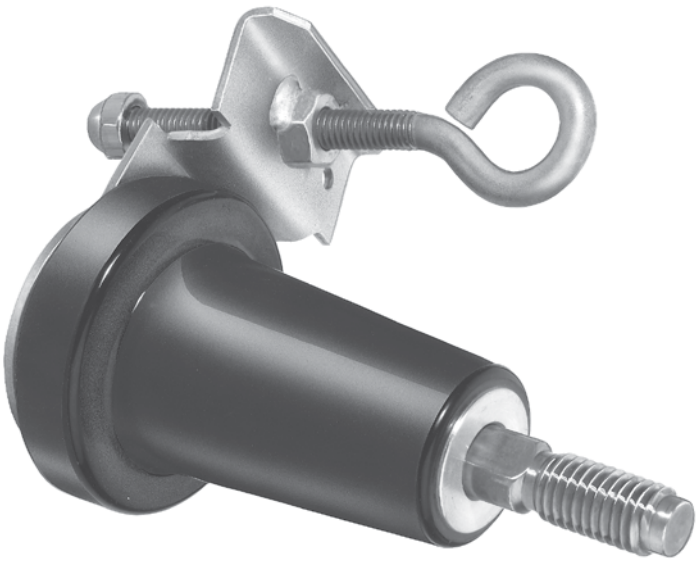
Deadbreak Connectors
Catalog Data
CA650066EN

Effective August 2015
Supersedes 600-44 December 2003

COOPER POWER SERIES

600 A 15/25 kV class standoff bushings



General

Eaton's Cooper Power series 600 A, 15/25 kV insulated standoff bushing meets the full requirements of IEEE Std 386™-2006 standard — "Separable Insulated Connector Systems", and provides a single deadbreak interface made of high quality insulating epoxy material. It is used in pad-mount cabinets, underground vaults and other apparatus to isolate and sectionalize an energized cable.

Temporary or permanent parking of energized 600 A 15/25 kV deadbreak connectors that conform to IEEE Std 386™-2006 standard is simplified with the use of insulated standoff bushings.

The insulated standoff bushing is designed to be installed in the parking stand mounted on a transformer or other apparatus. A drain wire lug is provided on the standoff bracket for attachment of a drain wire to ensure deadfront construction. The bushing provides a fully-shielded, submersible connection for deadbreak operation.

Insulated standoff bushings for T-OP™ II and U-OP™ connectors meet all the requirements and features of the standard insulated standoff bushing. They incorporate the appropriate studs which allow for parking of a 600 A T-OP II connector, or U-OP connector, respectively.

Eaton's Cooper Power series 600 A, 15/25 kV grounded standoff bushing is designed to be installed in the parking stand bracket mounted on the transformer or other apparatus. A 2/0 AWG copper, 5-foot jacketed cable is connected to the bushing for attachment to system ground. The bushing provides a fully visible ground and submersible connection for temporary or permanent parking of 600 A deadbreak connectors that conform to IEEE Std 386™-2006 standard.

All standoff bushing brackets have a stainless steel eyebolt with a brass pressure foot. The bushing body is bolted to a stainless steel base bracket using a stainless steel bolt. Special pins ensure firm location of the bushing on the bracket.

