

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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ELECTRICAL TESTING

I.	DOMESTIC ELECTRICAL APPLIANCES			
1.	Domestic Electrical Household Appliances (Power Adapter; Washing Machine; Refrigerator; Microwave oven; kitchen machines; refrigerating appliances, ice-cream appliances and ice-makers)	Marking and instruction (Visual inspection)	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008 +A1:2009+A2:2013 +A3:2014+A4:2014 Clause 7, 7.1,7.2,7.3,7.4,7.5,7.6,7.7,7.8,7.9,7.10,7.11,7.12,7.12.1,7.12.2,7.12.3,7.12.4,7.12.5,7.12.6,7.12.7,7.12.8,7.13,7.14,7.15,7.16 IEC 60335-2-7: 2008+A1: 2011 +A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 7, 7.1,7.2,7.3,7.4,7.5,7.6,7.7,7.8,7.9,7.10,7.11,7.12,7.12.1,7.12.2,7.12.3,7.12.4,7.12.5,7.12.6,7.12.7,7.12.8,7.13,7.14,7.15,7.16 IEC 60335-2-14: 2016 +A1:2019	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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			EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 7, 7.1,7.2,7.3,7.4,7.5,7.6,7.7,7.8,7.9,7.10,7.11,7.12,7.12.1,7.12.2,7.12.3,7.12.4,7.12.5,7.12.6,7.12.7,7.12.8,7.13,7.14,7.15,7.16 IEC 60335-2-24: 2010+A1: 2012 +A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 7, 7.1,7.2,7.3,7.4,7.5,7.6,7.7,7.8,7.9,7.10,7.11,7.12,7.12.1,7.12.2,7.12.3,7.12.4,7.12.5,7.12.6,7.12.7,7.12.8,7.13,7.14,7.15,7.16 IEC 60335-2-25:2010 +A1:2014 +A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 7, 7.1,7.2,7.3,7.4,7.5,7.6,7.7,7.8,7.9,7.10,7.11,7.12,7.12.1,7.12.2,7.12.3,7.12.4,7.12.5,7.12.6,7.12.7,7.12.8,7.13,7.14,7.15,7.16	
		Marking Durability test	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+A11: 2004+A12: 2006+A13:	

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			2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 7.14 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 7.14 IEC 60335-2-14: 2016+A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 7.14 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 7.14 IEC 60335-2-25:2010 +A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 7.14	
		Protection against access to live parts	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15:	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

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			2011 IS 302: Part 1:2008 +A1:2009+A2:2013 +A3:2014+A4:2014 Clause 8 IEC 60335-2-7: 2008+A1: 2011 +A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010/Clause 8 IEC 60335-2-14: 2016 +A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 8 IEC 60335-2-24: 2010+A1: 2012 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 8 IEC 60335-2-25:2010 +A1:2014 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 8	
		Starting of motor-operated appliances	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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			1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 9 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 9 IEC 60335-2-14: 2016+A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 9 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 9 IEC 60335-2-25:2010 +A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 9	
		Power Input and Current (input test)	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013	Current: 1 mA to 20 A (AC & DC Current) Voltage: 0.15 V to 600 V (AC & DC Voltage) Power: 0.2 mW to 3000 W

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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			+A3:2014+A4:2014 Clause 10 IEC 60335-2-7: 2008+A1: 2011 +A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 10 IEC 60335-2-14: 2016 +A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 10 IEC 60335-2-24: 2010+A1: 2012 +A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 10 IEC 60335-2-25:2010 +A1:2014 +A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 10	
		Heating (Temperature rise test)	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014	Ambient to 250°C

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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			Clause 11 IEC 60335-2-7: 2008+A1: 2011 +A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 11 IEC 60335-2-14: 2016 +A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 11 IEC 60335-2-24: 2010+A1: 2012 +A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 11 IEC 60335-2-25:2010 +A1:2014 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 11	
		Leakage current and Dielectric Strength Test at operating temperature	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 13	0.001mA to 50mA 0.01kV to 3.0kV

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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		Measurement of Transient over voltages	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 14 IEC 60335-2-7: 2008+A1:	100 V to 7kV for 1.2x 50µs 1.2 µs (Rise time) 50 µs (Time duration)

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

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		Moisture resistance (IPX3 & IPX4 test)	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 15.1 IEC 60335-2-7: 2008+A1: 2011+A2:2016	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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			EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 15.1 IEC 60335-2-14: 2016+A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 15.1 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 15.1 IEC 60335-2-25:2010 +A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 15.1	
		Moisture resistance (Spillage test)	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 15.2 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11:	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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			2013 IS 302-2-7: 2010 Clause 15.2 IEC 60335-2-14: 2016+A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 15.2 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 15.2 IEC 60335-2-25:2010 +A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 15.2	
		Moisture resistance (Humidity Test)	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 15.3 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013	20 to 30°C 93% RH ± 3%RH

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

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			IS 302-2-7: 2010 Clause 15.3 IEC 60335-2-14: 2016+A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 15.3 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 15.3 IEC 60335-2-25:2010 +A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 15.3	
		Leakage current and Electric strength test	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 16 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010	0.001mA to 50mA 0.01kV to 3.0kV

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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		Overload protection of transformer & associated circuits	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 17 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 17	Ambient to 250°C

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

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		Endurance	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 18 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 18 IEC 60335-2-25:2010	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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			+A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 18	
		Abnormal operation	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 19.1 to 19.11.3, 19.12 to 19.15 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 19.1 to 19.11.3, 19.12 to 19.15 IEC 60335-2-14: 2016 +A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 19.1 to 19.11.3, 19.12 to 19.15 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994	Ambient to 250°C

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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		Stability and Mechanical hazards	IEC 60335-1: 2010+A1: 2013 +A2:2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 20 IEC 60335-2-7: 2008+A1: 2011 +A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 20 IEC 60335-2-14: 2016 +A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 20 IEC 60335-2-24: 2010+A1: 2012 +A2: 2017 EN 60335-2-24: 2010	15°

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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			IS 302-2-24: 1994 Clause 20 IEC 60335-2-25:2010 +A1:2014 +A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 20	
		Mechanical strength	IEC 60335-1: 2010+A1: 2013 +A2:2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 21.1 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 21.1 IEC 60335-2-14: 2016 +A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 21.1 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994	0.2J to 0.5J

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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			Clause 21.1 IEC 60335-2-25:2010 +A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 21.1	
		Construction (Visual inspection)	IEC 60335-1: 2010+A1: 2013 +A2:2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 22.1,22.2 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 22.1,22.2 IEC 60335-2-14: 2016+A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 22.1,22.2 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 22.1,22.2	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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			IEC 60335-2-25:2010 +A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 22.1,22.2	
		Construction (Socket-outlet test, Pull force test, Torque test)	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 22.3 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 22.3 IEC 60335-2-14: 2016+A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 22.3 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 22.3 IEC 60335-2-25:2010	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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			+A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 22.3	
		Construction (Visual inspection)	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 22.4 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 22.4 IEC 60335-2-14: 2016+A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 22.4 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 22.4 IEC 60335-2-25:2010 +A1:2014+A2:2015	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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			EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 22.4	
		Construction (Capacitor discharge test)	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 22.5 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 22.5 IEC 60335-2-14: 2016+A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 22.5 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 22.5 IEC 60335-2-25:2010 +A1:2014+A2:2015 EN 60335-2-25: 2012	0.01V to 400V

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			IS 302-2-25:2014 Clause 22.5	
		Construction (Visual inspection)	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 22.6,22.7,22.8,22.9,22.10 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 22.6,22.7,22.8,22.9,22.10 IEC 60335-2-14: 2016+A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 22.6,22.7,22.8,22.9,22.10 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 22.6,22.7,22.8,22.9,22.10	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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			IEC 60335-2-25:2010 +A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 22.6,22.7,22.8,22.9,22.10	
		Construction (Push, Pull force, Torque test)	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 22.11 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 22.11 IEC 60335-2-14: 2016 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 22.11 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 22.11 IEC 60335-2-25:2010	0.1N to 50N

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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			+A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 22.11	
		Construction (Pull force test)	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 22.12 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 22.12 IEC 60335-2-14: 2016+A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 22.12 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 22.12 IEC 60335-2-25:2010 +A1:2014+A2:2015	0.1N to 30N

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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			EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 22.12	
		Construction (Visual inspection & manual test)	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 22.13,22.14,22.15,22.16,22.17, 22.18,22.19,22.20,22.21, 22.22,22.23, 22.24, 22.26,22.27, 22.28,22.29, 22.30,22.31,22.32, 22.33,22.34,22.35,22.36,22.37,22.38,22.39,22.40,22.41,22.42,22.43,22.44,22.45, 22.46,22.47, 22.48 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 22.13,22.14,22.15,22.16,22.17,22.18,22.19,22.20,22.21, 22.22,22.23, 22.24, 22.26,22.27, 22.28,22.29,	Qualitative

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			22.30,22.31,22.32,22.33,22.34,22.35,22.36,22.37,22.38,22.39,22.40,22.41,22.42.,22.43,22.44,22.45,22.46,22.47,22.48 IEC 60335-2-14: 2016+A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 22.13,22.14,22.15,22.16,22.17,22.18,22.19,22.20,22.21, 22.22,22.23, 22.24, 22.26,22.27, 22.28,22.29, 22.30,22.31,22.32,22.33,22.34,22.35,22.36,22.37,22.38,22.39,22.40,22.41,22.42., 22.43,22.44,22.45,22.46,22.47,22.48 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 22.13,22.14,22.15,22.16,22.17,22.18,22.19,22.20,22.21, 22.22,22.23, 22.24, 22.26,22.27, 22.28,22.29, 22.30,22.31,22.32,22.33,22.34,22.35,22.36,22.37,22.38,22.39,22.40,22.41,22.42., 22.43,22.44,22.45,22.46,22	

