Xtra capabilities and enhanced features

Features

- 15 kV, 63 kA, 1200–3000A drawout vacuum circuit breaker
- 62% DC Component that exceeds IEEE® requirements and is used in applications with high impedance/resistance ratios (X/R)
- 175 kA peak close and latch and momentary rating exceeds IEEE preferred rating of 164 kA
- Demonstrated Out-of-Phase switching rating of 31.5 kA rms for industry applications such as power plants
- Additional vacuum interrupter very fast TRV testing up to 10 kV per microsecond
- Enhanced vacuum interrupter low frequency testing as low as 4 Hz for use with adjustable frequency drives
- Available as drawout with the option of six wheel roll-on-the-floor configuration
- Control circuit and wiring enhancements
- Dedicated dry contact for spring-charged indication; this extra contact can be wired out to the panel for visual indication that the breaker is charged
- Enhanced wiring with a newly detailed wiring schematic
- Superior environmental capability, anti-radiation wire for special applications such as power plant use
- Control wiring terminated with ring terminals for reliable connections

Application

The VCP-WXC is ideal for large power plant and industrial applications where the highest interrupting and momentary ratings are required for distribution circuits. The VCP-WXC complements the VCP-WG generator circuit breakers for applications when very high inductance provides challenges to system switching and interruption.

The VCP-WXC, Eaton’s medium voltage ANSI breaker platform’s newest addition, features Xtra capability to meet today’s circuit protection needs.
VCP-WXC ratings (symmetrical current basis)

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Voltage Range Factor</th>
<th>Power Frequency (1 Min.)</th>
<th>Lightning Impulse 1.2 x 50 μs</th>
<th>Continuous Current at 60 Hz</th>
<th>Style Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 kV rms</td>
<td>1</td>
<td>42 kV rms</td>
<td>95 kV peak</td>
<td>1200A rms</td>
<td>4A35390G10</td>
</tr>
<tr>
<td>15 kV rms</td>
<td>1</td>
<td>42 kV rms</td>
<td>95 kV peak</td>
<td>2000A rms</td>
<td>4A35391G10</td>
</tr>
<tr>
<td>15 kV rms</td>
<td>1</td>
<td>42 kV rms</td>
<td>95 kV peak</td>
<td>3000A rms</td>
<td>4A35392G10</td>
</tr>
</tbody>
</table>

1 This breaker is available with 125 Vdc secondary control voltage. This includes as standard a motor, closing coil, shunt trip #1 and shunt trip #2.

Short-Circuit Current

<table>
<thead>
<tr>
<th>Symmetrical Interrupting at V (Isc)</th>
<th>% DC Component (Idc)</th>
<th>Asymmetrical Interrupting (It)</th>
<th>Closing and Latching Capability</th>
<th>Short-Time Current for 3 Sec</th>
<th>Interrupting Time</th>
<th>Maximum Permissible Tripping Delay</th>
<th>Transient Recovery Voltage (RRRV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>63 kA rms</td>
<td>62%</td>
<td>83 kA rms</td>
<td>175 kA peak</td>
<td>63 kA rms</td>
<td>50 ms</td>
<td>2 sec</td>
<td>1.1 kV/μs</td>
</tr>
</tbody>
</table>

1 Except as noted.
2 Three cycles.
3 Contact Eaton for higher RRRV or for more information.

Capacitor Switching Ratings

<table>
<thead>
<tr>
<th>General Purpose Isolated Shunt Capacitor Bank Current</th>
<th>Definite Purpose Back-to-Back Capacitor Switching</th>
<th>Mechanical Endurance No-Load Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacitor Bank Current</td>
<td>Inrush Current</td>
<td>Inrush Frequency</td>
</tr>
<tr>
<td>250A rms</td>
<td>200 and 1600A rms</td>
<td>7.7 kA peak</td>
</tr>
</tbody>
</table>

1 C37.04a–2003 class C2 at 15 kV.

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