National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :	HIGH VOLTAGE TEST LABORATORY, ELECTRICAL CONTROLS & SYSTEMS, 1409-1410, WAGHODIA GIDC, WAGHODIA, VADODARA, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
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Validity	19/07/2022 to 18/07/2024	**Last Amended on**	-

S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
Permanent Facility				
1	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combi Sensor CT UPTO 33 kV	Determination of Composite Error	IEC 61869-1 CL. No. 7.2.6 &IEC 61869-2 CL. No. 7.3.5 .203
2	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combi Sensor CT UPTO 33 kV	Determination of the Secondary Winding resistance	IEC 61869-1 & 2 CL. No.7.3.201
3	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combi Sensor CT UPTO 33 kV	Inter-turn Overvoltage Test	IEC 61869-1 & 2 CL. No. 7.3.204
4	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combi Sensor CT UPTO 33 kV	Lightning impulse voltage test on Primary terminals(Dry)	IEC 61869-1 CL. No. 7.2.3
5	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combi Sensor CT UPTO 33 kV	Partial Discharge Measurement	IEC 61869-1 & 2 CL. No. 7.3.2 (IEC 60270- CL NO 4.3 2000)
6	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combi Sensor CT UPTO 33 kV	Power Frequency Voltage withstand Test on Secondary Terminals & Between sections	IEC 61869-1 &2 CL. No. 7.3.3 & 7.3.4,
7	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combi Sensor CT UPTO 33 kV	Temperature Rise test	IEC 61869-1 & 2 CL. No. 7.2.2
8	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combi Sensor CT UPTO 33 kV	Test for Accuracy	IEC 61869-1 CL. No. 7.3.5.202, IEC 61869- 2 CL. No. 7.2.6 & 7.3.5.202
9	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combi Sensor CT UPTO 33 kV	Verification of Markings	IEC 61869-1 CL. No. 7.3.6 & IEC 61869-2 CL. No. 6.13.201
10	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combi Sensor CT UPTO 33 kV	Visual & Dimension Verification	IEC 61869-1 CL No. 7.2.1.1 & IEC 61869-2
11	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combi Sensor CT UPTO 33 kV	Visual & Dimension Verification (Measure tape)	IEC 61869-1 CL No. 7.2.1.1 & IEC 61869-2
12	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combi Sensor CT UPTO 33 kV	Chopped Impulse Voltage on withstand test on Primary terminals	IEC 61869-1&2 CL. No. 7.4.1
13	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combi Sensor CT Upto 33 kV	Lightning impulse voltage test on Primary terminals(Dry)	IEC 61869-1 CL. No. 7.2.3
14	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combi Sensor CT Upto 33 kV	Power frequency voltage withstand test on primary terminal	IEC 61869-1 & IEC 61869- 2 CL. No. 7.3.1
15	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Accuracy Test(Routine Test)	IS 2705-2 (Withdrawn) CL NO 3.1 & 3.2
16	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Induce over voltage test	IS 16227-1 CL. No. 7.3.1. 301 (IS 16227 - 3 CL. No. 7.3.1.301)

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17	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Accuracy Test	IS 3156-2 (Withdrawn) CL. No 4.2
18	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit ,Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Visual inspection and dimensional check	IS 2705-1,, CL No. 10.1 (Annex. E,k) :(Withdrawn) & IS 3156-1, CL NO. 10.1 AnnexE,11
19	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit ,Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Visual inspection and dimensional check	IEC 60044-1(withdrawn) & 2
20	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit ,Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Visual inspection and dimensional check	IEC 61869-1
21	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit ,Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Visual inspection and dimensional check	IS 16227 1 & 2
22	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit ,Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Visual inspection and dimensional check(Measure tape)	IEC 60044-1 & 2
23	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit ,Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Visual inspection and dimensional check(Measure tape)	IEC 61869-1
24	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit ,Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Visual inspection and dimensional check(Measure tape)	IS 16227 1 & 2
25	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit ,Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Visual inspection and dimensional check(Measure tape)	IS 2705-1, CL No. 10.1 (Annex. E,k) :(Withdrawn) & IS 3156-1, CL NO. 10.1 AnnexE,11
26	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Power frequency voltage withstand test on primary terminal.	IEC 61869-1 & 2 CL. No. 7.3.1
27	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Determination of the Instrument Safety factor (ISF)	IEC 60044-1 CL. No. 11.6
28	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Determination of the Instrument Safety factor (ISF)	IEC 61869-2 CL. No. 7.5.2
29	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Determination of the Instrument Safety factor (ISF)	IS 16227 -2 CL. No. 7.5.2
30	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Determination of the Instrument Safety factor (ISF)	IS 2705-2 CL.No 2.5(withdrawn)
31	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Induce over voltage test	IEC 60044-2 CL. No. 9.2.1
32	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Induce over voltage test	IEC-61869-3 CL.No,7.3.1.303
33	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Induce over voltage test	IS 3156-1 CL.No 9.3.1.2(withdrawn)

