

# 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 %
Impulse spark-over voltage 4)			
• • • • • • • • • • • • • • • • • • •			V
• • • • • • • • • • • • • • • • • • •	% of measured values values of distribution	< 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 (+) & 9	5x (–)] 8/20 μs <sup>5)</sup>	5	kA
1 operation	10/350 µs <sup>5)</sup>	1	kA
300 operations (alternating	ng 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 $V_{dc}$ / 1300 $\Omega$		< 150	ms
Transverse delay time 3)		< 0.2	μs
Arc voltage at 1 A		~ 10	V
Glow to arc transition current		~ 1	Α
Glow voltage		~ 80	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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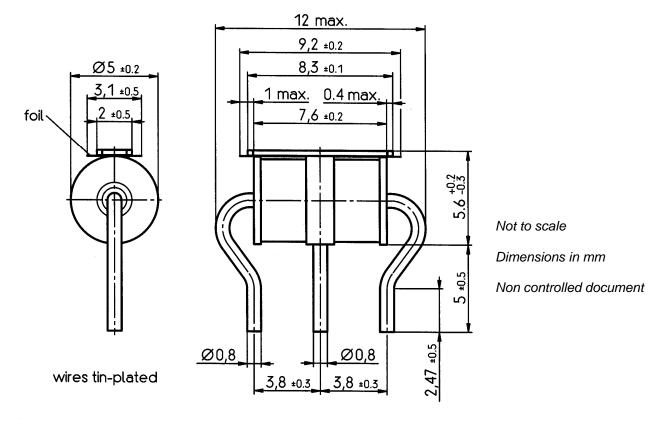
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- 1) At delivery AQL 0.65 level II, DIN ISO 2859
- 2) In ionized mode
- 3) Test according to ITU-T Rec. K.12
- <sup>4)</sup> Tip or ring electrode to center electrode
- Total current through center electrode, half value through tip respectively ring electrode.

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

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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