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**TEST REPORT**  
**IEC 60950-1**  
**Information technology equipment – Safety –**  
**Part 1: General requirements**

**Report Number.** ..... 190700259TWN-001

**Date of issue** ..... August 16, 2019

**Total number of pages**..... 171 pages

**Name of Testing Laboratory preparing the Report**..... Intertek Testing Services Taiwan Ltd.  
5 F, No. 423, Ruiguang Rd., Neihu District, Taipei 114, Taiwan

**Applicant's name**..... GlobTek, Inc.

**Address** ..... 186 Veterans Dr. Northvale, NJ 07647, USA

**Test specification:**

**Standard** ..... IEC 60950-1:2005, AMD1:2009, AMD2:2013

**Test procedure** ..... CB Scheme

**Non-standard test method**..... N/A

**Test Report Form No**..... IEC 60950\_1G

**Test Report Form(s) Originator**..... SGS Fimko Ltd

**Master TRF**..... Dated 2019-07-02

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<b>Test item description</b> ..... :	I.T.E Power Supply	
<b>Trade Mark</b> ..... :		
<b>Manufacturer</b> .....	Same as applicant	
<b>Model/Type reference</b> .....	GT*46161-**-*( (See general product information on page 7)	
<b>Ratings</b> ..... :	Input: 100-240 V~, 50-60 Hz, 0.45 A; Output: 5-5.5 Vdc, Max. 3.2 A, Max 16 W Class II	
<b>Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):</b>		
<input checked="" type="checkbox"/> <b>CB Testing Laboratory:</b>	Intertek Testing Services Taiwan Ltd.	
<b>Testing location/ address</b> ..... :	5 F, No. 423, Ruiguang Rd., Neihu District, Taipei 114, Taiwan	
<b>Tested by (name, function, signature)</b> ..... :	Project Handler, Ken Ko	
<b>Approved by (name, function, signature)</b> ... :	Reviewer, Dan Chen	
<b>Testing procedure: CTF Stage 1:</b>		
<b>Testing location/ address</b> ..... :		
<b>Tested by (name, function, signature)</b> ..... :		
<b>Approved by (name, function, signature)</b> ... :		
<b>Testing procedure: CTF Stage 2:</b>		
<b>Testing location/ address</b> ..... :		
<b>Tested by (name + signature)</b> .....		
<b>Witnessed by (name, function, signature) . :</b>		
<b>Approved by (name, function, signature)</b> ... :		
<b>Testing procedure: CTF Stage 3:</b>		
<b>Testing procedure: CTF Stage 4:</b>		
<b>Testing location/ address</b> ..... :		
<b>Tested by (name, function, signature)</b> ..... :		
<b>Witnessed by (name, function, signature) . :</b>		
<b>Approved by (name, function, signature)</b> ... :		
<b>Supervised by (name, function, signature) :</b>		

**List of Attachments (including a total number of pages in each attachment):**

Appendix 1 (1 page) – Appended table.

Appendix 2 (103 pages) – National differences.

Appendix 3 (1 page) – Circuit diagram.

Appendix 4 (2 pages) – PCB layout.

Photos (9 pages)

**Summary of testing:**
**Tests performed (name of test and test clause):**

The sample(s) tested complies with the requirements of IEC 60950-1:2005/ AMD1:2009/ AMD2:2013 and EN 60950-1:2006/ AMD11:2009/ AMD1:2010/ AMD12:2011/ AMD2:2013.

- 1.6.2 Input current test
- 1.7.11 Marking durability test
- 2.1.1.1 b Finger test
- 2.1.1.1 c Pin test
- 2.1.1.5 Energy hazards test
- 2.2.2 Voltages under normal conditions test
- 2.2.3 Voltages under fault conditions test
- 2.4 Limited circuit current test
- 2.5 Limited power sources test
- 2.9.2 Humidity condition test
- 2.10.2 Determination of working voltage test
- 2.10.3, 2.10.4 Clearances and creepage distances measurement
- 2.10.5.6 Solid insulation measurement
- 4.2.2 Mechanical Strength – 10 N Force test
- 4.2.4 Mechanical Strength – 250 N Force test
- 4.2.6 Mechanical Strength – drop test
- 4.2.7 Mechanical Strength – stress relief test
- 4.5.2 Normal operating test
- 4.5.5 Ball pressure test
- 5.1 Touch current test
- 5.2 Electric strength test
- 5.3 Abnormal operating and fault conditions test

**Testing location:**

Intertek Testing Services Taiwan Ltd.

