

Transformer Components 200A Integral Bushing Well



GENERAL

The Chardon 200A, 15 kV, 25 kV, 28 kV, and 35 kV Class Integral Bushing Well aligns with the IEEE Standard 386 (separable insulated connector system) specifications. Specifically designed for the termination of primary winding leads at the face plate of oil-filled (or approved equivalents) single-phase and three-phase transformers and switchgear, it's rated for 8.3/14.4 kV, 15.2/26.3 kV, 16.2/28.0 kV (Canadian applications), and 21.1/36.6 kV.

Setting it apart from the standard variant, the Integral Bushing Well incorporates an external mounting mechanism with its integrated clamp design. This innovative feature removes the need for separate mounting clamps. Seamlessly fitting into a 2.56-inch (65mm) aperture on the

apparatus tank wall, its compatibility extends to Chardon Bushing Inserts and any product adhering to the IEEE Standard 386. Its designed knurled copper stud, complemented by rolled threads, ensures optimal conductivity.

The Chardon Integral Bushing Well follows Chardon's rigorous quality standards, and is molded with high-quality polymer material, which offers excellent temperature resilience, structural strength, prolonged durability, minimal moisture absorption, and maintains mechanical and electrical attributes even in humid, high-temperature environments. Additionally, the integrated mounting gasket guarantees a uniform, controlled sealing compression between the bushing well and the apparatus tank wall.

INSTALLATION

The Chardon Integral Bushing Well is seamlessly mounted onto the tank wall of the oil-filled (or approved equivalents) transformer or switchgear. Its design incorporates a rubber gasket that sits within a groove on its rear side, facing the equipment. Once positioned, the bushing well aligns with the threaded studs on the tank wall, and it is then fixed securely with the integrated clamp design.

PRODUCTION TESTS

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

Internal Chardon Quality Assurance requirements:

- Physical Inspection
- / Periodic Dissection
- Periodic Fluoroscopic (X-Ray) Inspection

VOLTAGE RATINGS

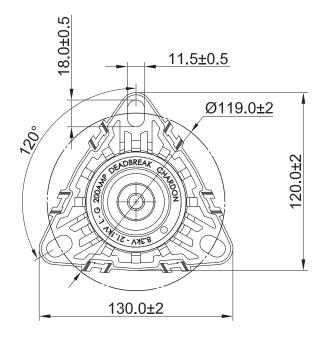
| Standard Voltage Class | 35 kV |
|---------------------------------|---------|
| Maximum Rating Phase-to -phase | 36.6 kV |
| Maximum Rating Phase-to -ground | 21.1 kV |
| Ac 60 Hz 1 Minute Withstand | 50 kV |
| DC 15 Minute Withstand | 103 kV |
| BIL and Full Wave Crest | 150 kV |
| Minimum Corona Voltage Level | 26 kV |

CURRENT RATINGS

| Description | Test Parameters |
|-------------|--|
| Continuous | 200 amps rms |
| Short Time | • 10,000 amps rms symmetrical for 0.17 s • 3,500 amps rms symmetrical for 3.0 s |

• CH200BWC

Revision date: 12/06/2023



87.0±2 27.0±1 55.0±2 7+0.26 3/8" -16UNC-2A

Fig. 1: 200A Bushing Well with Clamp Integrated

Fig. 2: 200A Bushing Well with Clamp Integrated & Embedded Stud

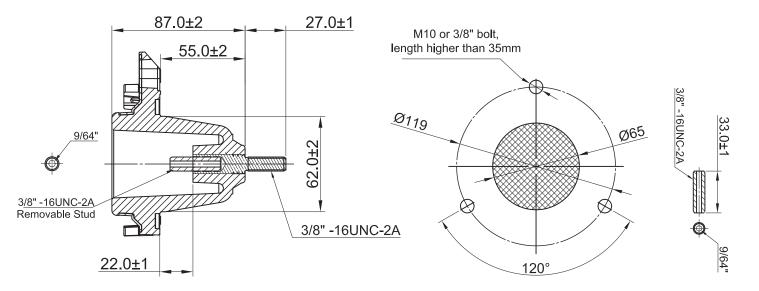


Fig. 3: 200A Bushing Well with Clamp & Removable Stud

Fig. 4: Recommended Tank Wall Dimensions

Fig. 5: Removable Stud

ORDERING INFORMATION

To order a Chardon 200A Integral Bushing Well, please refer to the following specifications:

| Description | Catalog Number | Refer To Figure |
|---|----------------|-----------------|
| Bushing Well with Clamp Integrated & Fixed Stud | CH200BWC | 2 |
| Bushing Well with Clamp Integrated & Removable Stud | CH200BWC-RV | 3 |
| Removable Stud | STUD-RV-BW | 5 |

^{*} Gasket and Shipping Cap included with Bushing Well

