

200 A 15/25 kV class epoxy bushing well (2.25" tank hole and fixed stud only)



General

Eaton's Cooper Power™ series 200 A 15/25 kV Class bushing well meets the full requirements of the latest revision of IEEE Std 386™ standard – separable insulated connector systems.

It is designed for the termination of primary winding leads at the front plate of fluid-filled apparatus rated at either 8.3/14.4 kV or 15.2/26.3 kV.

The bushing well is externally clamped for sidewall mounting on single- or three-phase transformers filled with transformer oil, Envirotemp™ FR3™ fluid or an approved equivalent. It fits a 2.25 inch (57 mm) hole and mates with all bushing inserts meeting applicable IEEE® Standards. The knurled copper stud with rolled threads provides excellent conductivity.

Installation

The bushing well is installed in the front plate of oil-filled apparatus with a gasket on the internal shank of the well. A bushing insert is installed in the well only while the apparatus is de-energized. Refer to Installation Instruction Sheet S800-35-2 for details.

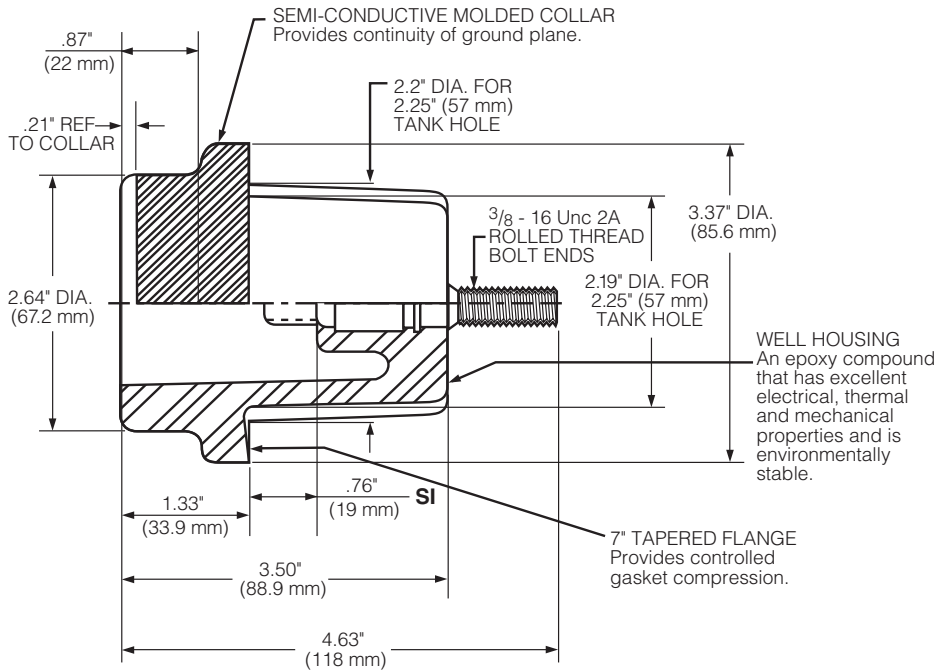


Figure 1. 200 A 15 and 25 kV Class Bushing Well.

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
 - 40 kV
- Minimum Partial Discharge Extinction Value
 - 19 kV

Tests are conducted in accordance with Eaton requirements.

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

Table 1. Voltage Ratings and Characteristics

| Description | kV |
|--|------|
| Standard Voltage Class | 25 |
| Maximum Rating Phase-to-Phase | 26.3 |
| Maximum Rating Phase-to-Ground | 15.2 |
| ac 60 Hz 1 Minute Withstand | 40 |
| dc 15 Minute Withstand | 78 |
| BL and Full Wave Crest | 125 |
| Minimum Partial Discharge Extinction Value | 19 |

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

Table 2. Current Ratings and Characteristics

| Description | Amperes |
|-------------|--|
| Continuous | 200 A rms |
| 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.

Ordering information

To order a 15/25 kV Class bushing well, specify bushing well, gasket and clamp from Table 3.

