



# Surge Arrester

## 3-Electrode-Arrester

**Series/Type:** T90-A230XFSMD  
**Ordering code:** B88069X6690T902  
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**T90-A230XFSMD**
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DC spark-over voltage <sup>1) 2) 3)</sup>	230 ± 20	V %
Impulse spark-over voltage <sup>3)</sup> at 100 V/μs - for 99 % of measured values - typical values of distribution	< 580 < 460	V V
at 1 kV/μs - for 99 % of measured values - typical values of distribution	< 750 < 600	V V
Insulation resistance at 100 V <sub>dc</sub> <sup>3)</sup>	> 1	GΩ
Capacitance at 1 MHz <sup>3)</sup>	< 1.5	pF
Service life according to ITU-T-Rec. K.12		
300 operations 10/1000 μs <sup>4)</sup>	200	A
1 operation 10/350 μs <sup>4)</sup>	2	kA
10 operations 8/20 μs <sup>4)</sup>	5	kA
10 operations 8/20 μs <sup>5)</sup>	5	kA
10 operations 50 Hz; 1 s <sup>4)</sup>	5	A <sub>rms</sub>
10 operations 50 Hz; 1 s <sup>5)</sup>	5	A <sub>rms</sub>
Service life according to Telebras SDT 235-430-708		
120 operations 10/1000 μs <sup>4)</sup>	50	A
20 operations 10/1000 μs <sup>4)</sup>	100	A
6 operations 10/1000 μs <sup>4)</sup>	200	A
2 operations 10/1000 μs <sup>6)</sup>	200	A
2 operations 10/1000 μs <sup>6)</sup>	1	kA
10 operations 50 Hz; 1 s <sup>4)</sup>	2	A <sub>rms</sub>
1 operation 50 Hz; 0.33 s <sup>4)</sup>	20	A <sub>rms</sub>
DC holdover voltage <sup>7)</sup>		
at 52 V <sub>dc</sub> / 260 Ω	< 150	ms
at 80 V <sub>dc</sub> / 330 Ω	< 150	ms
at 135 V <sub>dc</sub> / 1300 Ω	< 150	ms
Transverse delay time <sup>3)</sup>	< 0.2	μs
Arc voltage at 1 A	~ 10	V
Glow to arc transition current	~ 1	A
Glow voltage	~ 60	V
Weight	~ 0.8	g
Storage temperature	-40 ... +90	°C
Climatic category (IEC 60068-1)	40/ 90/ 21	

Marking, blue

**EPCOS**  
**230 YY O**

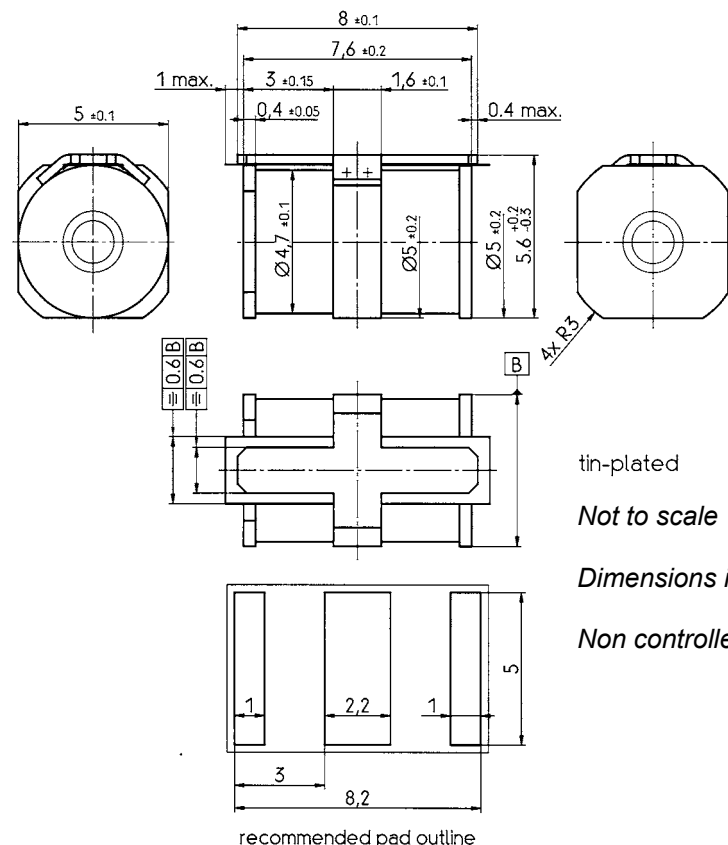
 230 - Nominal voltage  
 YY - Year of production  
 O - Non radioactive

- 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; in addition to ITU-T-Rec. K.12
- 6) 1 operation for each gap; total current through center electrode; same value through tip respectively ring electrode
- 7) Test according to ITU-T-Rec. K.12

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

The arrester failsafe mechanism contains a insulating foil with a melting temperature of 260 °C.

Arrester fail safe works at temperatures &gt; 260 °C. The arrester has to be fixed mechanically, if the arrester is contacted by soldering and if the solder temperature is less than 260 °C.



tin-plated

*Not to scale*
*Dimensions in mm*
*Non controlled document*

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