Deadbreak Connector Catalog Data CA650019EN

Effective April 2015 Supersedes 600-19 January 1990

COOPER POWER SERIES

600 A 15 kV class PUSH-OP™ insulated adapter cap



General

Eaton's Cooper Power[™] series 600 A, 15 kV Class PUSH-OP[™] adapter cap is a factory assembled LRTP and T-body with a stainless steel shroud and tin-plated copper probe. It meets all the requirements of IEEE Std 386[™]-2006 standard, Separable Connector Systems.

The PUSH-OP adapter cap 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 three-phase switching and three-phase fault close rated. Used with a 200 A insulated protective cap, Eaton's Cooper Power series M.O.V.E. arrester or grounding elbow, a PUSH-OP adapter cap provides a fully shielded, submersible unit.

Installation

The PUSH-OP adapter cap is installed on a de-energized 600 A special PUSH-OP bushing interface using a clampstick. Refer to *Service Information S600-19-1 600 A 15, 25, and 35 kV Class PUSH-OP Bushing Adapter Cap Installation Instructions* for details. Installation of the factory assembled LRTP and T-body to the 600 A PUSH-OP bushing requires no threading.

Production tests

Tests are conducted in accordance with IEEE Std $386^{\text{TM}}\text{-}2006$ standard.

- ac 60 Hz 1 Minute Withstand
 - 34 kV
- Minimum Corona Voltage Level
 - 11 kV

Tests are conducted in accordance with Eaton requirements.

- Physical Inspection
- Periodic Dissection
- Periodic Fluoroscopic Analysis



CATCH ASSEMBLY off of PUSH-OP mating apparatus upon removal. 12.8 " (326 mm) COMPRESSION CONNECTOR 11/16 Inch Unthreaded CopperTop Compression Connector is sized to ensure a cool running connector with maximum current transfer. Ð 0 0 0 6 COPPER PROBE Field Replaceable Tin Plated Copper Probe ensures reliable electrical 600 A PUSH-OP (O)connection. BUSHING LOCATING PINS 200 A INTERFACE SERIES 300 SHROUD Stainless Steel Shroud provides hotstick pulling 0 ∎đ|þ∎ \odot LOADBREAK eye and locating pins for PUSH-OP type bushing. 14.05 REDUCING (358 mm) TAP PLUG πĒ þ. 0 \odot a GROUNDING LEAD 48 Inch #14 Stranded Plated Copper Ground Lead ensures SHOTGUN STICK EYE deadfront construction and avoids low energy discharge from the molded semiconducting shields. SEMI-CONDUCTING GROUNDING TAB point to connect ground wire to ensure grounding of the connector SHIELD SHIELD Molded Semi-Conducting EPDM Shield meets the requirements of IEEE Std 592[™]-2007 standard. shield. EPDM INSULATION DELRIN PLUG _ High quality peroxide cured EPDM Insulation is mixed and formulated in-house for complete control of raw rubber characteristics

Figure 1. Cutaway illustration shows design detail and dimensions.

Note: Dimensions given are for reference only.

Table 1. Voltage Ratings and Characteristics

Description	kV
Standard Voltage Class	15
Maximum Rating Phase-to-Phase (LRTP 200 A interface only)	14.4
Maximum Rating Phase-to-Ground	8.3
ac 60 Hz 1 Minute Withstand	34
dc 15 Minute Withstand	53
BIL and Full Wave Crest	95
Minimum Corona Voltage Level	11

200 A Interface*	
Continuous	200 A rms
Switching	10 operations at 200 A rms at 14.4 kV
Fault Closure	10,000 A rms symmetrical at 14.4 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

Table 2. Current Ratings and Characteristics

Amperes

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

Description

* 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.

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

Ordering information

To order a 15 kV Class PUSH-OP Insulated Adapter Cap Kit, refer to Table 3.

Table 3. Insulated Adapter Cap Kits

Description	Catalog Number
Adapter Cap	PDBA615
Adapter Cap with 200 A Insulated Protective Cap	PDBA615C

Each kit contains:

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

Table 4. Replacement Parts

Description	Catalog Number
Loadbreak Reducing Tap Plug (includes STUD-T)	LRTP615
Probe	2638198B01B
Extended Length Stud	STUD-T
Catch Assembly	2638191B01
Shipping Cap (for 200 A interface)	2637123B01

Eaton 1000 Eaton Boulevard Cleveland, OH 44122 United States Eaton.com

Eaton's Cooper Power Systems Division 2300 Badger Drive Waukesha, WI 53188 United States Eaton.com/cooperpowerseries

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For Eaton's Cooper Power series PUSH-OP deadbreak connector product information call 1-877-277-4636 or visit: www.eaton.com/cooperpowerseries.

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