

Laboratory Swen Konformity, Gokul RH 1, S. No. 22, Vishal Nagar, Pimple Nilakh, Pune, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6330 (in lieu of T-3597 & T-3598)

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Validity 24.09.2017 to 23.09.2019

Last Amended on 27.09.2017

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
<b><u>ELECTRICAL TESTING</u></b>				
<b>I.</b>	<b>SAFETY TESTING</b>			
<b>1</b>	<b>Machinery, electrical equipment of machines, (hoisting machines)</b>	Verification of the continuity of the protective bonding circuits	BS EN 60204-1:2006+A1:2009, Clause 18.2.2 test 1 BS EN 60204-32:2008, Clause 18.2.2 test 1	3Aac to 33Aac/ 10mΩ to 650mΩ
	<b>Low-voltage switchgear and control gear assemblies, (Power switchgear and control gear assemblies), ( Distribution boards intended to be operated by ordinary persons), ( assemblies for construction sites), ( power distribution in public networks), (Busbar trunking systems(busways)</b>	Requirements for earth continuity providing protection against the consequences of faults within the assembly  Effective earth continuity between the exposed conductive parts of the assembly and the protective circuit.	IEC 61439-1:2011,Ed.2,Clause 8.4.3.2.2 & 10.5.2 IEC 61439-2:2011,Ed.2, Clause 8.4.3.2.2 IEC 61439-3:2012,Ed.1, Clause 8.4.3.2.2 IEC 61439-4:2013, Clause 8.4.3.2.2 IEC 61439-5:2014,Ed.2, Clause 8.4.3.2.2 BS EN 61439-6:2012, Clause 8.4.3.2.2	
	<b>Testing Electrical equipment for measurement, control, and laboratory,( testing and measuring circuits),( sterilizers</b>	Protective bonding	BS EN 61010-1:2010, Clause 6.5.2 BSEN 61010-2-010:2014, Clause 6.5.2 BS EN 61010-2-030:2010, Clause 6.5.2 BS EN 61010-2-040:2015, Clause 6.5.2	

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	and washer-disinfectors used to treat medical materials),		BS EN 61010-2-061:2015, Clause 6.5.2 BS EN 61010-2-081:2015, Clause 6.5.2 BS EN 61010-2-091:2012, Clause 6.5.2	
	(laboratory atomic spectrometers with thermal atomization and ionization),( cabinet x-ray systems),( in vitro diagnostic (IVD) medical equipment),(control equipment)	Provision for earthing	IEC 61010-2-101:2015,Ed.2, Clause 6.5.2 BS EN 61010-2-201:2013, Clause 6.5.2/6.5.2.5/ 6.5.2.6/6.5.2.101 & 6.5.2.103	3Aac to 33Aac/ 10mΩ to 650mΩ
	Household and similar electrical appliances, (dishwashers), (floor treatment machines and wet scrubbing machines), (tumble dryers), (warming plates and similar appliances),(deep fat fryers, frying pans and similar appliances), ( appliances for heating liquids), (refrigerating appliances, ice-		IEC 60335-1:2010+A1 2013+A2 2016,Ed.5.2, Clause 27.5 BS EN 60335-2-5:2015, Clause 27.5 BS EN 60335-2-6:2015, Clause 27.5 BS EN 60335-2-10:2003+A1:2008, Clause 27.5 BS EN 60335-2-11:2010+A1:2015, Clause 27.5 BS EN 60335-2-12:2003+A1:2008, Clause 27.5 BS EN 60335-2-13:2010+A1:2012, Clause 27.5	

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	cream appliances and ice makers), (clocks), (skin exposure to ultraviolet and infrared radiation),( sewing machines)		BS EN 60335-2-15:2016, Clause 27.5 BS EN 60335-2-17:2013, Clause 27.5 BS EN 60335-2-24:2010, Clause 27.5 BS EN 60335-2-25:2012+A12:2015, Clause 27.5 BS EN 60335-2-26:2003+A1:2008, Clause 27.5 BS EN 60335-2-29:2004+A2:2010, Clause 27.5 BS EN 60335-2-32:2003+A2:2015, Clause 27.5 BS EN 60335-2-34:2013, Clause 27.5 BS EN 60335-2-36:2002+A11:2012, Clause 27.5 BS EN 60335-2-40:2003+A13:2012, Clause 27.5 BS EN 60335-2-43:2003+A2:2008, Clause 27.5 BS EN 60335-2-44:2002+A2:2012, Clause 27.5 BS EN 60335-2-47:2003+A11:2012, Clause 27.5	

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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
			BS EN 60335-2-54:2008+A1:2015, Clause 27.5 BS EN 60335-2-60:2003+A12:2010, Clause 27.5 BS EN 60335-2-65:2003+A11:2012, Clause 27.5	
	(battery chargers), (massage appliances), (motor-compressors), (commercial electric cooking ranges, ovens, hobs and hob elements), (electrical heat pumps, air-conditioners and dehumidifiers), (clothes dryers and towel rails), (ironers), (commercial electric boiling pans,( surface-cleaning appliances for household use), (whirlpool baths and whirlpool spas),	Provision for Earthing	BS EN 60335-2-68:2012, Clause 27 BS EN 60335-2-72:2012, Clause 27 BS EN 60335-2-75:2004+A2:2008, Clause 27 BS EN 60335-2-77:2010, Clause 27 BS EN 60335-2-84:+A1:2008, Clause 27 BS EN 60335-2-90:2006+A1:2010, Clause 27 BS EN 60335-2-95:2015+A1:2015, Clause 27 BS EN 60335-2-102:2006+A2:2016, Clause 27 BS EN 60335-2-108:2008, Clause 27	3Aac to 33Aac/ 10mΩ to 650mΩ

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	(commercial electric rinsing sinks), (commercial electric rinsing sinks),( spray extraction machines, for commercial use), ( floor treatment machines), ( dispensing appliances and vending machines),( lawn mowers),( fans), ( toilets), ( commercial ovens),( vertically moving garage doors), ( vaporizers), (gas, oil and solid-fuel burning appliances), (electrolysers)			
	Power converters for use in photovoltaic power systems, (inverters)	Rating of protective bonding – Test current, duration and acceptance criteria	IEC 62109-1:2010, Ed.1 Clause 7.3.6.3.3.1 IEC 62109-2:2011, Ed.1, Clause 7.3.6.3.3.1	3Aac to 33Aac/ 10mΩ to 650mΩ

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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
	Uninterruptible power systems (UPS)	Protective earthing and bonding	IEC 62040-1:2017,Ed.2.0, Clause 4.4 IEC 62477-1:2012,Ed.1, Clause 4.4.4.2	
	Household and similar electrical appliances	Provision for Earthing	IS 302-1:2008, Clause 27.5	
	Machines for general use	Resistance to earth	IS 1356-1:1972, Clause 11.3	
2.	Low-voltage switchgear and control gear assemblies, (Power switchgear and control gear assemblies),( Distribution boards intended to be operated by ordinary persons),( assemblies for construction sites),( power distribution in public networks	Dielectric properties- insulation resistance	IEC 61439-1:2011,Ed.2, Clause 11.9 IEC 61439-2:2011,Ed.2, Clause 11 IEC 61439-3:2012,Ed.1, Clause 11 IEC 61439-4:2012, ED.1, Clause 11 IEC 61439-5:2014,Ed.2, Clause 11	50V to 1kVdc/ 1MΩ to 50 GΩ
	Machinery, Electrical equipment of machines, (hoisting machines)	Voltage test	BS EN 60204-1:2006+A1:2009, Clause 18.4 BS EN 60204-32:2008, Clause 18.4	

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3.	Household and similar electrical appliances, (dishwashers), (floor treatment machines and wet scrubbing machines), (tumble dryers), (warming plates and similar appliances), (deep fat fryers, frying pans and similar appliances), (appliances for heating liquids), (refrigerating appliances, ice-cream appliances and ice makers), (clocks),( skin exposure to ultraviolet and infrared radiation), (sewing machines)	Leakage current and Electric strength at operating temperature	IEC 60335-1:2010+A1 2013+A2 2016,Ed.5.2, Clause 13.3 & 16.3 BS EN 60335-2-5:2015, Clause 13 & 16 BS EN 60335-2-10:2003+A1:2008, Clause 13 & 16 BS EN 60335-2-11:2010+A1:2015, Clause 13 & 16 BS EN 60335-2-12:2003+A1:2008, Clause 13 & 16 BS EN 60335-2-13:2010+A11:2012, Clause 13 & 16 BS EN 60335-2-15:2016, Clause 13 & 16 BS EN 60335-2-17:2013, Clause 13 & 16 IEC 60335-2-21:2012,Ed.6, Clause 13 & 16 BS EN 60335-2-24:2010, Clause 13 & 16 BS EN 60335-2-25:2012+A12:2015, Clause 13 & 16 BS EN 60335-2-26:2003+A1:2008, Clause 13 & 16 BS EN 60335-2-27:2013, Clause 13 & 16 BS EN 60335-2-28:2003+A1:2008,	50V to 5kVac/ 0.01 to 100mAac

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			Clause 13 & 16 BS EN 60335-2-29:2004+A2:2010, Clause 13 & 16 BS EN 60335-2-32:2003+A2:2015, Clause 13 & 16 BS EN 60335-2-34:2013, Clause 13 & 16 BS EN 60335-2-36:2002+A11:2012, Clause 13.3 & 16.3 BS EN 60335-2-40:2003+A13:2012, Clause 13 & 16 BS EN 60335-2-43:2003+A2:2008, Clause 13 & 16 BS EN 60335-2-44:2002+A2:2012, Clause 13 & 16 BS EN 60335-2-47:2003+A11:2012, Clause 13 & 16 BS EN 60335-2-54:2008+A1:2015, Clause 13 BS EN 60335-2-60:2003+A12:2010, Clause 13 & 16 BS EN 60335-2-62:2003A1:2008, Clause 13 & 16 BS EN 60335-2-65:2003+A11:2012,	



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			Clause 13 BS EN 60335-2-68:2012, Clause 13	
	(battery chargers), ( massage appliances), ( motor-compressors), ( commercial electric cooking ranges, ovens, hobs and hob elements), ( electrical heat pumps, air-conditioners and dehumidifiers), ( clothes dryers and towel rails), ( ironers), ( commercial electric boiling pans, ( surface-cleaning appliances for household use), ( whirlpool baths and whirlpool spas), ( commercial electric rinsing sinks), (commercial electric rinsing	Leakage current and Electric strength at operating temperature	BS EN 60335-2-72:2012, Clause 13 BS EN 60335-2-75:2004+A2:2008, Clause 13 & 16 BS EN 60335-2-77:2010, Clause 13 & 16 BS EN 60335-2-80:2003+A2:2009, Clause 13 & 16 BS EN 60335-2-84:+A1:2008, Clause 13 & 16 BS EN 60335-2-90:2006+A1:2010, Clause 13 & 16 BS EN 60335-2-95:2015+A1:2015, Clause 13 & 16 BS EN 60335-2-101:2002+A2:2014, Clause 13 & 16 BS EN 60335-2-102:2006+A2:2016, Clause 13 BS EN 60335-2-108:2008, Clause 13 & 16	50V to 5kVac/ 0.001 to 100mAac

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	sinks),( spray extraction machines, for commercial use), ( floor treatment machines), ( dispensing appliances and vending machines),( lawn mowers),( fans), ( toilets),( commercial ovens), (vertically moving garage doors), ( vaporizers), (gas, oil and solid-fuel burning appliances), ( electrolyzers)			
	Testing Electrical equipment for measurement, control, and laboratory, ( testing and measuring circuits), ( sterilizers and washer-disinfectors used to treat medical materials), Testing	The A.C. voltage test	BS EN 61010-1:2010, Clause 6.8.3.1 BSEN 61010-2-010:2014, Clause 6.8.3.1 BS EN 61010-2-030:2010, Clause 6.8.3.1 BS EN 61010-2-032:2012, Clause 6.8.3.1 BS EN 61010-2-033:2012, Clause 6.8.3.1 BS EN 61010-2-040:2015, Clause 6.8.3.1 BS EN 61010-2-061:2015, Clause 6.8.3.1	50V to 5kVac/ 0.001 to 100mAac

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	Electrical equipment for measurement, control, and laboratory, ( testing and measuring circuits), ( sterilizers and washer-disinfectors used to treat medical materials)		BS EN 61010-2-081:2015, Clause 6.8.3.1 BS EN 61010-2-091:2012, Clause 6. 8.3.1 IEC 61010-2-101:2015,Ed.2, Clause 6. 8.3.1 BS EN 61010-2-201:2013, Clause 6. 8.3.1 BS EN 61010-031:2015, Clause 6.6.5.1	
	Machines for general use	Voltage test	IS 1356-1:1972, Clause 11.2	
	Low voltage switch gear and control gear assemblies	Verification of dielectric properties	IS 8623-1:1993, Clause 8.2.2	
	Uninterruptible power systems (UPS)	AC or DC voltage test	IEC 62477-1:2012, Ed.1, Clause 5.2.3.4 IEC 62040-1:2017,Ed.2.0 , Clause 5	50V to 5kVac/ 0.001 to 100mAac, 50V to 6kVdc/ 0.001 to 20mAdc
		Alternative to impulse voltage test	IEC 62477-1:2012,Ed.1, Clause 5.2.3.3 IEC 62040-1:2017,Ed.2.0 , Clause 5	
	Power converters for use in photovoltaic power systems, (inverters)	Voltage test(dielectric strength test)	IEC 62109-1:2010, Ed.1, Clause 7.5.2 IEC 62109-2:2011, Ed.1, Clause 7	50V to 6kVdc/ 0.001 to 20mAdc, 50V to 6kVdc/ 0.001-20mAdc
	Household and similar electrical appliances	Electric strength	IS 302-1:2008, Clause 13 & 16	

