



## Surge arrester

3-electrode arrester

**Series/Type:** T23-A350XF1  
**Ordering code:** B88069X7240B502  
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| Features                                                                                                                                                                                                                                                                                    | Applications                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>Standard size</li> <li>Fast response time</li> <li>High current rating</li> <li>Stable performance over life</li> <li>Very low capacitance</li> <li>High insulation resistance</li> <li>Reliable failsafe device</li> <li>RoHS-compatible</li> </ul> | <ul style="list-style-type: none"> <li>Branch exchange (MDF)</li> <li>Line protection</li> <li>Station protection</li> </ul> |

## Electrical specifications

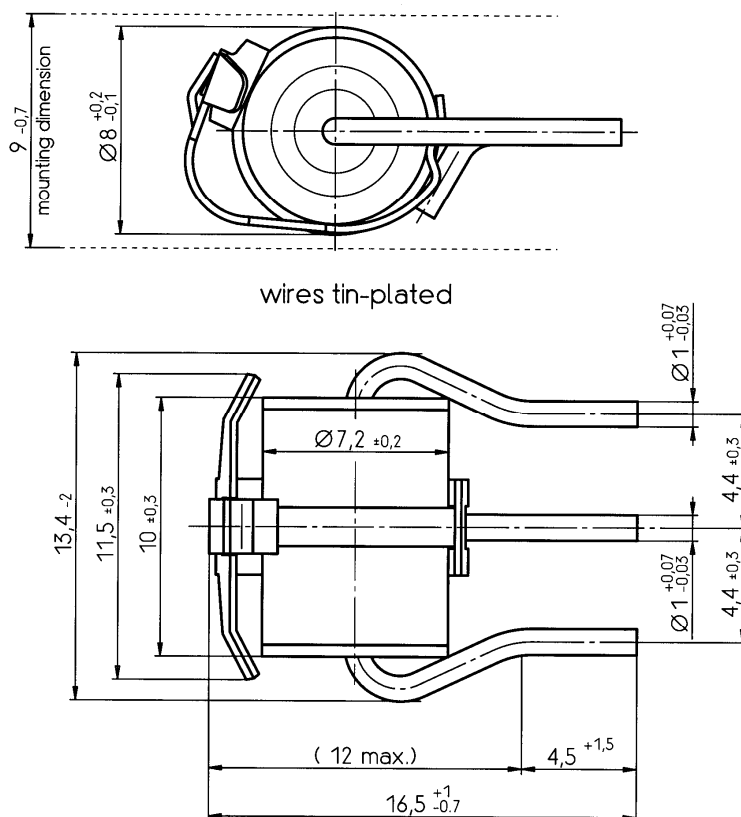
|                                                            |                                                                                                                      |        |
|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|--------|
| DC spark-over voltage <sup>1) 2) 4)</sup>                  | 350<br>± 20                                                                                                          | V<br>% |
| Impulse spark-over voltage <sup>4)</sup>                   |                                                                                                                      |        |
| at 100 V/μs   - for 99 % of measured values                | < 650                                                                                                                | V      |
| - typical values of distribution                           | < 550                                                                                                                | V      |
| at 1 kV/μs   - for 99 % of measured values                 | < 700                                                                                                                | V      |
| - typical values of distribution                           | < 600                                                                                                                | V      |
| Service life                                               |                                                                                                                      |        |
| 10 operations   50 Hz, 1 s <sup>5)</sup>                   | 10                                                                                                                   | A      |
| 1 operation    50 Hz, 0.18 s (9 cycles) <sup>5)</sup>      | 50                                                                                                                   | A      |
| 10 operations   8/20 μs <sup>5)</sup>                      | 20                                                                                                                   | kA     |
| 1 operation    8/20 μs <sup>5)</sup>                       | 25                                                                                                                   | kA     |
| 1 operation    10/350 μs <sup>5)</sup>                     | 5                                                                                                                    | kA     |
| 300 operations 10/1000 <sup>5)</sup>                       | 200                                                                                                                  | A      |
| Insulation resistance at 100 V <sub>dc</sub> <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                                         | ~ 30                                                                                                                 | V      |
| Glow to arc transition current                             | ~ 1                                                                                                                  | A      |
| Glow voltage                                               | ~ 200                                                                                                                | V      |
| Weight                                                     | ~ 2.5                                                                                                                | g      |
| Storage temperature                                        | -40 ... +90                                                                                                          | °C     |
| Climatic category (IEC 60068-1)                            | 40/ 90/ 21                                                                                                           |        |
| Marking, blue negative                                     | <b>EPCOS</b><br><b>350 YY O</b><br>350   - Nominal voltage<br>YY    - Year of production<br>O      - Non radioactive |        |

- 1) At delivery AQL 0.65 level II, DIN ISO 2859
- 2) In ionized mode
- 3) Test according to ITU-T Rec. K.12
- 4) Tip or ring electrode to center electrode
- 5) 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

The arrester failsafe mechanism contains a solder pellet with a melting temperature between 193 and 203 °C.

### Dimensional drawing



Not to scale

Dimensions in mm

Non controlled document

### Cautions and warnings

- The short-circuit spring does not trigger until 180 °C is reached depending on the material. Care must be taken to limit the thermal radiation onto adjacent parts to safe values.
- Depending on the incorporation position, the surge arrester may have to be additionally secured by mechanical means.
- 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.

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