Surge arrester

3-electrode arrester

Series/Type: T83-A260XF4  
Ordering code: B88069X8250B502  
Version/Date: Issue 03 / 2008-04-02
### Features
- Standard size
- Fast response time
- High current rating
- Stable performance over life
- Very low capacitance
- High insulation resistance
- Reliable failsafe device
- RoHS-compatible

### Applications
- Branch exchange (MDF)
- Line protection
- Station protection

### Electrical specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC spark-over voltage 1) 2) 4)</td>
<td>260 ± 20 V</td>
</tr>
<tr>
<td>Impulse spark-over voltage 4)</td>
<td></td>
</tr>
<tr>
<td>at 100 V/µs - for 99 % of measured values</td>
<td>&lt; 500 V</td>
</tr>
<tr>
<td>- typical values of distribution</td>
<td>&lt; 450 V</td>
</tr>
<tr>
<td>at 1 kV/µs - for 99 % of measured values</td>
<td>&lt; 700 V</td>
</tr>
<tr>
<td>- typical values of distribution</td>
<td>&lt; 650 V</td>
</tr>
<tr>
<td>Service life</td>
<td></td>
</tr>
<tr>
<td>10 operations 50 Hz, 1 s 5)</td>
<td>10 A</td>
</tr>
<tr>
<td>1 operation 50 Hz, 0.18 s (9 cycles) 5)</td>
<td>40 A</td>
</tr>
<tr>
<td>10 operations (5x (+) &amp; 5x (-)) 8/20 µs 5)</td>
<td>10 kA</td>
</tr>
<tr>
<td>1 operation 8/20 µs 5)</td>
<td>15 kA</td>
</tr>
<tr>
<td>1 operation 10/350 µs 5)</td>
<td>2 kA</td>
</tr>
<tr>
<td>Insulation resistance at 100 V&lt;sub&gt;dc&lt;/sub&gt; 4)</td>
<td>&gt; 10 GΩ</td>
</tr>
<tr>
<td>Capacitance at 1 MHz 4)</td>
<td>&lt; 1.5 pF</td>
</tr>
<tr>
<td>Transverse delay time 3)</td>
<td>&lt; 0.2 µs</td>
</tr>
<tr>
<td>Arc voltage at 1 A</td>
<td>~ 35 V</td>
</tr>
<tr>
<td>Glow to arc transition current</td>
<td>&lt; 1 A</td>
</tr>
<tr>
<td>Glow voltage</td>
<td>~ 200 V</td>
</tr>
<tr>
<td>Weight</td>
<td>~ 2.2 g</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-40 ... +90 °C</td>
</tr>
<tr>
<td>Climatic category (IEC 60068-1)</td>
<td>40/ 90/ 21</td>
</tr>
</tbody>
</table>

**EPCOS**

<table>
<thead>
<tr>
<th>Code</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>260</td>
<td>Nominal voltage</td>
</tr>
<tr>
<td>YY</td>
<td>Year of production</td>
</tr>
<tr>
<td>O</td>
<td>Non radioactive</td>
</tr>
</tbody>
</table>

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Please read Cautions and warnings and Important notes at the end of this document.

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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

The arrester failsafe mechanism contains a solder pellet with a melting temperature range from 193 to 203 °C.

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**Cautions and warnings**

- The short-circuit spring does not trigger until 190 °C is reached depending on the material. Care must be taken to limit the thermal radiation onto adjacent parts to safe values.
- Depending on the incorporation position, the surge arrester may have to be additionally secured by mechanical means.
- 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.
- Surge arrester with triggered short-circuit mechanisms must not be re-used.
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