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	Testing Electrical equipment for measurement, control, and laboratory, ( testing and measuring circuits), ( sterilizers and washer-disinfectors used to treat medical materials), Testing Electrical equipment for measurement, control, and laboratory, ( testing and measuring circuits), ( sterilizers and washer-disinfectors used to treat medical materials)	The 1 min dc voltage test	BS EN 61010-1:2010, Clause 6.8.3.2 BSEN 61010-2-010:2014, Clause 6.8.3. 2 BS EN 61010-2-030:2010, Clause 6.8.3. 2 BS EN 61010-2-032:2012, Clause 6.8.3. 2 BS EN 61010-2-033:2012, Clause 6.8.3.2 BS EN 61010-2-040:2015, Clause 6.8.3. 2 BS EN 61010-2-061:2015, Clause 6.8.3. 2 BS EN 61010-2-081:2015, Clause 6.8.3. 2 BS EN 61010-2-091:2012, Clause 6. 8.3.2 IEC 61010-2-101:2015, Ed.2, Clause 6. 8.3.2 BS EN 61010-2-201:2013, Clause 6. 8.3.2 BS EN 61010-031:2015, Clause 6.6.5.2	
	Low-voltage switchgear and control gear assemblies, (Power switchgear and control gear assemblies),	Power frequency test	IEC 61439-1:2011,Ed.2, Clause 10.9.1/10.9.2/10.9.3.3/10.9.3.4 & 11.9 IEC 61439-2:2011,Ed.2, Clause10 IEC 61439-3:2012,Ed.1,	50V to 5kVac, 50V to 6kVdc/ 0.001 to 100mAac, 0.001 to 20mAdc

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	(Distribution boards intended to be operated by ordinary persons),( assemblies for construction sites),( power distribution in public networks),( Busbar trunking systems (busways)		Clause10 IEC 61439-4:2012, Ed.1, Clause10 IEC 61439-5:2014,Ed.2, Clause10	
4.	Electrical equipment for measurement, control, and laboratory, ( testing and measuring circuits), ( sterilizers and washer-disinfectors used to treat medical materials), (laboratory atomic spectrometers with thermal atomization and ionization), ( cabinet x-ray systems),( in vitro diagnostic (IVD) medical	Levels in normal conditions	BS EN 61010-1:2010, Clause 6.3.1 BS EN 61010-2-010:2014, Clause 6.3.1 BS EN 61010-2-030:2010, Clause 6.3.1 BS EN 61010-2-032:2012, Clause 6.3.1 BS EN 61010-2-033:2013, Clause 6.3.1 BS EN 61010-2-040:2015, Clause 6.3.1 BS EN 61010-2-061:2015, Clause 6.3.1 BS EN 61010-2-081:2015, Clause 6.3.1 BS EN 61010-2-091:2012, Clause 6.3.1 IEC 61010-2-101:2015,Ed.2, Clause 6.3.1 BS EN 61010-2-201:2013,	0.001µA to 50 mAac 0.001 µA to 50 mAdc

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	equipment), (control equipment)		Clause 6.3.1	
	Uninterruptible power systems (UPS)	General provision for earth leakage	IEC 62040-1:2017,Ed.2.0 , Clause 5.2 IEC 62477-1:2012,Ed.1, Clause 5.2.3.6	0.001µA – 50 mAac 0.001 µA – 50 mAdc
	Uninterruptible power systems (UPS)	General provision for earth leakage	IEC 62040-1:2017,Ed.2.0 , Clause 5.2 IEC 62477-1:2012,Ed.1, Clause 5.2.3.6	0.001µA to 50 mAac 0.001 µA to 50 mAdc
	Household and similar electrical appliances, ( dishwashers), ( floor treatment machines and wet scrubbing machines), ( tumble dryers), ( warming plates and similar appliances),( deep fat fryers, frying pans and similar appliances), ( appliances for heating liquids), (refrigerating appliances, ice-cream appliances and ice makers), ( clocks), (skin exposure to ultraviolet and	Leakage current test	IEC 60335-1:2010+A1 2013+A2 2016,Ed.5.2, Clause 13.2/16.2 BS EN 60335-2-5:2015, Clause 13.2 & 16.2 BS EN 60335-2-10:2003+A1:2008, Clause 13.2 & 16 BS EN 60335-2-11:2010+A1:2015, Clause 13.2 & 16.2 BS EN 60335-2-12:2003+A1:2008, Clause 13.2 & 16.2 BS EN 60335-2-13:2010+A11:2012, Clause 13.2& 16.2 BS EN 60335-2-15:2016, Clause 13.2& 16.2 BS EN 60335-2-17:2013, Clause 13.2 & 16.2 IEC 60335-2-21:2012,Ed.6, Clause 13.2& 16.2 BS EN 60335-2-24:2010,	

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	infrared radiation), (sewing machines)		Clause 13.2 & 16.2 BS EN 60335-2-26:2003+A1:2008, Clause 13.2 & 16.2 BS EN 60335-2-27:2013, Clause 13.2 & 16.2 BS EN 60335-2-28:2003+A1:2008, Clause 13.2 & 16.2 BS EN 60335-2-29:2004+A2:2010, Clause 13.2 & 16.2 BS EN 60335-2-32:2003+A2:2015, Clause 13.2 & 16.2 BS EN 60335-2-36:2002+A11:2012, Clause 13.2 & 16.2 BS EN 60335-2-40:2003+A13:2012, Clause 13.2 & 16.2 BS EN 60335-2-43:2003+A2:2008, Clause 13.2 & 16.2 BS EN 60335-2-44:2002+A2:2012, Clause 13.2 & 16.2 BS EN 60335-2-47:2003+A11:2012, Clause 13.2 & 16.2 BS EN 60335-2-54:2008+A1:2015, Clause 13. & 16.2 BS EN 60335-2-60:2003+A12:2010,	

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			Clause 13.2 & 16.2 BS EN 60335-2-62:2003A1:2008, Clause 13.2 & 16.2 BS EN 60335-2-65:2003+A11:2012, Clause 13.2 & 16.2 BS EN 60335-2-68:2012, Clause 13.2 & 16.2 BS EN 60335-2-72:2012, Clause 13.2 & 16.2 BS EN 60335-2-75:2004+A2:2008, Clause 13.2 & 16.2 BS EN 60335-2-77:2010, Clause 13.2 & 16.2 BS EN 60335-2-80:2003+A2:2009, Clause 13.2 & 16.2 BS EN 60335-2-84:+A1:2008, Clause 13.2 & 16.2 BS EN 60335-2-90:2006+A1:2010, Clause 13.2 & 16.2 BS EN 60335-2-95:2015+A1:2015, Clause 13.2 & 16.2 BS EN 60335-2-101:2002+A2:2014, Clause 13.2 & 16.2 BS EN 60335-2-102:2006+A2:2016, Clause 13.2 & 16.2 BS EN 60335-2-108:2008,	



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			Clause 13.2 & 16.2	
	Power converters for use in photovoltaic power systems, (inverters)	Touch current measurement (Type test)	IEC 62109-1:2010, Ed.1, Clause 7.5.4 IEC 62109-2:2011, Ed.1, Clause 7.5.4	0.001µA to 50 mAac 0.001 µA to 50 mAdc
	Household and similar electrical appliances	Leakage current test	IS 302-1:2008, Clause 13.2 and 16.2	
5.	Electrical equipment for measurement, control, and laboratory,( testing and measuring circuits),( sterilizers and washer-disinfectors used to treat medical materials), (laboratory atomic spectrometers with thermal atomization and ionization),( cabinet x-ray systems),( in vitro diagnostic (IVD) medical equipment),(control equipment)	Mechanical strength Drop test	BS EN 61010-1:2010, Clause 8.3 BS EN 61010-2-010:2014, Clause 8.3 BS EN 61010-2-030:2010, Clause 8.3 BS EN 61010-2-032:2012, Clause 8.3 BS EN 61010-2-033:2013, Clause 8.3 BS EN 61010-2-040:2015, Clause 8.3 BS EN 61010-2-061:2015, Clause 8.3 BS EN 61010-2-081:2015, Clause 8.3 BS EN 61010-2-091:2012, Clause 8.3 IEC 61010-2-101:2015,Ed.2, Clause 8.3 BS EN 61010-2-201:2013, Clause 8.3	Hard Wood: 50 mm Thick. Density : 800 Kg/m3

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	Uninterruptible power systems (UPS)		IEC 62040-1:2017,Ed.2.0 , Clause 5.2.2.4.4 IEC 62477-1:2012, Ed.1,Clause 5.2.2.4.4	
	Power converters for use in photovoltaic power systems, (inverters)		IEC 62109-1:2010, Ed.1 Clause 13.7.4 IEC 62109-2:2011, Ed.1, Clause 13.7.4	
	assemblies for construction sites	Mechanical impact, Impact test, Mechanical strength	IEC 61439-4:2012, Ed.1,Clause 10.2.6.2	
6.	Electrical equipment for measurement, control, and laboratory,( testing and measuring circuits),( sterilizers and washer-disinfectors used to treat medical materials), (laboratory atomic spectrometers with thermal atomization and ionization),( cabinet x-ray systems),( in vitro diagnostic (IVD) medical equipment), (control equipment)		BS EN 61010-1:2010, Clause 8.2.2 BS EN 61010-2-030:2010, Clause 8.2.2 BS EN 61010-2-033:2013, Clause 8.2.2 BS EN 61010-2-040:2015, Clause 8.2.2 BS EN 61010-2-061:2015, Clause 8.2.2 BS EN 61010-2-081:2015, Clause 8.2.2 BS EN 61010-2-091:2012, Clause 8.2.2 IEC 61010-2-101:2015,Ed.2, Clause 8.2.2 BS EN 61010-2-201:2013, Clause 8.2.2	500 g ± 25 g

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	Uninterruptible power systems (UPS)		IEC 62040-1:2017,Ed.2.0 , Clause 5.2 IEC 62477-1:2012, Ed.1,Clause 5.2.2.4.3	
7.	Power converters for use in photovoltaic power systems, (inverters)	Hazardous noise levels	IEC 62109-1:2010, Ed.1 Clause 10.2.1  IEC 62109-2:2011, Ed.1, Clause 10.2.1	
8.	Uninterruptible power systems (UPS)	Stability	IEC 62040-1:2017,Ed.2.0 , Clause 4 IEC 62477-1:2012, Ed.1,Clause 4.12.1	0° to 20 °
9.	Household and similar electrical appliances,( dishwashers),( floor treatment machines and wet scrubbing machines),( tumble dryers), ( warming plates and similar appliances),( deep fat fryers, frying pans and similar appliances),( appliances for heating liquids ),( refrigerating appliances, ice-cream appliances	Stability and mechanical hazards	IEC 60335-1:2010+A1 2013+A2 2016,Ed.5.2, Clause 20 BS EN 60335-2-5:2015, Clause 20 BS EN 60335-2-10:2003+A1:2008, Clause 20 BS EN 60335-2-11:2010+A1:2015, Clause 20 BS EN 60335-2-12:2003+A1:2008, Clause 20 BS EN 60335-2-13:2010+A11:2012, Clause 20 BS EN 60335-2-15:2016, Clause 20 BS EN 60335-2-17:2013,	0° to 20 °

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	and ice makers), ( clocks),( skin exposure to ultraviolet and infrared radiation), ( sewing machines) (battery chargers), ( massage appliances), ( motor-compressors), ( commercial electric cooking ranges, ovens, hobs and hob elements), ( electrical heat pumps, air-conditioners and dehumidifiers), ( clothes dryers and towel rails),		Clause 20 IEC 60335-2-21:2012,Ed.6, Clause 20 BS EN 60335-2-24:2010, Clause 20 BS EN 60335-2-25:2012+A12:2015, Clause 20 BS EN 60335-2-26:2003+A1:2008, Clause 20 BS EN 60335-2-27:2013, Clause 20 BS EN 60335-2-28:2003+A1:2008, Clause 20 BS EN 60335-2-29:2004+A2:2010, Clause 20 BS EN 60335-2-32:2003+A2:2015, Clause 20 BS EN 60335-2-34:2013, Clause 20 BS EN 60335-2-40:2003+A13:2012, Clause 20 BS EN 60335-2-43:2003+A2:2008, Clause 20 BS EN 60335-2-47:2003+A11:2012, Clause 20 BS EN 60335-2-54:2008+A1:2015,	

