National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : NATIONAL HIGH POWER TEST LABORATORY PVT. LTD, POWERGRID COMPLEX, 765/400KV S/S, KHIMLASA ROAD, BINA, BINA-ETAWA, SAGAR, MADHYA PRADESH, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-6407 **Page No** 1 of 5

Validity 17/03/2022 to 16/03/2024 **Last Amended on** -

S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
Permanent Facility				
1	ELECTRICAL- INDUCTORS & TRANSFORMERS	Power Transformers, Auto transformer (ICT), Generator Transformers, Converter Transformers for Industrial Applications & HVDC Applications, Traction Transformers and Series Reactors up to 765kV rating. (25MVA, 132kV Class to 520MVA, 765 kV Class (1 Phase & 3 Phase Transformers).	Ability to withstand dynamic effects of Short circuit tests.	IEC 60076 (Part 1)
2	ELECTRICAL- INDUCTORS & TRANSFORMERS	Power Transformers, Auto transformer (ICT), Generator Transformers, Converter Transformers for Industrial Applications & HVDC Applications, Traction Transformers and Series Reactors up to 765kV rating. (25MVA, 132kV Class to 520MVA, 765 kV Class (1 Phase & 3 Phase Transformers).	Ability to withstand dynamic effects of Short circuit tests.	IEC 60076 (Part 1)
3	ELECTRICAL- INDUCTORS & TRANSFORMERS	Power Transformers, Auto transformer (ICT), Generator Transformers, Converter Transformers for Industrial Applications & HVDC Applications, Traction Transformers and Series Reactors up to 765kV rating. (25MVA, 132kV Class to 520MVA, 765 kV Class (1 Phase & 3 Phase Transformers).	Ability to withstand dynamic effects of Short circuit tests.	IEC 60076 (Part 1)
4	ELECTRICAL- INDUCTORS & TRANSFORMERS	Power Transformers, Auto transformer (ICT), Generator Transformers, Converter Transformers for Industrial Applications & HVDC Applications, Traction Transformers and Series Reactors up to 765kV rating. (25MVA, 132kV Class to 520MVA, 765 kV Class (1 Phase & 3 Phase Transformers).	Ability to withstand dynamic effects of Short circuit tests.	IEC 60076 (Part 5)
5	ELECTRICAL- INDUCTORS & TRANSFORMERS	Power Transformers, Auto transformer (ICT), Generator Transformers, Converter Transformers for Industrial Applications & HVDC Applications, Traction Transformers and Series Reactors up to 765kV rating. (25MVA, 132kV Class to 520MVA, 765 kV Class (1 Phase & 3 Phase Transformers).	Ability to withstand dynamic effects of Short circuit tests.	IEC 60076 (Part 5)
6	ELECTRICAL- INDUCTORS & TRANSFORMERS	Power Transformers, Auto transformer (ICT), Generator Transformers, Converter Transformers for Industrial Applications & HVDC Applications, Traction Transformers and Series Reactors up to 765kV rating. (25MVA, 132kV Class to 520MVA, 765 kV Class (1 Phase & 3 Phase Transformers).	Ability to withstand dynamic effects of Short circuit tests.	IEC 60076 (Part 5)
7	ELECTRICAL- INDUCTORS & TRANSFORMERS	Power Transformers, Auto transformer (ICT), Generator Transformers, Converter Transformers for Industrial Applications & HVDC Applications, Traction Transformers and Series Reactors up to 765kV rating. (25MVA, 132kV Class to 520MVA, 765 kV Class (1 Phase & 3 Phase Transformers).	Ability to withstand dynamic effects of Short circuit tests.	IS 2026 (Part 1)

