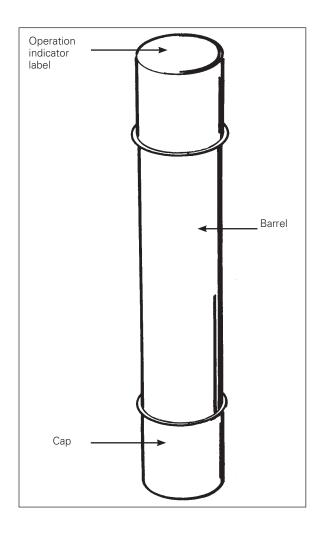
# **ELG Current-Limiting Power Fuse Installation Instructions**





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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 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, may result in minor or moderate injury.

#### **CAUTION**

Indicates a 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.



#### 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.

# **CAUTION**

The ELG current-limiting power fuse 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.

ELG power fuses should be installed and service only by personnel familiar with good safety practices and the handling of high-voltage electrical equipment.

## **Product information**

#### Introduction

ELG current-limiting power fuse may be used for indoor or outdoor applications, or in enclosed air-insulated cabinets. They are intended for use in standard power class fuse supports and switch mountings, such as Ferraz Shawmut (formerly GE) type EK and EKO clip-mounted and fuse-disconnecting switch mountings. ELG fuses may be mounted vertically or horizontally. They are available in fuse sizes "C" and "D" and are suitable for use on single- and three-phase systems, rated 2.4 kV through 15.5 kV.

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

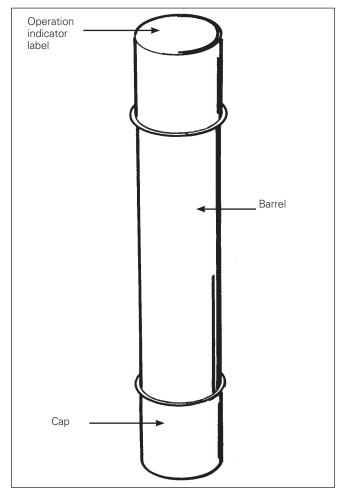


Figure 1. ELG current-limiting power fuse

#### **Handling and storage**

Be careful during handling and storage of the fuse to minimize the possibility of damage. If the fuse 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

# **Installation procedure**

#### Blown fuse indication

When the ELG fuse operates, the indicator pin protrudes from the labeled end approximately 3/4 inch. The labeled indicator end of the fuse must always be unobstructed.

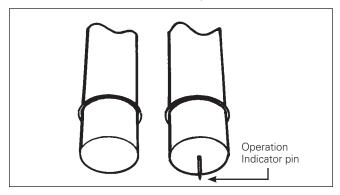


Figure 2. Blown fuse

#### **Fuse removal**



Insulated fuse tongs or a hotstick must be used to remove and replace any power fuse from an energized mounting or switch. Both ends of the fuse mounting should be de-energized and grounded before the fuse is removed.

# **WARNING**

Because of high fuse surface temperatures, gloves should be worn for handling any fuse after operation and removal.

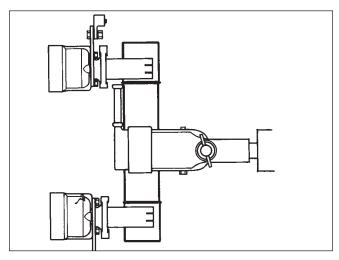


Figure 3. Clip style fuse holder removal

#### Clip-mounted fuse

To remove the ELG power fuse, grasp the fuse barrel with fuse tongs and pull firmly directly away from the clip mounting surface.

## **Fuse-disconnecting switch**

Grasp the switch operating eye with a hotstick and pull firmly away from the switch mounting surface. Lift the fuse out of the disconnect switch.

#### **Replacement fuse selection**

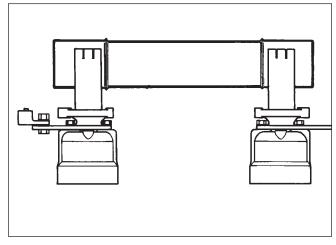


Figure 4. Clip style fuse holder

Select a replacement fuse on the basis of application, voltage, fuse ampere rating, and barrel diameter. Obtain this information from the blown fuse, the fuse mounting, fuse interchangeability charts, or any combination of these sources.



Never exceed the fuse rating required.

# **Fuse replacement**

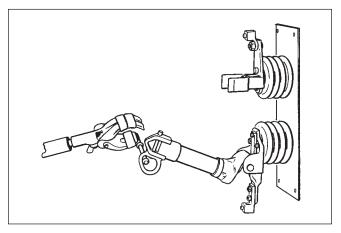


Figure 5. Fuse replacement

## **Clip-mounted fuse**

Use fuse tongs to grasp the fuse barrel and position the fuse caps in line with the contacts. Push the fuse into place.

## **Fuse-disconnecting switch**

Position the switch operating eye and hinge fitting on the fuse. The hinge fitting should be located at the end of the fuse with the operation indicator label. Grasp operating eye with hotstick or fuse body and position hinge fitting on the lower hinge mounting. Rotate the fuse up and push firmly into the upper contact clips.



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