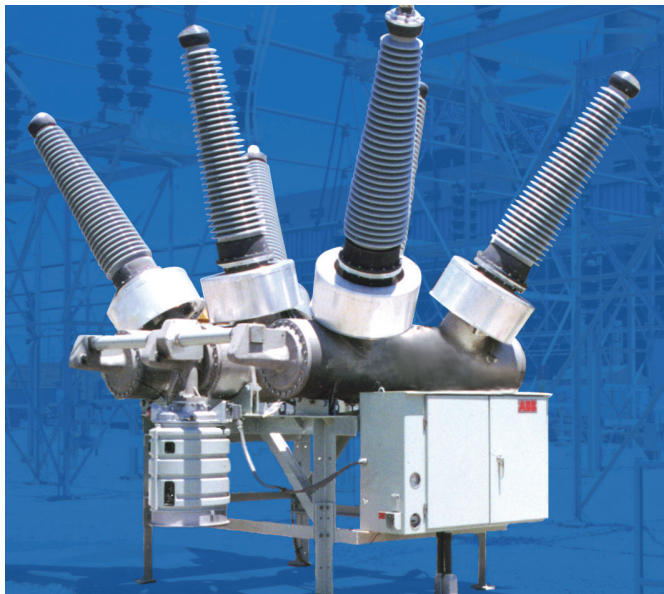


Type PMG-B, 245 kV, up to 63 kA Power Circuit Breaker



The PMG-B breaker evolved from the quality ABB type PMG breakers, merging components, expertise and outstanding performance history into a breaker that provides enhanced performance with exceptional long-term reliability.

ABB Advantage

- Interrupting performance through 63 kA without shunt capacitors for short line fault performance, saves cost and simplifies engineering
- High performance interrupters for definite purpose breaker reduce potential for overvoltages caused by restrikes during capacitor bank switching
- Interrupter complies with IEEE's new C2 capacitive current switching requirements for transmission line applications
- One-piece interrupter assembly simplifies field change-out whenever end of life is reached by eliminating need for internal tank mounting of separate parts and alignment
- Fully-integrated spring-hydraulic operating mechanism is self-lubricating and self-damping. It is also hermetically sealed to the atmosphere, which eliminates corrosion and helps provide maintenance-free performance with long term stability
- Externally accessible current transformers enable simple field change-out without degassing breaker and bushing removal
- Foundation layout identical to that of previous 242PMG designs, minimizing engineering and construction costs for upgrades
- Extensive range of available field services, from technical assistance to turn-key installation, can dramatically reduce construction costs and speed time to commercial operation

Standard Features

- Dead tank design, with one 2-cycle puffer interrupter per tank on a TGIC powdercoat steel frame
- National Board certification of interrupter tanks per the ASME Pressure Vessel and Boiler Code
- All tanks factory leak tested in a hard-vacuum chamber with a helium mass spectrometer
- Certified per ANSI C37.04, C37.06, and C37.09 Standards
- Maintenance-free HMB-8 class spring-hydraulic mechanism
- Frame mounted NEMA-3R steel control cabinet protected with TGIC polyester powdercoat finish
- Single tank-mounted gas density monitor and pressure gauge
- Continuous current ratings through 4000 A
- Mechanism is removed for shipment; breaker otherwise ships fully assembled and factory tested with 5 psig SF₆ gas (bushings removed for export transit)

