CT-MS & CT-LS SERIES

1 A & 5 A Secondary Current Transformer

CT-MS Series

CT-LS Series

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 a 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.

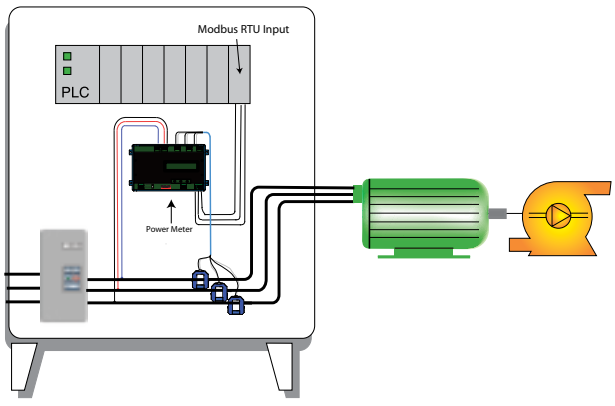
Current Transformer Features

- 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

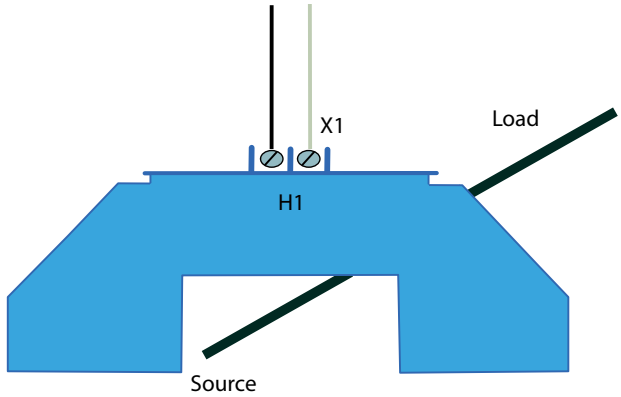
- Serves as current input for use with APT and APN series KW transducers.
- Saves space in control panels by remotely locating the sensing of the current closer to the load.
- The current transformer secondary can be connected to the NK CTC-05A-420-24L-DIN to produce a loop-powered, 4–20 mA signal proportional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

Power-Pump Load Monitoring



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 to the right. This will allow the load to be removed safely.



Current Transformers

NK Technologies
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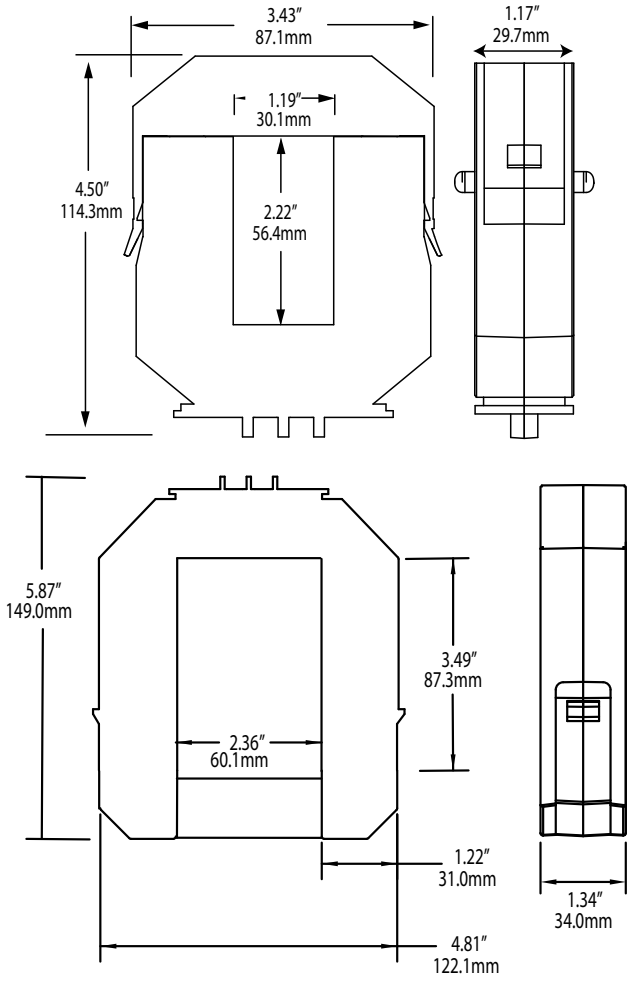
Current Transformer Dimensions



Current Transformer Specifications

Power Supply	None, Self-powered
Current Range	• 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	• 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

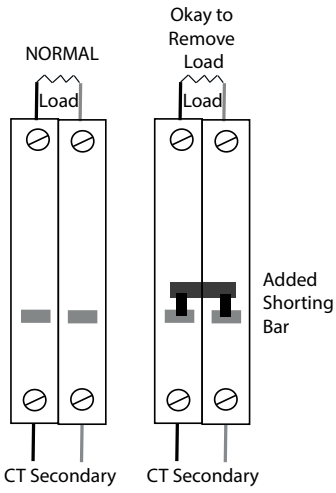
Weight

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		1 A Secondary		2 A Secondary	
Ratio	Burden	Ratio	Burden	Ratio	Burden	Ratio	Burden
150:1	1.0 VA	150:5	1.2 VA	800:1	16.0 VA	800:5	10.0 VA
200:1	1.0 VA	200:5	1.2 VA	1000:1	16.0 VA	1000:5	10.0 VA
300:1	1.0 VA	300:5	1.2 VA	1200:1	16.0 VA	1200:5	10.0 VA
300:5	4.5 VA			1400:1	16.0 VA		
400:1	1.0 VA	400:5	1.2 VA			1600:5	12.5 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 Connections



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.

CT – (1) – (2) – (3)

(1) Model

CT-MS Models	
0150	150 ratio
0200	200 ratio
0300	300 ratio
300:5	4.5 VA
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