

Laboratory CSA India Pvt. Ltd., Unit No. A-3, 3rd Floor, Tower A, Einstein Building, Bearys Global Research Triangle, Sy No. 63/3B, Gorvigere Village, Bidarahalli Hobli, Whitefield Ashram Road, Bangalore, Karnataka

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-5257

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Validity 09.12.2018 to 08.12.2020

Last Amended on 05.08.2019

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

I.	POWER SUPPLY EQUIPMENTS AND SYSTEMS			
1.	Electrical Equipment for test and Measurement, Process Control and Laboratory Usage Laboratory equipment for mixing and Stirring Laboratory equipment for the heating of Materials Testing and measuring circuits Control equipment	Mains Supply	EN/IEC 61010-1(3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051(3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010(3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201 IEC 61010-2-201	0.1 Vac to 300 Vac 0.1 Vdc to 150 Vdc 0.01 Aac to 42 Aac/ 0.01 Adc to 30 Adc(max) 0.01 W to 5000 W

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			(2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 5.1.3)	
		Durability of Markings	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition)	0.1s to 60 s

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			UL 61010-2-201 (2nd Edition) (Clause 5.3)	
		Equipment Temperature Limits	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201	1 °C to 400 °C

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			(2nd Edition) (Clause 9.5, 10.1-Cl.10.4)	
		Humidity pre-conditioning test	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201	15 °C to 50 °C 10 % R.H to 95 % R.H.

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			(2nd Edition) (Clause 6.8.2, 9.6)	
		Connection to External Circuits	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201	0.1 V to 300 V Upto 10 mm

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Voltage Tests	(2nd Edition) (Clause 6.6) EN/IEC 61010-1(3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 6.8)	Upto 10 kV ac/dc 1 s to 999 s

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		Protective Conductor Terminal	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 6.5.2.3)	0.01 Nm to 5 Nm

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		Impedance of Protective Bonding	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 6.5.2.4-6.5.2.6)	0.01 A to 60 A Upto 0.3 Ω

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		Limited Energy Circuit measurements	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 9.2, 9.4)	1 VA to 300 VA 0.1s to 100 s

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Stability test	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 7.4)	1° to 15° 1 N to 1000 N

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Provision for Lifting & Carrying	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 7.5)	70 mm Strap 1 N to 1000 N 0.1 s to 60 s

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Wall Mounting	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 7.6)	12 mm±2 mm drywall 1 N to 1000 N 0.1s to 60s

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		Cord Anchorage	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 6.10.2.2)	1 N to 200 N 0.1 Nm to 1.5 Nm 0.1 mm to 10 mm 0.1 kV to 10 kV

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		Enclosure Rigidity Test Static Test	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 8.1, 8.2.1)	1 N to 200 N 1 s to 999 s 1 °C to 400 °C

Ravi Johri
Convenor

Mallika Gope
Program Manager

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		Enclosure Rigidity Test Impact Test	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 8.1, 8.2.2)	500gm Steel Ball 0.1mm to 1000 mm 1 s to 999 s 1 °C to 400 °C

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		Drop	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 8.1, 8.3)	50 mm Thick Hardwood Board 1° to 60° 1 mm to 1000 mm

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		Resistance to Heat	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 10.5)	1°C to 220°C 1N to 20N, 5mm ball Diameter Upto 3 hrs

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Determination of Accessible parts	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 6.2)	Qualitative

Laboratory CSA India Pvt. Ltd., Unit No. A-3, 3rd Floor, Tower A, Einstein Building, Bearys Global Research Triangle, Sy No. 63/3B, Gorvigere Village, Bidarahalli Hobli, Whitefield Ashram Road, Bangalore, Karnataka

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Limit Values for Accessible Parts	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 6.3, 6.10.3)	0.1 mA to 20 mA 0.1 V to 300 V

Laboratory CSA India Pvt. Ltd., Unit No. A-3, 3rd Floor, Tower A, Einstein Building, Bearys Global Research Triangle, Sy No. 63/3B, Gorvigere Village, Bidarahalli Hobli, Whitefield Ashram Road, Bangalore, Karnataka

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Protection against hazards from Fluids Cleaning, Spillage, Overflow	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 11.2-11.4)	0.1 l to 1 l 0.1 to 10kV AC/DC 0.1 s to 60 s 1 ⁰ to 180 ⁰

Laboratory CSA India Pvt. Ltd., Unit No. A-3, 3rd Floor, Tower A, Einstein Building, Bearys Global Research Triangle, Sy No. 63/3B, Gorvigere Village, Bidarahalli Hobli, Whitefield Ashram Road, Bangalore, Karnataka

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Battery & Battery Charging	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 13.2.2)	Qualitative

Laboratory CSA India Pvt. Ltd., Unit No. A-3, 3rd Floor, Tower A, Einstein Building, Bearys Global Research Triangle, Sy No. 63/3B, Gorvigere Village, Bidarahalli Hobli, Whitefield Ashram Road, Bangalore, Karnataka

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Over temperature Protection Device	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 14.3)	Qualitative

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Application of Fault Conditions	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 4.4.2)	1 °C to 400 °C

Laboratory CSA India Pvt. Ltd., Unit No. A-3, 3rd Floor, Tower A, Einstein Building, Bearys Global Research Triangle, Sy No. 63/3B, Gorvigere Village, Bidarahalli Hobli, Whitefield Ashram Road, Bangalore, Karnataka

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Clearance and Creepage Distances	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 6.7, 6.9.1)	0.1 mm to 150 mm

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Switching devices tests	CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 4.4.2.101)	6000 cycles
		Spread of fire	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition)	Qualitative

Laboratory CSA India Pvt. Ltd., Unit No. A-3, 3rd Floor, Tower A, Einstein Building, Bearys Global Research Triangle, Sy No. 63/3B, Gorvigere Village, Bidarahalli Hobli, Whitefield Ashram Road, Bangalore, Karnataka

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 4.4.4.3, 9.2)	
		Measuring circuit Terminals	CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) (Clause 6.6.101)	0.1 mm to 150 mm 0.1 Vrms to 750 Vrms 0.1 Vdc to 1000 Vdc
		Specialized Measuring Circuit Terminals	CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) (Clause 6.6.102)	Qualitative (0.1 mA to 20 mA 0.1 V to 300 V)
		The impulse voltage test	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition)	1.2/50 μ s 1 kV to 12 kV

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 6.8.3.3)	
		Constructional requirements for protection against electric shock	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition)	Qualitative

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 6.9)	
		Connection to the MAINS supply source and connections between parts of equipment	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition)	Qualitative

Laboratory CSA India Pvt. Ltd., Unit No. A-3, 3rd Floor, Tower A, Einstein Building, Bearys Global Research Triangle, Sy No. 63/3B, Gorvigere Village, Bidarahalli Hobli, Whitefield Ashram Road, Bangalore, Karnataka

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 6.10)	
		Speed Controls	CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) (Clause 7.3.101)	1 °C to 400 °C

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Movement during operation	CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) (Clause 7.3.102)	Qualitative (0.1mm to 150 mm)
		Dynamic test of horizontal heating surfaces of glass or ceramic material	CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) (Clause 8.2.101)	1 °C to 400 °C 1 s to 999 s 0.1 mm to 150 mm
		Protection against the spread of fire	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010	Qualitative

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			(3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 9.1)	
		Containment of fire within the equipment	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010	V-2, V-1, V-0 Flame height: 20 (±)1 mm 0.01 s to 1 s to 2 hrs

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			(3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 9.3)	
		Battery electrolyte	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010	Qualitative

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			(3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 11.5)	
		Equipment RATED with a degree of ingress protection (IP code)	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010	Qualitative

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			(3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 11.6)	
		Connections for hoses and pipes	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010	Qualitative

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			(3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 11.101)	
		Motors	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010	1 °C to 400 °C

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			(3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 14.2)	
		Fuse holders	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010	Qualitative

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			(3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 14.4)	
		MAINS voltage selection devices	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010	Qualitative

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			(3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 14.5)	
		MAINS transformers tested outside equipment	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010	1°C to 400°C 0.1 V to 300 V

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			(3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 14.6)	
		Printed wiring boards	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010	V-2, V-1, V-0 Flame height: 20 (±)1 mm 0.01 s to 1 s to 2 hrs

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			(3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 14.7)	
		Circuits or Components used as to limit transient over voltages limiting devices	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010	Qualitative (1.2/50µs)

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			(3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 14.8)	
		Probe assemblies and accessories	IEC 61010-2-030 (Clause 14.102)	Qualitative
		Protection by interlocks	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010	10000 cycles of operation

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			(3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 15)	
		Reliability	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010	10 000 cycles of operation

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			(3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 15.3)	
		HAZARDS resulting from application	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010	Qualitative

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			(3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 16)	
		RISK Assessment	EN/IEC 61010-1 (3.1 Edition) CAN/CSA-C22.2 No. 61010-1 (3.1 Edition) UL 61010-1:2018 CAN/CSA-C22.2 No 61010-2-051:15 IEC 61010-2-051 (3rd Edition) UL 61010-2-051 (3rd Edition) CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010	Qualitative

