



## Surge arrester

### 2-electrode arrester

|                       |                              |
|-----------------------|------------------------------|
| <b>Series/Type:</b>   | <b>EF800X</b>                |
| <b>Ordering code:</b> | <b>B88069X2641****</b>       |
| <b>Version/Date:</b>  | <b>Issue 05 / 2013-09-04</b> |

## Surge arrester

B88069X2641\*\*\*\*

## 2-electrode arrester

EF800X

### Features

- Standard size
- High follow current capability
- Very fast response time
- Stable performance over life
- Very low capacitance
- High insulation resistance
- RoHS-compatible

### Applications

- Application with high follow current
- Power supply

### Electrical specifications

|                                                                          |                                                                                                                            |    |
|--------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|----|
| DC spark-over voltage <sup>1) 2)</sup>                                   | 680 ... 1000                                                                                                               | V  |
| Impulse spark-over voltage                                               |                                                                                                                            |    |
| at 100 V/μs   - for 99% of measured values                               | < 1200                                                                                                                     | V  |
| - typical values of distribution                                         | < 1000                                                                                                                     | V  |
| at 1 kV/μs   - for 99% of measured values                                | < 1300                                                                                                                     | V  |
| - typical values of distribution                                         | < 1100                                                                                                                     | V  |
| Service life                                                             |                                                                                                                            |    |
| 10 operations   50 Hz, 1 s                                               | 5                                                                                                                          | A  |
| 1 operation    50 Hz, 0.18 s (9 cycles)                                  | 65                                                                                                                         | A  |
| 10 operations   8/20 μs                                                  | 5                                                                                                                          | kA |
| 1 operation    8/20 μs                                                   | 10                                                                                                                         | kA |
| Max. follow current during one voltage half cycle at 50 Hz <sup>3)</sup> | 200                                                                                                                        | A  |
| Insulation resistance at 100 V <sub>DC</sub>                             | > 10                                                                                                                       | GΩ |
| Capacitance at 1 MHz                                                     | < 1.5                                                                                                                      | pF |
| Arc voltage at 1 A                                                       | ~ 22                                                                                                                       | V  |
| Glow to arc transition current                                           | < 0.5                                                                                                                      | A  |
| Glow voltage                                                             | ~ 140                                                                                                                      | V  |
| Weight                                                                   | ~ 1.5                                                                                                                      | g  |
| Operation and storage temperature                                        | -40 ... +125                                                                                                               | °C |
| Climatic category (IEC 60068-1)                                          | 40/ 125/ 21                                                                                                                |    |
| Marking, red positive                                                    | <b>EPCOSEF 800 YY O</b><br>EF   - Series<br>800   - Nominal voltage<br>YY   - Year of production<br>O    - Non radioactive |    |

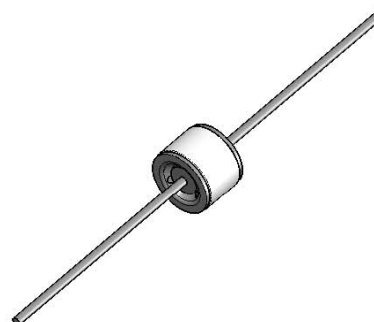
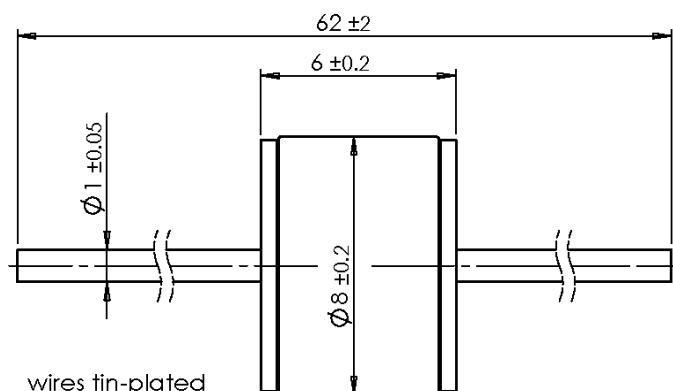
<sup>1)</sup> At delivery AQL 0.65 level II, DIN ISO 2859

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

<sup>3)</sup> Max. continuous operating voltage U<sub>c</sub> = 275 V

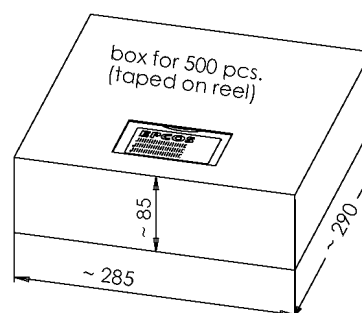
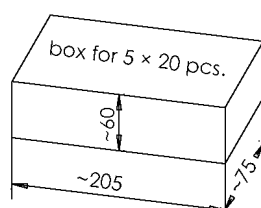
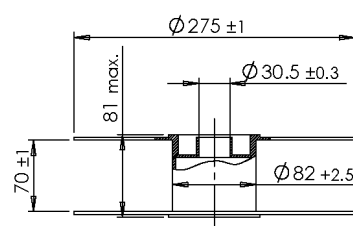
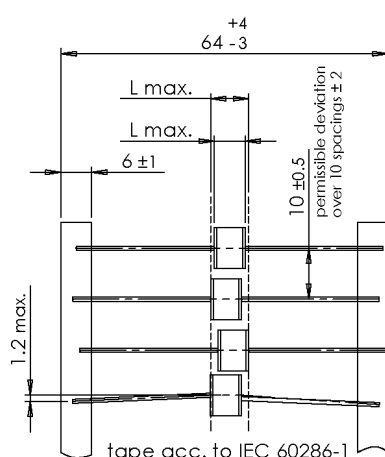
Terms in accordance with ITU-T Rec. K.12; IEC 61663-2 and IEC 61643-311.

# **Dimensional drawing in mm**



# **Ordering codes and packing advices**

*B88069X2641S102 = 100 pcs. on 5 taped stripes    B88069X2641T502 = 500 pcs. on tape and reel*



# **Cautions and warnings**

- Surge arrester must be selected so that the maximum expected follow current can be quenched.
- The follow current must be limited so that the arrester can be properly extinguished when the surge has decayed. The arrester might otherwise heat up and ignite adjacent components.
- 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 lead contacts may fail or the component may be destroyed.
- Surge arresters must be handled with care and must not be dropped.
- Damaged surge arresters must not be re-used.

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