

## Technical Specifications for 145kV Isolator along with Support Insulators

1	Rated voltage	145kV rms
2	Rated frequency	50 Hz
3	No. of Poles	Single pole having independent operating mechanism with out earth switch
4	Design Ambient Temperature	50 Degress centigrade
5	Type	Outdoor
6	Rated Current at 50 degree Centigrade ambient temperature	1250 A
7	Rated short time withstand current of isolator	31.5 KA for 1 sec
8	Rated dynamic short time withstand current of isolator	80kAp
9	Temperature rise over design ambient temperature	As per Table-14 of IEC-62271-1
10	Rated mechanical terminal load	As per Table 4 of IEC-62271-102
11	Mechanical Endurance Class	Isolator-M2
12	Operating mechanism of isolator	A.C. Motor operated
13	No. of auxiliary contacts on each isolator	Besides requirement of this spec., 5 NO + 5 NC contacts wired on each isolator to terminal block exclusively for Employer's use in future
14	Max. Operating time	12 secs
15	Number of terminal in control cabinet	All contacts & control circuits are to be wired up to control cabinet plus 24 spare terminals evenly distributed.
16	<b>Rated Insulation levels</b>	
a	Full wave impulse withstand voltage (1.2/50 microsec.)	
i	between line terminals and ground	±650 kVpeak
ii	between terminals with isolator open	±750 kVpeak
c	<b>One minute power frequency dry withstand voltage</b>	
i	between line terminals and ground	275 kV rms
ii	between terminals with isolator open	315 kV rms
17	Minimum Corona extinction voltage with Isolator in all positions	92 KV rms
18	Max. radio interference voltage for frequency between 0.5 MHz and 2MHz. in all positions	500 micro volts at 92 kVrms
19	Minimum Creepage distance (Phase to ground)	Minimum 3625 mm.
20	Seismic acceleration	As per IS:1893
21	Thermal Rating of Auxiliary Contacts	10 A at 220 V DC
22	Breaking Capacity of auxiliary contacts	2 A DC with circuit time constant not less than 20 ms
23	System neutral earthing	Effectively Earthed
24	Cantilever strength	Minimum 6 KN
25	Top PCD	127 mm
26	No. of holes	4 x M16
27	Bottom PCD	254 mm
28	No. of holes	8 x 18mm dia
29	Minimum creepage distance	Minimum 3625 mm.

**Note:**

Isolators and Insulators offered shall comply to the latest Powergrid Technical Specifications.



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