



Surge arrester

3-electrode arrester

Series/Type: T83-A350XF1
Ordering code: B88069X9410B502
Version/Date: Issue 07 / 2009-04-30

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

Electrical specifications

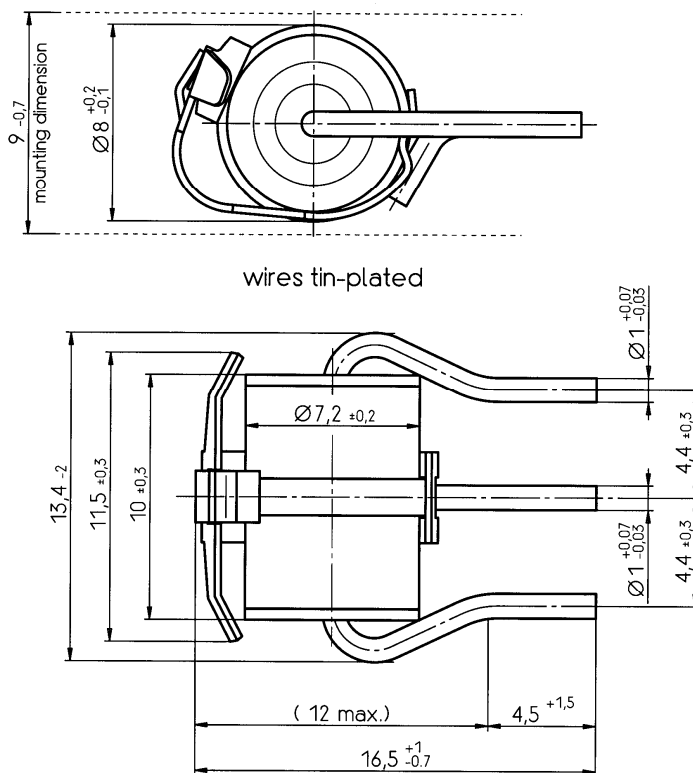
| | | |
|---|--|--------|
| DC spark-over voltage ^{1) 2) 4)} | 350 ± 20 | V % |
| Impulse spark-over voltage ⁴⁾ | | |
| at 100 V/μs - for 99 % of measured values - typical values of distribution | < 700 < 600 | V V |
| at 1 kV/μs - for 99 % of measured values - typical values of distribution | < 900 < 800 | V V |
| Service life | | |
| 10 operations 50 Hz, 1 s ⁵⁾ | 10 | A |
| 1 operation 50 Hz, 0.18 s (9 cycles) ⁵⁾ | 40 | A |
| 10 operations [5x (+) & 5x (-)] 8/20 μs ⁵⁾ | 10 | kA |
| 1 operation 8/20 μs ⁵⁾ | 20 | kA |
| 1 operation 10/350 μs ⁵⁾ | 2.5 | kA |
| 300 operations [150x (+) & 150x (-)] 10/1000 μs ⁵⁾ | 200 | A |
| 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 | ~ 10 | V |
| Glow to arc transition current | < 1 | A |
| Glow voltage | ~ 60 | V |
| Weight | ~ 2.2 | g |
| Storage temperature | -40 ... +90 | °C |
| Climatic category (IEC 60068-1) | 40/ 90/ 21 | |
| Marking, red negative | EPCOS 350 YY O 350 - Nominal voltage YY - Year of production 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 range from 230 to 240 °C.

Dimensional Drawing



Not to scale

Dimensions in mm

Non controlled document

Cautions and warnings

- The short-circuit spring does not trigger until 230 °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.
- Surge arrester with triggered short-circuit mechanisms must not be re-used.

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Release 2018-10

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