



## Surge arrester

2-electrode arrester

**Series/Type:** EM90X  
**Ordering code:** B88069X0190xxxx <sup>a)</sup>  
Version/Date: Issue 07 / 2006-08-31

Features	Applications
<i>f</i> Very small size	<i>f</i> Modem
<i>f</i> Very fast response time	<i>f</i> XDSL-splitter
<i>f</i> Stable performance over life	<i>f</i> Data lines
<i>f</i> Extremely low capacitance	<i>f</i> Tuner
<i>f</i> High insulation resistance	<i>f</i> Antenna
<i>f</i> RoHS-compatible	

### Electrical specifications

DC spark-over voltage <sup>1)2)</sup>	90 ...20	V %
Impulse spark-over voltage at 100 V/ $\mu$ s - for 99 % of measured values - typical values of distribution	< 400 < 330	V V
at 1 kV/ $\mu$ s - for 99 % of measured values - typical values of distribution	< 600 < 530	V V
Service life		
10 operations 50 Hz, 1 s	2.5	A
10 operations 8/20 $\mu$ s	2.5	kA
1 operation 10/350 $\mu$ s	0.5	kA
Insulation resistance at 50 V <sub>dc</sub>	> 1	GK
Capacitance at 1 MHz	< 1	pF
Arc voltage at 1 A	~ 15	V
Glow to arc transition current	~ 0.8	A
Glow voltage	~ 80	V
Weight	~ 1	g
Operation and storage temperature	-40 ... +90	°C
Climatic category (IEC 60068-1)	40/ 90/ 21	
Marking, red positive	<p style="text-align: center;"><b>EM 90 YY O</b></p> <p>EM - Series 90 - Nominal voltage YY - Year of production O - Non radioactive</p>	

<sup>a)</sup> xxxx = S102 (100 pcs on 5 taped stripes)  
= T502 (500 pcs on tape and reel)

<sup>1)</sup> At delivery AQL 0.65 level II, DIN ISO 2859

<sup>2)</sup> In ionized mode

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