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			Clause 20 BS EN 60335-2-60:2003+A12:2010, Clause 20 BS EN 60335-2-62:2003A1:2008, Clause 20	
10.	(Ironers), (commercial electric boiling pans,( surface-cleaning appliances for household use), (whirlpool baths and whirlpool spas), (commercial electric rinsing sinks), (commercial electric rinsing sinks),(spray extraction machines, for commercial use), (floor treatment machines), (dispensing appliances and vending machines), (lawn mowers), (fans),( toilets), (commercial ovens),(vertically	Stability& mechanical hazards	BS EN 60335-2-65:2003+A11:2012, Clause 20 BS EN 60335-2-68:2012, Clause 20 BS EN 60335-2-72:2012, Clause 20 BS EN 60335-2-75:2004+A2:2008, Clause 20 BS EN 60335-2-77:2010, Clause 20 60335-2-80:2003+A2:2009, Clause 20 BS EN 60335-2-84:+A1:2008, Clause 20 BS EN 60335-2-90:2006+A1:2010, Clause 20 BS EN 60335-2-101:2002+A2:2014, Clause 20 BS EN 60335-2-102:2006+A2:2016, Clause 20 BS EN 60335-2-108:2008, Clause 20	0° to 20 °

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	moving garage doors), (vaporizers), (gas, oil and solid-fuel burning appliances), (electrolysers)			
11.	Household and similar electrical appliances		IS 302-1:2008, Clause 20	
	Household and similar electrical appliances	Resistance to heat & fire	IS 302-1:2008, Clause 30.1	(Ambient to 130)°C, 20N±0.2N, (0.1 to 150)mm
12.	Electrical equipment for measurement, control, and laboratory,( testing and measuring circuits),( sterilizers and washer-disinfectors used to treat medical materials),(laboratory atomic spectrometers with thermal atomization and ionization),( cabinet x-ray systems),( in vitro diagnostic (IVD) medical equipment), (control equipment)	Insulating material	BS EN 61010-1:2010, Clause 10.5.3 BS EN 61010-2-010:2014, Clause 10.5.3 BS EN 61010-2-030:2010, Clause 10.5.3 BS EN 61010-2-032:2012, Clause 10.5.3 BS EN 61010-2-033:2013, Clause 10.5.3 BS EN 61010-2-040:2015, Clause 10.5.3 BS EN 61010-2-061:2015, Clause 10.5.3 BS EN 61010-2-081:2015, Clause 10.5.3 BS EN 61010-2-091:2012, Clause 10.5.3. IEC 61010-2-101:2015,Ed.2, Clause 10.5.3 BS EN 61010-2-201:2013, Clause 10.5.3	(Ambient to 130)°C, 20N±0.2N, (0.1 to 150)mm

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	Household and similar electrical appliances, (dishwashers), (floor treatment machines and wet scrubbing machines),(cooking ranges, hobs, ovens), ( tumble dryers),( warming plates and similar appliances),( deep fat fryers, frying pans and similar appliances), (appliances for heating liquids)		IEC 60335-1:2010+A1 2013+A2 2016,Ed.5.2, Clause 30.1 BS EN 60335-2-5:2015, Clause 30.1 BS EN 60335-2-6:2014, Clause 30.1 BS EN 60335-2-10:2003+A1:2008, Clause 30.1 BS EN 60335-2-11-2010+A1:2015, Clause 30.1 BS EN 60335-2-12:2003+A1:2008 Clause 30.1 BS EN 60335-2-13:2010+A11:2012, Clause 30.1 BS EN 60335-2-15:2016, Clause 30.1 BS EN 60335-2-17:2013, Clause 30.1 IEC 60335-2-21:2012,Ed.6, Clause 30.1 BS EN 60335-2-24:2010, Clause 30.1 BS EN 60335-2-25:2012+A12:2015, Clause 30.1 BS EN 60335-2-26:2003+A1:2008, Clause 30.1 BS EN 60335-2-27:2013, Clause 30.1	(Ambient to 130)°C, 20N±0.2N, (0.1 to 150)mm

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			BS EN 60335-2-28:2003+A1:2008, Clause 30.1 BS EN 60335-2-29:2004+A2:2010, Clause 30.1 BS EN 60335-2-32:2003+A2:2015, Clause 30.1 BS EN 60335-2-34:2013, Clause 30.1 BS EN 60335-2-36:2002+A11:2012, Clause 30.1 BS EN 60335-2-40:2003+A13:2012, Clause 30.1 BS EN 60335-2-43:2003+A2:2008, Clause 30.1 BS EN 60335-2-44:2002+A2:2012, Clause 30.1 BS EN 60335-2-47:2003+A11:2012, Clause 30.1	
	( Refrigerating appliances, ice-cream appliances and ice makers), ( clocks),(skin exposure to ultraviolet and infrared radiation), ( sewing	Resistance to heat	BS EN 60335-2-54 2008+A1:2015, Clause 30.1 BS EN 60335-2-60 2003+A12:2010, Clause 30.1 BS EN 60335-2-62 2003 A1:2008, Clause 30.1	(Ambient to 130)°C, 20N±0.2N, (0.1 to 150)mm



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	<b>machines) (battery chargers), ( massage appliances), ( motor-compressors), ( commercial electric cooking ranges, ovens, hobs and hob elements), ( electrical heat pumps, air-conditioners and dehumidifiers), ( clothes dryers and towel rails),(ironers), ( commercial electric boiling pans,(surface-cleaning appliances for household use)( whirlpool baths and whirlpool spas), (commercial electric rinsing sinks), ( commercial electric rinsing sinks),(spray extraction machines, for</b>		BS EN 60335-2-65 2003 A11:2008, Clause 30.1 BS EN 60335-2-68 2012, Clause 30.1 BS EN 60335-2-72 2012, Clause 30.1 BS EN 60335-2-77:2010, Clause 30.1 BS EN 60335-2-80:2003+A2:2009, Clause 30.1 BS EN 60335-2-84:+A1:2008, Clause 30.1 BS EN 60335-2-90:2006+A1:2010, Clause 30.1 BS EN 60335-2-95:2015+A1:2015, Clause 30.1 BS EN 60335-2-101:2002+A2:2014, Clause 30.1 BS EN 60335-2-102:2006+A2:2016, Clause 30.1 BS EN 60335-2-108:2008, Clause 30.1	

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	commercial use), (floor treatment machines), ( dispensing appliances and vending machines),( lawn mowers),( fans), (toilets), (commercial ovens),			
	Household and similar electrical appliances	Resistance to heat	IS 302-1:2008, Clause 30.1	(Ambient to 130)°C, 20N±0.2N, (0.1 to 150)mm
11.	Low-voltage switchgear and control gear assemblies, (Power switchgear and control gear assemblies), (Distribution boards intended to be operated by ordinary persons), ( assemblies for construction sites), ( Busbar trunking systems (busways)	Resistance of insulating materials to abnormal heat and fire due to internal electrical effects	IEC 61439-1:2011,Ed. 2, Clause 8.1.3.2.3 IEC 61439-2:2011,Ed.2, Clause 8.1.3.2.3 IEC 61439-3:2012,Ed.1, Clause 8.1.3.2.3 IEC 60947-1:2014,Ed.5.2 Clause 7.1.2.2 & 8.2.1.1.1 IEC 61439-4:2012, Ed.1, Clause 8.1.3.2.3 BS EN 61439-6:2012, Clause 8.1.3.2.3	(450-960)°C 10N

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	Electrical equipment for measurement, control, and laboratory,( testing and measuring circuits),( sterilizers and washer-disinfectors used to treat medical materials),(laboratory atomic spectrometers with thermal atomization and ionization),(cabinet x-ray systems),( in vitro diagnostic (IVD) medical equipment),( control equipment)	Spread of Fire	BS EN 61010-1:2010, Clause 4.4.4.3 BS EN 61010-2-010:2014, Clause 4.4.4.3 BS EN 61010-2-030:2010, Clause 4.4.4.3 BS EN 61010-2-032:2012, Clause 4.4.4.3 BS EN 61010-2-033:2012, Clause 4.4.4.3 BS EN 61010-2-040:2015, Clause 4.4.4.3 BS EN 61010-2-061:2015, Clause 4.4.4.3 BS EN 61010-2-081:2015, Clause 4.4.4.3 BS EN 61010-2-091:2012, Clause 4.4.4.3 IEC 61010-2-101:2015,Ed.2, Clause 4.4.4.3 BS EN 61010-2-201:2013, Clause 4.4.4.3	
	Household and similar electrical appliances,( dishwashers),( floor treatment machines and wet scrubbing machines),( tumble dryers),( warming plates and similar	Resistant to heat and fire	IEC 60335-1:2010+A1 2013+A2 2016,Ed.5.2, Clause 30.2 BS EN 60335-2-5:2015, Clause 30.2 BS EN 60335-2-10:2003+A1:2008, Clause 30.2 BS EN 60335-2-11-2010+A1-2015, Clause 30.2	

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	appliances),( deep fat fryers, frying pans and similar appliances),( appliances for heating liquids), ( refrigerating appliances, ice-cream appliances and ice makers),( clocks),( skin exposure to ultraviolet and infrared radiation),( sewing machines),(battery chargers),( massage appliances),( motor-compressors),( commercial electric cooking ranges, ovens, hobs and hob elements), ( electrical heat pumps, air-conditioners and dehumidifiers),( clothes dryers and towel rails), (ironers),( commercial electric boiling		BS EN 60335-2-12:2003+A1:2008, Clause 30.2 BS EN 60335-2-13:2010+A11:2012, Clause 30 BS EN 60335-2-15:2016, Clause 30.2 BS EN 60335-2-17:2013, Clause 30.2 IEC 60335-2-21:2012,Ed.6, Clause 30.2 BS EN 60335-2-24:2010, Clause 30.2 BS EN 60335-2-25:2012+A1:2015, Clause 30.2 BS EN 60335-2-26:2003+A1:2008, Clause 30.2 BS EN 60335-2-27:2013, Clause 30.2 BS EN 60335-2-28:2003+A1:2008, Clause 30.2 BS EN 60335-2-29:2004+A2:2010, Clause 30.2 BS EN 60335-2-32:2003+A2:2015, Clause 30.2 BS EN 60335-2-34:2013, Clause 30.2 BS EN 60335-2-36:2002+A11:2012,	

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	pans, (surface-cleaning appliances for household use)		Clause 30.2 BS EN 60335-2-40:2003+A13:2012, Clause 30.2	
	( Whirlpool baths and whirlpool spas),( commercial electric rinsing sinks),( commercial electric rinsing sinks),( spray extraction machines, for commercial use),( floor treatment machines),( dispensing appliances and vending machines),( lawn mowers),( fans),( toilets),( commercial ovens),( vertically moving garage doors),( vaporizers), (gas, oil and solid-fuel burning appliances),( electrolyzers)		BS EN 60335-2-43:2003+A2:2008, Clause 30.2 BS EN 60335-2-44:2002+A2:2012, Clause 30.2 BS EN 60335-2-47:2003+A11:2012, Clause 30.2 BS EN 60335-2-54:2008+A1:2015, Clause 30.2 BS EN 60335-2-60:2003+A12:2010, Clause 30.2 BS EN 60335-2-62:2003A1:2008, Clause 30.2 BS EN 60335-2-65:2003+A11:2012, Clause 30.2 BS EN 60335-2-68:2012, Clause 30.2 BS EN 60335-2-72:2012, Clause 30.2 BS EN 60335-2-75:2004+A2:2008, Clause 30.2 BS EN 60335-2-77:2010, Clause 30.2 BS EN 60335-2-	

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			80:2003+A2:2009, Clause 30.2 BS EN 60335-2-84:+A1:2008, Clause 30.2 BS EN 60335-2-90:2006+A1:2010, Clause 30.2 BS EN 60335-2-95:2015+A1:2015, Clause 30.2 BS EN 60335-2-101:2002+A2:2014, Clause 30.2 BS EN 60335-2-102:2006+A2:2016, Clause 30.2 BS EN 60335-2-108:2008, Clause 30.2	
	<b>Uninterruptible power systems (UPS)</b>	Resistance to fire	IEC 62040-1:2008+A1:2017, Ed.2.0 , Clause 5 IEC 62477-1:2012, Ed.1, Clause 5.2.5.3	(450 to 960)°C 10N
	<b>Power converters for use in photovoltaic power systems, (inverters)</b>	Protection against the spread of fire	IEC 62109-1:2010, Ed.1 Clause 4.4.3.2  IEC 62109-2:2011, Ed.1 Clause 4.4.3.2	
	<b>Household and similar electrical appliances</b>	Resistant to heat and fire	IS 302-1:2008, Clause 30.2	

