

# Surge arrester

3-electrode arrester

 Series/Type:
 T23-A350XF1

 Ordering code:
 B88069X7240B502

 Version/Date:
 Issue 05 / 2007-04-23

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3-electrode arrester T23-A350XF1

Features	Applications
<ul> <li>Standard size</li> </ul>	Branch exchange (MDF)
<ul> <li>Fast response time</li> </ul>	Line protection
<ul> <li>High current rating</li> </ul>	Station protection
<ul> <li>Stable performance over life</li> </ul>	
<ul> <li>Very low capacitance</li> </ul>	
<ul> <li>High insulation resistance</li> </ul>	
<ul> <li>Reliable failsafe device</li> </ul>	
<ul> <li>RoHS-compatible</li> </ul>	

# **Electrical specifications**

DC spark-over voltage 1) 2) 4)	350	V
	± 20	%
Impulse spark-over voltage 4)		
at 100 V/µs - for 99 % of measured values	< 650	V
<ul> <li>typical values of distribution</li> </ul>	< 550	V
at 1 kV/µs - for 99 % of measured values	< 700	V
<ul> <li>typical values of distribution</li> </ul>	< 600	V
Service life		
10 operations 50 Hz, 1 s $^{5)}$	10	Α
1 operation 50 Hz, 0.18 s (9 cycles) 5)	50	Α
10 operations $8/20 \mu s^{5}$	20	kA
1 operation $8/20 \mu s^{5}$	25	kA
1 operation 10/350 $\mu$ s <sup>5)</sup>	5	kA
300 operations 10/1000 <sup>5)</sup>	200	Α
Insulation resistance at 100 V <sub>dc</sub> <sup>4)</sup>	> 10	$G\Omega$
Capacitance at 1 MHz 4)	< 1.5	pF
Transverse delay time 3)	< 0.2	μs
Arc voltage at 1 A	~ 30	V
Glow to arc transition current	~ 1	Α
Glow voltage	~ 200	V
Weight	~ 2.5	g
Storage temperature	-40 +90	°C
Climatic category (IEC 60068-1)	40/ 90/ 21	
Marking, blue negative	EPCOS	
	350 YY O	
	350 - Nominal voltage YY - Year of production	
	O - Non radioacti	

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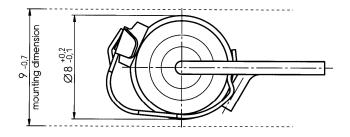
3-electrode arrester T23-A350XF1

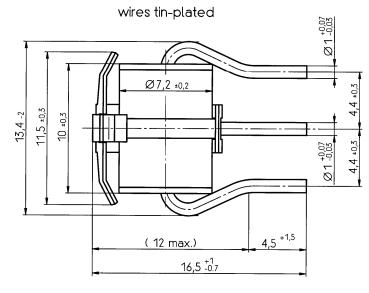
- 1) At delivery AQL 0.65 level II, DIN ISO 2859
- 2) In ionized mode
- 3) Test according to ITU-T Rec. K.12
- Tip or ring electrode to center electrode
- Total current through center electrode, half value through tip respectively ring electrode.

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

The arrester failsafe mechanism contains a solder pellet with a melting temperature between 193 and 203 °C.

## **Dimensional drawing**





Not to scale

Dimensions in mm

Non controlled document

### **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.
- Depending on the incorporation position, the surge arrester may have to be additionally secured by mechanical means.
- 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 head contacts may fail or the component may be destroyed.
- Damaged surge arresters must not be re-used.

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