## Summary of compliance with National Differences

### List of countries addressed:

Group differences, special national deviations of all CENELEC countries, AU, CA, CN, IL, JP, KR, US and SG.

Explanation of CENELEC countries: Austria (AT), Belgium (BE), Bulgaria (BG), Croatia (HR), Cyprus (CY), Czech Republic (CZ), Denmark (DK), Estonia (EE), Finland (FI), France (FR), Germany (DE), Greece (GR), Hungary (HU), Iceland (IS), Ireland (IE), Italy (IT), Latvia (LV), Lithuania (LT), Luxembourg (LU), Malta (MT), Netherlands (NL), Norway (NO), Poland (PL), Portugal (PT), Romania (RO), Spain (ES), Slovakia (SK), Slovenia (SI), Sweden (SE), Switzerland (CH) and United Kingdom (GB).

Explanation of used codes for National Differences: Australia (AU), Canada (CA), China (CN), Israel (IL), Japan (JP), Korea (KR), United States of America (US) and Singapore (SG).

All country differences listed in the CB Bulletin are covered by the Common Modifications, Special National Conditions, National Deviations, and National Requirements noted above except for the following countries which are documented in Country Differences. Refer to appendix 2 of test report for details.

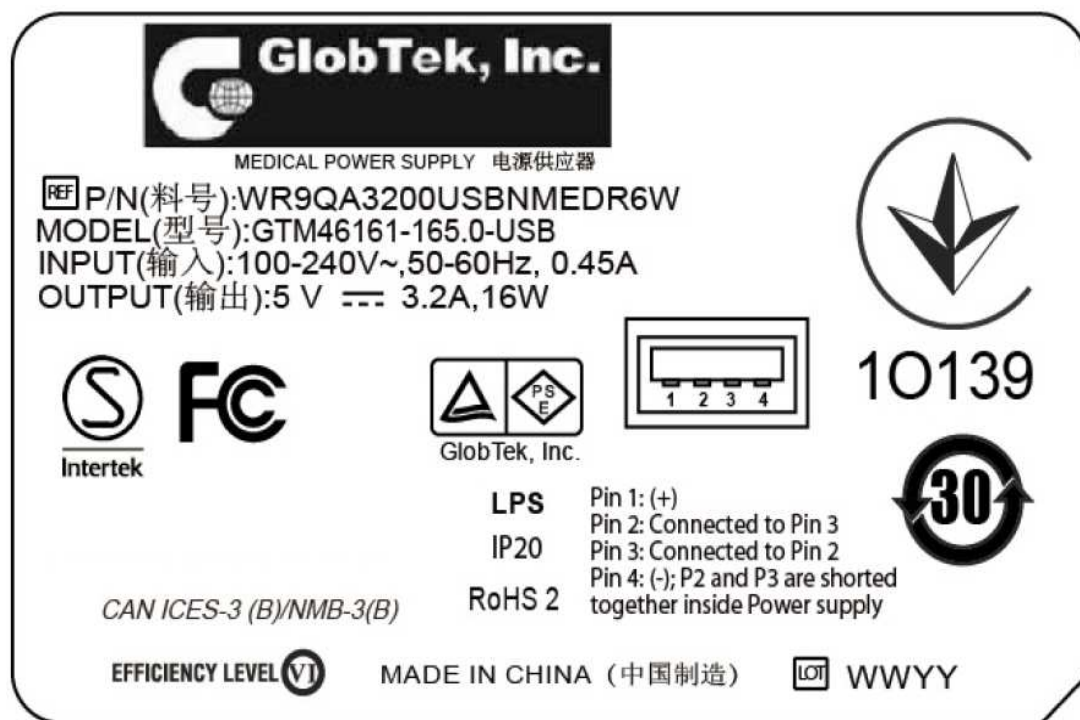
Compliance with the National requirements of "(countries)" as given in CB Bulletin "(112A)" dated December 2006 and IECEE website dated July 2019 were also confirmed.

☒ **The product fulfils the requirements of IEC 60950-1:2005/ AMD1:2009/ AMD2:2013 and EN 60950-1:2006/ AMD11:2009/ AMD1:2010/ AMD12:2011/ AMD2:2013.**

### Copy of marking plate:

The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.

