

Connecting a Split-Core Current Transformer to a Load

Product Description

This is a step-by-step guide to connecting Siemens Industry's Split-Core Current Transformers (CTs) to a load.

Contents

1 Split-Core Transformer

Product Numbers



Standard Grade Current Transformers SCT-SCx

SCT-SCS-0050-U	Small Split-Core CT; 0.75" (19 mm) Opening, 50A
SCT-SCS-0100-U	Small Split-Core CT; 0.75" (19 mm) Opening, 100A
SCT-SCM-0100-U	Medium Split-Core CT; 1.25" (32 mm) Opening, 100A
SCT-SCM-0200-U	Medium Split-Core CT; 1.25" (32 mm) Opening, 200A
SCT-SCM-0400-U	Medium Split-Core CT; 1.25" (32 mm) Opening; 400A
SCT-SCM-0600-U	Medium Split-Core CT; 1.25" (32 mm) Opening; 600A
SCT-SCL-0600-U	Large Split-Core CT; 2.00" (51 mm) Opening; 600A
SCT-SCL-1000-U	Large Split-Core CT; 2.00" (51 mm) Opening; 1000A

Revenue Grade Current Transformers SCT-SRx

SCT-SRS-005-U	Small Split-Core CT; 0.4" (10.2 mm) Opening, 5A
SCT-SRS-050-U	Medium Split-Core CT; 0.4" (10.2 mm) Opening; 50A
SCT-SRL-100-U	Medium Split-Core CT; 1.25" (32 mm) Opening; 100A
SCT-SRL-200-U	Large Split-Core CT; 1.25" (32 mm) Opening; 200A
SCT-SRL-400-U	Large Split-Core CT; 1.25" (32 mm) Opening; 400A

Warning/Caution Notations

WARNING:		Personal injury or loss of life may occur if you do not follow the procedures as specified.
CAUTION:		Equipment damage or loss of data may occur if you do not follow the procedures as specified.



WARNING:

All work should be performed by a qualified electrician using proper safety equipment.



Equipment is protected throughout by double insulation (IEC 536 Class III).

Required Tools

Small flat blade screwdriver.

Expected Installation Time

15 minutes

Installation

1. Open the CT by holding onto the removable leg and pulling it apart for the SCT-SCx series or open by small corner clasp for the SCT-SRx series. See Figure 1 examples.

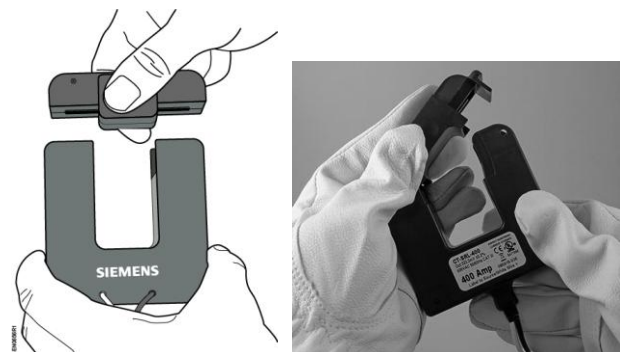


Figure 1. Open the CT.

2. Install the CT around the load conductor to be measured. Verify the CT is installed with the CT label reading **THIS SIDE TOWARDS SOURCE** facing towards the wire direction of the power source, not the load. See Figure 2.

NOTE: Ensure that the maximum current of the conductor does not exceed the CT's rating.



Figure 2. Install CT around Conductor.

3. Reconnect the removable leg or snap the end down into place. The conductor should be in the inside of the CT Window. Ensure that the CT leg core aligns with the main housing core. See Figure 2.
4. Repeat Steps 1 through 3 if you are using more than one CT.
5. Connect the white wire on the CT to the positive terminal (+) on the measuring device. See Figure 3.

6. Connect the black wire on the CT to the negative (-) terminal on the measuring device. No connection will be made to the shield (S) terminal. See Figure 3.
7. If the digital energy meter is powered, verify that the CT LED next to the wired CT terminal block is GREEN. If it is RED, verify that the CT is on the correct phase and/or is installed with the label on the CT reading **THIS SIDE TOWARDS SOURCE** facing toward the wire direction of the power source, not the load. After it is corrected, the LED will change to GREEN.

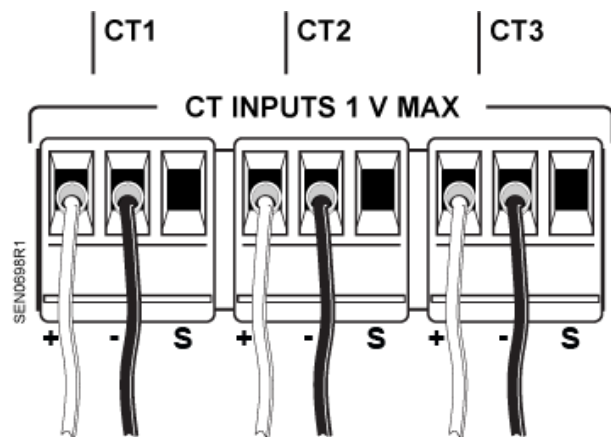


Figure 3. Connect White Wire to Positive (+) Terminal. Connect Black Wire to Negative (-) Terminal.

You are now ready to begin your monitoring session.

Information in this publication is based on current specifications. The company reserves the right to make changes in specifications and models as design improvements are introduced. Product or company names mentioned herein may be the trademarks of their respective owners. © 2017 Siemens Industry, Inc.