Table 3. Bushing Well, Clamps and Gasket

| Description | Catalog Number | Figure |
|---|----------------|--------|
| 2.2 inch Diameter Well | 2603973B01 | 1 |
| 4-Stud Clamp (3.25 in.) | 2606821A01 | 4 |
| 4-Stud Clamp (3.25 in.) with Two Bail Tabs | 2606823A02 | 4 |
| 4-Stud Clamp (3.25 in.) with Four Bail Tabs | 2606823A04 | 4 |
| 4-Stud Clamp (2.75 in.) | 2606722A01 | 5 |
| 4-Stud Clamp (2.75 in.) with Two Bail Tabs | 2606822A02 | 5 |
| 3-Stud Clamp with Flange | 2085399A01 | 3 |
| 3-Stud Clamp with Flange (Stainless Steel) | 2085399A02 | 3 |
| 3-Stud Clamp | 2026152A51 | 2 |
| Bushing Well Shipping Cap | 2638640C01 | |
| Gasket for 2.2 inch Diameter Well | 0537980C01 | 1 |

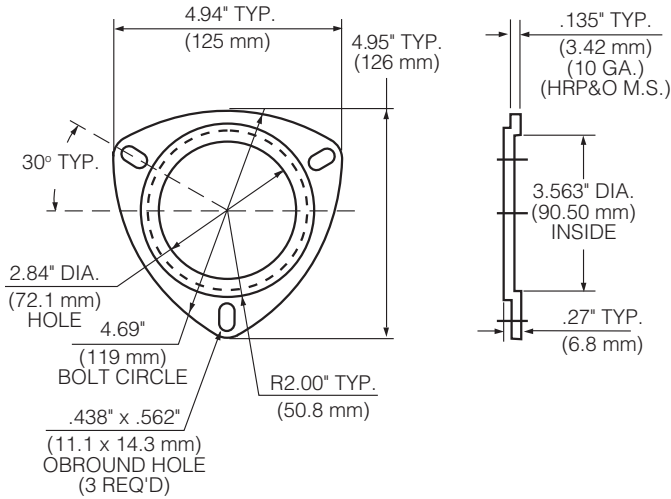


Figure 2. 3-Stud Clamp.

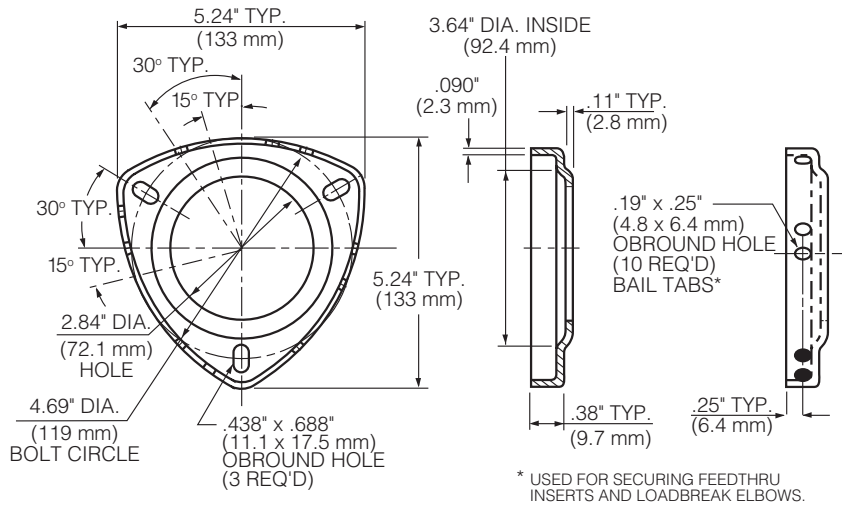


Figure 3. 3-Stud Clamp with flange.

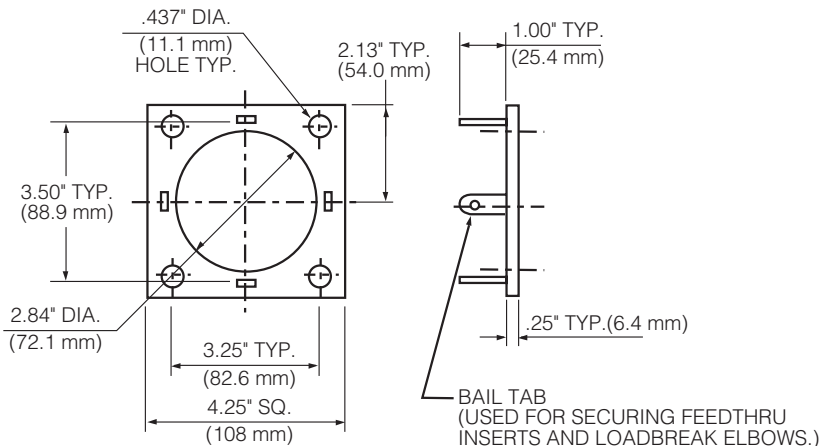


Figure 4. 4-Stud, 3.25 inch Clamp.

