

Deadbreak Apparatus Connectors

600 A 15/25 kV Class Standoff Bushings

GENERAL

The Cooper Power Systems 600 A, 15/25 kV Insulated Standoff Bushing meets the full requirements of **IEEE Standard 386™** — "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 Standard 386™** 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.

The 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.

The Cooper Power Systems 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 Standard 386™**.

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.



Figure 1. Insulated Standoff Bushing shown with optional T-OP II stud.

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 Installation Instruction Sheet S600-24-1 (5000050605) for details on the insulated standoff bushing. For installation of the grounded standoff bushing, refer to Installation Instruction Sheet S600-24-2 (5000050541) for details.

PRODUCTION TESTS (Insulated Standoff Bushing)

Tests conducted in accordance with **IEEE Standard 386™**:

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

Tests conducted in accordance with Cooper Power Systems 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 Standard 386™**.

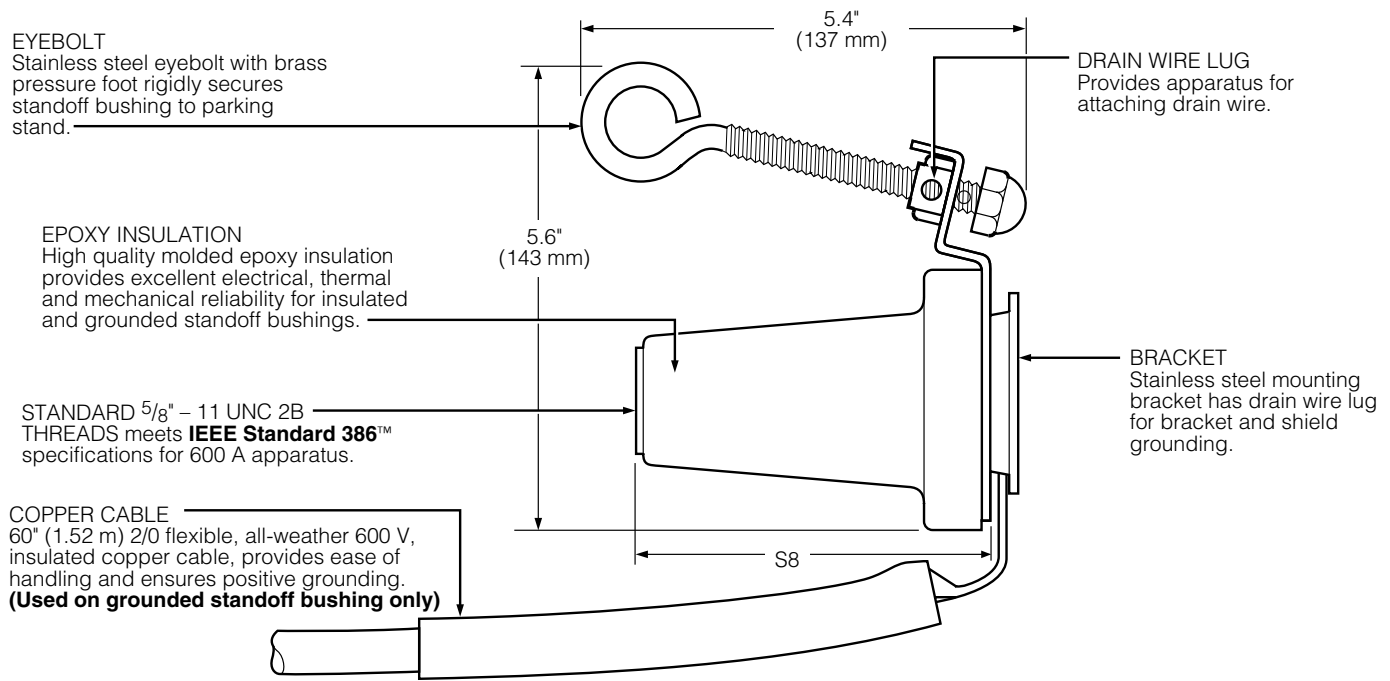


Figure 2.
Diagram shows Grounded Standoff Bushing made with molded epoxy insulation with five feet of insulated copper.

Note: Dimensions given are for reference only.

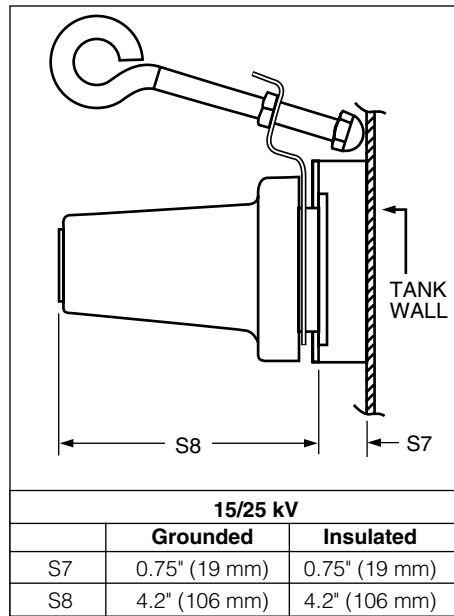


Figure 3.
Standoff bushing stacking dimensions.

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 Standard 386™.

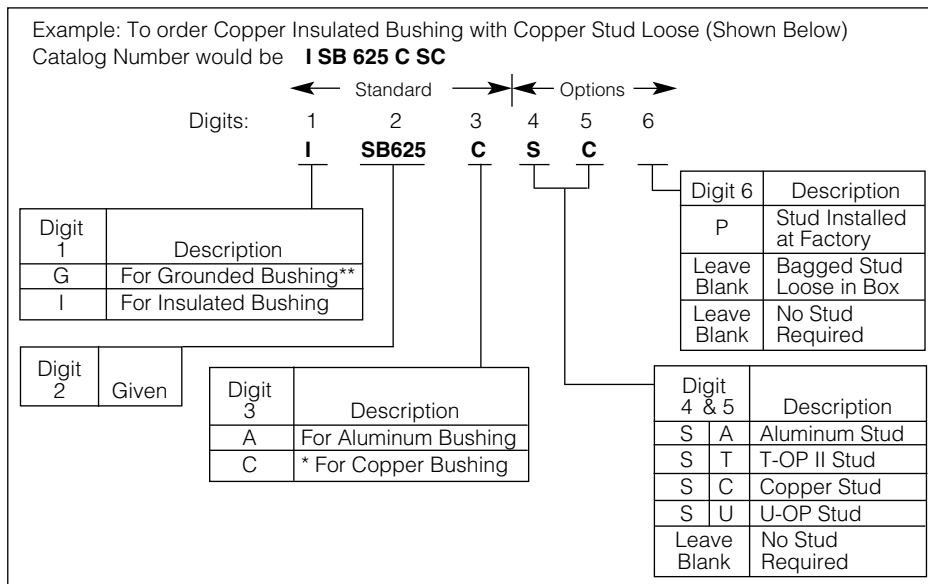
ORDERING INFORMATION

To order a Cooper Power Systems 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



* Cooper Power Systems recommends when a copper Standoff is designated – use only copper stud.
 ** Grounded bushing available in copper only. Digit 3 will be "C".

ISO 9001:2000-Certified Quality Management System



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