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12.	Uninterruptible power systems (UPS)	Steady force Test, 30N	IEC 62040-1:2008+A1:2017,Ed.2.0 , Clause 5 IEC 62477-1:2012, Ed.1, Clause 5.2.2.4.2.2	1N to 50N
13.	Low-voltage switchgear and control gear assemblies, (Power switchgear and control gear assemblies), ( Distribution boards intended to be operated by ordinary persons), ( assemblies for construction sites), (power distribution in public networks), ( Busbar trunking systems (busways)	Marking	IEC 61439-1:2011,Ed. 2,Clause 10.2.7 IEC 61439-2:2011,Ed.2, Clause 10.2.7 IEC 61439-3:2012,Ed.1, Clause 10.2.7 IEC 61439-4:2012, ED.1, Clause 10.2.7 IEC 61439-5:2014,Ed.2, Clause 10.2.7 BS EN 61439-6:2012, Clause 10.2.7	Qualitative
	Electrical equipment for measurement, control, and laboratory,( testing and measuring circuits), ( sterilizers and washer-	Marking and documentation	BS EN 61010-1:2010, Clause 5.3 BS EN 61010-2-010:2014, Clause 5 BS EN 61010-2-030:2010, Clause 5 BS EN 61010-2-032:2012, Clause 5 BS EN 61010-2-033:2013, Clause 5	Qualitative

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	disinfectors used to treat medical materials),		BS EN 61010-2-040:2015, Clause 5 BS EN 61010-2-061:2015, Clause 5 BS EN 61010-2-081:2015, Clause 5 BS EN 61010-2-091:2012, Clause 5 IEC 61010-2-101:2015,Ed.2, Clause 5 BS EN 61010-2-201:2013, Clause 5	
	(laboratory atomic spectrometers with thermal atomization and ionization),( cabinet x-ray systems),( in vitro diagnostic (IVD) medical equipment), (control equipment)	Durability of markings		Qualitative
	Uninterruptible power systems (UPS)	Information and marking requirements	IEC 62040-1:2017,Ed.2.0 , Clause 6 IEC 62477-1:2012,Ed.1, Clause 6	
	Machinery, Electrical equipment of machines, (hoisting machines)	Marking, warning signs and reference designations Technical documentations	BS EN 60204-1:2006+A1:2009, Clause 16 & 17 BS EN 60204-32:2008, Clause 16 & 17	



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	Household and similar electrical appliances, (dishwashers), (floor treatment machines and wet scrubbing machines), (tumble dryers), (warming plates and similar appliances),(deep fat fryers, frying pans and similar appliances), (appliances for heating liquids	Marking and instructions	IEC 60335-1:2010+A1 2013+A2 2016,Ed.5.2, Clause 7 BS EN 60335-2-5:2015, Clause 7 BS EN 60335-2-10:2003+A1:2008, Clause 7 BS EN 60335-2-11:2010+A1:2015, Clause 7 BS EN 60335-2-12:2003+A1:2008, Clause 7 BS EN 60335-2-13:2010+A11:2012, Clause 7 BS EN 60335-2-15:2016, Clause 7 BS EN 60335-2-17:2013, Clause 7 IEC 60335-2-21:2012,Ed.6, Clause 7 BS EN 60335-2-24:2010, Clause 7 BS EN 60335-2-25:2012+A12:2015, Clause 7 BS EN 60335-2-26:2003+A1:2008 ,Clause 7 BS EN 60335-2-27:2013,Clause 7 BS EN 60335-2-28:2003+A1:2008,	

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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 7 BS EN 60335-2-29:2004+A2:2010, Clause 7 BS EN 60335-2-32:2003+A2:2015, Clause 7 BS EN 60335-2-34:2013, Clause 7	
	(refrigerating appliances, ice-cream appliances and ice makers), (clocks), (skin exposure to ultraviolet and infrared radiation), (sewing machines), (battery chargers), (massage appliances), (motor-compressors), (commercial electric cooking ranges, ovens, hobs and hob elements), (electrical heat pumps, air-conditioners and dehumidifiers), (clothes dryers and towel rails),	Marking and instructions	BS EN 60335-2-36:2002+A11:2012, Clause 7 BS EN 60335-2-40:2003+A13:2012, Clause 7 BS EN 60335-2-43:2003+A2:2008, Clause 7 BS EN 60335-2-44:2002+A2:2012, Clause 7 BS EN 60335-2-47:2003+A11:2012, Clause 7 BS EN 60335-2-54:2008+A1:2015, Clause 7 BS EN 60335-2-60:2003+A12:2010, Clause 7 BS EN 60335-2-62:2003A1:2008. Clause 7 BS EN 60335-2-65:2003+A11:2012,	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
	(ironers), ( commercial electric boiling pans,( surface-cleaning appliances for household use),( whirlpool baths and whirlpool spas), ( commercial electric rinsing sinks), ( commercial electric rinsing sinks),( spray extraction machines, for commercial use), ( floor treatment machines), ( dispensing appliances and vending machines),( lawn mowers),( fans), ( toilets), ( commercial ovens),( vertically moving garage doors), ( vaporizers), (gas, oil and solid-fuel burning appliances), (electrolysers)		Clause 7 BS EN 60335-2-68:2012,Clause 7 BS EN 60335-2-72:2012,Clause 7 BS EN 60335-2-75:2004+A2:2008, Clause 7 BS EN 60335-2-77:2010,Clause 7 BS EN 60335-2-80:2003+A2:2009, Clause 7 BS EN 60335-2-84:+A1:2008, Clause 7 BS EN 60335-2-90:2006+A1:2010, Clause 7 BS EN 60335-2-95:2015+A1:2015, Clause 7 BS EN 60335-2-101:2002+A2:2014, Clause 7 BS EN 60335-2-102:2006+A2:2016, Clause 7	

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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
	Power converters for use in photovoltaic power systems, (inverters)	Marking	IEC 62109-1:2010, Ed.1 Clause 5 IEC 62109-2:2011, Ed.1 Clause 5	Qualitative
14.	Machinery, Electrical equipment of machines, (hoisting machines)	Protection against electric shock	BS EN 60204-1:2006+A1:2009, Clause 6 BS EN 60204-32:2008, Clause 6	Sphere 50mm Rigid & Jointed Finger Probe :ø 12 mm Cylindrical pin 4mm Conical pin 3mm Rod 2.5mm Wire 1mm Force : 1N to 50 N/ 0V to 50 Vac
	Low-voltage switchgear and control gear assemblies, (Power switchgear and control gear assemblies),( Distribution boards intended to be operated by ordinary persons),( assemblies for construction sites),(busways))	Protection against contact with live parts, ingress of solid foreign bodies	IEC 61439-1:2011, Ed. 2, Clause 8.2.2 IEC 61439-2:2011, Ed.2, Clause 8.2.2 IEC 61439-3:2012, Ed.1, Clause 8.2.2 BS EN 61439-6:2012, Clause 8.2.2  IS 8623-1:1993, Clause 8.2.7	
	Electrical equipment for measurement, control, and laboratory,( testing and measuring circuits),(	Determination of accessible parts	BS EN 61010-1:2010, Clause 6.2 BS EN 61010-2-010:2014, Clause 6.2 BS EN 61010-2-030:2010, Clause 6 BS EN 61010-2-032:2012, Clause 6	

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	sterilizers and washer-disinfectors used to treat medical materials),		BS EN 61010-2-033:2013, Clause 6 BS EN 61010-2-040:2015, Clause 6 BS EN 61010-2-061:2015, Clause 6 BS EN 61010-2-081:2015, Clause 6	
	(laboratory atomic spectrometers with thermal atomization and ionization),( cabinet x-ray systems),( in vitro diagnostic (IVD) medical equipment),( control equipment)	Determination of accessible parts	BS EN 61010-2-091:2012, Clause 6.2 IEC 61010-2-101:2015,Ed.2, Clause 6.2 BS EN 61010-2-201:2013, Clause 6.2	Sphere 50mm Rigid & Jointed Finger Probe :ø 12 mm Cylindrical pin 4mm Conical pin 3mm Rod 2.5mm Wire 1mm Force : 1N to 50 N/ 0V to 50 Vac
	Uninterruptible power systems (UPS)	Enclosure	IEC 62040-1:2017,Ed.2.0, Clause 5 IEC 62477-1:2012, Ed.1, Clause 5.2.2.3	
	Household and similar electrical appliances,( dishwashers),( floor treatment machines and wet scrubbing machines),( tumble dryers),( warming plates	Protection against access to live parts	IEC 60335-1:2010+A1 2013+A2 2016,Ed.5.2, Clause 8 BS EN 60335-2-5:2015, Clause 8 BS EN 60335-2-10:2003+A1:2008, Clause 8 BS EN 60335-2-11:2010+A1:2015,	

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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
	and similar appliances),( deep fat fryers, frying pans and similar appliances),( appliances for heating liquids),( refrigerating appliances, ice-cream appliances and ice makers),( clocks),( skin exposure to ultraviolet and infrared radiation),( sewing machines)		Clause 8 BS EN 60335-2-12:2003+A1:2008, Clause 8 BS EN 60335-2-13:2010+A11:2012, Clause 8 BS EN 60335-2-15:2016, Clause 8 BS EN 60335-2-17:2013, Clause 8 IEC 60335-2-21:2012,Ed.6, Clause 8 BS EN 60335-2-24:2010, Clause 8 BS EN 60335-2-26:2003+A1:2008, Clause 8 BS EN 60335-2-27:2013, Clause 8 BS EN 60335-2-28:2003+A1:2008, Clause 8 BS EN 60335-2-29:2004+A2:2010, Clause 8 BS EN 60335-2-32:2003+A2:2015, Clause 8 BS EN 60335-2-34:2013, Clause 8 BS EN 60335-2-36:2002+A11:2012, Clause 8 BS EN 60335-2-	

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			40:2003+A13:2012, Clause 8 BS EN 60335-2-43:2003+A2:2008, Clause 8 BS EN 60335-2-44:2002+A2:2012, Clause 8 BS EN 60335-2-47:2003+A11:2012, Clause 8 BS EN 60335-2-54:2008+A1:2015, Clause 8 BS EN 60335-2-60:2003+A12:2010, Clause 8 BS EN 60335-2-62:2003A1:2008, Clause 8 BS EN 60335-2-65:2003+A11:2012, Clause 8 BS EN 60335-2-68:2012, Clause 8	
	(Battery chargers), (massage appliances), (motor-compressors), (commercial electric cooking ranges, ovens, hobs and hob elements),	Protection against access to live parts	BS EN 60335-2-72:2012, Clause 8, Clause 8 BS EN 60335-2-75:2004+A2:2008, Clause 8 BS EN 60335-2-77:2010, Clause 8 BS EN 60335-2-80:2003+A2:2009, Clause 8	Sphere 50mm Rigid & Jointed Finger Probe :ø 12 mm Cylindrical pin 4mm Conical pin 3mm Rod 2.5mm Wire 1mm Force : 1N – 50 N/ 0V - 50 Vac

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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
	( electrical heat pumps, air-conditioners and dehumidifiers), ( clothes dryers and towel rails), (ironers), ( commercial electric boiling pans,( surface-cleaning appliances for household use), ( whirlpool baths and whirlpool spas), ( commercial electric rinsing sinks), ( commercial electric rinsing sinks), (spray extraction machines, for commercial use), ( floor treatment machines), ( dispensing appliances and vending machines),( lawn mowers),( fans), ( toilets), ( commercial ovens),(vertically		BS EN 60335-2-90:2006+A1:2010, Clause 8 BS EN 60335-2-95:2015+A1:2015, Clause 8 BS EN 60335-2-101:2002+A2:2014, Clause 8 BS EN 60335-2-108:2008, Clause 8	



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	moving garage doors), ( vaporizers), (gas, oil and solid-fuel burning appliances), ( electrolysers)			
	Power converters for use in photovoltaic power systems, (inverters)	Ingress protection	IEC 62109-1:2010, Ed.1 Clause 6.3 IEC 62109-2:2011, Ed.1 Clause 6	Sphere 50mm Rigid & Jointed Finger Probe :ø 12 mm Cylindrical pin 4mm Conical pin 3mm
	Power converters for use in photovoltaic power systems, (inverters)	Access probe test	IEC 62109-1:2010, Ed.1 Clause 7.3.4.2.3  IEC 62109-2:2011, Ed.1 Clause 7	Rod 2.5mm Wire 1mm Force : 1N to 50 N/ 0V - 50 Vac
15.	Power converters for use in photovoltaic power systems, (inverters)	Input ratings	IEC 62109-1:2010, Ed.1 Clause 4.7.1 IEC 62109-2:2011, Ed.1 Clause 4	0 to 270 VAC 0 to 10 Aac
16.	Low-voltage switchgear and control gear assemblies, (Power switchgear and control gear assemblies),( Distribution boards intended to be operated by ordinary persons),( assemblies for	Temperature rise limits	IEC 61439-1:2011,Ed. 2,Clause 9.2 IEC 61439-2:2011,Ed.2, Clause 9.2 IEC 61439-3:2012,Ed.1, Clause 9.2 IEC 61439-4:2012, ED.1, Clause 9.2 IEC 61439-5:2014,Ed.2, Clause 9.2 BS EN 61439-6:2012, Clause 9.2	Temperature Data Logger 30 °C to 100 °C  IR Thermometer 1°C to 450 °C

