National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : HEPL TESTING AND CALIBRATION LABORATORY, HIVOLTRANS ELECTRICALS PVT. LTD., 2202-03, GIDC HALOL, HALOL, PANCH MAHALS, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

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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
Permanent Facility				
1	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers (33 kV to 220 kV 1 A to 2400 A Up to 0.2s accuracy class)	Determination of Errors / Accuracy test	IS 2705 (Part 2) Cl. No. 7.1.1, 7.1.1.1, 7.2.1, & 3.3, 3.3.1, 3.3.3
2	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers (33kV to 220kV 1 A to 2400 A Up to 0.2s accuracy class)	Determination of Errors / Accuracy test	IS 2705 (Part 2) Cl. No. 7.1.1, 7.1.1.1, 7.2.1, & 3.3, 3.3.1, 3.3.3
3	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Verification of Terminal Markings and Polarity	IS 2705 (Part 1): Cl. No. 9.2, 8.2
4	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Secondary Winding Resistance Test	IS-2705 (Part-4) Clause: 6.2
5	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Power frequency dry withstand tests on primary windings	IS 16227 (Part 1) Cl. No. 7.3.1, 7.3.3
6	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Composite Error Test	IEC 61869 -2 Clause: 7.2.6.203, 7.3.5.203
7	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Composite Error Test	IS-2705 (Part-3) Cl. No. 7.1.2.2
8	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Determination of Errors / Accuracy test	IEC 61869 -2 : Clause 7.3.5, 7.2.6, 5.6
9	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Determination of Errors / Accuracy test	IEC 61869 -2 Clause 7.3.5, 7.2.6, 5.6
10	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Determination of Errors / Accuracy test	IS 16227 (PART 2) : Clause 7.3.5, 7.2.6, 5.6
11	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Determination of Errors / Accuracy test	IS 16227 (PART 2) : Clause 7.3.5, 7.2.6, 5.6
12	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Determination of Errors / Accuracy test	IS 2705 (Part 3) : Clause: 7.1.1, 7.2.1 & 5.1
13	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Exciting Current Test	IEC 61869 - 2 Clause: 7.3.5, 7.3.203
14	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Exciting Current Test	IS 16227 (PART 2 Clause: 7.3.5, 7.3.203
15	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Exciting Current Test	IS-2705 (Part-4) Clause: 6.1
16	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Instrument Security Factor Test	IEC 61869 -2 Clause: 7.2.6.202
17	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Instrument Security Factor Test	IS 16227 (PART 2) Clause: 7.2.6.202

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18	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Instrument Security Factor Test	IS-2705 (Part-2) Clause: 7.1.2
19	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Knee Point Voltage Test	IEC 61869 - Clause: 7.3.5, 7.3.203
20	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Knee Point Voltage Test	IS 16227 (PART 2) Clause: 7.3.5, 7.3.203
21	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Knee Point Voltage Test	IS-2705 (Part-4) Clause: 6.1
22	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Measurement of Capacitance and Tan Delta	IEC 61869 -2 Cl. 7.4.3
23	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Measurement of Capacitance and Tan Delta	IS 16227 (PART 2) Cl. 7.4.3
24	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Measurement of Capacitance and Tan Delta	IS 2705 (Part 1) Cl. 9.1.3(b)
25	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Over-Voltage Inter turn Test	IS 16227 (PART 2) : Clause: 7.3.204
26	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Over-Voltage Inter turn Test IS 16227	IEC 61869 Clause: 7.3.204
27	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Partial Discharge Test	IEC 61869-1 Clause: 7.3.2
28	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Partial Discharge Test	IS 11322
29	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Partial Discharge Test	IS 16227(PART-1) Clause: 7.3.2
30	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Power frequency dry withstand tests on primary windings	IS-2705 (Part-1) Clause: 9.3, 9.3.1, 9.3.3
31	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Power frequency dry withstand tests on secondary windings	IEC 61869-1 Clause: 7.3.4 & 5.3.5
32	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Power frequency dry withstand tests on secondary windings	IS 16227(PART-1) Clause: 7.2.2, 6.4
33	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Power frequency dry withstand tests on secondary windings	IS-2705 (Part-1) Clause: 9.4, 9.4.1
34	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Secondary Winding Resistance Test	IEC 61869 -2 Clause: 7.3.5.204, 7.3.201
35	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Secondary Winding Resistance Test	IS 16227 (PART 2) Clause: 7.3.5.204, 7.3.201
36	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Temperature Rise Test	IEC 61869-1 Clause: 7.2.2, 6.4

