Surge arrester

3-electrode arrester

Series/Type: T31-A350X
Ordering code: B88069X3090B252
Version/Date: Issue 05 / 2007-03-29
## Features
- Very small size
- Extremely fast response time
- High current rating
- Stable performance over life
- Extremely low capacitance
- High insulation resistance
- RoHS-compatible

### Applications
- Line protection
- Station protection
- Base stations

## Electrical specifications

| DC spark-over voltage | 350 ± 20 | V ± %
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Impulse spark-over voltage 4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>at 100 V/μs - for 99 % of measured values</td>
<td>&lt; 800</td>
<td>V</td>
</tr>
<tr>
<td>- typical values of distribution</td>
<td>&lt; 650</td>
<td>V</td>
</tr>
<tr>
<td>at 1 kV/μs - for 99 % of measured values</td>
<td>&lt; 900</td>
<td>V</td>
</tr>
<tr>
<td>- typical values of distribution</td>
<td>&lt; 700</td>
<td>V</td>
</tr>
</tbody>
</table>

### Service life
- 10 operations 50 Hz; 1 s 5)
- 1 operation 50 Hz; 0.18 s (9 cycles) 5)
- 10 operations [5x (+) & 5x (-)] 8/20 μs 5)
- 1 operation 8/20 μs 5)
- 1 operation 10/350 μs 5)

<table>
<thead>
<tr>
<th>Insulation resistance at 100 V_{dc}</th>
<th>&gt; 10</th>
<th>GΩ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacitance at 1 MHz 4)</td>
<td>&lt; 1.5</td>
<td>pF</td>
</tr>
<tr>
<td>Transverse delay time 3)</td>
<td>&lt; 0.2</td>
<td>μs</td>
</tr>
<tr>
<td>Arc voltage at 1 A</td>
<td>~ 30</td>
<td>V</td>
</tr>
<tr>
<td>Glow to arc transition current</td>
<td>~ 1</td>
<td>A</td>
</tr>
<tr>
<td>Glow voltage</td>
<td>~ 200</td>
<td>V</td>
</tr>
</tbody>
</table>

### Marking, blue negative

<table>
<thead>
<tr>
<th>EPCOS 350 YY O</th>
</tr>
</thead>
<tbody>
<tr>
<td>350 - Nominal voltage</td>
</tr>
<tr>
<td>YY - Year of production</td>
</tr>
<tr>
<td>O - Non radioactive</td>
</tr>
</tbody>
</table>
1) At delivery AQL 0.65 level II, DIN ISO 2859
2) In ionized mode
3) Test according to ITU-T Rec. K.12
4) Tip or ring electrode to center electrode
5) Total current through center electrode, half value through tip respectively ring electrode.
Terms in accordance with ITU-T Rec. K.12 and DIN 57845/VDE0845

Cautions and warnings

- Surge arresters must not be operated directly in power supply networks.
- Surge arresters may become hot in case of longer periods of current stress (danger of burning).
- Surge arresters may be used only within their specified values. In case of overload, the head contacts may fail or the component may be destroyed.
- Damaged surge arresters must not be re-used.
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