

Surge arrester

3-electrode arrester

 Series/Type:
 T33-A230XF1

 Ordering code:
 B88069X9550B502

 Version/Date:
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3-electrode arrester T33-A230XF1

Features	Applications
Very small size	Line protection
 Extremely fast response time 	Station protection
 High current rating 	 Base stations
 Stable performance over life 	
 Extremely low capacitance 	
 High insulation resistance 	
 Reliable failsafe device 	
 RoHS-compatible 	

Electrical specifications

DC spark-over voltage	e ^{1) 2) 4)}		230 ± 20	V %
Impulse spark-over voltage ⁴⁾ at 100 V/µs - for 99 % of measured values - typical values of distribution		< 400 < 350	V	
at 1 kV/μs	for 99 % of measured valuestypical values of distribution		< 450 < 420	V V
Service life				
10 operations	3	50 Hz; 1 s ^{5) 6)}	10	Α
1 operation		50 Hz; 0.18 s (9 cycles) 5)	30	Α
10 operations	S [5x (+) & 5x (-)]	8/20 μs ⁵⁾	10	kA
1 operation		8/20 μs ⁵⁾	10	kA
1 operation		10/350 μs ⁵⁾	2	kA
Insulation resistance at 100 V _{dc} ⁴⁾		> 10	$G\Omega$	
Capacitance at 1 MHz ⁴⁾		< 1.5	pF	
Transverse delay time 3)		< 0.2	μs	
Arc voltage at 1 A Glow to arc transition current Glow voltage		~ 30 ~ 1 ~ 200	V A V	
Weight			~ 1.4	g
Storage temperature			-40 +90	°C
Climatic category (IEC 60068-1)		40/ 90/ 21		
Marking, blue negative		EPCOS 230 YY O 230 - Nominal voltage YY - Year of production O - Non radioactive		

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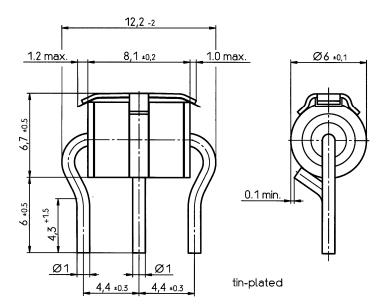
- At delivery AQL 0.65 level II, DIN ISO 2859
- 2) In ionized mode
- 3) Test according to ITU-T Rec. K.12
- 4) Tip or ring electrode to center electrode
- 5) Total current through center electrode, half value through tip respectively ring electrode.
- 6) Voltage of the current source 230 V_{RMS}

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

The arrester failsafe mechanism contains an insulating foil with a melting temperature of 260 °C.

Arrester failsafe 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 sensor material. Care must be taken to limit the thermal radiation onto adjacent parts to safe values.
- If the contacts of the surge arresters are defective, current stress can lead to the formation of sparks and loud noises.
- 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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