

## SecTER™ cabinet installation instructions



**EATON**

*Powering Business Worldwide*

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## Safety for life



Eaton's Cooper Power™ series products meet or exceed all applicable industry standards relating to product safety. We actively promote safe practices in the use and maintenance of our products through our service literature, instructional training programs, and the continuous efforts of all Eaton employees involved in product design, manufacture, marketing, and service.

We strongly urge that you always follow all locally approved safety procedures and safety instructions when working around high voltage lines and equipment, and support our "Safety For Life" mission.

## Safety information

The instructions in this manual are not intended as a substitute for proper training or adequate experience in the safe operation of the equipment described. Only competent technicians who are familiar with this equipment should install, operate, and service it.

A competent technician has these qualifications:

- Is thoroughly familiar with these instructions.
- Is trained in industry-accepted high and low-voltage safe operating practices and procedures.
- Is trained and authorized to energize, de-energize, clear, and ground power distribution equipment.
- Is trained in the care and use of protective equipment such as arc flash clothing, safety glasses, face shield, hard hat, rubber gloves, clampstick, hotstick, etc.

Following is important safety information. For safe installation and operation of this equipment, be sure to read and understand all cautions and warnings.

### Hazard Statement Definitions

This manual may contain four types of hazard statements:

#### DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

#### WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

#### CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

**CAUTION:** Indicates a potentially hazardous situation which, if not avoided, may result in equipment damage only.

### Safety instructions

Following are general caution and warning statements that apply to this equipment. Additional statements, related to specific tasks and procedures, are located throughout the manual.

#### DANGER

**Hazardous voltage. Contact with hazardous voltage will cause death or severe personal injury. Follow all locally approved safety procedures when working around high- and low-voltage lines and equipment.**

G103.3

#### WARNING

**Before installing, operating, maintaining, or testing this equipment, carefully read and understand the contents of this manual. Improper operation, handling or maintenance can result in death, severe personal injury, and equipment damage.**

G101.0

#### WARNING

**This equipment is not intended to protect human life. Follow all locally approved procedures and safety practices when installing or operating this equipment. Failure to comply can result in death, severe personal injury and equipment damage.**

G102.1

#### WARNING

**Power distribution and transmission equipment must be properly selected for the intended application. It must be installed and serviced by competent personnel who have been trained and understand proper safety procedures. These instructions are written for such personnel and are not a substitute for adequate training and experience in safety procedures. Failure to properly select, install or maintain power distribution and transmission equipment can result in death, severe personal injury, and equipment damage.**

G122.3

## **Product information**

### **Introduction**

Eaton's versatile single-phase and three-phase Cooper Power™ series SecTER™ sectionalizing enclosures are designed as cable sectionalizing centers, or as permanent or temporary transformer pad covers.

The aesthetic low profile design provides unobtrusive installations for sectionalizing and tap points for underground distribution systems. Available in several sizes, they can accommodate 15, 25, and 35 kV, 200 A or 600 A, 2-, 3-, or 4-position junctions.

These enclosures are designed to be mounted at grade level with the use of fiberglass ground sleeves or above grade on pads with the use of steel base extensions.

### **Read this manual first**

Read and understand the contents of this manual and follow all locally approved procedures and safety practices before installing or operating this equipment.

### **Additional information**

These instructions cannot cover all details or variations in the equipment, procedures, or process described nor provide directions for meeting every possible contingency during installation, operation, or maintenance. For additional information, contact your representative.

### **Acceptance and initial inspection**

Each SecTER cabinet is in good condition when accepted by the carrier for shipment. Upon receipt, inspect the shipping container for signs of damage. Unpack the cabinet and inspect it thoroughly for damage incurred during shipment. If damage is discovered, file a claim with the carrier immediately.

### **Handling and storage**

Be careful during handling and storage of the SecTER cabinet to minimize the possibility of damage. If the cabinet is to be stored for any length of time prior to installation, provide a clean, dry storage area.

### **Standards**

ISO 9001 Certified Quality Management System

## Installation instructions

### Equipment required

- Ratchet Wrench
- 7/16" Socket Wrench
- 9/16" Socket Wrench

**Note:** To prevent contamination or damage to the interfaces, leave shipping caps on the junction bushing interfaces during installation.

