National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : ELECTRICAL RESEARCH AND DEVELOPMENT ASSOCIATION, R-336, TTC INDUSTRIAL AREA, MIDC RABALE, THANE-BELAPUR ROAD, NAVI MUMBAI, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

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Validity 11/05/2023 to 10/05/2025 **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- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	AC Static Direct and Transformer operated Smart Energy meter 3 phase, 3X63.5V to 300V, Ib: 1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Starting	Cl.No.6.12 of IS:16444:2017 & Cl.No.6.12 of IS:16444
2	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	AC Static Direct and Transformer operated Smart Energy meter 3 phase, 3X63.5V to 300V, Ib: 1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Dielectric strength or AC high voltage test	Cl.No.6.10.6 of IS:16444:2017 & Cl.No.6.10.6 of IS:16444
3	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	AC Static Direct and Transformer operated Smart Energy meter 3 phase, 3X63.5V to 300V, Ib: 1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Impulse Voltage Test	Cl.No.6.10.6 of IS:16444:2017 & Cl.No.6.10.6 of IS:16444
4	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	AC Static Direct and Transformer operated Smart Energy meter 3 phase, 3X63.5V to 300V, Ib: 1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Insulation Resistance /Insulation test	Cl.No.6.10.6 of IS:16444:2017 & Cl.No.6.10.6 of IS:16444
5	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	AC Static Direct and Transformer operated Smart Energy meter 3 phase, 3X63.5V to 300V, Ib: 1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Limits of errors/ Test of accuracy requirements	Cl.No.6.12 of IS:16444:2017 & Cl.No.6.12 of IS:16444
6	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	AC Static Direct and Transformer operated Smart Energy meter 3 phase, 3X63.5V to 300V, Ib: 1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Power loss/Power consumption	Cl.No.6.10.1 of IS:16444:2017 & Cl.No.6.10.1 of IS:16444
7	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	AC Static Direct and Transformer operated Smart Energy meter 3 phase, 3X63.5V to 300V, Ib: 1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Repeatability of error test	Cl.No.6.12 of IS:16444:2017 & Cl.No.6.12 of IS:16444
8	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	AC Static Direct and Transformer operated Smart Energy meter 3 phase, 3X63.5V to 300V, Ib: 1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Running with No Load/ Test of No Load conditions	Cl.No.6.12 of IS:16444:2017 & Cl.No.6.12 of IS:16444
9	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	AC Static Direct and Transformer operated Smart Energy meter 3 phase, 3X63.5V to 300V, Ib: 1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Test of immunity of earth fault/ test of abnormal voltage condition	Cl.No.6.10.7 of IS:16444:2017 & Cl.No.6.10.7 of IS:16444
10	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	AC Static Direct and Transformer operated Smart Energy meter 3 phase, 3X63.5V to 300V, Ib: 1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Test of influence quantities (Frequency variation)	Cl.No.6.12 of IS:16444:2017 & Cl.No.6.12 of IS:16444

SCOPE OF ACCREDITATION

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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
11	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	AC Static Direct and Transformer operated Smart Energy meter 3 phase, 3X63.5V to 300V, Ib: 1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Test of influence quantities (Reverse phase sequence)	Cl.No.6.12 of IS:16444:2017 & Cl.No.6.12 of IS:16444
12	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	AC Static Direct and Transformer operated Smart Energy meter 3 phase, 3X63.5V to 300V, Ib: 1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Test of influence quantities (Voltage unbalance)	Cl.No.6.12 of IS:16444:2017 & Cl.No.6.12 of IS:16444
13	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	AC Static Direct and Transformer operated Smart Energy meter 3 phase, 3X63.5V to 300V, Ib: 1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Test of influence quantities (Voltage variation)	Cl.No.6.12 of IS:16444:2017 & Cl.No.6.12 of IS:16444
14	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	AC Static Direct and Transformer operated Smart Energy meter 3 phase, 3X63.5V to 300V, Ib: 1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Test of influence quantities (Waveform 10% of third harmonics in current)	Cl.No.6.12 of IS:16444:2017 & Cl.No.6.12 of IS:16444
15	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	AC Static Direct and Transformer operated Smart Energy meter 3 phase, 3X63.5V to 300V, Ib: 1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Test of meter constant	Cl.No.6.12 of IS:16444:2017 & Cl.No.6.12 of IS:16444
16	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib: 1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above	Dielectric strength or AC high voltage test	Cl. No. 6.10.1.3.4 of IEC: 62052-31
17	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib: 1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Dielectric strength or AC high voltage test	Cl .No 12.7.6.3 of IS: 14697:2021 & Cl.No.12.7.6.3 of IS: 13779
18	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib: 1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Dielectric strength or AC high voltage test	Cl. No. 5.4.6.3 of CBIP Report 325
19	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above	Starting	Cl. No. 7.7 of IEC: 62053-21:2020; Cl. No. 7.7 of IEC: 62053-22: 2020; Cl.No.7.7 of IEC:62053-23:2020 & Cl.No.8.3 of IEC:62053-11:
20	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above	Test of meter constant	Cl. No. 12.15 of IS: 13779 :2020 & Cl .No 12.14 of IS: 14697

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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
21	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above	Test of meter constant	Cl. No. 5.6.6 CBIP Report 325
22	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above	Test of meter constant	Cl. No. 8.4 of IEC: 62053-11:2016; Cl. No. 7.4 of IEC: 62053-21: 2020; Cl. No. 7.4 of IEC: 62053-22: 2020; Cl. No. 7.4 of IEC: 62053-23
23	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Impulse voltage test	Cl. No. 12.7.6.2 of IS: 13779:2020 & Cl .No 12.7.6.2 of IS: 14697
24	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Effect of self-heating	Cl. No. 12.7.4 of IS: 13779:2020 & Cl .No 12.7.4 of IS: 14697
25	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Effect of self-heating	Cl. No. 5.4.4. CBIP Report 325
26	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Effect of self-heating	Cl. No. 7.10 of IEC: 62053-21:2020; Clause No.9.1 of IEC: 62052-11: 2020; Cl. No. 7.10 of IEC: 62053-22: 2020 & Cl. No. 7.10 of IEC: 62053-23
27	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Heating / test of influence of heating	Cl. No. 11.9 of IS: 13010 (Ammd.1-2):2002; Cl .No 12.7.5 of IS: 14697: 2021 & Cl. No. 12.7.5 of IS: 13779
28	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Heating / test of influence of heating	Cl. No. 5.4.5 of CBIP Report 325
29	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Impulse voltage test	Cl. No. 6.10.4.3.3 of IEC: 62052-31:2015; IEC: 61000-4-5:2017 & IEC:60060
30	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Influence of supply voltage/ voltage dips and interruptions	Cl. No. 12.7.2 of IS: 13779

SCOPE OF ACCREDITATION

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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
31	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Influence of supply voltage/ voltage dips and interruptions	Cl. No. 5.4.2 of CBIP Report 325
32	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Insulation resistance / insulation test	Cl .No 12.7.6.4 of IS: 14697:2021 & Cl. No. 12.7.6.4 of IS: 13779
33	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Insulation resistance / insulation test	Cl. No. 5.4.6.4 CBIP Report 325
34	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Limits of errors / Test of accuracy requirement	Cl. No. 11.1 of IS: 13779:2020 & Cl .No 11.1 of IS: 14697
35	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Limits of errors / Test of accuracy requirement	Cl. No. 5.6.8 CBIP Report 325
36	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Limits of errors / Test of accuracy requirement	Cl. No. 7.9 of IEC: 62053-23:2020 ; Cl. No. 7.9 of IEC: 62053-21: 2020; Cl. No. 8.1 of IEC: 62053-11: 2016 & Cl. No. 7.9 of IEC: 62053-22
37	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Power loss / power consumption	Cl .No 12.7.1 of IS: 14697:2021; Cl.No.12.7.1 of IS:13779
38	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Power loss / power consumption	Cl. No. 4.4 of IEC: 62053-22:2020; Cl.No.4.4 of IEC:62053-23:2020; Cl.No.4.4 of IEC:62053-21:2020 & Cl.No.7.1 of IEC:62053-11
39	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Power loss / power consumption	Cl. No. 5.4.1 CBIP Report 325
40	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Power loss/power consumption	IS: 16444-Part-2

SCOPE OF ACCREDITATION

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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
41	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Repeatability of error test	Cl .No 12.16 of IS: 14697:2021 & Cl. No. 12.17 of IS: 13779
42	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Repeatability of error test	Cl. No. 5.6.9 CBIP Report 325
43	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Running with no load / Test of no-load condition	Cl .No 12.12 of IS: 14697:2021 & Cl. No. 12.13 of IS: 13779
44	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Running with no load / Test of no-load condition	Cl. No. 5.6.4 CBIP Report 325
45	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Running with no load / Test of no-load condition	Cl. No. 7.6 of IEC: 62053-22:2020; Cl. No. 7.6 of IEC: 62053-21: 2020; Cl.No.7.6 of IEC:62053-23: 2020 & Cl.No.8.3 of IEC:62053-11
46	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Starting	Cl .No 12.13 of IS: 14697:2021 & Cl. No. 12.14 of IS: 13779
47	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Starting	Cl. No. 5.6.5 CBIP Report 325
48	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Tamper and Fraud Monitoring (2V - 500V,10m-120A)	Cl. No.6.7.1(a), (b) & (f) of CBIP Research Publication No. 325
49	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Test of immunity to earth fault/ Test of abnormal voltage condition	Cl .No 9.6 & 12.17 of IS: 14697 :2021 & Cl. No. 12.8 of IS: 13779
50	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Test of immunity to earth fault/ Test of abnormal voltage condition	Cl. No. 4.4.7of CBIP Report 325

