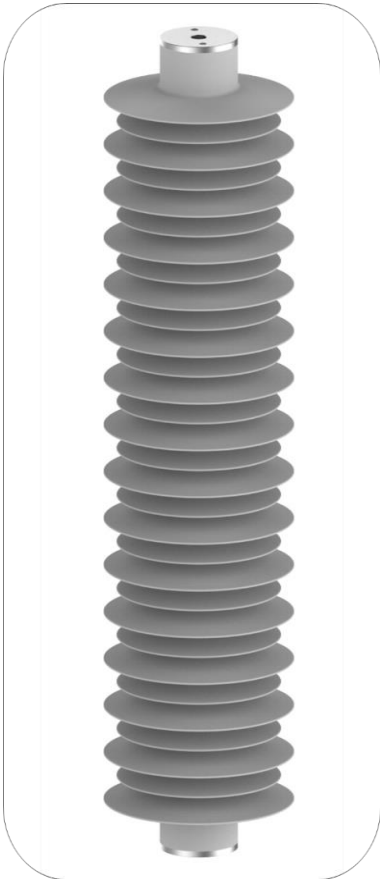


# TE's BOWTHORPE EMP HIGH VOLTAGE SURGE ARRESTERS

## TECHNICAL SPECIFICATIONS

### PCA RANGE - PCA3E72



#### General Information

Metal oxide arrester (ZnO)  
Polymeric Housing  
Hydrophobic silicone housing for long-term outdoor use  
Nominal discharge current: 10 kA  
Designation class: SM  
High current impulse 4/10  $\mu$ s: 100 kA  
Single impulse withstand rating: 2.2 C  
Energy Capability (Wth): 7.8 kJ/kV at Ur (Thermal)  
IEC 60099-4:2014

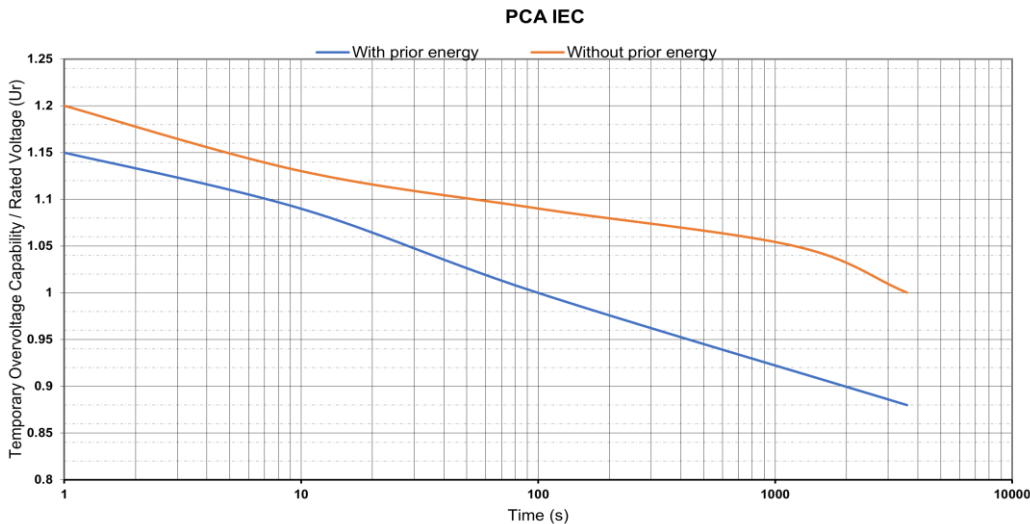
#### Surge Arrester Characteristics

Maximum System Voltage:	Us:	100 kV
Rated Voltage	Ur:	72 kV
Continuous Operating Voltage	Uc:	57.6 kV
TOV Capability (with prior energy)		82.8 kV for 1s 78.4 kV for 10s
Rated Short Circuit Current	Isc:	65 kA
Cantilever Load		
Safe Long-Term Load	SLL:	2.0 kNm
Safe Short-Term Load	SSL:	2.5 kNm
Dry Impulse Voltage - 1,2/50 $\mu$ s		672 kV
Wet Power Frequency Voltage		358 kV
Flashover Distance		1113 mm
Creepage Length		4500 mm
Minimum distance between phase centers		840 mm
Minimum distance between phase to earth		480 mm
Height (core only - accessories not included)		1076 mm
Approx. Weight		27.5 kg

#### Maximum Residual Voltages

Lightning current impulse 8/20 $\mu$ s				Steep lightning current impulse 1/20 $\mu$ s		Switching current impulse 30/60 $\mu$ s				
5 kA	10 kA	20 kA	40 kA	10 kA	20 kA	125 A	250 A	500 A	1000 A	2000 A
164 kV	173 kV	187 kV	207 kV	181 kV	195 kV	135 kV	138 kV	142 kV	147 kV	152 kV

#### Power Frequency Voltage versus Time



#### Marking

Isc:65 kA  
In:10 kA  
PCA3E72  
IEC 60099-4:2014  
Manufacturing Year  
Ur:72kV  
Uc:57.6kV  
Designation class: SM  
Serial No  
7.8 kJ/kV-Ur

\* The image on this datasheet is a reference, for proper dimensional information please refer to technical sales drawing.  
For data not shown on this datasheet or questions related to special applications, please contact TE for further assistance.

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**ENERGY / TE's BOWTHORPE EMP HIGH VOLTAGE SURGE ARRESTER**