

Rogowski Coil Current Sensor with Voltage Integrator

The **JRLO** series of Rogowski Coil current sensors are designed for permanent installation on existing primary conductors/ BUS bars. The sensor features non-contact AC current or current pulse measurement.

A current sensor that is based upon the Rogowski Coil principle offers significant advantages over the standard magnetic core current transformer products. Specifically, since the sensor does not incorporate a magnetic core, magnetic core saturation (the point where incremental increases in magnetic flux are not reflected in proportional increases in secondary signal outputs) is avoided.



Features:

A Rogowski Coil sensor is able to measure a very wide range of AC current and/ or current pulse inputs with excellent accuracy and linearity.

Specifications:

- Frequency: 45 Hz to 600 Hz.
- Primary Conductor Position Sensitivity: $\pm 2\%$ maximum.
- Influence of External Field: $\pm 1.5\%$ maximum
- Working Voltage: 1000V_{RMS} or 1000 VDC.
- Dielectric Surge Withstand: 5kV_{RMS} for 1 minute (coil closed).
- Operating Temperature: -20°C to +65° C.
- Case Construction:
 - Nylon GF30% (Black)
 - Epoxy encapsulated (Black).

- Lead Wire:
 - Teflon, 24 AWG (White/ Black), UL 2586, 600V, 1.0m (3.3 FT).
 - 80mm (0.26FT), twisted pair (Black/ Yellow)
- RoHS Compliant.



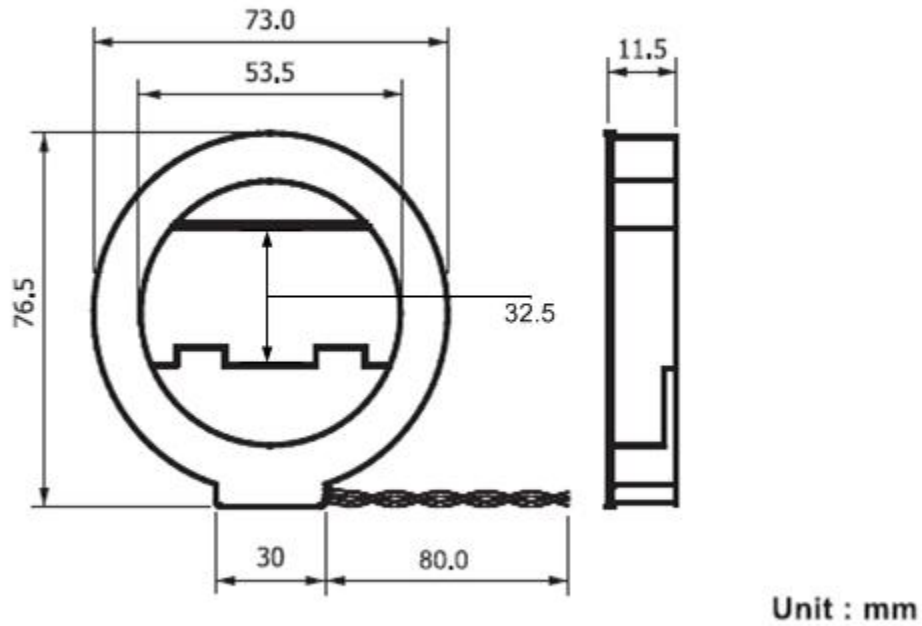
Performance:

- Rated Primary Currents:

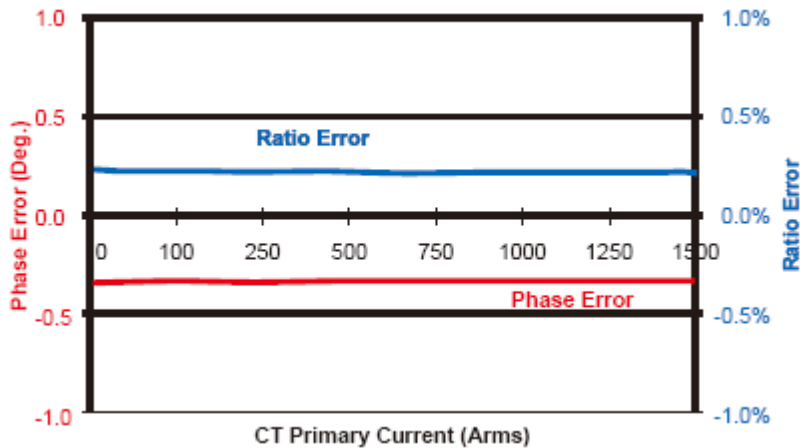
400A	630A	800A
1000A	1250A	1600A
6000A		

- Output: 200mV @ Rated Primary Current @ 50/60 Hz
- Accuracy: $< \pm 1\%$.
- Phase Shift: ± 60 minutes (1°) @ Rated Primary Current.
- Linearity: $\pm 0.2\%$ of reading from 10% to 100% of Rated Primary Current.

Outline Dimensions:



Typical Performance:



Technical Support: For a no obligation technical evaluation of specific performance requirements, please provide the specific requirements to ApplicationEngineering@tichenassociates.com or the address below.