Surge arrester

3-electrode arrester

Series/Type: T21-A90X
Ordering code: B88069X3733B252
Date: 2015-09-10
Version: 02
Surge arrester
B88069X3733B252
3-electrode arrester
T21-A90X

Features
- Small size
- Fast response time
- High current rating
- Stable performance over life
- Very low capacitance
- High insulation resistance
- 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</td>
<td>90 ±20 V</td>
</tr>
<tr>
<td>Impulse spark-over voltage</td>
<td></td>
</tr>
<tr>
<td>at 100 V/µs</td>
<td>&lt; 400 V</td>
</tr>
<tr>
<td>at 1 kV/µs</td>
<td>&lt; 550 V</td>
</tr>
<tr>
<td>Service life</td>
<td></td>
</tr>
<tr>
<td>10 operations</td>
<td>10 A</td>
</tr>
<tr>
<td>1 operation</td>
<td>50 A</td>
</tr>
<tr>
<td>10 operations [5x (+) &amp; 5x (-)]</td>
<td>20 kA</td>
</tr>
<tr>
<td>1 operation</td>
<td>25 kA</td>
</tr>
<tr>
<td>1 operation 8/20 µs</td>
<td>5 kA</td>
</tr>
<tr>
<td>300 operations 10/1000 µs</td>
<td>200 A</td>
</tr>
<tr>
<td>Insulation resistance</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>~ 15 V</td>
</tr>
<tr>
<td>Glow to arc transition current</td>
<td>&lt; 0.5 A</td>
</tr>
<tr>
<td>Glow voltage</td>
<td>~ 70 V</td>
</tr>
<tr>
<td>Weight</td>
<td>~ 2.0 g</td>
</tr>
<tr>
<td>Operation and storage temperature</td>
<td>-40 ... +90 °C</td>
</tr>
<tr>
<td>Climatic category</td>
<td>40/090/21</td>
</tr>
<tr>
<td>Marking, blue negative</td>
<td></td>
</tr>
</tbody>
</table>

Certifications
- UL 497B (E163070)

Remarks on next page
Surge arrester B88069X3733B252

3-electrode arrester T21-A90X

1) At delivery AQL 0.65 level II, DIN ISO 2859
2) In ionized mode
3) Tip or ring electrode to center electrode
4) Total current through center electrode, half value through tip respectively ring electrode.
5) Test according to ITU-T Rec. K.12

Terms in accordance with ITU-T Rec. K.12; IEC 61663-2 and IEC 61643-311.

Dimensional drawing in mm

Ordering code and packing advice

B88069X3733B252 = 250 pcs. on trays

PPD AB PD / PPD AB PM

2015-09-10
Soldering parameter

Wave soldering

Wave profile features

- Pb-free assembly
  - Solder
  - Solder bath temperature: 263 (±3) °C
  - Dwell time: < 3 s

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.
- If the contacts of the surge arresters are defective, current load can cause sparks and loud noises.
- 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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