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	construction sites),( power distribution in public networks), ( Busbar trunking systems busways)			
	Electrical equipment for measurement, control, and laboratory,(testing and measuring circuits), (sterilizers and washer-disinfectors used to treat medical materials),(laboratory atomic spectrometers with thermal atomization and ionization),( cabinet x-ray systems),( in vitro diagnostic (IVD) medical equipment),( control equipment)	Surface temperature limits for protection against burn, Temperature of windings, Other temperature measurements, conduct of temperature tests	BS EN 61010-1:2010, Clause 10.1,10.2,10.3,10.4 BS EN 61010-031:2015, Clause 10.1,10.2,10.3,10.4 BS EN 61010-2-010:2014, Clause 10.1,10.2,10.3,10.4 BS EN 61010-2-030:2010, Clause 10.1,10.2,10.3,10.4 BS EN 61010-2-032:2012, Clause 10.1,10.2,10.3,10.4 BS EN 61010-2-033:2013, Clause 10.1,10.2,10.3,10.4 BS EN 61010-2-040:2015, Clause 10.1,10.2,10.3,10.4 BS EN 61010-2-061:2015, Clause 10.1,10.2,10.3,10.4 BS EN 61010-2-081:2015, Clause 10.1,10.2,10.3,10.4 BS EN 61010-2-091:2012, Clause 10.1,10.2,10.3,10.4 IEC 61010-2-101:2015,Ed.2, Clause 10.1,10.2,10.3,10.4 BS EN 61010-2-201:2013, Clause 10.1,10.2,10.3,10.4	Temperature Data Logger 30 °C to 100 °C  IR Thermometer 1°C to 450 °C
	Uninterruptible power systems (UPS)-	Temperature rise	IEC 62040-1:2017,Ed.2.0, Clause 5.2.3.10	

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			IEC 62477-1:2012, Ed.1, Clause 4.6.4,5.2.3.10	
	<b>Power converters for use in photovoltaic power systems, (inverters)</b>	Maximum temperature-general	IEC 62109-1:2010, Ed.1 Clause 4.3.2.1 IEC 62109-2:2011, Ed.1 Clause 4	
	<b>Low voltage switchgear and control gear assemblies</b>	Verification of temperature rise limits	IS 8623:1993, Clause 7.3, 8.2.1, 8.2.1.5	
	<b>Household and similar electrical appliances</b>	Heating, overload protection of transformer and circuits, construction	IS 302-1:2008, Clause 11.3, 11.8, 17, 22.13	
	<b>Household and similar electrical appliances,( dishwashers),( floor treatment machines and wet scrubbing machines),( tumble dryers),( warming plates and similar appliances),( deep fat fryers, frying pans and similar appliances),( appliances for heating liquids ),( refrigerating appliances, ice-cream appliances and ice makers),</b>	Heating	IEC 60335-1:2010+A1 2013+A2 2016,Ed.5.2, Clause 11 BS EN 60335-2-5:2015, Clause 11 BS EN 60335-2-10:2003+A1:2008, Clause 11 BS EN 60335-2-11:2010+A1:2015, Clause 11 BS EN 60335-2-12:2003+A1:2008, Clause 11 BS EN 60335-2-13:2010+A1:2012, Clause 11 BS EN 60335-2-15:2016, Clause 11 BS EN 60335-2-17:2013,	Temperature Data Logger 30 °C to 100 °C IR Thermometer 1°C to 450 °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
	( clocks),( skin exposure to ultraviolet and infrared radiation), ( sewing machines), (battery chargers), ( massage appliances), ( motor-compressors), ( commercial electric cooking ranges, ovens, hobs and hob elements),( electrical heat pumps, air-conditioners and dehumidifiers), (clothes dryers and towel rails),		Clause 11 IEC 60335-2-21:2012,Ed.6, Clause 11 BS EN 60335-2-25:2012+A12:2015, Clause 11 BS EN 60335-2-26:2003+A1:2008, Clause 11 BS EN 60335-2-28:2003+A1:2008, Clause 11 BS EN 60335-2-29:2004+A2:2010, Clause 11 BS EN 60335-2-32:2003+A2:2015, Clause 11 BS EN 60335-2-36:2002+A11:2012, Clause 11 BS EN 60335-2-40:2003+A13:2012, Clause 11	
	(ironers), ( commercial electric boiling pans,( surface-cleaning appliances for household use), ( whirlpool baths and whirlpool spas), (commercial electric rinsing		BS EN 60335-2-43:2003+A2:2008, Clause 11 BS EN 60335-2-44:2002+A2:2012, Clause 11 BS EN 60335-2-47:2003+A11:2012, Clause 11	

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	sinks),( commercial electric rinsing sinks),( spray extraction machines, for commercial use), ( floor treatment machines), ( dispensing appliances and vending machines),( lawn mowers),( fans), ( toilets), ( commercial ovens),( vertically moving garage doors), ( vaporizers), (gas, oil and solid-fuel burning appliances), ( electrolyzers)		BS EN 60335-2-54:2008+A1:2015, Clause 11 BS EN 60335-2-60:2003+A12:2010, Clause 11 BS EN 60335-2-62:2003A1:2008, Clause 11 BS EN 60335-2-65:2003+A11:2012, Clause 11 BS EN 60335-2-68:2012, Clause 11 BS EN 60335-2-72:2012, Clause 11 BS EN 60335-2-75:2004+A2:2008, Clause 11 BS EN 60335-2-80:2003+A2:2009, Clause 11 BS EN 60335-2-84:+A1:2008, Clause 11 BS EN 60335-2-90:2006+A1:2010, Clause 11 BS EN 60335-2-95:2015+A1:2015, Clause 11 BS EN 60335-2-101:2002+A2:2014, Clause 11 BS EN 60335-2-102:2006+A2:2016,	

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			Clause 11 BS EN 60335-2-108:2008, Clause 11	
17.	Electrical equipment for measurement, control, and laboratory,( testing and measuring circuits),( sterilizers and washer-disinfectors used to treat medical materials),	Resistance to Heat Test Non-metallic enclosures	BS EN 61010-1:2010, Clause 10.5.2 BS EN 61010-2-010:2014, Clause 10.5.2 BS EN 61010-2-030:2010, Clause 10.5.2 BS EN 61010-2-032:2012, Clause 10.5.2 BS EN 61010-2-033:2013, Clause 10.5.2 BS EN 61010-2-040:2015, Clause 10.5.2 BS EN 61010-2-061:2015, Clause 10.5.2	Temperature : (-10 to 130) °C,
	(laboratory atomic spectrometers with thermal atomization and ionization), ( cabinet x-ray systems),( in vitro diagnostic (IVD) medical equipment),( control equipment)		BS EN 61010-2-081:2015, Clause 10.5.2 BS EN 61010-2-091:2012, Clause 10.5.2 IEC 61010-2-101:2015,Ed.2, Clause 10.5.2 BS EN 61010-2-201:2013, Clause 10.5.2	
	Uninterruptible power systems (UPS)	Stress relief test	IEC 62477-1:2012, Ed.1,Clause 5.2.2.4.5	Temperature : (-10 to 130) °C,

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II.	<b>ENVIRONMENTAL TESTING</b>			
1.	Electrical equipment for measurement, control, and laboratory,( testing and measuring circuits),( sterilizers and washer-disinfectors used to treat medical materials), Testing Electrical equipment for measurement, control, and laboratory,( testing and measuring circuits),( sterilizers and washer-disinfectors used to treat medical materials)	Humidity Preconditioning	BS EN 61010-1:2010, Clause 6.8.2 BSEN 61010-2-010:2014, Clause 6.8.2 BS EN 61010-2-030:2010, Clause 6.8.2 BS EN 61010-2-040:2015, Clause 6.8.2 BS EN 61010-2-061:2015, Clause 6.8.2 BS EN 61010-2-081:2015, Clause 6.8.2 BS EN 61010-2-091:2012, Clause 6.8.2 IEC 61010-2-101:2015,Ed.2, Clause 6.8.2 BS EN 61010-2-201:2013, Clause6.8.2	Temperature : (Ambient to 130) °C, Humidity : (40 to 96) %RH

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<b>AT SITE</b>				
<b>1.</b>	<b>ELECTRICAL- SAFETY TESTING</b>			
<b>1.</b>	<b>Machinery, Electrical equipment of machines, (hoisting machines)</b>	Verification of the continuity of the protective bonding circuits	BS EN 60204-1:2006+A1:2009, Clause 18.2.2 BS EN 60204-32:2008, Clause 18.2.2 test 1	3Aac to 33Aac/ 10mΩ to 650mΩ
	<b>Low-voltage switchgear and control gear assemblies, (Power switchgear and control gear assemblies),( Distribution boards intended to be operated by ordinary persons),( assemblies for construction sites),( power distribution in public networks),( Busbartrunking systems (busways))</b>	Requirements for earth continuity providing protection against the consequences of faults within the assembly  Effective earth continuity between the exposed conductive parts of the assembly and the protective circuit.	IEC 61439-1:2011, Ed.2, Clause 8.4.3.2.2 & 10.5.2 IEC 61439-2:2011, Ed.2, Clause 8.4.3.2.2 IEC 61439-3:2012, Ed.1, Clause 8.4.3.2.2 IEC 61439-4:2013, Clause 8.4.3.2.2 IEC 61439-5:2014, Ed.2, Clause 8.4.3.2.2 BS EN 61439-6:2012, Clause 8.4.3.2.2  IS 8623-1:1993	
	<b>Uninterruptible power systems (UPS)</b>	Protective earthing and bonding	IEC 62040-1:2017, Ed.2.0, Clause 4.4 IEC 62477-1:2012, Ed.1, Clause 4.4.4.	



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	Power converters for use in photovoltaic power systems, (inverters)	Rating of protective bonding – Test current, duration and acceptance criteria	IEC 62109-1:2010, Ed.1 Clause 7.3.6.3.3.1 IEC 62109-2:2011, Ed.1, Clause 7.3.6.3.3.1	3Aac to 33Aac/ 10mΩ to 650mΩ
	Machines for general use	Resistance to earth	IS 1356-1:1972, Clause 11.3	
	Machinery, Electrical equipment of machines, (hoisting machines)	Insulation resistance test	BS EN 60204-1:2006+A1:2009, Clause 18.3 BS EN 60204-32:2008, Clause 18.3	50V to 1kVdc/ 1MΩ to 50 GΩ
	Low-voltage switchgear and control gear assemblies, (power switchgear and control gear assemblies), ( distribution boards intended to be operated by ordinary persons), ( assemblies for construction sites), ( power distribution in public networks	Dielectric properties- Insulation resistance	IEC 61439-1:2011,Ed.2, Clause 11.9 IEC 61439-2:2011,Ed.2, Clause 11 IEC 61439-3:2012,Ed.1, Clause 11 IEC 61439-4:2012, ED.1, Clause 11 IEC 61439-5:2014,Ed.2, Clause 11	
		Insulation Resistance test	IS 1356-1:1972, Clause 11.1	

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	<b>Machinery, Electrical equipment of machines, (hoisting machines)</b>	Voltage test	BS EN 60204-1:2006+A1:2009, Clause 18.4 BS EN 60204-32:2008, Clause 18.4	50V to 5kVac/ 0.001 to 100mAac
	<b>Machines for general use</b>	Voltage test	IS 1356-1:1972, Clause 11.2	
	<b>Power converters for use in photovoltaic power systems, (inverters)</b>	Voltage test(dielectric strength test)	IEC 62109-1:2010, Ed.1, Clause 7.5.2 IEC 62109-2:2011, Ed.1, Clause 7	50V to 5kVac/ 0.001 to 100mAac
	<b>Low-voltage switchgear and control gear assemblies, (Power switchgear and control gear assemblies), (Distribution boards intended to be operated by ordinary persons), ( assemblies for construction sites),( power distribution in public networks), ( Busbar trunking systems (busways)</b>	Temperature rise limits	IEC 61439-1:2011,Ed. 2,Clause 9.2 IEC 61439-2:2011,Ed.2, Clause 9.2 IEC 61439-3:2012,Ed.1, Clause 9.2 IEC 61439-4:2012, ED.1, Clause 9.2 IEC 61439-5:2014,Ed.2, Clause 9.2 BS EN 61439-6:2012, Clause 9.2	Temperature Data Logger 30 °C to 100 °C  IR Thermometer 1°C to 450 °C

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	Uninterruptible power systems (UPS)-	Temperature rise	IEC 62040-1:2017,Ed.2.0, Clause 5.2.3.10 IEC 62477-1:2012,Ed.1 ,Clause 4.6.4,5.3.2.10	
	Power converters for use in photovoltaic power systems, (inverters)	Maximum temperature-general	IEC 62109-1:2010, Ed.1 Clause 4.3.2.1 IEC 62109-2:2011, Ed.1 Clause 4	