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			(3rd Edition) CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) CAN/CSA-C22.2 No 61010-2-201:18 IEC 61010-2-201 (2nd Edition) UL 61010-2-201 (2nd Edition) (Clause 17)	
		Solid insulation for MAINS CIRCUITS	CAN/CSA-C22.2 No 61010-2-010:15 IEC 61010-2-010 (3rd Edition) UL 61010-2-010 (3rd Edition) (Annex K)	0.1 Vac to 300 Vac Upto150mm
		Current Measuring circuits	CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) (Clause 101.2)	0.01 Aac to 42 Aac

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Protection against mismatches of inputs and ranges	CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) (Clause 101.3)	Qualitative
		Protection against MAINS over voltages	CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) (Clause 101.4)	Qualitative
		Over-range indication	CAN/CSA-C22.2 No 61010-2-030-12 IEC 61010-2-030 (2nd Edition) UL 61010-2-030 (2nd Edition) (Clause 101.5)	Qualitative
II.	ELECTRO MEDICAL EQUIPMENTS			
1.	Electro Medical Equipments	Limitation of Voltage Current or Energy	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 8.4) IEC 60601-1 2nd Edition 1988	0.1 V peak to 300 V peak

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			UL 60601-1 First Edition 2003, Revision 26th April 2006 (Clause 15)	
		Dielectric voltage withstand test	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 8.8.3) IEC 60601-1 2nd Edition 1988 UL 60601-1 First Edition 2003, Revision 26th April 2006 (Clause 20.4)	0.1 kV to 10 kV ac/dc 1 s to 999 s
		Protection Against Excessive Temperatures & Other Hazards	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 11) IEC 60601-1 2nd Edition 1988 UL 60601-1 First Edition 2003, Revision 26th April 2006 (Clause 42)	0.1 °C to 400 °C

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Humidity conditioning test	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 5.7) IEC 60601-1 2nd Edition 1988 UL 60601-1 First Edition 2003, Revision 26th April 2006 (Clause 44.5)	Ambient to 50 °C 20 % to 95 % RH
		Hazardous situations & Fault Conditions for ME Equipment	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 13) IEC 60601-1 2nd Edition 1988 UL 60601-1 First Edition 2003, Revision 26th April 2006 (Clause 52)	0.1 °C to 400 °C
		Creepage Distances and Air Clearances	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012	Upto 150mm

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			IS 13450-1 (Clause 8.9) IEC 60601-1 2 nd Edition 1988 UL 60601-1 First Edition 2003, Revision 26th April 2006 (Clause 59)	
		Power Input Test	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 4.11) IEC 60601-1 2 nd Edition 1988 UL 60601-1 First Edition 2003, Revision 26th April 2006 (Clause 7.1)	0.1 Vac/Vdc to 300 Vac 150V dc, 0.01 Aac to 42 Aac 30Adc(max) 0.01 W to 5000 W
		Impedance and Current Carrying Capability	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 8.6.4 a) IEC 60601-1 2 nd Edition 1988 UL 60601-1 First Edition 2003,	0.01 mΩ to 600 mΩ Upto 60 A Upto 999s

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			Revision 26th April 2006 (Clause 18f)	
		Leakage Currents & Patient Auxiliary Currents	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 8.7) IEC 60601-1 2nd Edition 1988 UL 60601-1 First Edition 2003, Revision 26th April 2006 (Clause 19)	0.1mA to 20 mA
		Durability of markings test	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 7.1.3) IEC 60601-1 2nd Edition 1988 UL 60601-1 First Edition 2003, Revision 26th April 2006 (Clause 6.1)	0.1 s to 60 s

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Interruption power supply test	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 11.8) IEC 60601-1 2nd Edition 1988 UL 60601-1 First Edition 2003, Revision 26th April 2006 (Clause 49.2)	Qualitative
		Resistance to heat	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 8.8.4.1) IEC 60601-1 2nd Edition 1988 UL 60601-1 First Edition 2003, Revision 26th April 2006 (Clause 59.2)	1°C to 220 °C 20N, 5mm ball Diameter 0.01 mm to 10 mm
		Mechanical strength	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012	1 N to 1000 N

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			IS 13450-1 (Clause 15.3) IEC 60601-1 2nd Edition 1988 UL 60601-1 First Edition 2003, Revision 26th April 2006 (Clause 21 a,b)	
		Instability/Stability	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 9.4) IEC 60601-1 2nd Edition 1988 UL 60601-1 First Edition 2003, Revision 26th April 2006 (Clause 21)	1 mm to 150 mm 1 ⁰ to 15 ⁰ 1 N to 1000N 1 s to 60 s 0.1 mm to 1000 mm
		Legibility of Marking	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 7.1.2)	0.1 lx to 2000 lx
		Connection to Supply Mains	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014	Qualitative

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 7.2.6)	
		Working Voltage Measurement	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 8.5.4)	1 Vrms to 1000 Vrms
		Thermal Cycling for spaces filled with insulating material	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 8.9.3)	20 °C to 100 °C
		Temperature and Overload Control Device	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 15.4.2.1)	10 cycles to 200 Cycles
		Batteries	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 15.4.3)	1 Vac to 300 Vac 0.5 Vdc to 24 Vdc

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Transformer Short Circuit	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 15. 5.1.2) IEC 60601-1 2 nd Edition 1988 UL 60601-1 First Edition 2003, Revision 26th April 2006 (Clause 57.9.1)	1 °C to 400 °C 0.1 kV to 10 kV ac/dc
		Transformer Overload	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 15.5.1.3) IEC 60601-1 2 nd Edition 1988 UL 60601-1 First Edition 2003, Revision 26th April 2006 (Clause 57.9.1)	1 °C to 400 °C 0.1 kV AC/DC to 10 kV AC/DC

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Transformer Dielectric Strength	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 15.5.2) IEC 60601-1 2 nd Edition 1988 UL 60601-1 First Edition 2003, Revision 26th April 2006 (Clause 57.9.4)	0.1 kV to 10 kV AC/DC
		ME System Leakage Current	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 16.6.1)	0.1 mA to 1000 mA
		Cord Anchorage	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 8.11.3.5) IEC 60601-1 2 nd Edition 1988 UL 60601-1 First Edition 2003, Revision 26th April 2006 (Clause 57.4)	1 N to 100 N 0.1 mm to 150 mm 0.1 Nm to 1 Nm

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Cord Guards	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 8.11.3.6) IEC 60601-1 2 nd Edition 1988 UL 60601-1 First Edition 2003, Revision 26th April 2006 (Clause 57.4)	0.1 mm to 150 mm 0.1 kg to 5 kg 1° to 45°
		Measurement of Gaps (Trapping Zones)	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 9.2.2.2)	0.1 mm to 1000 mm
		Actuating Parts of Control of ME Equipment	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 15.4.6) IEC 60601-1 2 nd Edition 1988 UL 60601-1 First Edition 2003, Revision 26th April 2006 (Clause 56.10)	0.1 N to 100 N 0.1 Nm to 5 Nm

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Overflow	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 11.6.2) IEC 60601-1 2 nd Edition 1988 UL 60601-1 First Edition 2003, Revision 26th April 2006 (Clause 44)	1 ⁰ to 10 ⁰ 1V to 10V 1kV AC to 10kV AC/DC 0.1 to 600 s
		Spillage	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 11.6.3) IEC 60601-1 2 nd Edition 1988 UL 60601-1 First Edition 2003, Revision 26th April 2006 (Clause 44)	1V to 10V 1kVAC/DC to 10kV AC/DC 1ml to 1000ml

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Leakage	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 11.6.4) IEC 60601-1 2 nd Edition 1988 UL 60601-1 First Edition 2003, Revision 26th April 2006 (Clause 44)	1ml to 1000ml
		Rough Handling-Drop Test	IEC 60601-1 2 nd Edition 1988 UL 60601-1 First Edition 2003, Revision 26th April 2006 (Clause 21.6)	1mm to 50mm
		Rough Handling-Roll Off Step Test	IEC 60601-1 2 nd Edition 1988 UL 60601-1 First Edition 2003, Revision 26th April 2006 (Clause 21.6)	5s to 600s 1m to 3m 1mm to 40mm

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Cleaning and Disinfection	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 11.6.6) IEC 60601-1 2 nd Edition 1988 UL 60601-1 First Edition 2003, Revision 26th April 2006 (Clause 44)	0.1kV to 10 kV AC/DC 0s to 999 s
		Systems with Mechanical Protective Devices	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1 (Clause 9.8.4) IEC 60601-1 2 nd Edition 1988 UL 60601-1 First Edition 2003, Revision 26th April 2006 (Clause 28.4)	0s to 60 s 0kg to 100 kg

