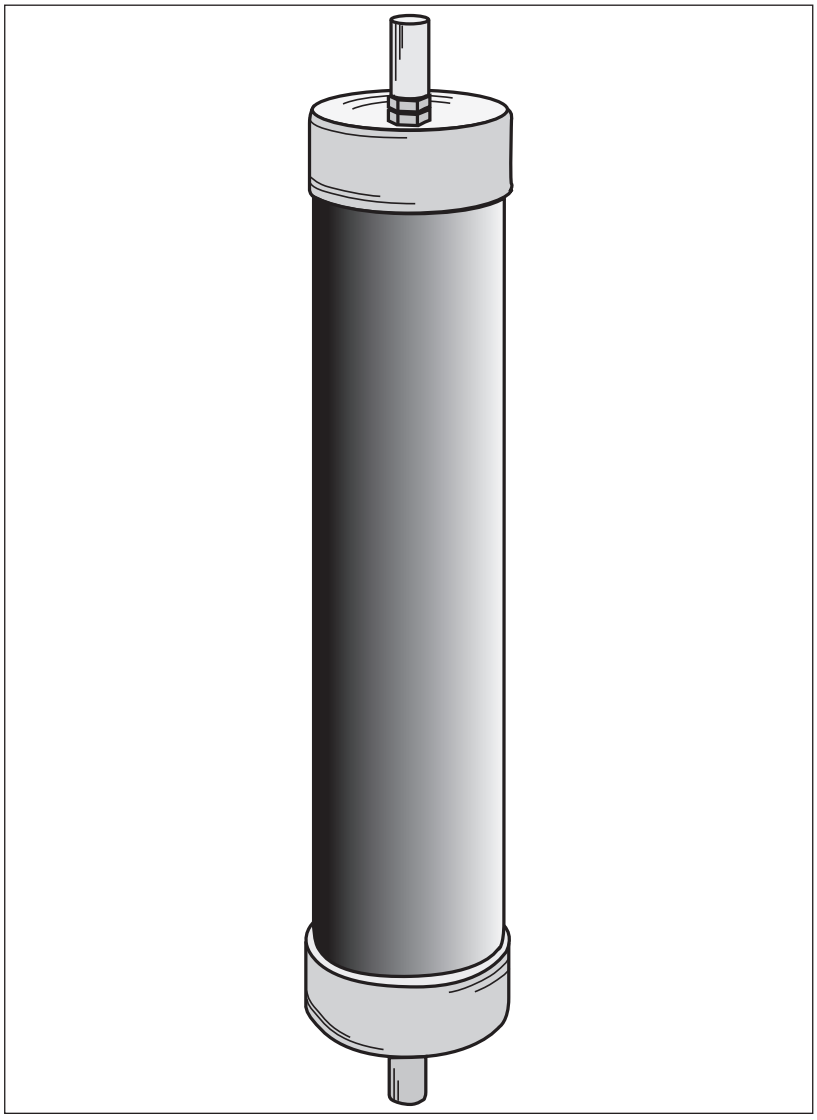
X-Limiter Full-Range Current-Limiting Fuse Installation Instructions



Powering Business Worldwide

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Contents

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.

Product information

Introduction

Full-range fuses are designed to clear a wide range of currents. They should be properly selected for the specific application at hand by properly trained personnel.

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.

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.