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51	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Test of immunity to earth fault/ Test of abnormal voltage condition	Cl. No. 7.10 of IEC: 62053-23:2020; Cl. No. 7.10 of IEC: 62053-22: 2020 & Cl.No.7.10 of IEC:62053-21
52	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Test of Influence Quantities a) Frequency Variation	Cl .No 12.10 of IS: 14697:2021 & Cl. No. 12.11 of IS: 13779
53	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Test of Influence Quantities a) Frequency Variation	Cl. No. 5.6.2 of CBIP Report 325
54	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Test of Influence Quantities a) Frequency Variation	Cl. No. 7.10 of IEC: 62053-23:2020; Cl. No. 7.10 of IEC: 62053-22: 2020 ; Cl.No.8.2 of IS:62053-11:2016 & Cl.No.7.10 of IEC:62053-21
55	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Test of Influence Quantities b) Reverse Ph Sequence	Cl. No. 12.11 of IS: 13779:2020 & Cl .No 12.10 of IS: 14697
56	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Test of Influence Quantities b) Reverse Ph Sequence	Cl. No. 5.6.2 of CBIP Report 325
57	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Test of Influence Quantities b) Reverse Ph Sequence	Cl. No. 7.10 of IEC: 62053-22:2020; Cl. No. 7.10 of IEC: 62053-21: 2020; Cl.No.8.2 of IEC:62053-11:2016 & Cl.No.7.10 of IEC:62053-23
58	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Test of Influence Quantities c) Waveform 10% of third harmonic in current	Cl. No. 12.11 of IS: 13779:2020 & Cl .No 12.10 of IS: 14697
59	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Test of Influence Quantities c) Waveform 10% of third harmonic in current	Cl. No. 5.6.2 of CBIP Report 325
60	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Test of Influence Quantities c) Waveform 10% of third harmonic in current	Cl. No. 8.2 of IEC: 62053-11

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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
61	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Test of Influence Quantities d) Voltage Variation	Cl .No 12.10 of IS: 14697:2021 & Cl. No. 12.11 of IS: 13779
62	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Test of Influence Quantities d) Voltage Variation	Cl. No. 5.6.2 of CBIP Report 325
63	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Test of Influence Quantities d) Voltage Variation	Cl. No. 8.2 of IEC: 62053-11:2016; Cl. No. 7.10 of IEC: 62053-22: 2020; Cl.No.7.10 of IEC:62053-21:2020 & Cl.No.7.10 of IEC:62053-23
64	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Test of Influence Quantities e) Voltage unbalance	Cl .No 12.10 of IS: 14697:2021 & Cl. No. 12.11 of IS: 13779
65	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Test of Influence Quantities e) Voltage unbalance	Cl. No. 5.6.2 of CBIP Report 325
66	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Test of Influence Quantities e) Voltage unbalance	Cl. No. 8.5 of IEC: 62053-11:2016; Cl. No. 7.10 of IEC: 62053-22: 2020; Cl.No.7.10 of IEC:62053-23:2020 & Cl.No.7.10 of IEC:62053-21
67	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Test of Influence Quantities) Waveform 40% of 5th harmonics in current (10 mA to 120A) and Test of Influence Quantities) Harmonic component in the voltage and current circuits (40% of 5th harmonics Current & 10% of 5th harmonics voltage)	Cl. No. 12.11 of IS: 13779
68	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Test of Influence Quantities) Waveform 40% of 5th harmonics in current (10 mA to 120A) and Test of Influence Quantities) Harmonic component in the voltage and current circuits (40% of 5th harmonics Current & 10% of 5th harmonics voltage)	Cl. No. 5.6.2 of CBIP Report 325

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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
69	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Test of Influence Quantities) Waveform 40% of 5th harmonics in current (10 mA to 120A) and Test of Influence Quantities) Harmonic component in the voltage and current circuits (40% of 5th harmonics Current & 10% of 5th harmonics voltage)	Cl. No. 7.10 of IEC: 62053-22:2020 ; Cl. No. 7.10 of IEC: 62053-23: 2020 & Cl.No.7.10 of IEC:62053-21
70	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Heating / test of influence of heating	Cl. No. 9.1 of IEC: 62052-11
71	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Influence of supply voltage/ voltage dips and interruptions	Cl. No. 9.1 of IEC: 62052-11
72	ELECTRICAL- ELECTRICAL INDICATING & RECORDING INSTRUMENTS	Electrical and Electronic (Static) Energy meter and Electromechanical Energy meter 3 phase, 3X63.5V to 300V, Ib:1A to 120A, class 0.2 and above and 1 phase, 63.5V to 300V, Ib:1A to 120A, class 0.2 and above.	Insulation resistance / insulation test	Cl. No. 12.7.6.4 of IS: 13779
73	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Combined Transformer (upto 33 kV Class, from class 1 to class 3) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P PS, PX	a) Power frequency voltage withstand test on primary terminals (separate source) b) Power frequency voltage withstand test on primary terminals (Induced AC voltage test)	Cl. No. 7.3.1 of IEC: 61869 Part-4
74	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Dry type transformers Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Induced Over voltage withstand test	cl. No. 13.2.f of IS: 11171 – [Amd.1]
75	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Circuit Breakers, Vacuum Interrupter, H.T. Panels (upto 33 kV Class)	Dry Power Frequency Voltage Withstand Test	Cl. No. 6.2 of IEC:62271–100
76	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Circuit Breakers, Vacuum Interrupter, H.T. Panels (upto 33 kV Class)	Dry Power Frequency Voltage Withstand Test	Cl. No. 6.2 of IEC: 62271–200
77	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Circuit Breakers, Vacuum Interrupter, H.T. Panels (upto 33 kV Class)	Dry Power Frequency Voltage Withstand Test	Cl. No. 6.2 of IEC:62271–1,2017, Amd-1
78	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Circuit Breakers, Vacuum Interrupter, H.T. Panels (upto 33 kV Class)	Dry Power Frequency Voltage Withstand Test	Cl. No. 7.2.7.2 of IEC: 62241-1: 2017, Amd.-1
79	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Circuit Breakers, Vacuum Interrupter, H.T. Panels (upto 33 kV Class)	Dry Power Frequency Voltage Withstand Test	Cl. No. 8.3.3.4.2 IEC 60947-1
80	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Circuit Breakers, Vacuum Interrupter, H.T. Panels (upto 33 kV Class)	Dry Power Frequency Voltage Withstand Test	Cl.No.7.2 of IEC:62271-100

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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
81	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Circuit Breakers, Vacuum Interrupter, H.T. Panels (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 7.2.7.3 of IEC: 62271-1 Amd. 1 2021
82	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Circuit Breakers, Vacuum Interrupter, H.T. Panels (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 6.2 of IEC: 62271-100
83	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Circuit Breakers, Vacuum Interrupter, H.T. Panels (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 7.2 of IEC: 62271-200
84	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Circuit Breakers, Vacuum Interrupter, H.T. Panels (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 8.3.3.4.2 IEC 60947-1
85	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Circuit Breakers, Vacuum Interrupter, H.T. Panels (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 6.2 of IEC:62271-1 Amd. 1: 2021
86	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Circuit Breakers, Vacuum Interrupter, H.T. Panels (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 7.2 of IEC:62271-100
87	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Combined Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P PS, PX	High Voltage Power Frequency dry withstand Test on secondary winding	Cl. No. 7.1.2 of IS 16227-4: 2015 Cl. No. 7.3.4 & 7.3.3 of IS 16227-1
88	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Combined Transformer (upto 33 kV Class, from class 1 to class 3) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P	Lightning impulse voltage withstand test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 7.2.3 of IS: 16227-4
89	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Combined Transformer (upto 33 kV Class, from class 1 to class 3) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P PS, PX	High voltage Power Frequency test on Primary winding	Cl. No. 7.3.1 of 16227-4:2015 Cl. No. 7.3.1.3.0.2 of IS16227-3:2015 Cl. NO. 7.3.1 of IS 16227-2-2016
90	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Combined Transformer (upto 33 kV Class, from class 1 to class 3) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P PS, PX	Power frequency voltage withstand test on primary terminals (Induced AC voltage test)	Cl. NO. 7.3.1 of IS: 16227-Part-4:2015 Cl. NO. 7.3.1.3.0.3 of IS 16227-3:2015
91	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Combined Transformer (upto 33 kV Class, from class 1 to class 3) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P PS, PX	Power Frequency voltage withstand test on secondary terminal and between sections.	Cl.No.7.3.3 & Cl.No.7.3.4 of IEC:61869 Part-1
92	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Current Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 7.2.3 of IS:16227-2
93	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Current Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 7.2.3.2 of IEC:61869-1

