



## Surge arrester

2-electrode arrester

**Series/Type:** EM3600X  
**Ordering code:** B88069X2311 \*\*\*\*  
Version/Date: Issue 02 / 2010-05-18

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**Features**

- Very small size
- Fast response time
- Stable performance over life
- Extremely low capacitance
- High insulation resistance
- RoHS-compatible

**Applications**

- AC power line devices
- Consumer electronics
- Power supply

**Electrical specifications**

|                                                                                                             |                                                                                                                     |        |
|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|--------|
| DC spark-over voltage <sup>1) 2)</sup>                                                                      | 3600<br>± 20                                                                                                        | V<br>% |
| Impulse spark-over voltage<br>at 100 V/μs - for 99 % of measured values<br>- typical values of distribution | < 5500<br>< 4000                                                                                                    | V<br>V |
| at 1 kV/μs - for 99 % of measured values<br>- typical values of distribution                                | < 6000<br>< 5500                                                                                                    | V<br>V |
| Service life <sup>3)</sup>                                                                                  |                                                                                                                     |        |
| 10 operations 50 Hz; 1 s                                                                                    | 1                                                                                                                   | A      |
| 3 operations 8/20 μs                                                                                        | 2                                                                                                                   | kA     |
| 300 operations 8/20 μs                                                                                      | 100                                                                                                                 | A      |
| Insulation resistance at 100 V <sub>dc</sub>                                                                | > 1                                                                                                                 | GΩ     |
| Capacitance at 1 MHz                                                                                        | < 1                                                                                                                 | pF     |
| Arc voltage at 1 A                                                                                          | ~ 15                                                                                                                | V      |
| Glow to arc transition current                                                                              | ~ 1                                                                                                                 | A      |
| Glow voltage                                                                                                | ~ 80                                                                                                                | V      |
| Weight                                                                                                      | ~ 1                                                                                                                 | g      |
| Operation and storage temperature                                                                           | -40 ... +90                                                                                                         | °C     |
| Climatic category (IEC 60068-1)                                                                             | 40/ 90/21                                                                                                           |        |
| Marking, red positive                                                                                       | <b>EPCOSEM 3600 YY O</b><br>EM - Series<br>3600 - Nominal voltage<br>YY - Year of production<br>O - Non radioactive |        |

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

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

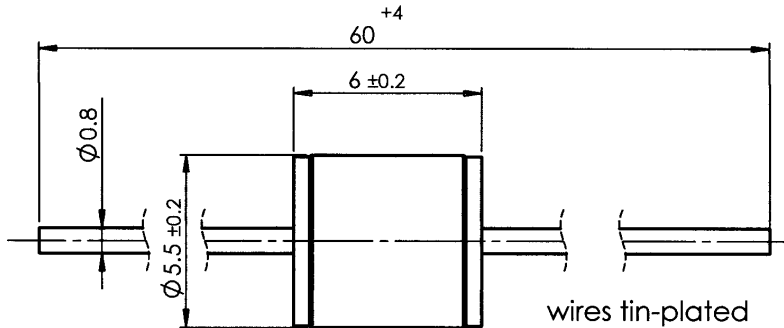
<sup>3)</sup> Arrester has to meet:

Voltage withstand test AC 1500 V, 1 min  
and AC 1800 V, 1 s

with accepted failure rate of 1 %

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

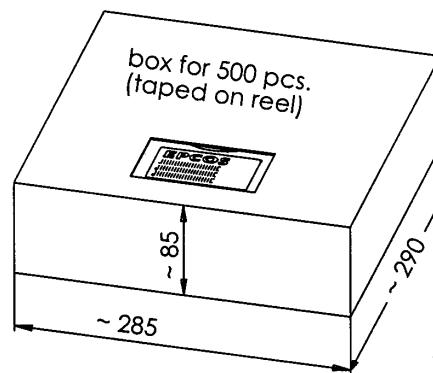
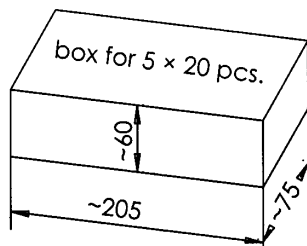
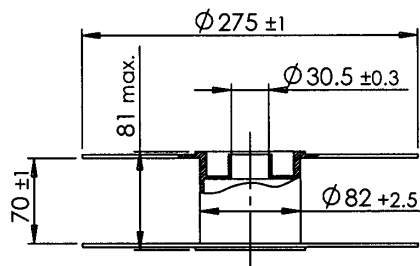
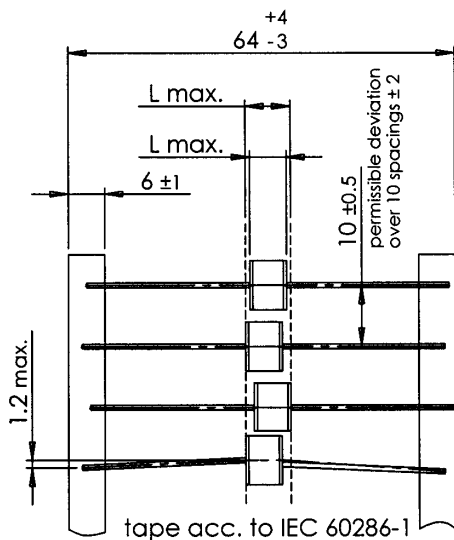
Dimensional drawing in mm



Ordering codes and packing advices

B88069X...**S102** = 100 pcs on 5 taped stripes

B88069X...**T502** = 500 pcs on tape and reel



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

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