



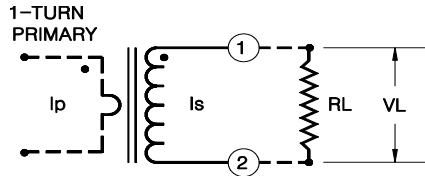
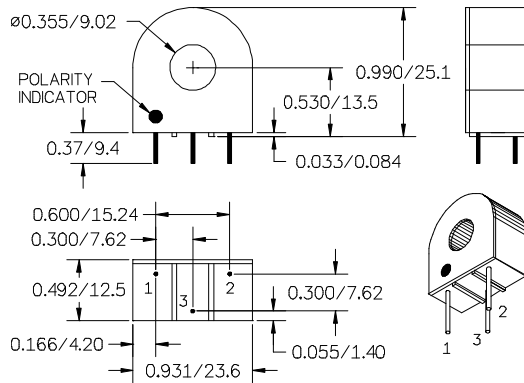
# 50 A Current Transformer Model S44

### Electrical Specifications:

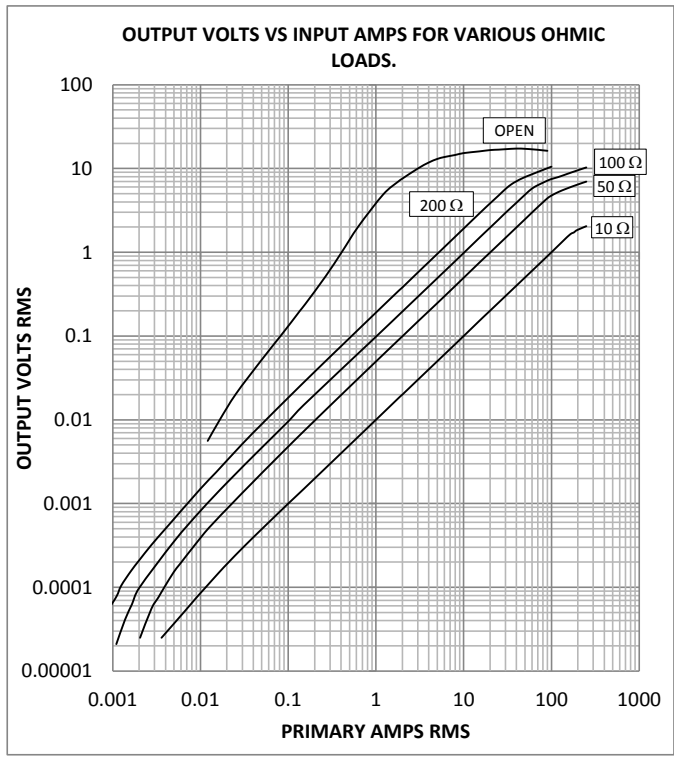
Turns Ratio: 1000:1 Nominal.  
 Rated Current listed is for a reference load of 100 ohms.  
 See chart and table below for other load values.  
 Max output Voltage: 20 Vrms at 60Hz.  
 SRF: 120 kHz. MIN.  
 DC Resistance at 20°C: 37 OHMS ± 10%  
 Series inductance at 1V, 50Hz.: 4.0 H MIN.  
 Dielectric Withstanding Voltage (DWV): 4 kV

### Other Specifications:

Flammability: Conforms to UL94-V0  
 Pins: Tin plated round copper, 0.032" dia (#20 AWG)  
 Storage Temp. Range: -55°C- +130°C  
 Load current for 30°C temperature rise: 105 A  
 Net wt.: 16 gm.  
 All dimensions are in inches/mm.  
 Tolerance: ± 0.010 / 0.25  
 Marking: GMS44 YY-WW (datecode)



Ip: Primary Current  
 Is: Secondary current  
 VL: Output voltage across load RL  
 RL: Terminating Resistor  
 In the linear range,  
 $I_p = V_L \times N / R_L \pm 1\%$   
 Where N is the nominal ratio of the transformer.



### Notes:

- 1: Pin 3 is for mechanical support and is not electrically connected.
- 2: The terminating resistor and the one-turn primary are not supplied.
- 3: Dot indicates pin with positive polarity when positive current flows into face with dot on it.
- 4: For right pin polarity, add R to P/N. ie. S44-R
- 5: Custom marking available at no extra charge.

Linear Range		
Load RL OHM	Volts per Amp (V/A)	Current Range for ±1% linearity
10	0.01	0.50 - 100
50	0.05	0.50 - 80
100	0.1	0.50 - 52
200	0.2	0.50 - 30

Values are for 60 Hz. Reduce top end of current range by 20% at 50 Hz.