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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
94	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Current Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 7.2.3.2 of IEC:61869-2
95	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Current Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P PS, PX	High Voltage Power Frequency dry withstand Test on secondary winding	Cl. No, 7.3.1, 7.3.3 & 7.3.4 of IEC 61869-Part 1
96	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Current Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P PS, PX	High Voltage Power Frequency dry withstand Test on secondary winding	Cl. No, 7.3.1, 7.3.3 & 7.3.4 of IEC 61869-Part 2
97	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Current Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P PS, PX	High Voltage Power Frequency dry withstand Test on secondary winding	Cl. No. 7.3.1,7.3.3&7.3.4 of IS 16227-2
98	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Current Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P PS, PX	High voltage Power Frequency test on Primary winding	Cl. No, 7.3.1, 7.3.3 & 7.3.4 of IEC 61869-Part 1
99	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Current Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P PS, PX	High voltage Power Frequency test on Primary winding	Cl. No, 7.3.1, 7.3.3 & 7.3.4 of IEC 61869-Part 2
100	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Current Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P PS, PX	High voltage Power Frequency test on Primary winding	Cl. No. 7.3.1,7.3.3&7.3.4 of IS 16227-2
101	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Dry type transformers Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 21 of IEC :60076-11
102	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Dry type transformers Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Separate source Voltage withstand test	Cl. No. 13.2.e of IS: 11171 (R.1996,)
103	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Dry type transformers Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Separate source Voltage withstand test	Cl. No. 19 of IEC 60076-Part 11
104	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Dry type transformers Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	(Withdrawn): Cl. No. 16 of IS: 11171
105	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Dry type transformers Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Induced Over voltage withstand test	Cl. No. 20 of IEC 60076-Part 11
106	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Dry Power Frequency Voltage Withstand Test	Cl. No. 6 of IEC: 60060-1
107	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Dry Power Frequency Voltage Withstand Test	Cl. No. 6 of IEC: 60060-2
108	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Dry Power Frequency Voltage Withstand Test	Cl. No. 6 of IEC: 60060-3
109	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Dry Power Frequency Voltage Withstand Test	Cl. No. 9.3 of IS:9431 (R.1999)
110	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Dry Power Frequency Voltage Withstand Test	Cl. No. 9.4 of IS: 2544 (Amnd 1-4),

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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
111	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Dry Power Frequency Voltage Withstand Test	Cl.No.8.1 of IEC:60137
112	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Dry Power Frequency Voltage Withstand Test	IEC: 60298
113	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Dry Power Frequency Voltage Withstand Test	IEC:60052
114	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl No. 3.1.6 of IS: 9921-1-(R.1997) (Withdrawn)
115	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl No. 3.1.6 of IS: 9921-4-(R.1997) (Withdrawn)
116	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl No. 3.1.6 of IS: 9921-5-(R.1992) (Withdrawn)
117	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl No. 6.2 of IS: 9920-1-(R.1997) (Withdrawn)
118	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 10.3 of IS 731-(Amnd 1-7)
119	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 10.3 of IS: 731
120	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 20 of IEC: 60060-1
121	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 3.1.6 of IS: 9920-4-(R.1997) (Withdrawn)
122	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 3.3 of IS:5621-(Amnd 1-2)
123	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 4.3 of IEC: 60060-2
124	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 4.3 of IEC: 60060-3

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125	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 6.2 of IS: 9920-2-(R.1997) (Withdrawn)
126	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 6.2 of IS: 9920-3 (R.1997) (Withdrawn)
127	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 9.2.3 of IS:9431-(R.1999)
128	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. of 6.2 of IEC: 60265-1 (Withdrawn)
129	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl.No.8.3 of IEC:60137
130	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	IEC:60052
131	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test,Rise time 1.2 µs and Fall time 50 µs	Cl. No. 20 of IS: 2071-1
132	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Dry Power Frequency Voltage Withstand Test	Cl. No. 7.3.6 of IS 9385-2
133	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Dry Power Frequency Voltage Withstand Test	Cl. No. 8 of IS: 2071-1
134	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Dry Power Frequency Voltage Withstand Test	Cl. No. 8.1 of IEC:60137
135	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 8.3 of IEC:60137
136	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Dry Power Frequency Voltage Withstand Test	(Withdrawn Standard) Cl. No. 6 of IEC 60060-4
137	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Dry Power Frequency Voltage Withstand Test	(Withdrawn Standard) Cl. No. 6.4 of IEC 60694
138	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Dry Power Frequency Voltage Withstand Test	Cl. No. 4.7 of IEC 60168: 1994, Amd.-2:
139	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Dry Power Frequency Voltage Withstand Test	Cl. No. 6.2 of IEC: 62271-102
140	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Dry Power Frequency Voltage Withstand Test	Cl. No. 7.2 of IEC: 62271-103

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141	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	(Withdrawn) Cl. No. 6.2 of IEC: 60694
142	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	(Withdrawn) Cl. No. 9.3.6 of IS: 2544
143	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	(Withdrawn): Cl. No. 4.3 of IEC: 60060-4
144	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	(Withdrawn): Cl. No. 4.3 of IS: 2071-3
145	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	(Withdrawn): IEC: 60298
146	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl No. 4.5 of IEC 60168- 1994 (Amnd 2:2000)
147	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 19.3.2 of IEC :60353 (Withdrawn)
148	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 6.2 of IEC: 62271-102 (Withdrawn) 2018 (Amd. 1)
149	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 6.2 of IEC: 62271-103 (Withdrawn)
150	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 7.3.2 of IS 9385-2 (Withdrawn)
151	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 7.3.5 of IS: 9385-2- (R.1997) (Withdrawn)
152	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 8.3.2 of IEC: 60099-4 (Withdrawn)
153	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Insulators, Bushings, A. B. Switch, H. G. Fuse (upto 33 kV Class)	Dry Power Frequency Voltage Withstand Test	(Withdrawn Standard) Cl. No. 3.2 of IS 2071-3
154	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Oil cooled / Dry type transformers Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl.no.13 of IEC 60076-3

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155	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Oil cooled / Dry type transformers Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 13 & 14 of IS:2026-3
156	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Oil cooled / Dry type transformers Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Separate source Voltage withstand test	Cl. No. 10.1.3.a of IS: 2026-Part 1-2011 ; Cl. No. 11 of IS: 2026-Part 3
157	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Oil cooled / Dry type transformers Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 10.5 of IEEE 57.12.60
158	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Oil cooled / Dry type transformers Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 10.5 of IEEE 57.12.90
159	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Oil cooled / Dry type transformers Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Separate source Voltage withstand test	Cl. No. 11.1.2.1.e of IEC: 60076-Part 1
160	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Oil cooled / Dry type transformers Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Separate source Voltage withstand test	Cl.no.10 of IEC 60076-3 Amd. 1:
161	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Oil cooled / Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 21.3.a of IS: 1180-1-(Amnd 4)
162	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Oil cooled / Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Separate source Voltage withstand test	Cl. No. 21..2.g of IS: 1180-Part 1(Amd. 1&2) Amd. 4
163	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Oil cooled / Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Induced Over voltage withstand test	Cl. No. 21.2.f of IS: 1180-Part 1-[Amd.1&2] Amd. 4
164	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Oil cooled / Dry type transformers Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Induced Over voltage withstand test	,Cl.no.11.2 of IEC60076-Part 3 Amd. 1
165	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Oil cooled / Dry type transformers Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Induced Over voltage withstand test	Cl. No. 10.1.1.eof IS: 2026-Part 1
166	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Oil cooled / Dry type transformers Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Induced Over voltage withstand test	Cl. No. 11.1.2.1.e of IEC: 60076-Part 1
167	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Oil cooled / Dry type transformers Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Induced Over voltage withstand test	Cl.no.12 of IS2026-part 3
168	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Pin & Post Insulators (11 kV Class)	Dry Power Frequency Voltage Flashover Test	Cl. No. 9.3 of IS:9431 (R.1999)
169	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Pin & Post Insulators (11 kV Class)	Dry Power Frequency Voltage Flashover Test	IEC: 60060-1
170	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Pin & Post Insulators (11 kV Class)	Dry Power Frequency Voltage Flashover Test	IS: 2071-1
171	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Pin & Post Insulators (11 kV Class)	Lightning Impulse Voltage Flashover Test, Rise time 1.2 µs and Fall time 50 µs	Cl No. 4.5.2 of IEC 60168(Amnd 1-2),