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			.47,22.48 IEC 60335-2-25:2010 +A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 22.13,22.14,22.15,22.16,22.17,22.18,22.19,22.20,22.21, 22.22,22.23, 22.24, 22.26,22.27, 22.28,22.29, 22.30,22.31,22.32,22.33,22.34,22.35,22.36,22.37,22.38,22.39,22.40,22.41,22.42., 22.43,22.44,22.45,22.46,22.47,22.48	
		Internal wiring (Visual inspection & manual test)	IEC 60335-1: 2010+A1: 2013 +A2:2016 EN 60335-1: 2002 +A1+A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 23.1, 23.2, 23.4, 23.5 to 23.10 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 23.1, 23.2, 23.4, 23.5 to 23.10	Qualitative

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			IEC 60335-2-14: 2016 +A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 23.1, 23.2, 23.4, 23.5 to 23.10 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 C Clause 23.1, 23.2, 23.4, 23.5 to 23.10 IEC 60335-2-25:2010 +A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 23.1, 23.2, 23.4, 23.5 to 23.10	
		Internal wiring (Electric Strength Test)	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 23.5 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013	0.01kVac to 3.0kVac

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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			IS 302-2-7: 2010 Clause 23.5 IEC 60335-2-14: 2016+A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 23.5 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 23.5 IEC 60335-2-25:2010 +A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 23.5	
		Internal wiring (Visual inspection)	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 23.6,23.7,23.8,23.9,23.10 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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			IS 302-2-7: 2010 Clause 23.6,23.7,23.8,23.9,23.10 IEC 60335-2-14: 2016+A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 23.6,23.7,23.8,23.9,23.10 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 23.6,23.7,23.8,23.9,23.10 IEC 60335-2-25:2010 +A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 23.6,23.7,23.8,23.9,23.10	
		Supply connection and external flexible cords (Visual inspection)	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 25.1 IEC 60335-2-7: 2008+A1:	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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			2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 25.1 IEC 60335-2-14: 2016 +A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 25.1 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 25.1 IEC 60335-2-25:2010 +A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 25.1	
		Supply connection and External flexible cords (Electric strength test)	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 25.2 IEC 60335-2-7: 2008+A1: 2011+A2:2016	0.01 kV AC to 3.0 kV AC

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			EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 25.2 IEC 60335-2-14: 2016+A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 25.2 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 25.2 IEC 60335-2-25:2010 +A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 25.2	
		Supply connection and External Flexible cords (Visual inspection)	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 25.3,25.4, 25.5,25.6,25.7,25.8,25.9, 25.10, 25.11,25.12,25.13 IEC 60335-2-7: 2008+A1:	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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			2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 25.3,25.4, 25.5,25.6,25.7,25.8,25.9,25.10, 25.11,25.12,25.13 IEC 60335-2-14: 2016+A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 25.3,25.4, 25.5,25.6,25.7,25.8,25.9,25.10, 25.11,25.12,25.13 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 25.3,25.4, 25.5,25.6,25.7,25.8,25.9,25.10, 25.11,25.12,25.13 IEC 60335-2-25:2010 +A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 25.3,25.4, 25.5,25.6,25.7,25.8,25.9,25.10, 25.11,25.12,25.13	
		Supply connection and External flexible cords (cord anchorage test)	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+A11: 2004+A12: 2006+A13:	30N, 60N, 100N 0.1Nm, 0.25Nm, 0.35Nm 2mm

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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
			2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 25.15 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 25.15 IEC 60335-2-14: 2016+A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 25.15 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 25.15 IEC 60335-2-25:2010 +A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 25.15	
		Supply connection and External Flexible cords (Visual inspection)	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15:	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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			2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 25.16,25.17,25.18,25.19, 25.20,25.21,25.22,25.23,25 .24,25.25 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 25.16,25.17,25.18,25.19,25 .20,25.21,25.22,25.23,25.2 4,25.25 IEC 60335-2-14: 2016+A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 25.16,25.17,25.18,25.19,25 .20,25.21,25.22,25.23,25.2 4,25.25 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 25.16,25.17,25.18,25.19,25 .20,25.21,25.22,25.23,25.2	

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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			4,25.25 IEC 60335-2-25:2010 +A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 25.16,25.17,25.18,25.19,25 .20,25.21,25.22,25.23,25.2 4,25.25	
		Terminal for external conductors (Visual inspection)	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 26.11 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 26.11 IEC 60335-2-14: 2016 +A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 26.11 IEC 60335-2-24: 2010+A1: 2012+A2: 2017	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main 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
			EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 26.11 IEC 60335-2-25:2010 +A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 26.11	
		Provision for earthing (Visual inspection & manual test)	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 27.1,27.2,27.3,27.4 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 27.1,27.2,27.3,27.4 IEC 60335-2-14: 2016 +A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 27.1,27.2,27.3,27.4 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010	Qualitative

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			IS 302-2-24: 1994 Clause 27.1,27.2,27.3,27.4 IEC 60335-2-25:2010 +A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 27.1,27.2,27.3,27.4	
		Provision for earthing (Earthing resistance test)	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 27.5 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 27.5 IEC 60335-2-14: 2016 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 27.5 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 27.5	Current 25A AC Voltage: 0.01 to 5.4 V Resistance: 0.01Ω to 1 Ω

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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			IEC 60335-2-25:2010 +A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 27.5	
		Provision for earthing (Visual inspection)	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 27.6 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 27.6 IEC 60335-2-14: 2016+A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 27.6 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 27.6 IEC 60335-2-25:2010	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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			+A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 27.6	
		Screws and connections (Torque test for screws and nuts)	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 28.1 IEC 60335-2-7: 2008+A1: 2011 +A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 28.1 IEC 60335-2-14: 2016 +A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 28.1 IEC 60335-2-24: 2010+A1: 2012 +A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 28.1 IEC 60335-2-25:2010 +A1:2014 +A2:2015	0.1Nm to 2.5 Nm

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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			EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 28.1	
		Screw and connections (Visual inspection & manual test)	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 28.2,28.3,28.4 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 28.2,28.3,28.4 IEC 60335-2-14: 2016+A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 28.2,28.3,28.4 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 28.2,28.3,28.4 IEC 60335-2-25:2010 +A1:2014+A2:2015 EN 60335-2-25: 2012	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main 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
			IS 302-2-25:2014 Clause 28.2,28.3,28.4	
		Clearance and creepage distances and solid insulation	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 29.1,29.2,29.3 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 29.1,29.2,29.3 IEC 60335-2-14: 2016 +A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 29.1,29.2,29.3 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 29.1,29.2,29.3 IEC 60335-2-25:2010 +A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014	0.01 mm to 200mm

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main 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
		Resistance to Heat and fire (Ball pressure test)	Clause 29.1,29.2,29.3 IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 30.1 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 30.1 IEC 60335-2-14: 2016 +A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 30.1 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 30.1 IEC 60335-2-25:2010 +A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 30.1	Ambient to 125°C 2mm

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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		Resistance to heat and fire (Glow-wire test and Needle flame test)	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 30.2 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 30.2 IEC 60335-2-14: 2016+A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 30.2 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 30.2 IEC 60335-2-25:2010 +A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 30.2	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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		Resistance to rusting (Visual Inspection)	IEC 60335-1: 2010+A1: 2013 +A2: 2016 EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 31 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 31 IEC 60335-2-14: 2016+A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 31 IEC 60335-2-25:2010 +A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 31	Qualitative
		Radiation, toxicity and similar hazardous	IEC 60335-1: 2010+A1: 2013+A2: 2016	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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			EN 60335-1: 2002 +A1+ A11: 2004+A12: 2006+A13: 2008+A14: 2010+A15: 2011 IS 302: Part 1:2008+A1:2009+A2:2013 +A3:2014+A4:2014 Clause 32 IEC 60335-2-7: 2008+A1: 2011+A2:2016 EN 60335-2-7: 2010 +A11: 2013 IS 302-2-7: 2010 Clause 32 IEC 60335-2-14: 2016+A1:2019 EN 60335-2-14: 2006+A1: 2008 IS 302-2-14: 2009 Clause 32 IEC 60335-2-24: 2010+A1: 2012+A2: 2017 EN 60335-2-24: 2010 IS 302-2-24: 1994 Clause 32 IEC 60335-2-25:2010 +A1:2014+A2:2015 EN 60335-2-25: 2012 IS 302-2-25:2014 Clause 32	

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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II.	SAFETY TESTING FACILITY			
1.	Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 1: General requirements (Ammeters; Digital recorders; Earth resistance tester; Varmeters Voltmeters Watthour meters Watt meters; Electricity meters; Galvanometers & null detectors; Graphic recording instruments; Insulation resistance tester; Ohmmeters; Phase meters; Power factor meters; sterilizer; Transducers and Electrical industrial	Mains supply (Input power measurement test)	IEC 61010-1: 2010+A1:2016 Clause 5.1.3 EN 61010-1:2010 Clause 5.1.3	1 mA to 20 A 0.2 mW to 3000W
		Durability of Markings	IEC 61010-1: 2010+A1:2016 Clause 5.3 EN 61010-1:2010 Clause 5.3	Qualitative
		Determination of accessible part	IEC 61010-1: 2010+A1:2016 Clause 6.2 EN 61010-1:2010 Clause 6.2	Qualitative Rigid test finger, Jointed test finger Test pin: 100mm X 4mm Test Pin: Dia-3mm
		Permissible limits for accessible parts in normal condition	IEC 61010-1: 2010+A1:2016 Clause 6.3.1 EN 61010-1:2010 Clause 6.3.1	0.1 to 100 V _{peak} 0.1 to 100 VDC 0.001 to 50 mA
		Impedance of PROTECTIVE BONDING of plug-connected equipment (Earth bond test)	IEC 61010-1: 2010+A1:2016 Clause 6.5.2.4 EN 61010-1:2010 Clause 6.5.2.4	Current 25A AC Voltage: 0.01 to 5.4 V Resistance: 0.01Ω to 1 Ω
		Insulation requirements (Determination of working voltage, measurement of creepage and	IEC 61010-1: 2010+A1:2016 Clause 6.7.1.1, 6.7.1.2 and 6.7.1.3/ EN 61010-1:2010	0.1 V to 2.8 kV AC 0.1 V to 4 kV DC 0.01 mm to 200 mm

