200 A 25 kV class insulated protective cap

General
Eaton’s Cooper Power Systems insulated protective cap is an accessory device designed to electrically insulate and mechanically seal loadbreak bushing interfaces. When mated to a loadbreak product and the drain wire is attached to ground, the insulated protective cap provides a fully shielded, submersible insulating cover for energized bushings. The cap can be used for permanent or temporary installation on bushings, junctions, or feedthru devices that meet the requirements of IEEE Std 386™-2006 standard.

Installation
No special tools are required. A clampstick tool is used to place the protective cap on an exposed bushing interface. Refer to Service Information S500-21-1, 200 A 15, 25, and 35 kV Class Insulated Protective Cap Installation Instructions for details.
Production tests
Tests are conducted in accordance with IEEE Std 386™-2006 standard.
- ac 60 Hz 1 Minute Withstand
  - 40 kV
- Minimum Corona Voltage Level
  - 19 kV
Tests are conducted in accordance with Eaton's Cooper Power Systems requirements.
- Physical Inspection
- Periodic Dissection
- Periodic Fluoroscopic Analysis

Table 1. Voltage Ratings and Characteristics

<table>
<thead>
<tr>
<th>Description</th>
<th>kV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Voltage Class</td>
<td>25</td>
</tr>
<tr>
<td>Maximum Rating Phase-to-Phase</td>
<td>26.3</td>
</tr>
<tr>
<td>Maximum Rating Phase-to-Ground</td>
<td>15.2</td>
</tr>
<tr>
<td>ac 60 Hz 1 Minute Withstand</td>
<td>40</td>
</tr>
<tr>
<td>dc 15 Minute Withstand</td>
<td>78</td>
</tr>
<tr>
<td>BIL and Full Wave Crest</td>
<td>125</td>
</tr>
<tr>
<td>Minimum Corona Voltage Level</td>
<td>19</td>
</tr>
</tbody>
</table>

Voltage ratings and characteristics are in accordance with IEEE Std 386™-2006 standard.

Ordering information
To order the 25 kV Class Insulated Protective Cap Kit, refer to Table 2.

Table 2. Insulated Protective Cap Kit

<table>
<thead>
<tr>
<th>Description</th>
<th>Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protective Cap</td>
<td>LPC 225</td>
</tr>
</tbody>
</table>

Each kit contains:
- Protective Cap with stranded copper ground wire
- Silicone Lubricant
- Installation Instruction Sheet
Features and detailed description

- **PULLING EYE**: Stainless steel reinforced pulling eye ensures high strength for clampstick operation.
- **SEMI-CONDUCTIVE INSERT**: Semi-conductive insert is molded of semi-conductive EPDM and controls electrical stresses at nose of mating loadbreak product.
- **LATCHING RING**: Semi-conductive molded locking ring locks cap onto nose piece of mating interface.
- **SEMI-CONDUCTIVE SHIELD**: Molded semi-conductive EPDM shield meets requirements of IEEE Std 592™-2007 standard.
- **PROBE**: Probe provides reliable conductive path with mating female contacts.
- **GROUNDING EYE**: (Optional for larger grounding wire)

**EPDM INSULATION**
High quality peroxide cured EPDM insulation is mixed and formulated in-house for complete control of insulating rubber characteristics.

**S3=2.61**
(66.3 mm)

**Dia.**

**2.83**
(71.9 mm)

**Figure 1. Illustration shows construction of insulated protective cap.**

**Figure 2. Insulated protective cap profile and stacking dimensions.**