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172	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Pin & Post Insulators (11 kV Class)	Lightning Impulse Voltage Flashover Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 10.3.5 of IS:731
173	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Pin & Post Insulators (11 kV Class)	Lightning Impulse Voltage Flashover Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 9.2.3 of IS:9431 (R.1999)
174	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Pin & Post Insulators (11 kV Class)	Lightning Impulse Voltage Flashover Test, Rise time 1.2 µs and Fall time 50 µs	IEC: 60060-1
175	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Pin & Post Insulators (11 kV Class)	Lightning Impulse Voltage Flashover Test, Rise time 1.2 µs and Fall time 50 µs	IS: 2071-1
176	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Pin & Post Insulators (11 kV Class)	Lightning Impulse Voltage Flashover Test, Rise time 1.2 µs and Fall time 50 µs	(Withdrawn): Cl. No. 9.3.6 of IS: 2544 (R.2001),
177	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Pin & Post Insulators (11 kV Class)	Dry Power Frequency Voltage Flashover Test	(Withdrawn Standard) Cl. No. 9.4.4 of IS 2544
178	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Pin & Post Insulators (11 kV Class)	Dry Power Frequency Voltage Flashover Test	Cl No. 4.7.3 of IEC 60168 (Amnd 1-2), 1994 (Amd. 2:2000)
179	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	Induced Over voltage withstand test	Cl.No7.3.1, 7.3.3, 7.3.4 of IEC 61869-3
180	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	High Voltage Power Frequency dry withstand Test on secondary winding	Cl. No. 7.3.1, 7.3.3, 7.3.4 of IEC 61869-Part 1
181	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	High Voltage Power Frequency dry withstand Test on secondary winding	Cl. No. 7.3.1, 7.3.3, 7.3.4 of IEC 61869-Part 3
182	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	High Voltage Power Frequency dry withstand Test on secondary winding	Cl. No. 7.3.1, 7.3.3, 7.3.4 of IS 16227-3
183	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	High voltage Power Frequency test on Primary winding	Cl. No. 7.3.1, 7.3.3, 7.3.4 of IEC 61869-1
184	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	High voltage Power Frequency test on Primary winding	Cl. No. 7.3.1, 7.3.3, 7.3.4 of IEC 61869-3
185	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	High voltage Power Frequency test on Primary winding	Cl. No. 7.3.1.302 of IS 16227-3
186	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	Induced Over voltage withstand test	Cl. No. 7.3.1,7.3.3,7.3.4 Of IEC 61869 -1

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187	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	Induced Over voltage withstand test	Cl.No. 7.3.1.303 of IS 16227-3
188	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. N0. 7.2.3.2 ofIEC:61869-3
189	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 7.2.3 of IEC:16227-5
190	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 7.2.3.2 of IEC:16227-3
191	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 7.2.3.2 of IEC:61869-1
192	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	High Voltage Power Frequency dry withstand Test on secondary winding	IEEE Std.C.57.13
193	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 7.3 of IEC: 60044- 2 (Withdrawn)
194	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	Cl. No. 8.3.2 of IEC: 60044-3 (Withdrawn)
195	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	Lightning Impulse Voltage Withstand Test, Rise time 1.2 µs and Fall time 50 µs	IEEE Std.C.57.13
196	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	High Voltage Power Frequency dry withstand Test on secondary winding	Cl. No. 7.3.3, 7.3.4, 7.3.4 of IEC 16227-Part 4
197	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	Induced Over voltage withstand test	Cl. No. 7.3.1, of IEC 61869-Part-3
198	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type transformers Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Measurement of no load loss and current	(Withdrawn): Cl. No. 13.2 of IS: 11171-[Amd.1]
199	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type transformers Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Measurement of no load loss and current	Cl. No. 18 of IEC 60076-Part 11
200	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type transformers Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Measurement of short circuit impedance and load loss	(Withdrawn) Cl. No. 13.2.c of IS: 11171 – [Amd.1]
201	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type transformers Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Measurement of short circuit impedance and load loss	Cl. No. 17 of IEC 60076-Part 11

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202	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type transformers Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Measurement of voltage ratio and check of phase displacement	(Withdrawan) Cl. No. 13.2.b of IS: 11171 – [Amd.1]
203	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type transformers Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Measurement of voltage ratio and check of phase displacement	Cl. No. 16 of IEC 60076-Part 11
204	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type transformers Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Measurement of winding resistance	(Withdrawn) Cl. No. 13.2 (a) of IS: 11171 [Amd.1]
205	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type transformers Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Measurement of winding resistance	Cl. No. 15 of IEC 60076-Part 11
206	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type transformers Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Measurement of zero sequence impedance on 3Ø transformer	(Withdrawn) IIS: 11171 (R.1996)
207	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type transformers Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Temperature rise test	Cl. No. 23 of IEC 60076-Part 11
208	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type transformers Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Temperature rise test	(Withdrawn)cl. No. 13.1.h of IS: 11171- [Amd.1]
209	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Dry type transformers Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Determination of sound level	IEC 60076-Part 10
210	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Dry type transformers Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Determination of sound level	IS 2026-Part 10
211	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Dry type transformers Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Magnetic balance test	CBIP publication no.:317
212	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Dry type transformers Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Measurement of insulation resistance	Cl. No. 10.1.3.j of IS: 2026-Part 1
213	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Dry type transformers Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Measurement of insulation resistance	Cl. No. 11.1.4.h of IEC: 60076-Part 1
214	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Dry type transformers Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Measurement of no load loss and current	Cl. No. 10.1.1.d of IS: 2026-Part 1
215	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Dry type transformers Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Measurement of no load loss and current	Cl. No. 11.1.2.1.d & 11.5 of IEC: 60076-Part 1
216	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Dry type transformers Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Measurement of short circuit impedance and load loss	Cl. No. 10.1.1.c of IS: 2026-Part 1
217	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Dry type transformers Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Measurement of short circuit impedance and load loss	Cl. No. 11.1.2.1.c & 11.4 of IEC: 60076-Part 1
218	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Dry type transformers Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Measurement of unbalance current	CBIP 317
219	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Dry type transformers Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Measurement of winding resistance	Cl. No. 10.1.1.a of IS: 2026-Part 1

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220	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Dry type transformers Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Measurement of winding resistance	Cl. No. 11.1.2.1.a & 11.2 of IEC: 60076-Part 1
221	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Dry type transformers Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Measurement of zero sequence impedance on 3Ø transformer	Cl. No. 10.7 of IS: 2026-Part 1
222	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Dry type transformers Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Measurement of zero sequence impedance on 3Ø transformer	Cl. No. 11.1.4.f of IEC: 60076-Part 1
223	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Dry type transformers Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Measurement of zero sequence impedance on 3Ø transformer	Cl.no.7 of IEC 60076-2
224	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Dry type transformers Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Measurement of voltage ratio and check of phase displacement	Cl. No. 10.1.1.b of IS: 2026-Part 1
225	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Dry type transformers Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Measurement of voltage ratio and check of phase displacement	Cl. No. 11.1.2.1.b. & 11.3 of IEC: 60076-Part 1
226	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Dry type transformers Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Temperature rise test	Cl. No. 10.1.2.a of IS: 2026-Part 1
227	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Dry type transformers Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Temperature rise test	Cl. No. 11.1.3.a of IEC: 60076-Part 1
228	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Dry type transformers Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Temperature rise test	Cl. No. 7 of IEC-60076-2
229	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Air pressure test	CBIP publication no.:317
230	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Air pressure test	Cl. No. 21.2.h & 21.3.d of IS:1180-Part 1(Amd. 4)
231	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Conservator for non-sealed type transformer	Cl. No. 16 of IS 1180-Part-1(Amd. 4)
232	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Determination of sound level	Cl. No. 21.4.a IS 1180-Part1 (Amd. 4)
233	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Fitting	Cl. No. 20 of IS 1180-Part-1(Amd. 4)
234	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Measurement of insulation resistance	Cl. No. 21.2.e of IS: 1180-Part 1- [Amd. 4]
235	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Measurement of no load loss and current	Cl. No. 21.2.d of IS: 1180-Part 1-[Amd.4]
236	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Measurement of short circuit impedance and load loss	Cl. No. 21.2.c of IS: 1180-Part1-[Amd.4]
237	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Upto 200 kVA '33 kV Class 1 Phase and 3 Phase	Measurement of voltage ratio and check of phase displacement	Cl. No. 21.2.b of IS: 1180-Part 1-[Amd 4]

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238	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Measurement of winding resistance	Cl. No. 21.2 (a) of IS: 1180-Part 1[Amd.4]
239	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Minimum clearance in air	Cl. No. 11 of IS 1180-Part-1(Amd. 4)
240	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Mounting Arrangements	Cl. No. 14 of IS 1180-Part-1(Amd. 4)
241	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	No Load Current at 112.5 % Voltage	Cl. No. 21.4.c of IS 1180-Part1(Amd. 4)
242	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Oil leakage test	Cl.no. 21.2.j IS 1180-Part1-(Amd. 4)
243	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Paint Adhesion test	Cl. No. 21.4.d IS 1180-Part-1(Amd. 4)
244	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Permissible Flux Density and Over Fluxing	Cl.No.6.9,7.9,8.9 ofIS 1180 (Part 4)
245	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Temperature rise test	Cl. No. 21.3.b of IS: 1180-Part 1-[Amd. 4]
246	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled / Upto 200 kVA ’33 kV Class 1 Phase and 3 Phase	Vacuum test	CBIP publication no.:317
247	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric material	Appearance	IS 1866
248	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric material	Appearance	IS:335
249	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Material	Appearance	ISO 2049
250	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric material	DBDS	IEC 62697-Part-1
251	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric material	DBDS	IS 16497-Part-1
252	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric material	Density	IS:1866:2017 & IS:1448 Part 16
253	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric material	Density	IS:335:2018 & IS:1448 Part 16