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Determination of accessible parts	CAN/CSA C22.2 NO. 60601-1 Third Edition 2014 IEC 60601-1 3.1 Edition 2012 IS 13450-1(Clause 5.9.2)	1N to 20 N
III.	SAFETY TESTING FACILITY			
1.	Information Technology Equipments	Input Current	CAN/CSA-C22.2 No. 60950-1-07 (RA 2012), 2nd Ed. UL 60950-1 2nd Ed. IEC 60950-1:2005+A1: 2009+A2:2013 IS 13252:Part 1 (Clause 1.6.2)	0.1Vac to 300Vac/ 0.1Vdc to 150Vdc, 0.0 Aac1 to 42Aac 30 Adc(max) 0.1 W to 5000 W
		Durability of marking	CAN/CSA-C22.2 NO. 60950-1-07 (RA 2012), 2nd Ed. UL 60950-1 2nd Ed. IEC 60950-1:2005+A1: 2009+A2:2013 IS 13252:Part 1 (Clause 1.7.11)	Qualitative
		Energy Hazard	CAN/CSA-C22.2 NO. 60950-1-07 (RA 2012), 2nd Ed. UL 60950-1 2nd Ed. IEC 60950-1:2005+A1: 2009+A2:2013 IS 13252: Part 1(Clause 2.1.1.5)	2 VA to 300 VA 0.1 s to 100 s

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Discharge of Capacitors in Equipment	CAN/CSA-C22.2 NO. 60950-1-07 (RA 2012), 2nd Ed. UL 60950-1 2nd Ed. IEC 60950-1:2005+A1:2009+A2:2013 IS 13252:Part 1 (Clause 2.1.1.7)	1 V to 300 V
		SELV Circuits	CAN/CSA-C22.2 NO. 60950-1-07 (RA 2012), 2nd Ed. UL 60950-1 2nd Ed. IEC 60950-1:2005+A1:2009+A2:2013 IS 13252:Part 1 (Clause 2.2)	1 V to 100 V
		Limited current circuit measurements	CAN/CSA-C22.2 NO. 60950-1-07 (RA 2012), 2nd Ed. UL 60950-1 2nd Ed. IEC 60950-1:2005+A1:2009+A2:2013 IS 13252:Part 1 (Clause 2.4)	1 mA to 100 mA 1 V to 400 V
		Limited power source measurement test	CAN/CSA-C22.2 NO. 60950-1-07 (RA 2012), 2nd Ed.UL 60950-1 2nd Ed. IEC 60950-1:2005+A1:2009+A2:2013 IS 13252:Part 1 (Clause 2.5)	1 V to 60 V 20 A Max 800 VA

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Resistance of Earthing Conductors & Their Terminations	CAN/CSA-C22.2 No. 60950-1-07 (RA 2012), 2nd Ed. UL 60950-1 2nd Ed. IEC 60950-1:2005+A1: 2009+A2:2013 IS 13252:Part 1 (Clause 2.6.3.4)	1 A to 60 A Upto 0.3 Ω
		Humidity conditioning	CAN/CSA-C22.2 NO. 60950-1-07 (RA 2012), 2nd Ed.UL 60950-1 2nd Ed. IEC 60950-1:2005+A1: 2009+A2:2013 IS 13252:Part 1 (Clause 2.9.2)	25 °C to 50 °C 25 % RH to 95 %RH
		Clearance and Creepage Distances	CAN/CSA-C22.2 NO. 60950-1-07 (RA 2012), 2nd Ed. UL 60950-1 2nd Ed. IEC 60950-1:2005+A1:2009+A2:2013 IS 13252:Part 1 (Clause 2.10)	1 mm to 150 mm
		Batteries	CAN/CSA-C22.2 NO. 60950-1-07 (RA 2012), 2nd Ed. UL 60950-1 2nd Ed. IEC 60950-1:2005+A1:2009+A2:2013 IS 13252:Part 1 (Clause 4.3.8)	1V to 300V ac/dc, 1A to 20A(max) 0.1W to 5000W Load:150 W

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Thermal Requirements	CAN/CSA-C22.2 NO. 60950-1-07 (RA 2012), 2nd Ed. UL 60950-1 2nd Ed. IEC 60950-1:2005+A1: 2009+A2:2013 IS 13252:Part 1(Clause 4.5)	1°C to 400°C
		Electric strength test	CAN/CSA-C22.2 NO. 60950-1-07 (RA 2012), 2nd Ed. UL 60950-1 2nd Ed. IEC 60950-1:2005+A1:2009+A2:2013 IS 13252:Part 1 (Clause 5.2)	0.1 to 10kVac/dc 100mAac/10mAdc 1s to 999s
		Insulation of Conductors	CAN/CSA-C22.2 NO. 60950-1-07 (RA 2012), 2nd Ed. UL 60950-1 2nd Ed. IEC 60950-1:2005+A1:2009+A2:2013 IS 13252:Part 1 (Clause 3.1.4)	0.1 kVac/dc to 10kVac/dc 1s to 999s
		Termination of Conductors	CAN/CSA-C22.2 NO. 60950-1-07 (RA 2012), 2nd Ed. UL 60950-1 2nd Ed. IEC 60950-1:2005+A1:2009+A2:2013 IS 13252:Part 1 (Clause 3.1.9)	1N to 50N

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Cord Anchorage And Strain Relief	CAN/CSA-C22.2 NO. 60950-1-07 (RA 2012), 2nd Ed. UL 60950-1 2nd Ed. IEC 60950-1:2005+A1:2009+A2:2013 IS 13252:Part 1 (Clause 3.2.6)	1N to 200N 0.1Nm to 1.5Nm 0.1mm to 10 mm 0.1kV to 10kV
		Cord Guard Test	CAN/CSA-C22.2 NO. 60950-1-07 (RA 2012), 2nd Ed. UL 60950-1 2nd Ed. IEC 60950-1:2005+A1:2009+A2:2013 IS 13252:Part 1 (Clause 3.2.8)	1N to 200N
		Stability test	CAN/CSA-C22.2 NO. 60950-1-07 (RA 2012), 2nd Ed. UL 60950-1 2nd Ed. IEC 60950-1:2005+A1:2009+A2:2013 IS 13252:Part 1 (Clause 4.1)	1 ⁰ to 15 ⁰ 1N to 1000 N
		Mechanical Strength Test	CAN/CSA-C22.2 NO. 60950-1-07 (RA 2012), 2nd Ed. UL 60950-1 2nd Ed. IEC 60950-1:2005+A1:2009+A2:2013 IS 13252:Part 1 (Clause 4.2.1-4.2.8)	1N to 1000N 500gm Ball 1000 mm 1 to 200°C Drop height:740 to 1010mm

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Wall or Ceiling Mounted Equipment	CAN/CSA-C22.2 NO. 60950-1-07 (RA 2012), 2nd Ed. UL 60950-1 2nd Ed. IEC 60950-1:2005+A1:2009+A2:2013 IS 13252:Part 1 (Clause 4.2.10)	1N to 1000N
		Handles	CAN/CSA-C22.2 NO. 60950-1-07 (RA 2012), 2nd Ed. UL 60950-1 2nd Ed. IEC 60950-1:2005+A1:2009+A2:2013 IS 13252:Part 1 (Clause 4.3.2)	1N to 1000 N
		Spillage Test	CAN/CSA-C22.2 NO. 60950-1-07 (RA 2012), 2nd Ed. UL 60950-1 2nd Ed. IEC 60950-1:2005+A1:2009+A2:2013 IS 13252:Part 1 (Clause 4.3.10)	0.1ltr-1ltr 0.1kV to 10kV AC/DC 0.1s to 60s 1° to 180°
		Abnormal Operation & Fault Conditions	CAN/CSA-C22.2 NO. 60950-1-07 (RA 2012), 2nd Ed. UL 60950-1 2nd Ed. IEC 60950-1:2005+A1:2009+A2:2013 IS 13252:Part 1 (Clause 5.3)	1°C to 400°C

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Touch current & Protective Conductor Current	CAN/CSA-C22.2 NO. 60950-1-07 (RA 2012), 2nd Ed. UL 60950-1 2nd Ed. IEC 60950-1:2005+A1:2009+A2:2013 IS 13252:Part 1 (Clause 5.1)	0.1 mA to 20 mA
		Resistance To Fire	CAN/CSA-C22.2 NO. 60950-1-07 (RA 2012), 2nd Ed. UL 60950-1 2nd Ed. IEC 60950-1:2005+A1:2009+A2:2013 IS 13252:Part 1 (Clause 4.7)	Qualitative
		TNV Circuits	CAN/CSA-C22.2 No. 60950-1, 2nd Ed. UL 60950-1 2nd Ed. IEC 60950-1:2005+A1:2009+A2:2013 IS 13252 (Part 1) (Clause 2.3, Clause 2.3.1, 2.3.2, 2.3.4 2.3.5, Annex M)	120 V + 2 V ac 50 Hz/60 Hz 1200 Ω + 2% 5k Ω resistor
		Clearances Mains Transient Voltages	CAN/CSA-C22.2 No. 60950-1, 2nd Ed. UL 60950-1 2nd Ed. IEC 60950-1+A1+A2 IS 13252 (Part 1) (Clause 2.10.3.2, 2.10.3.6, 2.10.3.9, 6.2.2.1, 7.4.3 Annex N)	0.5 kV to 7 kV (10/700 μ s Impulse) 1 kV to 12 kV (1.2/50 μ s Impulse)

