Model LC30 Miniature

Current Transformer High Accuracy 0.3" Window, 600 VAC Rated

- Select 1A through 100A = XXX input current
- Accuracy 0.5% over full range (AC output model)
- Range is 1% to 100% of Full Scale
- Phase shift < 0.5° Full Scale
- UL Recognized to IEEEC57.13
- Class 105 for 55°C Ambient Temperature







The LC30 miniature current transformer is an indoor AC voltage output transducer designed for tight areas like breaker panels – the snap top simplifies installation over wire sizes up to 0.3" diameter. The CT weighs only 1.6 oz and uses a single coil construction – this allows for the small package for the large current input. The AC Voltage out (ACV) model contains an internal resistor to provide an AC voltage output signal. Turns-ratio models (ACA) are available but the current ratio is limited due coil winding space.

Specifications:

Output Types

AC Voltage: 100mV, 250mV, 333mV, 500mV, 1V or 5V.

AC Current Ratio: Ratios limited due to coil winding space, call Sentran Corp. **Input Current:** AC current, sinewave, single phase 50 or 60Hz (specify). **Voltage Rating:** 600Vac, Tested at 1500VAC Full Wave for 60 second. **Ratio and Linearity Accuracy:** 0.5% over the range down to 5% of full scale.

Phase Displacement: < 0.5° at full scale and about 1° at 5% of scale.

Bandwidth: 50Hz to 400Hz.

Phase Relationship: Label points to source for positive output on white wire.

Interface Resistance: Should be at least 50,000 ohms.

Temperature Range: -20°C to +55°C.

Temperature Coefficient: Less than 0.05% from -20°C to +55°C. **Continuous Current Rating Factor**: 1.0 or sometimes shown as 1X.

Short-Time Thermal Current Rating: 500A for 1s (1A unit worse case, temp < 100°).

Construction: ABS or Nylon plastic case. Weight is 1.6oz. **Lead Wires:** 8' Twisted black & white 22AWG, UL1015



How To Order:

Build a part number: LC30-XXX-YYY, select input current and output:

AC Voltage Example: LC30-50A:333mV is 50A range with 333mV output. Replace "XXX" with up to 100A.

AC Ratio Example: LC-25A-3000:1 for 8.33mA output at full scale.

Installation Instructions

Due to the "corner affect" of a single coil CT, the conductor passing through the center should be centered and perpendicular to the CT window.

You can secure the CT to the center conductor using nylon ties through the window and around the center conductor – or nylon ties around the CT.



