

CT-MS & CT-LS SERIES

1 A & 5 A Secondary Current Transformers

1 A and 5 A Secondary Current Transformers offer a compact, cost-effective means of measuring primary current. These current transformers provide an easy-to-install method to measure AC current, producing a 0–1 A or 0–5 A output proportional to the current flowing through the sensing window. Both the CT-MS and the CT-LS series offer a larger-than-average sensing window and a split-core design for easy installation.

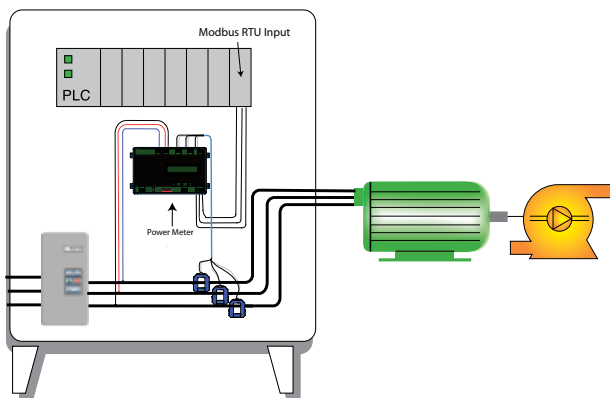
Current Transformer Features

- Split-core case for convenient installation over large wires or bus bars.
- 1 A and 5 A secondary CTs are compatible with standard power monitors and panel meters designed for 1 A or 5 A input.
- Larger sensing windows:
MS Series aperture measures 2.22" x 1.19" and measures current from 0–150 to 0–800 A.
LS Series aperture measures 3.49" x 2.36" and measures current from 0–800 to 0–1600 A.
- Plated terminals for reliability.
- UR recognized file E475131. Meets ANSI/IEEE C57.13 and IEEE C57.13.2.

Current Transformer Applications

- Serves as current input for use with APT and APN series KW transducers.
- Saves space in control panels by remotely locating the sensing of the current closer to the load.
- The current transformer secondary can be connected to the NK CTC-05A-420-24L-DIN to produce a loop-powered, 4–20 mA signal proportional to the current through the CT.

Power-Pump Load Monitoring



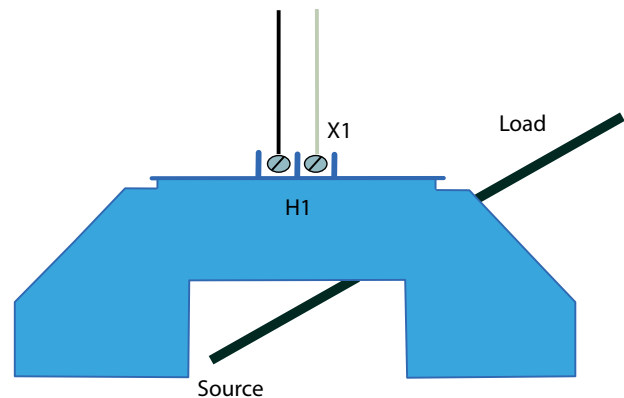
CT-MS Series



CT-LS Series

Connecting a Current Transformer

A current transformer (CT) should never be energized (AC current through the sensing window) without a load connected to the output terminals. Best practice is to terminate the current transformer secondary on a terminal block with the ability to short between two points before extending the leads to the load. If it is ever necessary to remove the load from the CT while it is or could become energized, a shorting bar can be placed between the secondary loads, as shown in the drawing below. This will allow the load to be removed safely.



OEMs

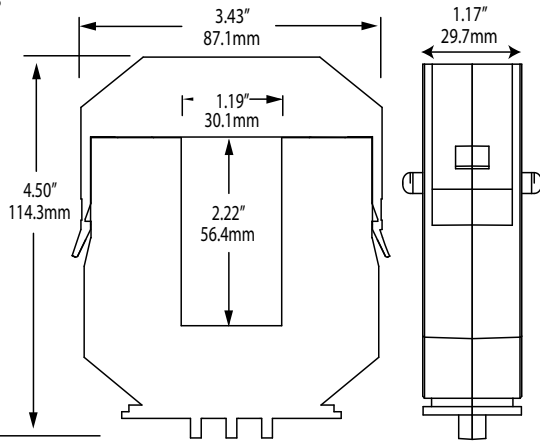
Test & Evaluation Units for OEMs

Free program expedites evaluation process. See page 3 for details.

