



## Surge arrester

### 3-electrode arrester

**Series/Type:** T60-A420X  
**Ordering code:** B88069X6980C203  
**Date:** 2016-02-26  
**Version:** 02

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**Features**

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

**Applications**

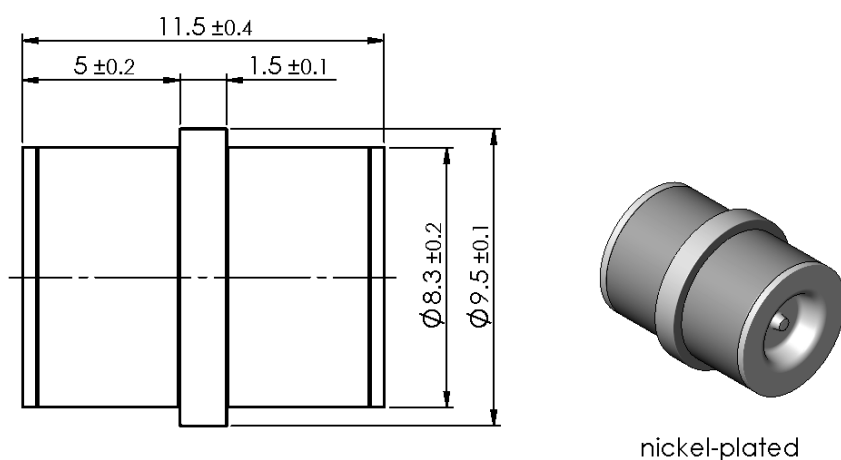
- Branch exchange (MDF)
- Line protection
- Station protection

**Electrical specifications**

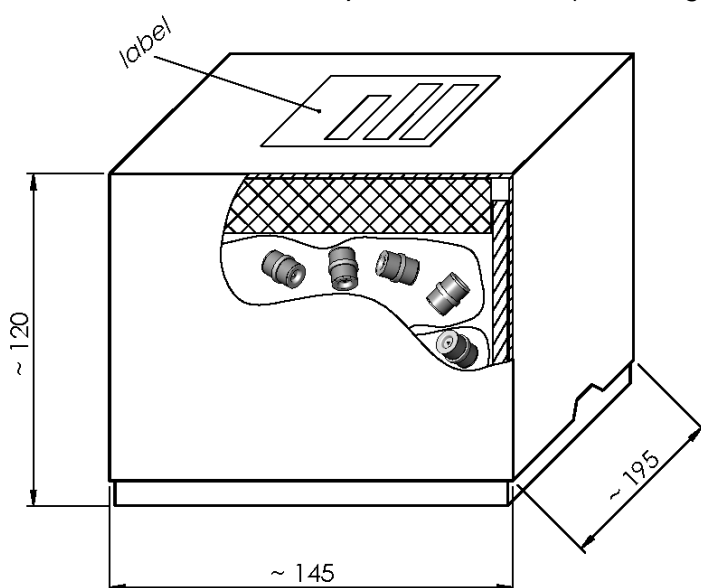
DC spark-over voltage <sup>1) 2) 3)</sup>	420	V
Tolerance at 100 V/s	330 ... 500	V
Tolerance at 100 kV/s	350 ... 620	V
Impulse spark-over voltage <sup>3)</sup> at 1 kV/μs - for 99% of measured values	350 ... 650	V
Service life <sup>8)</sup>		
100 operations                      50 Hz; 1 s <sup>5) 7)</sup>	1	A
20 operations                        50 Hz; 1 s <sup>5) 6)</sup>	10	A
20 operations                        50 Hz; 1 s <sup>4) 6)</sup>	20	A
10 operations [5x (+) & 5x(-)]    8/20 μs <sup>5)</sup>	10	kA
10 operations [5x (+) & 5x(-)]    8/20 μs <sup>4)</sup>	20	kA
300 operations, alternating polarity 10/1000 μs <sup>5)</sup>	200	A
300 operations, alternating polarity 10/1000 μs <sup>4)</sup>	400	A
DC holdover voltage <sup>8)</sup>		
at 80 V <sub>DC</sub> / 600 Ω	< 150	ms
at 120 V <sub>DC</sub> / 600 Ω	< 150	ms
Insulation resistance at 100 V <sub>DC</sub> <sup>3)</sup>	> 10	GΩ
Capacitance at 1 MHz <sup>3)</sup>	< 1.5	pF
Arc voltage at 1 A	~ 35	V
Glow to arc transition current	< 1	A
Glow voltage	~ 200	V
Weight	~ 3.0	g
Operation and storage temperature	-40 ... +90	°C
Climatic category (IEC 60068-1)	40/090/21	
Marking, blue negative	<b>EPCOS</b> <b>420 YY O</b> 420 - 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) Test program: 10 times (1 s current, 2 s break, 1 s current) 3 min break
- 7) Test program: 50 times (1 s current, 2 s break, 1 s current) 3 min break
- 8) Test in accordance with France Telecom ST/FT R&D/8288 Surge Protective Devices (Sept. 2003)

**Dimensional drawing in mm**

**Ordering code and packing advice**

**B88069X6980C203** = 2000 pcs. in container (2 PE-bags á 1000 pcs.)



### 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.
- If the contacts of the surge arresters are defective, current load can cause sparks and loud noises.
- 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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