

# **Surge arrester**

3-electrode arrester

 Series/Type:
 EZ3-A250XF1

 Ordering code:
 B88069X4521B502

 Version/Date:
 Issue 02 / 2007-09-06

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3-electrode arrester EZ3-A250XF1

Features	Applications	
<ul> <li>Extremely small size</li> </ul>	Branch exchange (MDF)	
<ul> <li>Fast response time</li> </ul>	Line protection	
<ul> <li>High current rating</li> </ul>	Station protection	
<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)			250 ± 20	V %
	4)		± 20	,,,
Impulse spark-over voltage <sup>4)</sup> at 100 V/µs - for 99 % of measured values - typical values of distribution		< 600 < 450	V	
•	<ul><li>for 99 % of measured values</li><li>typical values of distribution</li></ul>		< 750 < 600	V
Service life				
10 operations		50 Hz, 1 s <sup>5)</sup>	5	Α
1 operation		50 Hz, 0.18 s <sup>5)</sup>	5	Α
10 operations [5x (+	·) & 5x (–)]	8/20 μs <sup>5)</sup>	5	kA
1 operation		10/350 μs <sup>5)</sup>	1	kA
300 operations (altern	nating polarity)	10/1000 μs <sup>5)</sup>	200	Α
Insulation resistance at 100 V <sub>dc</sub> <sup>4)</sup>		> 1	$G\Omega$	
Capacitance at 1 MHz <sup>4)</sup>		< 1.5	pF	
DC holdover voltage $^{3)}$ at 135 V <sub>dc</sub> / 1300 $\Omega$			< 150	ms
Transverse delay time 3)		< 0.2	μs	
Arc voltage at 1 A Glow to arc transition current Glow voltage		~ 10 ~ 1 ~ 80	V A V	
Weight		~ 1.0	g	
Storage temperature		-40 <b>+</b> 90	°C	
Climatic category (IEC 60068-1)		40/ 90/ 21		
Marking, blue negative		EPCOS EZ 250 YY O EZ - Series 250 - Nominal voltage YY - Year of production O - Non radioactive		
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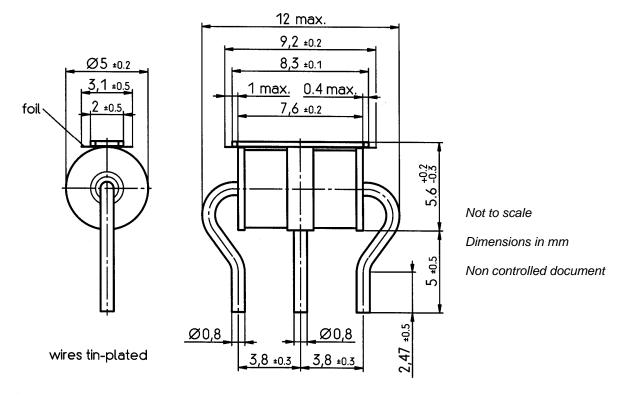
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- 1) At delivery AQL 0.65 level II, DIN ISO 2859
- 2) In ionized mode
- 3) Test according to ITU-T Rec. K.12
- 4) Tip or ring electrode to center electrode
- 5) Total current through center electrode, half value through tip respectively ring electrode.

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

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

### **Dimensional Drawing**



#### **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.
- Surge arrester with triggered short-circuit mechanism must not be re-used.

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