



Surge arrester

2-electrode arrester

Series/Type: A60-A230XF
Ordering code: B88069X2400C103
Date: 2019-06-21
Version: 06


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)
- Subscriber protection
- Line protection
- Consumer electronics

Electrical specifications

DC spark-over voltage ^{1) 2)}	230	V
Tolerance	±20	%
Min.	184	V
Max.	276	V
Impulse spark-over voltage		
at 100 V/μs - for 99% of measured values	< 500	V
- typical values of distribution	< 450	V
at 1 kV/μs - for 99% of measured values	< 800	V
- typical values of distribution	< 700	V
Service life		
10 operations 50 Hz, 1 s	10	A
1 operation 50 Hz, 0.18 s (9 cycles)	60	A
10 operations 8/20 μs	10	kA
1 operation 8/20 μs	12	kA
Insulation resistance at 100 V _{DC}	> 1	GΩ
Capacitance at 1 MHz	< 1.5	pF
Arc voltage at 1 A	~ 20	V
Glow to arc transition current	< 0.5	A
Glow voltage	~ 60	V
Weight	~ 1.5	g
Operation and storage temperature	-40 ... +125	°C
Climatic category (IEC 60068-1)	40/125/21	
Marking, red negative	EPCOS 230 YY O 230 - Nominal voltage YY - Year of production O - Non radioactive	
Certification	UL 497B (E163070)	