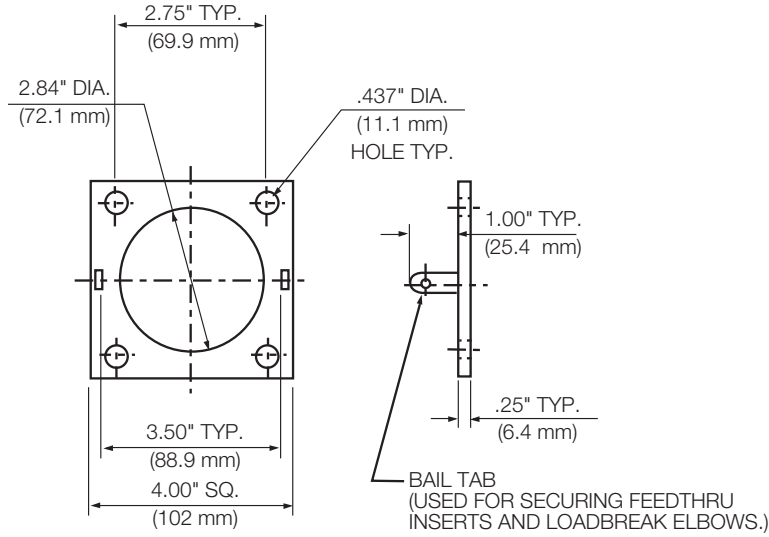


Figure 5. 4-Stud, 2.75 inch Clamp.

Note: Dimensions given are for reference only.

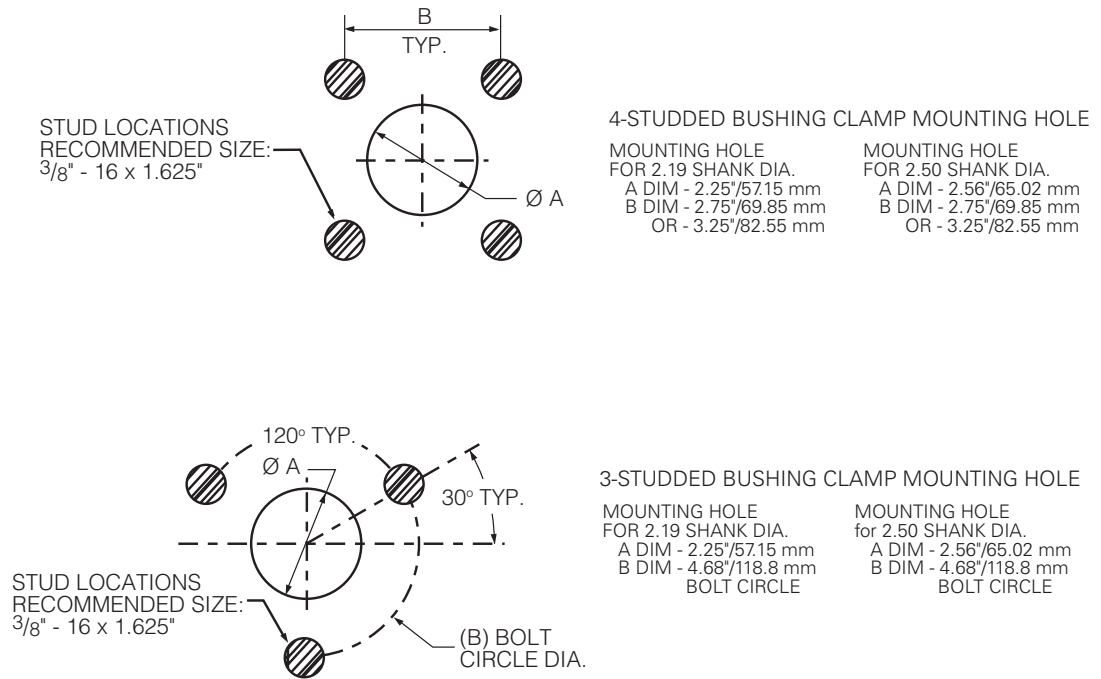


Figure 6. Recommended tank wall dimensions.

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