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37	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Temperature Rise Test	IS 16227(PART-1) Clause: 7.2.2, 6.4
38	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Temperature Rise Test	IS-2705 (Part-1) Clause: 9.7
39	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Turns Ratio Error Test	IEC 61869 -2 Clause: 7.3.5.206
40	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Turns Ratio Error Test	IS 16227 (PART 2) Clause: 7.3.5.206
41	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Turns Ratio Error Test	IS-2705 (Part-4) Clause: 6.3
42	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Determination of Errors / Accuracy test	IS 2705 (Part 3) : Clause: 7.1.1, 7.2.1 & 5.1
43	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Over-Voltage Inter turn Test	IS-2705 (Part-1)Clause 9.5, 9.5.2
44	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Power frequency dry withstand tests on primary windings	IEC 61869 -1 Clause: 7.3.1, 7.3.3
45	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Verification of Terminal Markings and Polarity	IEC 61869-1 : Clause: 7.3.6
46	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1 A to 2400 A Up to 0.2s accuracy class)	Verification of Terminal Markings and Polarity	IS 16227 (Part-1) Clause: 7.3.6
47	ELECTRICAL- INDUCTORS & TRANSFORMERS	Current Transformers, (33kV to 220kV, 1A to 2400A Up to 0.2s accuracy class)	Composite Error Test	IS 16227 (PART 2) Clause: 7.2.6.203, 7.3.5.203
48	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformers, (33kV to 220 kV, Up to 0.2 accuracy class, 10VA-500VA)	Determination of Errors./ Accuracy test	IS-3156 (Part-2) Clause: 8.1.1, 8.2.1
49	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformers, (33kV to 220 kV, Up to 0.2 accuracy class, 10VA-500VA)	Determination of Errors./ Accuracy test	IEC 61869 -3 Clause: 7.3.5, 7.2.6 & 5.6
50	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformers, (33kV to 220 kV, Up to 0.2 accuracy class, 10VA-500VA)	Determination of Errors./ Accuracy test	IEC 61869 -3 Clause: 7.3.5, 7.2.6 & 5.6
51	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformers, (33kV to 220 kV, Up to 0.2 accuracy class, 10VA-500VA)	Determination of Errors./ Accuracy test	IS 16227 (Part 3) Clause: 7.3.5, 7.2.6 & 5.6
52	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformers, (33kV to 220 kV, Up to 0.2 accuracy class, 10VA-500VA)	Determination of Errors./ Accuracy test	IS 16227 (Part 3) Clause: 7.3.5, 7.2.6 & 5.6
53	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformers, (33kV to 220 kV, Up to 0.2 accuracy class, 10VA-500VA)	Determination of Errors./ Accuracy test	IS-3156 (Part-2) Clause: 8.1.1, 8.2.1
54	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformers, (33kV to 220 kV, Up to 0.2 accuracy class, 10VA-500VA)	Determination of Errors./ Accuracy test	IS-3156 (Part-3) Clause: 10.1.1.2, 10.1.2.1, 10.2.1.1, 10.2.2.1

