

Model LCF

Miniature Current Transformer

UL Listed To UL2808, XOBA

- Input Range: 5A to 100A
- Output: 333mVAC standard
- Other outputs available
- Accuracy Class 0.5 standard
- Small size for tight places
- Hinged Top for easy installation



The Model LCF is an XOBA split-core current transformer with a hinged top and latch. UL Listed to UL2808 and CAN/CSA C22.2 6101-1 for energy metering equipment, CAT III, Pollution Degree 2. Due to the small size, the LCF has a 100A maximum input current, making it ideal for monitoring cramped locations such as control panels. Current outputs for this model are limited due to internal space for turns ratio. Call or email for available current outputs.

Specifications:

Input Current.....100AC current max, sine wave, single phase 50/60Hz
 Standard Inputs: 5A, 10A, 15A, 20A, 25A, 30A, 50A, 70A, 75A, 100A

Voltage Rating.....600VAC

Output Voltage.....100mV, 250mV, 333mV

Output Current.....Contact Sentran for available current outputs

Standard Accuracy.....Class 0.5 per Table 201 IEC61869-1

Output Resistance.....100 to 3,500Ω, depending on current rating

Interface Resistance.....100kΩ minimum. Other instrument impedances can be interfaced on special orders

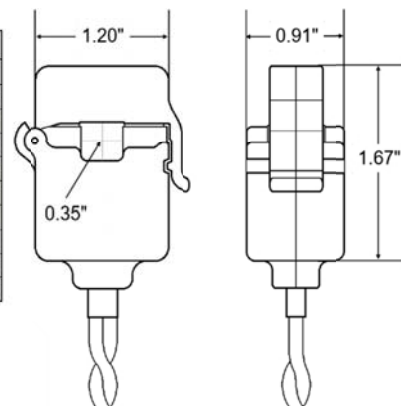
Pollution Degree.....2 | **Humidity**.....Up to 95% non-condensing

Temperature Range.....-20°C to 55°C

Lead Wires......8ft. twisted black and red, 18AWG per UL1015






| 100mA OUT | 100mV OUT | 250mV OUT | 333.3mV OUT |
|----------------|----------------|---------------|-----------------|
| LCF-5A:100mA | LCF-5A:100mV | LCF-5A:250mV | LCF-5A:333.3mV |
| LCF-10A:100mA | LCF-10A:100mV | LCF-10A:250mV | LCF-10A:333.3mV |
| LCF-15A:100mA | LCF-15A:100mV | LCF-15A:250mV | LCF-15A:333.3mV |
| LCF-20A:100mA | LCF-20A:100mV | LCF-20A:250mV | LCF-20A:333.3mV |
| LCF-25A:100mA | LCF-25A:100mV | LCF-25A:250mV | LCF-25A:333.3mV |
| LCF-30A:100mA | LCF-30A:100mV | LCF-30A:250mV | LCF-30A:333.3mV |
| LCF-50A:100mA | LCF-50A:100mV | LCF-50A:250mV | LCF-50A:333.3mV |
| LCF-70A:100mA | LCF-70A:100mV | LCF-70A:250mV | LCF-70A:333.3mV |
| LCF-75A:100mA | LCF-75A:100mV | LCF-75A:250mV | LCF-75A:333.3mV |
| LCF-100A:100mV | LCF-100A:250mV | | |









Miniature Current Transformers






The smallest CTs we manufacture, the Miniature current transformers are designed to fit inside of cramped spaces, such as residential breaker boxes. All models are hinge-tilt top making it easy for installation around a conductor. The Models LC30, LC45, and LCDC are UL Recognized while the Model LCF is UL Listed.

