

Magnelab AC Current Transformer (CT) Connection Instructions

For use with HOBO® H22, U30, and RX3000 Series Data Loggers

Applies to these Magnelab CTs:

Onset Part No.	Rated Current	Output	Magnelab Part No.
T-MAG-SCT-100	100 Amps	0.333 Volt AC representing 0 to 100 Amps AC	SCT-1250-100
T-MAG-SCT-200	200 Amps	0.333 Volt AC representing 0 to 200 Amps AC	SCT-1250-200
T-MAG-SCT-600	600 Amps	0.333 Volt AC representing 0 to 600 Amps AC	SCT-2000-600



DANGER!—HIGH VOLTAGE HAZARD



Installing CTs in an energized electrical enclosure or on any energized conductor can result in severe injury or death. These CTs are for installation by qualified personnel only. To avoid electrical shock, do not perform any installation or servicing of these CTs unless you are qualified to do so. Disconnect and lock-out all power sources during installation and servicing.

This document provides instructions on connecting the Magnelab CTs listed above to the FlexSmart™ TRMS Module used with HOBO H22, U30, or RX3000 series data loggers. It also lists configuration values used by HOBOWare® software to configure the logger for each CT.

Required

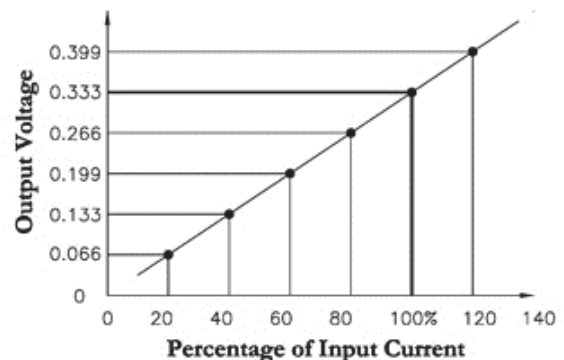
- Selected Magnelab CT
- HOBO H22, U30, or RX3000 series data logger
- FlexSmart TRMS Module, Onset Part No: S-FS-TRMSA (for H22 series only) or S-FS-TRMSA-D (for H22 and U30 series)
- HOBOWare software, version 2.2.1 or higher (2.4.0 or higher for U30 series)
- HOBOLink (for RX3000 series data loggers)



Magnelab AC Current Transformer
(Onset Part No. T-MAG-SCT-200 shown)

Specifications

- Output 0.333 Volt AC at rated current
- Operates from 50 Hz to 400 Hz
- Phase angle < 2 degrees measured at 50% rated current
- Linearity accuracy $\pm 1\%$
- 8 ft. twisted-pair lead
- UL recognized
- Accuracy at 10% to 130% of rated current

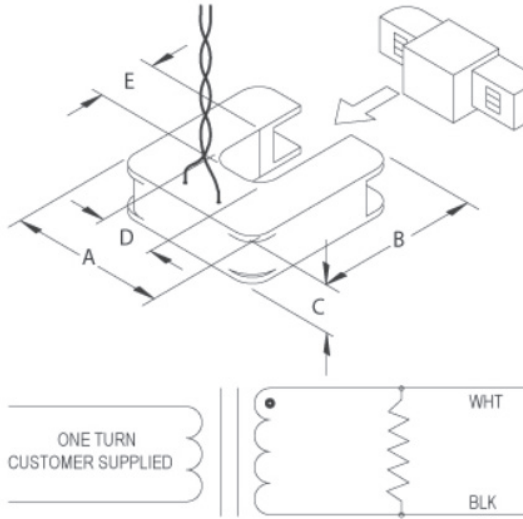


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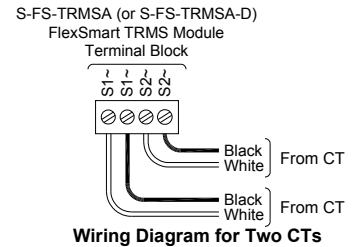
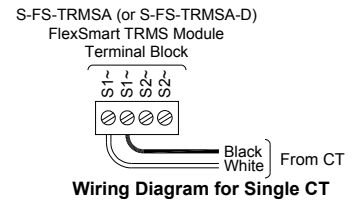
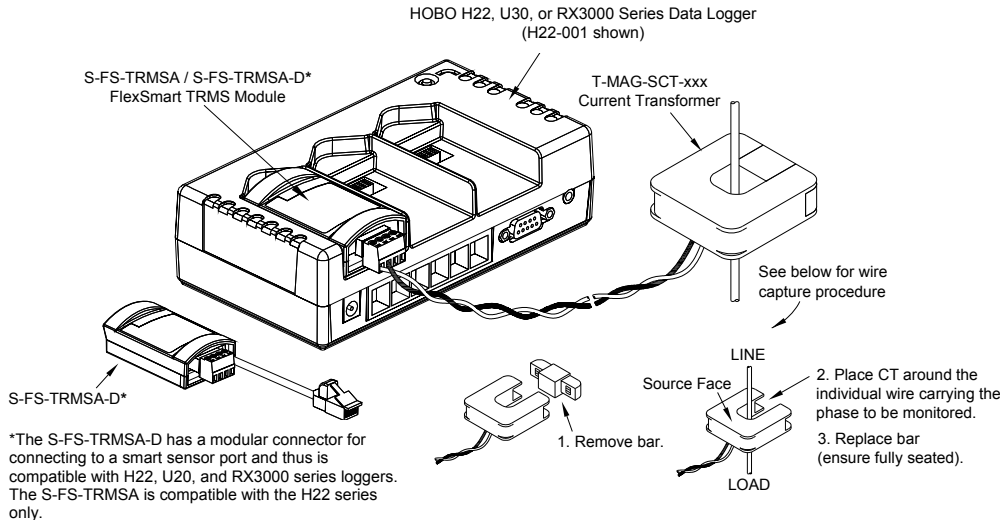
Dimensions

Dimensions T-MAG-SCT-100 & T-MAG-SCT-200	
A	8.255 cm (3.250 in.)
B	8.509 cm (3.350 in.)
C	2.54 cm (1.000 in.)
D	3.175 cm (1.250 in.)
E	3.175 cm (1.250 in.)

Dimensions T-MAG-SCT-600	
A	12.065 cm (4.750 in.)
B	12.7 cm (5.000 in.)
C	3.048 cm (1.200 in.)
D	5.08 cm (2.000 in.)
E	5.08 cm (2.000 in.)



Connecting the CT to the FlexSmart TRMS Module



Configuring the Data Logger for the CT using HOBOWare Software

Note: HOBOWare software provides configuration files for the CTs. The table below lists the recommended configuration values for each CT that these files contain. For information on loading configuration files, refer to the software documentation.

Onset Part No:	Channel Name	Raw Value 1 (mV)	Raw Value 2 (mV)	Scaled Value 1	Scaled Value 2	Scaled Units
T-MAG-SCT-100	Current	0	333	0	100	A
T-MAG-SCT-200	Current	0	333	0	200	A
T-MAG-SCT-600	Current	0	333	0	600	A