



## Surge arrester

3-electrode arrester

**Series/Type:** T63-C650X  
**Ordering code:** B88069X6990B102  
Version/Date: Issue 03 / 2011-02-07

**Features**

- Very fast response time
- Maximum current rating
- Stable performance over life
- Low capacitance
- High insulation resistance
- RoHS-compatible

**Applications**

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

**Electrical specifications**

DC spark-over voltage <sup>1) 2) 4)</sup>	550 ... 800	V
Impulse spark-over voltage <sup>4)</sup>		
at 100 V/ $\mu$ s   - for 99 % of measured values - typical values of distribution	< 1100 < 1000	V V
at 1 kV/ $\mu$ s     - for 99 % of measured values - typical values of distribution	< 1350 < 1100	V V
Service life		
10 operations                      50 Hz, 1 s <sup>5)</sup>	20	A
1 operation                        50 Hz, 0.18 s (9 cycles) <sup>5)</sup>	130	A
10 operations [5x (+) & 5x (-)] 8/20 $\mu$ s <sup>5)</sup>	20	kA
1 operation                        8/20 $\mu$ s <sup>5)</sup>	40	kA
1 operation                        10/350 $\mu$ s <sup>5)</sup>	5	kA
Insulation resistance at 100 V <sub>DC</sub> <sup>4)</sup>	> 10	G $\Omega$
Capacitance at 1 MHz <sup>4)</sup>	< 1.5	pF
Transverse delay time <sup>3)</sup>	< 0.2	$\mu$ s
Arc voltage at 1 A	~ 35	V
Glow to arc transition current	~ 1	A
Glow voltage	~ 200	V
Weight	~ 3.5	g
Operation and storage temperature	-40 ... +90	°C
Climatic category (IEC 60068-1)	40/ 90/ 21	
Marking, blue negative	<b>EPCOS</b> <b>650 YY O</b> 650    - Nominal voltage YY     - Year of production O      - Non radioactive	

<sup>1)</sup> At delivery AQL 0.65 level II, DIN ISO 2859

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

<sup>3)</sup> Test according to ITU-T Rec. K.12

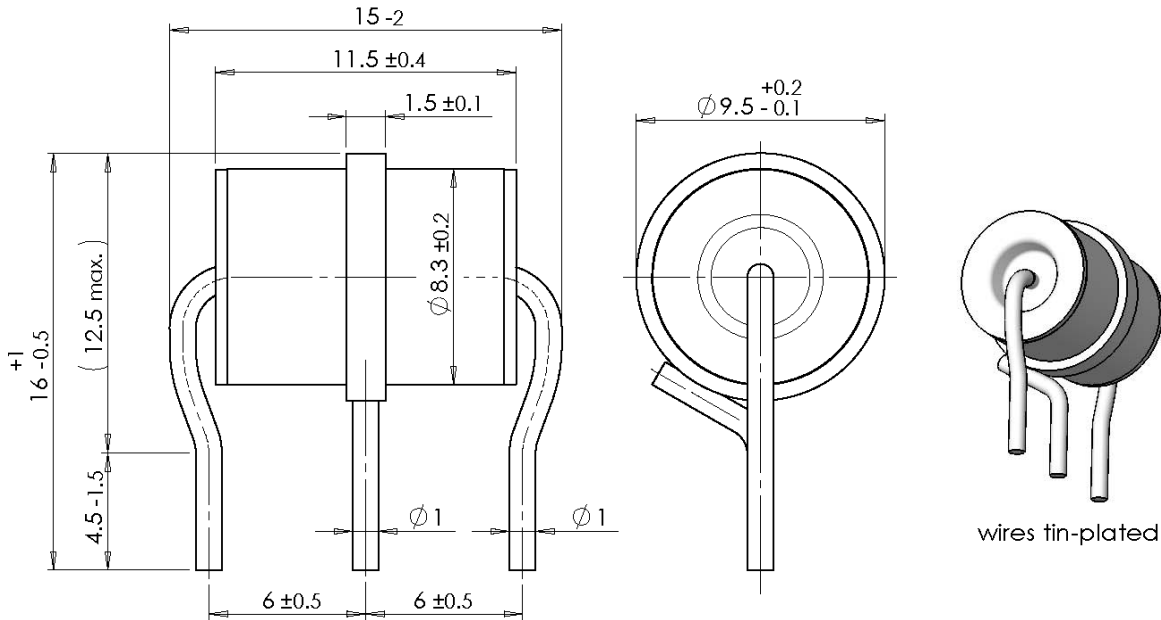
<sup>4)</sup> Tip or ring electrode to center electrode

<sup>5)</sup> Total current through center electrode, half value through tip respectively ring electrode.

Terms in accordance with ITU-T Rec. K.12 and DIN 57845/VDE0845

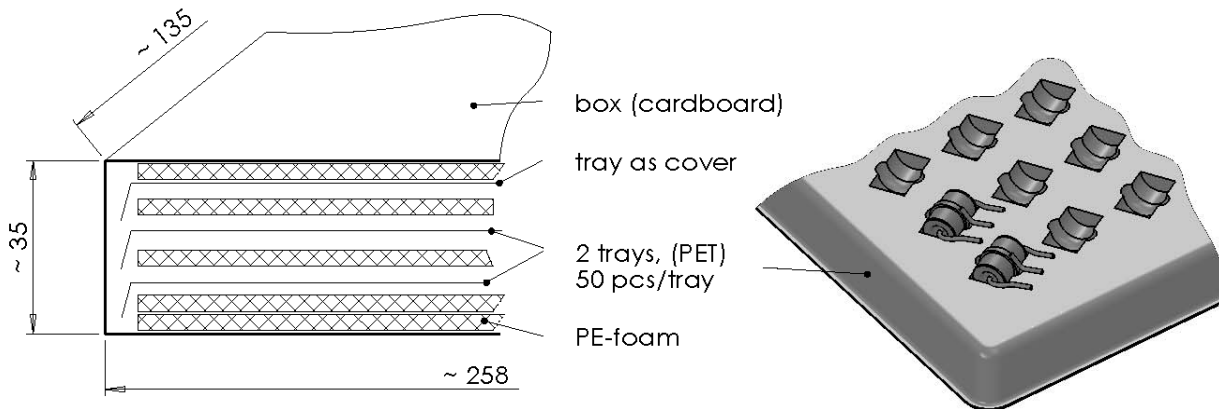
Tested in accordance to RUS PE-80 and IEEE C62.31

Dimensional drawing in mm



Ordering code and packing advice

B88069X6990B102 = 100 pcs on 2 trays



Cautions and warnings

- Surge arresters must not be operated directly in power supply networks.
- Surge arresters may become hot in case of longer periods of current stress (danger of burning).
- Surge arresters may be used only within their specified values. In case of overload, the lead contacts may fail or the component may be destroyed.
- Damaged surge arresters must not be re-used.

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