

Guaranteed Technical Particulars for 33 KV combined CT-PT Metering Unit		
SI No.	Characterstics	Data
I : POTENTIAL TRANSFORMER - 33 KV		
1	Type & Make	
2	Rated Primary Voltage	33 KV/ $\sqrt{3}$
3	Rated Secondary Voltage	110 V/ $\sqrt{3}$
4	Rated burden of each phase	50 VA
5	Accuracy class	0.5
6	Class of insullation	Class-A
7	Temperature rise at 1.1 times rated voltage with rated burden	As per IS 3156 part 1/78
8	Rated voltage factor	1.2 cont.
9	Ratio and phase angle error	As per IS 3156 part 1/78
10	One minute power frequency withstand test voltage	70 KV RMS
11	impulse withstand test voltage	170 KV Peak
II : CURRENT TRANSFORMER 3 CT's:		
12	Rated Voltage	33 KV
13	Rated Primary Current	As per specs.
14	Rated Secondary Current	As per specs.
15	Rated output accuracy class and accuracy limiting voltage	0.5
16	Secondary voltage knee point voltage secondary limiting voltage / ISF	0.5
17	Rated burden	15 VA
18	1 minute power frequency withstand test	70 KV RMS
19	Impulse test voltage	170 KV Peak
20	Ratio and phase angle error	As per IS 2705
III. ROOF BUSHING		
21	Type & Make	Out door Reputed indigencous make
22	Dry flash over voltage	As per IS : 2099/73
23	Wet flash over voltage	
24	Dry 60 Sec withstand voltage	
25	Under oil flash over on puncture withstand test voltage (Power frequency)	
26	Full wave impulse withstand test voltage with I.	
27	Creepage distance in polluted air	
28	Corona shield provided or not	N.R
TRANSFORMER OIL		
29	Apperance of oil	Clenr transparrent & free from suspended matter
30	Density at 27 ⁰ C (max.)	0.812
31	Kinematics viscosity at 27 ⁰ C (max)	11.680
32	interfacial tension at 27 ⁰ C (max)	0.017
33	Flash point, pensky marten closed (min)	152.000
34	Pour point (max)	-27.000
35	Neutralization value	
	a. Total acidity (max)	NIL
	b. inorganic acidity / alkalinity	NIL
36	Corrosiv sulphur	Non corrosive
37	Electric strength (break down voltage) (min)	
	a. New unfiltered oil	30 kv
	b. after filtration	70 kv
38	Diclectric dissipation factor	0.000
39	Specific resistance (resistivity)	
40	a. at 90 ⁰ C (MIN)	432 x 10 ¹²
41	b. at 27 ⁰ C (MIN)	
42	Oxidntion stibility	
	a. Neutrnization value after oxidation	0.031
	b. Total slude, after oxidation (max)	0.025
43	Ageing characterstics after accelerating ageing () open breaker method with copper catalyst for 96 hrs.	
	a Specific resistance (resistivity)	
	i. at 27 ⁰ C (MIN)	145 x 10 ¹²
	ii. at 90 ⁰ C (MIN)	40 x 10 ¹²
	b Dielectric dissipation factor. Tan delta at 90 ⁰ C	0.003
	Total acidity (max)	0.025
	c Total sludge value (max)	0.009
44	Presence of oxidation inbabites	Absent
45	Water content (max)	12
46	Total weight	380 kg
47	Mounting details	500 x 500 mm mounting hole
48	Overall dimension	1490 x 1010 x 11000 mm

N.B :- Type test certificates from CPRI or accredited NABL laboratory should be furnished.