Surge arrester

2-electrode arrester

Series/Type: EC75X
Ordering code: B88069X0180****
Version/Date: Issue 05 / 2015-01-13
Features
- Standard size
- Very fast response time
- High current rating
- Stable performance over life
- Very low capacitance
- High insulation resistance
- RoHS-compatible

Applications
- Branch exchange
- Line protection
- Subscriber protection
- Alarm system
- Tuner
- Antenna protection

Electrical specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>DC spark-over voltage</th>
<th>Impulse spark-over voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC spark-over voltage</td>
<td>Min.</td>
<td>60 V</td>
</tr>
<tr>
<td>Tolerance</td>
<td>Max.</td>
<td>90 V</td>
</tr>
<tr>
<td>Min.</td>
<td>60 V</td>
<td>90 V</td>
</tr>
<tr>
<td>Max.</td>
<td>90 V</td>
<td>&lt; 600 V</td>
</tr>
</tbody>
</table>

Service life

| 10 operations 50 Hz, 1 s | 5 A |
| 1 operation 50 Hz, 0.18 s (9 cycles) | 20 A |
| 10 operations 8/20 µs | 5 kA |
| 1 operation 8/20 µs | 10 kA |
| 1 operation 10/350 µs | 1 kA |
| 300 operations 10/1000 µs | 100 A |

Insulation resistance at 100 V<sub>DC</sub>

| > 10 GΩ |

Capacitance at 1 MHz

| < 1.5 pF |

Arc voltage at 1 A

| ~ 10 V |

Glow to arc transition current

| ~ 0.8 A |

Glow voltage

| ~ 55 V |

Weight

| ~ 1.5 g |

Operation and storage temperature

| –40 ... +90 °C |

Climatic category (IEC 60068-1)

| 40/ 90/ 21 |

Certification

| UL 497B (E163070) |

Notes:

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

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

Ordering codes and packing advices
B88069X0180S102 = 100 pcs. on 5 taped stripes  B88069X0180T502 = 500 pcs. on tape and reel
Soldering parameter

Wave soldering

![Wave profile features](image)

**Wave profile features**
- **Pb-free assembly**
- **Solder**: Sn 95.5 / Ag 3.8 / Cu 0.7
- **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.
- 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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