

## Surge arrester

3-electrode arrester

 Series/Type:
 T30-A420X

 Ordering code:
 B88069X3040C253

 Version/Date:
 Issue 05 / 2007-03-29

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### Surge arrester

#### **3-electrode arrester**

B88069X3040C253 T30-A420X

| Features   | Applications                           |  |
|--|--|--|
| <ul> <li>Very small size</li> </ul>              | Line protection                        |  |
| <ul> <li>Extremely fast response time</li> </ul> | <ul> <li>Station protection</li> </ul> |  |
| <ul> <li>High current rating</li> </ul>          | <ul> <li>Base stations</li> </ul>      |  |
| <ul> <li>Stable performance over life</li> </ul> |  |  |
| <ul> <li>Extremely low capacitance</li> </ul>    |  |  |
| <ul> <li>High insulation resistance</li> </ul>   |  |  |
| RoHS-compatible                                  |  |  |

#### **Electrical specifications**

| DC spark-over voltage <sup>1) 2) 4)</sup>   |  | 357 525  | V           |
|---|--|--|-------------|
| Impulse spark-over voltage <sup>4)</sup><br>at 100 V/µs - for 99 % of measured values<br>- typical values of distribution |  | < 750<br>< 700   | VVV         |
| I I   | at 1 kV/µs - for 99 % of measured values<br>- typical values of distribution |  | V<br>V      |
| Service life  |  |  |             |
| 10 operations   | 50 Hz; 1 s <sup>5)</sup>   | 10   | А           |
| 1 operation   | 50 Hz; 0.18 s (9 cycles) <sup>5)</sup>                                       | 30   | А           |
| 10 operations [5x (+) & 5x (-)  | 8/20 μs <sup>5)</sup>  | 10   | kA          |
| 1 operation   | 8/20 μs <sup>5)</sup>  | 10   | kA          |
| 1 operation   | 10/350 µs <sup>5)</sup>  | 2  | kA          |
| Insulation resistance at 100 $V_{dc}$ <sup>4)</sup>   |  | > 10   | GΩ          |
| Capacitance at 1 MHz <sup>4)</sup>  |  | < 1.5  | pF          |
| Transverse delay time <sup>3)</sup>   |  | < 0.2  | μs          |
| Arc voltage at 1 A<br>Glow to arc transition current<br>Glow voltage  |  | ~ 30<br>~ 1<br>~ 200   | V<br>A<br>V |
| Weight  |  | ~ 1.4  | g           |
| Operation and storage temperature   |  | -40 +90  | °C          |
| Climatic category (IEC 60068-1)   |  | 40/ 90/ 21   |             |
| Marking, blue negative  |  | <b>EPCOS</b><br><b>420 YY O</b><br>420 - Nominal voltage<br>YY - Year of production<br>O - Non radioactive |             |

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

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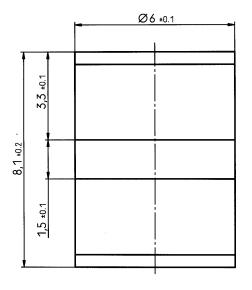
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- <sup>1)</sup> At delivery AQL 0.65 level II, DIN ISO 2859
- <sup>2)</sup> In ionized mode
- <sup>3)</sup> Test according to ITU-T Rec. K.12
- <sup>4)</sup> Tip or ring electrode to center electrode
- <sup>5)</sup> Total current through center electrode,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

Terms in accordance with ITU-T Rec. K.12 and DIN 57845/VDE0845

#### **Dimensional drawing**



tin-plated

Not to scale

Dimensions in mm

Non controlled document

#### **Cautions and warnings**

- Surge arresters must not be operated directly in power supply networks.
- Surge arresters may become hot in case of longer periods of current stress (danger of burning).
- Surge arresters may be used only within their specified values. In case of overload, the head contacts may fail or the component may be destroyed.
- Damaged surge arresters must not be re-used.

#### KB AB E / KB AB PM

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

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