(Representative)



### Note:

1. Class II symbol is used lasers to engrave on enclosure.
2. The above markings are the minimum requirements required by the safety standard. For the final production samples, the additional markings which do not give rise to misunderstanding may be added.
3. When the equipment is vended to EUROPE, manufacturers and importers shall indicate on the electrical equipment their name, registered trade name or registered trade mark and the postal address at which they can be contacted or, where that is not possible, on its packaging or in a document accompanying the electrical equipment.

<b>Test item particulars.....:</b>	
<b>Equipment mobility.....:</b>	<input type="checkbox"/> movable <input type="checkbox"/> hand-held <input type="checkbox"/> transportable <input type="checkbox"/> stationary <input type="checkbox"/> for building-in <input checked="" type="checkbox"/> direct plug-in
<b>Connection to the mains.....:</b>	<input checked="" type="checkbox"/> pluggable equipment <input checked="" type="checkbox"/> type A <input type="checkbox"/> type B <input type="checkbox"/> permanent connection <input type="checkbox"/> detachable power supply cord <input type="checkbox"/> non-detachable power supply cord <input type="checkbox"/> not directly connected to the mains
<b>Operating condition.....:</b>	<input checked="" type="checkbox"/> continuous <input type="checkbox"/> rated operating / resting time:
<b>Access location .....</b>	<input checked="" type="checkbox"/> operator accessible <input type="checkbox"/> restricted access location
<b>Over voltage category (OVC) .....</b>	<input type="checkbox"/> OVC I <input checked="" type="checkbox"/> OVC II <input type="checkbox"/> OVC III <input type="checkbox"/> OVC IV <input type="checkbox"/> other:
<b>Mains supply tolerance (%) or absolute mains supply values .....</b>	+ 6 %, + 10 % and – 10 % (the test voltage + 10 % is required by the manufacturer)
<b>Tested for IT power systems .....</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>IT testing, phase-phase voltage (V) .....</b>	230 V
<b>Class of equipment .....</b>	<input type="checkbox"/> Class I <input checked="" type="checkbox"/> Class II <input type="checkbox"/> Class III <input type="checkbox"/> Not classified
<b>Considered current rating of protective device as part of the building installation (A) .....</b>	16 A or 20 A (for North America)
<b>Pollution degree (PD) .....</b>	<input type="checkbox"/> PD 1 <input checked="" type="checkbox"/> PD 2 <input type="checkbox"/> PD 3
<b>IP protection class .....</b>	IP
<b>Altitude during operation (m) .....</b>	< 5000 m
<b>Altitude of test laboratory (m) .....</b>	< 100 m
<b>Mass of equipment (kg) .....</b>	0.06
<b>Possible test case verdicts:</b>	
- test case does not apply to the test object.....: N/A	
- test object does meet the requirement.....: P (Pass)	
- test object does not meet the requirement.....: F (Fail)	
<b>Testing.....:</b>	
<b>Date of receipt of test item .....</b>	July 16, 2019
<b>Date (s) of performance of tests .....</b>	July 16, 2019 - August 9, 2019

**General remarks:**

"(See Enclosure #)" refers to additional information appended to the report.  
 "(See appended table)" refers to a table appended to the report.

**Throughout this report a ☐ comma / ☒ point is used as the decimal separator.**

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When determining the test conclusion, the Measurement Uncertainty of test has been considered.

**Manufacturer's Declaration per sub-clause 4.2.5 of IECEE 02:**

The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided .....

☒ **Yes**  
☐ **Not applicable**

**When differences exist; they shall be identified in the General product information section.**

**Name and address of factory (ies) .....** 1. GlobTek (Suzhou) Co., Ltd.  
 Building 4, No. 76 JinLing East Road, Suzhou  
 Industrial Park, Suzhou, JiangSu, 215021,  
 China  
 2. GlobTek, Inc.  
 186 Veterans Dr. Northvale, NJ 07647, USA

**General product information:**

The equipment is an I.T.E. Power Supply for ITE and indoor use only.

The integral plug forming as part of the equipment is considered as the disconnect device.

The equipment is considered as direct plug-in and Class II equipment.

The equipment is submitted and evaluated for maximum manufacturer's recommended ambient of 40 °C.

The equipment is intended to be used in tropical conditions.

The enclosure is fixed together by ultrasonic welding.

