



Surge arrester

3-electrode arrester

Series/Type:	T83-A230XF1
Ordering code:	B88069X9420B502
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Features	Applications
- Standard size - Fast response time - High current rating - Stable performance over life - Very low capacitance - High insulation resistance - Reliable failsafe device - RoHS-compatible	- Branch exchange (MDF) - Line protection - Station protection

Electrical specifications

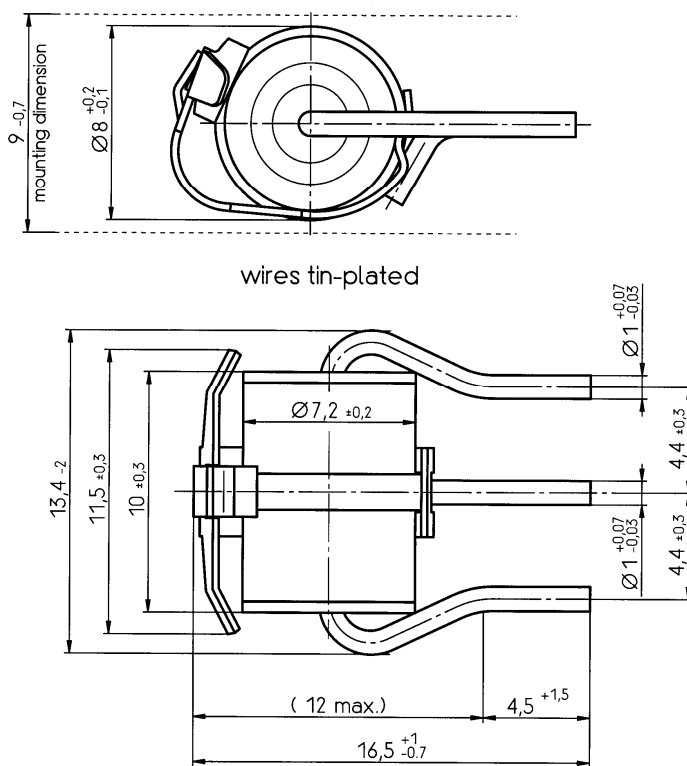
DC spark-over voltage ^{1) 2) 4)}	230 ± 20	V %
Impulse spark-over voltage ⁴⁾		
at 100 V/μs - for 99 % of measured values - typical values of distribution	< 450 < 400	V V
at 1 kV/μs - for 99 % of measured values - typical values of distribution	< 650 < 600	V V
Service life		
10 operations 50 Hz, 1 s ⁵⁾	10	A
1 operation 50 Hz, 0.18 s (9 cycles) ⁵⁾	40	A
10 operations [5× (+) & 5× (-)] 8/20 μs ⁵⁾	10	kA
1 operation 8/20 μs ⁵⁾	15	kA
1 operation 10/350 μs ⁵⁾	5	kA
300 operations [150× (+) & 150× (-)] 10/1000 μs ⁵⁾	200	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	~ 25	V
Glow to arc transition current	< 1	A
Glow voltage	~ 200	V
Weight	~ 2.2	g
Storage temperature	-40 ... +90	°C
Climatic category (IEC 60068-1)	40/ 90/ 21	
Marking, red negative	EPCOS 230 YY O 230 - 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.

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 range from 193 to 203 °C.

Dimensional Drawing



Not to scale

Dimensions in mm

Non controlled document

Cautions and warnings

- The short-circuit spring does not trigger until 190 °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.
- Surge arrester with triggered short-circuit mechanisms must not be re-used.

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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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