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Voltage Surge	CAN/CSA-C22.2 No. 60950-1 , 2nd Ed. UL 60950-1 2nd Ed. IEC 60950-1+A1+A2 IS 13252 (Part 1) (Clause 7.4.2 Annex N)	2 kV to 10 kV
		Access to energized parts (Probe Tests) Protection in operator access areas	CAN/CSA-C22.2 NO. 60950-1-07 (RA 2012), 2nd Ed. UL 60950-1:2007 2nd Ed. IEC 60950-1:2005+A1:2009+A2:2013 IS 13252: Part 1:2010 (Clause 2.1.1.1) (Clause 4.4.2)	1 N to 50 N
		Beads and ceramic insulators	CAN/CSA-C22.2 NO. 60950-1-07 (RA 2012), 2nd Ed. UL 60950-1:2007 2nd Ed. IEC 60950-1:2005+A1:2009+A2:2013 IS 13252: Part 1 : 2010 (Clause 3.1.5)	1N to 50 N
		Direct plug-in equipment	CAN/CSA-C22.2 NO. 60950-1-07 (RA 2012), 2nd Ed. UL 60950-1:2007 2nd Ed. IEC 60950-1:2005+A1:2009+A2:2013 IS 13252: Part 1 : 2010 (Clause 4.3.6)	1N to 50 N
		Connection to	CAN/CSA-C22.2 NO.	0.1 to 10kVac/dc

Ravi Johri
Convenor

Mallika Gope
Program Manager

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		telecommunication network	60950-1-07 (RA 2012), 2nd Ed. UL 60950-1:2007 2nd Ed. IEC 60950-1:2005+A1:2009+A2:2013 IS 13252 : Part 1 : 2010 (Clause *6.1.2.1, 6.2.1, 6.2.2, 6.2.2.2, 6.2.2.3, 6.3)	100mAac/10mAdc 1 to 999 sec
2.	Self-Ballasted LED Lamps for general lighting services	Marking	IS 16102-1 IEC/EN 62560 (Clause 5.3)	Qualitative
		Cap Interchangeability	IS 16102-1 IEC/EN 62560 (Clause 6.1)	Qualitative
		Bending Moment, Axial Pull & Mass	IS 16102-1 IEC/EN 62560 (Clause 6.2)	0.01 mm to 50 mm 1 N to 40 N 0.001 kg to 2 kg 0.1Nm to 3Nm
		Protection Against Accidental contact with Live Parts	IS 16102-1 (Clause 7, 9.3, 13.6) IEC/EN 62560 (Clause 7, 13.3)	Qualitative
		Insulation Resistance	IS 16102-1 (Clause 8.1.1, 13.6) IEC/EN 62560 (Clause 8.2, 9.3,13.3)	0.01 M Ω to 5000 M Ω 50 V to 1000 V DC

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Electric Strength	IS 16102-1 (Clause 8.2, 13.6) IEC/EN 62560 (Clause 8.3, 9.3, 13.3)	Qualitative (0.1 to 10 kV AC/DC) 0.1 to 2 min)
		Mechanical Strength-Torsion Resistance of Unused Lamps	IS 16102-1 (Clause 9.1) IEC/EN 62560 (Clause 9.2.1, 9.4)	Qualitative (0.1 Nm to 5 Nm)
		Cap Temperature Rise	IS 16102-1 IEC/EN 62560 (Clause 10)	0.1-400°C
		Resistance to Heat	IS 16102-1 IEC/EN 62560 (Clause 11)	20N 0.1-200°C 0.1-5mm
		Resistance to Flame & Ignition	IS 16102-1 IEC/EN 62560 (Clause 12)	Qualitative 0.1-1050°C 0.1 to 200s
		Fault Conditions	IS 16102-1 (Clause 13.3-13.5) IEC/EN 62560 (Clause 13.2)	Qualitative (0.1 to 300 V 0.01 to 20 A 0.01 to 5 kW 1 to 200 °C 0.1 to 60 min 0.01 MΩ to 5000 MΩ 0.1 to 1000 V DC)
		Creepage Distances & Clearances	IS 16102-1 IEC/EN 62560 (Clause 14)	0.1 to 50 mm
		Ingress Protection	IEC/EN 62560 (Clause 18)	Qualitative (IPX4)
		Axial strength of Edison caps	IS 16102-1 (Clause 9.4)	0.05 N to 120 N

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
3.	Enclosures for Electrical & Electronic Apparatus (Max Size of EUT 1m X 1m 1 m for all categories)	Degrees of Protection provided by the Enclosures-IP Code	IS/IEC 60529:2001 IEC 60529:2013NEMA ANSI/IEC 60529:2004 CAN/CSA-C22.2 No. 60529:05	Qualitative (IP 1X-IP 6X IP X1-IP X8 IP X3 & X4 limited to 800 mm radius oscillation tube)
4.	Rotating Electrical Machines (Max Size of EUT 1m X 1m 1 m for all categories)	Degrees of Protection Provided by the Integral Design of Rotating Electrical Machines (IP Code)	IS/IEC 60034-5:2000	Qualitative (IP 1X to IP 6X IP X1 to IP X6 IP X3 & X4 limited to 800 mm radius oscillation tube)
5.	Audio, Video and Similar Electronics Apparatus safety Requirements	General test conditions	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision),CL.4.1.4	0.1 mm to 50 mm
		Normal operating condition	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), Clause. 4.2	10 mA to 20 A 600 Vac/dc
		Fault conditions	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), CL.4.3	10 mA to 20 A 600 Vac/dc 0.1 s to 60 s

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Marking Legibility	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision) Clause. 5	Qualitative
		Heating under normal operating conditions	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), Clause. 7.1	1 °C to 400 °C
		Construction requirements with regards to the protection against electric shock	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), Cl-8(excluding 8.11,8.17,8.21)	1 N to 100 N 0.1 Vac/dc to 150 Vac/dc 20 % R.H. to 98% R.H. 20 °C to 50 °C 0.1 kVac/dc to 5 kVac/dc 1 s to 999 s 0.1 to 150Vac/dc 0.1 mm to 150 mm 1N to 196.1 N
		Determination of Hazardous live parts	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), CL.9,9.1.1.2,9.1.1.3	Qualitative (1 N to 196.1 N Upto 400 Vac/dc 0.001mA to 30mA)
		Opening in enclosure	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8);	4 mm diameter and 100 mm length

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			IS 616:2017(5th revision), Clause. 9.1.3	
		Terminals	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision) Clause. 9.1.4	1mm to 25 mm 1N to 10 N 1Vpk to 35Vpk 1vdc to 60Vdc 1mA to 3.5mA Test probe D length 0.1 to 20mm
		Pre-set controls	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), Clause.9.1.5	Test probe C 1N to 20N
		Withdrawal of main plug	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), Clause. 9.1.6	1V to 300Vac 0.1-10s
		Resistance to external forces	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), Clause. 9.1.7	1N to 300N 10s 30mm Test probe 11 Test hook
		Surge test & humidity treatment	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision),	10kV, 60sec; 0°C to 50°C 0.1 to 98 % RH

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			Clause. 10.2 & 10.3	
		Insulation resistance & Dielectric Strength	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), Clause.10.4	500 VDC 0.01 M Ω to 5000 M Ω 0.1 kV AC/DC to 5 kV AC/DC 1 min
		Fault Conditions Tests	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), Clause.11	25 °C to 400 °C 100 Vpk 300 Vdc
		Mechanical Strength Bump	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), Clause. 12.1.1, 12.1.2	Weighing Scale:10 kg Scale:10 cm
		Mechanical Strength impact	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), Clause.12.1.4, 12.7.3.5	(50 \pm 1)mm, diameter 500 gm.
		Drop test	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), Clause. 12.1.5, 12.7.3.4	1mm-1000mm, Hardwood 13 mm on 2 layers of 19 mm to 20 mm plywood

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		Mechanical Strength stress relief	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), CL.12.1.6, 12.7.3.2	70°C, 7hr
		Fixing of actuating element	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), Clause. 12.2	0.20Nm to 5Nm
		Drawers	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), Clause. 12.4	0.1N to 200N
		Endurance test	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), Cl. 12.5	Qualitative
		Impact test	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), Cl. 12.5	0.5J

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Torque test	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), Cl. 12.5	1N to 50N 0.1 to 60 seconds
		Telescoping or rod antennas	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), Clause. 12.6	1mm to 25 mm
		Torque Test-Rod Antenna	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), Clause. 12.6.1	Qualitative 0.1N to 20N, 1 min 0.6Nm
		Battery replacement test	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), CL 12.7.3.3	Visual inspection Qualitative
		Crush test	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), CL.12.7.3.6	1N to 1000 N