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34	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Inter-turn Overvoltage Test for CT	IEC 60044-1 CL No. 8.4
35	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Inter-turn Overvoltage Test for CT	IS 16227 -2 CL. No. 7.3.204
36	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Inter-turn Overvoltage Test for CT	IEC 61869-2 CL. No. 7.3.204
37	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Inter-turn Overvoltage Test for CT	IS 2705-1 CL. No 9.5
38	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Power Frequency Voltage withstand Test on Secondary Terminals & Between sections	IEC 60044-1 CL. No. 8.3 & IEC 60044-2 CL. No.9.3
39	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Power Frequency Voltage withstand Test on Secondary Terminals & Between sections	IEC-61869-1 CL.No 7. 3.3 & 7.3.4
40	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Power Frequency Voltage withstand Test on Secondary Terminals & Between sections	IS 16227 (1,2 &3) CL. No. 7.3.3 & 7.3.4
41	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Power Frequency Voltage withstand Test on Secondary Terminals & Between sections	IS 2705-1 CL.No 9.4 & IS 3156-1 CL.No 9.4(withdrawn)
42	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Power frequency voltage withstood test on Primary terminal	IEC 60044-1 CL. No. 8.2
43	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Power frequency voltage withstood test on Primary terminal	IS 16227 1 & 2 CL. No. 7.3.1
44	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Power frequency voltage withstood test on Primary terminal	IS 2705-1 CL.No 9.3
45	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Temperature Rise Test	IS 3156-1(withdrawn) CL. No 9.5 & IS 2705-1 CL .NO 7.2 & 9.7
46	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Terminal Marking & Polarity	IEC 60044-1 CL No. 8.1 & IEC 60044-2 CL. No. 9.1
47	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Terminal Marking & Polarity	IEC 61869-1,2,3 CL. No. 7.3.6
48	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Terminal Marking & Polarity	IS 16227- 1,2 & 3 CL. No. 7.3.6
49	ELECTRICAL- INDUCTORS & TRANSFORMERS	Combined CT-VT Unit Up to 33 kV, Class :0.2s to 1.0 (CT),0.1 to 6P (PT)	Terminal Marking & Polarity	IS 2705-1 & 8.2 &IS 3156-1 CL. No 9.2(withdrawn)

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50	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 132 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Chopped Impulse Voltage on withstand test on Primary terminals	IEC 60044-1 CL.No 9.1 (withdrawn)
51	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 132 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Chopped Impulse Voltage on withstand test on Primary terminals	IEC 61869-1 & 2 , CL.No. 7.4.1
52	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 132 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Chopped Impulse Voltage on withstand test on Primary terminals	IS 16227 1 & 2, CL.No. 7.4.1
53	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 132 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Chopped Impulse Voltage on withstand test on Primary terminals	IS 2705-1 CL.No 9.10
54	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 132 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Lightning impulse voltage test on Primary terminals(Dry)	IEC 60044-1 CL. No. 7.3.2(withdrawn)
55	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 132 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Lightning impulse voltage test on Primary terminals(Dry)	IEC 61869-1 CL. No. 7.2.3
56	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 132 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Lightning impulse voltage test on Primary terminals(Dry)	IS 2705-1 CL.No 9.8
57	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 132 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Lightning impulse voltage test on Primary terminals(Dry)	IS 16227 1 & 2 : CL. No. 7.2.3.2
58	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A t0 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A,	Determination of the Secondary Winding resistance	IS 2705-4 CLNo. 6.2 (withdrawn)
59	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Measurement of capacitance	IS 16227 1 & 2 : CL. No. 7.4.3
60	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Measurement of capacitance	IS 2705-1 CL.No 9.12
61	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Measurement of Dielectric Dissipation factor	IEC 60044-1 CL. No. 9.2(withdrawn)
62	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Measurement of Dielectric Dissipation factor	IEC 61869-1 & 2 CL. No. 7.4.3
63	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Measurement of Dielectric Dissipation factor	IS 16227 1 & 2 : CL. No. 7.4.3
64	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Measurement of Dielectric Dissipation factor	IS 2705-1 CL.No 9.12
65	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Partial Discharge Measurement	IEC 61869-1 & 2 CL. No. 7.3.2, (IEC 60270- CL NO 4.3)
66	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Partial Discharge Measurement	IS 2705-1 CL.No 9.1.2 (IEC 60270- CL NO 4.3 2000)

