

1.1. specifications

ISOLATED 110 kV BUSHINGS FOR POWER TRANSFORMERS TYPE ГКТИИТIII-60-126/800) drawing ИВУЕ.686352.103-01 on the Anex 1				
No d/o	Feature	U.M	Technical data required	
1	CONDITIONS IMPOSED BY THE ENERGY SYSTEM			Dalian Hivolt Power System Co., Ltd
1.1	Voltage class	kV	110	110
1.2	Highest voltage for equipment Um	kV	126	126
1.3	Nominal frequency	Hz	50±1Hz	50±1Hz
1.4.1	At lightning impulse 1.2/50 μ s	kVmax	550	550
1.4.2	At industrial frequency	kV	230	230
2	CLIMATIC AND ENVIRONMENTAL CONDITIONS			
2.1	Ambient temperature	°C	-40 / +55	-40 / +55
2.2	Maximum solar radiation	kW/m ²	1,1	1.1
2.3	Place of installation		outside	outside
2.4	Relative humidity	%	100	100
2.5	Ice thickness	mm	24	24
2.6	Seismic class according to MSK 64		9	9
3	ELECTRICAL CHARACTERISTICS			
3.1	Maximum working voltage	kV	135	135
3.2	Maximum voltage on each phase	kV	78	78
3.3	Rated current (Ir)	A	800	800
3.4	Short-circuit current thermal limit (1sec)	kA	20	20
3.5	Minimum rated dynamic current	kA	50	50
3.6	Insulation level			
3.6.1	Lightning (1.2/50)	kVmax	550	550
3.6.2	At industrial frequency (50Hz 1min)	kVef	265	265
3.7	Maximum level of partial discharges			
3.7.1	The Ur	pC	10	10
3.7.2	At 1.05Ur/ $\sqrt{3}$	pC	5	5
4	CONSTRUCTION REQUIREMENTS			
4.1	External insulation		electrotechnical porcelain	electrotechnical porcelain
4.2	Internal insulation		RIP (Rezin Impregnated Paper)	RIP (Rezin Impregnated Paper)
4.3	Minimum length of drain	mm	3900	3906

4.4	Insulation parameter control terminal		From	From
4.5	Maximum allowable efforts	N	1250	1250
4.6	Overall dimensions			
4.6.1	Passage length	mm	2500	2225
4.6.2	Length of the immersed part (from the attachment flange)	mm	770	770
4.7	Fixing flange			
4.7.1	No. of holes		8	8
4.7.2	Hole diameter	mm	16	16
4.7.3	Flange diameter	mm	290	290
4.7.4	Diameter between hole centers	mm	250	250
4.8	Conductor cross-section	mm ²	400	400
4.9	Mounting angle	grade	0...90	0...90
4.10	Interior insulation texture		micagel	micagel