



## **Surge arrester**

2-electrode arrester

**Series/Type:** V13-A500XN  
**Ordering code:** B88069X6940C251  
**Issue/Date:** Issue 10 / 2013-04-05

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**Features**

- Standard size
- Maximum current rating
- Fast response time
- Stable performance over life
- Very low capacitance
- High insulation resistance
- RoHS-compatible

**Applications**

- AC power lines N-PE applications
- Class I and class II requirements

**Electrical specifications**

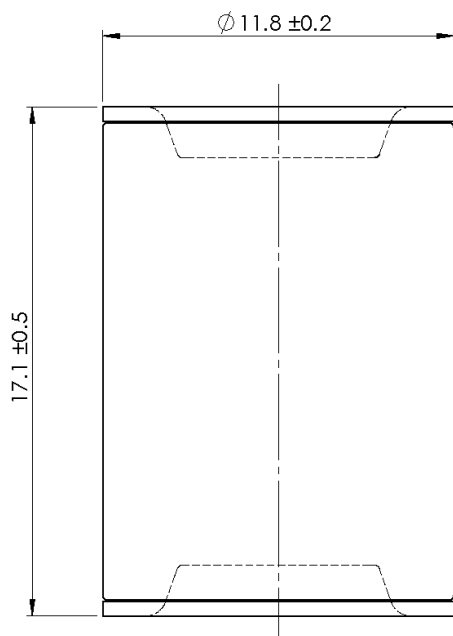
|  |                  |   |            |
|--|------------------|---|------------|
| DC spark-over voltage <sup>1) 2)</sup>   |                  | 500 ... 850   | V          |
| Front of wave spark-over voltage <sup>4)</sup><br>- at 1.2/50 $\mu$ s, 6 kV    |                  | < 1300  | V          |
| Breakdown time<br>- typical values   |                  | < 100<br>< 20   | ns<br>ns   |
| Insulation resistance at 100 V <sub>DC</sub>                                   |                  | > 1   | G $\Omega$ |
| Class I according to EN 61643-11   |                  |   |            |
| Max. continuous operating voltage at 50/60 Hz                                  | U <sub>c</sub>   | 255   | V          |
| Nominal discharge current 8/20 $\mu$ s   | I <sub>n</sub>   | 40  | kA         |
| Impulse current 10/350 $\mu$ s   | I <sub>imp</sub> | 12  | kA         |
| Follow current at 50/60 Hz   | I <sub>f</sub>   | 100   | A          |
| Class II according to EN 61643-11  |                  |   |            |
| Max. continuous operating voltage at 50/60 Hz                                  | U <sub>c</sub>   | 255   | V          |
| Nominal discharge current 8/20 $\mu$ s   | I <sub>n</sub>   | 40  | kA         |
| Maximum discharge current 8/20 $\mu$ s   | I <sub>max</sub> | 60  | kA         |
| Follow current at 50/60 Hz   | I <sub>f</sub>   | 100   | A          |
| AC discharge current (TOV <sup>3)</sup> at 1200 V)<br>1 operation 50 Hz, 0.2 s |                  | 300   | A          |
| Weight   |                  | ~ 6.5   | g          |
| Operation and storage temperature  |                  | -40 ... +90   | °C         |
| Climatic category (IEC 60068-1)  |                  | 40/ 90/ 21  |            |
| Marking, black positive  |                  | <b>EPCOS</b><br><b>500 YY ON</b><br>500 - Nominal voltage<br>YY - Year of production<br>O - Non radioactive<br>N - Series |            |

<sup>1)</sup> At delivery AQL 0.65 level II, DIN ISO 2859

<sup>2)</sup> In ionized mode

<sup>3)</sup> TOV – Temporary over voltage

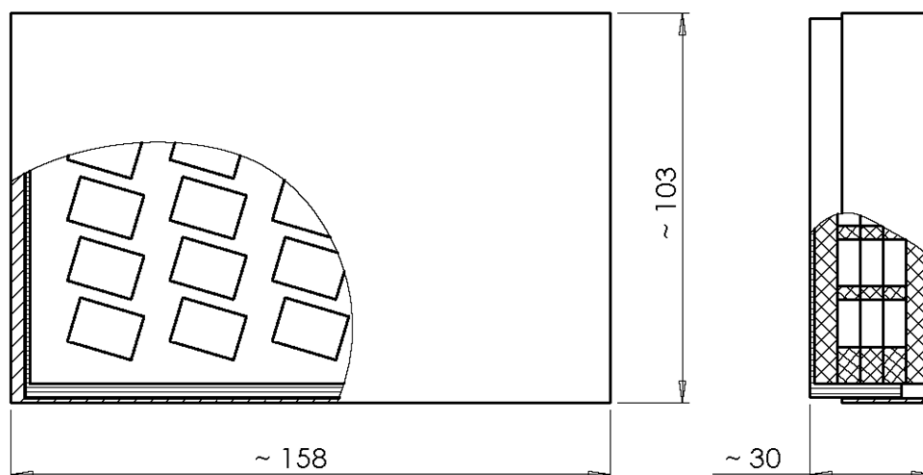
<sup>4)</sup> Values after load: < 1500 V

**Dimensional drawing in mm**


nickel-plated

**Ordering code and packing advice**

**B88069X6940C251** = 25 pcs. in foam tray


**Cautions and warnings**

- The follow current must be limited (see values on page 2) so that the arrester can be properly extinguished when the surge has decayed.
- 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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