The equipment was evaluated for a maximum operating altitude of 5000 m.

There are two kinds of Circuit diagram and PCB layout, the detail refer to below table:

Circuit diagram/ PCB layout	Fuse	Output type
Type 1	Fusible resistor (RF1) & fuse (FS1)	USB*1
Type 2	Fusible resistor (RF1) or fuse (RF1) & fuse (FS1)	USB*1, USB*2, USB Type-C
Note: Circuit diagram/ PCB Layout type 1 and type 2 are similar except for fuse type and secondary component (LF2).		

**Explanation for model GT\*46161-\*\*-\*:**

The 1st symbol “\*\*” denotes “M” or “-” or “H” for market identification and not related to safety.

The 2nd symbol “\*\*” denotes the rated output wattage designation, which can be “01” to “16”, with interval of 1.

The 3rd symbol “\*\*” denotes the standard rated output voltage designation, which can be “5.0” to “5.5” or “05” to “05.5” with interval of 0.1 Vdc.

The last symbol “\*\*” denotes -USB means Type 1 USB\*1, -USB1A means Type 2 USB\*1, -USB2A means Type 2 USB\*2

and -USBC means Type 2 USB Type C.

Model	Input	Output Voltage	Max. output current	Max. output power
GT*46161-*5.0-*, GT*46161-*05-*	100-240 V~, 50-60 Hz, 0.45 A	5 Vdc	3.2 A	16 W
GT*46161-**-* (The 3rd “*” can be “5.1” to “5.5” or “05.1” to”05.5”)		5.1-5.5 Vdc	3.14 A	16 W
Note: All models are similar except for output type and different output voltage.				

All tests are performed on Circuit diagram/PCB layout type 1 (Model: GTM46161-165.0-USB).

Output of all models compliance for sub-clause 2.5 Limit Power Source.

**Abbreviations used in the report:**

- normal conditions	<b>N.C.</b>	- single fault conditions	<b>S.F.C</b>
- functional insulation	<b>OP</b>	- basic insulation	<b>BI</b>
- double insulation	<b>DI</b>	- supplementary insulation	<b>SI</b>
- between parts of opposite polarity	<b>BOP</b>	- reinforced insulation	<b>RI</b>

**Indicate used abbreviations (if any)**

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict



1	GENERAL		P
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1.5	Components		P
1.5.1	General		P
	Comply with IEC 60950-1 or relevant component standard	(see appended tables 1.5.1)	P
1.5.2	Evaluation and testing of components	Components, which are certified to IEC and/or national standards, are used correctly within their ratings. Components not covered by IEC standards are tested under the conditions present in the equipment	P
1.5.3	Thermal controls	No such component within the EUT	N/A
1.5.4	Transformers	(see also Annex C)	P
1.5.5	Interconnecting cables		N/A
1.5.6	Capacitors bridging insulation	Approved Y capacitor (see appended table 1.5.1)	P
1.5.7	Resistors bridging insulation	No such component within the EUT	N/A
1.5.7.1	Resistors bridging functional, basic or supplementary insulation		N/A
1.5.7.2	Resistors bridging double or reinforced insulation between a.c. mains and other circuits		N/A
1.5.7.3	Resistors bridging double or reinforced insulation between a.c. mains and antenna or coaxial cable		N/A
1.5.8	Components in equipment for IT power systems	The equipment is Class II equipment	N/A
1.5.9	Surge suppressors		P
1.5.9.1	General	(see appended table 1.5.1)	P
1.5.9.2	Protection of VDRs	Approved Varistor comply with Annex Q used in primary circuit (see appended table 1.5.1)	P
1.5.9.3	Bridging of functional insulation by a VDR	A fuse is connected in series with VDR	P
1.5.9.4	Bridging of basic insulation by a VDR	Approved Varistor locate between mains	P
1.5.9.5	Bridging of supplementary, double or reinforced insulation by a VDR		N/A



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Clause	Requirement + Test	Result - Remark	Verdict

<b>1.6</b>	<b>Power interface</b>		P
1.6.1	AC power distribution systems	TN	P
1.6.2	Input current	(see appended table 1.6.2)	P
1.6.3	Voltage limit of hand-held equipment	The EUT is not hand-held equipment	N/A
1.6.4	Neutral conductor	The neutral is not identified in the equipment. Reinforced insulation for rated voltage between secondary parts and primary phases	P

