National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : TRANSFORMER TESTING LABORATORY, BHARAT HEAVY ELECTRICALS LIMITED, BHARAT HEAVY ELECTRICALS LIMITED, JHANSI, UTTAR PRADESH, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-6076 **Page No** 1 of 2

Validity 11/08/2021 to 10/08/2023 **Last Amended on** -

S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
Permanent Facility				
1	ELECTRICAL- INDUCTORS & TRANSFORMERS	Transformer 1MVA to 315MVA up to 400kV class.	Measurement of load loss	IS 2026-1 IEC-60076-1
2	ELECTRICAL- INDUCTORS & TRANSFORMERS	Transformer 1MVA to 315MVA up to 400kV class.	Measurement of magnetic balance	CBIP-295
3	ELECTRICAL- INDUCTORS & TRANSFORMERS	Transformer 1MVA to 315MVA up to 400kV class.	Measurement of magnetizing current	CBIP-295
4	ELECTRICAL- INDUCTORS & TRANSFORMERS	Transformer 1MVA to 315MVA up to 400kV class.	Measurement of no load loss	IS 2026-1 IEC-60076-1
5	ELECTRICAL- INDUCTORS & TRANSFORMERS	Transformer 1MVA to 315MVA up to 400kV class.	Measurement of noise level	IS 2026-10, IEC:60076-10
6	ELECTRICAL- INDUCTORS & TRANSFORMERS	Transformer 1MVA to 315MVA up to 400kV class.	Measurement of power taken by fan & pump/cooler	IS 2026-1 & IEC 60076-2
7	ELECTRICAL- INDUCTORS & TRANSFORMERS	Transformer 1MVA to 315MVA up to 400kV class.	RSO measurement	IEC 60076-3:2013+AMD1:2018
8	ELECTRICAL- INDUCTORS & TRANSFORMERS	Transformer 1MVA to 315MVA up to 400kV class.	SFRA-Sweep Frequency Response Analysis	IEC 60076-18
9	ELECTRICAL- INDUCTORS & TRANSFORMERS	Transformer 1MVA to 315MVA up to 400kV class.	Temperature rise test	IS 2026-2, IEC 60076-2
10	ELECTRICAL- INDUCTORS & TRANSFORMERS	Transformer 1MVA to 315MVA up to 400kV class.	Voltage ratio measurement	IS 2026-1, IEC 60076-1
11	ELECTRICAL- INDUCTORS & TRANSFORMERS	Transformer 1MVA to 315MVA upto 400kV class.	Capacitance	IS 2026-1, IEC :60076-1
12	ELECTRICAL- INDUCTORS & TRANSFORMERS	Transformer 1MVA to 315MVA upto 400kV class.	Check of polarity	IEC-60076-1, IS :2026-1
13	ELECTRICAL- INDUCTORS & TRANSFORMERS	Transformer 1MVA to 315MVA upto 400kV class.	Induced over voltage withstand test (IVWT)	IS 2026-3, IEC 60076-3
14	ELECTRICAL- INDUCTORS & TRANSFORMERS	Transformer 1MVA to 315MVA upto 400kV class.	Induced Voltage with partial discharge measurement (IVPD) and Line terminal AC withstand voltage test (LTAC)	IS 2026-3, IEC :60076-3
15	ELECTRICAL- INDUCTORS & TRANSFORMERS	Transformer 1MVA to 315MVA upto 400kV class.	Insulation resistance	IS 2026-1, IEC ; 60076-1
16	ELECTRICAL- INDUCTORS & TRANSFORMERS	Transformer 1MVA to 315MVA upto 400kV class.	Lightning impulse test (Chopped wave)	IS 2026-3, IEC ;60076-3
17	ELECTRICAL- INDUCTORS & TRANSFORMERS	Transformer 1MVA to 315MVA upto 400kV class.	Lightning impulse voltage withstand test	IS 2026-3, IEC : 60076-3

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18	ELECTRICAL- INDUCTORS & TRANSFORMERS	Transformer 1MVA to 315MVA upto 400kV class.	Measurement of impedance	IS 2026-1, IEC:60076-1
19	ELECTRICAL- INDUCTORS & TRANSFORMERS	Transformer 1MVA to 315MVA upto 400kV class.	Measurement of zero phase sequence impedance	IS 2026-1, IEC :60076-1
20	ELECTRICAL- INDUCTORS & TRANSFORMERS	Transformer 1MVA to 315MVA upto 400kV class.	Power frequency voltage withstand test/Applied voltage test	IS 2026-3, IEC : 60076-3
21	ELECTRICAL- INDUCTORS & TRANSFORMERS	Transformer 1MVA to 315MVA upto 400kV class.	Switching impulse voltage withstand test	IS 2026-3, IEC : 60076-3
22	ELECTRICAL- INDUCTORS & TRANSFORMERS	Transformer 1MVA to 315MVA upto 400kV class.	tandelta measurement	IS 2026-1, IEC: 60076-1
23	ELECTRICAL- INDUCTORS & TRANSFORMERS	Transformer 1MVA to 315MVA upto 400kV class.	Verification of vetor group	IS; 2026-1, IEC-60076-1
24	ELECTRICAL- INDUCTORS & TRANSFORMERS	Transformer 1MVA to 315MVA upto 400kV class.	Winding resistance measurement with temperature	IS 2026-1, IEC : 60076-1