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	process-control equipment; Electrical laboratory equipment and similar measuring equipment) other Electrical test and measurement equipment	clearance)	Clause 6.7.1.1, 6.7.1.2 and 6.7.1.3	
		Humidity preconditioning	IEC 61010-1: 2010+A1:2016 Clause. 6.8.2 EN 61010-1:2010 Clause 6.8.2	Qualitative 40°C ± 2°C 93% RH ± 3%RH
		Dielectric strength test (AC Voltage test and DC Voltage test)	IEC 61010-1: 2010+A1:2016 Clause 6.8.3.1 & 6.8.3.2 EN 61010-1:2010 Clause 6.8.3.1 & 6.8.3.2	0.01kVac to 3.0kVac 0.01kVdc to 4.2kVdc
		Cord anchorage	IEC 61010-1: 2010+A1:2016 Clause 6.10.2.2 EN 61010-1:2010 Clause 6.10.2.2	30N, 60N, 100N 0.1Nm, 0.25Nm, 0.35Nm 2mm
		Plugs and connectors	IEC 61010-1: 2010+A1:2016 Clause 6.10.3 EN 61010-1:2010 Clause 6.10.3	0.1 to 400 V peak 4 ns to 5s
		Stability test	IEC 61010-1: 2010+A1:2016 Clause 7.4 EN 61010-1:2010 Clause 7.4	0.1° to 10°
		Static test	IEC 61010-1: 2010+A1:2016 Clause 8.2.1 EN 61010-1:2010 Clause 8.2.1	0.1N to 30N

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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
		Impact test	IEC 61010-1: 2010+A1:2016 Clause 8.2.2 EN 61010-1:2010 Clause 8.2.2	500g, 50mm
		Drop test	IEC 61010-1: 2010+A1:2016 Clause 8.3 EN 61010-1:2010 Clause 8.3	Qualitative
		Constructional requirements (Horizontal-vertical burning test)	IEC 61010-1: 2010+A1:2016 Clause 9.3.2 EN 61010-1:2010 Clause 9.3.2	Qualitative
		Limited energy circuit (Measurement of limited power in circuits)	IEC 61010-1: 2010+A1:2016 Clause 9.4 EN 61010-1:2010 Clause 9.4	0.1Vdc to 120Vdc 0.1Adc to 60Adc
		Surface temperature limits for protection against burns (Heating test)	IEC 61010-1: 2010+A1:2016 Clause 10.1 EN 61010-1:2010 Clause 10.1	Ambient to 250°C
		Non- metallic enclosures (Stress relief test)	IEC 61010-1: 2010+A1:2016 Clause. 10.5.2 EN 61010-1:2010 Clause 10.5.2	0.1°C to 100°C
		Insulating material (Ball pressure test)	IEC 61010-1: 2010+A1:2016	Ambient to 125°C 2mm

**Neeraj Verma
Convenor**

**Birendra Prasad Murmu
Program Manager**

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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			Clause 10.5.3 EN 61010-1:2010 Clause 10.5.3	
		Insulating material (Vicat softening Test)	IEC 61010-1:2010+A1:2016 Clause 10.5.3 EN 61010-1:2010 Clause 10.5.3	25°C to 300°C
		Cleaning	IEC 61010-1:2010+A1:2016 Clause 11.2 EN 61010-1:2010 Clause 11.2	0.01kVac to 3.0kVac 0.01kVdc to 4.2kVdc
		Spillage	IEC 61010-1:2010+A1:2016 Clause 11.3 EN 61010-1:2010 Clause 11.3	0.01kVac to 3.0kVac 0.01kVdc to 4.2kVdc
		Overflow	IEC 61010-1:2010+A1:2016 Clause 11.4 EN 61010-1:2010 Clause 11.4	0.01kVac to 3.0kVac 0.01kVdc to 4.2kVdc
		Single fault condition	IEC 61010-1:2010+A1:2016 Clause 4.4 EN 61010-1:2010 Clause 4.4	Ambient to 250°C

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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III.	ENVIRONMENTAL TEST FACILITY			
1.	Environmental Testing-for Electrical and Electronics Products (Chamber Dimension: H X W X D: 940 X 950 X 1400 mm)	Cold test	IEC 60068-2-1:2007 EN 60068-2-1:2007 IS 9000: Part 2: Sec 1 to 4	5°C to -65°C
		Dry heat test	IEC 60068-2-2:2007 EN 60068-2-2:2007 IS 9000: Part 3: Sec 1 to 5	25°C to +180°C
		Damp heat, cyclic	IEC 60068-2-30:2005 EN 60068-2-30:2005 IS 9000: Part 5: Sec 1 to 2	25°C to 60°C 17% RH to 94% RH
		Composite temperature/ humidity cyclic test	IEC 60068-2-38:2009 EN 60068-2-38:2009 IS 9000: Part 6	-10°C to 70°C 17% RH to 94% RH
		Damp heat, steady state	IEC 60068-2-78:2012 EN 60068-2-78:2013 IS 9000: Part 4	25°C to 95°C 17% RH to 94% RH
		Salt mist Test	IS 9000 Part 11: 2016	35°C ± 3°C 90% RH to 95% RH
IV.	ELECTRIC TOYS			
1.	Electric Toys (Constructional sets; experimental sets; functional toys (having a function similar to an appliance or installation used by adults) and video toys (toys	General	IEC 62115: 2017 Clause 5.1	Qualitative
		Preconditioning (Overload test)	IS 15644: 2006+A1:2014 / Clause 5.15 ISO 8124-1/Clause 5.12.5	35kg, 80kg, 140kg
		Preconditioning (Tension test)	IEC 62115: 2017 Clause 5.2 ISO 8124-1 5.24.6.1	0.1N to 70N

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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	having a screen and means of activation, such as a joystick or keyboard; Separate screens having a rated voltage of more than 24 v are not considered to be part of the toy). Toys using electricity for secondary functions are also within the scope of this standard (a dolls house having an interior lamp is an example of such a toy)	Preconditioning (Tension test & Torque test)	IS 15644: 2006+A1:2014 Clause 5.15 ISO 8124-1 Clause 5.24.6.1 & 5.24.5	0.1N to 70N 0.1Nm to 0.45Nm
		Preconditioning (Drop test)	IEC 62115: 2017 Clause 5.2 IS 15644: 2006+A1:2014 Clause 5.15 ISO 8124-1 Clause 5.24.2	Qualitative
		Preconditioning (Dynamic strength test)	IEC 62115: 2017 Clause 5.2 IS 15644: 2006+A1:2014 Clause 5.15 ISO 8124-1 Clause 5.24.4	Qualitative
		Preconditioning (Tension test for seams & Torque test)	IEC 62115-1: 2017 Clause 5.2 IS 15644: 2006+A1:2014 Clause 5.15 ISO 8124-1 Clause 5.24.6.2 & 5.24.5	Qualitative
		Verification of Markings and instructions (Marking Test) (Durability)	IEC 62115: 2017 Clause 7.2.7 IS 15644: 2006+A1:2014 Clause 7.7	Qualitative
		Power input	IEC 62115: 2017 Clause 8 IS 15644: 2006+A1:2014 Clause 8	0.5 A to 2 A 100 W
		Heating and abnormal operation	IEC 62115: 2017 Clause 9	Ambient to 300°C

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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			IS 15644: 2006+A1:2014 Clause 9	
		Electric strength at operating temperature	IEC 62115: 2017 Clause 10.1 IS 15644: 2006+A1:2014 Clause 10	250 VAC
		Electric strength under humid conditions	IEC 62115:2017 Clause 10.2 IS 15644: 2006+A1:2014 Clause 11.2,12	20 °C and 30 °C 93± 3%RH
		Electric toys used in water (Ingress protection) (IPX4) and Water immersed test	IEC 62115:2017 Clause 11 IS 15644: 2006+A1:2014 Clause 11.1	Qualitative
		Mechanical strength of enclosures	IEC 62115:2017 Clause 12.1	0.2J to 0.5J
		Mechanical strength of enclosures	IS 15644: 2006+A1:2014 Clause 13	0.2J to 0.5J
		Attachment strength	IEC 62115:2017 Clause 12.2	0.1N to 90N
		Verification of Construction (working voltage test)	IEC 62115:2017 Clause 13.1 IS 15644: 2006+A1:2014 Clause 14.1	0.1 to 400 VAC
		Other batteries (Mechanical test)	IEC 62115:2017 Clause 13.4.2 IS 15644: 2006+A1:2014 Clause 14.7	Qualitative
		Electric toys placed above a child	IEC 62115:2017 Clause 13.4.4 IS 15644: 2006+A1:2014 Clause 14.16	Qualitative

