Porcelain-housed distribution-class assembly 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 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.

G122.3
Porcelain-housed distribution-class assembly instructions

General

Eaton’s Cooper Power series porcelain housed distribution class surge arrester mounted on a station post insulator shall be assembled according to the reference drawing Figure 1 and component identification in Table 1.

⚠️ CAUTION:

Eaton’s Cooper Power series Distribution class surge arrester should only be assembled by personnel familiar with good safety practices and the handling of high voltage electrical equipment.

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Table 1. Component description of VariSTAR distribution class surge arrester mounted on a station post insulator

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Surge Arrester Assembly</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>Insulator</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>Arrester Hanger</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>1/2&quot;-13 x 1.5&quot; lg (12.7 mm-d x 38 mm) HxHd Mach Bolt</td>
</tr>
<tr>
<td>5</td>
<td>7</td>
<td>1/2&quot; (12.7 mm) Split Lock Washer</td>
</tr>
<tr>
<td>5a</td>
<td>1</td>
<td>See Item 5</td>
</tr>
<tr>
<td>5b</td>
<td>2</td>
<td>See Item 5</td>
</tr>
<tr>
<td>5c</td>
<td>4</td>
<td>See Item 5</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>1/2&quot;-13 (12.7mm-d) HxHd Nut</td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>1/2&quot;-13 x 1&quot; lg (12.7 mm-d x 25.4 mm) HxHd Mach Bolt</td>
</tr>
<tr>
<td>7a</td>
<td>2</td>
<td>See Item 7</td>
</tr>
<tr>
<td>7b</td>
<td>1</td>
<td>See Item 7</td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>1/2&quot;-13 x 1.25&quot; lg (12.7 mm-d x 31.8 mm) HxHd Mach Bolt</td>
</tr>
<tr>
<td>8a</td>
<td>2</td>
<td>See Item 8</td>
</tr>
<tr>
<td>8b</td>
<td>1</td>
<td>See Item 8</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>Insulator Hanger</td>
</tr>
</tbody>
</table>

These instructions do not claim to cover all details or variations in the equipment, procedure, or process described, nor to provide directions for meeting every contingency during installation, operation, or maintenance. When additional information is desired to satisfy a problem not covered sufficiently for the user’s purpose, please contact your Eaton sales engineer.
Figure 1. Assembly of Eaton’s Cooper Power series distribution class surge arrester mounted on a station post insulator.
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