

# Surge arrester

3-electrode arrester

Series/Type: T30-A420X Ordering code: B88069X30

Ordering code: B88069X3040C253

Version/Date: Issue 05 / 2007-03-29

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## 3-electrode arrester T30-A420X

Features	Applications
<ul> <li>Very small size</li> </ul>	Line protection
<ul> <li>Extremely fast response time</li> </ul>	<ul> <li>Station protection</li> </ul>
<ul> <li>High current rating</li> </ul>	<ul> <li>Base stations</li> </ul>
<ul> <li>Stable performance over life</li> </ul>	
<ul> <li>Extremely low capacitance</li> </ul>	
<ul> <li>High insulation resistance</li> </ul>	
<ul> <li>RoHS-compatible</li> </ul>	

### **Electrical specifications**

DC spark-over voltage 1) 2) 4)			357 525	V
Impulse spark-over voltage <sup>4)</sup> at 100 V/µs - for 99 % of measured values - typical values of distribution		< 750 < 700	V	
at 1 kV/µs	<ul><li>for 99 % of measured values</li><li>typical values of distribution</li></ul>		< 800 < 750	V V
Service life				
10 operations	3	50 Hz; 1 s <sup>5)</sup>	10	Α
1 operation		50 Hz; 0.18 s (9 cycles) 5)	30	Α
10 operations	S [5x (+) & 5x (-)]	8/20 μs <sup>5)</sup>	10	kA
1 operation		8/20 μs <sup>5)</sup>	10	kA
1 operation		10/350 μs <sup>5)</sup>	2	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 3)		< 0.2	μs	
Arc voltage at 1 A		~ 30	V	
Glow to arc transition current		~ 1	A	
Glow voltage		~ 200	V	
Weight			~ 1.4	g
Operation and storage temperature		-40 <b>+</b> 90	°C	
Climatic category (IEC 60068-1)		40/ 90/ 21		
Marking, blue negative	e		EPCOS 420 YY O 420 - Nominal voltage YY - Year of production O - Non radioactive	

KB AB E / KB AB PM Issue 05 / 2007-03-29



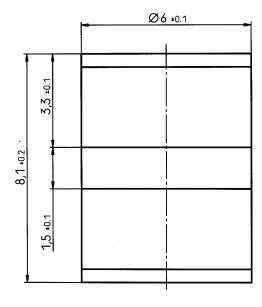
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- At delivery AQL 0.65 level II, DIN ISO 2859
- 2) In ionized mode
- 3) Test according to ITU-T Rec. K.12
- 4) Tip or ring electrode to center electrode
- Total current through center electrode, half value through tip respectively ring electrode.

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

### **Dimensional drawing**



tin-plated

Not to scale

Dimensions in mm

Non controlled document

#### **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 head contacts may fail or the component may be destroyed.
- Damaged surge arresters must not be re-used.

KB AB E / KB AB PM Issue 05 / 2007-03-29



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