CR3100 Series

CR3109-1500

CR3110-3000

CR3111-3000

CR3113-2000

The **CR3100** Series Split Core Current Transformer is designed to provide a low cost method to monitoring electrical current. A unique hinge and locking snap allows attachment without interrupting the current-carrying wire. High secondary turn will develop signals up to 10.0 VAC across a burden resistor.

Applications

Portable Instruments
Sub-Metering
Monitor Motor Loads

Features

Small Size
Low Cost
High Secondary Turns
Secure Locking Hinge

Specifications

Maximum Continuous Primary Current	4 X Ir
Insulation Voltage	3500 Vac/1min
Storage Temp.	-45°C thru +85°C
Operating Temp.	-40°C thru +65 °C

Regulatory Agencies

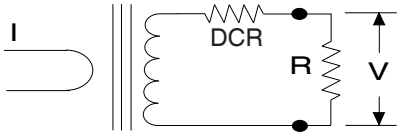
CR3110-3000 ONLY

PART NUMBERS	
CR3109 - 1500	30 AMP
CR3110 - 3000	75 AMP
CR3111 - 3000	100 AMP
CR3113 - 2000	150 AMP

SPLIT CORE CURRENT TRANSFORMERS

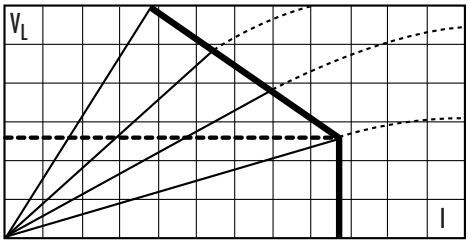
Part Number	Imax	Vmax RMS	Te (typ.)	DCR Ω	Frequency
CR3109-1500	30	5	1510	187	20 - 1 KHz
CR3110-3000	75	15	3100	515	20 - 1 KHz
CR3111-3000	100	19	3150	390	20 - 1 KHz
CR3113-2000	150	16	2125	58	20 - 1 KHz

I_r = Maximum Input Current to be linearly sensed V_{max} = Maximum Voltage (Saturation) CT will develop
T_e = Effective turns ratio including losses (All Specifications tested at 60 Hz)

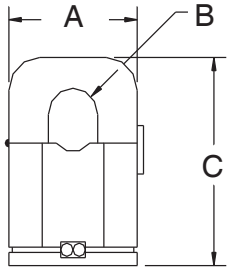


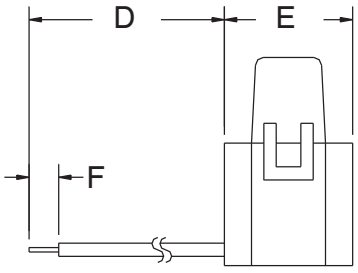
$$V_L = Vmax - \left[\frac{I \times DCR}{T_e} \right] \qquad V = \frac{I \times R}{T_e}$$

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



OUTLINE DRAWING





Part Number	A	B	C	D	E	F
CR3109-1500	0.76 (19.2)	0.19 (4.90)	1.24 (31.5)	6.10 (1.55)	0.82 (20.8)	0.20 (5.08)
CR3110-3000	1.00 (25.5)	0.40 (10.2)	1.57 (40.0)	5.91 (150)	1.04 (26.5)	0.24 (6.10)
CR3111-3000	1.24 (31.4)	0.62 (15.7)	1.77 (45.0)	6.10 (155)	1.22 (31.0)	0.20 (5.08)
CR3113-2000	2.68 (68.7)	0.98 (24.9)	2.56 (65.0)	118 (3000)	0.72 (18.4)	0.20 (5.08)