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Creepage and Clearance Distance	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), Clause. 13	0.1mm to 150mm
		Provisions for protective earthing	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), Clause. 15.2	0.1 A to 50 A 0.1 to 12 V
		TERMINALS for external flexible cords and for permanent connection to the MAINS supply	CAN/CSA-C22.2 No. 60065:16; UL 60065:s2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision) Clause. 15.3	0.20 Nm to 6 Nm 40 N to 70 N
		Devices forming A part of the mains plug	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), Clause. 15.4	0.20 Nm to 6 Nm 40 N to 70 N
		Electrical connections & mechanical fixing	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), Clause.17	0.20 Nm to 1.20 Nm

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Stability & mechanical hazards	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), Clause.19.2	1° to 15° 0.1 to 10 kg
		Vertical force test	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision) CL.19.3	1N to 1000N Inclination angle 1°
		Horizontal force test	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision) CL.19.4	1N to 1000N Inclination angle 15°
		Test of edges and corners	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision) CL.19.5	Qualitative (Visual inspection)
		Fragmentation test	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision) CL.19.6.2	0.1mm to 50mm

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Wall or ceiling mounting means	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision) CL.19.7	1N to 10000N 0.1 to 60 seconds inclination angle 90° 0.20 Nm to 1.25 Nm
		Resistance to Fire (Glow wire Test)	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), Clause. 20	1 to 850°C 1 to 200s
		Resistance to Fire (Needle flame)	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), Clause. 20	Upto 1hr 2 mm,12mm 100 °C to 700 °C
		Resistance to Fire (Flame test)	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), Clause. 20	Upto 50mm
		Surge test & humidity treatment	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), Clause .10.2 & 10.3	10 kV 60 s Upto 50 °C 0.1 to 98 % RH

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Measurement of transient Voltages	CAN/CSA-C22.2 No. 60065:16; UL 60065:2015 (Ed 8); EN/IEC 60065:2014 (Ed 8); IS 616:2017(5th revision), Clause. 13.3.4, 13.4)	Qualitative (2kV to 12kV 1.2/50 μ s impulse, 0.5 kV to 7 kV 10/700 μ s Impulse)
		Vibration	CAN/CSA-C22.2 No. 60065:16 (Edition 2); UL 60065:03; EN/IEC 60065:2014 (Ed 8); IS 616:2017 Clause. 8.11, 8.17, 12.1.3)	Qualitative (Frequency Range: 5-60Hz Amplitude (Adjustable): 0-4.5mm Vibration Direction: Vertical Timer: 0-3600sec)
6.	d.c. or a.c. Supplied Electronic Controlgear for LED Modules	Marking	IEC 61347-2-13:2006 EN 61347-2-13:2006 IS 15885 (Part 2/Sec XIII): 2012 Clause No. 7	Qualitative
		Protection against Accidental Contact with live parts	IEC 61347-2-13:2006 EN 61347-2-13:2006 IS 15885 (Part 2/Sec XIII): 2012 Clause No. 8	1 to 200 N 0.1 to 100V
		Terminals	IEC 61347-2-13:2006 EN 61347-2-13:2006 IS 15885 (Part 2/Sec XIII): 2012 Clause No. 9	0.01 to 150mm 0.1 N to 200N 0.1Nm to 5Nm 1V to 300V, 42A
		Provision for Protective Earthing	IEC 61347-2-13:2006 EN 61347-2-13:2006 IS 15885 (Part 2/Sec XIII): 2012 Clause No. 10	0.01 to 60A 0 to 0.3 Ω
		Moisture Resistance and insulation	IEC 61347-2-13:2006 EN 61347-2-13:2006	-30°C to 180°C, 30%Rh to 95%Rh

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			IS 15885 (Part 2/Sec XIII): 2012 Clause No. 11	0.01 MΩ to 5000MΩ
		Electric Strength Test	IEC 61347-2-13:2006 EN 61347-2-13:2006 IS 15885 (Part 2/Sec XIII): 2012 Clause No. 12	0.1kV-5 kV [AC/DC] 1-999sec
		Fault conditions	IEC 61347-2-13:2006 EN 61347-2-13:2006 IS 15885 (Part 2/Sec XIII): 2012 Clause No. 14	1 V to 300 V 0.1 to 42 A 0.01MΩ to 5000MΩ
		Transformer Heating	IEC 61347-2-13:2006 EN 61347-2-13:2006 IS 15885 (Part 2/Sec XIII): 2012 Clause No. 15	1 V to 300 V 0.1 to 42 A 1 to 400°C
		Creepage distances and clearance	IEC 61347-2-13:2006 EN 61347-2-13:2006 IS 15885 (Part 2/Sec XIII): 2012 Clause No. 17	0.1 to 150mm
		Screws, Current-carrying parts and connections	IEC 61347-2-13:2006 EN 61347-2-13:2006 IS 15885 (Part 2/Sec XIII): 2012 Clause No. 18	0.1 to 150mm 1 to 200N 0.1 to 5Nm
		Resistance to heat, Fire and tracking (Ball Pressure Test)	IEC 61347-2-13:2006 EN 61347-2-13:2006 IS 15885 (Part 2/Sec XIII): 2012 Clause No. 19	1 to 180°C 20N 0.01mm to 5.00mm
		Resistance to heat, Fire and tracking (Glow Wire Test)	IEC 61347-2-13:2006 EN 61347-2-13:2006 IS 15885 (Part 2/Sec XIII): 2012 Clause No. 19	1 to 1050°C, 0.1 to 200sec

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Resistance to heat, Fire and tracking (Needle Flame Test)	IEC 61347-2-13:2006 EN 61347-2-13:2006 IS 15885 (Part 2/Sec XIII): 2012 Clause No. 19	0-1100°C
		Resistance to heat, Fire and tracking (Tracking Test)	IEC 61347-2-13:2006 EN 61347-2-13:2006 IS 15885 (Part 2/Sec XIII): 2012 Clause No. 19	0-1200V 0-999 drops 30 sec
		Resistance to corrosion	IEC 61347-2-13:2006 EN 61347-2-13:2006 IS 15885 (Part 2/Sec XIII): 2012 Clause No. 20	Qualitative
7.	Safety of Household and Electrical Appliances (Microwave ovens) Adapters For Household And Electrical Appliances Electric Kitchen Machines	Marking and Instructions	IS 302-2-25 (Clause No. 7) IEC 60335-2-25 (Ed 6.2, 2015-11, Clause No.7) IS 302-1 (Clause No.7) IEC/EN 60335-1: Ed 5.2, 2016-05 (Clause No.7) IS 302-2-14 (Clause No.7) IEC/EN 60335-2-14: Ed 6.0, 2016-06 (Clause No.7)	Qualitative
		Protection against access to live parts	IS 302-2-25 (Clause No. 8) IEC 60335-2-25 (Ed 6.2, 2015-11,	Qualitative (1 N to 200 N)

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			Clause No.8) IS 302-1 (Clause No.8) IEC/EN 60335-1: Ed 5.2, 2016-05 (Clause No.8) IS 302-2-14 (Clause No.8) IEC/EN 60335-2-14: Ed 6.0,2016-06 (Clause No.8)	
		Power Input and Current	IS 302-2-25 (Clause No. 10) IEC 60335-2-25 (Ed 6.2, 2015-11, Clause No.10) IS 302-1 (Clause No.10) IEC/EN 60335-1 Ed 5.2,2016-05 (Clause No.10) IS 302-2-14 (Clause No.10) IEC/EN 60335-2-14 Ed 6.0,2016-06 (Clause No.10)	0.1 to 300V AC/DC 0.01 to 20A 0.01 to 5000VA 1 to 400Hz
		Heating	IS 302-2-25 (Clause No. 11) IEC 60335-2-25 (Ed 6.2, 2015-11, Clause No.11)	1 to 400 °C 1 to 2 kΩ

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			IS 302-1 (Clause No.11) IEC/EN 60335-1: Ed 5.2,2016-05 (Clause No.11) IS 302-2-14 (Clause No.11) IEC/EN 60335-2-14: Ed 6.0,2016-06 (Clause No.11)	
		Leakage current and electric strength at operating temperature	IS 302-2-25 (Clause No. 13) IEC 60335-2-25 (Ed 6.2, 2015-11, Clause No.13) IS 302-1 (Clause No.13) IEC/EN 60335-1: Ed 5.2,2016-05 (Clause No.13) IS 302-2-14 (Clause No.13) IEC/EN 60335-2-14: Ed 6.0,2016-06 (Clause No.13)	0.01 to 20 mA 0.1 to 5 kV AC/DC 1 to 999s
		Transient Overvoltage	IS 302-2-25 (Clause No. 14) IEC 60335-2-25 (Ed 6.2, 2015-11, Clause No.14) IS 302-1	1kV to 12000Vac, 1.2/50 μ s

