



## Surge arrester

3-electrode arrester

**Series/Type:** EZ0-A230XF  
**Ordering code:** B88069X3751B502  
Version/Date: Issue 03 / 2007-05-15

Features	Applications
<ul style="list-style-type: none"> <li>▪ Extremely small size</li> <li>▪ Fast response time</li> <li>▪ High current rating</li> <li>▪ Stable performance over life</li> <li>▪ Very low capacitance</li> <li>▪ High insulation resistance</li> <li>▪ Reliable failsafe device</li> <li>▪ RoHS-compatible</li> </ul>	<ul style="list-style-type: none"> <li>▪ Branch exchange (MDF)</li> <li>▪ Line protection</li> <li>▪ Station protection</li> </ul>

**Electrical specifications**

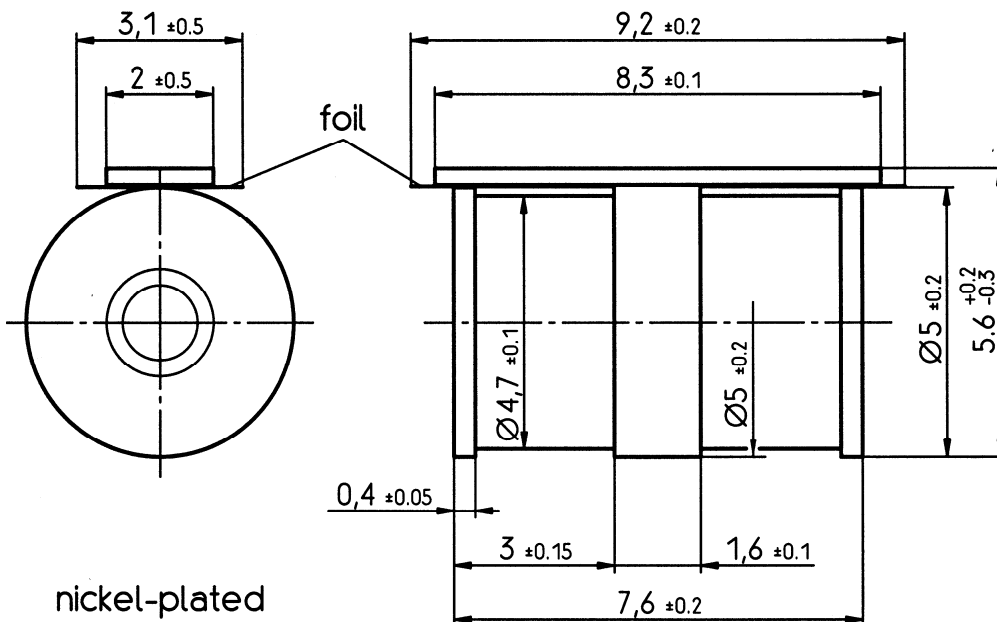
DC spark-over voltage <sup>1) 2) 4)</sup>	230 ± 20	V %
Impulse spark-over voltage <sup>4)</sup>		
at 100 V/μs   - for 99 % of measured values	< 600	V
- typical values of distribution	< 450	V
at 1 kV/μs   - for 99 % of measured values	< 750	V
- typical values of distribution	< 600	V
Service life		
10 operations           50 Hz, 1 s <sup>5)</sup>	5	A
10 operations           50 Hz, 1 s <sup>7)</sup>	5	A
10 operations           8/20 μs <sup>5)</sup>	5	kA
10 operations           8/20 μs <sup>6)</sup>	5	kA
300 operations, alternating polarity 10/1000 μs <sup>5)</sup>	200	A
Insulation resistance at 100 V <sub>dc</sub> <sup>4)</sup>	> 1	GΩ
Capacitance at 1 MHz <sup>4)</sup>	< 1.5	pF
DC holdover voltage <sup>3)</sup>		
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	~ 80	V
Weight	~ 1	g
Storage temperature	-40 ... +90	°C
Climatic category (IEC 60068-1)	40/ 90/ 21	
Marking, blue negative	<b>QUICKTEL</b> <b>YY 3R230</b> 3R   - Series (customer specific) 230   - Nominal voltage YY   - Year of production	

- 1) 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
- 5) Total current through center electrode, half value through tip respectively ring electrode.
- 6) 5 operations ring to center electrode & 5 operations tip to center electrode
- 7) Total current through center electrode, same value through tip respectively ring electrode.

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

Arrester fail safe works at temperatures > 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.

### Dimensional drawing



Not to scale

Dimensions in mm

Non controlled document

### Cautions and warnings

- The short-circuit spring does not trigger until 260 °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.
- Surge arrester with triggered short-circuit mechanisms must not be re-used.

## Important notes

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