Surge arrester

2-electrode arrester

Series/Type:	**EM3000X**
Ordering code:	**B88069X3431******
Version/Date:	Issue 02 / 2013-08-30

Surge arrester — B88069X3431****

2-electrode arrester — EM3000X

Features

- Very small size
- Fast response time
- Stable performance over life
- Extremely low capacitance
- High insulation resistance
- RoHS-compatible

Applications

- AC power line devices
- Consumer electronics
- Power supply

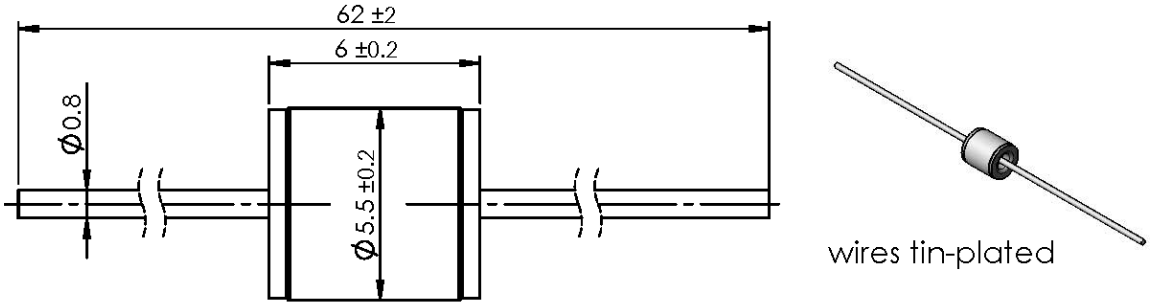
Electrical specifications

DC spark-over voltage [1) 2)]	2550 ... 3600	V
Impulse spark-over voltage		
at 100 V/µs - for 99% of measured values	< 4500	V
at 100 V/µs - typical values of distribution	< 4000	V
at 1 kV/µs - for 99% of measured values	< 5500	V
at 1 kV/µs - typical values of distribution	< 5000	V
Service life [3)]		
10 operations 50 Hz; 1 s	1	A
300 operations 8/20 µs	100	A
3 operations 8/20 µs	2	kA
Insulation resistance at 100 V_{DC}	> 1	GΩ
Capacitance at 1 MHz	< 1	pF
Arc voltage at 1 A	~ 15	V
Glow to arc transition current	~ 1	A
Glow voltage	~ 80	V
Weight	~ 1	g
Operation and storage temperature	-40 ... +90	°C
Climatic category (IEC 60068-1)	40/ 90/21	
Marking, red positive	EPCOS EM 3000 YY O EM - Series 3000 - 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) Voltage withstand test AC 1500 V, 1 min.

Terms in accordance with ITU-T Rec. K.12; IEC 61663-2 and IEC 61643-311.

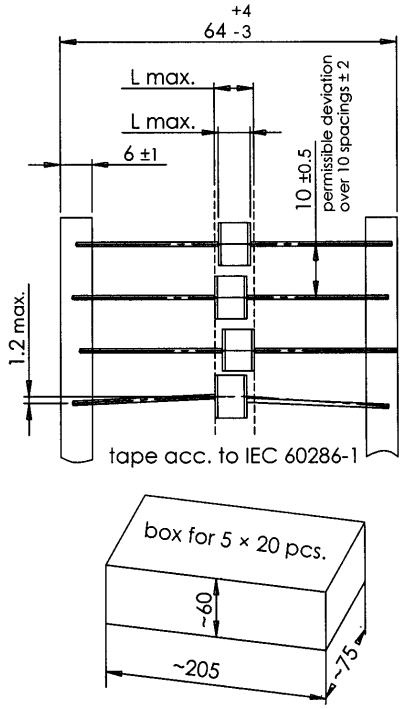
Dimensional drawing in mm

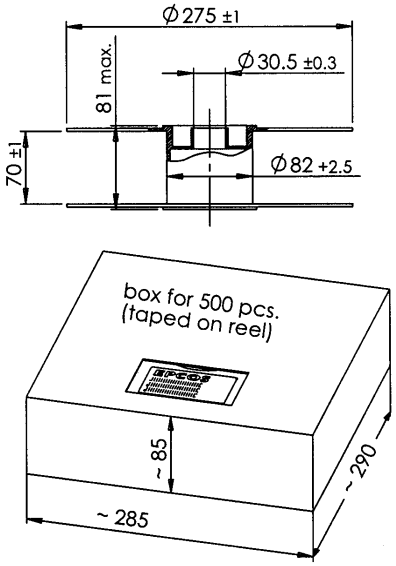


Ordering codes and packing advices

B88069X3431**S102** = 100 pcs. on 5 taped stripes

B88069X3431**T502** = 500 pcs. on tape & reel





Cautions and warnings

- Surge arresters must not be operated directly in power supply networks.
- Surge arresters may become hot in the event of longer periods of current stress (danger of burning).
- Electromagnetic fields and ionizing radiation may affect the electrical characteristics of the arresters. The impact of this kind of disturbances (inductive and capacitive comply, field distortion by nearby conductors) has to be avoided by circuit design.
- Surge arresters may be used only within their specified values. In the event of overload, the lead contacts may fail or the component may be destroyed.
- Surge arresters must be handled with care and must not be dropped.
- 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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