|  | MODEL | I.D (WW) | CERTIFICATIONS |
|------------------------------------------------------------------------------------|---------------|---------------|-------------------------------------------------------------------------------------|
| | LC30-XX:YY-WW | 0.3" |  |
| | INPUT (XX) | OUTPUT (YY) | |
| | 1A - 100A | 250mV - 1VAC* |  |
| | ACCURACY | OPT. ACCURACY | |
| Class 1.0 | Class 0.5 | | |

|  | MODEL | I.D (WW) | CERTIFICATIONS |
|-------------------------------------------------------------------------------------|---------------|----------------|---------------------------------------------------------------------------------------|
| | LCDC-XX:YY-WW | 0.45" |  |
| | INPUT (XX) | OUTPUT (YY) | |
| | 1A - 100A | 2.5VDC - 10VDC |  |
| | ACCURACY | OPT. ACCURACY | |
| Class 1.0 | Class 0.5 | | |

|  | MODEL | I.D (WW) | CERTIFICATIONS |
|-------------------------------------------------------------------------------------|---------------|---------------|-------------------------------------------------------------------------------------|
| | LC45-XX:YY-WW | 0.45" |  |
| | INPUT (XX) | OUTPUT (YY) | |
| | 1A - 100A | 250mV - 1VAC* |  |
| | ACCURACY | OPT. ACCURACY | |
| Class 1.0 | Class 0.5 | | |

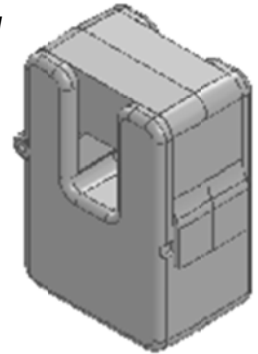
|  | MODEL | I.D (WW) | CERTIFICATIONS |
|--------------------------------------------------------------------------------------|--------------|---------------|---------------------------------------------------------------------------------------|
| | LCF-XX:YY-WW | 0.35" |  |
| | INPUT (XX) | OUTPUT (YY) | |
| | 1A - 100A | 250mV - 1VAC* |  |
| | ACCURACY | OPT. ACCURACY | |
| Class 0.5 | Class 0.2 | | |



Model Series LC30 & LC45

LC30 with 0.30" Window, LC45 with 0.45" Window Revenue Grade Split Current Transformer +/- 0.5 Accuracy per 60044-1, 600 VAC Rated UL Recognized to C57.13-1998/CSA C22 61010-1

- Select 1A through 100A = XXX input current
- Accuracy +/-0.5 % per 60044-1 Table 11
- C57.13-2008 +/- 0.6% Accuracy
- Range 5% to 100% of Full Load Amps
- Phase shift < +/-30 Min per 60044-1 Table 11
- 55°C Ambient Temperature
- Rugged Construction: Thick Plastic Snap Lid



The LC current transformer is an indoor AC voltage output transducer designed for installation within breaker panels and industrial control cabinets. The snap top simplifies installation over wire sizes up to 0.4" diameter. The CT is provided with an internal resistor for an AC voltage output signal. Current ratio models are available depending on output current and DCV output type for up to 10VDC. 8 foot output leads are black and white twisted pair 600V (UL1015) for ACV and ACA output type and red and black for the DCV output type. Longer lengths are available when ordered.

Input Current: AC current, sine wave, single phase 50 or 60Hz (specify)
Voltage Rating: 600Vac, Tested at 2500VAC Full Wave for 60 second
AC Voltage Output Type: 100mV, 250mV, 333mV, 500mV, 1V or 5VAC
AC Current Ratio Type: Ratio for 0.1A standard (contact Sentran Corp)
Ratio and Linearity Accuracy: +/- 0.5% range 5% to 120% per 60044-1
Phase Displacement: < 0.17° at full scale per 60044-1 Table 11
Phase Relationship: Label points to source for positive output on white wire
Interface Resistance: Should be at least 50,000 ohms for ACV output models
Temperature Range: -40°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 plastic case, weight is 1.6oz
Lead Wires: Twisted pair B/W 22 UL1015, 8ft. standard



Installation Instructions: The LC is a single coil CT using a ferrite core. The core faces, when the top is lifted, must be clean of any dirt for the CT to stay within calibration. 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.

