

Retrofitting

Solutions for ABB air-magnetic DIARC circuit breaker



01



02

— 01- VD4-DR vacuum with linear ratchet racking system

— 02-HD4-DR gas retrofit with screw rotary racking mechanism

Circuit breaker retrofit is a cost-effective alternative to the complete switchgear replacement. Retrofitting is performed by replacing phased-out devices with circuit breakers from the current production range specifically designed to mechanically and electrically adapt to the existing models in the plant. The result is substantial improvement in reliability, safety, maintenance and performance.

ABB Service experts conduct on-site audits on existing installations to assess the condition of the equipment, recommend the most suitable solution and technically support the most appropriate investment.

ABB Service is a complete system provider of retrofitting solutions, from proposal to design, through manufacturing, testing and finally installation and commissioning.



Safety and Reliability

- Strong fault risk reduction and significant life time extension
- Racking in-out motorization option and improved operator protection
- Lower maintenance requirements and long time availability of spare parts



Optimize your investment

- Limited capital investment
- Minimization of further maintenance costs
- Warranty on the conversion work



Protect your assets

- Latest generation solution designed according to IEC 62271-100 Standard
- Short implementation time for replacement with minimum shutdown of the switchboard

DIARC is the family name of a wide range of air-magnetic circuit breakers manufactured by ABB and currently in obsolete phase.

They were either manufactured for fitting their own panel and cassette but also delivered to panel builders in both fixed and withdrawable version.

Additional variants have been produced during their life cycle due to the technological development, such as Marine application certified apparatus.

02

02- DIARC original
circuit breaker

Product variants

ABB offers a full range of retrofit solutions based on vacuum circuit breakers and gas circuit breakers. Both are provided with the racking system, either the same as the original DIARC version for allowing a backward compatibility (linear ratchet) or the one applied to the latest ABB breakers (screw rotary) to align the installed base to the latest ABB switchgear solution.

Certified apparatus can be provided too. ABB experts propose the best apparatus for each switchgear unit, depending on the characteristics of the apparatus installed in the network and the specific operating requirements of each unit.

Remote racking solutions for enhanced personnel safety

Human errors can be prevented thanks to enhanced switchgear operability achieved by:

- Integrating a motor-operated racking system into each retrofit breaker when frequent operations from control system are required
- Installing a portable TruckMaster device per switchgear line -up for maintenance-related operations by station personnel.

Technical data

The following basic technical data are required in order to provide standard retrofitting solutions:

- Rating plate data and serial number
- Photos of all four sides
- Photo of the switchgear compartment interior
- Existing functional electric circuit diagram
- Generator data for the relevant feeders

Options

- **TruckMaster** remote motorized racking
- **MySiteCare** monitoring and diagnostic
- **MyRemoteCare** cloud based services
- **Power Care** customer support agreement

DIARC webpage:



For more information please contact:

More product information:

abb.com/mediumvoltage

Your contact center:

abb.com/contactcenters

More service information:

abb.com/service

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