With a few modifications and sustainable costs, Retrofitting kits are the perfect solution to improve a low voltage switchgear.

ABB SACE has developed new hard bus retrofit Retrofitting kits to replace and upgrade Schneider Masterpact M Air Circuit breaker with New Emax.

ABB ensures operating continuity between Masterpact M Air Circuit Breakers and the recent series of circuit New Emax:
- M32 and M40 withdrawable version, 3 and 4 poles, 3200A and 4000A, equipped with either Vertical or Horizontal Rear Terminals
- M16 and M20 fixed version, 3 poles only, with Horizontal Rear Terminals.

Replacement kits are designed to preserve existing switchgear and reduce downtimes to a minimum. Special terminals are mounted on New Emax Fixed part in order to replicate the copper bars connections of Masterpact M breaker.

The result is a completely upgraded System with all the advantages of new technology offered by ABB New Emax circuit breakers.

All New Emax Electrical and Mechanical accessories can be used. Mechanical interlock and ATS work only with New Emax Circuit breakers.

Retrofitting kit consists of:
1. Adhesive template for panel door cutout
2. Adapter kit for panel door
3. Dedicated plates for fixed part to fix the circuit breaker in the same fixing point of Masterpact ones
4. Special New Emax terminals.

**BENEFITS**
- Service continuity
- Easy installation
- Maintenance costs reduction
- Products and spare parts availability
- Tested solution
- Wide range of mechanical and electrical accessories with New Emax
- Power measurement with advanced trip units (PR122 and PR123)
- Monitoring with PR120/K, electrical signaling internal module Communication:
  - Modbus (PR120/D-M),
  - Wireless, (PR120/D-BT),
  - Profibus, DeviceNet (EP 010 – FBP)
- Diagnosis and installation with Ekip Connect Software.
It is required to order:

- A dedicated Fixed breaker with special terminals for Fixed version.

New Emax accessories available for the Masterpact M-New Emax retrofitting kits:

**New Emax accessories available for the retrofitting kit:**

<table>
<thead>
<tr>
<th>Schneider circuit breaker</th>
<th>Iu [A]</th>
<th>Version - terminals</th>
<th>Poles to</th>
<th>New Emax</th>
<th>Poles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masterpact M32H1</td>
<td>3200</td>
<td>W - HR</td>
<td>3p</td>
<td>E3S</td>
<td>3p</td>
</tr>
<tr>
<td>Masterpact M32H2</td>
<td>3200</td>
<td>W - HR</td>
<td>4p</td>
<td>E3S</td>
<td>4p</td>
</tr>
<tr>
<td>Masterpact M40H1</td>
<td>4000</td>
<td>W - HR</td>
<td>3p</td>
<td>E4S</td>
<td>3p</td>
</tr>
<tr>
<td>Masterpact M40H2</td>
<td>4000</td>
<td>W - HR</td>
<td>4p</td>
<td>E4S</td>
<td>4p/f</td>
</tr>
<tr>
<td>Masterpact M40H3</td>
<td>4000</td>
<td>W - VR</td>
<td>3p</td>
<td>E4S</td>
<td>3p</td>
</tr>
<tr>
<td>Masterpact M40H4</td>
<td>4000</td>
<td>W - VR</td>
<td>4p</td>
<td>E4S</td>
<td>3p</td>
</tr>
<tr>
<td>Masterpact M32H1</td>
<td>3200</td>
<td>W - HR</td>
<td>3p</td>
<td>E3V</td>
<td>3p</td>
</tr>
<tr>
<td>Masterpact M32H2</td>
<td>3200</td>
<td>W - HR</td>
<td>4p</td>
<td>E3V</td>
<td>4p</td>
</tr>
<tr>
<td>Masterpact M40H1</td>
<td>4000</td>
<td>W - HR</td>
<td>3p</td>
<td>E4H</td>
<td>3p</td>
</tr>
<tr>
<td>Masterpact M40H2</td>
<td>4000</td>
<td>W - HR</td>
<td>4p</td>
<td>E4H</td>
<td>3p</td>
</tr>
<tr>
<td>Masterpact M40H3</td>
<td>4000</td>
<td>W - VR</td>
<td>3p</td>
<td>E4H</td>
<td>3p</td>
</tr>
<tr>
<td>Masterpact M40H4</td>
<td>4000</td>
<td>W - VR</td>
<td>4p</td>
<td>E4H</td>
<td>4p/f</td>
</tr>
<tr>
<td>Masterpact M32H1</td>
<td>3200</td>
<td>W - HR</td>
<td>3p</td>
<td>E2N</td>
<td>3p</td>
</tr>
<tr>
<td>Masterpact M32H2</td>
<td>3200</td>
<td>W - HR</td>
<td>4p</td>
<td>E2N</td>
<td>4p</td>
</tr>
</tbody>
</table>

**Electrical accessories**

- YO (shunt opening release)
- YO2 (second shunt opening release)
- YC (shunt closing release)
- YU (undervoltage release)
- D (electronical Delay for YU - into the switchboard)
- M (motor for charging springs)
- AUX Open/Closed auxiliary contacts
- AUX CB connected/test/insulated position
- Closing Spring charged signalling – S33
- Electric TU reset
- SOR Test Unit
- Overcurrent release trip indication
- Contact for signalling undervoltage release de-energized

**Mechanical accessories**

- Key lock in open position
- Padlock in open position
- Key lock in racked in/test/out position
- Protection for sealable trip unit
- Mechanical operation counter
- O/C pushbutton protection
- Mechanical Interlock (only with other New Emax CB)

**Modules**

- PR120/K signalling module
- PR120/V measuring module
- PR120/D-M Modbus communication module
- PR120/D-BT Bluetooth communication module

For further information contact:

**ABB SACE**

A division of ABB S.p.A.

Via Friuli, 4

I-24044 Dalmine

Phone: +39 035 695 2900

Emergency Line h24: +39 02 2415.99.80

E-mail: service.sacedivision_proposal@it.abb.com

www.abb.com

The data and illustrations are not binding. We reserve the right to make changes in the course of technical development of the product. Copyright 2014 ABB. All rights reserved.