

Self-Describing Split-Core AC Current Transformer (SD-CT-x) (AC Amperage to DC Voltage Transducer)



For use with HOB0® MX1104 and MX1105 data loggers



Specifications

Current Range	SD-CT-020 or CTV-A: 2–20 AMPS AC SD-CT-050 or CTV-B: 5–50 AMPS AC SD-CT-100 or CTV-C: 10–100 AMPS AC SD-CT-200 or CTV-D: 20–200 AMPS AC SD-CT-600 or CTV-E: 60–600 AMPS AC
Accuracy	±2.1% of full scale (includes logger accuracy)
Response Time (from 10% to 90% of Amplitude)	SD-CT-020 or CTV-A: approx. 440 milliseconds SD-CT-050 or CTV-B: approx. 200 milliseconds SD-CT-100 or CTV-C: approx. 100 milliseconds SD-CT-200 or CTV-D: approx. 450 milliseconds SD-CT-600 or CTV-E: approx. 490 milliseconds
Input Current	AC current, sine wave, single phase 50 Hz or 60 Hz, load power factor 0.5 to 1.0 lead or lag
Output	0–2.5 V DC
Voltage Rating	600 V AC
Temperature Rating	SD-CT-020 or CTV-A, SD-CT-050 or CTV-B, SD-CT-100 or CTV-C: -15° to 60°C (5° to 140°F) SD-CT-200 or CTV-D, SD-CT-600 or CTV-E: -15° to 40°C (5° to 104°F)
Construction	Molded plastic housing for indoor use per UL508
Cable	1.8 m (6 ft.)
Window Size	SD-CT-020 or CTV-A, SD-CT-050 or CTV-B, SD-CT-100 or CTV-C: 28 x 20 mm (1.1 x 0.8 in.) SD-CT-200 or CTV-D: 39 x 32 mm (1.54 x 1.26 in.) SD-CT-600 or CTV-E: 74 x 62 mm (2.92 x 2.46 in.)
Dimensions	SD-CT-020 or CTV-A, SD-CT-050 or CTV-B, SD-CT-100 or CTV-C: 79 x 71 x 36 mm (3.1 x 2.8 x 1.4 in.) SD-CT-200 or CTV-D: 100 x 120 x 29 mm (3.92 x 4.72 x 1.14 in.) SD-CT-600 or CTV-E: 135 x 150 x 28 mm (5.3 in. x 5.91 in. x 1.12 in.)
	The CE Marking identifies this product as complying with all relevant directives in the European Union (EU)

Notice

- This product is not intended for life or safety applications.
- Do not install this product in hazardous or classified locations.
- The installer is responsible for conformance to all applicable codes.
- Mount this product inside a suitable fire and electrical enclosure.

23984-B MAN-SD-CT-x



DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Failure to follow these instructions will result in death or serious injury.



- Follow safe electrical work practices.
- See NFPA 70E in the USA, or applicable local codes.
- This equipment must only be installed and serviced by qualified electrical personnel.
- Read, understand and follow the instructions before installing this product.
- Turn off all power supplying equipment before working on or inside the equipment.
- Use a properly rated voltage sensing device to confirm power is off.
- DO NOT DEPEND ON THIS PRODUCT FOR VOLTAGE INDICATION

Specification Note: For CE compliance, conductor shall be insulated according to IEC 61010-1:2001, Installation Category III or equivalent. The product design provides for basic insulation only.

Using the SD-CT-x or CTV-x Sensor with the HOB0 MX Analog/Temp/RH/Light (MX1104) or HOB0 MX 4-Channel Analog (MX1105) Data Loggers

1. Insert the plug into an analog sensor port on the logger. Turn the sensor plug one-quarter clockwise until it stops.
2. In HOB0mobile, connect to the logger and tap Configure. If the sensor type is not selected automatically, then select the appropriate sensor type in the app when you are configuring the logger. Set any other logger settings and tap Start. See the HOB0mobile User's Guide at <https://www.onsetcomp.com/manuals/17841-hobomobile-users-guide> for details on configuring the logger.

Installation

- The I-bar can be hinged open to install the SD-CT-x or CTV-x sensor around an individual wire carrying a single phase. Rotate the I-bar open (on the SD-CT-200 or CTV-D and SD-CT-600 or CTV-E units, press in the I-bar tabs to open). Place the wire in the CT window and then snap the I-bar closed.
- The I-bar on the SD-CT-200 or CTV-D and SD-CT-600 or CTV-E units is fully removable for easy installation. Make sure the I-bar is replaced in the proper orientation to ensure correct readings. The contacts on the unit and I-bar are marked with matching notations.
- The SD-CT-020 or CTV-A, SD-CT-050 or CTV-B, and SD-CT-100 or CTV-C units are provided with a snap-on mounting plate that can be removed from the CT and mounted separately. Mount the plate under the wire you want to monitor and, once the cable is installed into the CT, snap the CT/wire assembly onto the mounting plate.
- Remove the CT from the plate by opening the CT and sliding it off the plate or gently rocking the CT slightly and pulling up at the same time.



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