**Neeraj Verma
Convenor**

**Birendra Prasad Murmu
Program Manager**

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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		Battery compartment fasteners	IEC 62115:2017 Clause 13.4.6	0.1N to 20N
		Plug and sockets	IEC 62115:2017 Clause 13.5	Vernier caliper 0 - 200mm
		Series motor	IEC 62115:2017 Clause 13.7	15 W to 100 W
		Working voltage	IEC 62115:2017 Clause 13.8 IS 15644: 2006+A1:2014 Clause 14.15	0.1V to 300V 0.001mA to 50mA 2000pF to 2 mF
		Electric toys connecting to other equipment	IEC 62115:2017 Clause 13.9	0.01mm to 1mm 0.01kV to 1.5kV
		Speed limitation of ride-on toys	IEC 62115:2017 Clause 13.10 ISO 8124-1 Clause 5.17	Qualitative
		Fixed parts	IEC 62115:2017 Clause 14.2	0.01mm to 200mm
		Batteries	IEC 62115:2017 Clause 15.5	Qualitative
		Screws and connection (Torque test)	IEC 62115:2017 Clause 16.1 IS 15644: 2006+A1:2014 Clause 17.1	0.1Nm to 2.5Nm
		Clearances and creepage distances	IEC 62115:2017 Clause 17 IS 15644: 2006+A1:2014 Clause 18	0.01mm to 200mm
		Resistance to heat and fire (Ball pressure test)	IEC 62115:2017 Clause 18.1 IS 15644: 2006+A1:2014 Clause 19.1	Ambient to 300°C 2mm

**Neeraj Verma
Convenor**

**Birendra Prasad Murmu
Program Manager**

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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		Resistance to heat and fire (Glow wire test)	IEC 62115:2017 Clause 18.2.2 IS 15644: 2006+A1:2014 Clause 19.2.1	Qualitative
		Resistance to heat and fire (Needle flame test)	IEC 62115:2017 Clause 18.2.3 IS 15644: 2006+A1:2014 Clause 19.2.2	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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ELECTRONICS TESTING

I.	IT EQUIPMENT			
1.	Information Technology Equipments	Input Current	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 1.6.2	1 mA to 20A 0.2 mW to 3000 W
	a. Banking equipment			
	b. Data and text processing machines and associated equipment	Voltage limit of handheld Equipment (Visual Inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 1.6.3	Qualitative
	c. Data network equipment			
	d. Electrical and electronics retail equipment	Neutral conductor (Visual Inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 1.6.4	Qualitative
	e. Electrical and electronic office machines			
	f. Postage equipment	Durability Test	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 1.7.11	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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	g. Telecommunication network infrastructure equipment	Protection in operator access area (Accessibility test using test probes)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause. 2.1.1; Clause. 2.1.1.1 b); Clause. 2.1.1.1 c); Clause. 2.1.1.1 d)	Qualitative
	h. Telecommunication terminal equipment and similar information technology equipment (Electronic Games (Video); Plasma/LCD/LED Televisions; Optical Disc Players With built in amplifiers' Amplifiers, Electronic Musical Systems; Power Adaptors for Audio, Video & similar Electronic Apparatus; video projectors; audio and/or video educational apparatus and Similar Audio	Inspection of Battery compartments (Visual Inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.1.1.2	Qualitative
		Access to ELV wiring (Electric strength test and Measurement of distance through insulation)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.1.1.3	0.01mm to 50 mm 0.01kV to 3.0kV
		Access to hazardous voltage circuit wiring (Electric strength test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.1.1.4	0.01kV to 3.0kV
		Energy hazards	IEC 60950-1:2005 & A1:2009 & A2:2013	0.1Vdc to 120Vdc 0.1Adc to 60Adc

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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	Video/Information Technology equipment covered in this standard)		EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.1.1.5	0.1V to 2.8kVrms 0.1V to 4kVDC
		Manual control (Electric strength test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.1.1.6 (Checked during cl 5.2.2)	0.01kV to 3.0kV
		Discharge of capacitors test	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.1.1.7	0.1 to 400 VAC
		Energy hazards measurement- d.c. mains supply	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.1.1.8	0.1Vdc to 120Vdc 0.1Adc to 60Adc 0.1V to 2.8kVrms 0.1V to 4kVDC
		Audio amplifiers (Measurement of touch current and Accessibility test using test probes)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015	0.001mA to 50 mA 0.1V to 2.8kVrms 0.1V to 4kVDC

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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			Clause 2.1.1.9	
		Protection in service access areas (Visual Inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.1.2	Qualitative
		Protection in restricted access location (Visual Inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.1.3	Qualitative
		SELV circuits (Voltage under normal conditions & Voltage under fault conditions/Connection of SELV circuits to other circuits)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.2	0.1Vac to 200Vac 0.1Vdc to 120Vdc
		TNV circuits (Limits/Connection of TNV Circuits to other circuits (Limits of TNV circuits))	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.3.1	0.1V to 1500Vac 0.1V to 120Vdc
		Separation of TNV circuits from other circuits and from accessible parts	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013	0.01kV to 3.0kV

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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		(Electric strength test)	IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.3.2	
		Separation from hazardous voltage (Electric strength test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.3.3	0.01kV to 3.0kV
		Connection of TNV circuits to other circuits	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.3.4	0.1V to 1500Vac 0.1V to 120Vdc
		Test for operating voltages generated externally	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.3.5	0.1Vac to 120Vac
		Limited Current Circuit Measurements test	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.4.2	0.1V to 500Vac 0.001mA to 50mA
		Limited Power Sources (Measurement of power)	IEC 60950-1:2005 & A1:2009 & A2:2013	0.1Vdc to 120Vdc 0.1Adc to 60Adc

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

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		in output ports)	EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.5	
		Protective earthing (Visual Inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.6.1	Qualitative
		Size of protective earthing conductors	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.6.3.2	0.01 mm to 200 mm
		Size of protective bonding conductors	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.6.3.3	0.01 mm to 200 mm
		Resistance of earthing conductors and their terminations (Earth bond test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.6.3.4	0.1A to 40A

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

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		Size of terminals	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.6.4	0.01 mm to 200 mm
		Size of protective earthing and bonding terminals	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.6.4.2	0.01 mm to 200 mm
		Short circuit backup protection (Visual Inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.7.3 (checked during test of cl 5.3)	Qualitative
		Number and location of protective devices (Visual Inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.7.4	Qualitative
		Protection requirements (Visual Inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 &	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

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			A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.8.2	
		Inadvertent reactivation (Visual Inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.8.3	Qualitative
		Fail safe operation test	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.8.4	Ambient to 250°C
		Humidity conditioning	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.9.2	20°C to 40°C ± 2°C 93% RH ± 3%RH
		Creepage and Clearance, distances through insulation	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause. 2.10.1	0.01 mm to 200 mm

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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		Frequency (Visual Inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.10.1.1	Qualitative
		Intervening unconnected conductive parts (Visual Inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.10.1.4	Qualitative
		Insulation with varying dimensions (Visual Inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.10.1.5	Qualitative
		Special separation requirements (Visual Inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause. 2.10.1.6	Qualitative
		Insulation in circuits generating starting pulses (Visual Inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 &	Qualitative

**Neeraj Verma
Convenor**

**Birendra Prasad Murmu
Program Manager**

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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			A1:2013 & A2:2015 Clause 2.10.1.7	
		Determination of working voltage RMS working voltage Peak working voltage	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause. 2.10.2.1; Clause. 2.10.2.2; Clause. 2.10.2.3	0.1V to 2.8kVAC 0.1V to 4kVDC
		Clearances	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause. 2.10.3.1	0.01 mm to 200 mm
		Clearances in primary circuits	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause. 2.10.3.3	0.01 mm to 200 mm
		Clearances in secondary circuits	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause. 2.10.3.4	0.01 mm to 200 mm

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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		Clearances in circuits having starting pulses	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause. 2.10.3.5	Vernier caliper: 0.01 mm to 200 mm
		Transients from A.C. mains supply	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause. 2.10.3.6	100 V to 7kV for 1.2x 50µs 1.2 µs (Rise time) 50 µs (Time duration) 100 V to 7 kV for 10X700 µs 10 µs (Rise time) 700 µs (Time duration)
		Transients from D.C. mains supply	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause. 2.10.3.7	100 V to 7kV for 1.2x 50µs 1.2 µs (Rise time) 50 µs (Time duration) 100 V to 7 kV for 10X700 µs 10 µs (Rise time) 700 µs (Time duration)
		Transients from telecommunication networks and cable distribution systems	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause. 2.10.3.8	100 V to 7kV for 1.2x 50µs 1.2 µs (Rise time) 50 µs (Time duration) 100 V to 7 kV for 10X700 µs 10 µs (Rise time) 700 µs (Time duration)
		Transient voltages	IEC 60950-1:2005 & A1:2009 & A2:2013	100 V to 7kV for 1.2x 50µs

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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			EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.10.3.9	1.2 μ s (Rise time) 50 μ s (Time duration) 100 V to 7 kV for 10X700 μ s 10 μ s (Rise time) 700 μ s (Time duration)
		Creepage distances	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.10.4.1	Vernier caliper: 0.01 mm to 200 mm
		Material group and comparative tracking index (Comparative tracking index test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.10.4.2	100 Vac to 600Vac
		Minimum creepage distances	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.10.4.3	Vernier caliper: 0.01 mm to 200 mm
		Solid insulation (Visual inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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			Clause 2.10.5.1	
		Distance through insulation	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.10.5.2	Vernier caliper: 0.01 mm to 200 mm
		Insulating compound as solid insulation (Visual inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.10.5.3	Qualitative
		Semiconductor (Visual inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.10.5.4	Qualitative
		Cemented joints (Humidity test and Electric strength test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.10.5.5	20°C to 40°C ± 2°C 93% RH ± 3%RH 0.01kV to 3.0kV
		Thin sheet material (Visual inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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			IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.10.5.6	
		Separable thin sheet material (Electric strength test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.10.5.7	0.01kV to 3.0kV
		Non-separable thin sheet material (Electric strength test and Mandrel test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.10.5.8	0.01kV to 3.0kV
		Thin sheet material-standard test procedure (Electric strength test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.10.5.9	0.01kV to 3.0kV
		Thin sheet material-alternative test procedure (Electric strength test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.10.5.10	0.01kV to 3.0kV
		Insulation in wound components	IEC 60950-1:2005 & A1:2009 & A2:2013	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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		(Visual inspection)	EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.10.5.11	
		Wire in wound components (Visual inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.10.5.12	Qualitative
		Wire with solvent-based enamel in wound components (Electric strength test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.10.5.13	0.01kV to 3.0kV
		Additional insulation in wound components (Electric strength test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.10.5.14	0.01kV to 3.0kV
		Thermal cycling test	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.10.9	0°C to 100°C

