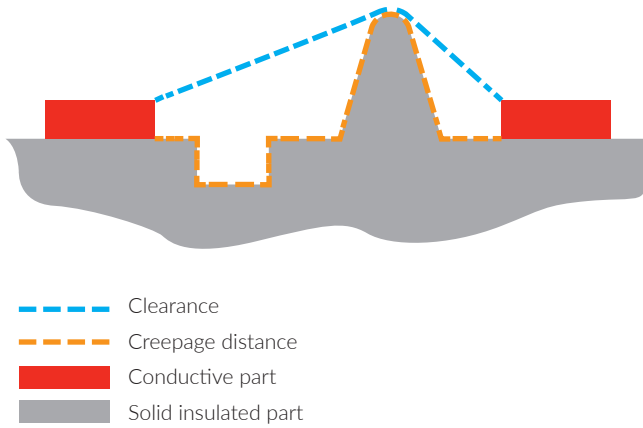


APPENDIX 4 : CLERANCES and CREEPAGE DISTANCES



Rated impulse withstand current U_{imp} (kV)	Minimum clearance (mm)
< 2.5	< 1.5
4	3
6	5.5
8	8
12	14

Rated insulation voltage U_i (V) ¹ ($U_i > U_e$)	Degree of pollution							
	1	2			3			
	All material groups ²	Material group ²			Material group ²			
		I	II	IIIa IIIb	I	II	IIIa	IIIb
250	1.5	1.5	1.8	2.5	3.2	3.6	4	4
320	1.5	1.6	2.2	3.2	4	4.5	5	5
400	1.5	2	2.8	4	5	4.5	5	6.3
500	1.5	2.5	3.6	5	6.3	7.1	8.0	8.0
630	1.8	3.2	4.5	6.3	8	9	10	10
800	2.4	4	5.6	8	10	11	12.5	
1000	3.2	5	7.1	10	12.5	14	16	
1250	4.2	6.3	9	12.5	16	18	20	
1600	5.6	8	11	16	20	22	25	

1: For lower insulation voltage values, refer to table 2 in standard IEC 61439-1

2: The material groups are classified as follows, according to the range of values of the comparative tracking index (CTI)

- Material group I 600 < CTI
- Material group II 400 < CTI < 600
- Material group IIIa 175 < CTI < 400
- Material group IIIb 100 < CTI < 175

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Item	Unit Position	U_i (V)	U_{imp} (KV)
Main busbar	-	1000	12
Distribution busbar	-	1000	12
ACB 4000 A	1,2	1000	8
ACB 2500 A	2,2	1000	12
MCCB 1600 A	3,1	1000	12
MCCB 1000A	3,2	1000	12
MCCB 630 A	3,3	1000	12
MCCB 400 A	3,4	1000	12
MCCB 250 A	3,5	800	8
MCCB 1600 A withdrawable	4,5	800	8
DSD 110 kW withdrawable	4,1	800	8
DSD 75 kW withdrawable	4,2	690	4
DSD 55 kW withdrawable	4,3	690	4
DSD 30 kW withdrawable	4,4	690	4
DOL 55 kW withdrawable	4,6	800	8
DOL 30 kW withdrawable	4,7	690	4
DOL 15 kW withdrawable	4,8	690	4

*Pollution degree 3 , Material Group IIIa