

Surge arrester

3-electrode arrester

Series/Type: T32-A230XF1 Ordering code: B88069X2320B502

Version/Date: Issue 04 / 2007-08-10

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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 	
 RoHS-compatible 	

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		< 400 < 350	V	
at 1 kV/μs	- for 99 % of measured values - typical values of distribution		< 450 < 420	V
Service life				
10 operations	;	50 Hz; 1 s ^{5) 6)}	10	Α
1 operation		50 Hz; 0.18 s (9 cycles) 5)	30	Α
10 operations	5 [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 a	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 Glow voltage		~ 1 ~ 200	A V	
				+
Weight			~ 1.4	g
Storage temperature			-40 +90	°C
Climatic category (IEC 60068-1)		40/ 90/ 21		
Marking, blue negative	e		EPCOS 230 YY O 230 - Nominal voltage YY - Year of production O - Non radioactive	

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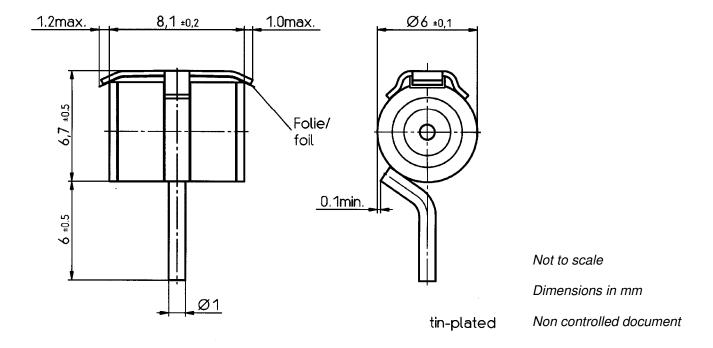
- 1) At delivery AQL 0.65 level II, DIN ISO 2859
- 2) In ionized mode
- 3) Test according to ITU-T Rec. K.12
- Tip or ring electrode to center electrode
- Total current through center electrode, half value through tip respectively ring electrode.
- 6) Voltage of the current source 230 V_{rms}

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 $^{\circ}$ 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

- 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 (bang).
- 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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