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67	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Partial Discharge Measurement	IS16227-1 & 2 : CL.No.7.3.2 (IEC 60270- CL NO 4.3 2000)
68	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Partial Discharge Measurement	IEC 60044-1(withdrawn) CL. No . 8.2.2 (IEC 60270- CL NO 4.3 2000)
69	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Power frequency voltage withstand test on primary terminal.	IEC 60044-1(withdrawn) CL. No. 8.2.1
70	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Power frequency voltage withstand test on primary terminal.	IEC 61869-1 & 2 CL.No 7.3.1
71	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Power Frequency Voltage withstand Test on Secondary Terminals & Between sections.	IEC 60044-1(withdrawn) CL. No. 8.3 & 14.4.4
72	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Temperature Rise test	IEC 60044-1 CL. No. 7.2(Withdrawn)
73	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Test for Accuracy	IEC 60044-1 (withdrawn)& 2 CL. No. 11.4, 11.5 and 12.4
74	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Test for Accuracy	IEC 61869-1 CL.No 7.3.5, IEC 61869- 2 CL.No 7.2.6 & 7.3.5
75	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Test for Accuracy	IS 16227 -1, CL. No. 7.3.5 IS 16227 -2 CL. No. 7.2.6
76	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Test for Accuracy	IS 2705-2 CL.No 3.1 & 3.2(withdrawn)
77	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Test for Rated knee point e.m.f. and exciting current at rated knee point e.m.f.	IEC 60044-1 CL. No. 14.4.1(withdrawn)
78	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Verification of Markings	IEC 60044-1 CL.No 8.1(withdrawn)
79	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Visual inspection and dimensional check	IEC 61869-1 Clause 7.2.1.1 & IEC 61869-2
80	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Visual inspection and dimensional check	IS 2705: 1 (Withdrawn) CL No. 10.1 (Anex E,k)
81	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Visual inspection and dimensional check(Measure tape)	IEC 60044-1(withdrawn)
82	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Visual inspection and dimensional check(Measure tape)	IEC 61869-1 Cl. No. 7.2.1.1 & IEC 61869- 2

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83	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Visual inspection and dimensional check(Measure tape)	IS 16227 1 & 2 Cl. No. 7.2.1.1
84	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A	Visual inspection and dimensional check(Measure tape)	IS 2705-1 Cl No. 10.1
85	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Determination of Composite Error	IEC 61869-1 & 2 CL. No. 7.2.6-203
86	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A,	Determination of Composite Error	IEC 60044-1 CL.No 12.5 & 12.6(Withdrawn)
87	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A,	Determination of Composite Error	IS 16227 1 & 2 : CL. No. 7.2.6-203
88	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A,	Determination of Composite Error	IS 2705-2 CL.No 2.4(withdrawn)
89	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A,	Determination of the Instrument Safety factor (ISF)	IEC 60044-1 CL. No. 11.6(withdrawn)
90	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Determination of the Instrument Safety factor (ISF)	IEC 61869-1 & 2 CL. No. 7.2.6.202 & 7.5.2
91	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Determination of the Instrument Safety factor (ISF)	IS 16227 1 & 2 CL. No. 7.2.6.202 & 7.5.2
92	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Determination of the Instrument Safety factor (ISF)	IS 2705-2 CL.No 2.5(withdrawn)
93	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A,	Determination of the Secondary Winding resistance	IEC 60044-1 CL.No 13.4.3(withdrawn)
94	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Determination of the Secondary Winding resistance	IEC 61869-1 & 2 CL.No.7.3.201
95	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Determination of the Secondary Winding resistance	IS 16227 -1 & 2 CL.No. 7.3.201
96	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A,	Inter-turn Overvoltage Test	IEC 60044-1 CL.No 8.4 & 14.4.5 (withdrawn)
97	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Inter-turn Overvoltage Test	IEC 61869-1 & 2 CL.No. 7.3.204
98	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Inter-turn Overvoltage Test	IS 16227 -1 & 2 CL.No. 7.3.204
99	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Inter-turn Overvoltage Test	IS 2705-1 CL CL.No 9.5
100	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A,	Measurement of capacitance	IEC 60044-1 CL. No. 9.2(withdrawn)

