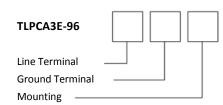


Bowthorpe EMP Transmission Surge Arrester TLPCA Range

Metal oxide arrester (ZnO) Polymeric Housing Outdoor application IEC 60099-4; 2014 Nominal discharge current: 10 kA Designation class SM (LD cl 3) Charge current rate (Qrs): 2.2 C High current impulse 4/10 µs: 100 kA Energy Capability (Wth): 7.8 kJ/kV at U_r



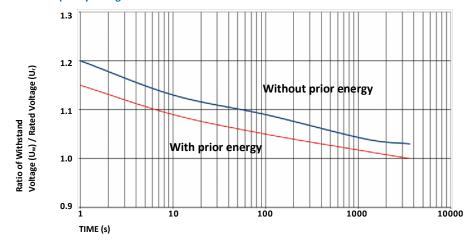
Surge Arrester Characteristics

Rated voltage	U _r :	96	kV
Continuous operating voltage	U _c :	77	kV
TOV Capability	T _r :	110	kV for 1s
		105	kV for 10s
Rated short circuit current		65	kA
Cantilever Load			
Safe long-term load (SLL)		2.0	kNm
Safe short-term load (SSL)		2.5	kNm
Impulse voltage - 1,2/50 μs		672	kV
Power frequency voltage - wet		360	kV
Flashover Distance		1113	mm
Creepage Length		4500	mm
Height		1085	mm
Approx. Weight		27	kg
			-

Maximum Residual Voltages

Lightning current impulse 8/20 μs		. •	Steep lightning current impulse 1/20 us		Switching current impulse 30/60 μs						
5 kA	10 kA	20 kA	40 kA	10 kA	20 kA	125 A	250 A	500 A	1000 A	2000 A	3000A
219 kV	230 kV	249 kV	246 kV	242 kV	260 kV	180 kV	184 kV	189 kV	196 kV	203 kV	210 kV

Power frequency voltage versus time



Marking

ZnO - Surge - Arrester I_{SC} 65 kA I_N 10 kA, SM TLPCA3E-96 IEC 60099-4 Manufacturing Year U_r: 96 kV U_c:77 kV Qrs: 2.2 C