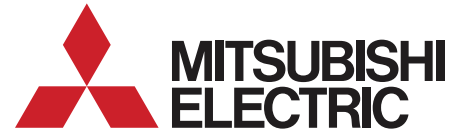


Medium Voltage Department

■ 27kV Vacuum Circuit Breaker



Model # 27DV-25-12/20



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
- 51.52" x 57.52" Footprint

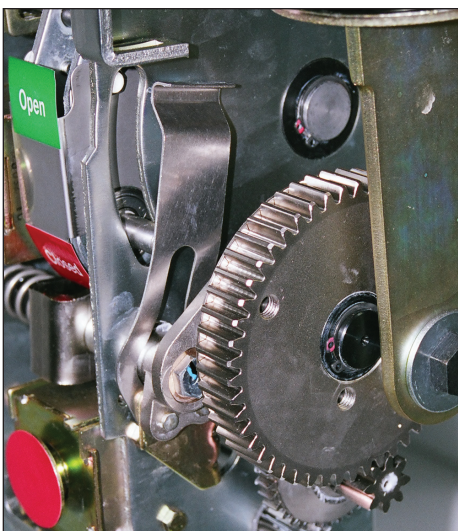
The Breaker

- 27kV, 1,200A, 1,320A, 2,000A 150kV BIL
- 25kAIC @ X/R = 30 (Tested)
- True Three-Cycle Operation
- 10,000+ Mechanical Operations
- 100 Full Fault Interruptions Before Bottle Replacement

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



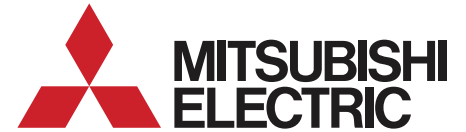
Barrier Removed



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
- Six-Second Spring Charge Time
- Universal Motor Voltages (1.5A Running Current; 6.9A Locked Rotor @ 125VDC)
- Single or Dual Trip Coils (< 6A Current @ 125VDC)
- Up to 10a, 10b Auxiliary Contacts
- Greaseless Gears Utilizing Low-Friction Plating
- Routine Maintenance Every Seven Years

Technical Specifications



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

Description	Ratings	Description	Ratings
Breaker Type	27DV-25-12 or -20	Rapid Duty Cycle	0-0.3s-CO-15sec-CO-50sec-CO
Maximum Voltage	27kV	Opening Time	30 ms (1.8 Cycles)
Nominal Voltage	2.4kV to 27kV	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
Full-Wave Withstand	150kV BIL	Maximum Rated Altitude	1,676 m (5,500 ft.)
Low Frequency Withstand	60kV	Temperature Range (Standard)	50°C to -30°C (122°F to -86°F)
Permissible Trip Delay	2 Seconds	Minimum Temperature with Extra Heater and Insulation	-50°C (-58°F)
Close and Latch Capabilities	25kA RMS; 65kA Crest	Seismic Qualification Level	High Level Available as Option

Specifications

Total Weight - 1,293kg (2,850 lbs.)

Bushings

Type - Porcelain (Composite Option)

Standard Creep - 673.6 mm (26.52 in.)

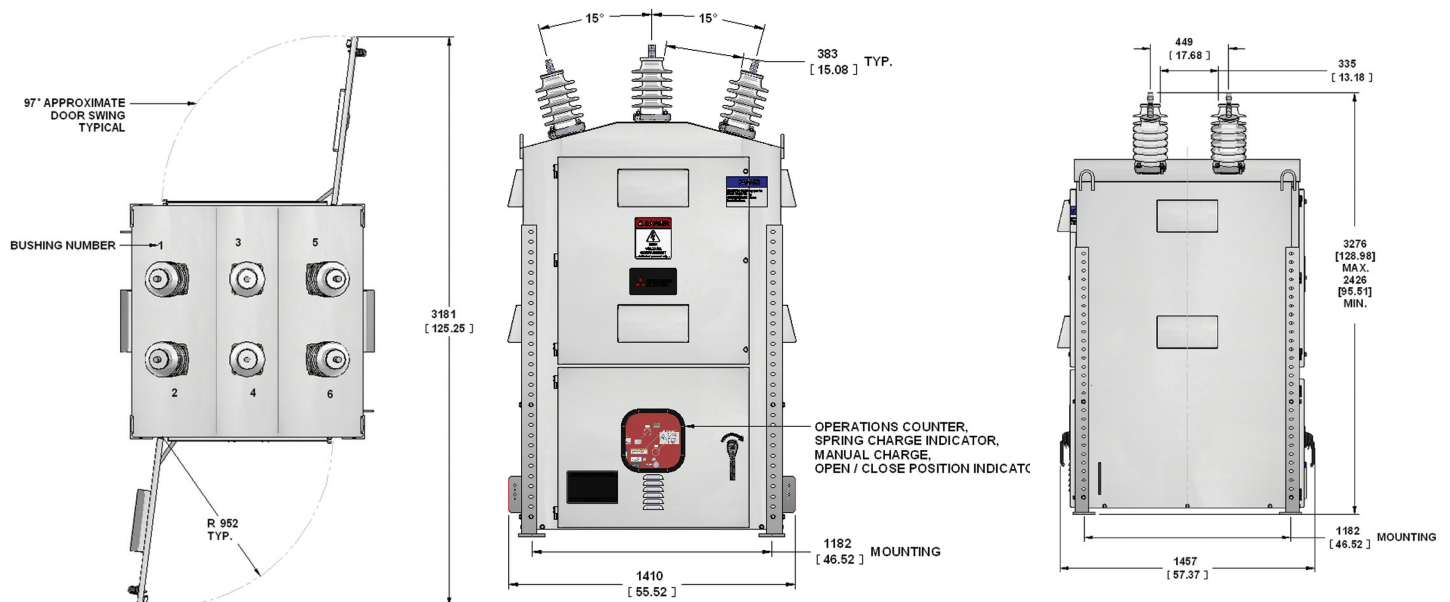
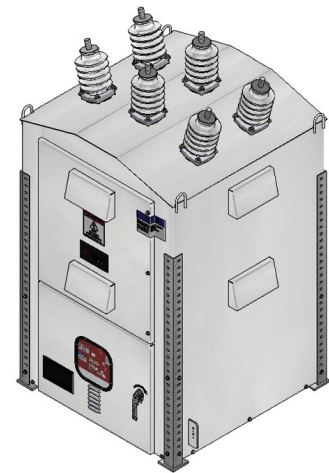
Standard Strike - 285.86 mm (11.25 in.)

Housing - 11 ga. Steel Painted ANSI No. 70 (SST Option)

Roof and Lifting Eyes - Welded-On, Painted Stainless Steel

Legs - Hot Dip Galvanized, Adjustable in 2" Increments

BCTs (Optional Configurations Available, Consult Factory)





MITSUBISHI ELECTRIC POWER PRODUCTS, INC.

Corporate Headquarters

Thorn Hill Industrial Park
530 Keystone Drive
Warrendale, PA 15086
Phone: (724) 778-5111
Facsimile: (724) 778-5146

Medium Voltage Department

Thorn Hill Industrial Park
510 Keystone Drive
Warrendale, PA 15086
Phone: (724) 772-2555
Facsimile: (724) 779-3368
Email: MVSales@meppi.com