

# Deadbreak Apparatus Connectors

## 600 A 35 kV Class PUSH-OP® Bushing Adapter

### GENERAL

The Cooper Power Systems 600 A, 35 kV Class PUSH-OP® Bushing Adapter is a factory assembled LRTP and Extender with a stainless steel shroud and tin-plated copper probe. It meets all the requirements of IEEE Standard 386 — Separable Connector Systems.

The PUSH-OP has a non-bolted connection that eliminates any need for threading and its associated problems.

The device is used to cap a 600 A PUSH-OP type bushing tap interface with the 200 A loadbreak interface allowing for live testing and visible grounding. The 200 A tap is single-phase switching and three-phase fault close rated. Used with a 200 A insulated protective cap, Cooper M.O.V.E. arrester or grounding elbow, a PUSH-OP Bushing Adapter provides a fully shielded, submersible unit.

### INSTALLATION

The PUSH-OP Bushing Adapter is installed on a de-energized 600 A PUSH-OP bushing interface using a hotline tool. Refer to Installation Instruction Sheet S600-19-1 for details. Installation of the factory assembled LRTP and extender to the 600 A PUSH-OP Bushing requires no threading.

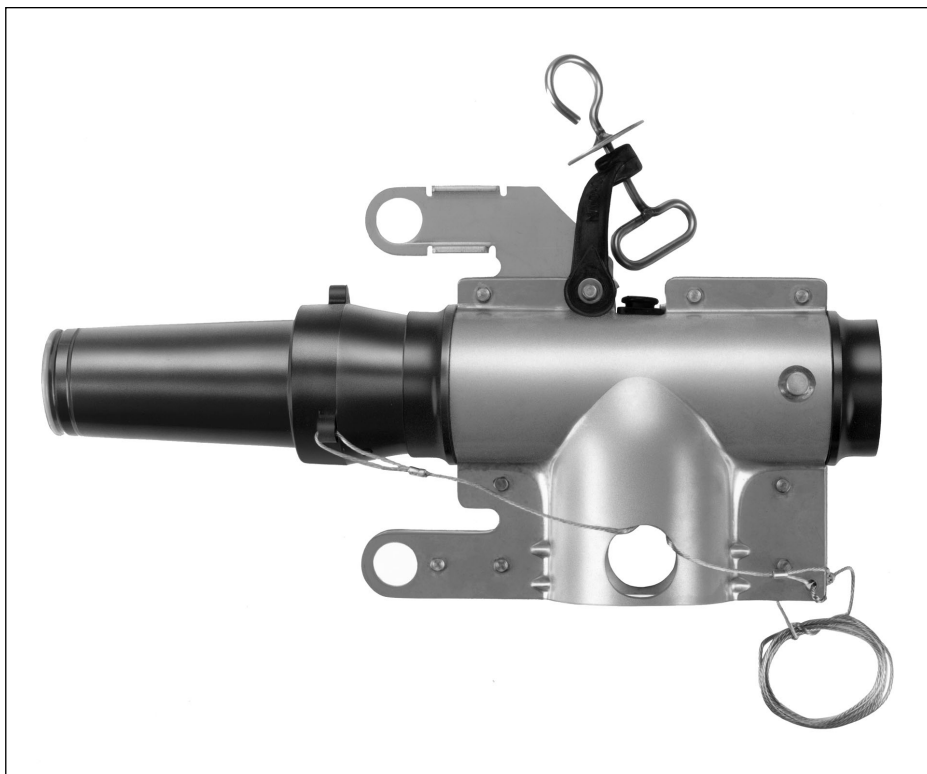
### PRODUCTION TESTS

Tests are conducted in accordance with IEEE Standard 386.

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

Tests are conducted in accordance with Cooper Power Systems requirements.

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



**Figure 1.**  
Insulated Bushing Adapter showing stainless steel shroud and drain wire lead.

**TABLE 1**  
Voltage Ratings and Characteristics

Description	kV
Standard Voltage Class	35
Maximum Rating Phase-to-Phase (LRTP 200 A interface only)	21.1
Maximum Rating Phase-to-Ground	21.1
AC 60 Hz 1 Minute Withstand	50
DC 15 Minute Withstand	103
BIL and Full Wave Crest	150
Minimum Corona Voltage Level	26

