

Guaranteed Technical Particulars for 33 KV Metering Unit

SI No.	Characteristics	Didders Data
I: POTENTIAL TRANSFORMER -33 KV		
1	Type & Make	
2	Rated Primary Voltage	33 KV
3	Rated Secondary Voltage	110 V
4	No. of Secondary Winding	3
5	Rated burden of each phase	50 VA
6	Accuracy class	0.5
7	Class of insulation	Class-A
8	Temperature rise at 1.1 times rated voltage with rated burden	As per IS 3156 Part 1/78
9	Rated voltage factor	1.2 cont
10	Ratio and phase angle error	As per IS 3156
11	One minute power frequency withstand test voltage	70 KV RMS
12	Impulse withstand test voltage	170 KV peak
II: CURRENT TRANSFORMER:		
13	Rated voltage	33 KV
14	Rated Primary Current	5 Amp & 1 Amp
15	Rated Secondary Current	5 Amp & 1 Amp
16	No of Core	3 in 3 CT Type.
17	Rated output accuracy class and accuracy limiting voltage	0.5
18	Secondary voltage knee point voltage secondary limiting voltage /ISF	<=5
19	Rated burden	15 VA
20	1 minute power frequency withstand test	70 KV RMS
21	Impulse test voltage	170 KV peak
22	Ratio and phase angle error	As per IS 2705.
III. ROOF BUSHING		
23	Type & Make	Out door , Reputed indigeneous make
24	Dry flash over voltage	As per IS: 2099/73
25	Wet flash over voltage	
26	Dry 60 sec withstand voltage	
27	Under oil flash over or puncture withstand test voltage (Power frequency)	
28	Full wave impulse withstand test voltage with 1.	
29	Creepage distnace in polluted air	
30	Corona shield provided or not	N.R

SI No.	Characteristics	Didders Data
TRANSFORMER OIL		
31	Apperance of oil	Clear transparent & free from suspended matter
32	Density at 27 ⁰ C (max)	0.812
33	Kinematics viscosity at 27 ⁰ C (max)	11.680
34	Interfacial tension at 27 ⁰ C (min)	0.047
35	Flash point , pensky marten closed (min)	152.000
36	Pour point (max)	-27.000
37	Neutralization value	
	a. Total acidity (max)	NIL
	b. Inorganic acidity / alkalinity 99	NIL
38	Corrosive sulphur	Non corrosive
39	Electric strength (break down voltage) (min)	
	a. New unfiltered oil	30 KV
	b. After filtration	70 KV
40	Dielectric dissipation factor	0.000
41	Specific resistance (resistivity)	
42	a. At 90 ⁰ C (MIN)	432 x10 ¹²
43	b. At 27 ⁰ C (MIN)	+
44	Oxidation stability	
	a. Neutralization value after oxidation	0.031
	b. Total slude , after oxidation (max)	0.025
45	Ageing characteristics after accelerating ageing () open breaker method with copper catalyst for 96 hrs.	
a	Specific resistance (resistivity)	
	i. At 27 ⁰ C (Min)	145x10 ¹²
	ii. At 90 ⁰ C (Min)	40x10 ¹²
b	Dielectric dissipation factor. Tan delta at 90 ⁰ C	0.003
c	Total acidity (max)	0.025
	Total sludge value (max)	0.009
46	Presence of oxidation inhabiter	Absent
47	Water content (max)	12
48	Total weight	380 Kg
49	Mounting details	500x500 mm mounting hole
50	Overall dimension	1490x1010x11000 mm

Guaranteed Technical Particulars for 11 KV Metering Unit

SI No.	Characteristics	Didders Data
I: POTENTIAL TRANSFORMER -11 KV		
1	Type & Make	
2	Rated Primary Voltage	11 KV
3	Rated Secondary Voltage	110 V
4	No. of Secondary Winding	3
5	Rated burden of each phase	50 VA
6	Accuracy class	0.5
7	Class of insulation	Class-A
8	Temperature rise at 1.1 times rated voltage with rated burden	As per IS 3156 Part 1/78
9	Rated voltage factor	1.2 cont
10	Ratio and phase angle error	As per IS 3156 Part 1/78
11	One minute power frequency withstand test voltage	28 KV RMS
12	Impulse withstand test voltage	75 KV peak
II: CURRENT TRANSFORMER:		
13	Rated voltage	11 KV
14	Rated Primary Current	15/5/3/2/1 Amp.
15	Rated Secondary Current	5 Amp & 1 Amp
16	No of Core	3 in 3 CT Type.
17	Rated output accuracy class and accuracy limiting voltage	0.5
18	Secondary voltage knee point voltage secondary limiting voltage /ISF	<=5
19	Rated burden	15 VA
20	1 minute power frequency withstand test	28 KV RMS
21	Impulse test voltage	75 KV peak
22	Ratio and phase angle error	As per IS 2705.
III. ROOF BUSHING		
23	Type & Make	Out door , Reputed indigeneous make
24	Dry flash over voltage	As per IS: 2099/73
25	Wet flash over voltage	
26	Dry 60 sec withstand voltage	
27	Under oil flash over or puncture withstand test voltage (Power frequency)	
28	Full wave impulse withstand test voltage with 1.	
29	Creepage distnace in polluted air	
30	Corona shield provided or not	N.R

SI No.	Characteristics	Diders Data
TRANSFORMER OIL		
31	Apperance of oil	Clear transparent & free from suspended matter
32	Density at 27 ⁰ C (max)	0.812
33	Kinematics viscosity at 27 ⁰ C (max)	11.68
34	Interfacial tension at 27 ⁰ C (min)	0.047
35	Flash point , pensky marten closed (min)	152.000
36	Pour point (max)	-27.000
37	Neutralization value	
	a. Total acidity (max)	NIL
	b. Inorganic acidity / alkalinity 99	NIL
38	Corrosive sulphur	Non corrosive
39	Electric strength (break down voltage) (min)	
	a. New unfiltered oil	30 KV
	b. After filtration	70 KV
40	Dielectric dissipation factor	0.000
41	Specific resistance (resistivity)	
42	a. At 90 ⁰ C (MIN)	432 x10 ¹²
43	b. At 27 ⁰ C (MIN)	7421x10 ¹²
44	Oxidation stability	
	a. Neutralization value after oxidation	0.031
	b. Total slude , after oxidation (max)	0.025
45	Ageing characteristics after accelerating ageing () open breaker method with copper catalyst for 96 hrs.	
a	Specific resistance (resistivity)	
	i. At 27 ⁰ C (Min)	145x10 ¹²
	ii. At 90 ⁰ C (Min)	40x10 ¹²
b	Dielectric dissipation factor. Tan delta at 90 ⁰ C	0.003
c	Total acidity (max)	0.025
	Total sludge value (max)	0.009
46	Presence of oxidation inhabiter	Absent
47	Water content (max)	12
48	Total weight	180 Kg
49	Mounting details	500x270 mm mounting hole
50	Overall dimension	900x700x720 mm