### Removing mounting plates

#### **WARNING**

The wind stop must be fully engaged in the rain gutter channel after opening the cabinet door. A fully engaged wind stop physically prevents the cabinet door from closing unexpectedly, such as being accidentally pushed closed by a person or a gust of wind. Failure to fully engage the wind stop may lead to serious injury or death.

1. Open SecTER cabinet door and engage wind stop before beginning junction installation. Make sure door is secure.



**Figure 1. Fully engaged wind stop shown on the right.**

2. Using a 9/16" socket wrench, remove mounting plates from back wall of SecTER cabinet, see Figure 2.



**Figure 2. Mounting plate removal.**

3. Place mounting plate on clean level surface (Top of SecTER cabinet works well), see Figure 3.



**Figure 3. Use clean level surface.**

4. Place supplied u-straps between each interface of the junction to be installed.

5. Place junction on mounting plate and align u-strap slots with plate slots, see Figure 4.



**Figure 4. Align u-strap slots with plate slots.**

7. Install 1/4" flat washer, lock washer, and nut on carriage bolt and tighten using a 7/16" socket, see Figure 6.



**Figure 6. Install hardware and tighten.**

6. Feed one, 1/4" carriage bolt (supplied with SecTER cabinet) from back of plate through slot and u-strap hole, see Figure 5.



**Figure 5. Install carriage bolts.**

8. Repeat step 5 and 6 for remaining carriage bolts.

**Note:** On one carriage bolt of each junction being installed, install a supplied drain wire tab washer between the flat washer and the mounting plate, see Figure 7.



**Figure 7. Install drain wire tab washer.**

- Place mounting plate/junction assembly onto the 3/8" studs on back wall of SecTER cabinet, Figure 8.



**Figure 8. Install mounting plate/junction assembly.**

- Install 3/8" flat washers, lock washers and nuts onto studs and tighten using a 9/16" socket wrench, see Figure 9.



**Figure 9. Install hardware and tighten.**

- Connect a minimum #14 AWG copper drain wire (customer supplied) from drain wire tab washer of each junction to system ground.

## Alternate mounting installation

As an alternate, junctions can be mounted on mounting plates without removing mounting plates.

### WARNING

**The wind stop must be fully engaged in the rain gutter channel after opening the cabinet door. A fully engaged wind stop physically prevents the cabinet door from closing unexpectedly, such as being accidentally pushed closed by a person or a gust of wind. Failure to fully engage the wind stop may lead to serious injury or death.**

- Open SecTER cabinet door and engage wind stop before beginning junction installation. Make sure door is secure.



**Figure 10. Fully engaged wind stop shown on the right.**

- Remove 200 A, loadbreak or 600 A deadbreak junction from carton.



3. Place supplied u-straps between each interface of the junction, see Figure 11.



**Figure 11. Place u-strap between each junction interface.**

5. Install ¼" carriage bolts supplied with SecTER cabinet into located slots, see Figure 13.



**Figure 13. Install carriage bolts.**

4. Hold junction against SecTER cabinet mounting plate to locate proper mounting slots, see Figure 12.



**Figure 12. Locate proper mounting slots.**

6. Align junction with u-straps against mounting plate so that the top carriage bolts go through the u-strap slots, see Figure 14.



**Figure 14. Align u-straps with top carriage bolts.**

7. Place flat washer and lock washer onto the top carriage bolts and thread a nut on each a few turns to hold the junction, see Figure 15.



**Figure 15. Install hardware on top carriage bolts.**

8. Align the lower carriage bolts into the lower u-straps slots, see Figure 16.



**Figure 16. Align u-straps with lower carriage bolts.**

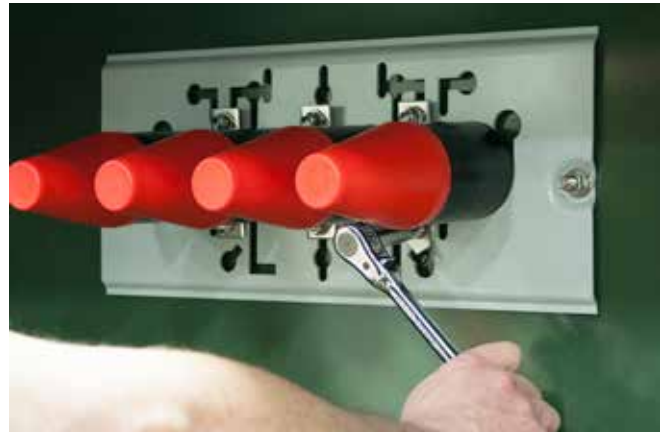
9. Place flat washers, lock washers and nuts onto remaining carriage bolts.

