

Retrofitting OneFit: the hard-bus retrofill concept

Circuit-breaker retrofitting is a cost-effective alternative to complete switchgear replacement. ABB Service experts conduct site audits on existing installations to assess the condition of the equipment, recommend the most suitable solution and technically support the most appropriate investment.

Retrofill is one of the retrofit technical solution used by ABB. OneFit is the latest ABB hard-bus retrofill design concept, containing an integrally safe plug-in technology in order to easily connect the new breaker to a wide range of existing panels.

Concept

OneFit is comprised of a frame that hosts a standard circuit-breaker connected to the existing switchgear bushings by an additional power circuit that also acts as an internal interface with the new breaker.

The adaptation system (OneFit kit) allows a completely standard ABB withdrawable apparatus to be fitted to the old panel.

The result is a great improvement in reliability, safety, maintenance and performance.

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

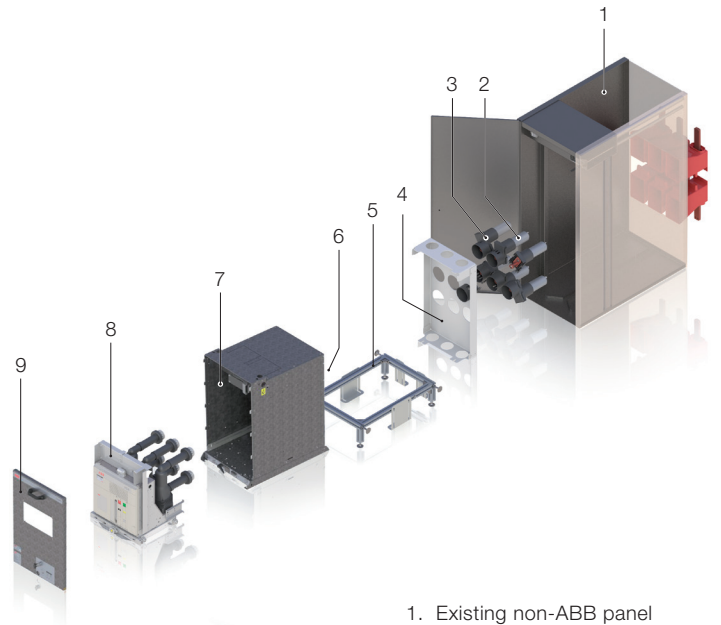
Benefits

Maintenance and repair aspect

- the new apparatus mounts all standard spare parts with all the benefits in terms of delivery time and price
- equipment and spare parts are interchangeable with new ABB extension panels and additional switchgear
- same operational interface and maintenance approach for the equipment installed in OneFit and new ABB panels

Modernization process

- The use of standard breakers makes them ready without any modification for future ABB replacement switchgear, providing an optimized investment for the next substation renewal



1. Existing non-ABB panel
2. Copper Adaptation System
3. Insulating shell
4. Insulating plate
5. Basement
6. Shutter
7. Frame
8. ABB new standard breaker
9. Door (on request)

Safety upgraded

- the original shutter system and all the relevant interlocking are replaced with new standard ones installed from the factory on the OneFit system
- shutter and circuit breaker movement are interlocked to enable all necessary safety features
- the dielectric properties are increased thanks to the installation of a new insulation plate
- depending on which OneFit package is chosen, apparatus racking behind a closed door and remote racking are available

Standards

- OneFit solutions are type tested according to latest IEC Standards: 62271-1 (for the frame), 62271-100 (for the circuit-breaker) and 62271-200 when the original panel is provided to perform the tests. Otherwise ABB can provide a technical extension certificate.

Packages

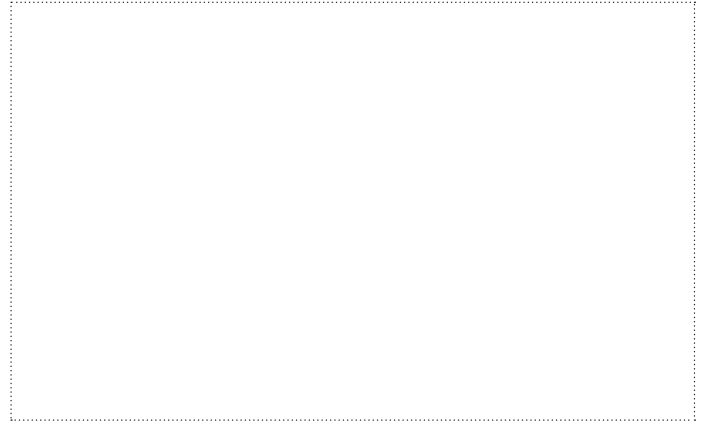
The OneFit range is made up of four packages with progressively increased technological content targeting personnel safety and switchgear renewal

- **OneFit:** the true retrofitting solution, new apparatus racking system, integrated metallic isolating shutter and state of the art interlocking system
- **OneFit Safety:** increased personnel protection providing closed-door operational mode preventing accidental electrical contact injuries
- **OneFit Safety Plus:** a new operational safety level, remote racking to provide a safer operating environment for personnel through the proven method of adding distance between the operator and arc flash incident energy at the switchgear site
- **OneFit eSafety Plus:** the integration of protection relay and measuring sensors gives a new life to switchgear, combining all the benefits of the previous packages with a complete equipment revamping.



OneFit packages

Contact us



Your Service sales contact: www.abb.com/contacts

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OneFit webpage:



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