Type PM-B, 123-145 kV, up to 63 kA
Power circuit breaker

The 123-145 PM-B breaker is designed with interrupter, mechanism, and bushing technology and expertise that have been field proven on ABB SF₆ dead tank breakers since 1992.

The breaker features interrupting performance through 63 kA without shunt capacitors for short line fault performance, a high performance interrupter which complies with IEEE’s new C2 capacitive current switching requirements, high performance interrupters which reduce the potential for overvoltages, a compact, fully-integrated spring-hydraulic operating mechanism, and one-piece interrupter assembly as well as externally accessible current transformers which enable simple field change-out.

Standard features
- Dead tank design, with one 3-cycle self-blast interrupter per tank on a galvanized 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-2 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
- Porcelain bushings
- Continuous current ratings through 4000 A
- Ships fully assembled and factory tested with 5 psig SF₆ gas (bushings may be 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 -30º C
- High seismic designs

HMB-2 mechanism
A type HMB-2 spring-hydraulic mechanism, located within the control cabinet, provides the driving force to gang-operate the breaker’s high performance interrupters.

Service
ABB HV Service offers an extensive range of available field services, from technical assistance to turn-key installation, which can dramatically reduce construction costs and speed time to commercial operation.
### Rated capabilities

<table>
<thead>
<tr>
<th>Circuit Breaker Type</th>
<th>Rated Maximum Voltage (kV, rms)</th>
<th>Short Circuit and Short Time Current (kA, rms)</th>
<th>Maximum Continuous Current (A, rms)</th>
<th>Rated Interrupting Time (Cycles)</th>
<th>Full Wave Withstand Voltage (kV, Peak)</th>
<th>Power Frequency Withstand Voltage (kV, rms)</th>
<th>2-µsec Chopped Wave Impulse Voltage (kV, Peak)</th>
<th>Closing and Latching Current (kA, Peak)</th>
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*4000A rating available only with porcelain bushings.

For more information please contact:

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