Circuit breaker retrofit is a cost-effective alternative to the complete switchgear replacement. ABB Service experts conduct site audits on existing installations to assess the condition of the equipment, recommend the proper solution and support the right investment decision.

Retrofit stands for the replacement of phased-out devices by current production circuit breakers which are mechanically and electrically adapted for the existing engineering. The result is a deep improvement on reliability, safety, maintenance and performances.

ABB Service is a full system provider for retrofit solutions, from the proposal and design, through the manufacturing and testing, up to the installation and commissioning.

**Benefits**

Reliability
- Significant life time extension
- Lower maintenance requirements
- Long time availability of spare parts.

Safety
- Strong fault risk reduction
- Additional embedded safety features
- Improved operator protection.

Technology
- Latest generation apparatus
- Designed according to IEC 62271-100 Standard
- Tested and certified products.

Project
- Short implementation time for replacement
- Minimum shutdown of the switchboard
- Smooth site activity.

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

**Facts**

Viacr VRB is the family name of a wide range of vacuum circuit breakers manufactured by ABB and currently phased-out. 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. Specific versions can be identified looking the apparatus name on the label and taking the part after VRB (e.g. VRBs, sG, etc.).

The design included non-ABB vacuum interrupters which are not available anymore. The vacuum seal was guaranteed for 20 years by the manufacturer; however the interrupters life is also linked to the relevant contacts wear and therefore both parameters have to be taken into account for defining the residual apparatus life.
Technical Data
A full range of retrofit solutions have been developed based on ABB vacuum and gas circuit breakers. Perfect one to one interchangeability is guaranteed from the mechanical and electrical point of view.
ABB proposal provides the best fit for purpose apparatus for each switchgear unit, depending on the complete network equipment conditions and the specific feeder operational characteristics.
The following basic details are necessary for providing standard retrofit solutions:
- Data label technical information and serial number.
- Four sides pictures.
- Compartment inner pictures.
- Existing panel schematic diagram.
- Generator data for the relevant feeders.

For more information please contact Service department at:

ABB S.p.A.
Power Products Division
Unità Operativa Sace-MV
Via Friuli, 4
I-24044 Dalmine
Phone: +39 035 695 2713
Emergency Line h24: +39 335 750 5383
Fax: +39 035 695 2792
E-mail: service.mv@it.abb.com

www.abb.it

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