

INSTALLATION OF VOLTAGE OUTPUT SPLIT TYPE METERING CTs

Intro:

The 'SCT' type split core metering CTs offer some significant advantages over traditional current output (5A or 1A) devices. Although they utilise the same basic technology, the SCTs feature additional output conditioning components which produce an output of 0-0.33VAC (rather than the 0-5A of a traditional device).

This allows the installer to use a connection cable of much smaller CSA than that required for a current output CT, and also to run the connection over a greater distance. Because the CTs are effectively shunted internally, no shorting links are required if they are left open circuit. Care must still be applied however, as per the details below:

Installation:

The output connections from these current sensors must be individually wired direct to the meter and must not be earthed or connected to any other circuit.

Orientation is as follows:

- 50A As per arrow on base
- 150A Output cables are on the load side of the CT
- 400A Output cables are on the load side of the CT
- 800A Output cables are on the load side of the CT

Cable colour denotes S1 & S2 polarity as follows:

Black – S1 (+)

White or White Stripe – S2 (-)

The connection cables may be extended to a maximum of 100m provided the following restrictions are observed:

- Screened cable of 22AWG twisted pair construction is used. Recommended type is Belden 8451 or equivalent.
- Cables should be routed away from AC power cabling. Outside the main enclosure, separate containment, or a separation of 100mm is recommended.

NOTE: The above cable is rated at 300V. Additional containment may be required if running inside panels with exposed conductors.

NOTE:

'SCT' type CTs must be used only with the correct meter type

'SCT' type CTs do not require shorting links.