Surge arrester

2-electrode arrester

Series/Type: G31-A200X
Ordering code: B88069X8801****
Date: 2019-04-10
Version: 10
Surge arrester

2-electrode arrester

Features

- Small size
- Fast response time
- Stable performance over life
- Low capacitance
- High insulation resistance
- RoHS-compatible

Applications

- Ethernet, PoE, xDSL
- Cable modem, splitter, line cards
- CCTV
- Applications with limited space

Electrical specifications

DC spark-over voltage \(^1\) \(^2\)

<table>
<thead>
<tr>
<th>Tolerance</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>200 V</td>
<td>160 V</td>
<td>240 V</td>
</tr>
</tbody>
</table>

Impulse spark-over voltage

- for 99% of measured values: < 500 V
- for typical values of distribution: < 450 V

Service life \(^3\)

<table>
<thead>
<tr>
<th>300 operations</th>
<th>8/20 µs</th>
<th>100 A</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 operations</td>
<td>8/20 µs</td>
<td>2 kA</td>
</tr>
<tr>
<td>1 operation</td>
<td>8/20 µs</td>
<td>500 A</td>
</tr>
</tbody>
</table>

Insulation resistance at 100 V\(_{DC}\)

> 1 GΩ

Capacitance at 1 MHz

< 0.5 pF

Arc voltage at 1 A

~ 10 V

Glow to arc transition current

< 1.0 A

Glow voltage

~ 60 V

Weight

~ 0.2 g

Operation and storage temperature

−40 ... +125 °C

Climatic category (IEC 60068-1)

40/125/21

Certification

UL 1449 (E319264)

\(^1\) At delivery AQL 0.65 level II, DIN ISO 2859

\(^2\) In ionized mode

\(^3\) Tests according to ITU-T Rec. K.12 and UL 1449

\(^4\) Contact discharge parameters: 1500 pF, 10 kV, 20 Ω

Terms in accordance with ITU-T Rec. K.12 and IEC 61643-311.
Dimensional drawing in mm

Ordering codes and packing advices

*B88069X8801B502 = 500 pcs. on trays (50 pcs. per tray)*
B88069X8801T103 = 1000 pcs. on tape and reel

B88069X8801K103 = 1000 pcs. on tape and reel
Soldering parameter

Wave soldering

<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.
- 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.
- If the contacts of the surge arresters are defective, current load can cause sparks and loud noises.
- Surge arresters must be handled with care and must not be dropped.
- Do not continue to use damaged surge arresters.

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