

# **Surge arrester**

3-electrode arrester

 Series/Type:
 T23-A230XF4

 Ordering code:
 B88069X8750B502

 Version/Date:
 Issue 09 / 2007-10-18

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Surge arrester B88069X8750B502
3-electrode arrester T23-A230XF4

Features	Applications
<ul> <li>Standard size</li> </ul>	<ul><li>Branch exchange (MDF)</li></ul>
<ul> <li>Fast response time</li> </ul>	<ul><li>Line protection</li></ul>
<ul> <li>High current rating</li> </ul>	<ul> <li>Station protection</li> </ul>
<ul> <li>Stable performance over life</li> </ul>	
<ul> <li>Very low capacitance</li> </ul>	
<ul> <li>High insulation resistance</li> </ul>	
<ul> <li>Reliable failsafe device</li> </ul>	
<ul> <li>RoHS-compatible</li> </ul>	

## **Electrical specifications**

DC spark-over voltage 1) 2) 4)		230 ± 20	V %
Impulse spark-over voltage <sup>4)</sup> at 100 V/µs - for 99 % of measured values - typical values of distribution		< 400 < 350	V
• • • • • • • • • • • • • • • • • • •	<ul><li>for 99 % of measured values</li><li>typical values of distribution</li></ul>		V
Service life 10 operations 1 operation 10 operations [5x (+) & 5x (-)] 1 operation 1 operation 300 operations	50 Hz, 1 s <sup>5)</sup> 50 Hz, 0.18 s (9 cycles) <sup>5)</sup> 8/20 μs <sup>5)</sup> 8/20 μs <sup>5)</sup> 10/350 μs <sup>5)</sup> 10/1000 μs <sup>5)</sup>	10 50 20 25 5 200	A A kA kA kA
Insulation resistance at 100 V <sub>dc</sub> <sup>4)</sup>		> 10	GΩ
Capacitance at 1 MHz <sup>4)</sup>		< 1.5	pF
Transverse delay time 3)		< 0.2	μs
Arc voltage at 1 A Glow to arc transition current Glow voltage		~ 35 ~ 1 ~ 200	V A V
Weight		~ 2	g
Storage temperature		-40 +90	°C
Climatic category (IEC 60068-1)		40/ 90/ 21	
Marking, blue negative		EPCOS 230 YY O 230 - Nominal voltage YY - Year of producti O - Non radioactive	

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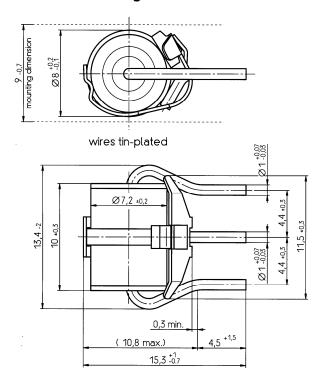
### 3-electrode arrester T23-A230XF4

- a) xxxx = B102 (100 pcs. on tray) B502 (500 pcs. on tray)
- 1) At delivery AQL 0.65 level II, DIN ISO 2859
- 2) In ionized mode
- 3) Test according to ITU-T Rec. K.12
- Tip or ring electrode to center electrode
- Total current through center electrode, half value through tip respectively ring electrode.

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

The arrester failsafe mechanism contains a solder pellet with a melting temperature between 193 and 203 °C.

#### **Dimensional drawing**



Not to scale

Dimensions in mm

Non controlled document

#### **Cautions and warnings**

- The short-circuit spring does not trigger until 180 °C is reached depending on the material. Care must be taken to limit the thermal radiation onto adjacent parts to safe values.
- Depending on the incorporation position, the surge arrester may have to be additionally secured by mechanical means.
- 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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