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<b><u>ELECTRONICS TESTING</u></b>				
<b>I.</b>	<b>SAFETY TESTING FACILITY</b>			
1.	Medical electrical equipment, (electron accelerators), ( high frequency surgical equipment and high frequency surgical accessories), ( short-wave therapy equipment), (ultrasonic physiotherapy equipment), ( therapeutic X-ray equipment operating in the range), ( gamma beam therapy equipment), ( automatically-controlled brachytherapy after loading equipment), ( endoscopic equipment),	Impedance and current-carrying capability (ground bond resistance/impedance test)	IEC 60601-:2005+A1:2012, Ed.3.1, Clause 8.6.4 BS EN 60601-2-1:2015, Clause 201.8.6.4 IEC 60601-2-2:2009, Clause 201.8.6.4 BS EN 60601-2-3:2015, Clause 201.8.6.4 IEC 60601-2-5:2009, Ed.5, Clause 201.8.6.4 BS EN 60601-2-8:2015+A1 2016, Clause 201.8.6.4 IEC 60601-2-10:2012+AMD1:2016, Clause 201.8.6.4 BS EN 60601-2-11:2015, Clause 201.8.6.4 BS EN 60601-2-17:2015, Clause 201.8.6.4 BS EN 60601-2-18:2015, Clause 201.8.6.4 IEC 60601-2-22:2007,Ed.3, Clause 201.8.6.4 BS EN 60601-2-24:2015,Ed.3, Clause 201.8.6.4 IEC 60601-2-25:2011, Ed.2, Clause 201.8.6.4 BS EN 60601-2-26:2015, Clause 201.8.6.4	3Aac to 33Aac/ 10mΩ to 650mΩ

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	(surgical, cosmetic, therapeutic and diagnostic laser equipment),(electro cardiographs), (electroencephalographs), (electrocardiographic monitoring equipment), (radiotherapy simulators), (invasive blood pressure monitoring equipment), ( equipment for extracorporeally induced lithotripsy), ( X-ray equipment for computed tomography)		BS EN 60601-2-27:2014, Clause 201.8.6.4 IEC 60601-2-29:2008,Ed.3, Clause 201.8.6.4 BS EN 60601-2-34:2014, Clause 201.8.6.4 BS EN 60601-2-36:2015, Clause 201.8.6.4 BS EN 60601-2-44:2009 AMD2012+2016, Clause 201.8.6.4 IEC 60601-2-52:2009+A1:2015,Ed.3, Clause 201.8.6.4	
	Information technology equipment	Provisions for earthing and bonding	EN 60950-1:2006+A1:2006+A2:2013, Ed.2, Clause 2.6	3Aac to 33Aac/ 10mΩ to 650mΩ
	Uninterruptible power systems (UPS)	Provisions for earthing and bonding	IEC 62040-1:2017,Ed.2.0, Clause 4.4 IEC 62477-1:2012,Ed.1, Clause 4.4.4.2	3Aac to 33Aac/ 10mΩ to 650mΩ
	Power converters for use in photovoltaic power systems, (inverters)	Requirement of protective bonding	IEC 62109-1:2010, Ed.1 Clause 7.3.6.3.3.1 IEC 62109-2:2011, Ed.1, Clause 7.3.6.3.3.1	3Aac to 33Aac/ 10mΩ to 650mΩ

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	<b>Medical electrical equipment</b>	Impedance and current carrying capability (ground bond resistance/impedance test)	IS 13450-1:2008, Clause 8.6.4	3Aac-33Aac/ 10mΩ-650mΩ
	<b>Information Technology Equipment</b>	Resistance of earthing conductors and their terminations	IS 13252-1:2010, Clause 2.6	3Aac to 33Aac/ 10mΩ to 650mΩ
	<b>Medical supply units</b>	Protection against electrical hazard from ME equipment	ISO 11197:2016 Ed. 2, Clause 201.8	3Aac to 33Aac/ 10mΩ to 650mΩ
	<b>Information technology equipment</b>	Electric strength	EN 60950-1:2006+A1:2006+A2:2013, Ed.2, Clause 5.2	50V to 5kVac/ 0.001 to 100mAac
	<b>Safety Testing Uninterruptible power systems (UPS)</b>	Dielectric strength	IEC 62040-1:2017, Ed.2.0, Clause 5 IEC 62477-1:2012, Ed.1, Clause 5.2.3.4	50V to 5kVac/ 0.001 to 100mAac
	<b>Safety Testing</b>	Dielectric strength	IEC 60601-1:2005+A1:2012, Ed.3.1, Clause 8.8.3 BS EN 60601-1-11:2015, Clause 201.8.8.3 BS EN 60601-2-1:2015, Clause 201.8.8.3 IEC 60601-2-10:2012+AMD1:2016, Clause 201.8.8.3 BS EN 60601-2-11-2015, Clause 201.8.8.3 BS EN 60601-2-17:2015, Clause 201.8.8.3 BS EN 60601-2-18-2015, Clause 201.8.8.3 IEC 60601-2-22:	50V to 5kVac/ 0.001 to 100mAac
	<b>Medical electrical equipment, (electrical equipment and medical electrical systems used in the home healthcare environment),(electron accelerators), (nerve and muscle stimulators), (automatically-controlled brachytherapy after</b>			

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	loading equipment), ( surgical,cosmetic, therapeutic and diagnostic laser equipment),( infusion pumps and controllers), ( electro-cardiographs), ( electro-encephalographs), ( electro-cardiographic monitoring equipment), ( radiotherapy simulators), ( invasive blood pressure monitoring equipment), ( equipment for extracorporeally induced lithotripsy), (X-ray equipment for computed tomography), (medical beds)		2007,Ed.3, Clause 201.8.8.3 BS EN 60601-2-24:2015, Clause 201.8.8.3 IEC 60601-2-25:2011,Ed.2, Clause 201.8.8.3 BS EN 60601-2-26:2015, Clause 201.8.8.3 BS EN 60601-2-27:2014, Clause 201.8.8.3 IEC 60601-2-29:2008,Ed.3, Clause 201.8.8.3 BS EN 60601-2-34:2014, Clause 201.8.8.3 BS EN 60601-2-36:2015,Clause 201.8.8.3 BS EN 60601-2-44:2009 AMD2012+2016, Clause 201.8.8.3 BS EN 60601-2-34:2014, Clause 201.8.8.3 BS EN 60601-2-36:2015,Clause 201.8.8.3 BS EN 60601-2-44:2009 AMD2012+2016, Clause201.8.8.3 IEC 60601-2-52:2009+A1:2015,Ed.1, clause 201.8.8.3	
	Medical electrical equipment		IS 13450-1:2008, Clause 8.8.3	50V to 5kVac/ 0.001 to 100mAac
	Information Technology Equipment		IS 13252-1:2010, Clause 5.2	50V to 5kVac/ 0.001 to 100mAac

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	<b>Safety Testing medical supply units</b>	Protection against electrical hazard from ME equipment	ISO 11197:2016 Ed.2, Clause 201.8	50V to 5kVac/ 0.001 to 100mAac
	<b>Information technology equipment</b>	Electric strength	EN 60950-1:2006+A1:2006+A2:2013, Ed.2, Clause 5.2	f/ 0.001 to 100mAac
	<b>Safety Testing Power converters for use in photovoltaic power systems, (inverters)</b>	Voltage test(dielectric strength test)	IEC 62109-1:2010, Ed.1, Clause 7.5.2 IEC 62109-2:2011, Ed.1, Clause 7.5.2	50V to 5kVdc/ 0.001 to 100mAac
	<b>Information technology equipment</b>	Electric strength	EN 60950-1:2006+A1:2006+A2:2013, Ed.2, Clause 5.2	50V to 6kVdc/ 0 to 20mAdc
	<b>Safety Testing Uninterruptible power systems (UPS)</b>		IEC 62040-1:2017, Ed.2.0, Clause 5  IEC 62477-1:2012, Ed.1, Clause 5.2.3.4	50V to 6kVdc/ 0 to 20mAdc
	<b>Safety Testing Power converters for use in photovoltaic power systems, (inverters)</b>	Voltage test(dielectric strength test)	IEC 62109-1:2010, Ed.1, Clause 7.5.2 IEC 62109-2:2011, Ed.1, Clause 7	50V to 6kVdc/ 0 to 20mAdc
	<b>Safety Testing Information technology equipment</b>	Touch current and protective conductor current	EN 60950-1:2006+A1:2006+A2:2013, Ed.2, Clause 5.1	0.001µA to 50 mAac 0.001 µA to 50 mAdc
	<b>Safety Testing Uninterruptible power systems (UPS)</b>		IEC 62040-1:2014, Ed.2.0 , Clause 4, IEC 62477-1:2012, Ed.1, Clause 5.2.3.6	0.001µA to 50 mAac 0.001 µA to 50 mAdc



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	<b>Medical electrical equipment, (electron accelerators), (high frequency surgical equipment and high frequency surgical accessories), ( short-wave therapy equipment), ( ultrasonic physiotherapy equipment), ( therapeutic X-ray equipment ), ( nerve and muscle stimulators), ( gamma beam therapy equipment), ( automatically-controlled brachytherapy after loading equipment), ( endoscopic equipment), ( surgical, cosmetic, therapeutic and diagnostic laser equipment), ( infusion pumps</b>	Leakage currents and patient Auxiliary currents	IEC 60601-1:2005+A1:2012, Ed.3.1, Clause 8.7 BS EN 60601-2-1:2015, Clause 201.8 IEC 60601-2-2:2009, Clause 201.8 BS EN 60601-2-3:2015, Clause 201.8 IEC 60601-2-5:2009,Ed.5, Clause 201.8 BS EN 60601-2-8:2015+A12016, Clause 201.8 IEC 60601-2-10:2012+AMD1:2016, Clause 201.8 BS EN 60601-2-11:2015, Clause 201.8.7 BS EN 60601-2-17:2015, Clause 201.8 BS EN 60601-2-18:2015, Clause 201.8 IEC 60601-2-22:2007,Ed.3, Clause 201.8 BS EN 60601-2-24:2015, Clause 201.8 IEC 60601-2-25:2011,Ed.2, Clause 201.8 BS EN 60601-2-26:2015, Clause 201.8.7 BS EN 60601-2-27:2014, Clause 201.8 IEC 60601-2-29:2008,Ed.3,	0.001µA to 50 mAac 0.001 µA to 50 mAdc

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	and controllers), (electro-cardiographs), (electro-encephalographs),( electro-cardiographic monitoring equipment) ,(equipment for extracorporeally induced lithotripsy),( X-ray equipment for computed tomography), ( medical beds),		Clause 201.8 BS EN 60601-2-34:2014, Clause 201.8 BS EN 60601-2-36:2015, Clause 201.8.7 BS EN 60601-2-44:2009 AMD2012+2016, Clause 201.8.7 IEC 60601-2-52:2009+A1:2015,Ed.1, Clause 201.8	
	Power converters for use in photovoltaic power systems, (inverters)	Touch current measurement (Type test)	IEC 62109-1:2010, Ed.1, Clause 7.5.4  IEC 62109-2:2011, Ed.1, Clause 7	0.001µA to 50 mAac 0.001 µA to 50 mAdc
	Medical electrical equipment	Leakage currents and Patient Auxiliary currents	IS 13450-1:2008, Clause 8.7	0.001µA to 50 mAac 0.001 µA to 50 mAdc
	Information Technology Equipment	Touch current and protective conductor current	IS 13252-1:2010, Clause 5.1	0.001µA to 50 mAac 0.001 µA to 50 mAdc
	Medical supply units	Protection against electric hazards from ME equipments	ISO 11197:2016 Ed.2, Clause 201.8.7	0.001µA to 50 mAac 0.001 µA to 50 mAdc
	Information technology equipment	Drop test	EN 60950-1:2006+A1:2006+A2:2013, Ed.2, Clause 4.2.6	Hard Wood: 50 mm Thick. Density : 800 Kg/m3

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	Uninterruptible power systems (UPS)	Mechanical strength	IEC 62040-1:2017,Ed.2.0,Clause 5.2.24.4 IEC 62477-1:2012,Ed.1 Clause 5.2.2.4.4	
	Medical electrical equipment, (electron accelerators), (high frequency surgical equipment and high frequency surgical accessories), (short-wave therapy equipment), (ultrasonic physiotherapy equipment),	Drop test	IEC 60601-1:2005+A1:2012, Ed.3.1, Clause 15.3.4 BS EN 60601-2-1:2015,Clause 201.15 IEC 60601-2-2:2009, Clause 201.15 BS EN 60601-2-3:2015, Clause 201.15 IEC 60601-2-5:2009,Ed.5, Clause 201.15 BS EN 60601-2-8:2015+A12016, Clause 201.15 IEC 60601-2-10:2012+AMD1:2016, Clause 201.15 BS EN 60601-2-11:2015, Clause 201.15 BS EN 60601-2-17:2015, Clause 201.15 BS EN 60601-2-18:2015, Clause 201.15 IEC 60601-2-22:2007,Ed.3, Clause 201.15 BS EN 60601-2-24:2015, Clause 201.15 IEC 60601-2-25:2011,Ed.2, Clause 201.15	Hard Wood: 50 mm Thick. Density : 800 Kg/m3

