

For 100A : 1A and 1000A : 1A AC Current Measurements



CT1000 Current Transformer

The Voltech CT1000 is a toroidally wound AC current transformer that extends the range of Voltech power analyzers such as the PM100, PM300 or PM3000A to 1200A rms. Close-tolerance current ratios provide a measurement accuracy of better than 0.2%, making the CT1000 suitable for precision-grade measurements.

The CT1000 is housed in a fully insulated, shock-resistant casing with a core aperture that accommodates large-diameter cables or rectangular busbars. To minimize the risk of electrical shock, the CT1000 has 4mm safety sockets for the leads connecting it to the power analyzer. In addition, a novel over-voltage protection circuit limits the voltage on the output terminals to 50V peak, if the transformer's secondary winding is inadvertently open-circuited.

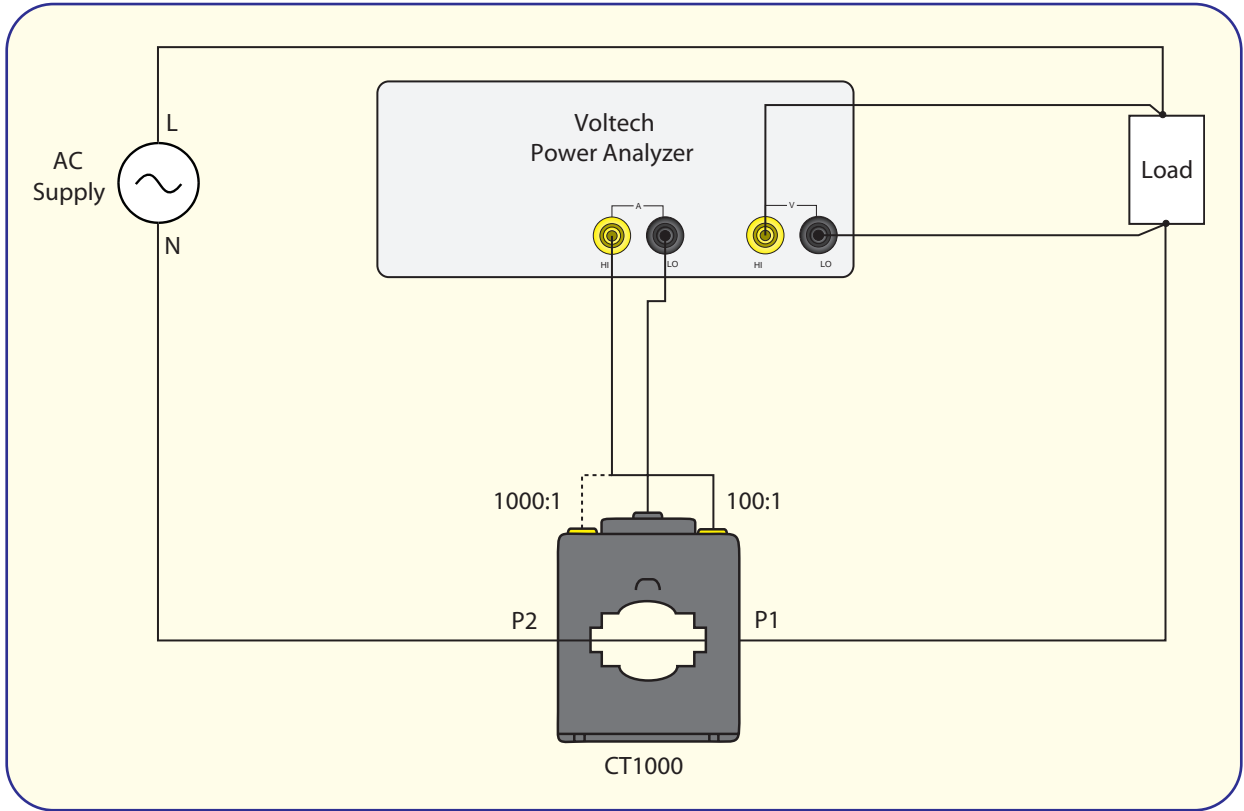
Specification

Frequency Range:	45Hz to 1kHz
Current Range:	100:1 ratio 10A to 120A rms 1000:1 ratio 100A to 1200A rms
Maximum Input Current:	1000A continuous 2000A for 1 hour
Accuracy (23°C ± 5°C):	±0.2% of specified ratio
Phase Error (23°C ± 5°C):	Better than ± 0.1° at 50Hz
Maximum Burden:	0.15VA for specified accuracy (equivalent to the input of any Voltech power analyzer plus the test leads provided)
Dielectric Strength:	4kV at 50Hz for 1 minute
Temperature Range:	Operating: -10°C to +50°C Storage: -25°C to +85°C

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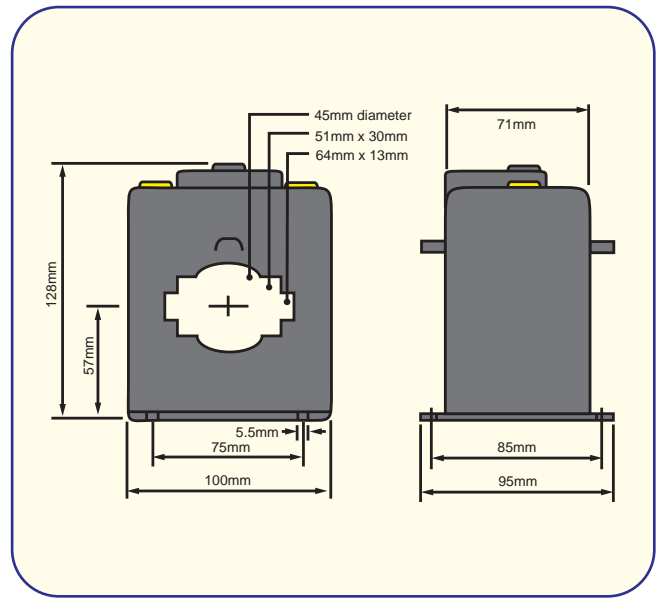
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Operation

- Connect the CT1000 to your power analyzer as shown in the diagram above.
- For primary circuit currents between 10A rms and 120A rms, use the output sockets on the CT1000 marked 100:1.
- For primary circuit currents between 100A rms and 1200A rms, use the sockets marked 1000:1.

When the CT1000 is used with a Voltech power analyzer, the analyzer's scaling function can be used to automatically scale the measurements by a factor of 100 or 1000, as appropriate.



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