Surge arrester

2-electrode arrester

Series/Type: EF2500XNTP
Ordering code: B88069X3383C103
Date: 2019-07-15
Version: 02
Surge arrester

2-electrode arrester

Features

- Standard size
- High follow current capability
- Very fast response time
- Stable performance over life
- Very low capacitance
- High insulation resistance
- RoHS-compatible

Applications

- Application with high follow current
- Power supply

Electrical specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC spark-over voltage</td>
<td>2500 ±20 V</td>
</tr>
<tr>
<td>Impulse spark-over voltage</td>
<td></td>
</tr>
<tr>
<td>at 100 V/µs - for 99% of measured values</td>
<td>&lt; 3200 V</td>
</tr>
<tr>
<td>at 100 V/µs - typical values of distribution</td>
<td>&lt; 3000 V</td>
</tr>
<tr>
<td>Service life</td>
<td>5 A</td>
</tr>
<tr>
<td>Max. follow current during one voltage half cycle at 50 Hz</td>
<td>200 A</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>Arc voltage at 1 A</td>
<td>~ 22 V</td>
</tr>
<tr>
<td>Glow to arc transition current</td>
<td>&lt; 0.5 A</td>
</tr>
<tr>
<td>Glow voltage</td>
<td>~ 140 V</td>
</tr>
<tr>
<td>Weight</td>
<td>~ 1.5 g</td>
</tr>
<tr>
<td>Operation and storage temperature</td>
<td>−40 ... +125 °C</td>
</tr>
<tr>
<td>Climatic category (IEC 60068-1)</td>
<td>40/125/21</td>
</tr>
<tr>
<td>Marking, red positive</td>
<td>EPCOS EF 2500 YY O</td>
</tr>
</tbody>
</table>

Certifications

UL 1449 (E319264)

1) At delivery AQL 0.65 level II, DIN ISO 2859
2) In ionized mode
3) Follow current has to be limited by an appropriate varistor in series

Terms in accordance with ITU-T Rec. K. 12; IEC 61643-311.
Surge arrester

B88069X3383C103

2-electrode arrester

EF2500XNTP

Dimensional drawing in mm

Ordering codes and packing advices

\( B88069X3383C103 = 1000 \text{ pcs. in container} \)
Soldering parameter

Wave soldering

![Soldering profile](image)

<table>
<thead>
<tr>
<th>Wave profile features</th>
<th>Pb-free assembly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solder</td>
<td>Sn 95.5 / Ag 3.8 / Cu 0.7</td>
</tr>
<tr>
<td>Solder bath temperature</td>
<td>263 (±3) °C</td>
</tr>
<tr>
<td>Dwell time</td>
<td>&lt; 3 s</td>
</tr>
</tbody>
</table>

Soldering profile applied to a single soldering process.

**Cautions and warnings**

- Do not operate surge arresters in power supply networks, whose maximum operating voltage exceeds the minimum spark-over voltage of the surge arresters.
- The follow current must be limited (see page 2) so that the arrester can be properly extinguished when the surge has decayed. The arrester might otherwise heat up and ignite adjacent components.
- Surge arresters may become hot in the event of longer periods of current stress (burn risk). In the event of overload the connectors may fail or the component may be destroyed.
- Surge arresters must be handled with care and must not be dropped.
- Do not continue to use damaged surge arresters.

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