

# Surge arrester

## 2-electrode arrester

Series/Type: A81-C90X

Ordering code: B88069X1380S102

Date: 2015-09-14

Version: 10

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Surge arrester B88069X1380S102

## 2-electrode arrester A81-C90X

#### **Features**

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

#### **Applications**

- Tower mounted amplifier
- Consumer electronic
- Alarm systems

## **Electrical specifications**

DC spark-over voltag	e <sup>1) 2)</sup>	90	V
Tolerance		±20	%
Min.		72	V
Max.		108	V
Impulse spark-over ve	oltage		
at 100 V/μs	- for 99% of measured values	< 500	V
	<ul> <li>typical values of distribution</li> </ul>	< 450	V
at 1 kV/µs	- for 99% of measured values	< 600	V
	<ul> <li>typical values of distribution</li> </ul>	< 550	V
Service life			
10 operation	s 50 Hz, 1 s	20	Α
10 operation	s [5x (+) & 5x (-)] 8/20 µs	20	kA
1 operation 8/20 µs		25	kA
1 operation 10/350 μs		5	kA
300 operation	s 10/1000 µs	100	Α
Insulation resistance	at 50 V <sub>DC</sub>	> 10	$G\Omega$
Capacitance at 1 MH	z	< 1.5	pF
Arc voltage at 1 A		~ 15	V
Glow to arc transition	current	< 0.5	Α
Glow voltage		~ 60	V
Weight		~ 1.5	g
Operation and storag	e temperature	-40 <b>+12</b> 5	°C
Climatic category (IE	C 60068-1)	40/125/21	
Marking, blue negativ	ve	EPCOS 90 YY O 90 - Nominal voltage YY - Year of production O - Non radioactive	
Certification		UL 497B (E163070)	TH.

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

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

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

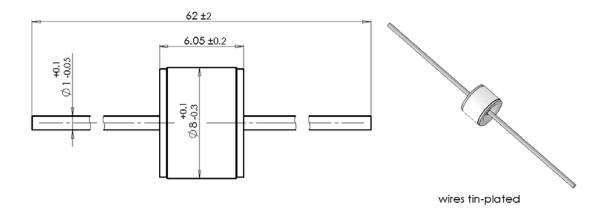


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#### 2-electrode arrester

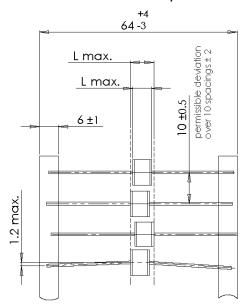
A81-C90X

## Dimensional drawing in mm

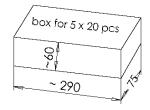


## Ordering code and packing advice

B88069X1380**S102** = 100 pcs. on 5 taped stripes



tape acc. to IEC 60286-1



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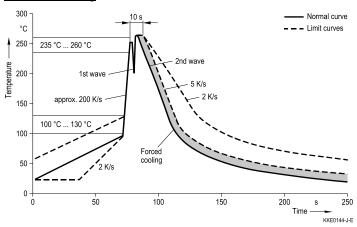


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#### Soldering parameter

#### 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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