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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		Test for pollution degree 1 environment and for insulating compound	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.10.10	0°C to 100°C 93% RH ± 3%RH
		Test for semiconductor devices and for cemented joints	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.10.11	0°C to 100°C 93% RH ± 3%RH
		Enclosed and sealed parts (Visual inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 2.10.12	Qualitative
		Current rating and over current protection (Visual inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 3.1.1 (checked during test cl 4.5.2 and cl 4.5.3)	Qualitative
		Insulation of conductors (Electric strength test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 &	0.01kV to 3.0kV

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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			A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 3.1.4	
		Beads and ceramic insulators (Force test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 3.1.5	0.1N to 10N
		Termination of conductors (Force test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 3.1.9	0.1N to 10N
		Multiple supply connection (Visual inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 3.2.2	Qualitative
		Permanently connected equipment (Measurement of size of cable and conduits)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 3.2.3	0.01 mm to 200 mm

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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		Appliance inlets (Visual Inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 3.2.4	Qualitative
		Cord anchorage and strain relief (Cord anchorage test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 3.2.6	0.01 mm to 2 mm
		Protection against mechanical damage (Visual inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 3.2.7	Qualitative
		Cord guards (Cord guard test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 3.2.8	0.01 mm to 200 mm
		Supply wiring space (Visual inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 &	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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			A1:2013 & A2:2015 Clause 3.2.9 (checked during test 3.3.4)	
		Connection of non-detachable power supply cords (Temperature measurement test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 3.3.2	Qualitative
		Conductor sizes to be connected (Visual inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 3.3.4	Qualitative
		Wiring terminal sizes (Visual inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 3.3.5	Qualitative
		Wiring terminal design (Visual inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 3.3.6	Qualitative
		Stranded wire (Visual inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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			EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 3.3.8	
		Data ports for additional equipment (Measurement of power in output ports)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 3.5.4	0.1Vdc to 120Vdc 0.1Adc to 60Adc
		Stability test	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 4.1	0.1° to 10°
		Steady force test	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Cl. 4.2.1 4.2.2, 4.2.3, 4.2.4	0.01 N to 30N Steady force tool 250N
		Impact Test	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 4.2.5	50mm & 500g

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

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		Drop test	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 4.2.6	Qualitative
		Stress relief test	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 4.2.7	0.1°C to 100°C
		Wall or ceiling mounted equipment (Wall or ceiling mount test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 4.2.10	Qualitative
		Handles and manual controls (Force test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 4.3.2	0.1N to 250N
		Securing of parts (Visual inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 &	Qualitative

**Neeraj Verma
Convenor**

**Birendra Prasad Murmu
Program Manager**

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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			A1:2013 & A2:2015 Clause 4.3.4	
		Direct plug-in equipment (Socket outlet test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 4.3.4	0.1mm to 300mm 0.25N,0.5N,1.25N
		Batteries (Unintentional charging, reverse charging, Excessive discharge, electric strength test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 4.3.8	1.4 VDC to 424 VDC Ambient to 250°C
		Dust, powders, liquids and gases (Visual inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 4.3.10	Qualitative
		Protection against hazardous moving parts	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 4.4	Qualitative
		Temperature tests	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 &	Ambient to 250°C

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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			A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 4.5.2	
		Temperature limits for materials (Visual inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 4.5.3	Qualitative
		Touch Temperature limits. (Visual inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 4.5.4	Qualitative
		Resistance to abnormal heat (Ball Pressure Test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 4.5.5	2 mm
		Top and side enclosure	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 4.6.1	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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		Measurement Bottom of fire enclosures (Needle flame test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 4.6.2	Qualitative
		Constructional design measures (Visual inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 4.6.4.1	Qualitative
		Evaluation measure of larger opening (Visual inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 4.6.4.2	Qualitative
		Use of metalized parts (Visual inspection)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 4.6.4.3	Qualitative
		Adhesive for constructional purposes (Humidity conditioning)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 &	25°C to 100°C - 40°C ± 2°C 93% RH ± 3%RH

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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			A1:2013 & A2:2015 Clause 4.6.5	
		Material test (Glow wire Test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 4.7.3.1	Qualitative
		Materials for fire enclosures (Horizontal vertical flame test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 4.7.3.2	Qualitative
		Materials for components and other parts outside the fire enclosures (Horizontal vertical flame test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 4.7.3.3	Qualitative
		Materials for components and other parts inside the fire enclosures (Horizontal vertical flame test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 4.7.3.4	Qualitative
		Materials used in high voltage components (Needle flame test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 &	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory **SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka**

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			A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 4.7.3.6	
		Touch current and protective conductor current	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 5.1	0.001mA to 50mA
		Electric strength	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 5.2	0.01kVac to 3.0kVac 0.01kVdc to 5.0kVdc
		Abnormal operating and fault conditions	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 5.3	Ambient to 250°C
		Separation between telecommunication network from Earth (Electric strength test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 6.1.2	0.01kVac to 3.0kVac

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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		Separation requirements (Electric strength test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 6.2.1	0.01kVac to 3.0kVac
		Impulse test	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 6.2.2.1	100 V to 7 kV for 10X700 μ s 10 μ s (Rise time) 700 μ s (Time duration)
		Steady State test (Electric strength test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 6.2.2.2	0.01kVac to 3.0kVac
		Compliance criteria (IR Test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 6.2.2.3	DC voltage: 500V Resistance: Up to 50 G Ω
		Protection of the telecommunication wiring system from overheating (Measurement of power)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 &	AC & DC Current: 1 mA to 20 A AC & DC Voltage: 0.15 V to 600 V Power:

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

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		in TNV circuits)	A1:2013 & A2:2015 Clause 6.3	0.2 mW to 3000 W Frequency: 1-999.9Hz DC Load: 0.1Vdc to 120Vdc 0.1Adc to 60Adc
		Protection of equipment users from overvoltage's on the cable distribution system (Impulse test, electric strength test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 7.3	100 V to 7 kV for 10X700 μ s 10 μ s (Rise time) 700 μ s (Time duration) 0.01kVac to 3.0kVac
		Insulation between primary circuits and cable distribution systems (Voltage surge test, Impulse test)	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 7.4.1	100 V to 7 kV for 10X700 μ s 10 μ s (Rise time) 700 μ s (Time duration) 0.01V to 10kV
		Impulse test	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 6.2.2.1	100 V to 7 kV for 10X700 μ s 10 μ s (Rise time) 700 μ s (Time duration)
		Voltage surge test	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015	0.0V to 10kV

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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		Impulse test	Clause 7.4.2 IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause 7.4.3 & 6.2.2.1	100 V to 7 kV for 10X700 μ s 10 μ s (Rise time) 700 μ s (Time duration)
		Flammability test for fire enclosures of movable equipment having a total mass exceeding 18 kg and of stationary equipment	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause Annex A.1	Qualitative
		Flammability test for fire enclosures of movable equipment having a total mass not exceeding 18 kg, and for material and components located inside fire enclosures	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause Annex A.2	Qualitative
		Motor tests under abnormal conditions	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause Annex B	Ambient to 250°C
		Transformers (Overload test)	IEC 60950-1:2005 & A1:2009 & A2:2013	Ambient to 250°C

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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			EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause Annex C	
		Mandrel test	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause Annex AA	Qualitative
		Requirements for mounting means of rack-mounted equipment	IEC 60950-1:2005 & A1:2009 & A2:2013 EN 60950-1:2006 & A1:2010 & A2:2013 IS 13252: Part 1:2010 & A1:2013 & A2:2015 Clause Annex DD	Qualitative
		Fixing of Conductors (10N Force test)	IEC 62368-1:2018 (Clause 4.6) EN 62368-1:2014+A1:2017 (Clause 4.6)	0.1N to 10N
		Equipment for direct insertion into mains socket-outlets (socket-outlet test)	IEC 62368-1:2018 (Clause 4.7) EN 62368-1:2014+A1:2017 (Clause 4.7)	0.1mm to 300mm 0.25N,0.5N,1.25N
		Stress relief Test for equipment containing coin / button cell batteries	IEC 62368-1:2018 (Clause 4.8.4.2) EN 62368-1:2014+A1:2017 (Clause 4.8.4.2)	25°C to 100°C

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

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		Battery Replacement Test for equipment containing coin / button cell batteries	IEC 62368-1: 2018 (Clause 4.8.4.3) EN 62368-1:2014+A1:2017 (Clause 4.8.4.3)	0.1Nm to 2.5Nm
		Drop test for equipment containing coin / button cell batteries	IEC 62368-1: 2018 (Clause 4.8.4.4) EN 62368-1:2014+A1:2017 (Clause 4.8.4.4)	Qualitative
		Impact Test for equipment containing coin / button cell batteries	IEC 62368-1:2018 (Clause 4.8.4.5) EN 62368-1:2014+A1:2017 (Clause 4.8.4.5)	0.2J to 2J
		Impact Test for equipment containing coin / button cell batteries	IEC 62368-1:2018 (Clause 4.8.4.5) EN 62368-1:2014+A1:2017 (Clause 4.8.4.5)	0.2J to 2J
		Crush test for equipment containing coin / button cell batteries	IEC 62368-1:2018 (Clause 4.8.4.6) EN 62368-1:2014+A1:2017 (Clause 4.8.4.6)	Qualitative
		Compliance criteria (Force test)	IEC 62368-1:2018 (Clause 4.8.5) EN 62368-1:2014+A1:2017 (Clause 4.8.5)	Straight unjointed test probe with force 30N
		Classification and limits of electrical energy sources (Measurement of Steady state voltage and current limits, Capacitance limits)	IEC 62368-1:2018 (Clause 5.2) EN 62368-1:2014+A1:2017 (Clause 5.2)	0.001mA to 50mA 0.1V to 2.5kVrms 0.1V to 4kVDC

