

# Surge arrester

2-electrode arrester

Series/Type: A83-C90X Ordering code: B88069X1450C102

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# Surge arrester

### 2-electrode arrester

### Features

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

Electrical specifications

# Applications

- Branch exchange (MDF)
- Line protection
- Subscriber protection

| DC spark-over voltage <sup>1) 2)</sup>             | 90   | V  |
|--|--|----|
| Tolerance  | ±20  | %  |
| Min.   | 72   | V  |
| Max.   | 108  | V  |
| Impulse spark-over voltage                         |  |    |
| at 100 V/µs - for 99% of measured values           | < 500  | V  |
| <ul> <li>typical values of distribution</li> </ul> | < 450  | V  |
| at 1 kV/µs - for 99% of measured values            | < 600  | V  |
| <ul> <li>typical values of distribution</li> </ul> | < 550  | V  |
| Service life                                       |  |    |
| 10 operations 50 Hz, 1 s                           | 20   | А  |
| 1 operations 50 Hz, 0.18 s (9 cycles)              | 100  | А  |
| 10 operations 8/20 μs                              | 20   | kA |
| 1 operation 8/20 μs                                | 25   | kA |
| 1 operation 10/350 µs                              | 2.5  | kA |
| 300 operations 10/1000 µs                          | 100  | А  |
| Insulation resistance at 50 $V_{DC}$               | > 10   | GΩ |
| Capacitance at 1 MHz                               | < 1.5  | pF |
| Arc voltage at 1 A                                 | ~ 15   | V  |
| Glow to arc transition current                     | < 0.5  | А  |
| Glow voltage                                       | ~ 60   | V  |
| Weight   | ~ 2.5  | g  |
| Operation and storage temperature                  | -40 +90  | °C |
| Climatic category (IEC 60068-1)                    | 40/ 90/ 21   |    |
| Marking, black positive                            | EPCOS 90 YY 090- Nominal voltageYY- Year of productionO- Non radioactive |    |
| Certification                                      | UL 497B (E163070)  |    |

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

<sup>2)</sup> In ionized mode

Terms in accordance with ITU-T Rec. K.12; IEC 61663-2 and IEC 61643-311.

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# B88069X1450C102 A83-C90X

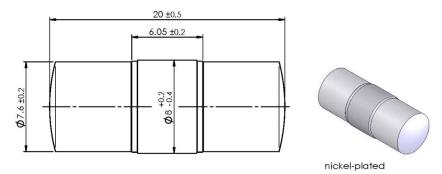


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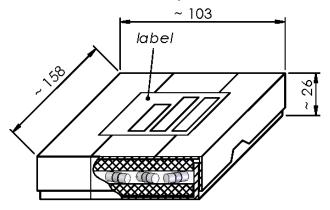
B88069X1450C102 A83-C90X

### Dimensional drawing in mm



### Ordering code and packing advice

B88069X1450C102 = 100 pcs. in container



### **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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