OEM Equipment
Catalog Data
CA800021EN

Effective February 2016
Supersedes August 2015

COOPER POWER SERIES

200 A 35 kV class three-phase integral loadbreak bushing

General

Eaton meets all the requirements of IEEE Std 386™ standard, Separable Insulated Connector Systems, and combines the advantages of a reliable one-piece design with the operating features required for underground distribution switching with its Cooper Power™ series 200 A, 35 kV three-phase rated integral loadbreak bushing. The bushing is designed for pad-mounted transformers, switchgear and other apparatus filled with transformer oil, Envirotemp™ FR3™ fluid or an approved equivalent. It eliminates the insert-to-well interface present in bushing well and insert primary terminations.

The three-phase rated 21.1/36.6 kV design has an ablative arc interrupter for superior arc quenching characteristics, and a fault activated piston contact assembly for a full 10 cycle, 36.6 kV fault close rating. The bushing has a continuous copper/copper alloy current path.

The 21.1/36.6 kV three-phase rating bushing should not be used with 21.1 kV single-phase rated loadbreak elbow connectors or grounding elbows. For quick identification, 21.1/36.6 kV three-phase rated busing are color coded with purple nose pieces. Mating 21.1/36.6 kV three-phase rated loadbreak elbow connections (Catalog Section CA650068EN) have a molded purple cuff. Single-phase rated products are color coded with tan nose pieces and molded cuffs. When mated with comparably rated products, the bushing provides a fully shielded, submersible, separable connection for loadbreak operation.

Installation

One-piece bushings are installed through the apparatus front place and externally clamped. No special tools are required. Internal primary loads are threaded or bolted to the copper stud. Refer to *Service Information MN800008EN High-Voltage Primary Bushings Installation Instructions* for details.

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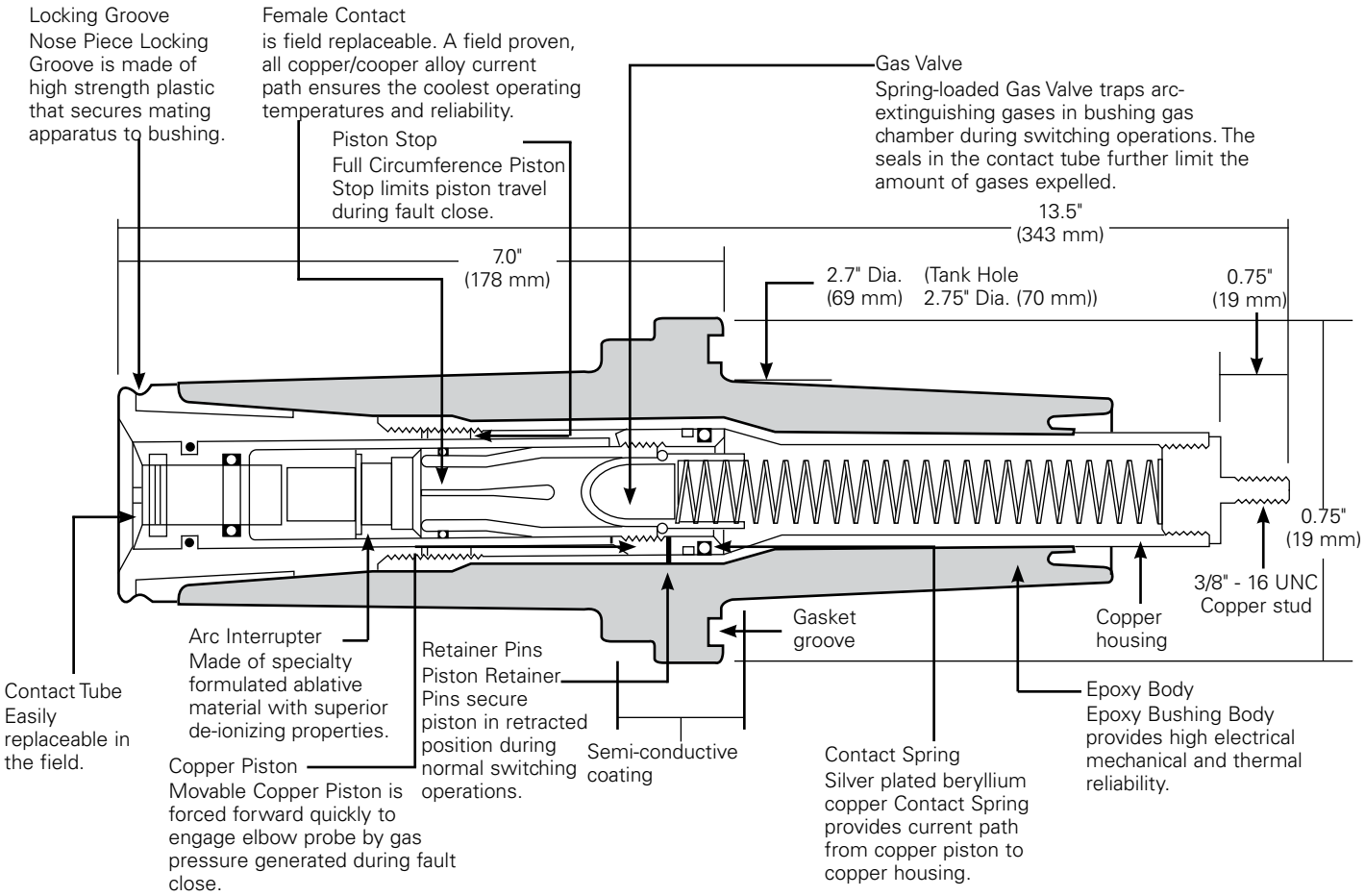

Figure 1. Cutaway illustration shows design detail and dimensions.

