



# Surge Arrester

## 3-Electrode-Arrester

|                       |                        |
|-----------------------|------------------------|
| <b>Series/Type:</b>   | <b>T90-A230XF</b>      |
| <b>Ordering code:</b> | <b>B88069X6710C253</b> |
| <b>Date:</b>          | <b>28.05.2002</b>      |
| <b>Version:</b>       | <b>Issue 04</b>        |

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T90-A230XF

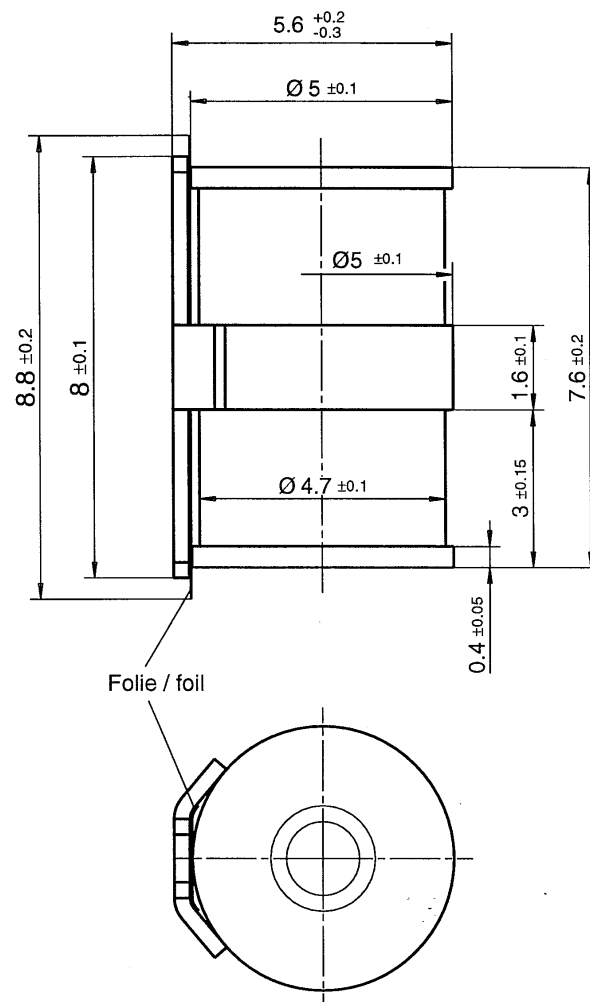
## 3-Electrode-Arrester

Ordering code: B88069X6710C253

|                                                            |                                                                                                                     |                  |
|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|------------------|
| DC spark-over voltage <sup>1) 2) 3)</sup>                  | 184 ... 276                                                                                                         | V                |
| DC spark-over voltage <sup>2) 4)</sup>                     | 176 ... 550                                                                                                         | V                |
| Impulse spark-over voltage                                 |                                                                                                                     |                  |
| at 100 V/μs   - for 99 % of measured values <sup>3)</sup>  | < 650                                                                                                               | V                |
| - for 50 % of measured values <sup>3)</sup>                | < 550                                                                                                               | V                |
| at 1 kV/μs    - for 99 % of measured values <sup>3)</sup>  | < 800                                                                                                               | V                |
| - for 50 % of measured values <sup>3)</sup>                | < 700                                                                                                               | V                |
| Insulation resistance at 100 V <sub>dc</sub> <sup>3)</sup> | > 1                                                                                                                 | GΩ               |
| Capacitance at 1 MHz <sup>3)</sup>                         | < 1.5                                                                                                               | pF               |
| Impulse life                                               |                                                                                                                     |                  |
| 300 operations      10/1000 μs <sup>5)</sup>               | 200                                                                                                                 | A                |
| Nominal impulse discharge current                          |                                                                                                                     |                  |
| 10 operations      8/20 μs <sup>5)</sup>                   | 5                                                                                                                   | kA               |
| 10 operations      8/20 μs <sup>6)</sup>                   | 5                                                                                                                   | kA               |
| Nominal alternating discharge current                      |                                                                                                                     |                  |
| 10 operations      50 Hz; 1 s <sup>5)</sup>                | 5                                                                                                                   | A <sub>rms</sub> |
| 10 operations      50 Hz; 1 s <sup>6)</sup>                | 5                                                                                                                   | A <sub>rms</sub> |
| DC hold-over voltage <sup>8)</sup>                         |                                                                                                                     |                  |
| at 52 V <sub>dc</sub> / 260 Ω                              | < 150                                                                                                               | ms               |
| at 80 V <sub>dc</sub> / 330 Ω                              | < 150                                                                                                               | ms               |
| at 135 V <sub>dc</sub> / 1300 Ω                            | < 150                                                                                                               | ms               |
| Activation after reflow soldering <sup>7)</sup>            |                                                                                                                     |                  |
| 1 operation      U <sub>RMS</sub> = 600 V; 1 s             | 2                                                                                                                   | A                |
| Weight                                                     | ~ 0.8                                                                                                               | g                |
| Storage temperature                                        | -40 ... +90                                                                                                         | °C               |
| Climatic category (IEC 60068-1)                            | 40/ 90/ 21                                                                                                          |                  |
| Marking, blue                                              | <b>EPCOS</b><br><b>230 YY O</b><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) Tip or ring electrode to center electrode
  - 4) Tip to ring electrode
  - 5) Total current through center electrode, half value through tip respectively ring electrode
  - 6) Total current through center electrode, same value through tip respectively ring electrode
  - 7) Total current from ring to tip electrode
  - 8) Test in accordance with ITU-Rec. K.12
- Terms in accordance with ITU-T Rec. K.12 and DIN 57845/VDE 0845

Arrester fail safe works at temperatures  $> 260\text{ }^{\circ}\text{C}$ . The arrester has to be fixed mechanically, if the arrester is contacted by soldering and if the solder temperature is less than  $260\text{ }^{\circ}\text{C}$ .



*Not to scale*

*Dimensions in mm*

*Non controlled document*

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