

# Surge arrester

3-electrode arrester

| Series/Type:<br>Ordering code: | T80-A90X<br>B88069X8360**** |  |
|--------------------------------|-----------------------------|--|
| Date:                          | 2015-09-18                  |  |
| Version:                       | 06                          |  |

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# Surge arrester

#### 3-electrode arrester

B88069X8360\*\*\*\*

T80-A90X

## Features

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

#### **Electrical specifications**

# Applications

- Base stations
- Line protection
- Station protection

| DC spark-over voltage <sup>1) 2) 3)</sup>                                    |                                 | 90<br>±20   | V<br>% |
|--|---------------------------------|---|--------|
| · · · · · · · · · · · · · · · · · · ·  |                                 | <u> </u>  | 70     |
| Impulse spark-over voltage <sup>3)</sup>                                     | of measured values              | < 400   | V      |
| at 100 V/µs - for 99% of measured values<br>- typical values of distribution |                                 | < 300   | V      |
| at 1 kV/µs - for 99% of measured values<br>- typical values of distribution  |                                 | < 550   | V      |
|  |                                 | < 500   | V      |
| Service life   |                                 |   |        |
| 10 operations  | 50 Hz; 1 s <sup>4)</sup>        | 10  | А      |
| 1 operation  | 50 Hz; 0.18 s (9 cycl.) $^{4)}$ | 40  | А      |
| 10 operations [5x (+) & 5x   |                                 | 10  | kA     |
| 1 operation  | 8/20 µs <sup>4)</sup>           | 15  | kA     |
| 1 operation  | 10/350 µs <sup>4)</sup>         | 2   | kA     |
| 300 operations   | 10/1000 µs <sup>4)</sup>        | 200   | А      |
| Insulation resistance at 50 $V_{DC}$ <sup>3)</sup>                           |                                 | > 10  | GΩ     |
| Capacitance at 1 MHz <sup>3)</sup>   |                                 | < 1.5   | pF     |
| Transverse delay time <sup>5)</sup>  |                                 | < 0.2   | μs     |
| Arc voltage at 1 A   |                                 | ~ 15  | V      |
| Glow to arc transition current   |                                 | < 0.5   | А      |
| Glow voltage   |                                 | ~ 70  | V      |
| Weight   |                                 | ~ 2   | g      |
| Operation and storage temperature  |                                 | -40 +90   | °C     |
| Climatic category (IEC 60068-1)  |                                 | 40/090/21   |        |
| Marking, blue negative   |                                 | <b>EPCOS</b><br>90 YY O<br>90 - Nominal voltage<br>YY - Year of production<br>O - Non radioactive |        |
| Certifications   |                                 | UL 497B (E16307   | 70) 🔊  |

Remarks on next page

PPD AB PD / PPD AB PM

# **公TDK**

# Surge arrester

#### **3-electrode arrester**

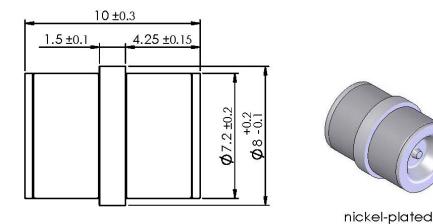
B88069X8360\*\*<sup>\*\*</sup> T80-A90X

1) At delivery AQL 0.65 level II, DIN ISO 2859

- <sup>2)</sup> In ionized mode
- <sup>3)</sup> Tip or ring electrode to center electrode
- <sup>4)</sup> Total current through center electrode, half value through tip respectively ring electrode.
- <sup>5)</sup> Test according to ITU-T Rec. K.12

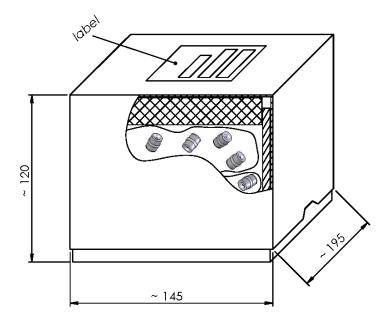
Terms in accordance with ITU-T Rec. K.12; IEC 61663-2 and IEC 61643-311.

# Dimensional drawing in mm



# Ordering code and packing advice

B88069X8360**C203** = 2000 pcs. in container



PPD AB PD / PPD AB PM



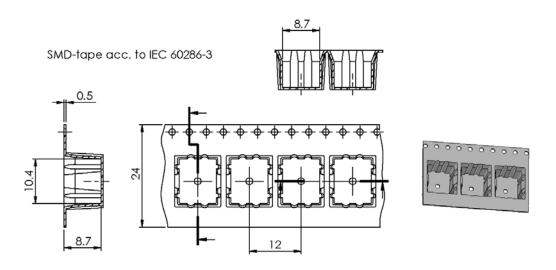
#### Surge arrester

**3-electrode arrester** 

B88069X8360\*\*\*\*

T80-A90X

B88069X8360T502 = SMD-tape with 500 pcs.



#### **Cautions and warnings**

- Do not operate surge arresters in power supply networks, whose maximum operating voltage exceeds the minimum spark-over voltage of the surge arresters.
- If the contacts of the surge arresters are defective, current load can cause sparks and loud noises.
- Surge arresters may become hot in the event of longer periods of current stress (burn risk). In the event of overload the connectors may fail or the component may be destroyed.
- Surge arresters must be handled with care and must not be dropped.
- Do not continue to use damaged surge arresters.

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