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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		Accessibility to electrical energy sources and safeguards	IEC 62368-1:2018 (Clause 5.3.2) EN 62368-1:2014+A1:2017 (Clause 5.3.2)	Qualitative
		Terminals for Connecting stripped wire	IEC 62368-1:2018 (Clause 5.3.2.4) EN 62368-1:2014+A1:2017 (Clause 5.3.2.4)	Qualitative
		Maximum operating temperature (Temperature measurement test)	IEC 62368-1:2018 (Clause 5.4.1.4) EN 62368-1:2014+A1:2017 (Clause 5.4.1.4)	Ambient to 250°C
		Test for pollution degree 1 environment and for insulating compound (Thermal Cycling Test, Electric strength test)	IEC 62368-1:2018 (Clause 5.4.1.5.2) EN 62368-1:2014+A1:2017 (Clause 5.4.1.5.2)	0°C to 100°C 93±3%RH, 20°C to 42°C 0.01kVac to 3kVac
		Measurement of working voltage	IEC 62368-1:2018 (Clause 5.4.1.8) EN 62368-1:2014+A1:2017 (Clause 5.4.1.8)	0.1V to 2.5kVrms 0.1V to 4kVDC
		Vicat Test	IEC 62368-1:2018 (Clause 5.4.1.10.2) EN 62368-1:2014+A1:2017 (Clause 5.4.1.10.2)	25°C to 300°C
		Ball pressure Test	IEC 62368-1:2018 (Clause 5.4.1.10.3) EN 62368-1:2014+A1:2017 (Clause 5.4.1.10.3)	2 mm

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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		Clearance & Creepage distances	IEC 62368-1:2018 (Clause 5.4.2 & 5.4.3) EN 62368-1:2014+A1:2017 (Clause 5.4.2, & 5.4.3)	0.01-200 mm 100-600 V
		Solid insulation (Measurement of distance through insulation, electric strength test)	IEC 62368-1:2018 (Clause 5.4.4) EN 62368-1:2014+A1:2017 (Clause 5.4.4)	0.01-200 mm 0.01kVac to 3kVac
		Standard test procedure for non-separable thin sheet material (Electric strength test)	IEC 62368-1:2018 (Clause 5.4.4.6.4) EN 62368-1:2014+A1:2017 (Clause 5.4.4.6.4)	0.01kVac to 3kVac
		Mandrel Test	IEC 62368-1:2018 (Clause 5.4.4.6.5) EN 62368-1:2014+A1:2017 (Clause 5.4.4.6.5)	Qualitative
		Antenna terminal insulation (Surge, Insulation resistance test)	IEC 62368-1:2018 (Clause 5.4.5) EN 62368-1:2014+A1:2017 (Clause 5.4.5)	100V to 10kV
		Humidity conditioning	IEC 62368-1:2018 (Clause 5.4.8) EN 62368-1:2014+A1:2017 (Clause 5.4.8)	40°C±2°C, 93 ± 3 % RH
		Steady-state test (electric strength test)	IEC 62368-1:2018 (Clause 5.4.10.2.3) EN 62368-1:2014+A1:2017 (Clause 5.4.10.2.3)	0.01kVac to 3kVac
		Test for Separation between external	IEC 62368-1:2018 (Clause 5.4.11)	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

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		circuits and earth	EN 62368-1:2014+A1:2017 (Clause 5.4.11)	
		Capacitor discharge after disconnection of a connector (Capacitor discharge test)	IEC 62368-1:2018 (Clause 5.5.2.2) EN 62368-1:2014+A1:2017 (Clause 5.5.2.2)	0.01V to 400Vpeak: 4ns to 2s
		Insulation between the mains and an external circuit consisting of a coaxial cable (Voltage surge, Impulse, IR test)	IEC 62368-1:2018 (Clause 5.5.8) EN 62368-1:2014+A1:2017 (Clause 5.5.8)	100V to 10kV 100 V to 7 kV for 1.2x 50µs 1.2 µs (Rise time) 50 µs (Time duration) 100 V to 7 kV for 10X700 µs 10 µs (Rise time) 700 µs (Time duration) DC voltage: 500 Up to 50 GΩ
		Resistance of the Protective Bonding System (Earth bond test)	IEC 62368-1:2018 (Clause 5.6.6) EN 62368-1:2014+A1:2017 (Clause 5.6.6)	0.1A to 40A
		Prospective touch voltage, touch current and protective conductor current (Measurement of touch current and protective conductor current)	IEC 62368-1:2018 (Clause 5.7) EN 62368-1:2014+A1:2017 (Clause 5.7)	0.001mA to 50mA
		Classification of power sources (PS) and potential ignition sources (PIS)	IEC 62368-1:2018 (Clause 6.2) EN 62368-1:2014+A1:2017 (Clause	0.1Vdc to 120Vdc 0.1Adc to 60Adc

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

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		(Measurement of power in output circuits)	6.2)	
		Safeguard against fire under normal operating conditions and abnormal conditions (Glow wire test)	IEC 62368-1:2018 (Clause 6.3) EN 62368-1:2014+A11:2017 (Clause 6.3)	Qualitative
		Bottom openings (Needle flame test)	IEC 62368-1:2018 (Clause 6.4.8.3.4) EN 62368-1:2014+A11:2017 (Clause 6.4.8.3.4)	Qualitative
		Separation of a PIS from a fire enclosure and a fire barrier (Needle flame test)	IEC 62368-1:2018 (Clause 6.4.8.4) EN 62368-1:2014+A11:2017 (Clause 6.4.8.4)	Qualitative
		Requirements for interconnection to building wiring (Limited power source test)	IEC 62368-1:2018 (Clause 6.5.2) EN 62368-1:2014+A11:2017 (Clause 6.5.2)	0.1Vdc to 120Vdc 0.1Adc to 60Adc
		Equipment having an electromechanical device for destruction of media (Force test)	IEC 62368-1:2018 (Clause 8.5.4.3) EN 62368-1:2014+A11:2017 (Clause 8.5.4.3)	Qualitative
		Static Stability Test	IEC 62368-1:2018 (Clause 8.6.2.2) EN 62368-1:2014+A11:2017 (Clause 8.6.2.2)	10° 0.1N to 250N

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		Downward Force Test	IEC 62368-1:2018 (Clause 8.6.2.3) EN 62368-1:2014+A11:2017 (Clause 8.6.2.3)	0.1N to 800N
		Relocation Stability	IEC 62368-1:2018 (Clause 8.6.3) EN 62368-1:2014+A11:2017 (Clause 8.6.3)	10°
		Glass slide Test	IEC 62368-1:2018 (Clause 8.6.4) EN 62368-1:2014+A11:2017 (Clause 8.6.4)	10°
		Horizontal force test and compliance criteria (stability and force test)	IEC 62368-1:2018 (Clause 8.6.5) EN 62368-1:2014+A11:2017 (Clause 8.6.5)	0.1N to 250N 15°
		Equipment mounted to wall, ceiling or other structure (Wall or ceiling mount test)	IEC 62368-1:2018 (Clause 8.7) EN 62368-1: 2014 + A11:2017 (Clause 8.7)	0.1N to 880N 0.1Nm to 2.5Nm
		Handle Strength test	IEC 62368-1:2018 (Clause 8.8) EN 62368-1: 2014 + A11: 2017 (Clause 8.8)	Qualitative
		Wheels or casters attachment requirement (Pull force test)	IEC 62368-1:2018 (Clause 8.9) EN 62368-1:2014+ A11:2017 (Clause 8.9)	0.1N to 20N

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

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		Cart, stand or carrier loading test and compliance criteria (Force test)	IEC 62368-1:2018 (Clause 8.10.3) EN 62368-1:2014+A11:2017 (Clause 8.10.3)	0.1N to 440N
		Cart, stand and carrier impact test (Impact test)	IEC 62368-1:2018 (Clause 8.10.4) EN 62368-1:2014+A11:2017 (Clause 8.10.4)	500g, 50mm
		Mechanical Stability (stability and force test)	IEC 62368-1:2018 (Clause 8.10.5) EN 62368-1:2014+A11:2017 (Clause 8.10.5)	0.1N to 100N
		Mounting means for slide-rail mounted equipment (SREM) (Downward force, lateral push force, integrity of slid rail end stop, force test)	IEC 62368-1:2018 (Clause 8.11) EN 62368-1:2014+A11:2017 (Clause 8.11)	0.1N to 530N
		Telescoping or rod antennas (Torque test)	IEC 62368-1:2018 (Clause 8.12) EN 62368-1:2014+A11:2017 (Clause 8.12)	0.1Nm to 0.6Nm
		Input test	IEC 62368-1:2018 (Annex B.2.5) EN 62368-1:2014+A11:2017 (Annex B.2.5)	1 mA to 20A 0.2 mW to 3000 W

