

Laboratory R & D Centre Laboratory, Exide Industries Ltd., 217, Nazrul Islam Avenue, P. O. Desbandhu Nagar, Kolkata, West Bengal

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6897

Page 1 of 2

Validity 07.02.2018 to 06.02.2020

Last Amended on --

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

ELECTRICAL TESTING

I.	CELL & BATTERIES			
1.	Lead acid storage batteries for motor cycle, auto rickshaws and similar vehicles	Dimensions Capacity Test Life Cycle	IS 13568:1992 (Cl. 7.7, 7.9,7.12) JIS 5302:2004 (Cl. 7, 8.3.2, Informative Ref. 1 & 2) AIS 048:2009 (Cl. A-1.1)	0 to 600mm/0.01mm 0 to 9999.9Ah/0.01Ah Qualitative
2.	Lead acid traction batteries	Dimensions Capacity Test Charge Retention Cyclic Endurance	IS 5154:1980 (Cl. 7.7, 7.10) IEC 60254-1:1997 (Cl. 4.2, 4.3,4.5)	0 to 600mm/0.01mm 0 to 9999.9Ah/0.01Ah Expressed in % Qualitative
3.	Lead acid storage batteries for motor Vehicles	Dimensions Capacity Test Charge Acceptance HRD/CCA Overcharge Endurance Life Cycle Water Loss Test	IS 14257:1995 (Cl. 9.3.2, 9.3.4, 9.3.6, 9.3.5/B-1.2, 9.3.9, 9.3.7) IEC 60095-1:2000 (Cl. 9.1, 9.2,9.4, 9.3, 9.6, 9.7) JIS D5301:2006 (Cl. 9.5.1, 9.5.2, 9.5.4, 9.5.3, 9.5.5, Annex1-2)	0 to 600mm/0.01mm 0 to 9999.9Ah/0.01Ah 0 to 800A/0.01A 0 to 18V/0.01V Qualitative Qualitative 0 to 100kg/0.001kg
4.	Stationary valve regulated lead acid batteries	Dimensions Capacity Test Charge Retention Cyclic Endurance	IS 15549:2005 (Cl. 10.1.1.b, 12.1, 12.2, 12.4, 12.5, 12.6, 12.10) IEC 60896-21:2004 (Cl. 6.11,6.12, 6.13) IEC 60896-22:2004 (Cl. 6.11,6.12, 6.13)	0 to 600mm/0.01mm 0 to 9999.9Ah/0.01Ah Expressed in % Qualitative

Laboratory R & D Centre Laboratory, Exide Industries Ltd., 217, Nazrul Islam Avenue, P. O. Desbandhu Nagar, Kolkata, West Bengal

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6897

Page 2 of 2

Validity 07.02.2018 to 06.02.2020

Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
5.	Stationary lead acid cells & batteries	Dimension Capacity Test Efficiency Test Retention of Charge Endurance Test Water Loss Short Circuit & Internal Resistance	IS 1651:2013 (Cl. 12.4, 12.5, 12.9, 12.7, 12.8, 12.11, 12.13) IS 1652:2013 (Cl. 6.1, 10.6,10.10,10.8, 10.9,10.12,10.14) IS 6304:1992 (Cl. 6, 8.6, 8.7,8.8, 8.9)	0 to 600mm/0.01mm 0 to 9999.9Ah/0.01Ah Expressed in % Expressed in % Qualitative 0 to 100kg/0.001kg Qualitative
6.	Secondary lead acid cells & batteries for photovoltaic energy systems	Dimensions Capacity Test Retention of Charge Life Test	IEC 61427:2005 (Cl. 8.1, 8.3,8.2, 8.4)	0 to 600mm/0.01mm 0 to 9999.9Ah/0.01Ah Expressed in % Qualitative
7.	Stationary lead acid batteries – Vented types	Dimensions Capacity Test Endurance Test Life Test Efficiency Test Retention of Charge Short Circuit & Internal Resistance	IEC 60896-11:2002 (Cl. 14, 16,17, 18, 19) IS 13369:1992 (Cl. 11.4, 11.5,11.8, 11.6, 11.7)	0 to 600mm/0.01mm 0 to 9999.9Ah/0.01Ah Qualitative Qualitative Expressed in % Expressed in % Qualitative