

# Surge arrester

2-electrode arrester

Series/Type: **EM470XS** 

Ordering code: B88069X7091\*\*\*\*

2019-07-19 Date:

Version: 03

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# 2-electrode arrester EM470XS

#### **Features**

- Small size
- Fast response time
- High current handling capability
- Stable performance over life
- Low capacitance and insertion loss
- High insulation resistance
- RoHS-compatible

## **Applications**

- Power supplies
- Antenna protection
- Air condition
- Modem
- Consumer electronics
- Dataline protection

#### **Electrical specifications**

Electrical specifications			
DC spark-over voltage 1) 2) Tolerance Min. Max.		470 -15 +25 400 588	V % V V
- typical at 1 kV/µs - for 999	% of measured values values of distribution of measured values values of distribution	< 600 < 550 < 700 < 650	V V V
Service life 10 operations 1 operation	8/20 μs 8/20 μs	2.5 5	kA kA
Insulation resistance at 100 V <sub>DC</sub>		> 1	GΩ
Capacitance at 1 MHz		< 1	pF
Arc voltage at 1 A Glow to arc transition current Glow voltage		~ 25 < 0.6 ~ 160	V A V
Weight		~ 1	g
Operation and storage temperature		-40 <b>+</b> 125	°C
Climatic category (IEC 60068-1)		40/125/21	•
Marking, red positive		EPCOS EM 470 YY O EM - Series 470 - Nominal voltage YY - Year of production O - Non radioactive	
Certification		UL 497B (E163070)	<b>M</b> °

<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

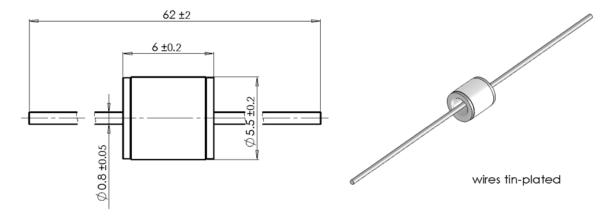


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## 2-electrode arrester

**EM470XS** 

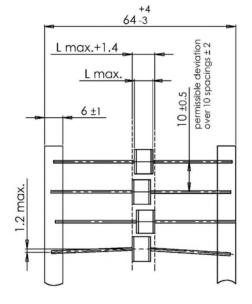
## Dimensional drawing in mm



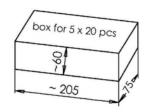
# Ordering codes and packing advices

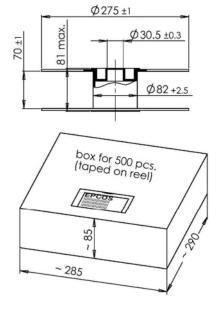
B88069X7091**S102** = 100 pcs. on 5 taped stripes

B88069X7091**T502** = 500 pcs. on tape and reel



tape acc. to IEC 60286-1





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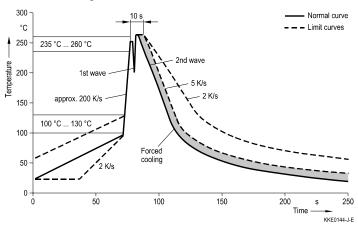


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#### 2-electrode arrester EM470XS

#### 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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