Note: Dimensions given are for reference only.

Production tests

Tests are conducted in accordance with IEEE Std 386™ standard.

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

Tests are conducted in accordance with Eaton's requirements.

- Physical Inspection
- Periodic Dissection
- Periodic Fluoroscopic Analysis (X-ray)

Table 1. Voltage Ratings and Characteristics

Description	kV
Standard Voltage Class	35
Maximum Rating Phase-to-Phase	36.6
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 Std 386™ standard.

Table 2. Current Ratings and Characteristics

Description	Amperes
Continuous Switching	200 A rms 10 operations at 200 A rms at 36.6 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 Std 386™ standard.

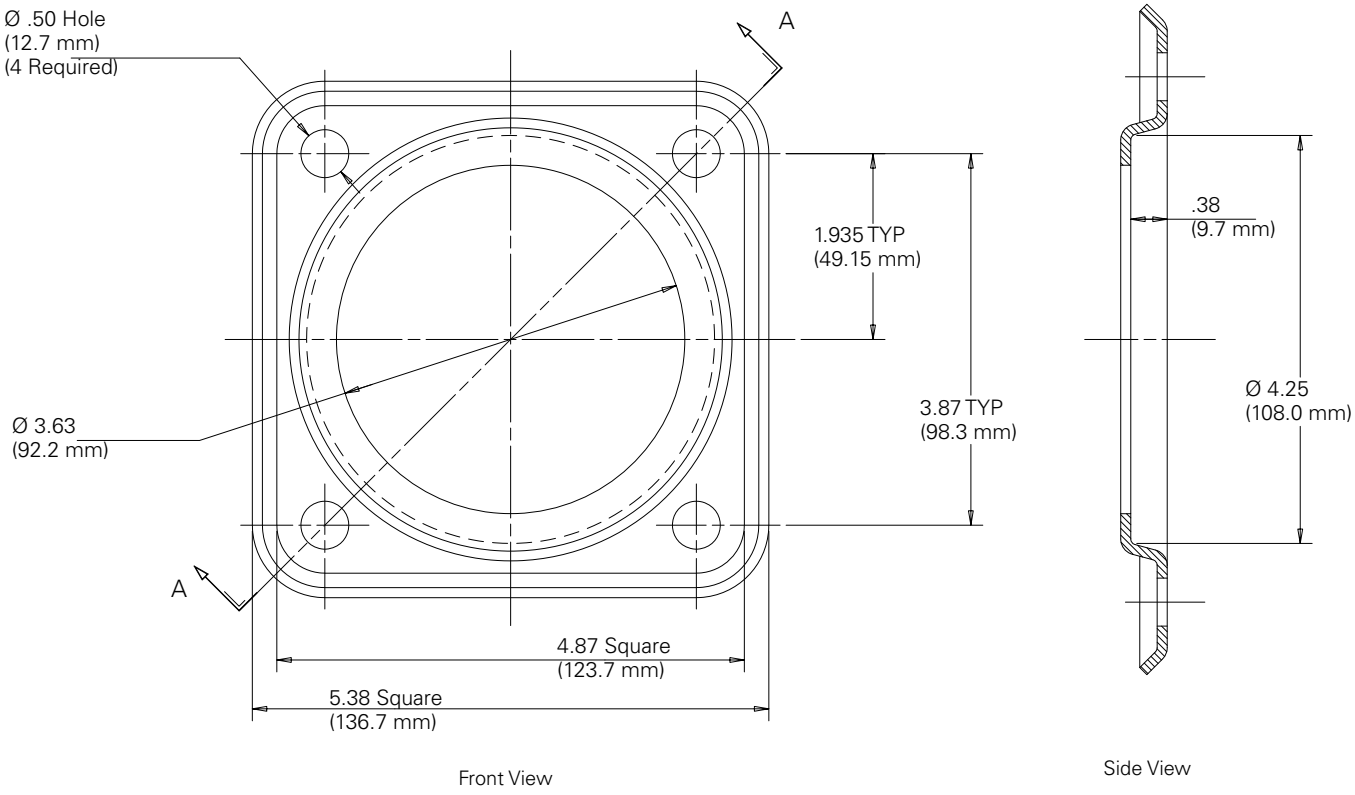

Figure 2. Bushing Clamp.

Note: Dimensions given are for reference only.

Ordering information

To order a 35 kV Class three-phase integral loadbreak bushing, specify the bushing, gasket and mounting clamp from Table 3.

Table 3. Bushing, Gasket and Clamp

Description	Catalog Number
Integral Bushing	2637024C01M
Gasket	0537980C12
4-Stud Clamp	2603989B01

Note: For SF_6 applications, contact your Eaton representative.

Table 4. Replacement Parts

Description	Catalog Number
Contact Tube Assembly	2637407B04B
Contact Tube Replacement Tool	2637585B01
Shipping Cap	2606754A03

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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

Powering Business Worldwide

Printed in USA
Publication No. CA800021EN

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