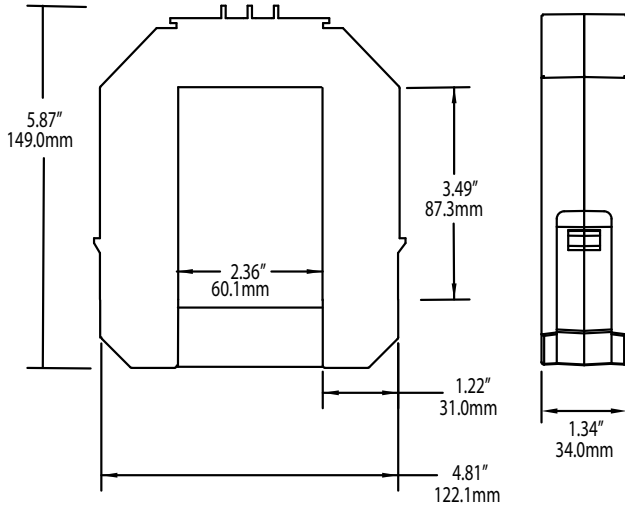


Current Transformer Dimensions

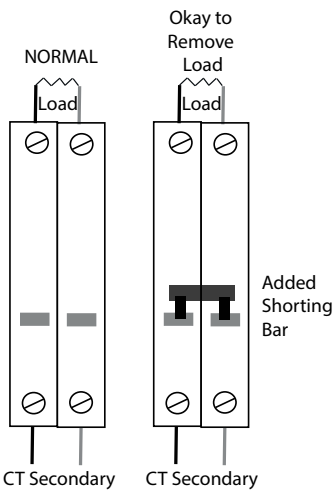
CT-MS



CT-LS



Current Transformer Connections



Current Transformer Specifications



| | | | | |
|--------------------------------|--|------------|---------------|----------|
| Power Supply | None, self-powered | | | |
| Current Range | <ul style="list-style-type: none"> • CT-MS: 0–150 through 0–800 A • CT-LS: 0–800 through 0–1600 A | | | |
| Output Signal | 0–1 A or 0–5 A (AC) | | | |
| Frequency | 50–400 Hz | | | |
| Primary Circuit Voltage | 600 VAC | | | |
| Accuracy | <ul style="list-style-type: none"> • 200–1600 A models: ±1% (10–100% of range) to 50°C • 150 A model: ±1.5% (10–100% of range) to 50°C | | | |
| Linearity | 0.5% (10–100% of range) | | | |
| Thermal Rating | 1.0 @ 30°C | | | |
| Listings | UL/cUL, CE | | | |
| Weight | CT-MS Series | | CT-LS Series | |
| | 150 | <0.75 lbs. | 800 | 2.0 lbs. |
| | 200 | <0.75 lbs. | 1000 | 2.2 lbs. |
| | 300 | <0.75 lbs. | 1200 | 2.3 lbs. |
| | 400 | <0.75 lbs. | 1400 | 2.3 lbs. |
| | 500 | <0.75 lbs. | 1600 | 2.4 lbs. |
| | 600 | <0.75 lbs. | | |
| 800 | <0.75 lbs. | | | |
| Allowable Burden | CT-MS Series | | CT-LS Series | |
| | 1 A Secondary | | 5 A Secondary | |
| | Ratio | Burden | Ratio | Burden |
| | 150:1 | 1.0 VA | 150:5 | 1.2 VA |
| | 200:1 | 1.0 VA | 200:5 | 1.2 VA |
| | 300:1 | 1.0 VA | 300:5 | 1.2 VA |
| | 300:5 | 4.5 VA | 1400:1 | 16.0 VA |
| | 400:1 | 1.0 VA | 400:5 | 1.2 VA |
| | 500:1 | 2.0 VA | 500:5 | 5.0 VA |
| | 600:1 | 2.5 VA | 600:5 | 7.5 VA |
| 800:1 | 2.0 VA | 800:5 | 7.5 VA | |

Current Transformer Ordering Information

Sample Model Number: CT-0800-5-LS

Current transformer with 800:5 ratio allowable burden, 5 A secondary output, and large sensing window.



(1) Model

| CT-MS Models | |
|--------------|-----------|
| 0150 | 150 ratio |
| 0200 | 200 ratio |
| 0300 | 300 ratio |
| 0400 | 400 ratio |
| 0500 | 500 ratio |
| 0600 | 600 ratio |
| 0800 | 800 ratio |

| CT-LS Models | |
|--------------|-----------------------|
| 0800 | 800 ratio |
| 1000 | 1000 ratio |
| 1200 | 1200 ratio |
| 1400 | 1400 ratio (1 A only) |
| 1600 | 1600 ratio (5 A only) |

(2) Output Signal

| | |
|---|-----------------|
| 1 | 0–1 A secondary |
| 5 | 0–5 A secondary |

(3) Case Style

| | |
|----|-----------------------|
| MS | Medium sensing window |
| LS | Large sensing window |

OEMs Test & Evaluation Units for OEMs
Free program expedites evaluation process. See page 3 for details.