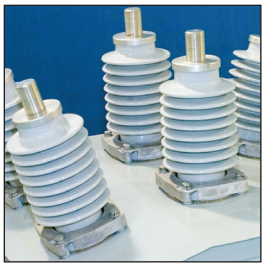
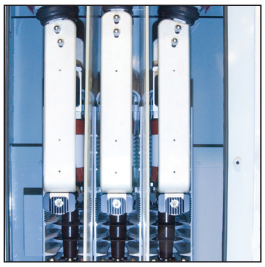
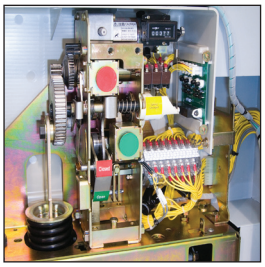
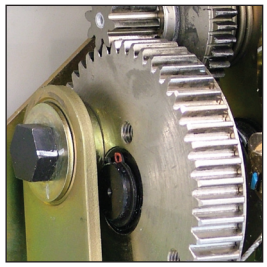
MITSUBISHI ELECTRIC

Medium Voltage Department

■ 17.5kV Vacuum Circuit Breaker

Model # 17DV-25-12/20

MITSUBISHI ELECTRIC

Mitsubishi Electric Experience

First generation bottle introduced in 1965.

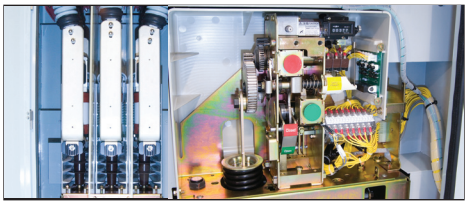
- Over 2,625,000 Mitsubishi Electric Vacuum Bottles Installed Worldwide in Mitsubishi Electric Circuit Breakers
- 100,000+ OEM Vacuum Bottles Sold Annually
- 19,725,000 Years of Equivalent Service with 0.00018% Bottle Failures per Year

For every 185,000 Mitsubishi vacuum breakers in service, only one will have a bottle fail in a given year.

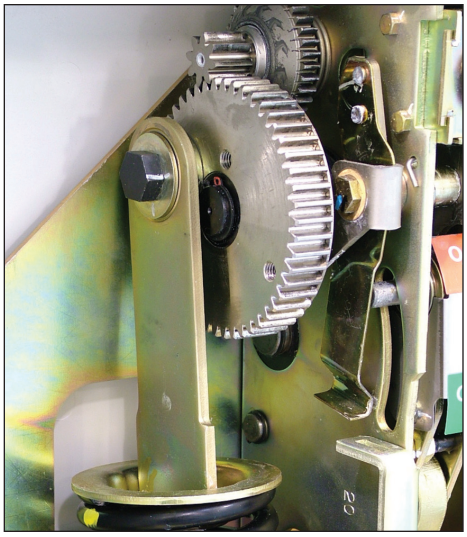
- Welded-On 11 Gauge Roof and Stainless Steel Lifting Lugs
- 11 Gauge Carbon-Steel Enclosure
- Two Through-Wall SST Ground Pads
- Galvanized Legs, Adjustable in 2" Increments
- Three-Point Breaker Door Latch
- 37"x 37" Footprint; Optional Large Box
- Mitsubishi Electric Quality and Performance

The Breaker Module

- 17.5kV, 1,200A / 2,000A, 115kV BIL
- 25kAIC @ X/R = 30 (Tested)
- True Three-Cycle Operation
- 10,000+ Mechanical Operations Tested
- 100 Full Fault Interruptions Before Bottle Replacement
- 30-Year Design Life
- One-Piece Bottle / Mechanism Module - Less Than 1-1/2 Hour R&R



- >1000% Contact Service Ability vs. ANSI 800% (Tested)
- Axial Magnetic Field Copper-Chromium Contacts
- Designed and Tested to ANSI and IEC Standards



The BH-2 Mechanism

- Simple Spring / Spring Stored Energy Operation
- One O-CO if Motor Power is Lost
- Less Than 50 Moving Parts in Entire Breaker Module
- Six-Second Spring Charge Time
- Universal Motor Voltages (1.5A Running Current; 6.9A Locked Rotor @ 125VDC)
- Single or Dual Trip Coils (< 6A Current @ 125 VDC)
- Up to 10a, 10b, Fixed Auxiliary Contacts
- Greaseless Gears Utilizing Low-Friction Plating
- Routine Maintenance Every Seven Years