**Neeraj Verma
Convenor**

**Birendra Prasad Murmu
Program Manager**

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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		Simulated abnormal operating conditions (Abnormal operation test)	IEC 62368-1:2018 (Annex B.3) EN 62368-1: 2014 + A11: 2017 (Annex B.3)	Ambient to 250°C
		Simulated single fault conditions test	IEC 62368-1:2018 (Annex B.4) EN 62368-1: 2014 + A11:2017 (Annex B.4)	Ambient to 225°C
		Durability, legibility and performance of marking (Marking durability test)	IEC 62368-1:2018 (Annex F.3.9) EN 62368-1: 2014 + A11:2017 (Annex F.3.9)	Qualitative
		Transformers (Overload and electric strength test)	IEC 62368-1:2018 (Annex G.5.3) EN 62368-1: 2014 + A11:2017 (Annex G.5.3)	Ambient to 250°C
		Motors (Motor overload, running overload, locked-rotor overload, electric strength test)	IEC 62368-1:2018 (Annex G.5.4) EN 62368-1: 2014 + A11:2017 (Annex G.5.4)	Ambient to 250°C
		Cord Strain Relief Test	IEC 62368-1:2018 (Annex G.7.3.2) EN 62368-1: 2014 + A11:2017 (Annex G.7.3.2)	0.01mm to 200 mm
		Non-detachable cord bend protection (Cord guard test)	IEC 62368-1:2018 (Annex G.7.5) EN 62368-1: 2014 + A11:2017 (Annex G.7.5)	0.01 mm to 200 mm
		Stranded wire (Visual inspection)	IEC 62368-1:2018 (Annex G.7.6.2) EN 62368-1: 2014 + A11:2017 (Annex G.7.6.2)	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

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		Criteria for telephone ringing signals (TNV circuit test)	IEC 62368-1:2018 (Annex H) EN 62368-1: 2014 + A11:2017 (Annex H)	1 to 400 VAC Non-inductive resistor 5000Ω
		Limited Power Source test	IEC 62368-1:2018 (Annex Q.1) EN 62368-1: 2014 +A11:2017 (Annex Q.1)	0.1Vdc to 120Vdc 0.1Adc to 60Adc
		Resistance to heat and fire (Horizontal Vertical Flame test, Needle flame test)	IEC 62368-1:2018 (Annex S) EN 62368-1: 2014 +A11:2017 (Annex S)	Qualitative
		Steady Force Test 10N	IEC 62368-1:2018 (Annex T.2) EN 62368-1: 2014 + A11: 2017 (Annex T.2)	0.1N to 10N
		Steady Force Test 30N	IEC 62368-1:2018 (Annex T.3) EN 62368-1: 2014 + A11: 2017 (Annex T.3)	0.1N to 30N
		Steady Force Test 100N	IEC 62368-1:2018 (Annex T.4) EN 62368-1: 2014 + A11:2017 (Annex T.4)	0.1N to 100N
		Steady Force Test 250N	IEC 62368-1:2018 (Annex T.5) EN 62368-1: 2014 + A11: 2017 (Annex T.5)	Steady force tool 250N
		Enclosure impact test	IEC 62368-1:2018 (Annex T.6) EN 62368-1: 2014 + A11:2017 (Annex T.6)	500g, 50mm

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

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		Drop Test	IEC 62368-1:2018 (Annex T.7) EN 62368-1: 2014 + A11:2017 (Annex T.7)	Qualitative
		Stress Relief Test	IEC 62368-1:2018 (Annex T.8) EN 62368-1: 2014 + A11:2017 (Annex T.8)	0.1°C to 100°C
		Glass Impact test	IEC 62368-1:2018 (Annex T.9) EN 62368-1: 2014 + A11:2017 (Annex T.9)	500g, 50mm
		Glass fragmentation test	IEC 62368-1:2018 (Annex T.10) EN 62368-1:2014+ A11:2017 (Annex T.10)	Qualitative
		Telescoping or rod antennas (Torque test)	IEC 62368-1:2018 (Annex T.11) EN 62368-1: 2014 + A11:2017 (Annex T.11)	0.1Nm to 0.6Nm
		Accessible part of equipment Surface and openings tested with jointed test probes	IEC 62368-1:2018 (Annex V.1.2) EN 62368-1: 2014+ A11:2017 (Annex V.1.2)	Qualitative
		Openings tested with straight unjointed test probes	IEC 62368-1:2018 (Annex V.1.3) EN 62368-1: 2014+ A11:2017 (Annex V.1.3)	Qualitative
		Plugs, Jacks, Connectors	IEC 62368-1:2018 (Annex V.1.4) EN 62368-1: 2014+ A11:2017 (Annex V.1.4)	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

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		Slot Openings	IEC 62368-1:2018 (Annex V.1.5) EN 62368-1: 2014+ A11:2017 (Annex V.1.5)	Qualitative
		Terminal intended to be used by an ordinary person	IEC 62368-1:2018 (Annex V.1.6) EN 62368-1:2014+ A11:2017 (Annex V.1.6)	Qualitative
II.	AUDIO EQUIPMENT			
1.	Audio, Video and similar Electronic Apparatus (Electronic Games (Video); Plasma/LCD/LED Televisions; Optical Disc Players With built in amplifiers' Amplifiers, Electronic Musical Systems; Power Adaptors for Audio, Video & similar Electronic Apparatus; video projectors; audio and/or video educational apparatus and	Identification and supply ratings (Visual Inspection)	IEC 60065:2014; EN 60065:2014; IS 616:2017 (Clause 4.2)	Qualitative
		Supply apparatus for general use (Visual Inspection)	IEC 60065:2014; EN 60065:2014; IS 616:2017 (Clause 4.2.12.)	Qualitative
		Fault conditions (Visual Inspection)	IEC 60065:2014; EN 60065:2014; IS 616:2017 (Clause 4.3)	Qualitative
		Markings Test	IEC 60065:2014; EN 60065:2014; IS 616:2017 (Clause 5.1)	Qualitative
		Input Test	IEC 60065:2014; EN 60065:2014; IS 616:2017 (Clause 5.2h)	1 mA to 20 A 0.2 mW to 3000 W

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

SGS India Private Limited, Consumer and Retail-Electrical & Electronics, Testing Laboratory, Ahmed Plaza, No. 38/1 and 38/2, New BBMP No. 88/45/45, Beretena Agrahara, Begur Hobli, Hosur Main Road, Bangalore, Karnataka

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	Similar Audio Video apparatus covered in this standard)	Terminals (Visual Inspection)	IEC 60065:2014; EN 60065:2014; IS 616:2017 (Clause 5.3)	Qualitative
		Caution marking (Visual Inspection)	IEC 60065:2014; EN 60065:2014; IS 616:2017 (Clause 5.4)	Qualitative
		Instructions (Visual Inspection)	IEC 60065:2014; EN 60065:2014; IS 616:2017 (Clause 5.5)	Qualitative
		Heating under normal operating conditions	IEC 60065:2014; EN 60065:2014; IS 616:2017 (Clause 7.1)	Ambient to 250°C
		Heat resistance of insulating material (Vicat softening Test)	IEC 60065:2014; EN 60065:2014; IS 616:2017 (Clause 7.2)	25°C to 300°C
		Constructional requirements with regard to the protection against electric shock (Measurement of resistor, capacitor, inductor value)	IEC 60065:2014; EN 60065:2014; IS 616:2017 (Clause 8)	Resistance: 0.0 Ω to 200MΩ Capacitance: 2000pF to 2mF Inductance: 200μH to 20H
		Conductive parts (Visual Inspection)	IEC 60065:2014; EN 60065:2014; IS 616:2017 (Clause 8.1)	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

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		Constructional requirements	IEC 60065:2014; EN 60065:2014; IS 616:2017 (Clause 8.2)	Qualitative
		Test on insulating material	IEC 60065:2014; EN 60065:2014; IS 616:2017 (Clause 8.3)	20°C to 40°C ± 2°C 90% RH to 95%RH
		Electric shock from accessible parts	IEC 60065:2014; EN 60065:2014; IS 616:2017 (Clause 8.4)	Qualitative
		For Class I apparatus (Visual Inspection)	IEC 60065:2014; EN 60065:2014; IS 616:2017 (Clause 8.5)	Qualitative
		For Class II apparatus (Visual Inspection)	IEC 60065:2014; EN 60065:2014; IS 616:2017 (Clause 8.6)	Qualitative
		Components (Visual Inspection)	IEC 60065:2014; EN 60065:2014; IS 616:2017 (Clause 8.7)	Qualitative
		Solid insulation measurement	IEC 60065:2014; EN 60065:2014; IS 616:2017 (Clause 8.8)	0.01-200 mm
		Insulation of internal wire	IEC 60065:2014; EN 60065:2014; IS 616:2017 (Clause 8.9)	0.01-200 mm

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

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		For Class II apparatus, Double Insulation	IEC 60065:2014; EN 60065:2014; IS 616:2017 (Clause 8.10)	0.01-200 mm
		Construction of the apparatus	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 8.11	Qualitative
		External forces windows covers, internal forces (Force test)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 8.12	0.1N to 20N
		Covers (Force test)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 8.13	0.1N to 50N
		Internal wiring (Force test)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 8.14, Table 3	0.1N to 2N
		Supply Apparatus for General Use (Visual Inspection)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 8.15	Qualitative
		Insulated winding wires of wound components (Visual Inspection)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 8.16	Qualitative
		Apparatus is designed to be fed from the mains (Visual inspection)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 8.18	Qualitative

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

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		Mains Switch shall not be fitted in the MAINS flexible cable (Visual inspection)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 8.19	Qualitative
		Resistors, capacitors or RC-units (Visual inspection)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 8.20	Qualitative
		Mandrel Test for non-separable thin sheet material	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 8.21	Qualitative
		Electric shock hazard under normal operating conditions (Touch current test and accessible Probes test)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 9.1.1.1	0.001mA to 3.5 mA 0.1V to 2.5kVrms 0.1V to 4kVDC Test probes B,18,19,13 as per IEC 61032:1997
		Determination of hazardous live parts (Touch current test)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 9.1.1.2	0.001mA to 3.5 mA 0.1V to 2.5kVrms 0.1V to 4kVDC
		Determination of accessible parts (Accessible Probes test)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 9.1.1.3	Test probes B,18,19,13 as per IEC 61032:1997 (Qualitative)
		Shafts of operating knobs (Touch current test)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 9.1.2	0.001mA to 3.5mA Up to 2.5kVrms Up to 4kVDC

