# COOPER POWER SERIES

## 600 A 25 kV class deadbreak apparatus bushing



#### General

Eaton's Cooper Power™ series 600 A 25 kV Class deadbreak apparatus bushing meets the full requirements of IEEE Std 386™-2016 standard separable insulated connector systems. All 600 A separable connectors manufactured according to IEEE Std 386™-2016 standard will operate with this bushing. This bushing covers 15kV Class (8.3kV Line-Ground), 25kV Class (15.2kV Line-Ground), and 28kV Class (16.2kV Line-Ground), reference "Production tests" and Table 1 "Voltage Ratings and Characteristics".

The epoxy bushings are designed for sidewall mounting in transformers, switches and other apparatus filled with transformer oil or Envirotemp<sup>TM</sup> FR3<sup>TM</sup> Fluid or an approved equivalent. Separable connector systems, such as Eaton's BOLT<sup>TM</sup>, BT-TAP and T-OP<sup>TM</sup> II deadbreak connectors as well as other similar systems on the market, can be used with these bushings.

#### Installation

No special tools are required. The bushing is mounted through the apparatus sidewall and clamped externally. Refer to *Service Information MN800008EN High-Voltage Primary Bushings Installation Instructions* for details.

#### **Production tests**

Tests are conducted in accordance with IEEE Std  $386^{\text{TM}}$ -2016 standard.

- AC 60 Hz 1 Minute Withstand
  - 45 kV
- Minimum Corona Voltage Level
  - 21.5 kV

Tests are conducted in accordance with Eaton's requirements:

- Physical Inspection
- Periodic 125 kV Impulse Withstand
- Periodic Fluoroscopic Analysis (X-ray)
- Periodic Helium Leak Test



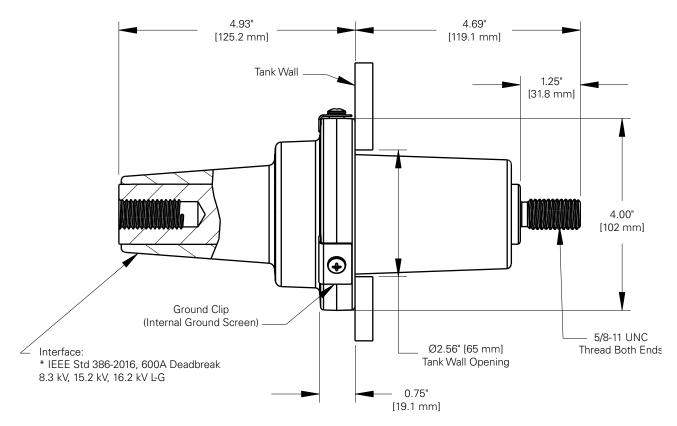


Figure 1. 600 A 25 kV Class deadbreak apparatus bushing

Note: Dimensions given are for reference only.

Table 1. Voltage Ratings and Characteristics

Description	kV
Standard Voltage Class	25
Maximum Rating Phase-to-Ground	16.2
AC 60 Hz 1 Minute Withstand	45
DC 15 Minute Withstand	78
BIL and Full Wave Crest	125
Minimum Corona Voltage Level	21.5

Voltage ratings and characteristics are in accordance with IEEE Std  $386^{\text{TM}}$ -2016 standard.

**Table 2. Current Ratings and Characteristics** 

Description	Amperes
Continuous	600 A rms (Aluminum) 900 A (Copper)
Short Time	25,000 A rms symmetrical for 0.17 s 10,000 A rms symmetrical for 3.0 s

Current ratings and characteristics are in accordance with IEEE Std 386™-2016 standard.

### **Ordering information**

To order a 600 A 25 kV Class deadbreak bushing, specify bushing, clamp and gasket from **Table 3**.

Table 3. Bushing, Clamp and Gasket

Description	Catalog Number
15 and 25 kV Bushing Aluminum Conductor Copper Conductor	DB625B125 DB925B125
Plated Steel Clamp	2637023B01
Stainless Steel Clamp	2637023B02
Gasket	0537980C06

Maximum tank wall thickness for the bushing is 0.25".

Table 4. Accessories

Description	Catalog Number
Shipping Cap (not for energized operation)	2637700B01
If a threaded stud is required, specify: Aluminum Copper T-OP II	STUD-A STUD-C STUD-T

**Note:** For other thread types, contact your Eaton representative.

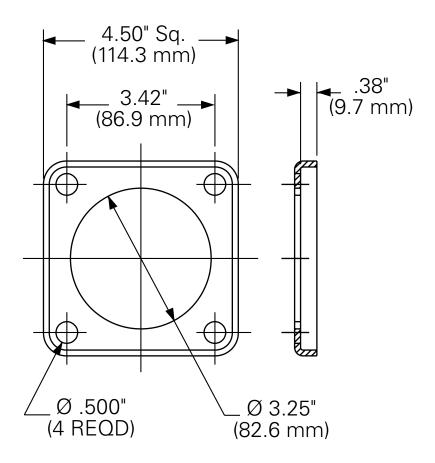


Figure 2. Clamp front and side view

Note: Dimensions given are for reference only.

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