Standards

ISO 9001 Certified Quality Management System

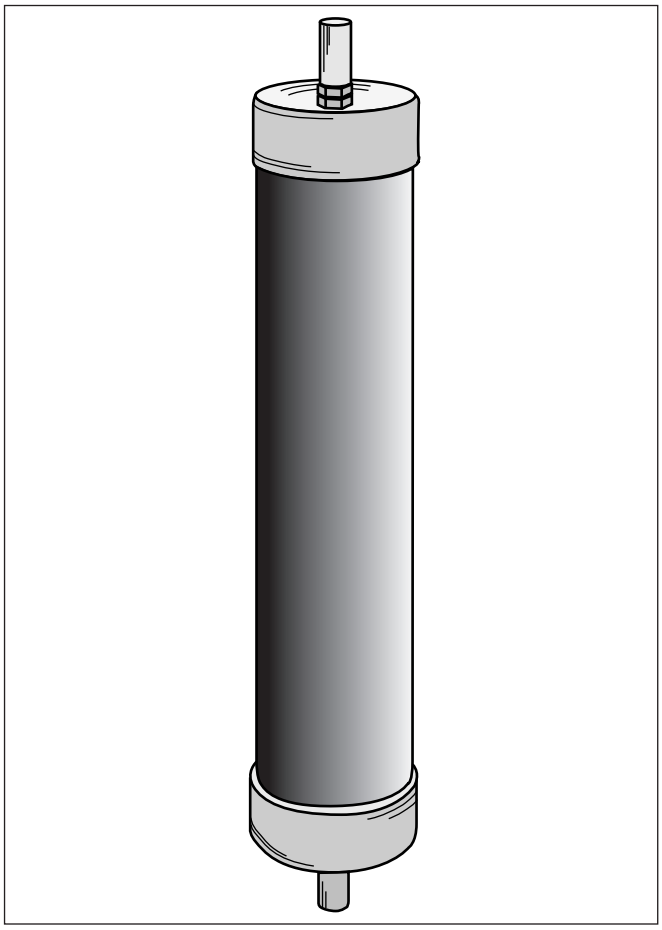

Figure 1. X-Limiter full-range current-limiting fuse

Installation procedure

1. X-Limiter fuses may be used as replacement fuses or in original equipment. Replace fuses of equal size and rating only. In three-phase applications, each phase must be re-fused with fuses of equal size, rating, and manufacture. If fuses of different manufacturers are intermixed between phases, simultaneous clearing of three-phase faults cannot be guaranteed.
2. X-Limiter fuses may be mounted in a variety of configurations. Follow the instructions of the mounting equipment for proper fit and connection.
3. The maximum rated design voltage of the fuse should not be exceeded in any application.

For further information regarding this fuse or its application, contact supervisory personnel or contact your Eaton representative.

Table 1. X-Limiter clip-style fuse dimensional information (see figure 2 for dimensional drawings.)

Fuse rating		Dimensions – inches (mm)			Weight	
Voltage (kV)	Current (A)	A	B	C	lbs (kg)	Mounting code
4.3 *	10-100	10.0 (254)	2.13 (54)	1.0 (25)	2.0 (0.9)	4
5.5 *	10-75	10.0 (254)	2.13 (54)	1.0 (25)	2.0 (0.9)	4
8.3 **	10-40	10.11 (257)	2.15 (55)	1.0 (25)	2.0 (0.9)	4
8.3 *	50 DW	10.0 (254)	2.13 (54)	1.0 (25)	2.0 (0.9)	4
8.3 *	50-140	14.69 (373)	3.16 (80)	1.19 (30)	5.5 (2.5)	5
15.5 **	10-40	14.37 (365)	2.15 (55)	1.0 (25)	3.0 (1.4)	5
15.5 *	50 DW	14.31 (363)	2.13 (54)	1.0 (25)	3.0 (1.4)	5
15.5 *	50-125	17.5 (444)	3.16 (80)	1.19 (30)	8.0 (3.6)	6
23 **	10-40	17.21 (437)	2.15 (55)	1.0 (25)	4.0 (1.8)	6
23 *	50 DW	17.13 (435)	2.13 (54)	1.0 (25)	4.0 (1.8)	6
23 *	50-100	27.37 (695)	3.16 (80)	1.19 (30)	12.0 (5.4)	9

