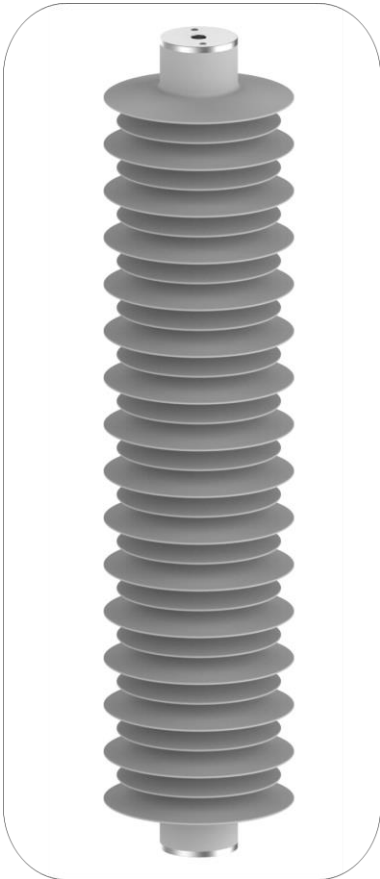


TE's BOWTHORPE EMP HIGH VOLTAGE SURGE ARRESTERS

TECHNICAL SPECIFICATIONS

PCA RANGE - PCA3E120



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 μ s: 100 kA
Single impulse withstand rating: 2.2 C
Energy Capability (Wth): 7.8 kJ/kV at Ur (Thermal)
IEC 60099-4:2014

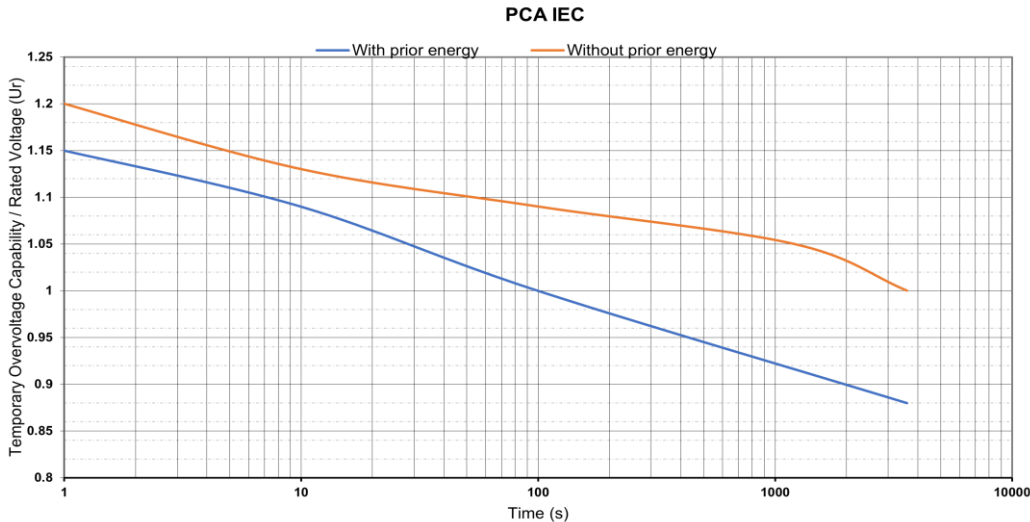
Surge Arrester Characteristics

Maximum System Voltage:	Us:	145 kV
Rated Voltage	Ur:	120 kV
Continuous Operating Voltage	Uc:	96 kV
TOV Capability (with prior energy)		138.0 kV for 1s 130.8 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 μ s		672 kV
Wet Power Frequency Voltage		358 kV
Flashover Distance		1113 mm
Creepage Length		4500 mm
Minimum distance between phase centers		990 mm
Minimum distance between phase to earth		900 mm
Height (core only - accessories not included)		1076 mm
Approx. Weight		27.5 kg

Maximum Residual Voltages

Lightning current impulse 8/20 μ s				Steep lightning current impulse 1/20 μ s		Switching current impulse 30/60 μ s				
5 kA	10 kA	20 kA	40 kA	10 kA	20 kA	125 A	250 A	500 A	1000 A	2000 A
274 kV	288 kV	311 kV	346 kV	302 kV	325 kV	225 kV	230 kV	236 kV	245 kV	254 kV

Power Frequency Voltage versus Time



Marking

Isc:65 kA
In:10 kA
PCA3E120
IEC 60099-4:2014
Manufacturing Year
Ur:120kV
Uc:96kV
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