

# Surge arrester

2-electrode arrester

Series/Type: A81-A500X Ordering code: B88069X1490\*\*\*\*

Date: 2019-06-27

Version: 07

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Surge arrester B88069X1490\*\*\*\*

2-electrode arrester A81-A500X

#### **Features**

- Standard size
- Fast response time
- High current rating
- Stable performance over life
- Very low capacitance
- High insulation resistance
- RoHS-compatible

## **Applications**

- Line protection
- Consumer electronics

#### **Electrical specifications**

DC spark-over voltage			500	V
Tolerance	₹ * *		±20	<b>v</b> %
Min.			400	V
Max.			600	V
Impulse spark-over vo	oltage			
. at 100 V/μs	- for 99% of measured values		< 1000	V
•	- typical values of distribution		< 900	V
at 1 kV/μs	- for 99% of measured values		< 1100	V
·	- typical values of distribution		< 1000	V
Service life				
10 operations	3	50 Hz, 1 s	20	Α
1 operation		50 Hz, 0.18 s (9 cycles)	100	Α
10 operations	3	8/20 μs	20	kA
1 operation		8/20 μs	25	kA
1 operation		10/350 μs	2.5	kA
Insulation resistance	at 100 V <sub>DC</sub>		> 10	$G\Omega$
Capacitance at 1 MHz	Z		< 1.5	pF
Arc voltage at 1 A			~ 10	V
Glow to arc transition current			< 0.8	Α
Glow voltage			~ 60	V
Weight			~ 1.5	g
Operation and storage temperature			-40 +125	°C
Climatic category (IEC 60068-1)			40/125/21	
Marking, blue negative			EPCOS 500 YY O 500 - Nominal voltage YY - Year of production O - Non radioactive	
Certification			UL 497B (E163070)	<i>71</i> 2

<sup>1)</sup> At delivery AQL 0.65 level II, DIN ISO 2859

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

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<sup>2)</sup> In ionized mode

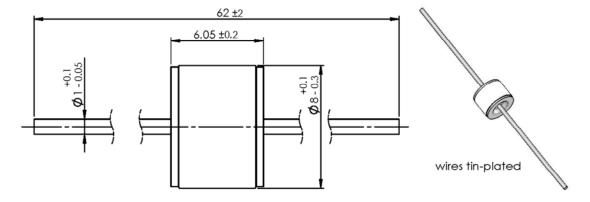


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## 2-electrode arrester

A81-A500X

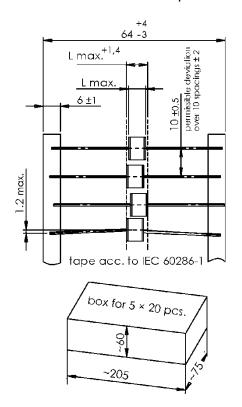
## Dimensional drawing in mm

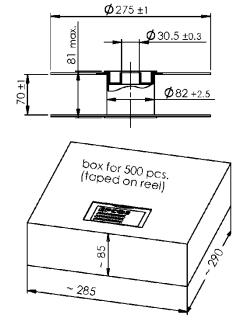


## Ordering codes and packing advices

B88069X1490**S102** = 100 pcs. on 5 taped stripes

B88069X1490**T502** = 500 pcs. on tape & reel





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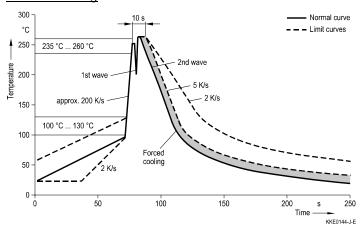


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#### 2-electrode arrester A81-A500X

#### Soldering parameter

#### Wave soldering



Wave profile features	Pb-free assembly	
Solder	Sn 95.5 / Ag 3.8 / Cu 0.7	
Solder bath temperature	263 (±3) °C	
Dwell time	< 3 s	

Soldering profile applied to a single soldering process.

#### **Cautions and warnings**

- Do not operate surge arresters in power supply networks, whose maximum operating voltage exceeds the minimum spark-over voltage of the surge arresters.
- Surge arresters may become hot in the event of longer periods of current stress (burn risk). In the
  event of overload the connectors may fail or the component may be destroyed.
- If the contacts of the surge arresters are defective, current load can cause sparks and loud noises.
- Surge arresters must be handled with care and must not be dropped.
- Do not continue to use damaged surge arresters.

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## Important notes

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