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254	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Material	Density	ISO 3675
255	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric material	Dielectric Dissipation Factor	IEC 61620
256	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Material	Dielectric Dissipation Factor	IEC: 60247
257	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric material	Dielectric Dissipation Factor	IS 1866:2017; IS:6262 (R-2001)-1992; IS:12422-2017 & IS:16086
258	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric material	Dielectric Dissipation Factor	IS:335-2018; IS:6262 (R-2001)-1992; IS:12422-2017 & IS:16086
259	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Material	Dissolved Gas Analysis	IEC 60567:2011 & IEC 60599
260	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Material	Dissolved Gas Analysis	IEC 60567:2011 & IEC 60599
261	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Material	Dissolved Gas Analysis	IEC 60567:2011 & IEC 60599
262	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Material	Dissolved Gas Analysis	IEC 60567:2011 & IEC 60599
263	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Material	Dissolved Gas Analysis	IEC 60567:2011 & IEC 60599
264	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Material	Dissolved Gas Analysis	IEC 60567:2011 & IEC 60599
265	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Material	Dissolved Gas Analysis	IEC 60567:2011 & IEC 60599
266	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Material	Dissolved Gas Analysis	IEC 60567:2011 & IEC 60599
267	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Material	Dissolved Gas Analysis	IEC 60567:2011 & IEC 60599

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268	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Material	Dissolved Gas Analysis	IEC 60567:2011 & IEC 60599
269	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Material	Dissolved Gas Analysis	IS 9434:2019 & IS 10593
270	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Material	Electric Strength	IEC: 60156
271	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric material	Electrical Strength	IS 1866:2017 & IS:6792 Amnd.1&2(R-2003)
272	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric material	Electrical Strength	IS 335:2018 & IS:6792 Amnd.1&2(R-2003)
273	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric material	Electrical Strength	IS: 1180-Part 1
274	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Material	Flash Point	ISO: 2719
275	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Material	Flash Point	IS 1866:2017 & IS 1448
276	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Material	Flash Point	IS 335:2018 & IS 1448
277	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Material	Furan Content (5HMF,2FOL,2FAL,2ACF,5MEF)	IEC 61198
278	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid dielectric material	Furan Content (5HMF,2FOL,2FAL,2ACF,5MEF)	IS:335
279	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric material	Furan Content, mg/kg (5HMF, 2FOL, 2FAL, 2ACF, 5MEF)	IS 15668
280	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Material	Interfacial Tension	ASTM: D971
281	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric material	Interfacial Tension	IS 1866:2017 & IS 6104 (R.2016)

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282	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric material	Interfacial Tension	IS 335:2018 & IS 6104 (R.2016)
283	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Material	Neutralization Value	IEC: 62021 (PART-1)-2007 & IEC:62021-Part-2
284	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Material	Neutralization Value	IS 1866:2017 & IS:1448
285	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric material	Neutralization Value	IS 335:2018 & IS:1448
286	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric material	PCA content	IP 346
287	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric material	Potentially Corrosive Sulphur	IEC: 62535
288	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric material	Potentially Corrosive Sulphur	IS16310
289	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric material	Sediment & Sludge	IS 1866
290	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric material	Sediment & Sludge	IS:335
291	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric material	Sediments & Sludge, % by wt	IS 12422
292	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Material	Specific Resistance (Resistivity)	IEC: 60247
293	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Material	Specific Resistance (Resistivity)	IS 1866:2017 & IS:6103 (R-2001)
294	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric material	Specific Resistance (Resistivity)	IS:335:2018 & IS:6103 (R-2001)
295	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric material	Total Acidity	IS 1242

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296	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Material	Water Content	IEC: 60814
297	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric material	Water Content	IS 1866:2017 & IS 13567 (R-1998)
298	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric material	Water Content	IS: 1180-part 1 [Amd. 1&2]
299	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Material	Water Content	IS:335:2018 & & IS 13567 (R-1998)
300	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Meterial	Dissolve Gas Analysis	IEC 60567:2011 & IS 10593
301	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Meterial	Dissolve Gas Analysis	IEC 60567:2011 & IS 10593
302	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Meterial	Dissolve Gas Analysis	IEC 60567:2011 & IS 10593
303	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Meterial	Dissolve Gas Analysis	IEC 60567:2011 & IS 10593
304	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Meterial	Dissolve Gas Analysis	IEC 60567:2011 & IS 10593
305	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Meterial	Dissolve Gas Analysis	IEC 60567:2011 & IS 10593
306	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Meterial	Dissolve Gas Analysis	IEC 60567:2011 & IS 10593
307	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Meterial	Dissolve Gas Analysis	IEC 60567:2011 & IS 10593
308	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Meterial	Dissolve Gas Analysis	IEC 60567:2011 & IS 10593
309	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Meterial	Dissolve Gas Analysis	IEC 60567:2011 & IS 10593

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310	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Meterial	Dissolve Gas Analysis	IS 9434:2019 & IS 10593
311	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Meterial	Dissolve Gas Analysis	IS 9434:2019 & IS 10593
312	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Meterial	Dissolve Gas Analysis	IS 9434:2019 & IS 10593
313	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Meterial	Dissolve Gas Analysis	IS 9434:2019 & IS 10593
314	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Meterial	Dissolve Gas Analysis	IS 9434:2019 & IS 10593
315	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Meterial	Dissolve Gas Analysis	IS 9434:2019 & IS 10593
316	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Meterial	Dissolve Gas Analysis	IS 9434:2019 & IS 10593
317	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Meterial	Dissolve Gas Analysis	IS 9434:2019 & IS 10593
318	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Dielectric Meterial	Dissolve Gas Analysis	IS 9434:2019 & IS 10593
319	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Liquid Electric material	PCB content	IS 16082
320	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Colour	ASTM D 1500
321	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Colour	IS:335
322	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Colour	ISO 2049
323	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Corrosive Sulphur	DIN 51353

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324	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Corrosive Sulphur	IEC:62535
325	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Corrosive Sulphur	IS:335
326	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Corrosive Sulphur	Method -B of ASTM D 1275
327	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Crystallisation	IEC:61099
328	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Crystallisation	IS:335
329	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Density, gm/cm3	IS:1448 PART-16
330	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Fire point	ASTM D-92
331	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Fire point	IS:2592-2010 & IS:335
332	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Fire point	IS:335
333	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Gassing tendency	IEC: 60628
334	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Gassing tendency	IS:335
335	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Kinematic viscosity	IEC:61868
336	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Kinematic viscosity	IS 335
337	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Kinematic viscosity	IS:16084

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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
338	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Kinematic viscosity	IS1448 (Part-25)-1976; IS:16084-2018 & IS:335
339	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Kinematic viscosity	ISO 3675
340	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Kinematic viscosity	ISO:3104-1994 & ISO:3675
341	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Oxidation Stability	IEC: 61125 method-c
342	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Oxidition Inhibitor	IEC 61125
343	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Oxidition Inhibitor	IEC:60666-2010 & IEC:61125
344	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Oxidition Inhibitor	IS:13631-2017 & IS:335
345	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Oxidition Inhibitor	IS:335
346	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Oxidition Stability	IS:12422-2017 & IS:335
347	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Oxidition Stability	IS:335
348	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	PCB	ASTM D4059
349	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	PCB	IEC:61619
350	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	PCB	IS:335
351	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Pour Point	ASTM D-2500

SCOPE OF ACCREDITATION

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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
352	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Pour Point	ASTM D-971-2012 & ASTM D-2500
353	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Pour Point	IS:1448-Part 10-2014 & IS:335
354	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Pour Point	IS:335
355	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Pour Point	ISO 3016
356	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Total additives	IEC:61125
357	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Total additives	IS:335
358	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Total additives	Method-B in IEC 60666
359	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P PS, PX	Instrument Security factor Test	Cl. No. 7.5.2 of IS 16227-4: 2015 Cl. No. 7.2.6.202 of IS 16227-2
360	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P PS, PX	Knee-point Voltage & excitation current	Cl. No. 7.3.203 of IS 16227-4:2015 Cl. 7.3.203 of IS 16227-2
361	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P PS, PX	Measurement of composite error	Cl. No. 7.3.5 of IS 16227-4: 2015 Cl. No. 7.2.6.203 & 7.3.5.203 of IS 16227-2
362	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P PS, PX	Measurement of composite error	Cl. No. 7.3.5 of IS 16227-4:2015 Cl. No. 7.3.5.203 of IS 16227-2
363	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P PS, PX	Overvoltage Inter-turn test	Cl. No. 7.1.2 of IS:16227-4:2015 and Cl.No.7.3.204 of IS 16227-2

