Vacuum circuit-breaker

In the vacuum circuit-breaker type VD4, the complete pole and the maintenance-free vacuum interrupter form a positive unit. Disruptive external effects on the switching element are therefore extensively precluded.

For very high rated short circuit breaking currents the assembled poles are still used.

The vacuum circuit-breaker of type VD4 with manual mechanism is fundamentally suitable for autoreclosing, the version with motorized mechanism for multi-shot autoreclosing.

In addition, the breaker can be fitted with all standard releases and auxiliary switches required for the particular switching function to be performed.

VD4 can also be supplied as a withdrawable module with interlocks; isolating contact arms can be fitted to the upper and lower terminals without additional support for installation on the withdrawable module.

Highly reliable operating mechanism thanks to featuring a low number of components and manufactured using production systems for large quantities. Extremely limited maintenance.

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Note

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VD4 Vacuum circuit-breaker.

The reliable solution in power distribution.

With its advanced technology, the vacuum circuit-breaker type VD4 ranks the leading position in utility and industrial application. The rated data are dimensioned to suit the users requirements and fulfills the high demands in all respects.

Einsatzgebiete:
– Power stations
– Transformer stations
– Chemical industry
– Steel industry
– Automotive industry
– Airport power supply
– Shipbuilding power supply
– Building power supply

Leadership based on:
– Availability
– Safety
– Robustness
– Extreme Maintainability

V44 is designed for switching:
– Short-circuit currents
– Cables and overhead lines under load and no-load conditions
– Transformers and generators under load and no-load conditions
– Ripple control systems
– Capacitor banks, and
– Motors

<table>
<thead>
<tr>
<th>Rated voltage (kV)</th>
<th>12</th>
<th>13</th>
<th>24</th>
<th>36</th>
<th>40.5</th>
<th>63</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated frequency (Hz)</td>
<td>50 - 60</td>
<td>50 - 60</td>
<td>50 - 60</td>
<td>50 - 60</td>
<td>50 - 60</td>
<td>50 - 60</td>
</tr>
<tr>
<td>Rated normal current (A)</td>
<td>630 … 4000</td>
<td>630 … 4000</td>
<td>630 … 4000</td>
<td>630 … 4000</td>
<td>630 … 4000</td>
<td>630 … 4000</td>
</tr>
<tr>
<td>Rated short-circuit breaking current (symm.) (kA)</td>
<td>16 … 31.5</td>
<td>16 … 31.5</td>
<td>16 … 31.5</td>
<td>16 … 40</td>
<td>16 … 40</td>
<td>16 … 40</td>
</tr>
<tr>
<td>Rated short-circuit making current (kA)</td>
<td>40 … 80</td>
<td>40 … 100</td>
<td>40 … 100</td>
<td>158</td>
<td>40 … 100</td>
<td>40 … 100</td>
</tr>
<tr>
<td>Rated duration of short-circuit (s)</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Fixed / Withdrawable Version</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max. overall dimensions (mm)</td>
<td>280 / 360</td>
<td>280 / 360</td>
<td>280 / 360</td>
<td>280 / 360</td>
<td>280 / 360</td>
<td>280 / 360</td>
</tr>
</tbody>
</table>

1) Test voltage according to DIN VDE 0670, part 1000, list 2
2) 4000 A with forced air cooling
3) Higher values on request
4) 360 mm for fixed, 280 mm for withdrawable Version
5) Circuit-breaker with heat sink 616 mm
6) 555 - 686
7) Circuit-breaker with heat sink 634 mm
8) ...2500 A, ...31.5 kA with embedded pole
9) Withdrawable Version
10) Cloud-breaker with 100 mm
11) Withdrawable Version
12) Circuit-breaker with heat sink 632 mm

VDE 0670, part 1000 and IEC 669-4-110
VDE 0671, part 150 and IEC 62271-110