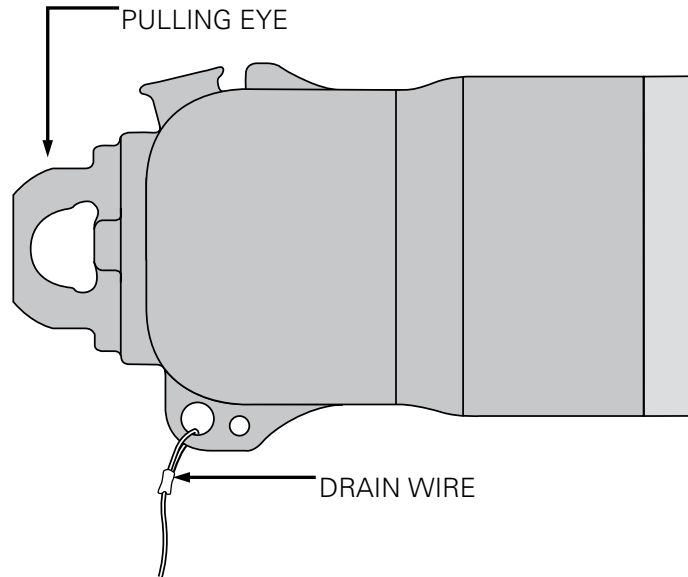


600 A 15/25 and 35 kV class deadbreak protective cap installation instructions



DISCLAIMER OF WARRANTIES AND LIMITATION OF LIABILITY

The information, recommendations, descriptions and safety notations in this document are based on Eaton Corporation's ("Eaton") experience and judgment and may not cover all contingencies. If further information is required, an Eaton sales office should be consulted. Sale of the product shown in this literature is subject to the terms and conditions outlined in appropriate Eaton selling policies or other contractual agreement between Eaton and the purchaser.

THERE ARE NO UNDERSTANDINGS, AGREEMENTS, WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, OTHER THAN THOSE SPECIFICALLY SET OUT IN ANY EXISTING CONTRACT BETWEEN THE PARTIES. ANY SUCH CONTRACT STATES THE ENTIRE OBLIGATION OF EATON. THE CONTENTS OF THIS DOCUMENT SHALL NOT BECOME PART OF OR MODIFY ANY CONTRACT BETWEEN THE PARTIES.

In no event will Eaton be responsible to the purchaser or user in contract, in tort (including negligence), strict liability or otherwise for any special, indirect, incidental or consequential damage or loss whatsoever, including but not limited to damage or loss of use of equipment, plant or power system, cost of capital, loss of power, additional expenses in the use of existing power facilities, or claims against the purchaser or user by its customers resulting from the use of the information, recommendations and descriptions contained herein. The information contained in this manual is subject to change without notice.

Contents

- DISCLAIMER OF WARRANTIES AND LIMITATION OF LIABILITY I**
- SAFETY FOR LIFE III**
- SAFETY INFORMATION III**
 - Safety instructions iii
- PRODUCT INFORMATION 1**
 - Introduction 1
 - Read this manual first 1
 - Additional information 1
 - Acceptance and initial inspection 1
 - Handling and storage 1
 - Standards 1
- INSTALLATION PROCEDURES 2**
 - Standard insulated protective cap kit 2
 - Installation instructions 2
 - U-OP/T-OP II protective cap kit 2
 - Installation instructions 2



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 flash clothing, safety glasses, face shield, hard hat, rubber gloves, 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 high voltage will cause death or severe personal injury. Follow all locally approved safety procedures when working around high- and low-voltage lines and equipment.

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.

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 may result in death, severe personal injury and equipment damage.

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.

⚠ WARNING

High Voltage. All associated apparatus must be de-energized during installation, removal or maintenance. Failure to comply could result in death, severe personal injury and equipment damage.

⚠ CAUTION

The Eaton Cooper Power series 600 A Deadbreak Protective Cap Assembly 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. Terminators must be de-energized during operation or maintenance. Visible break and adequate grounding must be provided before cable work proceeds. (Ensure that the connector is rated for the intended application before it is installed.)

The Deadbreak Protective Cap Assembly should be installed and serviced only by personnel familiar with good safety practice and the handling of high-voltage electrical equipment.