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

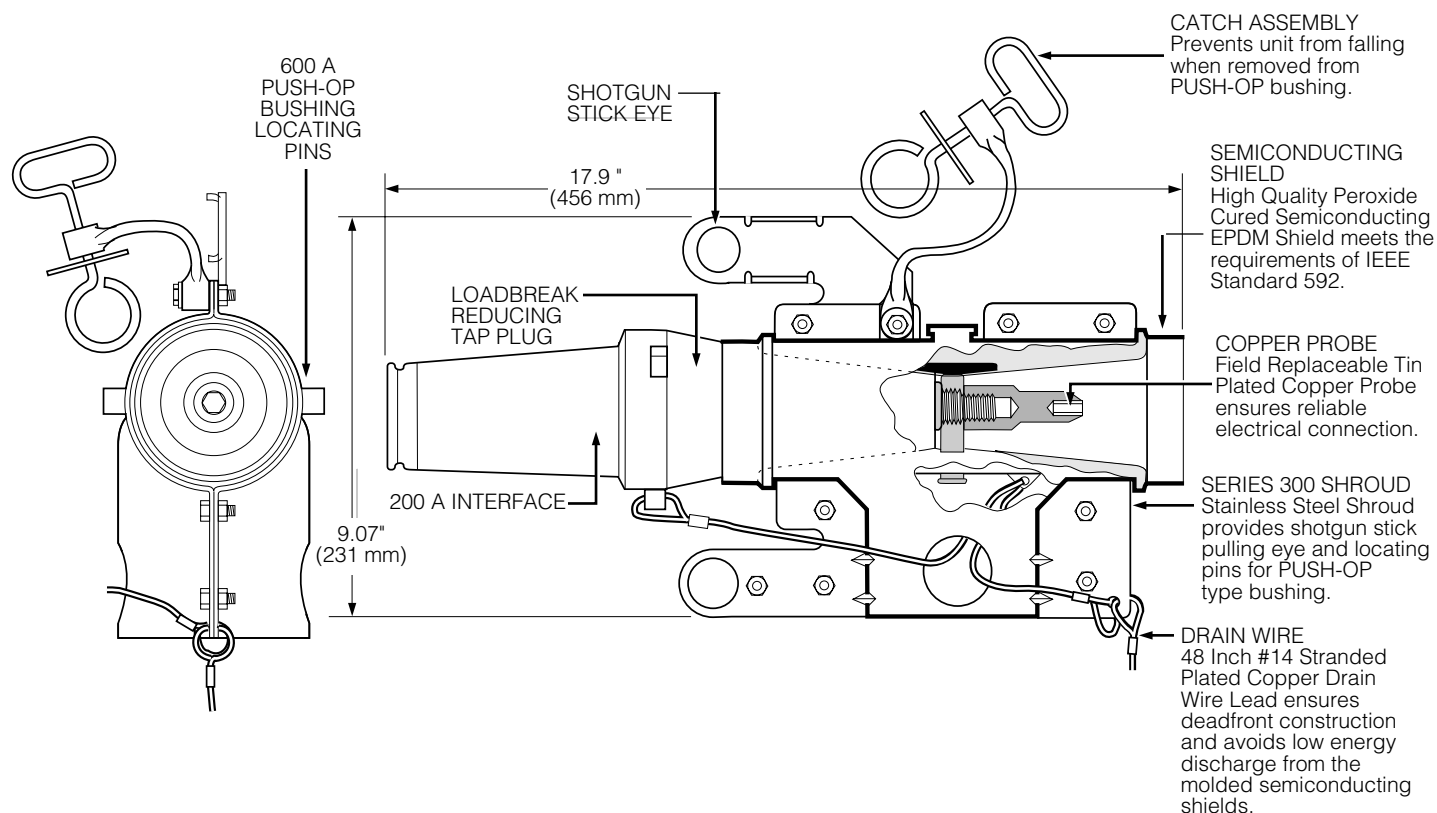
**TABLE 2**  
Current Ratings and Characteristics

Description	Amperes
<b>200 A Interface*</b>	
Continuous	200 A rms
Switching**	10 operations at 200 A rms at 21.1 kV
Fault Closure	10,000 A rms symmetrical at 36.6 kV after 10 switching operations for 0.17 s
Short Time	10,000 A rms symmetrical for 0.17 s 3,500 A rms symmetrical for 3.0 s

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

\* If available system fault current exceeds 10 kA, current limiting fusing must be used upstream, otherwise fault close and short time ratings of the 200 A interface will be exceeded.

\*\* Switching rating limited to single-phase 21.1 kV.



**Figure 2.**  
Cutaway illustration shows design detail and dimensions.

Note: Dimensions given are for reference only.

## ORDERING INFORMATION

To order a 35 kV Class PUSH-OP Insulated Bushing Adapter Kit, refer to Table 3.

**TABLE 3**  
Insulated Bushing Adapter Kits

Description	Catalog Number
Bushing Adapter	PDBA635
Bushing Adapter w/200 A Insulated Protective Cap	PDBA635C

Each kit contains:

- Assembled Bushing Adapter
- Shipping Cap (not for energized operation)
- Silicone Lubricant
- Installation Instruction Sheet

**TABLE 4**  
Replacement Parts

Description	Catalog Number
Loadbreak Reducing Tap Plug	LRTP635
Probe	2638198B01B
Catch Assembly	2638191B01

**ISO 9001:2000-Certified Quality Management System**

**COOPER** Power Systems