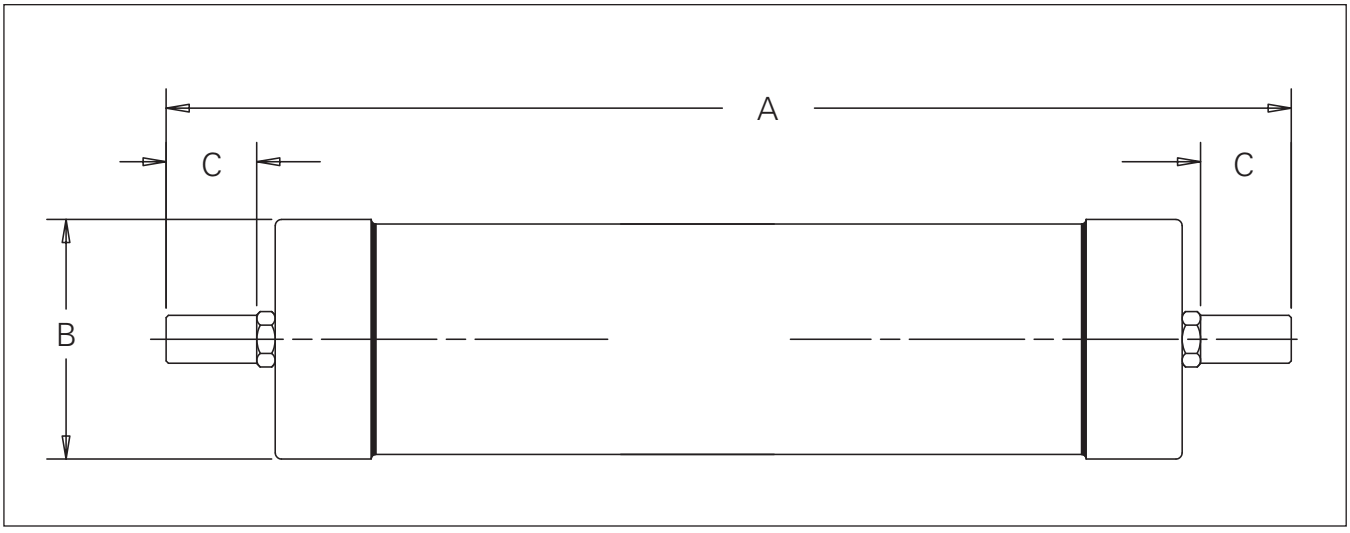

Figure 2. X-Limiter full-range current-limiting clip-style fuse dimensions. (See table 1 for dimensions)

Table 2. X-Limiter hinge-style fuse dimensional information (see figure 3 for dimensional drawings.)

Fuse rating		Dimensions – inches (mm)					
Voltage (kV)	**Current (A)**	**A**	**B**	**C**	**D**	**Weight lbs (kg)**	**Mounting code**
15.5**	60-100	4.37 (111)	2.13 (54.1)	13.55 (344.2)	1.50 (15.9)	8.0 (3.6)	2

** Consists of X-Limiter unitized fuse (parallel fuses) (see Figure 3 for dimensional drawing).

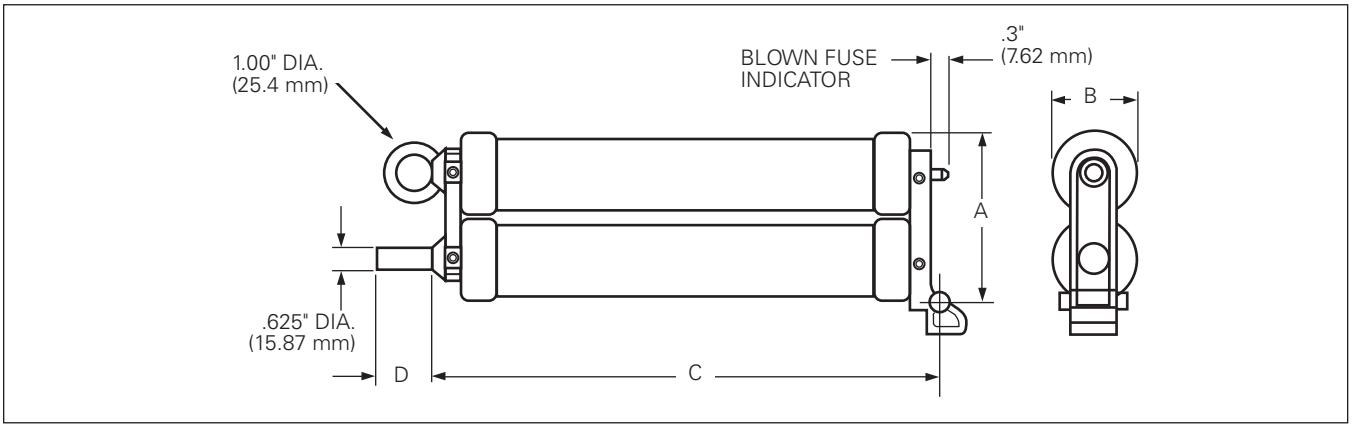

Figure 3. X-Limiter full-range current-limiting unitized fuse details and dimensions. (See table 2 for dimensions)

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