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8	ELECTRICAL- INDUCTORS & TRANSFORMERS	Power Transformers, Auto transformer (ICT), Generator Transformers, Converter Transformers for Industrial Applications & HVDC Applications, Traction Transformers and Series Reactors up to 765kV rating. (25MVA, 132kV Class to 520MVA, 765 kV Class (1 Phase & 3 Phase Transformers).	Ability to withstand dynamic effects of Short circuit tests.	IS 2026 (Part 1)
9	ELECTRICAL- INDUCTORS & TRANSFORMERS	Power Transformers, Auto transformer (ICT), Generator Transformers, Converter Transformers for Industrial Applications & HVDC Applications, Traction Transformers and Series Reactors up to 765kV rating. (25MVA, 132kV Class to 520MVA, 765 kV Class (1 Phase & 3 Phase Transformers).	Ability to withstand dynamic effects of Short circuit tests.	IS 2026 (Part 1)
10	ELECTRICAL- INDUCTORS & TRANSFORMERS	Power Transformers, Auto transformer (ICT), Generator Transformers, Converter Transformers for Industrial Applications & HVDC Applications, Traction Transformers and Series Reactors up to 765kV rating. (25MVA, 132kV Class to 520MVA, 765 kV Class (1 Phase & 3 Phase Transformers).	Ability to withstand dynamic effects of Short circuit tests.	IS 2026 (Part 5)
11	ELECTRICAL- INDUCTORS & TRANSFORMERS	Power Transformers, Auto transformer (ICT), Generator Transformers, Converter Transformers for Industrial Applications & HVDC Applications, Traction Transformers and Series Reactors up to 765kV rating. (25MVA, 132kV Class to 520MVA, 765 kV Class (1 Phase & 3 Phase Transformers).	Ability to withstand dynamic effects of Short circuit tests.	IS 2026 (Part 5)
12	ELECTRICAL- INDUCTORS & TRANSFORMERS	Power Transformers, Auto transformer (ICT), Generator Transformers, Converter Transformers for Industrial Applications & HVDC Applications, Traction Transformers and Series Reactors up to 765kV rating. (25MVA, 132kV Class to 520MVA, 765 kV Class (1 Phase & 3 Phase Transformers).	Ability to withstand dynamic effects of Short circuit tests.	IS 2026 (Part 5)
13	ELECTRICAL- INDUCTORS & TRANSFORMERS	Power Transformers, Auto transformer (ICT), Generator Transformers, Converter Transformers for Industrial Applications & HVDC Applications, Traction Transformers and Series Reactors up to 765kV rating. (25MVA, 132kV Class to 520MVA, 765 kV Class (1 Phase & 3 Phase Transformers).	Measurement of Capacitance & dissipation factor (tan d)	IEC 60076 (Part 1)
14	ELECTRICAL- INDUCTORS & TRANSFORMERS	Power Transformers, Auto transformer (ICT), Generator Transformers, Converter Transformers for Industrial Applications & HVDC Applications, Traction Transformers and Series Reactors up to 765kV rating. (25MVA, 132kV Class to 520MVA, 765 kV Class (1 Phase & 3 Phase Transformers).	Measurement of Capacitance & dissipation factor (tan d).	IEC 60076 (Part 1)

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16	ELECTRICAL- INDUCTORS & TRANSFORMERS	Power Transformers, Auto transformer (ICT), Generator Transformers, Converter Transformers for Industrial Applications & HVDC Applications, Traction Transformers and Series Reactors up to 765kV rating. (25MVA, 132kV Class to 520MVA, 765 kV Class (1 Phase & 3 Phase Transformers).	Measurement of Capacitance & dissipation factor (tan d).	IS 2026 (Part 1)
17	ELECTRICAL- INDUCTORS & TRANSFORMERS	Power Transformers, Auto transformer (ICT), Generator Transformers, Converter Transformers for Industrial Applications & HVDC Applications, Traction Transformers and Series Reactors up to 765kV rating. (25MVA, 132kV Class to 520MVA, 765 kV Class (1 Phase & 3 Phase Transformers).	Measurement of frequency response (Frequency Response Analysis or FRA)	IEC 60076 (Part 1)
18	ELECTRICAL- INDUCTORS & TRANSFORMERS	Power Transformers, Auto transformer (ICT), Generator Transformers, Converter Transformers for Industrial Applications & HVDC Applications, Traction Transformers and Series Reactors up to 765kV rating. (25MVA, 132kV Class to 520MVA, 765 kV Class (1 Phase & 3 Phase Transformers).	Measurement of frequency response (Frequency Response Analysis or FRA)	IEC 60076 (Part 18)
19	ELECTRICAL- INDUCTORS & TRANSFORMERS	Power Transformers, Auto transformer (ICT), Generator Transformers, Converter Transformers for Industrial Applications & HVDC Applications, Traction Transformers and Series Reactors up to 765kV rating. (25MVA, 132kV Class to 520MVA, 765 kV Class (1 Phase & 3 Phase Transformers).	Measurement of insulation resistance.	IEC 60076 (Part 1)
20	ELECTRICAL- INDUCTORS & TRANSFORMERS	Power Transformers, Auto transformer (ICT), Generator Transformers, Converter Transformers for Industrial Applications & HVDC Applications, Traction Transformers and Series Reactors up to 765kV rating. (25MVA, 132kV Class to 520MVA, 765 kV Class (1 Phase & 3 Phase Transformers).	Measurement of insulation resistance.	IS 2026 (Part 1)
21	ELECTRICAL- INDUCTORS & TRANSFORMERS	Power Transformers, Auto transformer (ICT), Generator Transformers, Converter Transformers for Industrial Applications & HVDC Applications, Traction Transformers and Series Reactors up to 765kV rating. (25MVA, 132kV Class to 520MVA, 765 kV Class (1 Phase & 3 Phase Transformers).	Measurement of Short Circuit Inductance	IEC 60076 (Part 1)