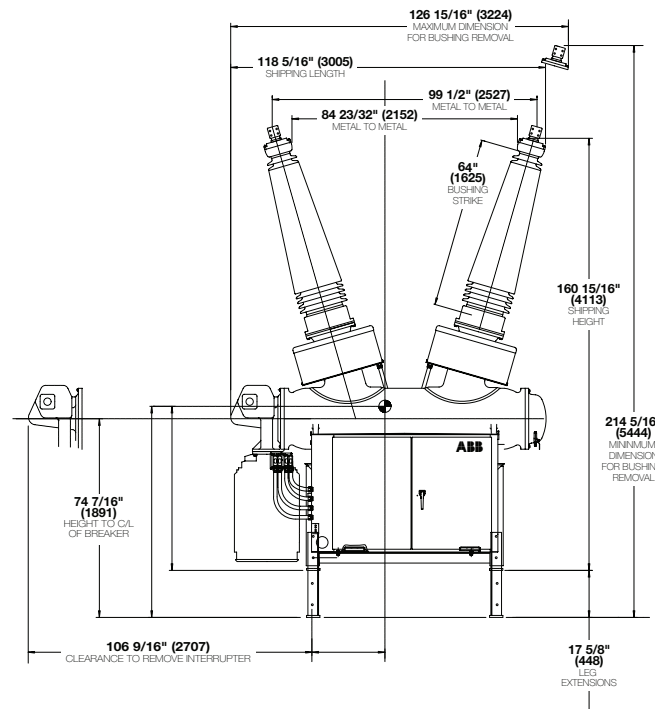
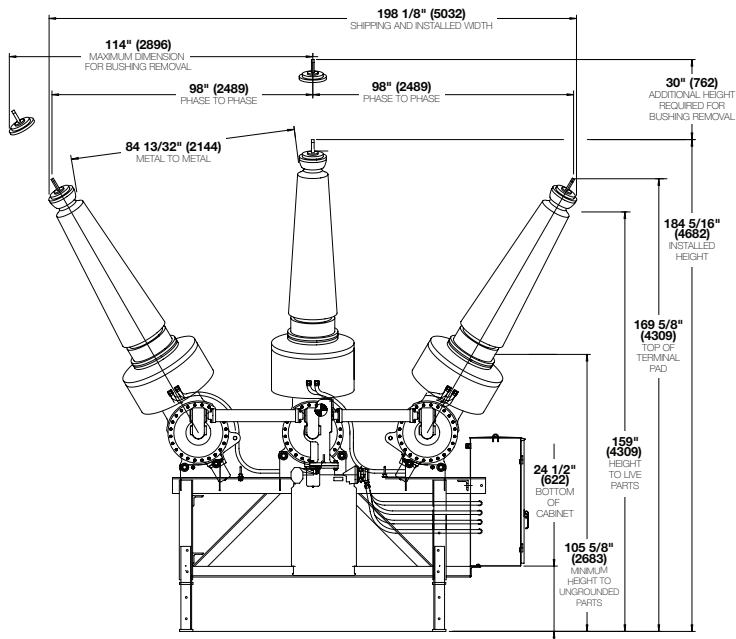
Options and Accessories

- Condition monitoring with the Circuit Breaker Sentinel (CBS)
- Density monitor and temperature-compensated pressure gauge directly-mounted on each tank
- Extra creep and/or extra strike bushings for special applications
- Silicone rubber composite bushings
- Tank heaters for operation in ambient temperatures below -30°C
- High seismic designs

HMB-8 Mechanism

The type HMB-8 class spring-hydraulic mechanism, externally mounted beneath the pole linkage system, provides the driving force to gang-operate the breaker's high performance puffer interrupters. Mechanical energy, stored in a stack of compression disk springs, is hydraulically translated to the operating shaft. Spring charge is automatically maintained by the operation of a universal motor and hydraulic pump. The fully-integrated mechanism is self-lubricating, hermetically sealed to the atmosphere, and weather protected, affording excellent reliability and long term stability.





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Rated Capabilities

Circuit Breaker Type	Rated Maximum Voltage (kV, rms)	Short Circuit and Short Time Current (kA, rms)	Maximum Continuous Current (A, rms)	Rated Interrupting Time (Cycles)	Full Wave Withstand Voltage (kV, Peak)	Power Frequency Insulation Withstand Voltage (kV, rms)	2 μ -sec Chopped Wave Impulse Voltage (kV, rms)	Closing and Latching Current (kA, Peak)
245PMG40-20B	245	40	2000	2*	900†	425†	1160	104
245PMG40-30B	245	40	3000	2*	900†	425†	1160	104
245PMG40-40B	245	40	4000	2*	900†	425†	1160	104
245PMG50-20B	245	50	2000	2*	900†	425†	1160	130
245PMG50-30B	245	50	3000	2*	900†	425†	1160	130
245PMG50-40B	245	50	4000	2*	900†	425†	1160	130
245PMG63-20B	245	63	2000	2*	900†	425†	1160	164
245PMG63-30B	245	63	3000	2*	900†	425†	1160	164
245PMG63-40B	245	63	4000	2*	900†	425†	1160	164

* 3-cycle rated interrupting time available

† 1050-kV full wave withstand voltage with 460-kV power frequency withstand rating available

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