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101	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A,	Measurement of capacitance	IEC 61869-1 & 2 CL. No. 7.4.3
102	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Power frequency voltage withstand test on primary terminal.	IS 16227 -1 & 2 CL.No. 7.3.1
103	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Power frequency voltage withstand test on primary terminal.	IS 2705-1 CL No 9.3
104	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Power Frequency Voltage withstand Test on Secondary Terminals & Between sections.	IEC 61869-1 &2 CL.No. 7.3.3 & 7.3.4
105	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Power Frequency Voltage withstand Test on Secondary Terminals & Between sections.	IS 16227 -1 & 2 CL.No. 7.3.3 & 7.3.4
106	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Power Frequency Voltage withstand Test on Secondary Terminals & Between sections.	IS 2705-1 CL.No 9.4
107	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Temperature coefficient test	IEEMA 22-02005 (8b)
108	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Temperature coefficient test	PGCIL Specifications (C/ENGG/SPEC/SWGR/R11),
109	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Temperature Rise test	IEC 61869-1 & 2 CL. No. 7.2.2
110	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Temperature Rise test	IS 16227 (1) : CL. No. 7.2.2 IS 16227 (2) CL. No. 7.2.2.104
111	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Temperature Rise test	IS 2705-1 CL.No 7.2 & 9.7
112	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Test for Rated knee point e.m.f. and exciting current at rated knee point e.m.f.	IS 2705 -4 CL 6.1 (Annex E 10.1 (H))(withdrawn)
113	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A,	Test for Rated knee point e.m.f. and exciting current at rated knee point e.m.f.	IEC 61869-1 & 2 CL. No.7.3.203
114	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A,	Test for Rated knee point e.m.f. and exciting current at rated knee point e.m.f.	IS 16227 -1 & 2: CL. No.7.3.203
115	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Thermal Stability test	IEEMA 22-02005 (8a)
116	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Thermal Stability test	PGCIL Specifications (C/ENGG/SPEC/SWGR/R11),

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117	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Turns ratio Error	IEC 61869-2 CL. No. 7.3.5.206 & 5.6.202.4
118	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Turns ratio Error	IS 2705-4: 1992,CL.No 6.3(withdrawn)
119	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Turns ratio Error	IEC 60044-1 CL. No. 14.4.3(withdrawn)
120	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Turns ratio Error	IS 16227-1 & 2 CL.No 7.3.5.206 & 5.6.202.4
121	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Verification of Markings	IEC 61869-1 &2 CL.No 7.3.6
122	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Verification of Markings	IS 16227-1 & 2 CL.No. 7.3.6
123	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -UPTO 220 kV, 1 A TO 10000 A, Class 0.2S TO 3, 10P ,PX ,100 VA, 5A/1A,	Verification of Markings	IS 2705-1 CL.No 8.2
124	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A,	Visual inspection and dimensional check	IEC 60044-1(withdrawn)
125	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformer -Upto 220 kV, 1 A to 10000 A, Class 0.2S to 3, 10P ,PX ,100 VA, 5A/1A,	Visual inspection and dimensional check	IS 16227 1 & 2 Cl. No. 7.2.1.1
126	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Applied voltage test(AV)	IEC 60076-11 CL.No 14.2.5 (IEC 60076-3:2013 CL.No 10)
127	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Measurement of impedance of voltage(principal tapping),short circuit impedance	IS 11171 CL.No13.2 (c)
128	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Applied voltage test(AV)	IEC 60076-11 CL.No 14.2.5 (IEC 60076-3:2013 CL.No 10)
129	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Applied voltage test(AV)	IS 2026-11: CL.No14.2.5 (IS 2026-3:2018 CL.No10)
130	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Check Of Voltage Vector Relationship	CBIP publication no.: 317
131	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Dimension and Visual Verification	IEC 60076-1 CL NO. Annex A1.1
132	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Dimension and Visual Verification	IS 11171
133	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Dimension and Visual Verification	IS 2026-1 CL No. 1.2, Annex B1.1,s
134	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Dimension and Visual Verification(Measure tape)	IEC 60076-1 CL NO. Annex A1.1,p