SCOPE OF ACCREDITATION

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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
364	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P PS, PX	Verification of terminal marking and polarity	Cl.No.7.3.6 of IS 16227-4:2015; Cl.No.7.3.6 of IS:16227-2:2016 & Cl. No. 7.2.6.203 & 7.3.5.203 of IS 16227-2
365	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P PS,PX	Secondary Winding Resistance	Cl No.7.3.201 of IS 16227-4: 2015 and Cl.No.7.3.201 of IS:16227-2
366	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P PS,PX	Temperature rise Test	Cl No.7.2.2 of IS 16227-4:2015 ; Cl.No.7.2.2 of IS:16227-3:2015 & Cl.No.7.2.2 of IS:16227-2
367	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P PS,PX	Test for Accuracy	Cl. No.7.3.5 of IS 16227-4:2015; Cl.No.7.3.5.201 of IS: 16227-2: 2016 & Cl.No.7.3.5.301 of IS:16227-3
368	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P PS,PX	Temperature rise Test	Cl.No.7.2.2 of IS:16227-4: 2015; Cl.No.7.2.2 of IS:16227-3:2015 & Cl>no.7.2.2 of IS:16227-2
369	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P PS,PX	Temperature rise Test	Cl.No.7.3.5.301 of IS:16227 Part-3
370	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P PS,PX	Verification of terminal marking and polarity	Cl. No. 7.3.6 of IS: 16227-4:2015 Cl. NO. 7.3.5,201 of IS: 16227 Part - 2
371	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P PX, PS	Verification of terminal marking and polarity	Cl. No. 7.3.6 of IS: 16227-4:2015 Cl. No. 7.3.5.301 of IS: 16227 Part-3
372	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer / Current Transformer (Upto 33 kV Class, from Class I to Class 3) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P, PS, PX	Verification of terminal marking and polarity	Cl. No. 7.3.6 IS 61869-4:2013 Cl. No. 7.1.2 & 7.3.6 of IEC: 61869-Part 1
373	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Current Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3	Instrument Security factor Test	Cl. No. 7.2.6.202 & 7.5.2 of IEC 61869-Part 2
374	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Current Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P Class PS, PX	Measurement of composite error	CL.No. 7.2.6.203 & 7.3.5.203 of IEC: 61869 Part-2

SCOPE OF ACCREDITATION

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375	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Current Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P Class PS, PX	Over voltage Inter-turn test	Cl. No. 7.3.204 of IEC 61869-Part 2
376	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Current Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P Class PS, PX	Overvoltage Inter-turn test	Cl.No. 7.3.204 of IS 16227-2
377	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Current Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P Class PS, PX	Secondary Winding Resistance	Cl. No. 7.3.201 of IEC 61869-Part 2
378	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Current Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P Class PS, PX	Secondary Winding Resistance	Cl. No. 7.3.201 of IS 16227-2
379	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Current Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P Class PS, PX	Temperature rise Test	Cl. No. 7.2.2 of IEC 61869-Part 1:2007 & Cl. No. 7.2.2 of IEC 61869-Part 2
380	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Current Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P Class PS, PX	Temperature rise Test	Cl. No. 7.2.2 of IS 16227-2
381	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Current Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P Class PS, PX	Test for accuracy	Cl. No. 7.2.6 & 7.3.5 of IS 16227-1
382	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Current Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P Class PS, PX	Test for accuracy	Cl. No. 7.2.6 & 7.3.5 of IS 16227-2
383	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Current Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P Class PS, PX	Test for accuracy	Cl. No. 7.3.5., Cl. No. 7.2.6 of IEC: 61869-2:2012 Cl. No. 7.3.5., Cl. No. 7.2.6 of IEC: 61869-1
384	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Current Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P Class PS, PX	Turns ratio	Cl. No. 7.3.5.206 of IEC 61869-Part 2
385	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Current Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P Class PS, PX	Turns ratio	Cl. No. 7.3.5.206 of IS:16227-2

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386	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Current Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P Class PX, PS	Knee-point Voltage & excitation current	Cl. No. 7.3.203 of IEC 61869-Part 2
387	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Current Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P Class PX, PS	Measurement of composite error	Cl. No. 7.2.6.203 & 7.3.5.203 of IS 16227-2
388	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Current Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P PS, PX	Verification of terminal marking and polarity	Cl.No.7.3.6 of IS 16227-2
389	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Current Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class PX, PS	Knee-point Voltage & excitation current	Cl.No. 7.3.203 of IS 16227-2
390	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Current Transformer (upto 33 kV Class) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P Class PS, PX	Instrument Security Factor test	Cl.No.7.2.6.202 & 7.5.2 of IS:16227-2
391	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	Temperature rise test	Cl. No. 7.2.2 of IEC61869-3
392	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	Verification of terminal marking and polarity	Cl. No. 7.3.6 of IEC: 61869-Part 1
393	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	Verification of terminal marking and polarity	Cl.No.7.3.6 0f IS 16227-3
394	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	Temperature rise test	Cl. No. 7.2.2 of IEC 61869-1 :2007 & Cl. No. 7.2.2 of IEC 61869-3
395	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	Temperature rise test	Cl. No. 7.2.2 of IS 16227-3:2015 Cl. No. 7.2.2 of IS 16227-1:2016
396	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	Temperature rise test	Cl.No. 7.2.2 of IS 16227-3

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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
397	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	Test for accuracy	Cl. No. 7.2.6 & 7.3.5 of IEC 61869-1
398	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	Test for accuracy	Cl. No. 7.2.6 & 7.3.5 of IEC 61869-3
399	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	Test for accuracy	Cl. No. 7.2.6 & 7.3.5 of IEC 61869-3
400	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	Test for accuracy	Cl. No. 7.2.6 & 7.3.5 of IS 16227-3:2015 Cl. No. 7.3.5 of IS 16227-1
401	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	Test for accuracy	Cl. No. 7.2.6 & 7.3.5 of IS 16227-3-2015 Cl. No. 7.3.5 of IS 16227-4
402	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	Test for accuracy	Cl. No. 7.2.6.& 7.3.5 of IS 16227-3
403	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	Test for accuracy	Cl. No. 7.2.6.& 7.3.5 of IS 16227-3
404	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	Test for accuracy	Cl. No. 7.2.6 & 7.3.5 of IEC 61869-1
405	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	Verification of terminal marking and polarity	Cl. No. 7.3.6 of IS 16227-3:2015 Cl. No. 7.1.2 of IS 16227-4
406	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	Temperature rise test	Cl. No. 7.2.2 of IEC 61869-3

SCOPE OF ACCREDITATION

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407	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Voltage Transformer (upto 33 kV Class) Class 0.1 to Class 3 And Protection class 3P, 6P For 1 Phase and 3 Phase	Test for Accuracy a) Routine tests for accuracy of measuring voltage transformers b) Routine tests for accuracy of protective voltage transformer	Cl.No.7.3.5.301 & Cl.No.7.3.5.302 of IEC:61869 Part-3

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Site Facility				
1	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Combined Transformer / Potential Transformer (upto 33 kV Class)	High Voltage Power Frequency dry withstand Test on secondary winding	Cl. No. 7.3.3, 7.3.4, 7.3.4 of IEC 61869-Part 4
2	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Combined Transformer / Potential Transformer (upto 33kV Class)	High Voltage Power Frequency dry withstand Test on secondary winding	Cl. No. 7.3.3, 7.3.4, 7.3.4 of IS 16227-4
3	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Combined Transformer /Current Transformer (Upto 33 kV Class) 5-3200 A	High Voltage Power Frequency dry withstand Test on secondary winding	Cl. 7.3.3 & 7.3.4 of IS61869-4: 2013 Cl. No, 7.3.1, 7.3.3 & 7.3.4 of IEC 61869-Part 2
4	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Combined Transformer /Current Transformer (Upto 33 kV Class) 5-3200A	High Voltage Power Frequency dry withstand Test on secondary winding	Cl. 7.3.3 & 7.3.4 of IS 16227-4:2015 Cl. No. 7.3.1,7.3.3&7.3.4 of IS 16227-2
5	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Combined Transformer /Potential Transformer (Upto 33kV Class)	High Voltage Power Frequency dry withstand Test on secondary winding	Cl. No. 7.3.3, 7.3.4, 7.3.4 of IEC 61869- Part 4: 2013 Cl. No. 7.3.1, 7.3.3, 7.3.4 of IEC 61869-Part 1-10
6	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Combined Transformer/ Potential transformer (Upto 33kV Class)	High Voltage Power Frequency dry withstand Test on secondary winding	Cl. No. 7.3.3, 7.3.4, 7.3.4 of IEC 16227-Part-4 Cl. No. 7.3.1, 7.3.3, 7.3.4 of IS 16227-3
7	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Combined Transformer/Current Transformer (Upto 33k V Class) 5-3200 A	High Voltage Power Frequency dry withstand Test on secondary winding	Cl. 7.3.3 & 7.3.4 of IS 16227-4: 2015 Cl. No. 7.3.1, 7.3.3 & 7.3.4 of IS 16227-Part-1:
8	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Combined Transformer/Current Transformer (upto 33kV Class) 5-3200A	High Voltage Power Frequency dry withstand Test on secondary winding	Cl. 7.3.3 & 7.3.4 of IEC 61869-Part 4: 2013 Cl. No, 7.3.1, 7.3.3 & 7.3.4 of IEC 61869-Part 1
9	ELECTRICAL- HIGH VOLTAGE TEST FACILITY	Combined Transformer/Current Transformer (Upto 33kV Class) 5-3200A	High Voltage Power Frequency dry withstand Test on secondary winding	Cl. No. 9.4 &9.3of IS: 2705-Part 1 (RA.2002)
10	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type power tranformers and distribution transformers and distribution transformer (Upto 4/100 MVA, 220kV Class I Phase and 3 Phase)	Temperature rise	IEC:60076 (Part 11) (Cl.no.23)
11	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type power transformers and distribution transformer (Upto 4/100 MVA, 220 kv Class I Phase and 3 Phase)	Impedance voltage/short circuit impedance and load loss.	IEC:60076 (Part 11) (Cl.no.17)
12	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type power transformers and distribution transformer (Upto 4/100 MVA, 220 kV Class I Phase and 3 Phase)	Voltage ratio and check of voltage vector relationship/phase displacement	IEC:60076 (Part 11) Cl.no.16
13	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type power transformers and distribution transformer (Upto 4/100 MVA, 220 kV Class I Phase and 3 Phase)	Winding resistance	IEC:60076 (Part 11) (Cl.no.15)

