

Connecting a Toroid Solid Core Current Transformer to a Load

Product Description

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

Contents

1 Toroid Solid Core Current Transformer

Product Numbers

Revenue Grade Current Transformers SCT-SRx



SCT-RGT12-0005-U Toroid Solid Core CT; 0.5" (12.7 mm) Opening, 5A

SCT-RGT12-0020-U Toroid Solid Core CT; 0.5" (12.7 mm) Opening, 20A

SCT-RGT12-0050-U Toroid Solid Core CT; 0.5" (12.7 mm) Opening, 50A

SCT-RGT12-0100-U Toroid Solid Core CT; 0.5" (12.7 mm) Opening, 100A

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

Screwdrivers, one large blade and one small blade.

Expected Installation Time

20 minutes

Prerequisites

None

Installation

1. Disconnect load from the power source.
2. Insert the conductor through the center of the CT. The CT label printing should be oriented towards the load. See Figure 1 examples.

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

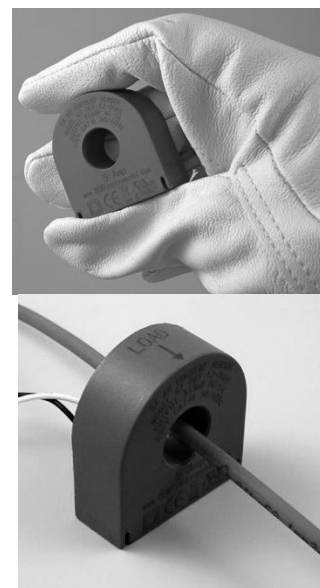
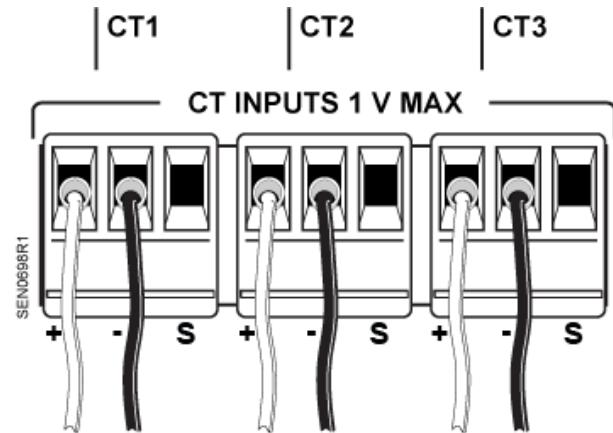


Figure 1. Inspect Solid Core CT for Correct Value and Install Wire Conductor through the Center of the CT.

3. Repeat Steps 1 and 2 if you are using more than one CT.
4. Connect the white wire on the CT to the positive terminal (+) on the measuring device. See Figure 2.
5. Connect the black wire on the CT to the negative (-) terminal on the measuring device. No connection is made to the shield (S) terminal. See Figure 2.

6. 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 printing on the CT facing toward the wire direction of the power source, not the load. After it is corrected, the LED will change to GREEN.
7. You are now ready to begin your monitoring session.



**Figure 2. Connect White Wire to Positive (+) Terminal.
Connect Black Wire to Negative (-) Terminal.**

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