



Surge arrester

3-electrode arrester

Series/Type: T23-A400XF4
Ordering code: B88069X5471B502
Date: 2019-08-27
Version: 03


Features

- Standard 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) 3)}	400	V
Tolerance	-25 ... +25	%
Min.	300	V
Max.	500	V
Impulse spark-over voltage ³⁾		
at 1 kV/μs	< 800	V
- for 99% of measured values		
- typical values of distribution	< 700	V
Service life according to TELEBRAS SDT 235-430-708		
10 operations	50 Hz; 1 s ⁴⁾	A _{rms}
+ 1 operation	50 Hz; 0.33 s ⁴⁾	A _{rms}
120 operations	10/1000 μs ⁴⁾	A
+ 20 operations	10/1000 μs ⁴⁾	A
+ 6 operations	10/1000 μs ⁴⁾	A
+ 2 operations	10/1000 μs ^{5) 6)}	A
+ 2 operations	10/1000 μs ^{5) 6)}	kA
DC hold-over voltage ^{5) 7)}		
at 52 V _{dc} / 200 Ω	< 150	ms
at 135 V _{dc} / 675 Ω	< 150	ms
Insulation resistance at 100 V _{DC} ³⁾	> 10	GΩ
Capacitance at 1 MHz ³⁾	< 1.5	pF
Weight	~ 2.5	g
Storage temperature	-40 ... +125	°C
Climatic category (IEC 60068-1)	40/125/21	
Marking, blue negative	EPCOS 400 YY O 400 - Nominal voltage YY - Year of production O - Non radioactive	
Certifications	UL 497B (E163070)	

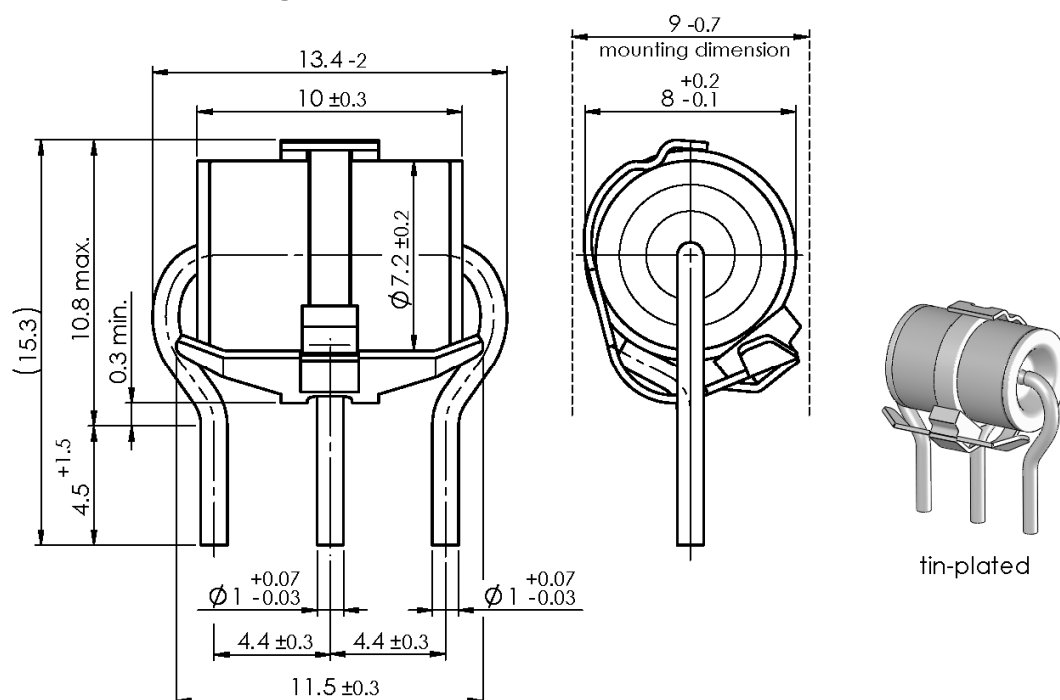
Remarks on next page

- 1) At delivery AQL 0.65 level II, DIN ISO 2859
- 2) In ionized mode
- 3) Tip or ring electrode to center electrode
- 4) Total current through center electrode, half value through tip respectively ring electrode.
- 5) Total current through center electrode, same value through tip respectively ring electrode.
- 6) 1 operation for each gap
- 7) In accordance with TELEBRAS SDT 235-430-708

