<sub>e</sub> = Effective turns ratio including losses (All Specifications tested at 60 Hz)

### PACKAGE AND PIN OUT DIMENSIONS (mm / in)

Part Number Prefix	A min	B max	C max	D max	E d 3.0	F d 3.0	G d 3.0	H typ
CR8320	5.5 .22	19.4 .76	19.5 .77	8.2 .32	12.7 .50	N/A	N/A	3.2 .13
CR8348	6.7 .27	23.5 .93	25 .98	11 .43	15.24 .60	9.5 .37	19 .75	1.90 .07
CR8349	9 .35	26 1.02	28 1.10	17 .67	15.24 .60	15.5 .61	19 .75	1.90 .07
CR8350	12.8 .50	37.5 1.48	39 1.54	14 .55	25.4 1.00	12.7 .50	33.02 1.30	3.81 .15



Another HUNTINGTON ELECTRIC Company

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

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