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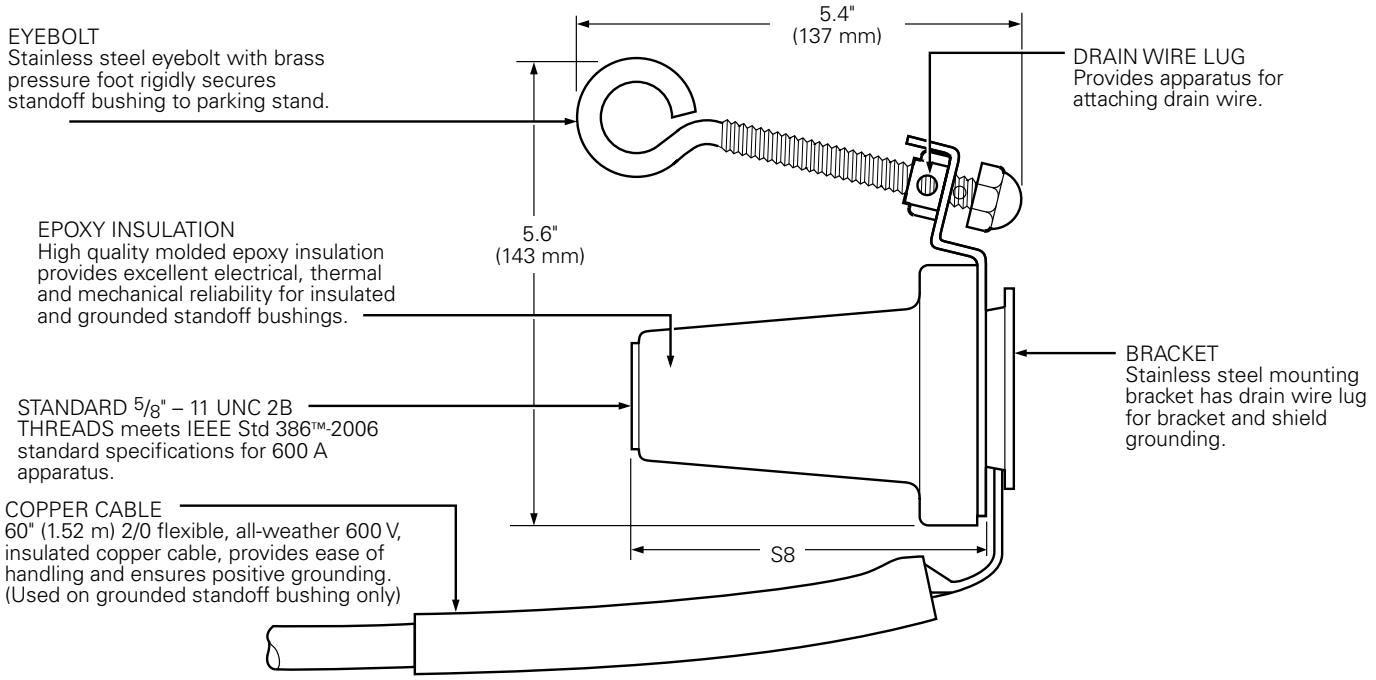
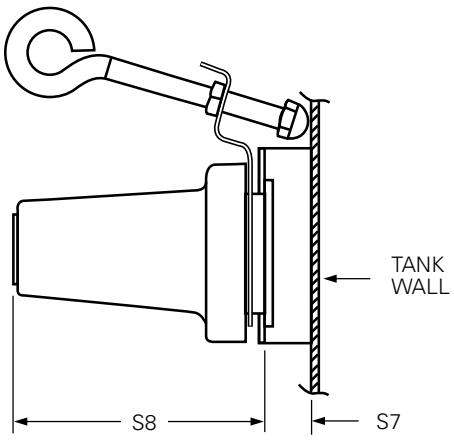


Figure 1. Diagram shows grounded standoff bushing made with molded epoxy insulation with five feet of insulated copper.

Note: Dimensions given are for reference only.



15/25 kV		
	Grounded	**Insulated**
S7	0.75" (19 mm)	0.75" (19 mm)
S8	4.2" (106 mm)	4.2" (106 mm)

Figure 2. Standoff bushing stacking dimensions.

Installation

A hotstick tool is used to place the standoff bushing in the parking stand on the frontplate of the apparatus. Special tools are required to thread de-energized 600 A connectors onto the standoff bushing. Refer to the appropriate connector catalog section for further clarification. Refer to *Service Information S600-24-1 600 A 15, 25, and 35 kV Class Insulated Standoff Bushing Installation Instructions* for details on the insulated standoff bushing. For installation of the grounded standoff bushing, refer to *Service Information S600-24-2 15, 25, and 35 kV Class Deadbreak Grounding Standoff Bushing Installation Instructions* for details.

Production tests (insulated standoff bushing)

Tests conducted in accordance with IEEE Std 386™-2006 standard:

- ac 60 Hz 1 Minute Withstand
  - 40 kV
- Minimum Corona Voltage Level
  - 19 kV

Tests conducted in accordance with Eaton requirements:

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

Table 1. Voltage Ratings and Characteristics – Insulated Standoff Bushing

Description	kV
Standard Voltage Class	25
Maximum Rating Phase-to-Ground	15.2
ac 60 Hz 1 Minute Withstand	40
dc 15 Minute Withstand	78
BIL and Full Wave Crest	125
Minimum Corona Voltage Level	19

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

Table 2. Current Ratings and Characteristics – Grounded Standoff Bushing

Description	Amperes
Short Time	25,000 A rms symmetrical for 0.17 s

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

Ordering information

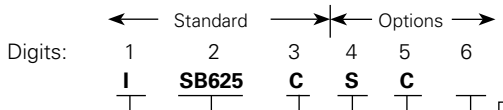
To order a 15/25 kV Class Standoff Bushing Kit, refer to Table 3.

Each kit contains:

- Standoff Bushing with Bracket
- Shipping Cap (not for energized operation)
- Silicone Lubricant
- Installation Instruction Sheet

Table 3. Ordering Selection Guide

Example: To order an Insulated Bushing with Copper Stud Loose (Shown Below)
Catalog Number would be **I SB 625 C SC**



Digit 1	Description
G	For Grounded Bushing**
I	For Insulated Bushing

Digit 2	Given

Digit 3	Description
A	For Aluminum Bushing
C	For Copper Bushing*

Digit 4 & 5		Description
S	A	Aluminum Stud
S	T	T-OP II Stud
S	C	Copper Stud
S	U	U-OP Stud
Leave Blank		No Stud Required

Digit 6	Description
P	Stud Installed at Factory
Leave Blank	Bagged Stud Loose in Box
Leave Blank	No Stud Required

* Eaton recommends when a copper Standoff is designated – use only copper stud.

** Grounded bushing available in copper only. Digit 3 will be "C".

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 standoff bushing product information call 1-877-277-4636 or visit: www.eaton.com/cooperpowerseries.