

Surge arrester

2-electrode arrester

Series/Type: M51-C90XF Ordering code: B88069X235

Ordering code: B88069X2351C102

Version/Date: Issue 01 / 2012-04-12



Surge arrester B88069X2351C102

2-electrode arrester M51-C90XF

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 | V |
|---|----------------|--|-----------|
| | | ± 20 | % |
| Impulse spark-over voltage | | | |
| at 100 V/µs - for 99% of me - typical values | | < 550 < 500 | V |
| at 1 kV/μs - for 99% of me - typical values | | < 600 < 550 | V |
| Service life | | | |
| 10 operations 50 Hz, 1 s | | 2.5 | Α |
| 5 operations 50 Hz, 1 s | | 5 | Α |
| 1 operation 50 Hz, 0.1 | 8 s (9 cycles) | 10 | Α |
| 10 operations 8/20 μs | | 5 | kA |
| 1 operation 8/20 μs | | 7.5 | kA |
| Insulation resistance at 50 V _{DC} | | > 1 | $G\Omega$ |
| Capacitance at 1 MHz | | < 1 | pF |
| Arc voltage at 1 A | | ~ 15 | V |
| Glow to arc transition current | | ~ 0.8 | Α |
| 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

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.

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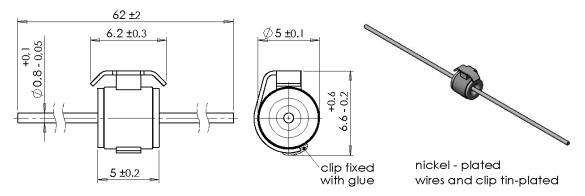
²⁾ In ionized mode



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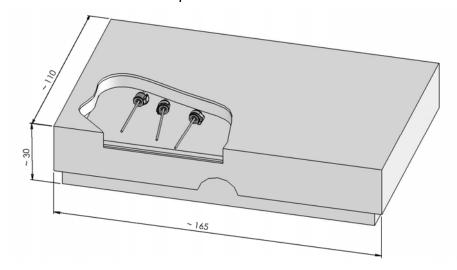
2-electrode arrester M51-C90XF

Dimensional drawing in mm



Ordering code and packing advice

B88069X2351**C102** = 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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