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			(Clause No.14) IEC/EN 60335-1: Ed 5.2, 2016-05 (Clause No.14) IS 302-2-14 (Clause No.14) IEC/EN 60335-2-14: Ed 6.0,2016-06 (Clause No.14)	
		Moisture Resistance	IS 302-2-25 (Clause No. 15) IEC 60335-2-25 (Ed 6.2, 2015-11, Clause No.15) IS 302-1 (Clause No.15) IEC/EN 60335-1: Ed 5.2,2016-05 (Clause No.15) IS 302-2-14 (Clause No.15) IEC/EN 60335-2-14: Ed 6.0,2016-06 (Clause No.15)	20% to 95 % RH 1 to 50 °C
		Leakage current and electric strength (After Humidity Treatment)	IS 302-2-25 (Clause No. 16) IEC 60335-2-25 (Ed 6.2, 2015-11, Clause No.16) IS 302-1 (Clause No.16)	0.01 to 20 mA 0.1 to 5 kV AC/DC 1 to 999s

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			IEC/EN 60335-1: Ed 5.2,2016-05 (Clause No.16) IS 302-2-14 (Clause No.16) IEC/EN 60335-2-14: Ed 6.0,2016-06 (Clause No.16)	
		Overload protection of transformers	IS 302-2-25 (Clause No. 17) IEC 60335-2-25 (Ed 6.2, 2015-11, Clause No.17) IS 302-1 (Clause No.17) IEC/EN 60335-1: Ed 5.2,2016-05 (Clause No.17) IS 302-2-14 (Clause No.17) IEC/EN 60335-2-14: Ed 6.0,2016-06 (Clause No.17)	1 to 400°C 0.1 to 300V AC/DC 0.01 to 20A 0.01 to 5000VA 1 to 400Hz
		Endurance	IS 302-2-25 (Clause No. 18) IEC 60335-2-25 (Ed 6.2, 2015-11 Clause No.18)	1 to 100 W/m2
		Abnormal Operation	IS 302-2-25 (Clause No. 19) IEC 60335-2-25	0.1 to 300V AC/DC 0.01 to 20A 0.01 to 5000VA

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			(Ed 6.2, 2015-11, Clause No.19) IS 302-1(Clause No.19) IEC/EN 60335-1: Ed 5.2,2016-05 (Clause No.19) IS 302-2-14 (Clause No.19) IEC/EN 60335-2-14: Ed 6.0,2016-06 (Clause No.19)	1 to 400Hz 1 to 60min
		Stability and Mechanical Hazards	IS 302-2-25 (Clause No. 20) IEC 60335-2-25 (Ed 6.2, 2015-11, Clause No.20) IS 302-1 (Clause No.20) IEC/EN 60335-1: Ed 5.2,2016-05 (Clause No.20) IS 302-2-14 (Clause No.20) IEC/EN 60335-2-14: Ed 6.0,2016-06 (Clause No.20)	1 to 15° 1 to 20N
		Mechanical Strength	IS 302-2-25:2014 (Clause No. 21) IEC 60335-2-25 (Ed 6.2, 2015-11, Clause No.21) IS 302-1 (Clause No.21)	Spring hammer (0.5 J) 1 to 200N 1 to 60min

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			IEC/EN 60335-1: Ed 5.2,2016-05 (Clause No. 21) IS 302-2-14 (Clause No.21) IEC/EN 60335-2-14: Ed 6.0,2016-06 (Clause No. 21)	
		Construction	IS 302-2-25 (Clause No. 22) IEC 60335-2-25 (Ed 6.2, 2015-11, Clause No.22) IS 302-1 (Clause No.22) IEC/EN 60335-1: Ed 5.2,2016-05 (Clause No.22) IS 302-2-14 (Clause No.22) IEC/EN 60335-2-14: Ed 6.0,2016-06 (Clause No.22)	Qualitative
		Internal Wiring	IS 302-2-25 (Clause No. 23) IEC 60335-2-25 (Ed 6.2, 2015-11, Clause No.23) IS 302-1(Claue No.23) IEC/EN 60335-1: Ed 5.2,2016-05	0.1 to 5000V AC/DC

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			(Clause No.23) IS 302-2-14 (Clause No.23) IEC/EN 60335-2-14: Ed 6.0,2016-06 (Clause No.23)	
		Supply connection and external flexible cords	IS 302-2-25 (Clause No. 25) IEC 60335-2-25 (Ed 6.2, 2015-11, Clause No.25) IS 302-1 (Clause No.25) IEC/EN 60335-1: Ed 5.2,2016-05 (Clause No.25) IS 302-2-14 (Clause No.25) IEC/EN 60335-2-14: Ed 6.0,2016-06 (Clause No.25)	0.1 to 5Nm 1 to 50N 0.1 to 10kV -40°C-100°C
		Terminals for External conductors	IS 302-2-25:2014 (Clause No. 6) IEC 60335-2-25 (Ed 6.2, 2015-11, Clause No.26) IS 302-1 (Clause No.26) IEC/EN 60335-1: Ed 5.2,2016-05 (Clause No.26) IS 302-2-14	0.1 to 50mm 0.1 to 5Nm

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			(Clause No.26) IEC/EN 60335-2-14: Ed 6.0,2016-06 (Clause No.26)	
		Provision For Earthing	IS 302-2-25:2014 (Clause No. 27) IEC 60335-2-25 (Ed 6.2, 2015-11, Clause No.27) IS 302-1 (Clause No.27) IEC/EN 60335-1: Ed 5.2,2016-05 (Clause No.27) IS 302-14 (Clause No.27) IEC/EN 60335-2-14: Ed 6.0,2016-06 (Clause No.27)	0 to 0.3Ω 0.01 to 60 A
		Screws and Connections	IS 302-2-25:2014 (Clause No. 28) IEC 60335-2-25 (Ed 6.2, 2015-11, Clause No.28) IS 302-1 (Clause No.28) IEC/EN 60335-1: Ed 5.2,2016-05 (Clause No.28) IS 302-2-14 (Clause No.28)	0.1 to 5Nm

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			IEC/EN 60335-2-14: Ed 6.0,2016-06 (Clause No.28)	
		Clearances, Creepage distances and Solid Insulation	IS 302-2-25 (Clause No. 29) IEC 60335-2-25 (Ed 6.2, 2015-11, Clause No.29) IS 302-1 (Clause No.29) IEC/EN 60335-1: Ed 5.2,2016-05 (Clause No.29) IS 302-2-14 (Clause No.29) IEC/EN 60335-2-14: Ed 6.0,2016-06 (Clause No.29)	0.1 to 50 mm
		Resistance To Heat and Fire (Ball Pressure Test)	IS 302-2-25:2014 (Clause No. 30) IEC 60335-2-25 (Ed 6.2, 2015-11, Clause No.30) IS 302-1 (Clause No.30) IEC/EN 60335-1: Ed 5.2,2016-05 (Clause No.30) IS 302-2-14 (Clause No.30) IEC/EN 60335-2-14:	1 to 180°C 20N 0.01mm-5.00mm

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			Ed 6.0,2016-06 (Clause No.30)	
		Resistance To Heat and Fire (Glow Wire Test)	IS 302-2-25:2014 (Clause No. 30) IEC 60335-2-25 (Ed 6.2, 2015-11, Clause No.30) IS 302-1 (Clause No.30) IEC/EN 60335-1: Ed 5.2,2016-05 (Clause No.30) IS 302-2-14 (Clause No.30) IEC/EN 60335-2-14: Ed 6.0,2016-06 (Clause No.30)	1 to 1050°C, 1 to 200sec
		Resistance To Heat and Fire (Needle Flame Test)	IS 302-2-25:2014 (Clause No. 30) IEC 60335-2-25 (Ed 6.2, 2015-11, Clause No.30) IS 302-1 (Clause No.30) IEC/EN 60335-1: Ed 5.2,2016-05 (Clause No.30) IS 302-2-14 (Clause No.30) IEC/EN 60335-2-14: Ed 6.0,2016-06 (Clause No.30)	0-1100°C

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Resistance To Heat and Fire (Horizontal & Vertical Flame test)	IS 302-2-25:2014 (Clause No. 30) IEC 60335-2-25 (Ed 6.2, 2015-11, Clause No.30) IS 302-1 (Clause No.30) IEC/EN 60335-1: Ed 5.2,2016-05 (Clause No.30) IS 302-2-14 (Clause No.30) IEC/EN 60335-2-14: Ed 6.0,2016-06 (Clause No.30)	0-50 mm
		Radiation, Toxicity and similar Hazards	IS 302-2-25:2014 (Clause No. 32) IEC 60335-2-25 (Ed 6.2, 2015-11, Clause No.32)	1 to 100 W/m2
8.	Fixed General Purpose Luminaries IS 10322-5-1 IEC 60598-2-1 Amendment 1 (1987)	Marking	IS 10322-5-1 (Clause 6) IEC 60598-2-1 Amendment 1(1987) IS 10322-1 IEC 60598-1	Qualitative

