

# Surge arrester

3-electrode arrester

 Series/Type:
 T23-A350XF1

 Ordering code:
 B88069X7240B502

 Version/Date:
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## Surge arrester

#### **3-electrode arrester**

Features	Applications
<ul> <li>Standard size</li> </ul>	<ul> <li>Branch exchange (MDF)</li> </ul>
<ul> <li>Fast response time</li> </ul>	<ul> <li>Line protection</li> </ul>
<ul> <li>High current rating</li> </ul>	<ul> <li>Station protection</li> </ul>
<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 <sup>1) 2) 4)</sup>	350 ± 20	V %
Impulse spark-over voltage <sup>4)</sup> at 100 V/µs - for 99 % of measured values - typical values of distribution	< 650 < 550	VVV
at 1 kV/µs - for 99 % of measured values - typical values of distribution	< 700 < 600	V V
$\begin{array}{c cccc} Service life & & & & & \\ & 10 & operations & 50 \ \text{Hz}, 1 \ \text{s}^{5)} & & \\ & 1 & operation & 50 \ \text{Hz}, 0.18 \ \text{s} \ (9 \ \text{cycles})^{5)} & & \\ & 10 & operations & 8/20 \ \mu \ \text{s}^{5)} & & \\ & 1 & operation & 8/20 \ \mu \ \text{s}^{5)} & & \\ & 1 & operation & 10/350 \ \mu \ \text{s}^{5)} & & \\ & 300 & operations & 10/1000^{5)} & & \\ \hline \text{Insulation resistance at } 100 \ \text{V}_{dc}^{-4)} & & \\ \hline \text{Capacitance at } 1 \ \text{MHz}^{-4)} & & \\ \hline \end{array}$	10 50 20 25 5 200 > 10 < 1.5 < 0.2	A A kA kA kA A GΩ pF μs
Arc voltage at 1 A Glow to arc transition current Glow voltage	~ 30 ~ 1 ~ 200	V A V
Weight	~ 2.5	g
Storage temperature	-40 +90	C
Climatic category (IEC 60068-1)	40/ 90/ 21	
Marking, blue negative	<b>EPCOS</b> <b>350 YY O</b> 350 - Nominal voltage YY - Year of production O - Non radioactive	

KB AB E / KB AB PM



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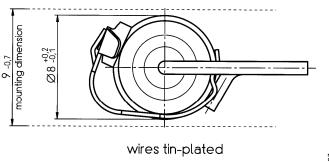
B88069X7240B502 T23-A350XF1

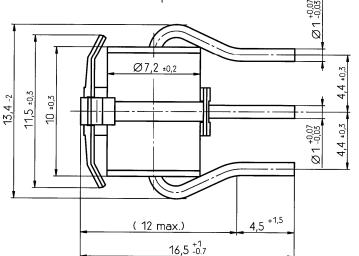
- 1) At delivery AQL 0.65 level II, DIN ISO 2859
- <sup>2)</sup> In ionized mode
- <sup>3)</sup> Test according to ITU-T Rec. K.12
- <sup>4)</sup> Tip or ring electrode to center electrode
   <sup>5)</sup> Total current through center electrode, half value through tip respectively ring electrode.

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

The arrester fails afe mechanism contains a solder pellet with a melting temperature between 193 and 203  $\ensuremath{\mathbb{C}}$  .

#### **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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