Surge arrester

3-electrode arrester

Series/Type:	**T33-A250XF1**
Ordering code:	**B88069X3971B502**
Version/Date:	Issue 02 / 2006-06-08

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Surge arrester	B88069X3971B502
3-electrode arrester	**T33-A250XF1**

Features	Applications
▪ Very small size ▪ Extremely fast response time ▪ High current rating ▪ Stable performance over life ▪ Extremely low capacitance ▪ High insulation resistance ▪ Reliable fail safe device ▪ RoHS-compatible	▪ Branch exchange (MDF) ▪ Line protection ▪ Station protection

Electrical specifications

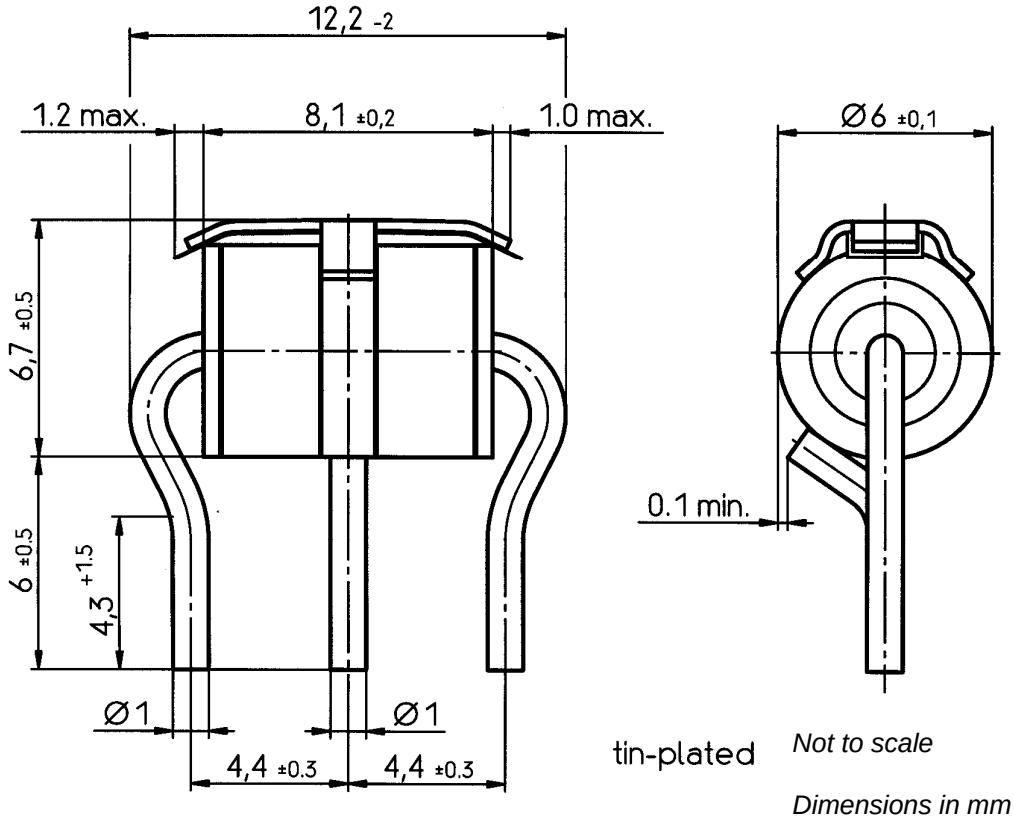
DC spark-over voltage (line to ground) [1) 2)) 4)]	200 ... 300	V
DC spark-over voltage (line to line) [1) 2) 6)]	200 ... 450	V
Impulse spark-over voltage [4)]		
at 100 V/µs - for 99 % of measured values	< 500	V
at 100 V/µs - typical values of distribution	< 400	V
at 1 kV/µs - for 99 % of measured values	< 550	V
at 1 kV/µs - typical values of distribution	< 450	V
Nominal impulse discharge current (wave 8/20 µs) [5)]	10	kA
Single impulse discharge current (wave 8/20 µs) [5)]	10	kA
Nominal alternating discharge current (50 Hz, 1 s) [5)]	5	A
Insulation resistance at 100 V_{dc} [4)]	> 10	GΩ
Capacitance at 1 MHz [4)]	< 1.5	pF
Transverse delay time [3)]	< 0.2	µs
Arc voltage at 1 A	~ 30	V
Glow to arc transition current	~ 1	A
Glow voltage	~ 200	V
Weight	~ 1.4	g
Storage temperature	-40 ... +90	°C
Climatic category (IEC 60068-1)	40/ 90/ 21	
Marking, blue negative	**EPCOS** **250 YY O** 250 - Nominal voltage YY - Year of production O - Non radioactive	

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.
6) Tip or ring electrode (L1) to tip or ring electrode (L2)

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

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

Dimensional drawing



Not to scale

Dimensions in mm

Non controlled document

Cautions and warnings

- The short-circuit spring does not trigger until 260 °C is reached depending on the material. care must be taken to limit the thermal radiation onto adjacent parts to safe values.
- 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.

Important notes

The following applies to all products named in this publication:

1. Some parts of this publication contain **statements about the suitability of our products for certain areas of application**. These statements are based on our knowledge of typical requirements that are often placed on our products in the areas of application concerned. We nevertheless expressly point out **that such statements cannot be regarded as binding statements about the suitability of our products for a particular customer application.** As a rule we are either unfamiliar with individual customer applications or less familiar with them than the customers themselves. For these reasons, it is always ultimately incumbent on the customer to check and decide whether a product with the properties described in the product specification is suitable for use in a particular customer application.
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Release 2018-10

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