

200 A 15, 25, and 35 kV class portable feedthru
installation instructions



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Safety for life



Eaton's Cooper Power Systems 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's Cooper Power Systems 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 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 a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

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

CAUTION

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

CAUTION: Indicates a hazardous situation which, if not avoided, could 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

The 200 A, Loadbreak Portable Feedthru from Eaton's Cooper Power Systems provides two internally bused loadbreak interfaces meeting all requirements of IEEE Std 386™ standard — Separable Insulated Connector Systems. It is used in pad-mounted equipment, underground vaults, and other apparatus to bypass transformers, to test and ground circuits, and to provide open point deadfront lightning arrester protection when used with Eaton's Cooper Power Systems M.O.V.E. Arrester. Sectionalizing of cable runs, to find and isolate cable faults, is made easy when the portable feedthru is used with 200 A loadbreak elbows and other accessories meeting the requirements of IEEE Std 386™ standard. When mated with comparable rated products, the portable feedthru provides a fully shielded, submersible, separable connection for loadbreak operation.



WARNING

Hazardous Voltage. All associated apparatus must be de-energized during any hands-on installation or maintenance. Failure to comply could result in death and severe personal injury.



CAUTION

Eaton's Cooper Power Systems 200 A Portable Feedthru is designed to be operated in accordance with normal safe operating procedures. These instructions are not intended to supersede or replace existing safety and operating procedures.

The Portable Feedthru should be installed and serviced only by personnel familiar with good safety practices and the handling of high-voltage electrical equipment.

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 portable feedthru is in good condition when accepted by the carrier for shipment. Upon receipt, inspect the shipping container for signs of damage. Unpack the portable feedthru 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 portable feedthru to minimize the possibility of damage. If the insulated protective cap is to be stored for any length of time prior to installation, provide a clean, dry storage area.

Quality standards

ISO 9001 Certified Quality Management System

Equipment required

- Portable Feedthru Kit including:
 - Lubricant
 - Instruction Sheet

Tools required

- Hotstick

Installation procedure

Step 1.

Install

- Attach feedthru holddown eyebolt to hotstick. Position feedthru in accessory pocket on the apparatus. Turn the holddown eyebolt clockwise until tight.

Step 2.

Ground

- Attach #14 AWG drain wire from the grounding lug on the feedthru to the system ground.

Step 3.

Clean and lubricate

- Remove red shipping caps.
- Clean and lubricate feedthru interfaces with lubricant supplied or Eaton's Cooper Power Systems approved lubricant.

Step 4.

Operate

- Attach a loadbreak elbow connector or ground elbow following the instructions provided with those products.
- Cover exposed energized bushings with grounded insulated protective caps or overvoltage protection devices following the instructions provided with those products.
- Cover exposed de-energized bushings with grounded insulated protective caps.

Note: Use of vertical feedthru may require retaining cable if the elbow connector is placed on the top feedthru bushing. Interfaces must be kept clean when not in use.

 **WARNING**

If Three-Phase loop feed circuits are being connected, both loadbreak elbows forming the loop must be from the same phase.

Failure to comply could result in death or serious injury.

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