600 A, 15 kV, 25 kV and 35 kV Class Insulated Standoff Bushing Installation and Operation Instructions

Powering Business Worldwide

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Contents

Safety for life

Eaton meets or exceeds all applicable industry standards relating to product safety in its Cooper Power™ series products. 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. G122.2

Product information

⚠ WARNING

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

⚠ CAUTION

Eaton's Cooper Power series 600 A Insulated Standoff Bushing 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 insulated standoff bushing should be installed and serviced only by personnel knowledgeable of good safety practices and fully trained on the installation and application of high voltage electrical equipment.

NOTE: For product applications that require ratings or characteristics not shown, contact Eaton for specific recommendations.

Introduction

Eaton's Cooper Power series 600 A, 15 kV, 25 kV and 35 kV Insulated Standoff Bushing meets the full requirements of **ANSI®/IEEE Standard 386™** — Separable Insulated Connector Systems, and provides a single deadbreak interface made of high-quality insulating epoxy material. It is used in pad-mounted cabinets, underground vaults and other apparatus to isolate and sectionalize an energized cable. The Insulated Standoff Bushing is designed to be installed in the parking stand mounted on a transformer or other apparatus. A grounding lug is provided on the standoff bracket for attachment of a ground wire to ensure deadfront construction. The bushing provides a fully shielded, submersible connection for deadbreak operation. All standoff bushing brackets have a stainless steel eyebolt with a brass pressure foot. The bushing body is bolted to a stainless steel base bracket using a stainless steel bolt. Special pins ensure firm location of the bushing on the bracket.

Insulated standoff bushing kit

Each kit contains:

- Insulated Standoff Bushing
- Lubricant
- Instruction Sheet

Figure 1. Typical 15 kV and 25 kV Class Standoff shown.

Installation

Ground

Attach ground drain wire from bushing ground lug to system ground.

Clean and lubricate

1. Remove protective shipping cap.
2. Clean and lubricate bushing interface using lubricant supplied or approved equivalent.

Install

1. Grasp eyebolt on standoff bushing using hotstick.
2. Install standoff bushing on parking pocket using hotstick.
3. Use hotstick to turn eyebolt clockwise until tight to ensure rigid mounting.

Note: 600 A standoff bushings are designed to fit standard parking pockets furnished with most apparatus.

Operation

1. Disconnect connector from apparatus bushing following connector operating instructions.
2. Position connector on standoff bushing.
3. Thread connector stud clockwise into standoff bushing until It is tightly seated.
4. Cover de-energized bushing with a 600 A grounded insulated protective cap or 600 A bushing adapter with 200 A insulated protective cap.

Note: 600 A standoff bushing interface must be covered at all times when not in use, using either the shipping cap (if de-energized) or an insulated protective cap (if energized).

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