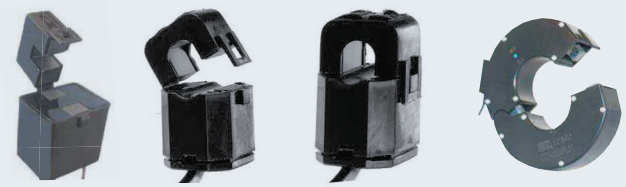
Split Core Current Transformer

3100 Series

ebmpapst

the engineer's choice



The **3100** 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.

Part Numbers

ER 3109	30 AMP
ER 3110	75 AMP
ER 3111	100 AMP
ER 3113	150 AMP

Split Core Current Transformers

Part Nr.	Imax	Vmax RMS	Te (typ.)	DCR Ω	Freq.
3109	30	5	1510	187	20 - 1 KHz
3110	75	15	3100	515	20 - 1 KHz
3111	100	19	3150	390	20 - 1 KHz
3113	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)

Applications

Portable Instruments
Sub-Metering
Monitor Motor Loads

Features

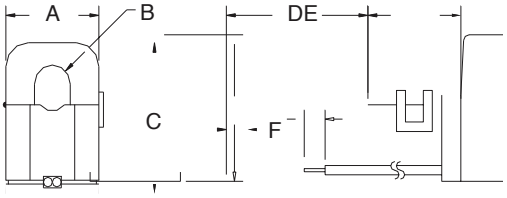
Small Size
Low Cost
High Secondary Turns
Secure Locking Hinge

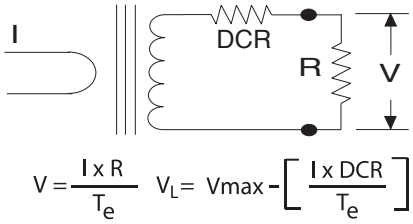
Specifications

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

Outline Drawing





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