

# Surge arrester

3-electrode arrester

Series/Type: T31-A90X Ordering code: B88069X2

Ordering code: B88069X2261B252

Version/Date: Issue 03 / 2007-03-29



Surge arrester B88069X2261B252

3-electrode arrester T31-A90X

Features	Applications
<ul><li>Very small size</li></ul>	■ Modem
<ul> <li>Extremely fast response time</li> </ul>	<ul> <li>Data lines</li> </ul>
<ul> <li>High current rating</li> </ul>	
<ul> <li>Stable performance over life</li> </ul>	
<ul> <li>Extremely low capacitance</li> </ul>	
<ul> <li>High insulation resistance</li> </ul>	
<ul> <li>RoHS-compatible</li> </ul>	

## **Electrical specifications**

DC spark-over voltage 1) 2) 4)			90 ± 20	V %
Impulse spark-over voltage <sup>4)</sup> at 100 V/µs - for 99 % of measured values - typical values of distribution			< 450 < 300	V
at 1 kV/μs	<ul><li>typical values of distribution</li><li>for 99 % of measured values</li><li>typical values of distribution</li></ul>		< 500 < 500 < 380	V V
Service life				
10 operations	3	50 Hz; 1 s <sup>5)</sup>	10	Α
1 operation		50 Hz; 0.18 s (9 cycles) 5)	30	Α
10 operations	S [5x (+) & 5x (-)]	8/20 μs <sup>5)</sup>	10	kA
1 operation		8/20 μs <sup>5)</sup>	12	kA
2 operations	3	10/350 μs <sup>5)</sup>	5	kA
Insulation resistance a	at 50 V <sub>dc</sub> <sup>4)</sup>		> 10	$G\Omega$
Capacitance at 1 MHz	4)		< 1.5	pF
Transverse delay time	; <sup>3)</sup>		< 0.2	μs
Arc voltage at 1 A			~ 10	V
Glow to arc transition current			~ 1	A V
Glow voltage			~ 60	V
Weight			~ 1.4	g
Operation and storage	e temperature		-40 +90	°C
Climatic category (IEC 60068-1)		40/ 90/ 21		
Marking, blue negative	e		EPCOS 90 YY O 90 - Nominal voltage YY - Year of production O - Non radioactive	

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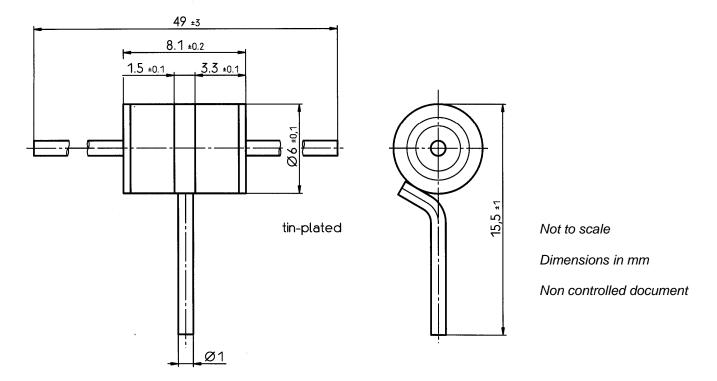
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- 1) At delivery AQL 0.65 level II, DIN ISO 2859
- 2) In ionized mode
- 3) Test according to ITU-T Rec. K.12
- 4) Tip or ring electrode to center electrode
- Total current through center electrode, half value through tip respectively ring electrode.

Terms and current waveforms in accordance with:

ITU-T Rec. K.12; IEC 61643-21 and DIN 57845/VDE0845

## **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.

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