# Circuit breaker retrofit

## Universal module

Retrofill is one of the retrofit technical solution used by ABB. Universal module is the latest ABB retrofill design concept in order to easily connect the new breaker to a wide range of existing non-ABB panels.

01

36kV Universal module

02

12kV Universal module

### Concept

Universal module comprises a cassette that hosts a standard circuit-breaker connected to the existing switchgear by an adaption system.

The adaptation system allows a completely standard ABB withdrawable apparatus to be fitted to the original switchgear. The result is a great improvement in reliability, safety, maintenance and performance.

#### **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 (UniGear) and additional switchgear
- Same operational interface and maintenance approach for the equipment installed in universal module 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

#### Ease of use and robust

- CB mechanical push buttons accessible from front door
- · Single shot handle for the door
- Robust structure with Aluzinc sheets
- Inspection window of toughened glass
- Mechanically stiffened door with padlocking facility

#### Safety upgraded

- The original shutter system and all the relevant interlocking are replaced with new standard ones installed from the factory on the universal module
- Shutter and circuit breaker movement are interlocked to enable all necessary safety features
- Option for remote racking of apparatus
- Optionally integrated with temperature monitoring sensors near apparatus spouts

## Technology

 Universal module solutions are fully type tested according to IEC standards



