# Surge arrester

3-electrode arrester

**Series/Type:** **T32-A230XF1**
**Ordering code:** **B88069X2320B502**
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| Features | Applications |
|---|---|
| ▪ Very small size<br>▪ Extremely fast response time<br>▪ High current rating<br>▪ Stable performance over life<br>▪ Extremely low capacitance<br>▪ High insulation resistance<br>▪ RoHS-compatible | ▪ Line protection<br>▪ Station protection<br>▪ Base stations |

## Electrical specifications

| | | | |
|---|---|---|---|
| DC spark-over voltage [1) 2) 4)] | | 230<br>± 20 | V<br>% |
| Impulse spark-over voltage [4)] | | | |
| at 100 V/µs | - for 99 % of measured values | < 400 | V |
| | - typical values of distribution | < 350 | V |
| at 1 kV/µs | - for 99 % of measured values | < 450 | V |
| | - typical values of distribution | < 420 | V |
| Service life | | | |
| 10 operations | 50 Hz; 1 s [5) 6)] | 10 | A |
| 1 operation | 50 Hz; 0.18 s (9 cycles) [5)] | 30 | A |
| 10 operations [5x (+) & 5x (-)] | 8/20 µs [5)] | 10 | kA |
| 1 operation | 8/20 µs [5)] | 10 | kA |
| 1 operation | 10/350 µs [5)] | 2 | kA |
| Insulation resistance at 100 $V_{dc}$ [4)] | | > 10 | GΩ |
| Capacitance at 1 MHz [4)] | | < 1.5 | pF |
| Transverse delay time [3)] | | < 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 |
| Storage temperature | | -40 ... +90 | °C |
| Climatic category (IEC 60068-1) | | 40/ 90/ 21 | |
| Marking, blue negative | | **EPCOS**<br>**230 YY O**<br>230 - Nominal voltage<br>YY - Year of production<br>O - Non radioactive | |

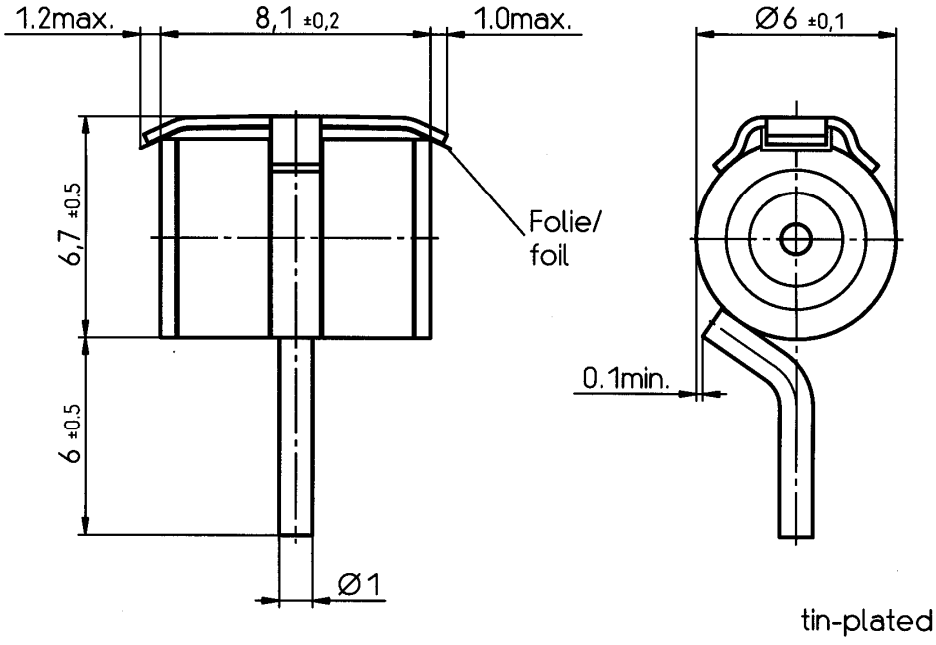
1) At delivery AQL 0.65 level II, DIN ISO 2859
2) In ionized mode
3) Test according to ITU-T Rec. K.12
4) Tip or ring electrode to center electrode
5) Total current through center electrode, half value through tip respectively ring electrode.
6) Voltage of the current source 230 $V_{rms}$

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

The arrester failsafe mechanism contains an insulating foil with a melting temperature of 260 °C.

Arrester failsafe works at temperatures > 260 °C. The arrester has to be fixed mechanically, if the arrester is contacted by soldering and if the solder temperature is less than 260 °C.

## Dimensional drawing




*Not to scale*

*Dimensions in mm*

*Non controlled document*

## Cautions and warnings

- The short-circuit spring does not trigger until 260 °C is reached depending on the sensor material. Care must be taken to limit the thermal radiation onto adjacent parts to safe values.
- If the contacts of the surge arresters are defective, current stress can lead to the formation of sparks and loud noises (bang).
- 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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