Crestron GLS-EM-CT
Crestron Green Light® Current Transformers



#### **Further Inquiries**

To locate specific information or resolve questions after reviewing this guide, contact Crestron's True Blue Support at 1-888-CRESTRON [1-888-273-7876] or, for assistance within a particular geographic region, refer to the listing of Crestron worldwide offices at www.crestron.com/offices.

To post a question about Crestron products, log onto Crestron's Online Help at www.crestron.com/onlinehelp First-time users must establish a user account to fully benefit from all available features.

#### Future Updates

As Crestron improves functions, adds new features, and extends the capabilities of the GLS-EM-CT, additional information may be made available as manual updates. These updates are solely electronic and serve as intermediary supplements prior to the release of a complete technical documentation revision.

Check the Crestron website periodically for manual update availability and its relevance. Updates are identified as an "Addendum" in the Download column.

WARNING: To avoid fire, shock, or death; turn off power at circuit breaker or fuse and test that power is off before wiring!

# NOTES: Observe the following points.

- To be installed and/or used in accordance with appropriate electrical codes and regulations
- This product should be installed by a qualified electrician

## PREPARING AND CONNECTING WIRES

Strip the ends of the wires approximately 1/4 in (6 mm). Use care to avoid nicking the conductors. Twist together the ends of the wires that share a connection. Apply solder only to the ends of the twisted wires. Avoid tinning too far up the wires or the end becomes brittle.

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Installation Guide - DOC. 7296D (2032460) ■|| 05.14

Specifications subject to change without notice.

## **Regulatory Compliance**

CONFORMS TO UL STD 61010-1; CERTIFIED TO CSA STD C22.2 NO. 61010-1

ETL listed for compliance to UL 61010-1 Issued:2004/07/12 Ed:2 Rev:2008/10/28 UL Standard for Safety Electrical Equipment For Measurement, Control, and Laboratory Use; Part 1: General Requirements, and CAN/CSAC22.2#61010-1 Issued:2004/07/01 Ed:2 Standard for Safety Electrical Equipment For Measurement, Control, and Laboratory Use; Part 1: General Requirements.

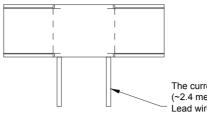
This product has been tested to the requirements of CAN/CSA-C22.2 No. 61010-1, 2nd edition, including Amendment 1, or a later version of the same standard incorporating the same level of testing requirements.

Ce produit a été testé en accord avec les exigences de CAN/CSA-C22.2 No. 61010-1, 2eme Edition, ci-inclus l'amendement 1, ou un version ultérieur du meme règlement incorporant les memes conditions d'essai.

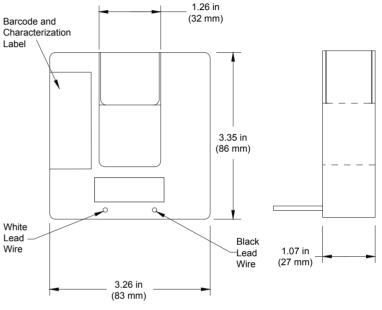
# INTRODUCTION

Current transformers are vital to metering power. Crestron® offers various split-core models that work with 600, 400, and 200 amp feeds; these devices clamp around main feeds. Solid-core models exist for 50 and 20 amp circuits; the wire must be routed through the closed loop of the core.

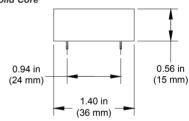
#### Dimensional Drawing for Split Core

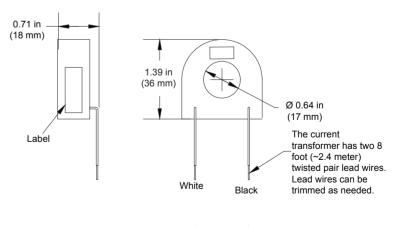


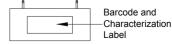
The current transformer has two 8 foot (~2.4 meter) twisted pair lead wires. Lead wires can be trimmed as needed.



## Dimensional Drawing for Solid Core







## INSTALLATION

**CAUTION:** All work should be performed by a qualified electricial using proper safety equipment.

**NOTE**: If the GLS-EM-CT current transformers are used in a manner other than described in this document, the protection provided by the current transformer may be impaired.

**NOTE**: To prevent wire noise, the maximum distance between a GLS-EM-MCU or GLS-EM-CTI and a GLS-EM-CT should not exceed 50 feet (~15.3 meters).