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22	ELECTRICAL- INDUCTORS & TRANSFORMERS	Power Transformers, Auto transformer (ICT), Generator Transformers, Converter Transformers for Industrial Applications & HVDC Applications, Traction Transformers and Series Reactors up to 765kV rating. (25MVA, 132kV Class to 520MVA, 765 kV Class (1 Phase & 3 Phase Transformers).	Measurement of Short Circuit Inductance.	IS 2026 (Part 1)
23	ELECTRICAL- INDUCTORS & TRANSFORMERS	Power Transformers, Auto transformer (ICT), Generator Transformers, Converter Transformers for Industrial Applications & HVDC Applications, Traction Transformers and Series Reactors up to 765kV rating. (25MVA, 132kV Class to 520MVA, 765 kV Class (1 Phase & 3 Phase Transformers).	Measurement of voltage ratio and check of voltage vector relationship.	IEC 60076 (Part 1)
24	ELECTRICAL- INDUCTORS & TRANSFORMERS	Power Transformers, Auto transformer (ICT), Generator Transformers, Converter Transformers for Industrial Applications & HVDC Applications, Traction Transformers and Series Reactors up to 765kV rating. (25MVA, 132kV Class to 520MVA, 765 kV Class (1 Phase & 3 Phase Transformers).	Measurement of voltage ratio and check of voltage vector relationship.	IS 2026 (Part 1)
25	ELECTRICAL- INDUCTORS & TRANSFORMERS	Power Transformers, Auto transformer (ICT), Generator Transformers, Converter Transformers for Industrial Applications & HVDC Applications, Traction Transformers and Series Reactors up to 765kV rating. (25MVA, 132kV Class to 520MVA, 765 kV Class (1 Phase & 3 Phase Transformers).	Measurement of winding resistance.	IS 2026 (Part 1)
26	ELECTRICAL- INDUCTORS & TRANSFORMERS	Power Transformers, Auto transformer (ICT), Generator Transformers, Converter Transformers for Industrial Applications & HVDC Applications, Traction Transformers and Series Reactors up to 765kV rating. (25MVA, 132kV Class to 520MVA, 765 kV Class (1 Phase & 3 Phase Transformers).	Measurement of winding resistance.	IEC 60076 (Part 1)
27	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer oil	Breakdown voltage	IEC 60156
28	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer oil	Breakdown voltage	IEC 60296
29	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer oil	Breakdown voltage	IEC 60422
30	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer oil	Breakdown voltage	IS 1866

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31	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer oil	Breakdown voltage	IS 335
32	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer oil	Breakdown voltage	IS 6792
33	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Moisture content	IEC 60296
34	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Moisture content	IEC 60422
35	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oil	Moisture content	IEC 60814
36	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer oil	Moisture content	IS 13567
37	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer oil	Moisture content	IS 1866
38	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer oil	Moisture content	IS 335