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135	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Dimension and Visual Verification(Measure tape)	IS 11171
136	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Dimension and Visual Verification(Measure tape)	IS 2026-1 CL No. 1.2, Annex B1.1,s
137	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Full wave lightning impulse test(LI)	IEC60076-11 CL.No14.3.1 (IEC 60076-3 CL.No13 2013)
138	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Full wave lightning impulse test(LI)	IS 2026-11 CL.No14.3.1 (IS 2026-3 CL.No13 2018)
139	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Induced overvoltage withstand test	IS 11171 CL.No13.2 (f)
140	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Induced voltage withstand test(IVW)	IEC 60076-11 CL.No14.2.6 (IEC 60076-3:2013 CL.No11)
141	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Induced voltage withstand test(IVW)	IS 2026-11 CL.No14.2.6 (IS 2026-3 CL.No11 2018)
142	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Lightning impulse test	IS 11171 CL.No13.1(g):
143	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Magnetic balance test	CBIP publication no.: 317
144	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Measurement of acoustic sound level	IS 11171, CL.No13.3(b)
145	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Measurement of insulation resistance	CBIP: 317
146	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Measurement of insulation resistance	IEC 60076-1 CL.No. 11.1.4 (h)
147	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Measurement of insulation resistance	IS 2026 (Part 1) CL.No 10.1.3(j)
148	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Measurement of no-load current	IEC 60076-11: CL.No14.2.4 (IEC 60076-1:2011 CL.No11.5)
149	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Measurement of no-load current	IS 11171 CL.No13.2(d)
150	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Measurement of no-load current	IS 2026-11 CL.No14.2.4 (IS 2026-1:2011 CL.No10.5)
151	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Measurement of no-load Loss	IEC 60076-11: CL.No14.2.4 (IEC 60076-1:2011 CL.No11.5)
152	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Measurement of no-load Loss	IS 11171 CL.No 13.2(d)
153	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Measurement of no-load Loss	IS 2026-11 CL.No14.2.4 (IS 2026-1:2011 CL.No10.5)

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154	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Measurement of short circuit impedance	IEC 60076-11 CL.No 14.2.3 (IEC 60076-1:2011 CL.No11.4)
155	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Measurement of short circuit impedance	IS 2026-11 CL.No 14.2.3 (IS 2026-1:2011 CL.No10.4)
156	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Measurement of short circuit load loss	IS 11171 CL.No13.2 (c)
157	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Measurement of short circuit load loss.	IEC 60076-11 CL.No 14.2.3 (IEC 60076-1:2011 CL.No11.4)
158	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Measurement of short circuit load loss.	IS 2026-11 CL.No 14.2.3 (IS 2026-1:2011 CL.No10.4)
159	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Measurement of sound level	IEC 60076-11 CL.No 14.4.2 (IEC 60076-10: 2016)
160	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Measurement of sound level	IS 2026-11 CL.No 14.4.2 (IS 2026-10 2009)
161	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Measurement of voltage ratio and check of phase displacement.	IEC 60076-11 CL.No14.2.2 (IEC 60076-1:2011 CL.No11.3)
162	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Measurement of voltage ratio and check of phase displacement.	IS 2026-11CL.No14.2.2 (IS 2026-1:2011 CL.No10.3)
163	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Measurement of voltage ratio and check of voltage vector relationship	IEC 61869-1 & IEC 61869-2 Cl. No. 7.3.1
164	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Measurement of winding resistance	IEC 60076-11 CL.No14.2.1, (IEC 60076-1:2011 CL.No11.2)
165	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Measurement of winding resistance	IS 11171 CL.No13.2(a)
166	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Measurement of winding resistance	IS 2026-11: CL.No14.2.1, (IS 2026-1:2011 CL.No10.2)
167	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Partial discharge measurement	IEC 60076-11:CL No14.2.7 (IEC 60076-3 With Annex –A:2013 , IEC 60270- CL NO 4.3 2000)
168	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Partial discharge measurement	IS 11171 CL.No13.3(a) (IS 6209 1982 ,IS 2026 -3 Appendix A 1981)
169	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Partial discharge measurement	IS 2026-11 CL.No 14.2.7 (IEC 60076-3 With Annex –A 2013, IEC 60270- CL NO 4.3 2000)
170	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Separate source voltage withstand test	IS 11171 CL.No13.2(e)