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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
14	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Power transformers and distribution transformer (Upto 4/100 MVA, 220kV Class I Phase and 3 Phase)	No load loss and current	IEC:60076 (Part 11) (Cl.no.18)
15	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type power transformers and distribution transformer (Upto 4/100 MVA, 33/220 kV Class I Phase and 3 Phase)	Impedance voltage/short circuit impedance and load loss.	(Withdrawn) IS: 11171 (Cl.no.13.2.c)
16	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Power transformers and distribution transformer (Upto 4/100 MVA, 33/220 kV Class I Phase and 3 Phase)	Temperature rise	(Withdrawn) IS: 11171 (Cl.no.13.1.h)
17	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type power transformers and distribution transformer (Upto 4/100 MVA, 33/220 kV Class I Phase and 3 Phase)	Voltage ratio and check of voltage vector relationship/phase displacement	(Withdrawn) IS: 11171 Cl.no.13.2.b
18	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type Power transformers and distribution transformer (Upto 4/100 MVA, 33/220 kV Class I Phase and 3 Phase)	Winding resistance	(Withdrawn) IS: 11171 (Cl.no.13.2.a)
19	ELECTRICAL- INDUCTORS & TRANSFORMERS	Dry type power transformers and distribution transformer (Upto 4/100 MVA.33/220 kV Class I Phase and 3 Phase)	No load loss and current	(Withdrawn) IS: 11171 (Cl.no.13.2.d)
20	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled Distribution tranformers (non sealed type/ sealed type) (Upto 2.5/MVA, 33/kV Class I Phase and 3 Phase)	Impedance voltage/short circuit impedance and load loss.	IS:1180(Part 1) (Cl.no.21.2.c) (Amd. 4)
21	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled Distribution transformers (non sealed type / sealed type) (Upto 2.5/ MVA, 33/kV Calss I Phase and 3 Phase)	Insulation resistance	IS:1180(Part 1) Cl.no.21.2.e (Amd. 4)
22	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled Distribution transformers (non sealed type/ sealed type) Upto 2.5/ MVA, 33/ kV Class I Phase and 3 Phase)	Voltage ratio and check of voltage vector relationship/phase displacement	IS:1180 (Part 1) Cl.no.21.2.b (Amd. 4)
23	ELECTRICAL- INDUCTORS & TRANSFORMERS	oil cooled Distribution transformers (non sealed type/ sealed type) Upto 2.5/ MVA, 33/ kV Class I Phase and 3 Phase)	Winding resistance	IS:1180(Part 1) (Cl.no.21.2.a) Amd. 4
24	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled Distribution transformers (non sealed type/ sealed type) Upto 2.5/, MVA, 33/ kV Class I Phase and 3 Phase)	Temperature rise	IS:1180(Part 1) (Cl.no.21.3.b) Amd. 4
25	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled Distribution transformers (non sealed type/ sealed type) Upto 2.5/MVA, 33/kV Class I Phase and 3 Phase)	Oil Leakage test	IS:1180(Part 1) Cl.no.21.2.J (Amd. 4
26	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled Power tranformers Distribution transformers (non sealed type/ sealed type) Dry type Power transformers and distribution transformer (Upto 4/100 MVA, 33/220 kV Class I Phase and 3 Phase)	Insulation resistance	IEC: 60076 (Part 1) Cl.no.11.1.4.h
27	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled Power transformers Distributin transformers (non sealed type/ sealed type) Dry type power transformers and distribution transformer (Upto 4/100 MVA, 33/220 kV Class I Phase and 3 Phase)	Temperature rise	Cl. No. 5 of IS: 2026-Part 2

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28	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled Power transformers Distribution transformers (non sealed type / sealed type) Dry type power transformers and distribution transformer (Upto 4/100 MVA. 33/220 kV Class I Phase and 3 Phase)	Voltage ratio and check of voltage vector relationship/phase displacement	IEC: 60076 (Part 1) Cl.no.11.1.2.1.b
29	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled Power transformers Distribution transformers (non sealed type /sealed type) Dry type power transformers and distribution transformer (Upto 4/100 MVA, 33/220 kV Class I Phase and 3 Phase)	Impedance voltage/short circuit impedance and load loss.	IS: 2026 (Part-1) (Cl.no.10.1.1.c)
30	ELECTRICAL- INDUCTORS & TRANSFORMERS	oil cooled power transformers distribution transformers (non sealed type/ sealed type) Dry type power transformer (Upto 4/100 MVA, 33/220 kV Class I Phase and 3 Phase)	Winding resistance	IEC: 60076 (Part 1) (Cl.no.11.1.2.1.a)
31	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled Power transformers Distribution transformers (non sealed type/ sealed type) Dry type power transformers and distribution transformer (Upto 4/100 MVA, 33/220 kV Class I Phase and 3 Phase)	Impedance voltage/short circuit impedance and load loss.	IEC: 60076 (Part 1) (Cl.no.11.1.2.1.c)
32	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled Power transformers Distribution transformers (non sealed type/ sealed type) Dry type power transformers and distribution transformer (Upto 4/100 MVA, 33/220 kV Class I Phase and 3 Phase)	Magnetic Balance Test	CBIP publication no.: 317
33	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled Power transformers Distribution transformers (non sealed type/ sealed type) Dry type power transformers and distribution transformer (Upto 4/100 MVA, 33/220 kV Class I Phase and 3 Phase)	No load loss and current	IEC: 60076 (Part 1) (Cl.no.11.1.2.1.d)
34	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled Power transformers Distribution transformers (non sealed type/ sealed type) Dry type power transformers and distribution transformer (Upto 4/100 MVA, 33/220 kV class I Phase and 3 Phase)	No load loss and current	IS: 2026 (Part-1) (Cl.no.10.1.1.d)
35	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled Power transformers Distribution transformers (non sealed type/ sealed type) Dry type power transformers and distribution transformer (Upto 4/100 MVA, 33/220 kV Class I Phase and 3 Phase)	Temperature rise	IEC: 60076 (Part 1) (Cl.no.11.1.3.a),
36	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled Power transformers Distribution transformers (non sealed type/ sealed type) Dry type power transformers and distribution transformer (Upto 4/100 MVA, 33/220 kV Class I Phase and 3 Phase)	Temperature rise	IEC-60076-2
37	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled Power transformers Distribution transformers (non sealed type/ sealed type) Dry type power transformers and distribution transformer (Upto 4/100 MVA, 33/220 kV Class I Phase and 3 Phase)	Temperature rise	IS: 2026 (Part-1) (Cl.no.10.1.2.a),
38	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled Power transformers Distribution transformers (non sealed type/ sealed type) Dry type Power transformers and distribution transformer (Upto 4/100 MVA, 33/220 kV Class I Phase and 3 Phase)	Voltage ratio and check of voltage vector relationship/phase displacement	IS: 2026 (Part-1) Cl.no.10.1.1.b