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			BS EN 60601-2-26:2015, Clause 201.15 BS EN 60601-2-27:2014, Clause 201.15.3.4 IEC 60601-2-29:2008,Ed.3, Clause 201.15 BS EN 60601-2-34:2014, Clause 201.15.3.4 BS EN 60601-2-36:2015, Clause 201.15 BS EN 60601-2-44:2009 AMD2012+2016, Clause 201.15 IEC 60601-2-52:2009+A1:2015,Ed.1, Clause 201.15	
	(therapeutic X-ray equipment),(nerve and muscle stimulators),(gamma beam therapy equipment),(automatically-controlled brachytherapy after loading),(endoscopic equipment),(surgical, cosmetic, therapeutic and diagnostic laser equipment),(infusion pumps and controller),(electro cardiographs),	Drop Test	IEC 60601-1:2005+A1:2012, Ed.3.1,Clause 15.3.4 BS EN 60601-2-1:2015, Clause 201.15 IEC 60601-2-2:2009, Clause 201.15 BS EN 60601-2-3:2015, Clause 201.15 IEC 60601-2-5:2009,Ed.5, Clause 201.15 BS EN 60601-2-8:2015+A12016, Clause 201.15 IEC 60601-2-10:2012+AMD1:2016, Clause 201.15 BS EN 60601-2-11:2015, Clause 201.15	Hard Wood: 50 mm Thick. Density : 800 Kg/m <sup>3</sup>

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	(electroencephalographs), (electrocardiographic monitoring equipment), (radiotherapy simulators), (radiotherapy simulators), (equipment for extracorporeally induced lithotripsy), (X-ray equipment for computed tomography), (medical beds)		BS EN 60601-2-17:2015, Clause 201.15 BS EN 60601-2-18:2015, Clause 201.15 IEC 60601-2-22:2007, Ed.3, Clause 201.15 BS EN 60601-2-24:2015, Clause 201.15 IEC 60601-2-25:2011, Ed.2, Clause 201.15 BS EN 60601-2-26:2015, Clause 201.15 BS EN 60601-2-27:2014, Clause 201.15.3.4 IEC 60601-2-29:2008, Ed.3, Clause 201.15 BS EN 60601-2-34:2014, Clause 201.15.3.4 BS EN 60601-2-36:2015, Clause 201.15 BS EN 60601-2-44:2009 AMD2012+2016, Clause 201.15 IEC 60601-2-52:2009+A1:2015, Ed.1, Clause 201.15	Hard Wood: 50 mm Thick. Density : 800 Kg/m3
	Power converters for use in photovoltaic power systems, (inverters)		IEC 62109-1:2010, Ed.1 Clause 13.7.4 IEC 62109-2:2011, Ed.1, Clause 13.7.4	Hard Wood: 50 mm Thick. Density : 800 Kg/m3
	Information Technology Equipment		IS 13252-1:2010, Clause 4.2.6	Hard Wood: 50 mm Thick. Density : 800 Kg/m3

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	Medical electrical equipment		IS 13450-1:2008, Clause 15.3.4	Hard Wood: 50 mm Thick. Density : 800 Kg/m <sup>3</sup>
	Medical supply units	Construction of ME equipment	ISO 11197:2016 Ed.2, Clause 201.15	Hard Wood: 50 mm Thick. Density : 800 Kg/m <sup>3</sup>
	Information Technology Equipment	Impact Test	EN 60950-1:2006+A1:2006+A2:2013, Ed.2, Clause 4.2.6	500 g ± 25 g
	Uninterrupted Power Systems (UPS)		IEC 62040 : 2017 Ed: 2.0 Clause 4	
	Medical electrical equipment, (electron accelerators), (high frequency surgical equipment and high frequency surgical accessories),(short-wave therapy equipment),(ultrasonic physiotherapy equipment),(therapeutic X-ray equipment), (nerve and muscle stimulators), (gamma beam therapy equipment),		IEC 62477-1:2012,Ed.1 Clause 5.2.2.4.4	

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	(automatically-controlled brachytherapy after loading), ( endoscopic equipment), ( surgical, cosmetic, therapeutic and diagnostic laser equipment), ( infusion pumps and controller), ( electro-cardiographs), ( electro-encephalographs), ( electro-cardiographic monitoring equipment), ( radiotherapy simulators), ( radiotherapy simulators), ( equipment for extracorporeally induced lithotripsy),(X-ray equipment for computed tomography), (medical beds)			
	Medical supply units			

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	Information technology equipment	Stability	EN 60950-1:2006+A1:2006+A2:2013, Ed.2, Clause 4.1	0° to 20 ° 0° to 360 °
	Uninterruptible power systems (UPS)		IEC 62040-1:2017,Ed.2.0, Clause 4 & 5 IEC 62477-1:2012 , Ed.1.0, Clause 4 & 5	
	Medical electrical equipment, (electron accelerators), (high frequency surgical equipment and high frequency surgical accessories), ( short-wave therapy equipment), ( ultrasonic physiotherapy equipment), (therapeutic X-ray equipment),( nerve and muscle stimulators), ( gamma beam therapy equipment), ( automatically-controlled brachytherapy after loading), ( endoscopic equipment),	Instability-Overbalance	IEC 60601-1:2005+A1:2012, Ed.3.1, Clause 9.4.2.1/9.4.2.2 BS EN 60601-2-1:2015, Clause 201.9 IEC 60601-2-2:2009, Clause 201.9 BS EN 60601-2-3:2015, Clause 201.9 IEC 60601-2-5:2009,Ed.5, Clause 201.9 BS EN 60601-2-8:2015+A1 2016, Clause 201.9 IEC 60601-2-10:2012+AMD1:2016, Clause 201.9 BS EN 60601-2-11:2015, Clause 201.9  BS EN 60601-2-17:2015, Clause 201.9 BS EN 60601-2-18:2015, Clause 201.9 IEC 60601-2-22: 2007,Ed.3, Clause 201.9 BS EN 60601-2-24:2015, Clause 201.9	0° to 20 °



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	(surgical, cosmetic, therapeutic and diagnostic laser equipment), (infusion pumps and controller), (electro-cardiographs), (electro-encephalographs), (electro-cardiographic monitoring equipment), (radiotherapy simulators), (radiotherapy simulators), (equipment for extracorporeally induced lithotripsy), (X-ray equipment for computed tomography), (medical beds)		IEC 60601-2-25:2011,Ed.2, Clause 201.9 BS EN 60601-2-26:2015, Clause 201.9 BS EN 60601-2-27:2014, Clause 201.9 IEC 60601-2-29:2008,Ed.3, Clause 201.9 BS EN 60601-2-34:2014, Clause 201.9 BS EN 60601-2-36:2015, Clause 201.9 BS EN 60601-2-44:2009 AMD2012+2016, Clause 201.9 IEC 60601-2-52:2009+A1:2015,Ed.1, Clause 201.9	
	Medical electrical equipment		IS 13450-1:2008, Clause 9.4.2.1/9.4.2.2	
	Information technology equipment	Resistance to abnormal heat	EN 60950-1:2006+A1:2006+A2:2013, Ed.2, Clause 4.5.5	(Ambient to 130)°C, 20N±0.2N,(0.1 to 150)mm

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	Medical electrical equipment, (electron accelerators), (high frequency surgical equipment and high frequency surgical accessories), ( short-wave therapy equipment), ( ultrasonic physiotherapy equipment), (therapeutic X-ray equipment), ( nerve and muscle stimulators), ( gamma beam therapy equipment), ( automatically-controlled brachytherapy after loading), ( endoscopic equipment), ( surgical, cosmetic, therapeutic and diagnostic laser equipment),	Mechanical strength and resistance to heat	IEC 60601-1:2005+A1:2012, Ed.3.1, Clause 8.8.4.1 BS EN 60601-2-1:2015, Clause 201.8.8.4.1 IEC 60601-2-2:2009, Clause 201.8.8.4.1 BS EN 60601-2-3:2015, Clause 201.8.8.4.1 IEC 60601-2-5:2009, Ed.5, Clause 201.8.8.4.1 BS EN 60601-2-8:2015+A12016, Clause 201.8.8.4.1 IEC 60601-2-10:2012+AMD1:2016, Clause 201.8.8.4.1 BS EN 60601-2-11:2015, Clause 201.8.8.4.1 BS EN 60601-2-17:2015, Clause 201.8.8.4.1 BS EN 60601-2-18:2015, Clause 201.8.8.4.1 IEC 60601-2-22:2007, Ed.3, Clause 201.8.8.4.1 BS EN 60601-2-24:2015, Clause 201.8.8.4.1 IEC 60601-2-25:2011, Ed.2, Clause 201.8.8.4.1 BS EN 60601-2-26:2015, Clause 201.8.8.4.1 BS EN 60601-2-27:2014, Clause 201.8.8.4.1 IEC 60601-2-29:2008, Ed.3,	(Ambient to 130)°C, 20N±0.2N, (0.1 to 150)mm

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	(infusion pumps and controller), (electro-cardiographs), ( electro-encephalographs), ( electro-cardiographic monitoring equipment), (radiotherapy simulators), (radiotherapyy simulators), ( equipment for extracorporeally induced lithotripsy), (X-ray equipment for computed tomography), ( medical beds)		Clause 201.8.8.4.1 BS EN 60601-2-34:2014, Clause 201.8.8.4.1 BS EN 60601-2-36:2015, Clause 201.8.8.4.1 BS EN 60601-2-44:2009 AMD2012+2016, Clause 201.8.8.4.1 IEC 60601-2-52:2009+A1:2015,Ed.1, Clause 201.8.8.4.1	
	<b>Information Technology Equipment</b>	Resistance to abnormal heat	IS 13252-1:2010, Clause 4.5.5	
	<b>Medical electrical equipment</b>	Mechanical strength and resistance to heat	IS 13450-1:2008, Clause 8.8.4.1	
	<b>Uninterruptible power systems (UPS)</b>	Resistance to fire	IEC 62040-1:2017,Ed.2.0 , Clause 5 IEC 62477-1:2012,Ed.1, Clause 5.2.5.3	(500 to 960)°C 10N
	<b>Power converters for use in photovoltaic power systems,</b>	Protection against the spread of fire	IEC 62109-1:2010, Ed.1 Clause 4.4.3.2  IEC 62109-2:2011, Ed.1	

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	(inverters)		Clause 4	
	Information technology equipment	Resistance to fire	EN 60950-1:2006+A1:2006+A2:2013, Ed.2, Clause 4.7	
	Information Technology Equipment		IS 13252-1:2010, Clause 4.7	
	Information technology equipment	Steady force Test	EN 60950-1:2006+A1:2006+A2:2013, Ed.2, Clause 4.2.2 & 4.2.3	1N to 50N
	Uninterruptible power systems (UPS)	Mechanical strength	IEC 62040-1:2017, Ed.2.0, Clause 5	
	Information Technology Equipment		IS 13252-1:2010, Clause 4.2.2 & 4.2.3	
	Information technology equipment	Access to energized part	EN 60950-1:2006+A1:2006+A2:2013, Ed.2, Clause 2.1.1.1 IS 13252-1:2010, Clause 2.1.1.1	Sphere 50mm Jointed Finger Probe : $\varnothing$ 12 mm Sphere 50mm Jointed Finger Probe : $\varnothing$ 12 mm Cylindrical pin 4mm Conical pin 3mm Rod 2.5mm Wire 1mm Force : 1N to 50 N/ 0V - 50 Vac  Sphere 50mm Jointed Finger Probe : $\varnothing$ 12 mm Sphere 50mm

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				Jointed Finger Probe : $\varnothing$ 12 mm Cylindrical pin 4mm Conical pin 3mm Rod 2.5mm Wire 1mm Test Hook Force : 1N to 50 N/ 0V to 50 Vac
	<b>Uninterruptible power systems (UPS)</b>	Enclosure	IEC 62040-1:2017,Ed.2.0 , Clause 5 IEC 62477-1:2012,Ed.1, Clause 5.2.2.3	Sphere 50mm Jointed Finger Probe : $\varnothing$ 12 mm Sphere 50mm Jointed Finger Probe : $\varnothing$ 12 mm Cylindrical pin 4mm Conical pin 3mm Rod 2.5mm Wire 1mm Test Hook Force : 1N to 50 N/ 0V to 50 Vac
	<b>Medical supply units</b>		ISO 11197:2016 Ed. 2,Clause 201. 5.9.2.1 & 5.9.2.2	Sphere 50mm Jointed Finger Probe : $\varnothing$ 12 mm Cylindrical pin 4mm Conical pin 3mm Rod 2.5mm Wire 1mm Force : 1N to 50 N/ 0V to50 Vac