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171	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Temperature rise test (Full load heat run cycle)	IEC60076-11: CL.No14.3.2 (IEC 60076-2 CL.No7)
172	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Temperature rise test (Full load heat run cycle)	IS 11171 CL.No13.1(h)
173	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Temperature rise test (No load heat run cycle)	IEC60076-11: CL.No14.3.2 (IEC 60076-2 CL.No7 2011)
174	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Temperature rise test (No load heat run cycle)	IS 11171 CL.No13.1(h)
175	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Temperature rise test (No load heat run cycle)	IS 2026-11 CL.No14.3.2 (IS 2026-2 CL.No5 2010)
176	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Transformer up to,2.5 MVA, up to 33kV, Single phase & three phase transformer	Temperature rise test(Full load heat run cycle)	IS 2026-11 CL.No14.3.2 (IS 2026-2 CL.No5 2010)
177	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 132 kV, Class 0.1 TO 6P	Lightning impulse voltage test on Primary Terminals (Dry)	IS 16227-1 CL. No. 7.2.3.2 & IS 16227 - 3 CL. No. 7.2.3.2
178	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 132 kV, Class 0.1 TO 6P	Lightning impulse voltage test on Primary Terminals (Dry)	IS 3156-1 & 4 (CL. No9.16 & CL. No 9.2.12)(withdrawn)
179	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 132 kV, Class 0.1 TO 6P	Lightning impulse voltage test withstand test on Primary Terminals (Dry)	IEC 61869-1 CL. No. 7.2.3.2 & IEC 61869-3 CL. No. 7.2.3.2
180	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 132 kV, Class 0.1 TO 6P	Lightning impulse voltage test withstand test on Primary Terminals (Dry)	IEC 60044-2 CL No. 8.3.2
181	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Partial Discharge Measurement	IS 3156-1 CL. No 9.1.2(withdrawn) (IEC 60270 CL No 4.3)
182	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Power Frequency Voltage Withstand test on Primary Terminals	IS 3156-1 CL. No 9.3.1.2 (withdrawn)
183	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Power Frequency Withstand test on Secondary Terminals & between sections.	IS 16227-1 & 3 CL. No. 7.3.3 & 7.3.4
184	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Visual inspection and dimensional check(Measure tape)	IS 16227- 1 CL 7.2.1.1
185	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Measurement of Capacitance	IEC 60044-2 CL No. 10.2
186	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Measurement of Capacitance	IEC 61869-1&3 CL. No. 7.4.3
187	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Measurement of Capacitance	IS 16227-1 CL. No. 7.4.3 & IS 16227 - 3 CL. No. 7.4.3

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188	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Measurement of Capacitance	IS 3156-1 (withdrawn)
189	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Measurement of Dielectric dissipation factor	IEC 60044-2 CL No. 10.2
190	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Measurement of Dielectric dissipation factor	IEC 61869-1&3 CL. No. 7.4.3
191	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Measurement of Dielectric dissipation factor	IS 16227-1 CL. No. 7.4.3 (IS 16227 - 3 CL. No. 7.4.3)
192	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Measurement of Dielectric dissipation factor	IS 3156-1 (withdrawn)
193	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Partial Discharge Measurement	IEC 60270(2000-12) CL. No. 4.3,IEC 60044-2 CL No. 9.2.4
194	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Partial Discharge Measurement	IEC 61869-1 CL. No. 7.3.2 & IEC 61869-3 CL. No. 7.3.2 (IEC 60270 CL. No. 4.3)
195	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Partial Discharge Measurement	IS 16227 -1 CL. No. 7.3.2 IS 16227 - 3 CL. No. 7.3.2 IEC 60270 CL No 4.3
196	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Power Frequency Voltage Withstand test on Primary Terminals	IEC 60044-2 CL No.9.2.1(withdrawn)
197	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Power Frequency Voltage Withstand test on Primary Terminals	IEC 61869-1 CL. No. 7.3.1. 301 IEC 61869-3 CL. No. 7.3.1.301
198	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Power Frequency Voltage Withstand test on Primary Terminals	IS 16227-1 CL. No. 7.3.1. 301 (IS 16227 - 3 CL. No. 7.3.1.301 2015)
199	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Power Frequency Withstand test on Secondary Terminals & between sections.	IEC 60044-2 CL No.9.3(withdrawn)
200	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Power Frequency Withstand test on Secondary Terminals & between sections.	IEC 61869-1&3 CL. No. 7.3.3 & 7.3.4
201	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Power Frequency Withstand test on Secondary Terminals & between sections.	IS 3156-1 CL. No 9.4(withdrawn)
202	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Temperature-Rise Test	IEC 60044-2 CL No. 8.1(withdrawn)
203	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Temperature-Rise Test	IEC 61869-1 CL. No. 7.2.2 & IEC 61869-3 CL. No. 7.2.2

