Surge arrester

3-electrode arrester

Series/Type: T33-A230XF1
Ordering code: B88069X9550B502
Version/Date: Issue 08 / 2007-11-22
Features | Applications
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- Very small size | - Line protection
- Extremely fast response time | - Station protection
- High current rating | - Base stations
- Stable performance over life | 
- Extremely low capacitance | 
- High insulation resistance | 
- Reliable failsafe device | 
- RoHS-compatible

Electrical specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC spark-over voltage</td>
<td>230 ± 20 V</td>
</tr>
<tr>
<td>Impulse spark-over voltage</td>
<td>&lt; 400 V, &lt; 350 V, &lt; 450 V, &lt; 420 V</td>
</tr>
<tr>
<td>Service life</td>
<td>10 A, 30 A, 10 kA, 2 kA</td>
</tr>
<tr>
<td>Insulation resistance at 100 V&lt;sub&gt;DC&lt;/sub&gt;</td>
<td>&gt; 10 GΩ</td>
</tr>
<tr>
<td>Capacitance at 1 MHz</td>
<td>&lt; 1.5 pF</td>
</tr>
<tr>
<td>Transverse delay time</td>
<td>&lt; 0.2 µs</td>
</tr>
<tr>
<td>Arc voltage at 1 A</td>
<td>~ 30 V</td>
</tr>
<tr>
<td>Glow to arc transition current</td>
<td>~ 1 A</td>
</tr>
<tr>
<td>Glow voltage</td>
<td>~ 200 V</td>
</tr>
<tr>
<td>Weight</td>
<td>~ 1.4 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>
<tr>
<td>Marking, blue negative</td>
<td>EPCOS 230 YY O</td>
</tr>
</tbody>
</table>

<sup>1)</sup> 230 - Nominal voltage
<sup>2)</sup> YY - Year of production
<sup>3)</sup> O - Non radioactive
At delivery AQL 0.65 level II, DIN ISO 2859

In ionized mode

Test according to ITU-T Rec. K.12

Tip or ring electrode to center electrode

Total current through center electrode, half value through tip respectively ring electrode.

Voltage of the current source 230 $V_{RMS}$

Terms in accordance with ITU-T Rec. K.12 and DIN 57845/VDE0845

The arrester failsafe mechanism contains an insulating foil with a melting temperature of 260 °C.

Arrester failsafe works at temperatures > 260 °C. The arrester has to be fixed mechanically, if the arrester is contacted by soldering and if the solder temperature is less than 260 °C.

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**Cautions and warnings**

- The short-circuit spring does not trigger until 260 °C is reached depending on the sensor material. Care must be taken to limit the thermal radiation onto adjacent parts to safe values.
- If the contacts of the surge arresters are defective, current stress can lead to the formation of sparks and loud noises.
- 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 lead contacts may fail or the component may be destroyed.
- Damaged surge arresters must not be re-used.
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