

## **Medium Voltage Department**

■ **72.5kV – 31.5kA Gas Circuit Breakers**



## Mitsubishi Electric Design Quality

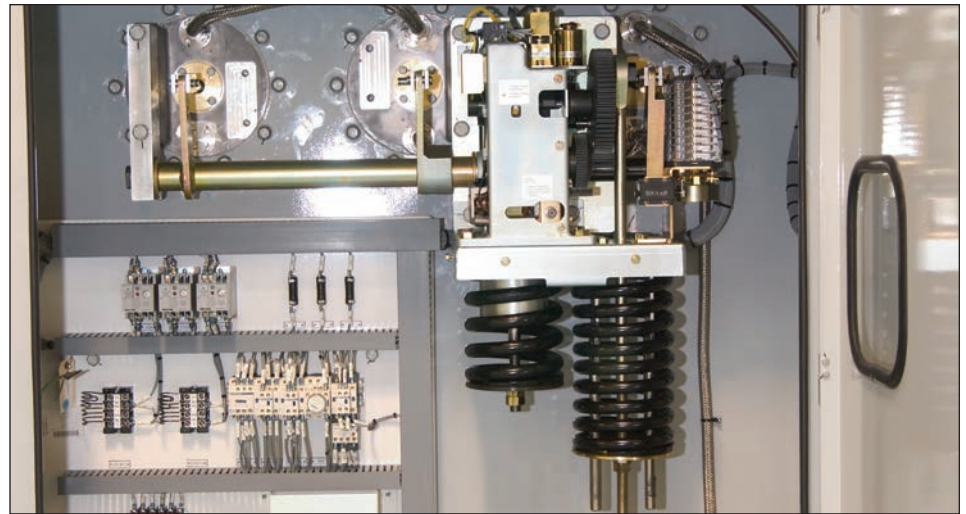
- SST Ground Pads
- Galvanized Frame (Adjustable Leg Option)
- Aluminum Tanks
- Slip-Over BCTs
- Protected Linkage and Gas System (Inside Cabinet)
- Optional Composite Bushings
- Meets ANSI and IEC Standards
- Short Lead Time

## Mitsubishi Electric Technology

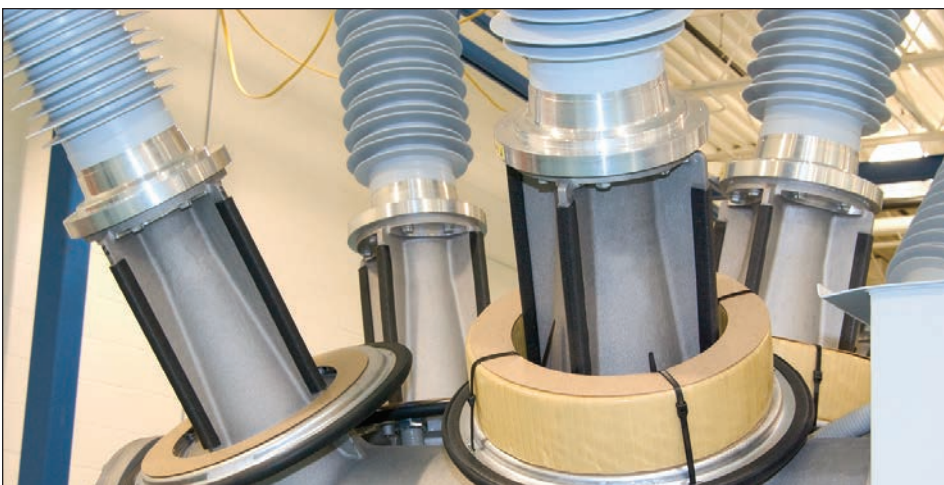
- True Puffer Interrupter
- Fifteen Minute Contact Inspection / Change-Out
- Two-Part Gas Sealing System: EPR O-Rings at all Static Joints, RTV to Seal-Out the External Environment
- Totally-Enclosed Gas Handling System
- Minimal Connection Interfaces

## The BH-3 Mechanism

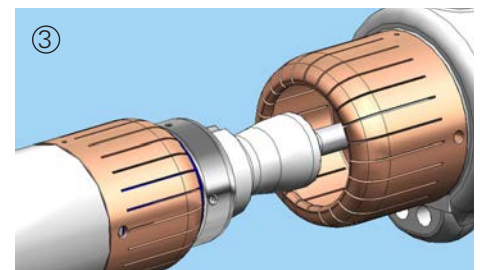
- Helical Spring Open / Close
- Three-Cycle Interruption
- Universal Motor
- Dual Trip Coils Available
- 20a, 20b, Auxiliary Switches
- Two Grease Points Every Six Years
- 10,000 Mechanical Operations



①



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- ③
- ① Totally-Enclosed Gas System and Operating Linkage
  - ② Slip-Over BCTs
  - ③ Superior Mitsubishi Contacts and Puffer Design (Inspect / Change Contacts with Bushings in Place)



