



Surge arrester

2-electrode arrester

Series/Type: M51-C90XF
Ordering code: B88069X2351C102
Version/Date: Issue 01 / 2012-04-12

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Features

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

Applications

- Branch exchange (MDF)
- Subscriber protection
- Line protection
- Consumer electronics
- Alarm systems

Electrical specifications

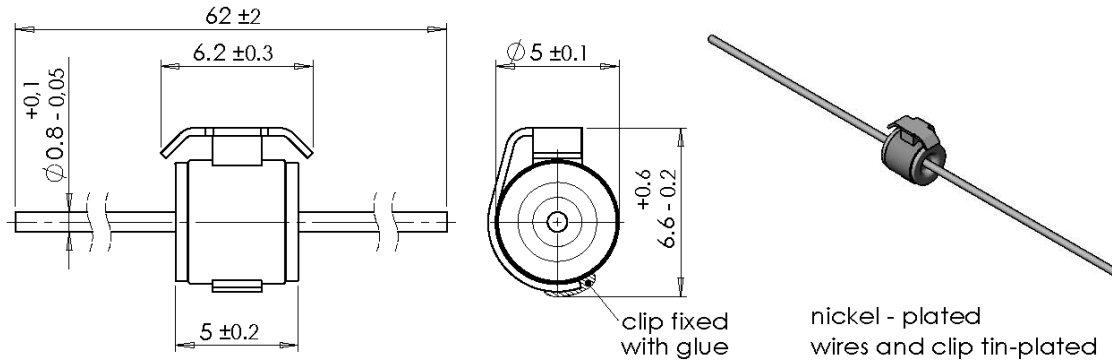
DC spark-over voltage ^{1) 2)}	90 ± 20	V %
Impulse spark-over voltage		
at 100 V/μs - for 99% of measured values	< 550	V
- typical values of distribution	< 500	V
at 1 kV/μs - for 99% of measured values	< 600	V
- typical values of distribution	< 550	V
Service life		
10 operations 50 Hz, 1 s	2.5	A
5 operations 50 Hz, 1 s	5	A
1 operation 50 Hz, 0.18 s (9 cycles)	10	A
10 operations 8/20 μs	5	kA
1 operation 8/20 μs	7.5	kA
Insulation resistance at 50 V _{DC}	> 1	GΩ
Capacitance at 1 MHz	< 1	pF
Arc voltage at 1 A	~ 15	V
Glow to arc transition current	~ 0.8	A
Glow voltage	~ 60	V
Weight	~ 1	g
Storage temperature	-40 ... +90	°C
Climatic category (IEC 60068-1)	40 / 90 / 21	
Marking, blue negative	EPCOS 90 YY O 90 - Nominal voltage YY - Year of production O - Non radioactive	

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

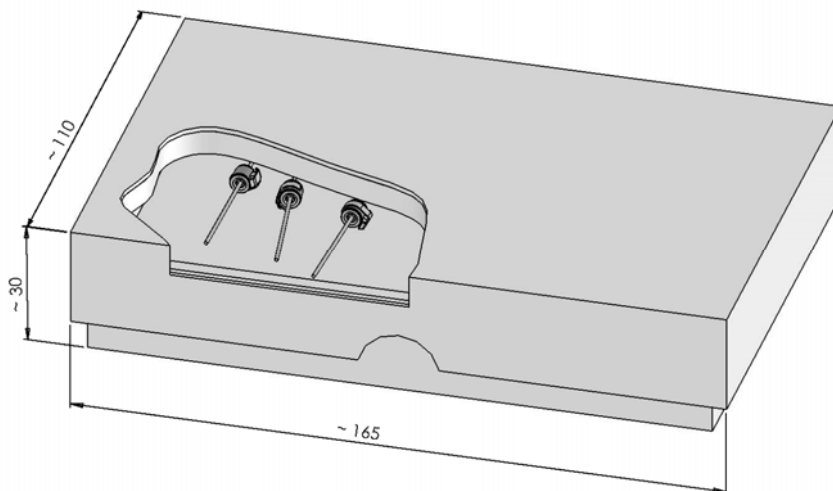
²⁾ In ionized mode

Terms in accordance with ITU-T Rec. K.12, IEC 61663-2 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

B88069X2351C102 = 100 pcs. in container


Cautions and warnings

- The short circuit spring does not trigger until 180 °C is reached depending on the material. Care must be taken to limit the thermal radiation onto adjacent parts to safe values.
- Surge arresters must not be operated directly in power supply networks.
- Surge arresters may become hot in the event of longer periods of current stress (danger of burning).
- Surge arresters may be used only within their specified values. In the event of overload, the head contacts may fail or the component may be destroyed.
- Damaged surge arresters must not be re-used.

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