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39	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled Power transformers Distribution transformers (non sealed type/ sealed type) Dry type power transformers and distribution transformer (Upto 4/100 MVA, 33/220 kV Class I Phase and 3 Phase)	Winding resistance	IS: 2026 (Part-1) (Cl.no.10.1.1.a) IS: 2026 (Part-1) (Cl.no.10.1.1.c)
40	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil cooled Power transformers Distribution transformers (non sealed type/ sealed type) Dry type power transformersd and distribution transformer (Upto 4/100 MVA, 33/220 kV Class I Phase and 3 Phase)	Insulation resistance	IS: 2026 (Part-1) Cl.no.10.1.3.j
41	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil Cooled Power transformers Distribution transformers (non sealed type/sealed type) (Upto 4/100 MVA, 33/220 kV Class I Phase and 3 Phase)	Oil Leakage test	CBIP Publication no:317
42	ELECTRICAL- INDUCTORS & TRANSFORMERS	Oil Cooled, Distribution transformers (non sealed type / sealed type) (Upto 2.5/ MVA.33/kV Class I Phase and 3 Phase)	No load loss and current	IS:1180(Part 1) (Cl.no.21.2.d) (Amd. 4
43	ELECTRICAL- TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer & Current Transformer (Upto 33 kV Class, from Class I to Class 3) 5-3200 A Class 0.05 to Class 3 Protection Class 5P,20P,PS, PX	Measurement of composite error	Cl. No. 7.3.5 of IS: 61869-4:2013 Cl. No. 7.2.6.203 & 7.3.5.203 of IEC: 61869 Part-2-09
44	ELECTRICAL- TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer & Current Transformer (Upto 33 kV class, from Class I to Class 3) 5-3200 Protection Class 5P to 20P, PS, PX	Verification of terminal marking and polarity	Cl.No.7.3.6 of IS:16227-4:2015; Cl.No.7.3.6 of IS:16227-3:2016 & Cl.No.7.3.6 of IS:16227-2
45	ELECTRICAL- TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer / Current Tranformer (Upto 33 kV Class, from Class I to Class 3) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P, PS, PX	Secondary Winding Resistance	Cl. No. 7.3.201 of IS 16227-2:2016 & Cl.No.7.3.201 of IS:16227-4
46	ELECTRICAL- TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer / Current Transformer (Upto 33 kV Class, from Class I to Class 3) 5-3200 A Class 0.05 to Class 3 Protection Class5P to 20P, PS, PX	Instrument Security factor Test	Cl. No. 7.5.2 of IS: 16227-4:2016 Cl. No. 7.2.6.202 & 7.5.2 of IEC 61869- Part 2-09
47	ELECTRICAL- TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer / Current Transformer (Upto 33 kV Class, from Class I to Class 3)5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P, PS, PX	Inter-turn Overvoltage test	Cl.No. 7.3.204 of IS 16227-2:2016 & Cl.No.7.1.2 of IS:16227-4
48	ELECTRICAL- TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer / Current Transformer (Upto 33 kV Class, from class I to Class 3) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P, PS, PX	Measurement of composite error	Cl. No. 7.3.5.203 & Cl.No.7.2.6.203 of IS:16227-2:2016 & Cl.No.7.3.5 of IS:16227-4
49	ELECTRICAL- TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer / Current Transformer (Upto 33 kV Class, from class I to Class 3) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P, PS, PX	Secondary Winding Resistance	Cl. No. 7.3.201 IEC 61869-Part 4:2013 Cl. No. 7.3.201 of IEC 61869-Part 2-09

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50	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer / Current Transformer (Upto 33 kV Class, from Class I to Class 3) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P, PS, PX	Secondary Winding Resistance	Cl. No. 7.3.201 IS 16227-4
51	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer / Current Transformer (Upto 33 kV Class, From Class I to Class 3) 5-3200 A Class 0.05 to Class 3 protection Class 5P to 20P, PS, PX	Temperature rise Test	Cl. 7.2.2 IS 61869-4:2013 Cl. No. 7.2.2 of IEC 61869-Part-2-09
52	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer / Current Transformer (Upto 33 kV Class, from Class I to Class 3) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P, PS, PX	Temperature rise Test	Cl. 7.2.2 of IS 16227-4
53	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer / Current Transformer (upto 33 kV Class, from class I to Class 3) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P, PS, PX	Test for accuracy	Cl. 7.3.5 IS 61869-4:2013 Cl. No. 7.2.6.203 & 7.3.5.203 of IEC 61869-Part 2-09
54	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer / Current Transformer (upto 33 kV Class, from class I to Class 3) 5-3200 A Class 0.05 to Class 3 protection Class 5P to 20P, PS, PX	Test for accuracy	Cl. No. 7.2.6 & 7.3.5 of IS 16227-4:2015 & Cl.No.7.2.6 & 7.3.5 of IS:16227-2
55	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer / Current Transformer (Upto 33 kV Class, from class I to class 3) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P, PS, PX	Turns ratio	Cl. No. 7.2.2 Cl. No. 7.3.5.206 of IEC 61869-Part 2-09
56	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer / Current Transformer (Upto 33 kV Class, from class I to Class 3) 5-3200 A Class 0.05 to Class 3 protection Class 5P, 20P, PS, PX	Turns ratio	Cl. No. 7.2.6.202 & 7.5.2 of IS 16227-2
57	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer / Current Transformer (upto 33 kV Class, from class I to class 3) 5-3200 A Class0.05 to Class 3 Protection Class 5P to 20P, PS, PX	Verification of terminal marking and polarity	Cl. No. 7.3.6 IS 61869-4:2013 IEC 61869-Part-2
58	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer / Current Transformer (Upto 33 kV Class, from class I to Class 3) 5-3200A Class 0.05 to Class 3 Protection Class 5P to 20 P, PS, PX	Temperature rise Test	Cl. No. 7.2.2 of IS 16227-2 :2016 ; Cl.No.7.2.2 of IS:16227-4:2015 & Cl.No.7.2.2 of IS:16227-3
59	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer / Current Transformer (Upto 33 kV Class, from Class I to Class 3)5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P, PS, PX	Knee-point Voltage & excitation current	Cl.No.7.3.203 of IS:16227-2:2016 & Cl.No.7.3.203 of IS:16227-4
60	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer / Current Transformer (Upto 33 kV Class, from Class I to Class 3)5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P, PS, PX	Temperature rise Test	Cl. 7.2.2 IS 61869-4 Cl. No. 7.2.2 of IEC 61869-Part 1-10

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61	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer / Current Transformer (Upto 33 kV Class, from Class I to Class 3)5-3200 A Class 0.05 to Class 3 protection Class 5P,20P, PS, PX	Knee-point Voltage & excitation current	Cl. No. 7.3.5 of IS: 61869-4:2013 Cl. No. 7.3.203 of IEC 61869-Part 2-09
62	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer / Current Transformer (Upto 33 kV Class, from Class I to Class3)5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P, PS, PX	Instrument Security factor Test	Cl. No. 7.2.6.202 of IS 16227-2:2015 & Cl.No.7.5.2 of IS:16227-4
63	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer / Current Transformer (upto 33 kV Class, from Class I to Class3)5-3200 A Class 0.05 to Class 3 Protection Class 5P,20P, PS,PX	Turns ratio	Cl.No.7.3.5.206 of IS:16227-2:2016 & Cl.No.7.3.5 of IS:16227-4
64	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer / Current Transformer / Current Transformer (upto 33 kV Class, from class I to class3) 5-3200 A Class 0.05 to class3 Protection Class 5P to 20P, PS, PX	Verification of terminal marking and polarity	Cl. No. 7.3.6 IS 16227-4
65	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer / Potential Transformer (Upto 33 kV class, from Class 0.1 to Class 3) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P, PS, PX	Test for accuracy	Cl. No. 7.3.5 IS 61869-4:2013 Cl. No. 7.2.6 & 7.3.5 of IEC 61869-3-07
66	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer / Potential Transformer (Upto 33 kV class, from Class 0.1 to Class 3) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P, PS, PX	Test for accuracy	Cl. No. 7.3.5 IS 61869-4:2013 Cl. No. 7.2.6 & 7.3.5 of IEC 61869-1-10
67	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer / Potential Transformer (Upto 33 kV class, from Class 0.1 to Class 3) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P, PS, PX	Verification of terminal marking and polarity	Cl. No. 7.3.6 of IEC: 61869-Part 1-07
68	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer / Potential Transformer (Upto 33 kV class, from Class 0.1 to Class 3) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P, PS, PX	Test for accuracy	Cl. No. 7.3.5 of IS: 16227-4:2015 Cl. No. 7.2.6.& 7.3.5 of IS 16227-3
69	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer / Potential Transformer (Upto 33 kV class, from Class 0.1 to Class 3) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P, PS, PX	Verification of terminal marking and polarity	Cl.No.7.3.6 0f IS 16227-3
70	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined transformer / Protential Transformer (Upto 33 kV Class, from Class 0.1 to Class 3) 5-3200 A Class 0.05toclass 3 Protection Class 5P to 20P, PS, PX	Test for accuracy	Cl.No.7.3.5 of IS:16227-3:2015 ; Cl.No.7.3.5 of IS:16227-4:2015 & Cl.No.7.3.5 of IS:16227-2
71	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Combined Transformer/Current Transformer (Upto 33 kV Class, from class I to class3) 5-3200 A Class 0.05 to Class 3 Protection Class 5P to 20P PS, PX	Inter-turn Overvoltage test	Cl. No. 7.3.204 of IEC 61869-Part 2

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72	ELECTRICAL-TRANSMISSION LINE EQUIPMENT & ACCESSORIES	Current Transformer/ CTPT Combined Unit (At site)	Verification of terminal marking and polarity	Cl. No. 7.1.2 & 7.3.6 of IEC: 61869-Part 1