# Technical Specifications

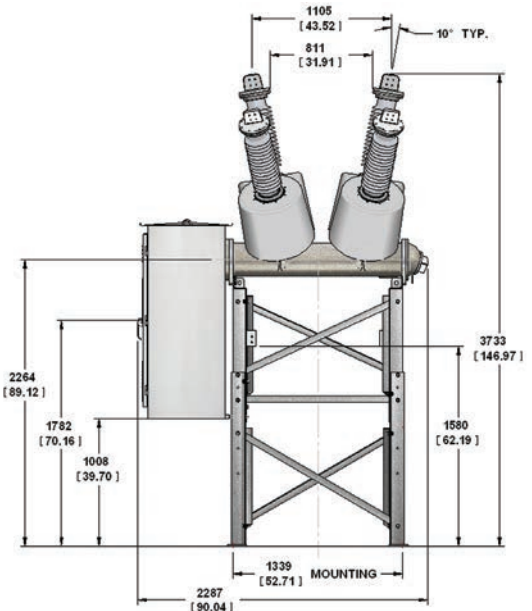
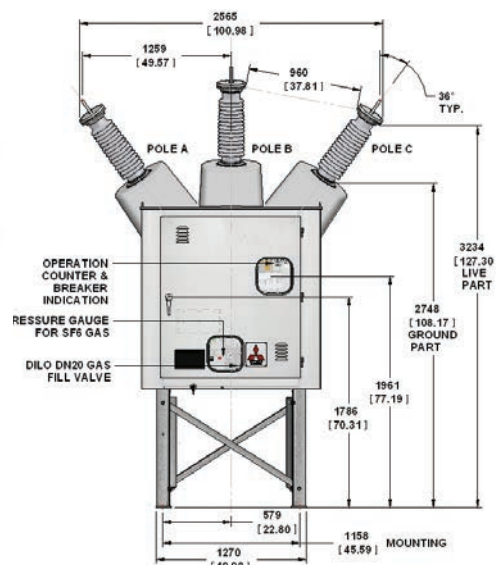
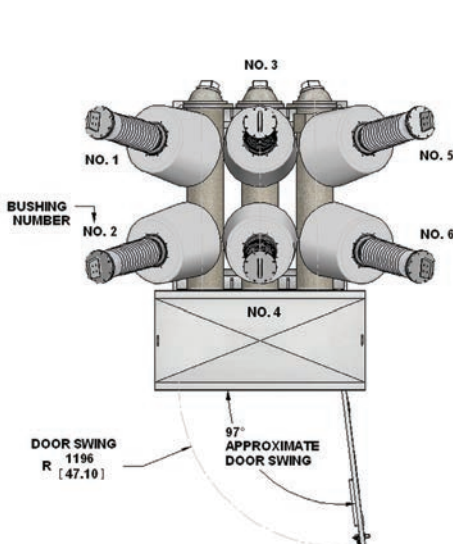
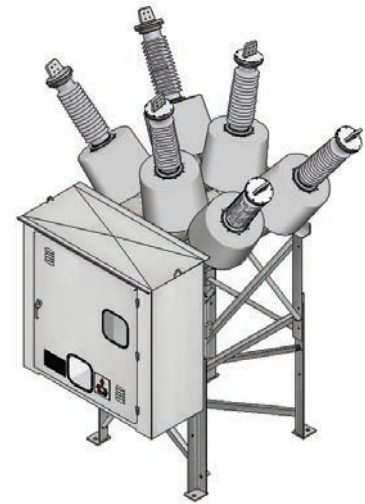


## Ratings (Tested to ANSI / IEEE & IEC Standards or Higher)

Description	Ratings	Description	Ratings
Breaker Type	70SFMT-32F	Close and Latch Capabilities	60kA RMS; 85kA Crest
Maximum Voltage	72.5kV	Rapid Duty Cycle	0-0.3s-CO-15sec-CO-50sec-CO
Nominal Voltage	34.5kV - 69kV	Opening Time	28 ms (1.7 Cycles)
Full-Load Current	1,200A, 2,000A, 3,000A	Closing Time	100 ms (6.0 Cycles)
Short-Circuit Current	31.5kA Interrupting	Reclosing Time	333 ms (20.0 Cycles)
Interrupting Time	3 Cycles	Gas Pressure	71 psig (5kg/cm <sup>2</sup> ) @ 68°F
Frequency	60Hz	Rated Altitude	1,000 m (3,300 ft.)
Full-Wave Withstand	350kV BIL	Temperature Range (Standard)	40°C to -35°C (105 to -31°F)
Bushing Creep (Standard)	1,315 mm (51.55 in.)	Minimum Temperature with Heaters	-50°C (-58°F)
Low Frequency Withstand	160kV	Seismic Level	IEEE 693 (1997)
Permissible Trip Delay	2 Seconds		

## Specifications

Total Weight - 2,220kg (4,885 lb.)	Dynamic Loading
SF6 Gas Weight - 12.7kg (28 lb.)	Horizontal - 2,205 lb. (1,000kg)
Rated Pressure - 5kg/cm <sup>2</sup> (71 psig) (490 kPag)	Vertical Up - 2,205 lb. (1,000kg)
Insulator	Vertical Down - 3,970 lb. (1,800kg)
Type - Gas-Filled	
Standard Creep - 1,315 mm (51.77 in.) (Optional High Creep Available)	
Surface Treatments	
Frame - Hot Dip Galvanized Steel	
Control Housing - ANSI 70 Light Gray, Painted Steel (Galvanized or SST Optional)	
SF6 Tanks - Unfinished Aluminum	
Porcelain - Glaze, ANSI 70	





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