Laboratory	**Testing & Quality Assurance Laboratory, MSEDCL, Bapat Camp, Kolhapur, Maharashtra**		
Accreditation Standard	**ISO/IEC 17025: 2005**		
Discipline	**Electrical Testing**	**Issue Date**	**08.10.2015**
Certificate Number	**T-2657**	**Valid Until**	**07.10.2017**
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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
I.	**ELECTRICAL INDICATING & RECORDING INSTRUMENTS**			
1.	**Ac Static Transformer Operated Watt – hour & VAr – hour Meters, Class 0.2 S, Class 0.5S & Class 1.0S**	Insulation Resistance Test	IS 14697: 1999 With Amd. 1,2,3 (Clause 12.7.6.4)	500 V (±)50 V 1 MΩ to 999 MΩ
		AC Voltage Test	IS 14697: 1999 With Amd. 1,2,3 (Clause 12.7.6.3)	Up to 5 kV AC at Power Freq.
		Test of Limits of Error	IS 14697: 1999 With Amd. 1,2,3 (Clause 11.1)	40 V to 320 V (P–N) 1 mA to 120 A 0.2 Lag to UPF - 0.2 Lead
		Test of Starting Condition	IS 14697: 1999 With Amd. 1,2,3 (Clause 12.13)	40 V to 320 V (P–N) 1 mA to 120 A 0.2 Lag to UPF - 0.2 Lead
		Test of No Load Condition	IS 14697: 1999 With Amd. 1,2,3 (Clause 12.12)	40 V to 320 V (P–N) 1 mA to 120 A 0.2 Lag to UPF - 0.2 Lead
		Test of Repeatability of Error	IS 14697: 1999 With Amd. 1,2,3 (Clause 12.16)	40 V to 320 V (P–N) 1 mA to 120 A 0.2 Lag to UPF - 0.2 Lead
		Test of Power Consumption	IS 14697: 1999 With Amd. 1,2,3 (Clause 12.7.1)	20 W 30 VA
		Test of Meter Constant	IS 14697: 1999 With Amd. 1,2,3 (Clause 12.14)	40 V to 320 V (P–N) 1 mA to 120 A 0.2 Lag to UPF - 0.2 Lead
		Tamper & Fraud Monitoring	CBIP Publication No. 325 Jan 2015 (Clause 6.7)	40 V to 320 V (P–N) 1 mA to 120 A 0.2 Lag to UPF - 0.2 Lead

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	AC Watt – hour Meters Class 1, Class 2	Insulation Resistance Test	IS 13779: 1999 With Amd. 1,2,3,4 (Clause 12.7.6.4)	500 (±) 50 V 1 MΩ to 999 MΩ
		AC High Voltage Test	IS 13779: 1999 With Amd. 1,2,3,4 (Clause 12.7.6.3)	Upto 5 kV AC at Power Freq.
		Test of Limits of Error	IS 13779: 1999 With Amd. 1,2,3,4 (Clause 11.1)	40 V to 320 V (P–N) 1 mA to 120 A 0.2 Lag to UPF - 0.2 Lead
		Test of Starting Condition	IS 13779: 1999 With Amd. 1,2,3,4 (Clause 12.14)	40 V to 320 V (P–N) 1 mA to 120 A 0.2 Lag to UPF - 0.2 Lead
		Test of No Load Condition	IS 13779: 1999 With Amd. 1,2,3,4 (Clause 12.13)	40 V to 320 V (P–N) 1 mA to 120 A 0.2 Lag to UPF - 0.2 Lead
		Test of Repeatability of Error	IS 13779: 1999 With Amd. 1,2,3,4 (Clause 12.17)	40 V to 320 V (P–N) 1 mA to 120 A 0.2 Lag to UPF - 0.2 Lead
		Test of Power Consumption	IS 13779: 1999 With Amd. 1,2,3,4 (Clause 12.7.1)	20W 30VA
		Test of Meter Constant	IS 13779: 1999 With Amd. 1,2,3,4 (Clause 12.15)	40 V to 320 V (P–N) 1 mA to 120 A 0.2 Lag to UPF - 0.2 Lead
		Tamper & Fraud Monitoring	CBIP Publication No. 325 Jan 2015 (Clause 6.7)	40 V to 320 V (P–N) 1 mA to 120 A 0.2 Lag to UPF - 0.2 Lead

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	AC Watt – hour Meters Class 0.5, Class 1.0, Class 2.0	Insulation Resistance Test	IS 13010:2002 With Amd. 1,2 (Clause 11.2)	500 (±) 50 V 1 MΩ to 999 MΩ
		Test of Limits of Error	IS 13010:2002 With Amd. 1,2 (Clause 11.5)	40 V to 320 V (P–N) 1 mA to 120 A 0.2 Lag to UPF - 0.2 Lead
		Test of Starting Condition	IS 13010:2002 With Amd. 1,2 (Clause 11.4)	40 V to 320 V (P–N) 1 mA to 120 A 0.2 Lag to UPF - 0.2 Lead
		Test of No Load Condition	IS 13010:2002 With Amd. 1,2 (Clause 11.3)	40 V to 320 V (P–N) 1 mA to 120 A 0.2 Lag to UPF - 0.2 Lead
		Test of Repeatability of Error	IS 13010:2002 With Amd. 1,2 (Clause 11.19)	40 V to 320 V (P–N) 1 mA to 120 A 0.2 Lag to UPF - 0.2 Lead
		Test of Power Consumption	IS 13010:2002 With Amd. 1,2 (Clause 11.8)	20W 30VA
		Test of Meter Constant	IS 13010:2002 With Amd. 1,2 (Clause 11.6)	40 V to 320 V (P–N) 1 mA to 120 A 0.2 Lag to UPF - 0.2 Lead
		Tamper & Fraud Monitoring	CBIP Publication No. 325 Jan 2015 (Clause 6.7)	40 V to 320 V (P–N) 1 mA to 120 A 0.2 Lag to UPF - 0.2 Lead

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