HMB operating mechanisms
The product family for high voltage circuit breaker from 52 to 1100 kV
Spring operating mechanisms of type HMB find their application in live tank breakers, circuit breaker modules, generator circuit breakers and gas-insulated switchgear.

Innovative solutions create the basis of successful products
Innovations in the operating mechanisms of high voltage circuit breakers have always been linked to innovations in the interrupters of the circuit breakers themselves.

High degree of acceptance, worldwide
The convincing aspect about operating mechanisms type HMB is not only their modularity and high level of compactness, but also their high switching time consistency, their excellent long-term stability and their low noise level. HMB operating mechanisms are maintenance-free. They can simply and quickly be adapted to various high-voltage circuit breakers.

That is the reason why HMBs are used in more than 100 different high-voltage applications worldwide.

HMB, if “time-to-market” is of importance for the high-voltage circuit breaker
Each operating mechanism of the entire HMB family consists of only a few pre-mounted modules or functional components. They are combined as a function of the requirements and submitted to the most stringent quality and functional testing prior to their delivery. The size of the operating mechanism depends on the energy stored. Therefore, an integrated portfolio with an opening energy from 1 kJ to 16 kJ is available to the user.
1 Mechanical Interface to the high voltage circuit breaker with Position Indication

2 Auxiliary switch assembly for signalling of the switching state

3 Control module with individual adjustable switching speed and reaction time

4 Spring limit switch to monitor the charging level

5 Disc spring column

<table>
<thead>
<tr>
<th>Type</th>
<th>HMB-1</th>
<th>HMB-2</th>
<th>HMB-4</th>
<th>HMB-8</th>
<th>HMB-16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stored switching sequence</td>
<td>O-CO/O-CO-CO</td>
<td>O-CO/O-CO-CO</td>
<td>O-CO/O-CO-CO</td>
<td>O-CO/O-CO-CO</td>
<td>O-CO</td>
</tr>
<tr>
<td>Switching energy, last O (kJ)</td>
<td>0.8-1.7</td>
<td>2.3/2.7</td>
<td>3.7/5.3</td>
<td>8.1/11.8</td>
<td>19.6/21.7</td>
</tr>
<tr>
<td>Switching energy, last C (kJ)</td>
<td>0.4/0.8</td>
<td>1.0/1.2</td>
<td>2.0/3.0</td>
<td>3.0/4.8</td>
<td>5.1/7.4</td>
</tr>
<tr>
<td>Stroke (mm)</td>
<td>115</td>
<td>135</td>
<td>205/220/230</td>
<td>180/205</td>
<td>180/205/230</td>
</tr>
</tbody>
</table>

O = Opening of the circuit breaker; C = Closing of the circuit breaker
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