# Surge arrester

**2-electrode arrester**

<table>
<thead>
<tr>
<th>Series/Type:</th>
<th>A71-H12X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordering code:</td>
<td>B88069X2090S102</td>
</tr>
<tr>
<td>Date:</td>
<td>2019-08-19</td>
</tr>
<tr>
<td>Version:</td>
<td>09</td>
</tr>
</tbody>
</table>

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Surge arrester

2-electrode arrester

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

**Applications**
- Power supply
- Consumer electronics
- Modem

**Features**

### Electrical specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>DC spark-over voltage</th>
<th>Impulse spark-over voltage</th>
<th>Service life</th>
<th>Insulation resistance at 100 V&lt;sub&gt;DC&lt;/sub&gt;</th>
<th>Capacitance at 1 MHz</th>
<th>Arc voltage at 1 A</th>
<th>Weight</th>
<th>Operation and storage temperature</th>
<th>Climatic category (IEC 60068-1)</th>
<th>Marking, green positive</th>
<th>Certifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tolerance</td>
<td>Min. 1200 V ± 20%</td>
<td>&lt; 1900 V</td>
<td>100 Hz, 1 s</td>
<td>&gt; 10 GΩ</td>
<td>&lt; 1 pF</td>
<td>~ 20 V</td>
<td>~ 2 g</td>
<td>-40 ... +125 °C</td>
<td>40/125/21</td>
<td>EPCOS 1200 YY O</td>
<td>UL 1449</td>
</tr>
<tr>
<td>Min.</td>
<td>960 V</td>
<td>&lt; 1800 V</td>
<td>50 Hz, 0.18 s (9 cycles)</td>
<td>65 A</td>
<td>&lt; 0.5 V</td>
<td>~ 160 V</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Max.</td>
<td>1440 V</td>
<td>&lt; 2000 V</td>
<td>8/20 µs</td>
<td>15 kA</td>
<td>~ 2 g</td>
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<tr>
<td></td>
<td></td>
<td>&lt; 1900 V</td>
<td>1 operation</td>
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<tr>
<td></td>
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<td>10 operations</td>
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</tbody>
</table>

1) At delivery AQL 0.65 level II, DIN ISO 2859
2) In ionized mode

Terms in accordance with ITU-T Rec. K.12 and IEC 61643-311.
Surge arrester
B88069X2090S102
2-electrode arrester
A71-H12X

Dimensional drawing in mm

Ordering codes and packing advices
B88069X2090S102 = 100 pcs. on 5 taped stripes

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

Wave soldering

![Wave soldering diagram]

<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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