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		Construction	IS 10322-5-1 (Clause 7) IEC 60598-2-1 Amendment 1(1987) IS 10322-1 (Clause 4/Section 4) IEC 60598-1	0.1N-100N 0.01 mm to 150mm 0-5 Nm 0.1kV-10kV 0-300V/42A 0-60s 0-1200V, 0-999 drops, 30 sec
		Creepage Distances And Clearances	IS 10322-5-1 (Clause 8) IEC 60598-2-1 Amendment 1(1987) IS 10322-1 (Clause 11/Section11) IEC 60598-1	0.1 mm to 150 mm 0-1200V, 0-999 drops, 30 sec 0.1kV-10kV Standard probe 50mm
		Provision For Earthing	IS 10322-5-1 (Cl. 9) IEC 60598-2-1 Amendment 1(1987) IS 10322-1 (Clause 7/Section 7) IEC 60598-1	0.01 to 60A 0 to 0.3Ω
		Terminals	IS 10322-5-1 (Clause 10) IEC 60598-2-1 Amendment 1(1987) IS 10322-1 (Cl. 14-15/Section 14-15) IEC 60598-1	0.01 mm to 150 mm, 0.01 Nm to 5 Nm 1 to 100N 0-60 sec 0.01 to 60A, 0.3Ω 1 to 180 °C, 0-1000V, 20A 0-1000V,10A

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		External And Internal Wiring	IS 10322-5-1 (Clause 11) IEC 60598-2-1 Amendment 1(1987) IS 10322-1 (Clause 5/Section 5) IEC 60598-1	0.01-150mm 0.1-100N 1 to 60 sec 0.01 Nm-5Nm
		Protection Against Electric Shock	IS 10322-5-1 (Clause 12) IEC 60598-2-1 Amendment 1(1987) IS 10322-1 (Clause 8/Section 8) IEC 60598-1	0.1 to 300 V 0.01 to 5 mA 1 to 100N Standard test finger Unjointed test finger
		Endurance Test And Thermal Test	IS 10322-5-1 (Clause. 13) IEC 60598-2-1 Amendment 1(1987) IS 10322-1 (Clause 12/Section 12) IEC 60598-1	1 to 300 °C, 0.01 to 5A 0.1 to 300V
		Resistance To Dust And Moisture	IS 10322-5-1 (Clause. 14) IEC 60598-2-1 Amendment 1(1987) IS 10322-1 (Clause 9/Section 9) IEC 60598-1	Qualitative (IP 1X-IP 6X IP X1-IP X8 IP X3 & X4 limited to 800 mm radius oscillation tube)

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		Insulation Resistance And Electric Strength	IS 10322-5-1 (Clause. 15) IEC 60598-2-1 Amendment 1(1987) IS 10322-1 (Clause 10/Section 10) IEC 60598-1	0.1 MΩ to 100 MΩ, 0.1kV-5 kV
		Resistance to heat, Fire and tracking (Ball Pressure Test)	IS 10322-5-1 (Clause. 16) IEC 60598-2-1 Amendment 1(1987) IS 10322-1 (Clause 13/Section 13) IEC 60598-1	1 to 180°C 20N 0.01mm-5.00mm
		Resistance to heat, Fire and tracking (Glow Wire Test)	IS 10322-5-1 (Clause. 16) IEC 60598-2-1 Amendment 1(1987) IS 10322-1 (Clause 13/Section 13) IEC 60598-1	1 to 1050°C, 1 to 200sec
		Resistance to heat, Fire and tracking (Needle Flame Test)	IS 10322-5-1 (Clause. 16) IEC 60598-2-1 Amendment 1(1987) IS 10322-1 (Clause 13/Section 13) IEC 60598-1	0-1100°C

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		Resistance to heat, Fire and tracking (Tracking Test)	IS 10322-5-1 (Clause. 16) IEC 60598-2-1 Amendment 1(1987) IS 10322-1 (Clause 13/Section 13) IEC 60598-1	0-1200V 0-999 drops 30 sec
10.	Electrical Insulating Materials	Comparative Tracking Index (CTI)	IEC 60112 Ed. 4 +Amd. 1 IS 2824:2007 CSA C22.2 No. 0.17-00 Cl. 6.5 ASTM D 3638 (4th Edition):2007 UL 746A Ed. 6, Clause. 24	Upto 1200V Upto 999 drops 30 s
		Ball Pressure Test (BPT)	IEC 60695-10-2 Ed. 3.0 CAN/CSA C22.2 No. 0.17-00 Cl. 9.6 UL 746A Ed. 6, Clause. 30	1 to 220 °C 20N 0.01 mm to 10.0 mm
		Glow Wire Tests (GWIT/GWFI)	IEC 60695-2-10 Ed. 2.0 IEC 60695-2-12 Ed. 2.1 IEC 60695-2-13 Ed. 2.1 CSA C22.2 No. 0.17-00 Cl. 4.3.5 UL 746A Ed. 6, Clause. 35	1 to 1050°C, 1 to 200sec
		50W (20 mm) Vertical Burning Test (V-2, V-1, V-0)	CSA C22.2 No. 0.17-00, Clause.4.2.2 ANSI/UL 94 Ed.6 Clause.8 IEC 60695-11-10 Ed. 2.0 Method B ASTM D 3801-10	V-2, V-1, V-0 Flame height: 20 (±)1 mm 0.01 s to 1 s to 2 hrs

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		Horizontal Burning Test(HB)	CAN/CSA C22.2 No. 0.17-00, Clause.4.2.3 IEC 60695-11-10 Ed. 2.0 Method A ANSI/UL 94 Ed.6 Clause.7 ASTM D 635-14	HB (HB40,HB75) Flame height: 20 (±)1 mm 0.01 s to 1 s to 2 hr
		12 mm Needle Flame	IEC 60695-11-5 Ed. 1.0	Flame height: 12 mm +/-1 0.01 s to 1 s to 2 hr
11.	Audio/video, information and communication technology equipment	Safeguard robustness Stress relief test	IEC/EN 62368-1:2014Edition 2 Clause 4.4.4.1, 4.4.4.7, T.8, 4.4.4.8, 4.8.4.2	2°C to 70° C , 1 sec to 7 hr
		Steady force tests	IEC/EN 62368-1 Edition 2 Clause 4.4.4.2, T.3, T.4, T.5, 4.4.4.8, 5.3.2.3	1N to 250N 15s Test probe V.2, V.3
		Drop tests	IEC/EN 62368-1 Edition 2 Clause 4.4.4.3, T.7, 4.4.4.8, 4.8.4.4	Hardwood 13 mm on 2 layers of 18 mm ± 2 mm plywood Test height:340mm to 1010mm
		Impact tests	IEC/EN 62368-1 Edition 2 Clause 4.4.4.4, T.6, 4.4.4.8, 4.8.4.5	Steel sphere mass:500 g ± 25 g, Dia:50 mm ± 1 mm
		Internal accessible safeguard tests	IEC/EN 62368-1 Edition 2 Clause 4.4.4.5, T.3, 4.4.4.8	1N to 250N 15s
		Fixing of conductors	IEC/EN 62368-1 Edition 2 Clause 4.6	1N to 10N 0.1 to 50mm
		Equipment for direct insertion into mains socket-outlets	IEC/EN 62368-1 Edition 2 Clause 4.7.3	0.20 Nm to 6 Nm 40 to 70N

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Products containing lithium coin/button cell batteries Battery replacement test	IEC/EN 62368-1 Edition 2 Clause 4.8.4.3	0.1 to 5 Nm
		Crush test	IEC/EN 62368-1 Edition 2 Clause 4.8.4.6, 4.8.5	1N to 250N 15s 1N to 250N Test probe V.2, Test hook
		Likelihood of fire or shock due to entry of conductive objects	IEC/EN 62368-1 Edition 2 Clause 4.9, Annex P	IP 1X-IP 6X IP X1-IP X7 (IP X3 & X4 limited to 800 mm radius oscillation tube)
		Steady-state voltage and current limits	IEC/EN 62368-1 Edition 2 Clause 5.2.2.2	1V to 100V
		Single pulse limits	IEC/EN 62368-1 Edition 2 Clause 5.2.2.4	1V to 100V
		Ringling signals	IEC/EN 62368-1 Edition 2 Clause 5.2.2.6, Annex H	1V to 100V
		Audio signals	IEC/EN 62368-1 Edition 2 Clause 5.2.2.7, Annex E.1	0.1 to 150V
		Accessibility to electrical energy sources and safeguards	IEC/EN 62368-1 Edition 2 Clause 5.3, Figure V.3	Blunt Probe: Figure V.3
		Contact requirements	IEC/EN 62368-1 Edition 2 Clause 5.3.2.2, 5.3.2.3, 5.4.9.1, 5.4.1.3, 5.4.1.5.2	1N to 250N 10s to 15s Test probe V.2, V.3
		Terminals for connecting stripped wire	IEC/EN 62368-1 Edition 2 Clause 5.3.2.4, V.1.6	0.1 to 50mm 0.1 to 5Nm