¹⁾ At delivery AQL 0.65 level II, DIN ISO 2859

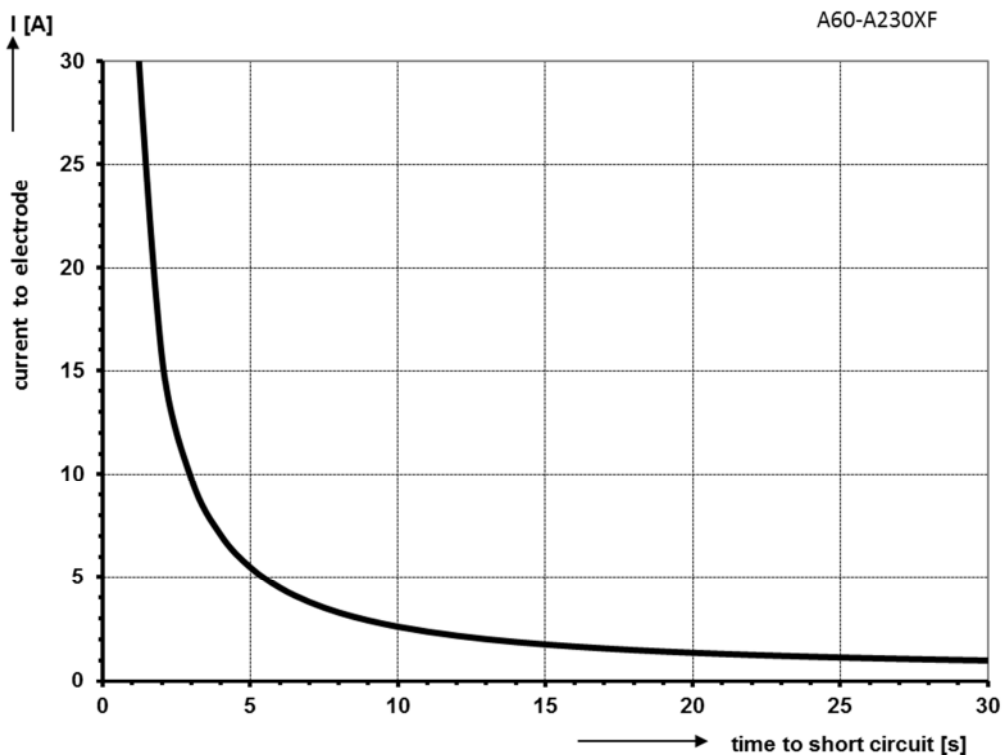
²⁾ In ionized mode

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

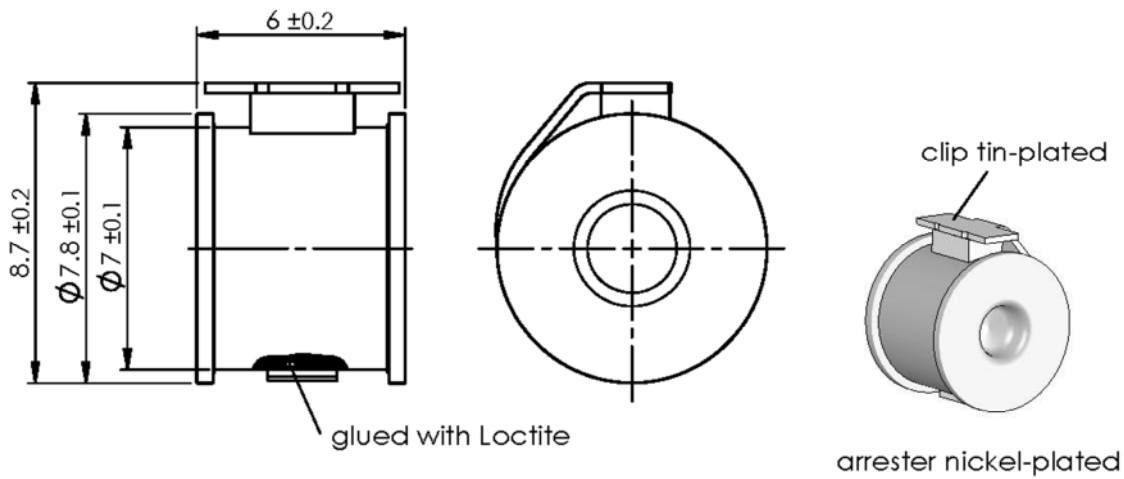
The arrester failsafe mechanism contains a solder pellet with a melting temperature between 193 and 203 °C.

Failsafe characteristic diagram

For arrester only, characteristic can differ in assembled module.

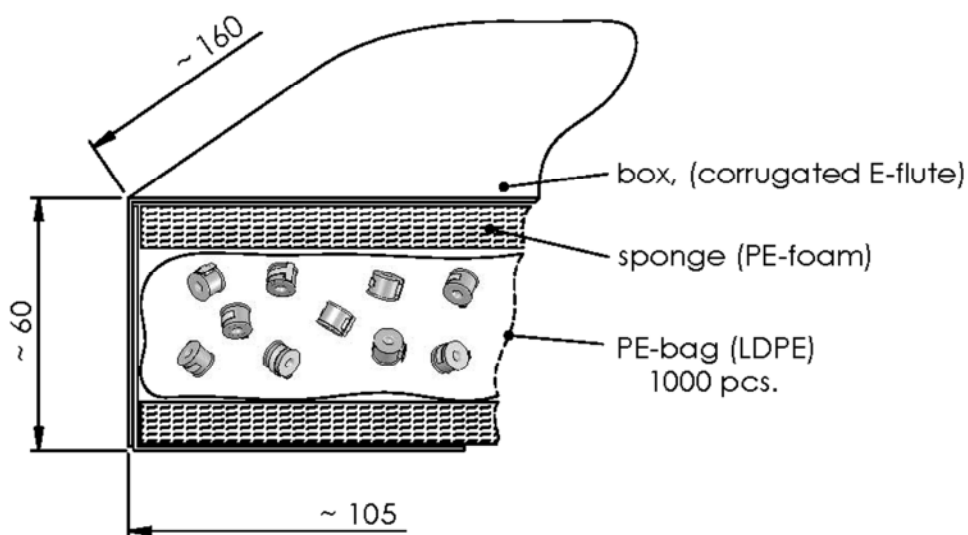


Dimensional drawing in mm



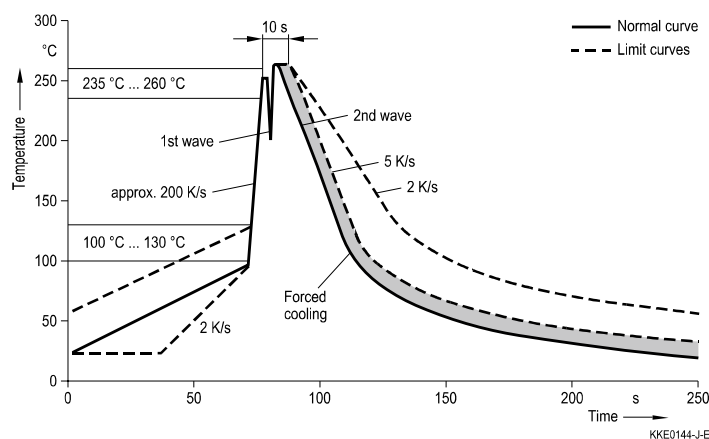
Ordering codes and packing advices

B88069X2400C103 = 1000 pcs. in container



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 200 °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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