Loadbreak
Apparatus Connectors

200 A 15 kV Class
Insulated Protective Cap

GENERAL
The Cooper Power Systems RTE® 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 ANSI/IEEE Standard 386.

INSTALLATION
No special tools are required. A shotgun stick tool is used to place the protective cap on an exposed bushing interface. Refer to Installation Instruction Sheet S500-21-1 for details.

PRODUCTION TESTS
Tests are conducted in accordance with ANSI/IEEE Standard 386-1995.
• ac 60 Hz 1 Minute Withstand – 34 kV
• Minimum Corona Voltage Level – 11 kV

Tests are conducted in accordance with 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>15</td>
</tr>
<tr>
<td>Maximum Rating Phase-to-Phase</td>
<td>14.4</td>
</tr>
<tr>
<td>Maximum Rating Phase-to-Ground</td>
<td>8.3</td>
</tr>
<tr>
<td>ac 60 Hz 1 Minute Withstand</td>
<td>34</td>
</tr>
<tr>
<td>dc 15 Minute Withstand</td>
<td>53</td>
</tr>
<tr>
<td>BIL and Full Wave Crest</td>
<td>95</td>
</tr>
<tr>
<td>Minimum Corona Voltage Level</td>
<td>11</td>
</tr>
</tbody>
</table>

Voltage ratings and characteristics are in accordance with ANSI/IEEE Standard 386-1995.

ORDERING INFORMATION
To order the 15 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 215</td>
</tr>
</tbody>
</table>

Each kit contains:
• Protective Cap with stranded copper ground wire
• Silicone Lubricant
• Installation Instruction Sheet
Features and Detailed Description

Figure 2. Illustration shows construction of insulated protective cap.

Figure 3. 15 kV Insulated Protective Cap profile and stacking dimensions.

SEMI-CONDUCTIVE SHIELD
Molded semi-conductive EPDM shield meets requirements of ANSI/IEEE Standard 592.

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

PROBE
Probe provides reliable conductive path with mating female contacts.

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.

GROUNDING WIRE AND GROUNDING EYE
48-Inch, #14 AWG stranded copper ground wire is tin plated and ensures dead-front construction when tied off to ground.

GROUNDING EYE
(Optional for larger grounding wire)

PULLING EYE
Stainless steel reinforced pulling eye ensures high strength for shotgun stick operation.

GROUNDING WIRE
48-Inch, #14 AWG stranded copper ground wire.

PULLING EYE
Stainless steel reinforced pulling eye.

PROBE
Probe provides reliable conductive path with mating female contacts.

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.

GROUNDING WIRE AND GROUNDING EYE
48-Inch, #14 AWG stranded copper ground wire is tin plated and ensures dead-front construction when tied off to ground.

GROUNDING EYE
(Optional for larger grounding wire)

PULLING EYE
Stainless steel reinforced pulling eye ensures high strength for shotgun stick operation.

Figure 2. Illustration shows construction of insulated protective cap.

Figure 3. 15 kV Insulated Protective Cap profile and stacking dimensions.