



Surge arrester

3-electrode arrester

Series/Type: T33-A350X8F1
Ordering code: B88069X9921B502
Version/Date: Issue 02 / 2011-03-15

Features

- Very small size
- Fast response time
- High current rating
- Stable performance over life
- Very low capacitance
- High insulation resistance
- Reliable failsafe device
- RoHS-compatible

Applications

- Branch exchange (MDF)
- Line protection
- Station protection

Electrical specifications

DC spark-over voltage ^{1) 2) 4)}	350 ± 20	V %
Impulse spark-over voltage ⁴⁾		
at 100 V/μs - for 99 % of measured values	< 700	V
- typical values of distribution	< 650	V
at 1 kV/μs - for 99 % of measured values	< 850	V
- typical values of distribution	< 800	V
Service life		
10 operations 50 Hz; 1 s ⁵⁾	10	A
1 operation 50 Hz; 0.18 s (9 cycles) ⁵⁾	30	A
10 operations [5x (+) & 5x (-)] 8/20 μs ⁵⁾	10	kA
1 operation 8/20 μs ⁵⁾	10	kA
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	~ 10	V
Glow to arc transition current	~ 1	A
Glow voltage	~ 50	V
Weight	~ 1.4	g
Storage temperature	-40 ... +90	°C
Climatic category (IEC 60068-1)	40/ 90/ 21	
Marking, blue negative	EPCOS 350 YY O 350 - 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

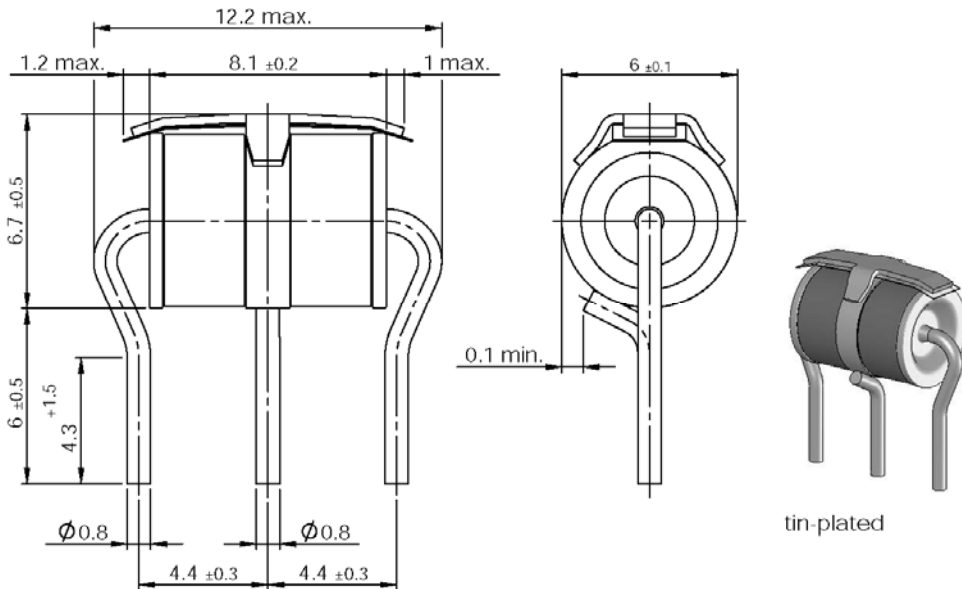
⁵⁾ Total current through center electrode, half value through tip respectively ring electrode.

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

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

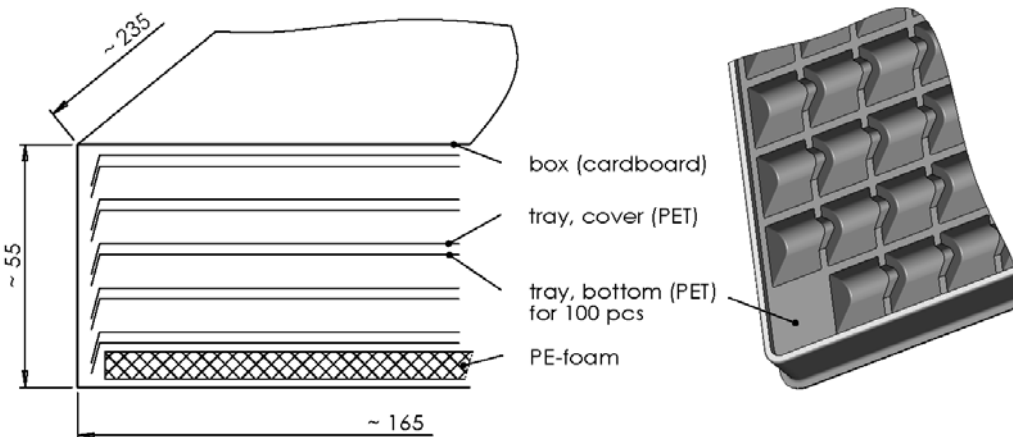
Arrester failsafe works at temperatures > 260 °C. The arrester has to be fixed mechanically, if the arrester is contacted by soldering and if the solder temperature is less than 260 °C.

Dimensional drawing in mm



Ordering code and packing advice

B88069X9921B502 = 500 pcs on trays



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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