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204	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Temperature-Rise Test	IS 16227-1 CL. No. 7.2.2 IS 16227 - 3 CL. No. 7.2.2
205	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Temperature-Rise Test	IS 3156 CL. No 7.2(withdrawn)
206	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Test for Accuracy	IEC 60044-2 CL No. 12.4 , 13.7,12.3 & 13.6.2 (withdrawn)
207	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer Upto 220 kV, Class 0.1 TO 6P	Test for Accuracy	IEC 61869-1 CL. No. 7.3.5 IEC 61869-3 CL. No. 7.2.6 & CL. No. 7.3.5
208	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Test for Accuracy	IS 16227-1 CL. No. 7.3.5 (IS 16227 - 3 CL. No. 7.3.5)
209	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Test for Accuracy	IS 3156-3 CL. No 4.2(withdrawn)
210	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Verification of Markings	IEC 60044-2 CL. No. 9.1(withdrawn)
211	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Verification of Markings	IEC 61869-1&3 CL. No. 7.3.6
212	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Verification of Markings	IS 16227 -1 CL. No. 7.3.6, & IS 16227 - 3 CL. No. 7.3.6
213	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Verification of Markings	IS 3156-1 CL. No 9.2(withdrawn)
214	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Visual inspection and dimensional check	IEC 60044-2(withdrawn)
215	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Visual inspection and dimensional check	IEC 61869-1 Cl No. 7.2.1.1
216	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Visual inspection and dimensional check	IS 16227 1 & 2
217	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Visual inspection and dimensional check	IS 3156 CL No. 10.1 Annex E,11
218	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Visual inspection and dimensional check(Measure tape)	IEC 60044-2(withdrawn)
219	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer UPTO 220 kV, Class 0.1 TO 6P	Visual inspection and dimensional check(Measure tape)	IEC 61869-1 Cl No. 7.2.1.1
220	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer Upto 132 kV, Class 0.1 to 6P	Chopped Impulse Voltage on withstand test on Primary terminals	IEC 60044-2 CL No. 10.1(withdrawn)

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221	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer Upto 132 kV, Class 0.1 to 6P	Chopped Impulse Voltage on withstand test on Primary terminals	IEC 61869-1 CL.No. 7.4.1 & IEC 61869-3 CL.No. 7.4.1
222	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer Upto 132 kV, Class 0.1 to 6P	Chopped Impulse Voltage on withstand test on Primary terminals	IS 16227 -1 & IS 16227 -3 CL. No. 7.4.1
223	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformer Upto 132 kV, Class 0.1 to 6P	Chopped Impulse Voltage on withstand test on Primary terminals	IS 3156-1 CL No 9.8(withdrawn)
224	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Material (Transformer/Mineral Oil)	Electric strength, Breakdown voltage test	IEC 60156
225	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Material (Transformer/Mineral Oil)	Electric strength, Breakdown voltage test	IS 6792
226	ELECTRICAL- SWITCHGEAR & PROTECTIVE EQUIPMENT	VIU (Voltage detection system)	Indication test (Clear indication of VDS)	IEC 61243-5. CL No 5.11
227	ELECTRICAL- SWITCHGEAR & PROTECTIVE EQUIPMENT	VIU (Voltage detection system)	Dimension and Visual Marking Verification (As per Drawing)	IEC 61243-5 Cl. No. 4.11.4
228	ELECTRICAL- SWITCHGEAR & PROTECTIVE EQUIPMENT	VPIS (Voltage presence indicating system)	Dimension and Visual Verification (As per Drawing)	IEC 62271-206 Cl No. 5.5
229	ELECTRICAL- SWITCHGEAR & PROTECTIVE EQUIPMENT	VPIS (Voltage presence indicating system)	Indication test (Clear indication of VDS)	IEC 62271-206 CL No 6.3
230	ELECTRICAL- TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Bushings UPTO 170 kV, 20 kA	Dry Lightning Impulse voltage withstand test	IEC 60137 CL. No. 8.4 & 9.3
231	ELECTRICAL- TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Bushings UPTO 245 kV, 20 kA	Measurement of Capacitance	IEC 60137 CL. No. 9.2
232	ELECTRICAL- TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Bushings UPTO 245 kV, 20 kA	Tightness test on liquid-filled, compound-filled and liquid-insulated bushings	IEC 60137 CL. No. 9.8

