

SCHEDULE-II

1. The fuse elements shall be strain type suitable for use in 11KV and 33KV Drop Out Fuses. These type elements will be used for over current and short circuit protection. The ratings of the ordered fuse elements is shown in Schedule-I, the fuse elements should generally comply with ISS-9385 except as modified/laid down hereunder:-

2. The fuse elements shall have a fusing factor of 1.20 to 1.25

SN	Fuse rating in Amp	Transformer capacity	Full load current of transformers in Amps	6 time full load current		12 time full load current		28 time full load current		Continuous Operating current of fuse element in Amp
				Amps	Fusing time in Seconds	Amps	Fusing time in Seconds	Amps	Fusing time in Seconds	
1	2	3	4	5	6	7	8	9	10	11
11KV FUSE ELEENTS FOR DISTRIBUTION TRANSORMERS										
1	0.50	10KA	0.525	3.15	1.61	6.30	0.5	10.5	0.16	0.58
2	1.00	16KA	0.84	5.04	1.15	10.00	0.51	16.8	0.20	0.924
3	1.50	25KA	1.31	7.86	1.2	15.72	0.28	26.2	0.10	1.44
4	2.50	50KA	2.63	15.78	2.2	31.56	0.55	52.6	0.19	2.89
5	3.00	63KA	3.31	19.86	2.2	39.72	0.6	66.2	0.23	3.64
6	5.00	100KA	5.25	31.5	2.3	163.00	0.52	100.0	0.22	5.78
7	7.50	160KA	8.4	50.4	1.6	100.00	0.4	168.0	0.18	9.24
8	10.00	200KA	10.5	63.18	1.9	126.36	0.58	210.6	0.18	11.58
9	15.00	300KA	15.75	94.64	2.5	189.36	0.6	315.6	0.18	17.36
10	20.00	316KA	16.59	120.0	1.0	240.00	0.25	600.0	1.00	18.25
11	25.00	500KA	26.25	157.8	1.8	315.00	0.54	526.0	0.18	28.89
FOR POWER TRANSFORMER ON 11KV SIDE:-										
12	40.0	750KVA	39.38	236.28	1.70	472.56	0.28	787.6	0.12	43.40
13	50.0	1000KVA	52.50	315.00	1.20	630.00	0.26	1050.0	0.10	57.75
14	75.0	1600KVA	84.00	484.00	1.40	968.00	0.27	1600.0	0.12	92.40
15	100.0	2000KVA	105.00	630.00	1.40	1260.00	0.45	2100.0	0.14	115.50
33KV FUSE ELEMENTS FOR POWER TRANSFORERS ON 33KV SIDE:-										
16	15.0	1000KVA	17.50	105.0	2.0	210.0	0.42	353.0	0.17	19.25
17	25.0	1600KVA	28.00	168.0	2.6	336.0	0.50	560.0	0.19	30.80
18	40.0	2000KVA	43.75	262.5	1.0	525.0	0.27	875.0	0.12	48.12
19	50.0	2500KVA	55.12	330.7	1.2	661.4	0.25	1102.4	0.095	60.63
20	75.0	5000KVA	87.50	525.0	1.0	1050.0	0.24	1750.0	0.095	96.25
21	100.0	5000KVA	87.50	525.0	2.1	1050.0	0.60	1750.0	0.095	110.00

3. The fuse elements should be strong enough to withstand the pull D.O. Fuses. As such, they should be properly crimped with silver/tin coated copper wires. The fuse elements should be capable of sustaining a minimum pull of 7 Kgs. The length of fuse elements should be suitable for use in 11kV & 33KV expulsion type D.O. Fuse units respectively. The strands used at the end should be made of Silver/tin coated copper wire so as to withstand the minimum pull and for adequate current carrying capacity. With each fuse unit element a metallic tag shall be attached indicating rating of the fuse element and corresponding capacity of transformer

Almost cares should therefore be taken during manufacture to ensure both the aforesaid electrical characteristics and mechanical strength as mentioned above.

4. **TESTS:-** The following certificates are required to be furnished along with the tender from Govt. laboratory:-

- (i) Mechanical test
- (ii) Time current characteristics of each current ratings corresponding to full load current as mentioned in para-2/N above.