#### Installing Main Feed Current Transformer

- 1. Locate and turn off feed to distribution panel.
- 2. Open split-core current transformer by pulling on removable leg
- Connect current transformer around conductor to be monitored. Ensure that the label THIS SIDE TOWARDS SOURCE faces away from the main lug feeding the panel.
- 4. If necessary, repeat steps 2 and 3 for additional current transformers
- 5. Route the current transformer output leads through appropriate conduit as required.
- Connect the current transformer wires to the correct terminal position on the GLS-EM-MCU.

**NOTE**: The current transformer wires must be connected to an input with the same phase designation as the feed it is monitoring.

 Apply power to panel when installation of all components is complete and proceed with system setup and testing. For wiring details, refer to the GLS-EM-MCU Installation Guide (Doc. 7295) at www.crestron.com/manuals.

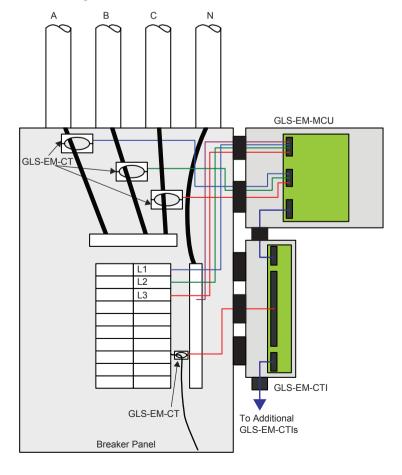
#### Installing Branch Current Transformer

- 1. Locate and turn off circuit breaker of branch feed to be monitored.
- 2. Remove branch feed line from circuit breaker.
- Pass branch feed line through the solid-core current transformer center. Make sure that the label THIS SIDE TOWARDS SOURCE faces the circuit breaker.
- 4. If necessary, repeat steps 2 and 3 for additional branch feed transformers.
- 5. Route current transformer output leads through appropriate conduit as required.
- Connect the current transformer wires to the correct terminal position on the GLS-EM-CTI.

**NOTE**: The current transformer wires must be connected to an input with the same phase designation as the breaker it is monitoring. Terminals on GLS-EM-CTI alternate phasing (A, B, A, B for 2-phase and A, B, C, A, B, C for 3-phase systems).

 Turn circuit breaker on when installation of all components is complete and proceed with system setup and testing. For wiring details, refer to the GLS-EM-MCU Installation Guide (Doc. 7295).

# Installation Diagram for GLS-EM-CT Devices



# **RETURN AND WARRANTY POLICIES**

#### Merchandise Returns / Repair Service

- 1. No merchandise may be returned for credit, exchange or service without prior authorization from Crestron. To obtain warranty service for Crestron products, contact an authorized Crestron dealers. Only authorized Crestron dealers may contact the factory and request an RMA (Return Merchandise Authorization) number. Enclose a note specifying the nature of the problem, name and phone number of contact person, RMA number and return address.
- 2. Products may be returned for credit, exchange or service with a Crestron Return Merchandise Authorization (RMA) number. Authorized returns must be shipped freight prepaid to Crestron, 6 Volvo Drive, Rockleigh, N.J. or its authorized subsidiaries, with RMA number clearly marked on the outside of all cartons. Shipments arriving freight collect or without an RMA number shall be subject to refusal. Crestron reserves the right in its sole and absolute discretion to charge a 15% restocking fee plus shipping costs on any products returned with an RMA.
- Return freight charges following repair of items under warranty shall be paid by Crestron, shipping by standard ground carrier. In the event repairs are found to be non-warranty, return freight costs shall be paid by the purchaser.

## **Crestron Limited Warranty**

Crestron Electronics, Inc. warrants its products to be free from manufacturing defects in materials and workmanship under normal use for a period of three (3) years from the date of purchase from Crestron, with the following exceptions: disk drives and any other moving or rotating mechanical parts, pan/filt heads and power supplies are covered for a period of one (1) year; touch screen display and overlay components are covered for 90 days: batteries and incandescent lamps are not covered.

This warranty extends to products purchased directly from Crestron or an authorized Crestron dealer. Purchasers should inquire of the dealer regarding the nature and extent of the dealer's warranty, if any.

Crestron shall not be liable to honor the terms of this warranty if the product has been used in any application other than that for which it was intended or if it has been subjected to misuse, accidental damage, modification or improper installation procedures. Furthermore, this warranty does not cover any product that has had the serial number altered, defaced or removed.

This warranty shall be the sole and exclusive remedy to the original purchaser. In no event shall Crestron be liable for incidental or consequential damages of any kind (property or economic damages inclusive) arising from the sale or use of this equipment. Crestron is not liable for any claim made by a third party or made by the purchaser for a third party.

Crestron shall, at its option, repair or replace any product found defective, without charge for parts or labor. Repaired or replaced equipment and parts supplied under this warranty shall be covered only by the unexpired portion of the warranty.

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