

Replacement Components

Low Voltage Switchgear & Power Circuit Breakers

Medium Voltage Switchgear & Circuit Breakers

Medium Voltage Switches & Motor Controls

Distribution Breakers



Customers Choose ABB Switchgear Time After Time

Outstanding aftermarket support is just one of the many reasons that customers continue to choose ABB switchgear and distribution breakers.

ABB offers superior technology, backed by quality assurance programs that meet rigorous standards for the nuclear power industry. Over the years, as ABB brands have changed from ITE to Gould, Brown Boveri and ultimately ABB, ABB has maintained an unwavering commitment to service and support. ABB's customers have come to expect extraordinary responsiveness in providing direct replacement circuit breakers and authentic components for breaker and switchgear maintenance, upgrade and life extension projects.

ABB Medium Voltage Service (MV Service) understands the importance of meeting customer needs. When it comes to extending switchgear life and reducing maintenance costs, no one can afford to take risks. Downtime is expensive, and access to new, high quality authentic replacement components is essential. ABB is here to meet those needs.



MV Service supplies replacement components for the full line of ABB switchgear products



- > The MV Service customer service team has combined experience of over 100 years in engineering, manufacturing, assembly and testing
- > Components experts are on-call 24 hours a day, 365 days a year
- > MV Service is the only authorized outlet for original ABB factory manufactured components
- > An extensive database provides equipment drawings and details on customer orders dating back more than 40 years
- > MV Service parts are manufactured to controlled prints and specifications to provide an exact fit
- > ABB's warehouse maintains an extensive stock of new switchgear and breaker components to meet emergency needs for both nuclear safety related and conventional applications, with same day shipments available on most parts
- > All parts are newly manufactured and backed by a full one-year warranty

A customer that purchases switchgear or distribution breakers from ABB is assured of continued, responsive support, long after the equipment has been energized.

MV Service Meets All Component Needs for the Entire ABB Family of Switchgear Products



MV Service Provides the highest quality renewal parts for low voltage switchgear types K-Line®, K-Line® Plus, LK, MB and FBK, and medium voltage types HK, HK-II, SafeGear® and Advance®.

Meters • Relays • Circuit Breakers • Circuit Breaker Parts • Transformers • Fuses • Bus Bar • Bus Boots • Bushings
Insulators • Control Switches • Capacitor Fuses • Control Panels • Load Break Switches • Arc Guard System

Circuit breaker renewal parts include common components such as trip devices, primary contacts and complete interrupter pole assemblies, as well as discrete parts and complete refurbishment kits. Renewal parts are available for a long legacy of technology-leading circuit breakers and load break switches.

Low Voltage

- > K-Line®
- > K-Line® Plus
- > FBK
- > MB
- > LK

Medium Voltage

- > HK
- > HKV
- > GHK
- > VHK
- > ADVAC®
- > AMVAC™

Load Break Switches

- > HPLC
- > VersaSwitch
- > VersaRupter™



Replacement Circuit Breakers for ABB and Other Manufacturers

Direct replacement breakers are available to replace and upgrade aging low and medium voltage breakers manufactured by ABB and other switchgear suppliers, such as General Electric and Westinghouse. Roll-in replacements provide the advantages of the latest technology from ABB, while avoiding a complex retrofit process or costly and time-consuming switchgear replacement or modification. Medium voltage air-magnetic breakers can be upgraded to AMVAC™ modern vacuum technology, with lower maintenance, higher ratings and a much longer life.



Top: Direct replacement breaker from MV Service in GE type AKD switchgear
Bottom: MV Service can offer replacement breakers based on the AMVAC™ 5-27 kV breaker with encapsulated vacuum interrupters and a magnetic actuator, greatly reducing maintenance requirements

K-Line® Breaker Upgrades

New K-Line® circuit breakers are equipped with state-of-the-art MPSC-2000 microprocessor trip devices. Optional type OD and SS units are available on replacement K-Line® breakers. The MPSC-2000 is available as a retrofit kit to upgrade K-Line® breakers originally equipped with OD, SS, MPS or MPS-C trip devices. MPSC-2000 uses a digital RMS trip system and provides maximum functionality and selectivity for a variety of applications, in addition to communications capabilities. The retrofit kit includes the MPSC-2000 trip device, magnetic latch, lower base molding with sensors, wiring harness and instructions.



MPSC-2000 trip unit retrofit kit

MV Service has the Qualifications and Experience to Support Nuclear Safety Related Equipment

ABB has been committed to the production and nuclear qualification of low and medium voltage switchgear since 1968. In the United States, over 65% of nuclear generating stations utilize switchgear made by ABB or its legacy brands, such as ITE and BBC.