Product information

Introduction

The 600 A Deadbreak Protective Cap meets the full requirements of IEEE Std 386™ standard — Separable Insulated Connector Systems, and provides an insulated, fully shielded and submersible protection for energized deadbreak interfaces. The cap is required for temporary or permanent installation on deadbreak bushings, junctions and other accessories having interfaces that conform to IEEE Std 386™ standard.

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.

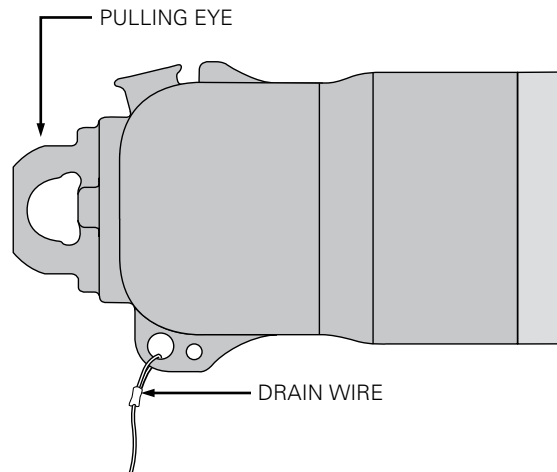


Figure 1. Standard insulated protective cap (15/25 kV shown)

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 Eaton representative.

Acceptance and initial inspection

Each 600 A Deadbreak Protective Cap is in good condition when accepted by the carrier for shipment. Upon receipt, inspect the shipping container for signs of damage. Unpack the Deadbreak Protective Cap 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 Deadbreak Protective Cap to minimize the possibility of damage. If the Deadbreak Protective Cap 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 procedures

Standard insulated protective cap kit

- Insulated Protective Cap
- Silicone Lubricant
- Instruction Sheet

Installation instructions

No special tools are required. A hotstick tool is used to place the protective cap on a de-energized bushing.

 **WARNING**

All associated apparatus must be de-energized during installation, removal or maintenance.

Step 1

Clean and lubricate

- Clean the interface surfaces of the protective cap and apparatus bushing.
- Lubricate the interfaces of the protective cap and mating apparatus bushing using the lubricant supplied.

Step 2

Install

- Grasp pulling eye of protective cap using a hotstick.
- Push cap onto mating apparatus interface.
- Turn hotstick clockwise to make threaded connection.
- Continue turning cap until tight.
- Remove the hotstick.

Step 3

Ground

- Attach supplied drain wire to system ground.

U-OP/T-OP II protective cap kit

- Insulated protective Cap
- Silicone Lubricant
- Instruction Sheet

Installation instructions

No special tools are required. A hotstick tool is used to place the protective cap on a de-energized bushing.

 **WARNING**

All associated apparatus must be de-energized during installation, removal or maintenance.

Step 1

Install stud into apparatus bushing

Note: Ensure unit is de-energized.

- Thread the shorter threaded end of T-OP II stud into the apparatus bushing until hand tight.
- Engage the flats of the stud with a 1/2" wrench and thread the stud into the bushing an additional 1/4 revolution past hand tight.
- Remove any shavings that may have been raised during the threading procedure.

Step 2

Clean and lubricate

- Clean the interface surfaces of the protective cap and mating apparatus bushing.
- Lubricate the interfaces of the protective cap and mating apparatus bushing using the lubricant supplied.

Step 3

Install

- Grasp pulling eye of protective cap using a hotstick.
- Push cap onto mating apparatus interface.
- Turn hotstick clockwise to make threaded connection.
- Continue turning cap until tight.
- Remove the hotstick.

Step 4

Ground

- Attach supplied drain wire to system ground.

This page intentionally left blank.



Eaton
1000 Eaton Boulevard
Cleveland, OH 44122
United States
Eaton.com

Eaton's Power Systems Division
2300 Badger Drive
Waukesha, WI 53188
United States
Eaton.com/cooperpowerseries

© 2017 Eaton
All Rights Reserved
Printed in USA
Publication No. MN650054EN
May 2017

Eaton is a registered trademark.

All trademarks are property
of their respective owners.

For Eaton's Cooper Power series product
information
call 1-877-277-4636 or visit:
www.eaton.com/cooperpowerseries.