

Specifications	
<b>Current Measurement</b>	0 to 1000A (AC)
<b>Output Signal</b>	0 to 5A (AC)
<b>Accuracy</b>	±1% @ 60Hz (10-100% of rated current)
<b>Frequency Range</b>	50 to 400Hz
<b>Primary Circuit Voltage</b>	0.6 kV maximum (600V)
<b>Temperature Range</b>	-20° to +50°C [-4° to +122°F]
<b>Dimensions</b>	ID 2.36" x 3.43" (60 x 87.3 mm)
<b>Case</b>	UL 94V-0 flammability rated thermoplastic
<b>Thermal Rating Factor (RF)</b>	1 @ 30°C
<b>Environmental Ratings</b>	0 to 95% RH non-condensing Pollution degree 2 Altitude to 2000 meters Overvoltage category II
<b>Approvals</b>	UL recognized component File E488023 Meets ANSI/IEEE 57.13 and IEEE C57.13.2



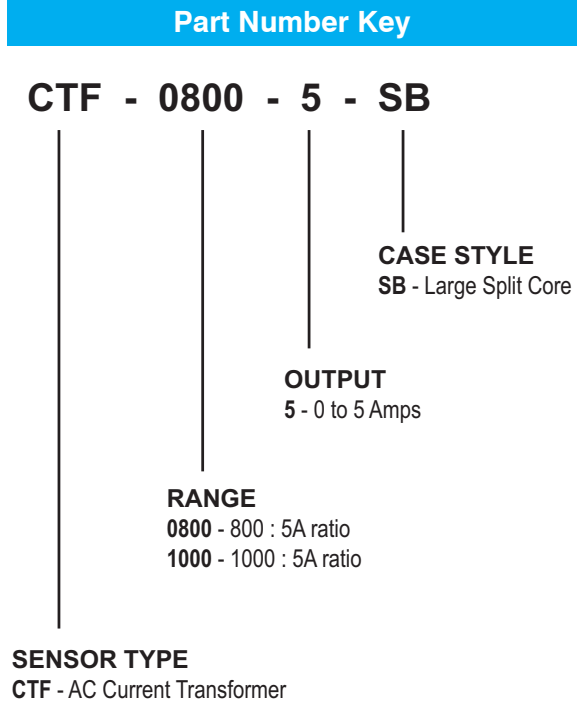
### Caution! Risk of electric shock or personal injury.

Safe operation can only be guaranteed if the transformer is used for the purpose for which it was designed and within the limits of the technical specifications. When this symbol is used, it means you should consult all documentation to understand the nature of potential hazards and the action required to avoid them.



### Caution! Risk of hazardous voltage.

When operating the transformer, certain parts may carry hazardous live voltage (e.g., primary conductor, secondary terminals). The transformer should not be put into service if the installation is not complete.



# CTF-xxxx-5-SB SERIES INSTALLATION INSTRUCTIONS



## Quick Start Guide

1. Open the CT by carefully prying out the locking tabs on each side of the sensing window and pulling downward to remove the base.
2. Place conductor inside sensing window and replace the base until the clips snap firmly closed. Verify the alignment markings match up properly.
3. Connect output wiring.
  - A. Use up to 14AWG 75/90°C copper wires.
  - B. Make sure output load does not exceed product specifications.
  - C. Observe polarity: H1 must face source, terminal X1 must connect to the "positive" on the load.
  - D. Terminating CT secondary on a block to allow shorting the secondary is advised.
4. Energize the monitored circuit.
5. Verify that the display or controller is reading the output correctly.



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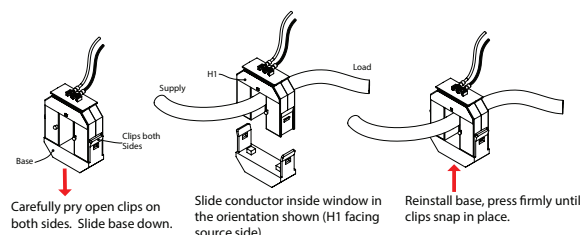
## Description

CTF-SB Series current transformers produce an output of current in proportion to the monitored circuit current. The wave shape of the output is nearly identical to the monitored circuit wave shape.

## Installation

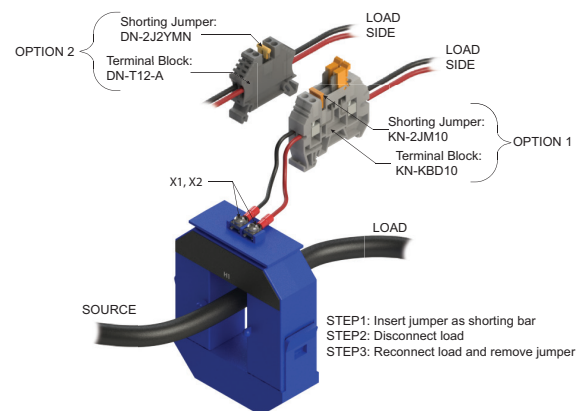
### For All Versions

Place wire or bus bar to be monitored through the sensing window. Be sure that the H1 side of the CT faces the source of the power.



CTF-SB Series transformers shall be installed within equipment that will provide an acceptable enclosure, such as switchboards, panelboards, and the like. They can be mounted in any position or hung directly on wires with a wire tie. Leave at least one inch distance between sensor and other magnetic devices.

Ratio	Burden
800 : 5	10VA
1000 : 5	10VA



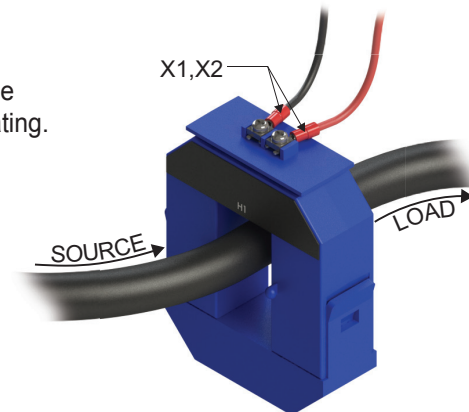
## Output Wiring

Connect control or monitoring wires to the sensor. Terminal X1 connects to the positive of the load. Use up to 14AWG 75/90°C copper wire and tighten terminals to 3.5 lb·in [0.4 N·m] torque. Be sure the output load total burden does not exceed unit burden rating.

### Connection Notes:

- Captive screw terminals  
#6 fork terminals or strip insulation 3/8 inch
- 14-22 AWG solid or stranded
- Observe polarity

\*See ordering information and label for monitored circuit range.



## Model Range Select

CT-SB Series transformers feature factory calibrated ranges. Select a model with a range higher than the normal running current of the load.

1. Determine the normal operating amperage of your monitored circuit using load specifications or a test ammeter.
2. Select the model with a range that is equal to or slightly higher than the normal operating amperage.

## Troubleshooting

### 1. Transformer has no output

- A. The load is not energized, is not AC or there is more than one phase passing through the aperture. *Check if there is AC current being used and that all conductors through the aperture are connected to the same phase.*
- B. Polarity is reversed. *Check and correct output wiring polarity.*

### 2. Output signal too low

- A. The range may be too high for current being monitored. *Exercise care when selecting the model range. Use a model with a ratio near the actual load being monitored.*

## Caution!



A current transformer (CT) should never be energized (AC current through the sensing window) with no 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, place a shorting bar between the secondary leads. This will allow the load to be removed safely. See drawing on the left.