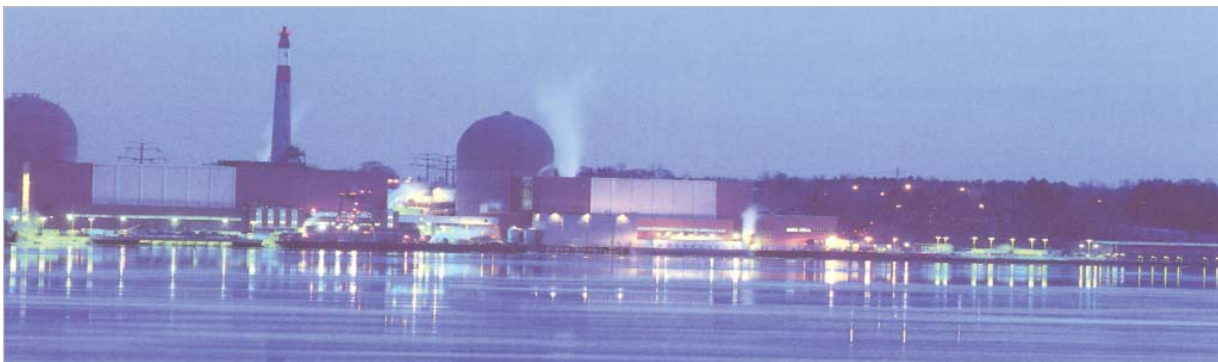
To meet progressively more stringent industry requirements, ABB developed a substantial database for the nuclear safety related capabilities of ITE-ABB switchgear and components. Historical data from years of testing and experience for seismic and environmental qualification of switchgear and component parts provides additional assurance for customers at nuclear facilities.



MV Service supplies direct replacement HK air-magnetic or VHK-X vacuum circuit breakers to upgrade and extend switchgear life in nuclear safety related and conventional applications.

MV Service Products and Services Offer Many Unique Advantages to Customers in the Nuclear Power Industry

- > More than 30 years of experience in nuclear safety related applications
- > A record of successful audits by NUPIC, NIAC and numerous nuclear utilities
- > Quality Assurance program meets the requirements of 10 CFR 50 Appendix B
- > Compliance with reporting responsibilities in accordance with 10 CFR Part 21
- > Reference libraries with extensive qualification reports and test data
- > Drawings and data on original equipment such as customer specifications, equipment qualifications, general arrangement drawings and material lists
- > Thoroughly documented processes to select, certify and supply replacement components as "nuclear safety related" and "qualified to original equipment specifications"
- > Dedication of commercial grade components for nuclear safety related applications in accordance with EPRI guidelines
- > A full-time nuclear standards and documentation staff that assures compliance with all nuclear regulations



Medium Voltage Service

From Replacement Parts to Total Breaker Management, ABB Keeps Switchgear Operating at Peak Performance.

ABB Medium Voltage Service (MV Service) provides customers with a complete range of performance and management solutions for low and medium voltage switchgear and circuit breakers. MV Service offers aftermarket support and components for the entire family of ABB switchgear and power circuit breakers. In most cases, ABB can modernize and manage the installed base of equipment manufactured by other suppliers.

ABB's practical approach gives customers the variety of choices that different applications need for cost-effective asset management, without compromising critical electrical system reliability. ABB's responsiveness demonstrates that we put our customer's success first, with quality second to none. MV Service certifications include ISO 9001:2000 and ISO 14001:1996, and MV Service products and services comply with 10 CFR 50 Appendix B, 10 CFR Part 21, and NQA1 requirements when applicable for nuclear safety related equipment.



Circuit Breaker Refurbishment

The ABB Product Support Center has the dedicated resources to professionally repair and refurbish all low and medium voltage distribution breaker elements to "like new" condition, in a controlled factory environment.

Authentic Circuit Breaker Parts, Replacement Breakers and Switchgear Components

MV Service supports the entire ABB family of products with replacement parts and breakers from the original manufacturer, including legacy equipment more than 40 years old. Many components are available for immediate shipment - for delivery where and when they are needed.

Direct Replacement Breakers

Direct replacement breakers are available for aging low and medium voltage breakers for the entire ABB family of legacy products, as well as other original equipment suppliers, such as General Electric, Westinghouse, Federal Pacific and others.

Field Services

The MV Service factory-trained technicians offer comprehensive field maintenance and repair services for planned and emergency work, 24 hours a day, 365 days a year. Service personnel have direct contact with the MV Service factory for authentic parts, original equipment drawings and technical support. Services include switchgear and circuit breaker commissioning, inspection, testing and refurbishment; replacement of breakers, relays and control components; primary bus upgrades and related switchgear services. ABB also offers maintenance and repair training, from product orientation for new equipment, to advanced repairs and life extension.



ABB field service technicians are factory-trained and equipped to support power plant, substation or industrial installations



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