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

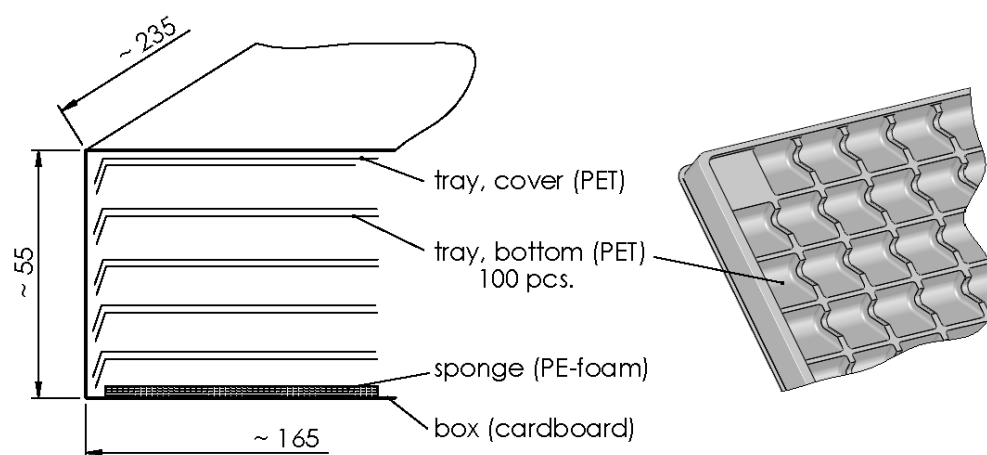
The arrester failsafe mechanism contains a solder pellet with a melting temperature between 193 and 203 °C.

Dimensional drawing in mm



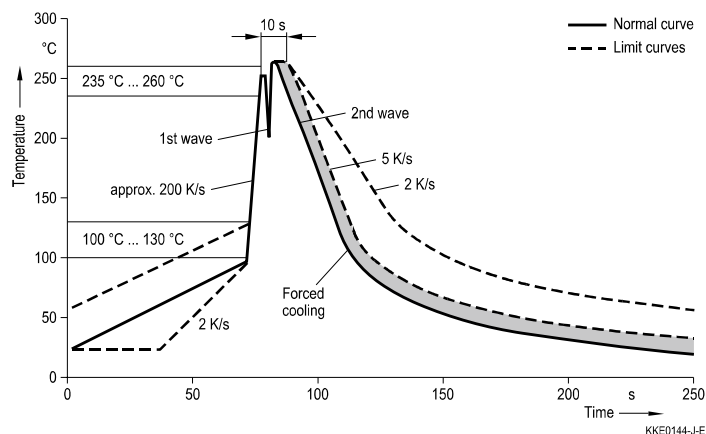
Ordering code and packing advice

B88069X5471B502 = 500 pcs. on trays



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

- Depending on the sensor material the short-circuit spring does not trigger until 180 °C is reached. Thermal radiation to adjacent components must be taken into consideration in the circuit design. Depending on the mounting position, the surge arrester may have to be secured by additional mechanical means.
- Do not continue to use surge arresters whose short-circuit mechanisms have been activated.
- If the contacts of the surge arresters are defective, current load can cause sparks and loud noises.
- 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.
- Surge arresters must be handled with care and must not be dropped.
- Do not continue to use damaged surge arresters.

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