

# Surge arrester

3-electrode arrester

T23-A420X

Series/Type: Ordering code: B88069X8070B502

Version/Date: Issue 09 / 2007-04-23

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

## **Electrical specifications**

| DC spark-over voltage 1) 2) 4)   | 350 550  | V                  |
|--|--|--------------------|
| Impulse spark-over voltage <sup>4)</sup> at 100 V/µs - for 99 % of measured values - typical values of distribution  | < 750<br>< 700   | V                  |
| at 1 kV/µs - for 99 % of measured values - typical values of distribution  | < 850<br>< 800   | V                  |
| Service life  10 operations 50 Hz; 1 s <sup>5)</sup> 1 operation 50 Hz; 9 cycles <sup>5)</sup> 10 operations 8/20 μs <sup>5)</sup> 1 operation 1 operation 10/350 μs <sup>5)</sup> | 10<br>50<br>20<br>25<br>5  | A<br>A<br>kA<br>kA |
| Insulation resistance at 100 V <sub>dc</sub> <sup>4)</sup>   | > 10   | GΩ                 |
| Capacitance at 1 MHz <sup>4)</sup> Transverse delay time <sup>3)</sup>   | < 1.5<br>< 0.2   | pF<br>µs           |
| Arc voltage at 1 A Glow to arc transition current Glow voltage   | ~ 30<br>~ 1<br>~ 200 V   |                    |
| Weight ~ 2.2   |  | g                  |
| Operation and storage temperature  | -40 +90  | °C                 |
| Climatic category (IEC 60068-1)  | 40/ 90/ 21   |                    |
| Marking, blue negative   | EPCOS 420 YY M O  420 - Nominal voltage YY - Year of production M - Month of production (1 9 = Jan Sep; O D = Oct Dec) O - Non radioactive |                    |

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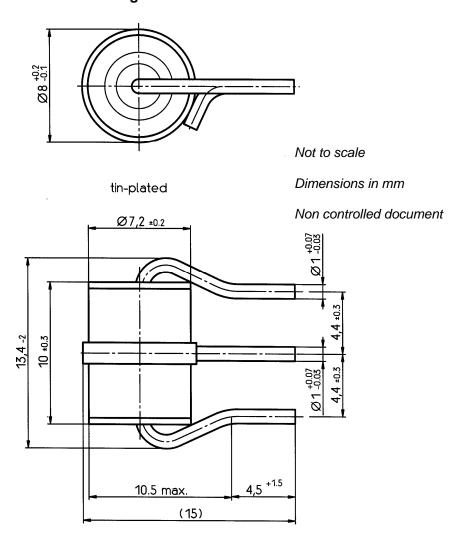
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- 1) At delivery AQL 0.65 level II, DIN ISO 2859
- 2) In ionized mode
- 3) Test according to ITU-T Rec. K.12
- <sup>4)</sup> Tip or ring electrode to center electrode
- Total current through center electrode, half value through tip respectively ring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

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

### **Dimensional drawing**



### **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 lead contacts may fail or the component may be destroyed.
- Damaged surge arresters must not be re-used.

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