# Deadbreak Apparatus Connectors



600 A 35 kV Class Insulated Protective Cap

Electrical Apparatus

### **DESCRIPTION**

The Cooper Power Systems 600 A, 35 kV Class Insulated Protective Cap meets the full requirements of IEEE Standard 386 — Separable Insulated Connector Systems, and provides an insulated, fully shielded submersible protection for energized 35 kV Class deadbreak interfaces. The cap is required for temporary or permanent installation on 35 kV deadbreak bushings, junctions and other accessories having interfaces that conform to IEEE Standard 386.

The cap design includes a semiconducting EPDM insert for stress relief and high quality peroxide cured EPDM insulation. The molded EPDM semi-conducting shield maintains ground potential on the cap's surface when the drain wire is connected to a common ground.

## **INSTALLATION**

No special tools are required. A hotstick tool is used to place the protective cap on a de-energized bushing. Refer to Installation Instruction Sheet S600-23-1 for details.

#### PRODUCTION TESTS

Tests are conducted in accordance with IEEE Standard 386.

- AC 60 Hz 1 Minute Withstand - 50 kV
- Minimum Corona Voltage Level – 26 kV

Tests conducted in accordance with Cooper Power Systems requirements:

- Physical Inspection
- Periodic Dissection
- Periodic X-ray Analysis



Figure 1.
Standard Insulated Protective Cap with drain wire.



Figure 2. U-OP™/T-OP™ II Insulated Protective Cap with drain wire.

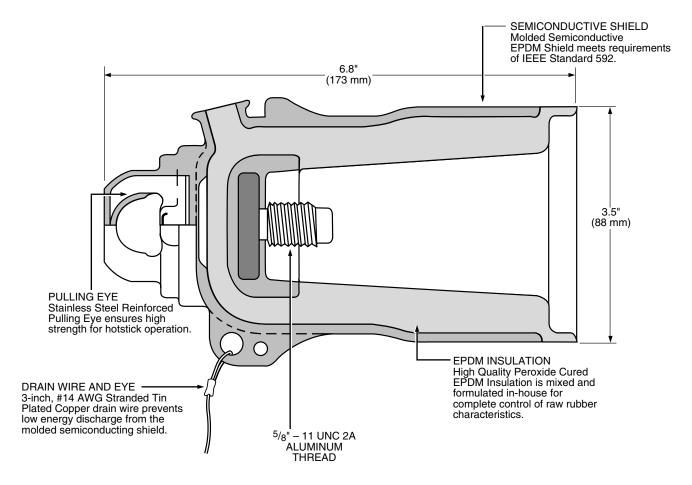


Figure 3. Insulated Protective Cap cutaway shows design characteristics and dimensions.

Note: Dimensions given are for reference only.

TABLE 1 Voltage Ratings and Characteristics

Description	kV
Standard Voltage Class Maximum Rating Phase-to-Ground	35 21.1
AC 60 Hz 1 Minute Withstand	50
DC 15 Minute Withstand	103
BIL and Full Wave Crest Minimum Corona Voltage Level	150 26
Minimum Corona voltage Level	20

Voltage ratings and characteristics are in accordance with IEEE Standard 386.

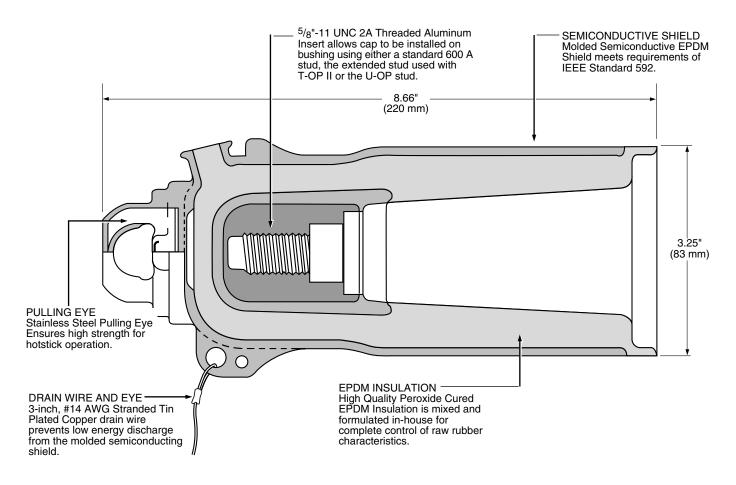


Figure 4. U-OP/T-OP II Cap cutaway shows design characteristics and dimensions.

Note: Dimensions given are for reference only.

# ORDERING INFORMATION

To order a Cooper Power Systems 35 kV Class Protective Cap Kit, refer to Table 2.

Each kit contains

- Protective Cap
- Silicone Lubricant
- Installation Instruction Sheet

TABLE 2 Protective Cap Kits

Description	Catalog Number
600 A 35 kV Protective Caps	
Standard Protective Cap with Drain Wire w/Permanent Stud (See Figure 3) (Individually Bagged)	DPC635
Standard Protective Cap with Drain Wire w/Permanent Stud (Individually Boxed)	DPC635X
Protective Cap for T-OP II and U-OP Applications w/out Stud (See Figure 4) (Individually Bagged)	DPC635UT
Protective Cap for T-OP II and U-OP Applications w/out Stud (Individually Boxed)	DPC635UTX

ISO 9001:2000-Certified Quality Management System



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