Magnelab Mini AC Current Transformer (CT) Connection Instructions
For use with HOBO® H22 and U30 Series Data Loggers

Applies to these Magnelab CTs

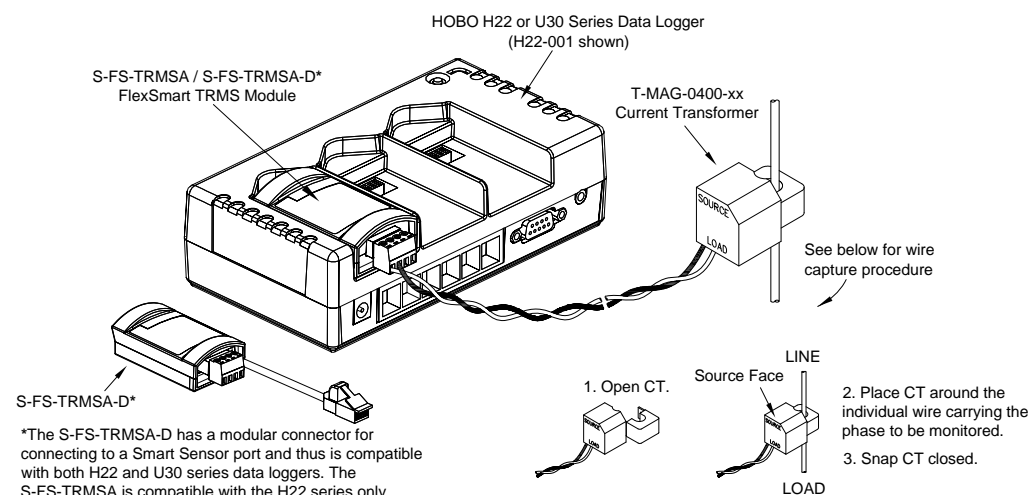| Onset Part No.	Rated Current	Output	Magnelab Part No.
T-MAG-0400-05	5 Amps	0-333mV AC representing 0 to 5 Amps AC	SCT-0400-005
T-MAG-0400-10	10 Amps	0-333mV AC representing 0 to 10 Amps AC	SCT-0400-010
T-MAG-0400-20	20 Amps	0-333mV AC representing 0 to 20 Amps AC	SCT-0400-020
T-MAG-0400-50	50 Amps	0-333mV AC representing 0 to 50 Amps AC	SCT-0400-050
T-MAG-0400-75	75 Amps	0-333mV AC representing 0 to 75 Amps AC	SCT-0400-075

⚠ ## 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 either HOBO H22 or U30 series data loggers. It also lists configuration values used by HOBOware® Pro software to configure the logger for each CT.
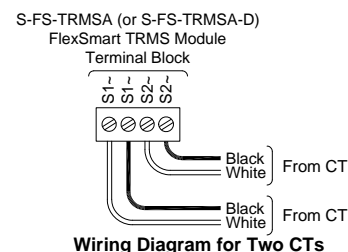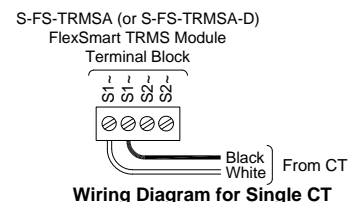
Required
- Selected Magnelab CT
- HOBO H22 or U30 Series Data Logger
- FlexSmart TRMS Module, Onset Part No: S-FS-TRMSA (for H22 series only) or S-FS-TRMSA-D (for H22 and U30 series)
- HOBOware Pro Software, version 2.2.1 or higher (2.4.0 or higher for U30 series)

Magnelab Mini AC Current Transformer

Connecting the CT to the FlexSmart TRMS Module

HOBO H22 or U30 Series Data Logger (H22-001 shown)

S-FS-TRMSA / S-FS-TRMSA-D* FlexSmart TRMS Module

T-MAG-0400-xx Current Transformer

S-FS-TRMSA-D*

*The S-FS-TRMSA-D has a modular connector for connecting to a Smart Sensor port and thus is compatible with both H22 and U30 series data loggers. The S-FS-TRMSA is compatible with the H22 series only.

See below for wire capture procedure

1. Open CT.

2. Place CT around the individual wire carrying the phase to be monitored.

3. Snap CT closed.

LINE / Source Face / LOAD

S-FS-TRMSA (or S-FS-TRMSA-D) FlexSmart TRMS Module Terminal Block
S1– S1– S2– S2–
Black / White } From CT
Wiring Diagram for Single CT

S-FS-TRMSA (or S-FS-TRMSA-D) FlexSmart TRMS Module Terminal Block
S1– S1– S2– S2–
Black / White } From CT
Black / White } From CT
Wiring Diagram for Two CTs

Configuring the Data Logger for the CT, using HOBOware Pro Software

HOBOware Pro 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-0400-05	Current	0	333	0	5	A
T-MAG-0400-10	Current	0	333	0	10	A
T-MAG-0400-20	Current	0	333	0	20	A
T-MAG-0400-50	Current	0	333	0	50	A
T-MAG-0400-75	Current	0	333	0	75	A