Technical Specifications

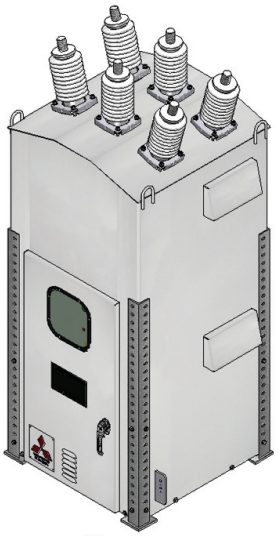
MITSUBISHI ELECTRIC

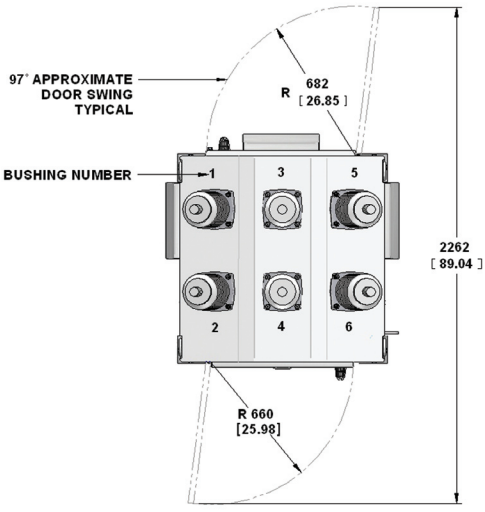
Ratings (Tested to ANSI / IEEE & IEC Standards or Higher)

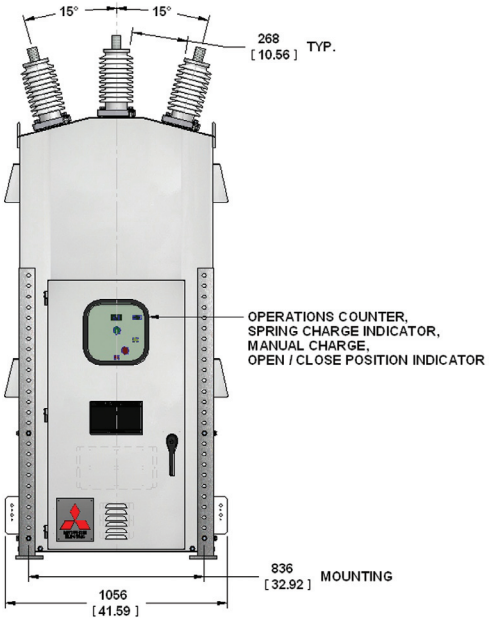
Description	Ratings	Description	Ratings
Breaker Type	17DV-25-12 or -20	Rapid Duty Cycle	O-0.3s-CO-15sec-CO-50sec-CO
Maximum Voltage	17.5kV	Opening Time	30 ms (1.8 Cycles)
Nominal Voltage	2.4kV to 17.5kV	Closing Time	60 ms (3.6 Cycles)
Full-Load Current	1,200A or 2,000A	Minimum Reclosing Time	50 ms (3.0 Cycles)
Short-Circuit Current	25kA Interrupting, X/R = 30	Range of Reclosing Times	3-120 Cycles
Interrupting Time	True 3 Cycles	Back-to-Back Capacitor Switching	600A
Frequency	60Hz	Reactor Switching	1,600A (Tested per IEC Standards)
Full-Wave Withstand	115kV BIL	Maximum Rated Altitude	1,676 m (5,500 ft.)
Low Frequency Withstand	50kV	Temperature Range (Standard)	+50°C to -40°C (122°F to -40°F)
Permissible Trip Delay	2 Seconds	Minimum Temperature with Extra Heater	-50°C (-58°F)
Close and Latch Capabilities	25kA RMS; 65kA Crest	Seismic Qualifications Level	IEEE 693 (1997) Highest Level

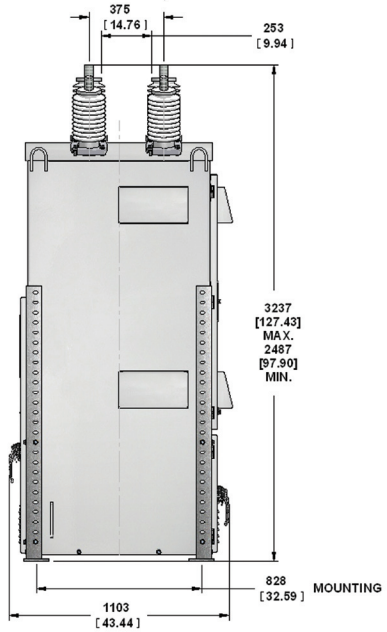
Specifications

Total Weight - 998kg (2,200 lb.)
Bushings
Type - Porcelain (Composite Option)
Standard Creep - 610 mm (24 in.)
Standard Strike - 247 mm (10.8 in.)
Housing - 11 ga. Steel Painted ANSI No. 70 (SST Option)
Roof and Lifting Eyes - Welded-On
Legs - Hot Dip Galvanized, Adjustable in 2" Increments
BCTs (Optional Configurations Available, Consult Factory)









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