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55	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformers, (33kV to 220 kV, Up to 0.2 accuracy class, 10VA-500VA)	Determination of Errors./ Accuracy test	IS-3156 (Part-3) Clause: 10.1.1.2, 10.1.2.1, 10.2.1.1, 10.2.2.1
56	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformers, (33kV to 220 kV, Up to 0.2 accuracy class, 10VA-500VA)	Measurement of Capacitance and Tan Delta	IEC 61869 -3 Cl. 7.4.3
57	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformers, (33kV to 220 kV, Up to 0.2 accuracy class, 10VA-500VA)	Measurement of Capacitance and Tan Delta	IS 16227 (Part 3) Cl. 7.4.3
58	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformers, (33kV to 220 kV, Up to 0.2 accuracy class, 10VA-500VA)	Partial Discharge Test	IEC 61869 -3 Clause: 7.3.2
59	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformers, (33kV to 220 kV, Up to 0.2 accuracy class, 10VA-500VA)	Partial Discharge Test	IS 16227 (Part 3) Clause: 7.3.2
60	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformers, (33kV to 220 kV, Up to 0.2 accuracy class, 10VA-500VA)	Partial Discharge Test	IS-11322
61	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformers, (33kV to 220 kV, Up to 0.2 accuracy class, 10VA-500VA)	Power frequency dry withstand test on Primary Terminals.	IEC 61869 -3 Clause: 7.3.1 & 7.3.1.303
62	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformers, (33kV to 220 kV, Up to 0.2 accuracy class, 10VA-500VA)	Power frequency dry withstand test on Primary Terminals.	IS 16227 (Part 3) Clause: 7.3.1 & 7.3.1.303
63	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformers, (33kV to 220 kV, Up to 0.2 accuracy class, 10VA-500VA)	Power frequency dry withstand test on Primary Terminals.	IS-3156 (Part-1) Clause: 9.3.1.2 & 9.3.2.2
64	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformers, (33kV to 220 kV, Up to 0.2 accuracy class, 10VA-500VA)	Power Frequency Dry Withstand Tests between Sections	IEC 61869 -3 Clause: 7.3.3
65	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformers, (33kV to 220 kV, Up to 0.2 accuracy class, 10VA-500VA)	Power Frequency Dry Withstand Tests between Sections	IS 16227 (Part 3) Clause: 7.3.3
66	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformers, (33kV to 220 kV, Up to 0.2 accuracy class, 10VA-500VA)	Power Frequency Dry Withstand Tests between Sections	IS-3156 (Part-1) Clause: 9.4.1
67	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformers, (33kV to 220 kV, Up to 0.2 accuracy class, 10VA-500VA)	Power Frequency Dry Withstand Tests on Secondary Windings	IEC 61869 -3 Clause: 7.3.4
68	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformers, (33kV to 220 kV, Up to 0.2 accuracy class, 10VA-500VA)	Power Frequency Dry Withstand Tests on Secondary Windings	IS 16227 (Part 3) Clause: 7.3.4
69	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformers, (33kV to 220 kV, Up to 0.2 accuracy class, 10VA-500VA)	Power Frequency Dry Withstand Tests on Secondary Windings	IS-3156 (Part-1) Clause: 9.4 & 9.4.1
70	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformers, (33kV to 220 kV, Up to 0.2 accuracy class, 10VA-500VA)	Temperature Rise Test	IS 16227 (Part 3) Clause: 7.2.2

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71	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformers, (33kV to 220 kV, Up to 0.2 accuracy class, 10VA-500VA)	Temperature Rise Test	IEC 61869 -3 Clause: 7.2.2
72	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformers, (33kV to 220 kV, Up to 0.2 accuracy class, 10VA-500VA)	Temperature Rise Test	IS-3156 (Part-1) Clause: 9.5
73	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformers, (33kV to 220 kV, Up to 0.2 accuracy class, 10VA-500VA)	Verification of Terminal Markings and Polarity	IEC 61869 -3 Clause: 7.3.6
74	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformers, (33kV to 220 kV, Up to 0.2 accuracy class, 10VA-500VA)	Verification of Terminal Markings and Polarity	IS 16227 (Part 3) Clause: 7.3.6
75	ELECTRICAL- INDUCTORS & TRANSFORMERS	Voltage Transformers, (33kV to 220 kV, Up to 0.2 accuracy class, 10VA-500VA)	Verification of Terminal Markings and Polarity	IS-3156 (Part-1) Clause:9.2