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		Insulation materials and requirements	IEC/EN 62368-1 Edition 2 Clause 5.4.1.3 5.4.8, 5.4.1.5.2	0.1 to 50 mm
		Maximum operating temperatures for materials, components and systems	IEC/EN 62368-1 Edition 2 Clause 5.4.1.4, B.2	Ambient to 400°C
		Insulation in circuits generating starting pulses	IEC/EN 62368-1 Edition 2 Clause 5.4.1.7	0.2 to 5kVac/dc 1 to 999 Sec
		Determination of working voltage	IEC/EN 62368-1 Edition 2 Clause 5.4.1.8	1V to 1000 V RMS
		Thermoplastic parts on which conductive metallic parts are directly mounted Ball pressure test	IEC/EN 62368-1 Edition 2 Clause 5.4.1.10.3	Ambient to 180°C 20N 0.01mm-5.00mm
		Clearances	IEC/EN 62368-1 Edition 2 Clause 5.4.2	0.1 to 50 mm
		Determining transient voltage levels by measurement	IEC/EN 62368-1 Edition 2 Clause 5.4.2.3.2.5. Annex D	2-10kV (1.2/50 µs impulse)
		Determining the adequacy of a clearance using an electric strength test	IEC/EN 62368-1 Edition 2 Clause 5.4.2.4	2-10kV (1.2/50 µs impulse)
		Creepage distances	IEC/EN 62368-1 Edition 2 Clause 5.4.3.2, G.7	0.1 to 150mm,
		Material Group and CTI	IEC/EN 62368-1 Edition 2 Clause 5.4.3.3	0-1200V 0-999 drops 30 sec

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		Antenna terminal insulation	IEC/EN 62368-1 Edition 2 Clause 5.4.5	2-10kV
		Humidity conditioning	IEC/EN 62368-1 Edition 2 Clause 5.4.8	Temperature Range: 20 to 180°C Humidity Range: 30-95%RH
		Electric strength test	IEC/EN 62368-1 Edition 2 Clause 5.4.9, 5.4.11.3	0 to 10kVac/dc 1 to 999 Sec
		Impulse test	IEC/EN 62368-1 Edition 2 Clause 5.4.10.2.2	0-7kV (10/700 μ s Impulse)
		Steady state test	IEC/EN 62368-1 Edition 2 Clause 5.4.10.2.3, 5.4.10.3	0 to 10kVac/dc 0 to 999 Sec 0.01 M Ω to 5000 M Ω 0-1000V DC
		Safeguards against capacitor discharge after disconnection of a connector	IEC/EN 62368-1 Edition 2 Clause 5.5.2.2	1V to 300V
		Resistance of the protective bonding system	IEC/EN 62368-1 Edition 2 Clause 5.6.6	0.1 to 50A 0.1 to 12 V 0.1m Ω to 600m Ω
		Prospective touch voltage, touch current and protective conductor current	IEC/EN 62368-1 Edition 2 Clause 5.7	0.1 to 20 mA
		Electrically-caused fire Power source circuit classifications	IEC/EN 62368-1 Edition 2 Clause 6.2	2VA to 300VA 0.1 to 100 sec
		Top openings and top opening properties	IEC/EN 62368-1 Edition 2 Clause 6.4.8.3.3	0 to 1hr 2 mm, 12mm 100-700°C

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Reduction of exposure to hazardous substances Compliance	IEC/EN 62368-1 Edition 2 Clause 7.2, Annex T	1N to 250N 15s Test probe V.2, V.3 Hardwood 13 mm on 2 layers of 18 mm \pm 2 mm plywood Test height:340mm to 1010mm Steel sphere mass:500 g \pm 25 g, Dia:50 mm \pm 1 mm
		Mechanically-caused injury Safeguards against parts with sharp edges and corners	IEC/EN 62368-1 Edition 2 Clause 8.4, Annex V	Test probe V.1, V.2:Jointed test probe, V.3:Blunt probe, V.4:Wedge probe. V.5:Terminal probe, Test hook 0.1N to 30N
		Equipment having an electromechanical device for destruction of media	IEC/EN 62368-1 Edition 2 Clause 8.5.4.2.4, V.1.2, V.1.5	V.4:Wedge probe
		Static stability test	IEC/EN 62368-1 Edition 2 Clause 8.6.2.2	1N to 1000N
		Downward force test	IEC/EN 62368-1 Edition 2 Clause 8.6.2.3	1N to 1000N
		Relocation stability test	IEC/EN 62368-1 Edition 2 Clause 8.6.3	Inclination angle:10° Rotation angle:360°
		Glass slide test	IEC/EN 62368-1 Edition 2 Clause 8.6.4	Inclination angle:10°

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Horizontal force test and compliance criteria	IEC/EN 62368-1 Edition 2 Clause 8.6.5	1N to 250N Inclination angle:15° Rotation angle:360°
		Equipment mounted to a wall or ceiling	IEC/EN 62368-1 Edition 2 Clause 8.7.2 , T.8	1N to 1000N
		Handle strength	IEC/EN 62368-1 Edition 2 Clause 8.8	1N to 1000N
		Wheels or casters attachment requirements	IEC/EN 62368-1 Edition 2 Clause 8.9	1N to 20N 1 min
		Carts, stands, and similar carriers	IEC/EN 62368-1 Edition 2 Clause 8.10, 8.6.5, 8.6.3	Inclination angle:15° Rotation angle:360°
		Cart, stand or carrier loading test and compliance criteria	IEC/EN 62368-1 Edition 2 Clause 8.10.3, 8.10.6	1N to 1000N 1min
		Cart, stand or carrier impact test	IEC/EN 62368-1 Edition 2 Clause 8.10.4, 8.10.6	Steel sphere mass: 500 g ± 25 g, Dia:50 mm ± 1 mm
		Mechanical stability	IEC/EN 62368-1 Edition 2 Clause 8.10.5, 8.10.6	1 to 15° 1N to 1000 N
		Mounting means for rack mounted equipment Mechanical strength test	IEC/EN 62368-1 Edition 2 Clause 8.11.3, 8.11.5	1N to 1000N
		Mechanical strength test, 250 N, including end stops	IEC/EN 62368-1 Edition 2 Clause 8.11.4, 8.11.5	1N to 1000N 1min
		Telescoping or rod antennas	IEC/EN 62368-1 Edition 2 Clause 8.12, T.11	1N to 20N 1 min

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		Thermal energy source classifications Test method and compliance criteria	IEC/EN 62368-1 Edition 2 Clause 9.2.5	Ambient to 400°C
		Normal operating condition tests, abnormal operating condition tests and single fault condition tests	IEC/EN 62368-1 Edition 2 Annex B	0.1 to 300V ac/ 0.1 to 150V dc, 0.01 to 42Aac/0.01 30Adc(max) 0.1 to 5000W
		Test generators	IEC/EN 62368-1 Edition 2 Annex D	0-7kV (10/700 µs Impulse) 1kV-12kV (1.2/50 µs impulse)
		Equipment markings, instructions, and instructional safeguards	IEC/EN 62368-1 Edition 2 Annex F	0.1 to 60 sec
		Criteria for telephone ringing signals	IEC/EN 62368-1 Edition 2 Annex H	1V to 1000 V RMS
		Insulated winding wires for use without interleaved insulation	IEC/EN 62368-1 Edition 2 Annex J	0.1 to 10kVac/dc 100mAac/10mA dc 1 to 999 sec
		Safeguards against conductive objects	IEC/EN 62368-1 Edition 2 Annex P	IP3X or IP4X 0.01 mm to 50 mm
		Circuits intended for interconnection with building wiring	IEC/EN 62368-1 Edition 2 Annex Q, 6.5.4	1V to 60V 20A Max 800VA

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		Tests for resistance to heat and fire	IEC/EN 62368-1 Edition 2 Annex S, 6.4.8.4	V-2, V-1, V-0 Flame height: 20 (±)1 mm 0.01 s to 1 s to 2 hrs (HB40,HB75) Flame height: 20 (±)1 mm 0.01 s to 1 s to 2 hr
		Mechanical strength tests	IEC/EN 62368-1 Edition 2 Annex T	1N to 250N 15s Test probe V.2, V.3 Hardwood 13 mm on 2 layers of 18 mm ± 2 mm plywood Test height:340mm to 1010mm Steel sphere mass: 500 g ± 25 g, Dia:50 mm± 1 mm
		Determination of accessible parts	IEC/EN 62368-1 Edition 2 Annex V	Test probe V.1, V.2:Jointed test probe, V.3:Blunt probe, V.4:Wedge probe. V.5:Terminal probe, Test hook
12.	Indian Language Support For Mobile Phone Handsets	Text Inputting in English and 22 Indian Official Languages	IS 16333 (Part-3) Clause 5.1	Capability of composing message in English and all 22 languages
		Message readability in English and 22 Indian Official Languages	IS 16333 (Part-3) Clause 5.2	Capability of reading message in English and all 22 languages