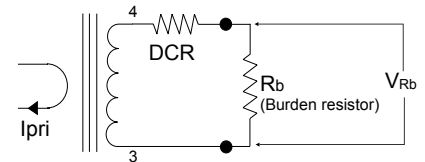


TL-8300 Series Current Transformers

Features:

- Maximum Primary Continuous Current: $4 \times I_{pri}$
- Isolation Voltage: 3500Vrms (60 seconds)
- Storage Temperature: -45°C to $+85^{\circ}\text{C}$
- Operating Temperature: -40°C to $+85^{\circ}\text{C}$
- Used for Power meters, Current Sensing, Ground Fault Sensing and Motor Load measurement applications

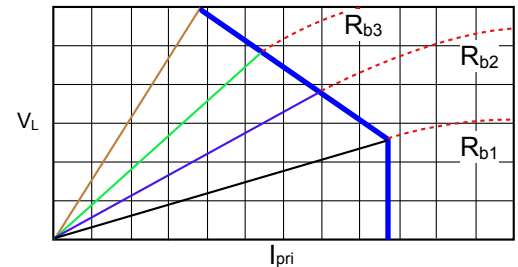
Schematic



$$V_L = V_{max} - \frac{I_{pri} \times DCR}{T_e} \quad V_{Rb} = \frac{I_{pri} \times R_b}{T_e}$$

For best Linearity, choose R such that $V_{Rb} < 0.8V_L$

V_L vs I_{pri} Linearity Plot



Electrical Specifications @25°C

Part Number	I_{pri}^3 (Arms)	V_{max}^4 (Vrms)	T_e^2 Typ.	DCR ($\Omega \pm 5\%$)	Frequency Range
TL-8320-1600	10	1.8	1613	95	20Hz - 1KHz
TL-8348-1000	20	7	1023	24	20Hz - 1KHz
TL-8348-2500-N ¹	40	7.5	2510	134	20Hz - 1KHz
TL-8349-1000	50	11.6	1016	35	20Hz - 1KHz
TL-8349-1000-N ¹	50	5.1	1009	32	20Hz - 1KHz
TL-8349-1500	75	15.5	1520	80	20Hz - 1KHz
TL-8349-2500-N ¹	75	11.2	2512	190	20Hz - 1KHz
TL-8350-2500-N ¹	100	10.5	2511	57	20Hz - 1KHz

Notes:

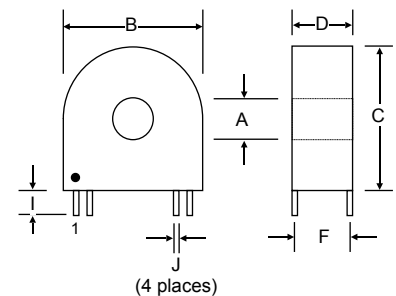
1. Higher grade versions with most linear response over temperature and current level
2. Effective turns ratio including losses
3. Maximum current that can be linearly sensed
4. Maximum voltage output at core saturation.
5. All specifications tested at 60Hz.

Package and Pinout Dimensions

Series Number	A (Min.)	B (Max.)	C (Max.)	D (Max.)	E (+0.3)	F (+0.3)	G (+0.3)	H (Typ.)	I (Typ.)	J (Typ.)
TL-8320	5.5	19.4	19.5	8.2	12.7	—	—	4	4	0.8
TL-8348	6.7	23.5	25	11	15.2	9.5	19	1.9	3	1
TL-8349	9	26	28	17	15.2	15.5	19	1.9	3	1
TL-8350	12.8	37.5	39	14	25.4	12.7	33.02	3.81	6	1

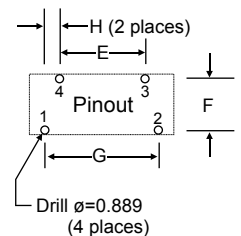
All Dimensions are in mm.

Dimensions



Marking

Tesla Magnetics
 TL-83XX
 D.C.



All Dimensions are in mm.