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233	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Bushings UPTO 245 kV, 20 kA	Measurement of Dielectric Dissipation Factor (tan delta)	IEC 60137 CL. No. 9.2
234	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Bushings UPTO 245 kV, 20 kA	Measurement of Partial Discharge quantity	IEC 60137 CL. No. 9.5 (IEC 60270 :2000)
235	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Bushings UPTO 245 kV, 20 kA	Tests of Tap Insulation Power frequency voltage withstand test	IEC 60137 CL. No. 9.6
236	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Bushings UPTO 245 kV, 20 kA	Visual inspection and dimensional check	IEC 60137 CL. No. 9.11
237	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Bushings UPTO 245 kV, 20 kA	Temperature Rise Test	IEC 60137 CL. No. 8.8
238	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Bushings UPTO 245 kV, 20 kA	Tests of Tap Insulation-Measurement of Dielectric Dissipation Factor (tan delta)	IEC 60137 CL. No. 9.6
239	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Bushings UPTO 245 kV, 20 kA	Visual inspection and dimensional check	IS 12676
240	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Bushings UPTO 245 kV, 20 kA	Visual inspection and dimensional check(Measure tape)	IEC 60137 CL. No. 9.11
241	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Bushings UPTO 245 kV, 20 kA	Visual inspection and dimensional check(Measure tape)	IS 12676
242	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Bushings UPTO 245 kV, 20 kA	Dry Power frequency voltage withstand test	IEC 60137 CL. No. 9.4
243	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Bushings UPTO 245 kV, 20 kA	Tests of Tap Insulation-Measurement Capacitance	IEC 60137 CL. No. 9.6

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244	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Bushings UPTO 170 kV, 20 kA	Dry lightning impulse voltage withstand test(chopped lightning impulses test)	IEC 60137 CL.No. 8.4 & 9.3
245	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Bushings UPTO 170 kV, 20 kA	Impulse withstand voltage test (BIL)	IEEE 386 CL NO 7.5.3
246	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Insulators	Dry Lightning Impulse voltage withstand test	IEC 60273 Table 2
247	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Insulators	Dry Lightning Impulse voltage withstand test	IEC 60273 Table 2
248	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Insulators	Dry Lightning Impulse voltage withstand test	IEC 60660 CL. No 3.3 & 5.4
249	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Insulators	Dry Lightning Impulse voltage withstand test	IEC 60660 CL. No. 3.6
250	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Insulators	Dry Lightning Impulse voltage withstand test	IS 9431 CL. No 9.2
251	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Insulators	Dry Power frequency voltage withstand test	IEC 60273 Table 2
252	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Insulators	Dry Power frequency voltage withstand test	IEC 60660 CL. No 3.4 & 5.4
253	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Insulators	Dry Power frequency voltage withstand test	IS 9431 CL. No 9.3
254	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Insulators	Lightning Impulse Puncture Test	IS 9431 CL. No 9.5

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255	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Insulators	Lightning Impulse Puncture Test	IS 9431 CL. No 9.5
256	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Insulators	Lightning Impulse Puncture Test	IEC 60660 CL. No. 3.6
257	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Insulators	Measurement of Partial Discharge quantity	IEC 60273 Table 2
258	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Insulators	Measurement of Partial Discharge quantity	IEC 60660 CL. No. 5.4 & CL. No 3.5 (IEC 60270 :2000)
259	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Insulators	Measurement of Partial Discharge quantity	IS 9431 CL. No 9.4
260	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Insulators	Visual & Dimension Verification	IEC 60273 Table 2
261	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Insulators	Visual & Dimension Verification	IEC 60660 CL. No 4.2
262	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Insulators	Visual & Dimension Verification	IS 9431 CL.No 9.13
263	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Insulators	Visual & Dimension Verification (Measure tape)	IEC 60273 Table 2
264	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Insulators	Visual & Dimension Verification (Measure tape)	IEC 60660 CL No. 4.2
265	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Insulators	Visual & Dimension Verification (Measure tape)	IS 9431 CL No 9.13