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

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		Openings of the enclosure (Test Pin test)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 9.1.3	Qualitative
		Terminals- Accessibility (Accessible Probes test)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 9.1.4	Qualitative
		Pre –set controls (Test Probe C test)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 9.1.5	Qualitative
		Withdrawal of mains plug (Capacitor discharge test)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 9.1.6	Up to 400Vpeak 2s
		Resistance to external forces (Probes & Force test)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 9.1.7	Qualitative
		Removal of protective covers (Visual inspection)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 9.2	Qualitative
		Surge test	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 10.2	100V to 10kV
		Humidity Treatment	IEC 60065:2014 EN 60065:2014 IS 616:2017/Clause 10.3	20°C to 40°C ± 2°C 93% RH ± 3%RH
		Dielectric Strength test	IEC 60065:2014 EN 60065:2014 IS 616:2017/Clause 10.4	0.01kVac to 3kVac
		Insulation resistance test	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 10.4	DC voltage: 500V Up to 50 GΩ
		Fault conditions Electrical shock hazard	IEC 60065:2014 EN 60065:2014	0.001mA to 3.5 mA 0.1V to 2.5kVrms

**Neeraj Verma
Convenor**

**Birendra Prasad Murmu
Program Manager**

Laboratory

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			IS 616:2017 Clause 11.1	0.1V to 4kVDC
		Fault conditions Heating test	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 11.2	Ambient to 250°C
		Windings (Visual inspection)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 11.2.6	Qualitative
		Printed boards (Needle Flame Test)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 11.2.7	Qualitative
		Bump test	IEC 60065:2014 EN 60065:2014 IS 616:2017/Clause 12.1.2	Qualitative
		Vibration Test	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 12.1.3	10Hz to 55Hz 0.35mm
		Impact Test	IEC 60065:2014 EN 60065:2014 IS 616:2017/Clause 12.1.4 Table 6 (Checked by clause 10.4)	0.2J to 0.5J Steel ball 500g, 50mm
		Drop test	IEC 60065:2014 EN 60065:2014 IS 616:2017 /Clause 12.1.5 (Checked by clause 10.4, 13)	Qualitative
		Stress relief test	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 12.1.6	0.1°C to 100°C
		Fixing of actuating elements (Torque and Force test)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 12.2	0.1Nm to 2.5Nm 0.1N to 100N

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

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		Tumbling Barrel test	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 12.3	Qualitative
		Drawers (Push & Pull force test)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 12.4	0.1N to 50N
		Antenna coaxial sockets (Endurance, Impact & Torque test)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 12.5	0.2J to 0.5J 0.1N to 50N
		General requirements (Visual inspection)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 12.6.1	(Qualitative)
		Physical securement test (Rod antennas) (Torque and Force test)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 12.6.2, Table 7	0.1Nm to 0.6Nm 0.1N to 20N
		Stress relief test	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 12.7.3.2	0.1°C to 100°C
		Battery replacement test	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 12.7.3.3	0.1Nm to 2.5Nm
		Drop test	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 12.7.3.4	Qualitative
		Impact test	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 12.7.3.5	0.2J to 2J
		Crush Test	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 12.7.3.6	0.1N to 330N

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

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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
		Force Test	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 12.7.4	Rigid finger probe with force 30N
		Determination of Working voltage test	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 13.2	0.1V to 2.5kVrms 0.1V to 4kVDC
		Clearances	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 13.3	0.01-200 mm
		Transient voltages	IEC 60065:2014 EN 60065:2014 Clause 13.3.4 IS 616:2017 Clause 13.3.4	100 V to 7 kV for 1.2x 50µs 1.2 µs (Rise time) 50 µs (Time duration) 100 V to 7 kV for 10X700 µs 10 µs (Rise time) 700 µs (Time duration)
		Creepage distances, Comparative tracking Index	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 13.4	100-600Vac
		Jointed insulation (Temperature cyclic test & electric strength test)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 13.6	0°C to 100°C 0.01kVac to 3kVac
		Enclosed and sealed parts (Temperature cyclic test & electric strength test)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 13.7	0°C to 100°C 0.01kVac to 3kVac
		Provisions for protective earthing	IEC 60065:2014 EN 60065:2014 Clause 15.2 IS 616:2017 Clause 15.2	Current 25A a.c Voltage: 0.01 to 5.4 V Resistance: 0.01Ω to 1Ω

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

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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
		Terminals for external flexible cords and for permanents connection to main supply (Visual inspection)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 15.3	(Qualitative)
		Device forming part of the mains plug (Socket-outlet test)	IEC 60065:2014 EN 60065:2014 Clause 15.4 IS 616:2017 Clause 15.4	1 mm to 300 mm 0.5N
		MAINS supply flexible cords (Visual inspection)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 16.1	Qualitative
		Nominal cross-sectional areas of external flexible cords (Measurement of nominal cross-sectional area)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 16.2	0.01mm to 200 mm
		Conductor of external flexible cords (Temperature test)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 16.4	Ambient to 250°C
		Strain relief test	IEC 60065:2014 EN 60065:2014 Clause 16.5 IS 616:2017 Clause 16.5	0.25Nm, 40N 2mm
		Apertures for external flexible cords (Visual inspection)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 16.6	Qualitative
		Appliance inlet of transportable apparatus (Visual inspection)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 16.7	Qualitative

**Neeraj Verma
Convenor**

**Birendra Prasad Murmu
Program Manager**

Laboratory

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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
		Screw Terminals (Torque test)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 17.1	0.1Nm to 2.5Nm
		Screws into female threads (Manual Test)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 17.2	Qualitative
		Screws or other fixing Test	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 17.3	0.1Nm to 2.5Nm
		Conductive parts permanently fixed together and carrying a current exceeding 0.2A (Visual inspection & manual test)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 17.4	Qualitative
		Electrical connections in circuits carrying a current exceeding 0.2 A (Visual inspection)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 17.5	Qualitative
		Stranded conductors of flexible supply cords carrying a current exceeding 0.2A (Visual inspection)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 17.6	Qualitative
		Cover fixing devices (Torque & force test)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 17.7	Qualitative
		Detachable legs or stands (Visual inspection)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 17.8	Qualitative

**Neeraj Verma
Convenor**

**Birendra Prasad Murmu
Program Manager**

Laboratory

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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
		Internal Plug (Pull test)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 17.9	0.1N to 2N
		Stability test	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 19.1,19.2,19.3,19.4,19.5	10° 0.1N to 100N
		Mechanical strength of glass (Impact hammer test)	IEC 60065:2014 EN 60065:2014 IS 616:2017 Clause 19.6	0.2J to 0.5J
		Fragmentation test	IEC 60065:2014 EN 60065:2014 IS 616:2017, Clause 19.6.2	Qualitative
		Wall or ceiling mount test	IEC 60065:2014 EN 60065:2014 IS 616:2017, Clause 19.7	Qualitative
		Resistance to Fire test	IEC 60065:2014 EN 60065:2014 Clause 20 IS 616:2017, Clause 20	Qualitative
		IPX4 Test	IEC 60065:2014 EN 60065:2014, Annex A	Qualitative
III.	EMC TEST FACILITY			
1.	All Electrical/ Electronic Equipments	Electrostatic Discharge Immunity Test	IEC 61000-4-2: 2008 EN 61000-4-2: 2009	Test Level: Contact ±2 kV to ± 8 kV & Air : ± 2 kV to ± 15 kV
	Information Technology Equipment		CISPR 24: 2010+A1:2015 EN 55024: 2010+A1:2015 CISPR 24: 2010 EN 55024: 2010	

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

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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
	Household appliances, electric tools and similar apparatus		CISPR 14-2: 2015 Cl.No.5.1 EN 55014-2:2015 Cl.No.5.1 CISPR 14-2: 1997+A1:2001 +A2:2008 Cl.No.5.1 EN 55014-2:1997+A2: 2008 Cl.No.5.1	
	Residential, commercial and light-industrial Equipment		IEC 61000-6-1: 2005 EN 61000-6-1: 2007	
	Industrial Equipment		IEC 61000-6-2: 2005 EN 61000-6-2: 2005	
	Electrical lighting and similar equipment		IEC 61547: 2009 Cl.No.5.2 EN 61547: 2009 Cl.No.5.2	
	Sound And Television Broadcast Receivers And Associated Equipment		CISPR 20: 2006+A1:2013 EN 55020:2007+A12:2016	
	Medical electrical equipment		IEC 60601-1-2 :2014 Cl.No.8.9 EN 60601-1-2 :2007 Cl.No.6.2	
	Uninterruptible power systems (UPS)		EN 62040-2:2006/Cl.No.7.3	

Neeraj Verma
Convenor

Birendra Prasad Murmu
Program Manager

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	Electrical Equipment for Measurement, Control and Laboratory Use		EN 61326-1:2013 Cl.No.6.2 IEC 61326-1:2012 Cl.No.6.2	
IV.	ELECTRIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES			
1.	Mobile Phone Handsets: Indian Language Support for Mobile Phone Handsets-Specific Requirements	Text inputting	IS 16333 (Part 3):2017 Clause 5.1	Mobile Phone Handset & Computer System with Unicode typing tool
		Message readability	IS 16333 (Part 3):2017 Clause 5.2	Mobile Phone Handset & Computer System with Unicode typing tool