Techno Associates Vidyut Pvt. Ltd., W-160, M.I.D.C, Phase-II, Dombivli (East), Maharashtra Laboratory

**Accreditation Standard** ISO/IEC 17025: 2005

**Certificate Number** TC-8083 Page 1 of 3

Validity 19.11.2018 to 18.11.2020 Last Amended on --

-	SI.	Product / Material	Specific Test Performed	Test Method Specification	Range of Testing /
l		of Test		against which tests are	Limits of Detection
į				performed	

## **ELECTRICAL TESTING**

I.	INDUCTORS & TRA	ANSFORMERS		
1.	Current Transformer 6.6 kV to 145 kV	Power frequency dry withstand on primary terminals	IS 16227 (Part 2) IEC 61869-2, Clause 7.3.1	10 kV to 300 kV rms
	Class	Power frequency Voltage withstand test between sections	IS 16227 (Part 2) IEC 61869-2, Clause 7.3.3	1 kV to 5 kV rms
		Power frequency dry withstand on Secondary terminals	IS 16227 (Part 2) IEC 61869-2, Clause 7.3.4	1 kV to 5 kV rms
		Accuracy test	IS 16227 (Part 2) IEC 61869-2, Clause 7.3.5	±0.05 % to ±5.0 % 1 A to 3000 A
		Verification of marking & Polarity	IS 16227 (Part 1) IEC 61869-1, Clause 7.3.6	Qualitative
		Enclosure tightness test at ambient temperature	IS 16227 (Part 1) IEC 61869-1, Clause 7.3.7	Qualitative
		Determination of Secondary winding resistance	IS 16227 (Part 2) IEC 61869-2, Clause 7.3.201	0.001 Ω to 19 kΩ
		Rated Knee point e.m.f. and exciting current	IS 16227 (Part 2) IEC 61869-2, Clause 7.3.203	1 V to 6 kV 5A
		Inter-turn Overvoltage test	IS 16227 (Part 2) IEC 61869-2, Clause 7.3.204	Qualitative
		Capacitance & Dissipation factor	IEC 61869-1, Clause 7.4.3	50 pF to 0.1 μF 0.00001 to 1.1 0.1 kV to 10 kV

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Instrument Security Factor	IS 16227 (Part 2) IEC 61689-2, Clause 7.26.202	1 to 20 0.1 A to 10 A
		Composite error test	IS 16277 (Part 2) IEC 61689-2, Annex 2A,2A-4 & 2A-5	0.001 % to 20 % 0.001 A to 10 A 1 V to 6 kv
		Temperature Rise	IS 16227 (Part 3), Clause 9.5 IEC 61869-3, Clause 7.2.2	1 A to 1200 A 1 deg C to 200 deg C
2.	Current Transformer 66 kV Class	Partial discharge	IS 16227 (Part 1) IEC 61869-1, Clause 7.3.2	1 kV to 75 kV 1 pC to 1000 pC
3.	Voltage Transformer 6.6 kV to 145 kV	Power-frequency withstand tests on primary terminals	IS 16227 (Part 3) IEC 61869-3, Clause 7.3.1	1 kV to 150 kV rms
	Class	Power frequency Voltage withstand test between sections	IS 16227 (Part 3) IEC 61869-3, Clause 7.3.3	(1 KV to 5 KV)
		Power frequency dry withstand on Secondary terminals	IS 16227 (Part 3) IEC 61869-3, Clause 7.3.4	0.1 kV to 5 kV rms
		Accuracy	IS 16227 (Part 3) IEC 61869-3, Clause 7.3.5	0.05 % to ±5.0 % 1 kV to 132 kV
		Verification of marking & Polarity	IS 16227 (Part 3) IEC 61869-3, Clause 7.3.6	Qualitative
		Enclosure tightness test at ambient temperature	IS 16227 (Part 3) IEC 61869-3, Clause 7.3.7	Qualitative
		Capacitance and Dissipation factor	IEC 61869-1, Clause 7.4.3	50 pF to 0.1 μF 0.00001 to 1.1 0. 1 kV to 10 kV

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Power-frequency withstand on primary windings (Induced)	IS 16227 (Part 3), Clause 9.3.1.2 or 9.3.2.2 IEC 61869-3, Clause 7.3.1.303	10 V rms to 300 kV rms
		Temperature Rise	IS 16227 (Part 3), Clause 9.5 IEC 61869-3, Clause 7.2.2	1 kV to 132 kV 1 °C to 150 °C
4.	Voltage Transformer 66 kV Class	Partial discharge measurement	IS 16227 (Part 3) IEC 61869-3, Clause 7.3.2	1 kV to 75 kV 1 pC to 1000 pC

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