**Note:** On one carriage bolt, a drain wire tab washer should be placed between the flat washer and the mounting plate, see Figure 17.



**Figure 17. Install drain wire tab washer.**

10. Use a 7/16" socket wrench or socket wrench to tighten all nuts, see Figure 18.



**Figure 18. Tighten all nuts.**

11. Connect a minimum #14 AWG copper drain wire (customer supplied) from drain wire tab washer of each junction to system ground.

## 600 A Cleer™ loadbreak connector installation instructions

### WARNING

The wind stop must be fully engaged in the rain gutter channel after opening the cabinet door. A fully engaged wind stop physically prevents the cabinet door from closing unexpectedly, such as being accidentally pushed closed by a person or a gust of wind. Failure to fully engage the wind stop may lead to serious injury or death.

1. Open SecTER cabinet door and engage wind stop before beginning installation of Eaton's Cooper Power series Cleer™ loadbreak connectors. Make sure door is secure.



Figure 19. Fully engaged wind stop shown on the right.

2. Remove Cleer loadbreak connector and hardware from carton.
3. Install supplied drain wire lug to Cleer connector bracket.
4. Install two 3/8" carriage bolts (supplied with Cleer loadbreak connector) in u-shaped mounting slots on parking lot and install supplied nylon retaining washers to bolts to secure them in place, see Figure 20.

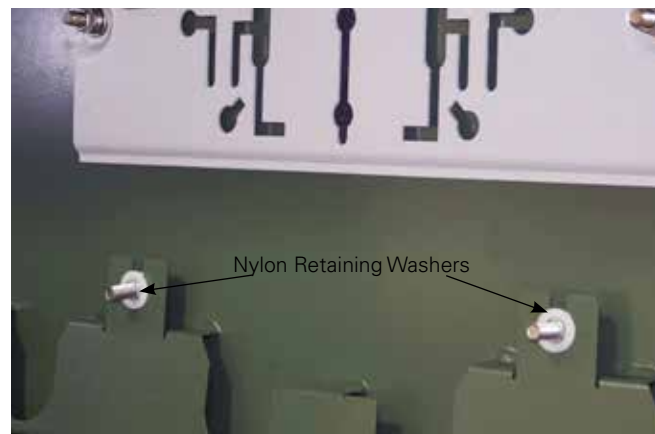


Figure 20. Install carriage bolts and nylon retaining washers.

5. Install two 3/8" carriage bolts in slots of mounting plate directly above the two bolts installed in the u-shape slots of parking lot, see Figure 21.

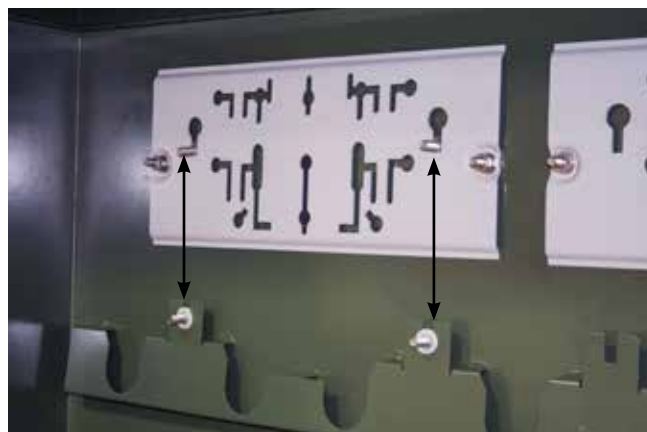


Figure 21. Install carriage bolts in mounting plate.

6. Install the Cleer connector onto the four carriage bolts, see Figure 22.

**Note:** The two 600 A loadbreak bushings with "C" connector should be on top.



Figure 22. Install Cleer connector on bolts.

7. Install 3/8" flat washers, lock washers and nuts on the four carriage bolts. Tighten using a 9/16" socket wrench, see Figure 23.



**Figure 23. Install hardware and tighten.**

8. Attach supplied drain wire of "C" connector to the bracket drain wire lug. Connect a minimum #14 AWG copper drain wire (customer supplied) from bracket drain wire lug to system ground.



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