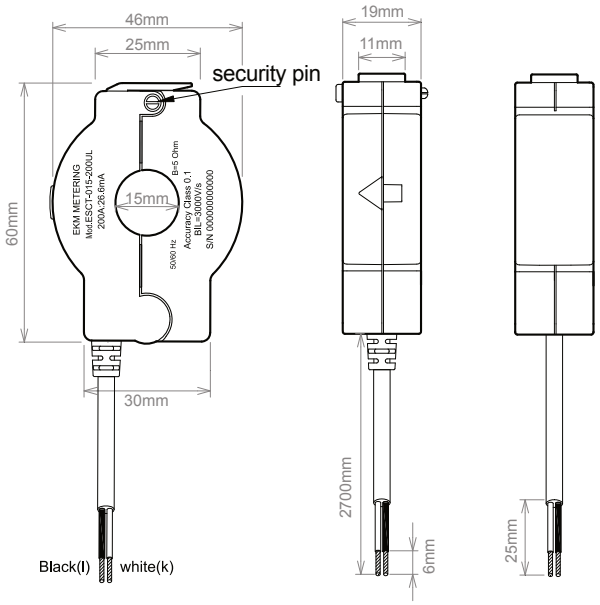
EKM METERING INC.

ESCT-015-200UL Current Transformer Spec Sheet



I. Functions and characteristics

All of our current transformers(CTs) have been designed with care to provide accuracy and consistency, in conjunction with our Omnimeter line of kWh meters, for a wide variety of users and use cases.

II. Technical Specifications

- Model: ESCT-015-200UL
- Type: Split Core
- Rated Input: 0.1-200 Amps
- Inside Diameter: 15mm
- Outside Diameter: 60mm
- Output: 26.6mA
- Accuracy: ± 0.1% accurate.
- When used in conjunction with our Omnimeters, the installation will have an accuracy of ± 0.5%.
- Leads: ~8.5 feet, 24AWG
- Internal windings: 7,518
- Frequency: 50–60Hz
- Operating Temperature: -40ºF–167ºF
- Storage Temperature: -49ºF–185ºF
- The arrow points towards the load.
- ANSI C57.13 and IEC60044-1 Standards
- Approved for UL and cUL installations when used in conjunction with our UL and cUL Listed Omnimeters.
- Red wire lead is the same as white shown in the diagram above

III. How to Choose CTs

When choosing current transformers, you should consider four factors:

How many CTs do I need for my electrical system?

Use 1 CT for 120 volt (or foreign 2-wire systems).

Use 2 CTs for a 120/240V three-wire system(two hots and a neutral, with or without ground).

Use 2 CTs for 3-phase 3-wire systems(3 hots and no neutral).

Use 3 CTs for 3-phase 4-wire systems(3 hots and a neutral).

What is the wire diameter that needs to pass through the CT?

What is the maximum amperage of the system being metered? Do you want CTs that open(split core), or are closed(solid core)?

IV. Installation

1.) Install in a protected environment or enclosure.

2.) We recommend that you do not lengthen the CT leads as this may decrease accuracy.

3.) We also recommend that you install this current transformer while the circuit is powered down.

4.) Open the CT by removing the small security pin and pulling the clasp outward while also gently pulling the CT apart.

5.) Be sure that the metal contact pads inside the CT are clean and the protective paper is removed.

6.) Close the CT around the wire to be measured and press firmly until you feel and hear the clasp click, which indicates a complete closure.

7) Reinsert the security pin to ensure that the CT remains closed.

7.) Connect the two wire leads to the appropriate terminals on your meter. See the Omnimeter spec sheet for additional instructions. Do not open circuit the CT secondary while the primary is energized. If the primary is energized while the CT is not connected to a meter, short the wire leads (join the two ends) to avoid damaging the CT.

RoHS COMPLIANT c UL us CE