Sachin Tomar  
Convenor

N. Venkateswaran  
Program Director

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	Power converters for use in photovoltaic power systems, (inverters)	Access probe test	IEC 62109-1:2010, Ed.1 Clause 7.3.4.2.3 IEC 62109-2:2011, Ed.1 Clause 7.3.4.2.3	
	Medical electrical equipment, (electron accelerators), (high frequency surgical equipment and high frequency surgical accessories), ( short-wave therapy equipment), ( ultrasonic physiotherapy equipment), (therapeutic X-ray equipment), ( nerve and muscle stimulators), ( gamma beam therapy equipment), ( automatically-controlled brachytherapy after loading), ( endoscopic equipment),	Power Input	IEC 60601-1:2005+A1:2012, Ed.3.1, Clause 4.11 BS EN 60601-2-1:2015, Clause 201.4.11 IEC 60601-2:2009,201.4.11 BS EN 60601-2-3:2015, Clause 201.4.11 IEC 60601-2-5:2009,Ed.5, Clause 201.4.11 BS EN 60601-2-8:2015+A12016, Clause 201.4.11 IEC 60601-2-10:2012+AMD1:2016, Clause 201.4.11 BS EN 60601-2-11:2015, Clause 201.4.11 BS EN 60601-2-17:2015, Clause 201.4.11 BS EN 60601-2-18:2015, Clause 201.4.11 IEC 60601-2-22:2007,Ed.3, Clause 201.4.11 BS EN 60601-2-24:2015, Clause 201.4.11 IEC 60601-2-25:2011,Ed.2,	0 to 270 Vac 0 to 10 Aac/dc

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			Clause 201.4.11 BS EN 60601-2-26:2015, Clause 201.4.11	
	( surgical, cosmetic, therapeutic and diagnostic laser equipment), ( infusion pumps and controller), electrocardiographs),electroencephalographs), electrocardiographic monitoring equipment), ( radiotherapy simulators), ( radiotherapy simulators), ( equipment for extracorporeally induced lithotripsy), ( X-ray equipment for computed tomography), ( medical beds)	Power Input	BS EN 60601-2-27:2014, Clause 201.4.11 IEC 60601-2-29:2008,Ed.3, Clause 201.4.11 BS EN 60601-2-34:2014, Clause 201.4.11 BS EN 60601-2-36:2015, Clause 201.4.11 BS EN 60601-2-44:2009 AMD2012+2016, Clause 201.4.11 IEC 60601-2-52:2009+A1:2015,Ed.1, Clause 201.4.11 IS 13450-1:2008, Clause 4.11	0 to 270 VAC 0 to 10Aac/dc
	Safety Testing Power converters for use in photovoltaic power systems, (inverters)	Electrical rating tests	IEC 62109-1:2010, Ed.1 Clause 4.7.1 IEC 62109-2:2011, Ed.1 Clause 4.7.1	

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	<b>Safety Testing Information technology equipment</b>	Thermal requirements	EN 60950-1:2006+A1:2006 +A2:2013,Ed.2,Clause 4.5 IS 13252-1:2010,Clause 4.5	Temperature Data Logger 30 °C to 100 °C IR Thermometer 1°C to 450 °C
	<b>Safety Testing Uninterruptible power systems (UPS)-</b>	Temperature rise	IEC 62040-1:2017,Ed.2.0 , Clause 4 & 5 IEC 62477-1:2012,Ed.1, Clause 4.6.4,5.2.3.10	
	<b>Safety Testing Power converters for use in photovoltaic power systems, (inverters)</b>	Maximum temperature	IEC 62109-1:2010, Ed.1 Clause 4.3.2.1  IEC 62109-2:2011, Ed.1 Clause 4	
	<b>Safety Testing medical supply units</b>	Protection against excessive temperatures	ISO 11197:2016 Ed. 2, Clause 201.11	
	<b>Medical electrical equipment, (electron accelerators), (high frequency surgical equipment and high frequency surgical accessories), ( short-wave therapy equipment), ( ultrasonic physiotherapy equipment), (therapeutic X-ray equipment),</b>	Protection against excessive temperatures and other hazard	IEC 60601-1:2005+A1:2012, Ed.3.1, Clause 11 BS EN 60601-2-1:2015, Clause 201.11 IEC 60601-2-2:2009, Clause 201.11 BS EN 60601-2-3:2015, Clause 201.11 IEC 60601-2-5:2009,Ed.5, Clause 201.11 BS EN 60601-2-8:2015+A12016, Clause 201.11 IEC 60601-2-10:2012+AMD1:2016, Clause 201.11	Temperature Data Logger 30 °C to 100 °C  IR Thermometer 1°C to 450 °C



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	(nerve and muscle stimulators), (gamma beam therapy equipment), ( automatically-controlled brachytherapy after loading), ( endoscopic equipment), ( surgical, cosmetic, therapeutic and diagnostic laser equipment), ( infusion pumps and controller), ( electro-cardiographs), ( electro-encephalographs), ( electro-cardiographic monitoring equipment), ( radiotherapy simulators), ( radiotherapy simulators), ( equipment for extracorporeally induced lithotripsy), ( X-ray equipment		BS EN 60601-2-11:2015, Clause 201.11 BS EN 60601-2-17:2015, Clause 201.11 BS EN 60601-2-18:2015, Clause 201.11 IEC 60601-2-22: 2007,Ed.3, Clause 201.11 BS EN 60601-2-24:2015, Clause 201.11 IEC 60601-2-25:2011,Ed.2, Clause 201.11 BS EN 60601-2-26:2015, Clause 201.11 BS EN 60601-2-27:2014, Clause 201.11 IEC 60601-2-29:2008,Ed.3, Clause 201.11 BS EN 60601-2-34:2014, Clause 201.11 BS EN 60601-2-36:2015, Clause 201.11 BS EN 60601-2-44:2009 AMD2012+2016, Clause 201.11 IEC 60601-2-52:2009+A1:2015,Ed.1, Clause 201.11  IS 13450-1:2008, Clause 11.1	

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	for computed tomography), ( medical beds)			
	Medical supply units	Push Test	IEC 60601-1:2005+A1:2012, Ed.3.1, Clause 15.3.2 ISO 11197:2016 Ed.2, Clause 201.15.3.2 IS 13450-1:2008, Clause 15.3.2	Standard Cast Iron weight
	Medical supply units	Static Forces	ISO 11197:2016 Ed.2 ,Clause 201.9.1.103	Standard Cast Iron Weight
	Medical supply units	Impact Resistance Test	ISO 11197:2016 Ed.2, Clause 201.9.1.102	0.5m bag with 200N force
	Information technology equipment	Stress relief test	EN 60950-1:2006+A1:2006+A2:2013, Ed.2,Clause 4.2.7 IS 13252:2010, Clause 4.2.7	(Ambient to 130)°C
	Uninterruptible power systems (UPS)	Mechanical strength	IEC 62040-1:2017,Ed.2.0 , Clause 4 & 5	(Ambient to 130)°C
	Medical electrical equipment, (electron accelerators), (high frequency surgical equipment and high frequency surgical accessories), ( short-wave therapy	Mould stress relief test	IEC 60601-1:2005+A1:2012, ED.3.1, Clause 15.3.6 BS EN 60601-2-1:2015,Clause 201.15 IEC 60601-2-2:2009, Clause 201.15 BS EN 60601-2-3:2015, Clause 201.15 IEC 60601-2-5:2009,Ed.5, Clause 201.15 BS EN 60601-2-	(Ambient to 130)°C

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	equipment), ( ultrasonic physiotherapy equipment), (therapeutic X-ray equipment), (nerve and muscle stimulators), (gamma beam therapy equipment), ( automatically-controlled brachytherapy after loading), ( endoscopic equipment)( surgical,cosmetic, therapeutic and diagnostic laser equipment), ( infusion pumps and controller), ( electro-cardiographs), Electro-encephalographs), electrocardiographic monitoring equipment), (radiotherapy simulators)		8:2015+A12016, Clause 201.15 IEC 60601-2-10:2012+AMD1:2016, Clause 201.15 BS EN 60601-2-11:2015, Clause 201.15 BS EN 60601-2-17:2015, Clause 201.15 BS EN 60601-2-18:2015, Clause 201.15 IEC 60601-2-22:2007,Ed.3, Clause 201.15 BS EN 60601-2-24:2015, Clause 201.15 IEC 60601-2-25:2011,Ed.2, Clause 201.15 BS EN 60601-2-26:2015, Clause 201.15 BS EN 60601-2-27:2014, Clause 201.15 IEC 60601-2-29:2008,Ed.3, Clause 201.15 BS EN 60601-2-34:2014, Clause 201.15 BS EN 60601-2-36:2015, Clause 201.15 BS EN 60601-2-44:2009 AMD2012+2016, Clause 201.15 IEC 60601-2-52:2009+A1:2015,Ed.1, Clause 201.15 IS 13450-1:2008, Clause 15.3.6	

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	(Equipment for extracorporeally induced lithotripsy),  ( X-ray equipment for computed tomography), ( medical beds)			
	Medical supply units	Creepage & Clearance	ISO 11197:2016 Ed.2, Clause 201.8.9 IEC 60601-1:2005+A1:2012, ED.3.1, Clause 201.8.9 BS EN 60601-2-1:2015, Clause 201.8.9 IEC 60601-2-2:2009, Clause 201.8.9 BS EN 60601-2-3:2015, Clause 201. 8.9 IEC 60601-2-5:2009,Ed.5, Clause 201. 8.9 BS EN 60601-2-8:2015+A12016, Clause 201. 8.9 IEC 60601-2-10:2012+AMD1:2016, Clause 201. 8.9 BS EN 60601-2-11:2015, Clause 201. 8.9 BS EN 60601-2-17:2015, Clause 201. 8.9 BS EN 60601-2-18:2015, Clause 201. 8.9 IEC 60601-2-22:	Vernier caliper (0-150) mm

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			2007,Ed.3, Clause 201. 8.9 BS EN 60601-2-24:2015, Clause 201. 8.9 IEC 60601-2-25:2011,Ed.2, Clause 201. 8.9 BS EN 60601-2-26:2015, Clause 201. 8.9 BS EN 60601-2-27:2014, Clause 201. 8.9 IEC 60601-2-29:2008,Ed.3, Clause 201. 8.9 BS EN 60601-2-34:2014, Clause 201. 8.9 BS EN 60601-2-36:2015, Clause 201. 8.9 BS EN 60601-2-44:2009 AMD2012+2016, Clause 201. 8.9 IEC 60601-2- 52:2009+A1:2015,Ed.1, Clause 201. 8.9 IS 13450-1:2008, Clause 8.9	
	<b>Environmental testing- Salt Spray test</b>	Salt Spray Test / Salt mist test	ASTM B117:2016 IEC 60068-2-11:1981 IS 9844:1981	Temperature: 0 to 35°C Humidity: (93 to 98)%RH
	<b>Measuring adhesion by tape test</b>	Cross hatch test	ASTM D3359:2017 EN/ISO 2409:2013	Multi Cross hatch cutter kit

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	Information technology equipment	Humidity preconditioning	EN 60950-1:2006+A1:2006+A2:2013, Ed.2, Clause 2.9.2 IS 13252:2010, Clause 2.9.2	imp : (Ambient to 130) °C, Humidity : (40 to 96) %RH
	Medical electrical equipment, (electron accelerators), ( high frequency surgical equipment and high frequency surgical accessories), ( short-wave therapy equipment), ( ultrasonic physiotherapy equipment), ( therapeutic X-ray equipment operating in the range),( gamma beam therapy equipment), ( automatically-controlled brachytherapy after loading equipment), ( endoscopic equipment), ( surgical,		IEC 60601-1:2005+A1:2012, Ed.3.1, Clause 5.7 BS EN 60601-2-1:2015, Clause 201.5 IEC 60601-2-2:2009, Clause 201.5 BS EN 60601-2-3:2015, Clause 201.5 IEC 60601-2-5:2009,Ed.5, Clause 201.5 BS EN 60601-2-8:2015+A12016, Clause 201.5 IEC 60601-2-10:2012+AMD1:2016, Clause 201.5 BS EN 60601-2-11:2015, Clause 201.5 BS EN 60601-2-17:2015, Clause 201.5 BS EN 60601-2-18:2015, Clause 201.5.7 IEC 60601-2-22:2007,Ed.3, Clause 201.5 BS EN 60601-2-24:2015, Clause 201.5 IEC 60601-2-25:2011,Ed.2, Clause 201.5	

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	cosmetic, therapeutic and diagnostic laser equipment), ( electro-cardiographs), ( electro-encephalographs), ( electro-cardiographic onitoring equipment), ( radiotherapy simulators),( invasive blood pressure monitoring equipment),( equipment for extracorporeally induced lithotripsy),( X-ray equipment for computed tomography)		BS EN 60601-2-26:2015, Clause 201.5 BS EN 60601-2-27:2014, Clause 201.5 IEC 60601-2-29:2008,Ed.3, Clause 201.5 BS EN 60601-2-34:2014, Clause 201.5 BS EN 60601-2-36:2015, Clause 201.5 BS EN 60601-2-44:2009 AMD2012+2016, Clause 201.5.7 IEC 60601-2-52:2009+A1:2015,Ed.1, Clause 201.5 IS 13450-1:2008, Clause 5.7	
	Safety Testing Power converters for use in photovoltaic power systems, (inverters)		IEC 62109-1:2010, Ed.1 Clause 4.5 IEC 62109-2:2011, Ed.1 Clause 4.5	
	Safety Testing Information Technology Equipment		ISO 11197:2016 Ed.2, Clause 201.5.7	

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	<b>Uninterruptible power systems (UPS)</b>	Dry Heat Test (steady state)	IEC 62477-1:2012,Ed.1, clause 5.2.6.3.1	(Ambient to 130) °C, Humidity : (40 to 96) %RH