<b>1.7</b>	<b>Marking and instructions</b>		P
1.7.1	Power rating and identification markings		P
1.7.1.1	Power rating marking	See below	P
	Multiple mains supply connections.....:	The EUT is not such type equipment	N/A
	Rated voltage(s) or voltage range(s) (V) .....	100–240 Vac	P
	Symbol for nature of supply, for d.c. only .....	The EUT is supplied by AC mains	N/A
	Rated frequency or rated frequency range (Hz) ...:	50-60	P
	Rated current (mA or A) .....	0.45 A	P
1.7.1.2	Identification markings	See below	P
	Manufacturer's name or trade-mark or identification mark .....		P
	Model identification or type reference .....	GT*46161-**-*	P
	Symbol for Class II equipment only .....		P
	Other markings and symbols .....	Symbols are used according to IEC 60417-1	P
1.7.1.3	Use of graphical symbols	Symbols are used according to IEC 60417-1 or ISO 3864-2 or ISO 7000	P
1.7.2	Safety instructions and marking	The English "I.T.E.Power supply" will be provided with the unit	P
1.7.2.1	General		P
1.7.2.2	Disconnect devices	The EUT is a direct plug-in equipment	N/A
1.7.2.3	Overcurrent protective device		N/A
1.7.2.4	IT power distribution systems	For Norway compliance has to be evaluated during the national approval	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
1.7.2.5	Operator access with a tool	No such area	N/A
1.7.2.6	Ozone	The EUT does not produce such thing	N/A
1.7.3	Short duty cycles	The EUT is continuous operating type	N/A
1.7.4	Supply voltage adjustment .....	Only one power supply voltage range	N/A
	Methods and means of adjustment; reference to installation instructions .....		N/A
1.7.5	Power outlets on the equipment .....	No such component within the EUT	N/A
1.7.6	Fuse identification (marking, special fusing characteristics, cross-reference) .....	The "FS1" and "T 1AL/250V" or "T 2AL/250V" and "RF1" and "1ohm 1W" are marked adjacent to the main fuse	P
1.7.7	Wiring terminals	No wiring terminal provided and the equipment is Class II equipment	N/A
1.7.7.1	Protective earthing and bonding terminals .....		N/A
1.7.7.2	Terminals for a.c. mains supply conductors		N/A
1.7.7.3	Terminals for d.c. mains supply conductors		N/A
1.7.8	Controls and indicators		N/A
1.7.8.1	Identification, location and marking .....	No controls and switches within the EUT	N/A
1.7.8.2	Colours .....		N/A
1.7.8.3	Symbols according to IEC 60417.....		N/A
1.7.8.4	Markings using figures .....	No figures used as marking	N/A
1.7.9	Isolation of multiple power sources .....	Only one power supply	N/A
1.7.10	Thermostats and other regulating devices .....	No such device within the EUT	N/A
1.7.11	Durability	After rubbing test by water and petroleum spirit, the marking still legible; it is not easily possible to remove the marking plate and show no curling	P
1.7.12	Removable parts	Marking plate is not placed on removable parts	P
1.7.13	Replaceable batteries .....	No such device within the EUT	N/A
	Language(s) .....		—
1.7.14	Equipment for restricted access locations.....	The EUT is not such type	N/A

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Clause	Requirement + Test	Result - Remark	Verdict

<b>2</b>	<b>PROTECTION FROM HAZARDS</b>		<b>P</b>
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<b>2.1</b>	<b>Protection from electric shock and energy hazards</b>		<b>P</b>
2.1.1	Protection in operator access areas		P
2.1.1.1	Access to energized parts	See comment below	P
	Test by inspection .....	The concerned hazardous parts are not accessible	P
	Test with test finger (Figure 2A) .....	The concerned hazardous parts are not accessible	P
	Test with test pin (Figure 2B) .....	Hazardous live parts are not accessible	P
	Test with test probe (Figure 2C) .....	No TNV circuit within the EUT	N/A
2.1.1.2	Battery compartments	No battery compartment within the EUT	N/A
2.1.1.3	Access to ELV wiring	No internal wiring at ELV	N/A
	Working voltage ( $V_{peak}$ or $V_{rms}$ ); minimum distance through insulation (mm)	(see appended tables 2.10.2 and 2.10.5)	—
2.1.1.4	Access to hazardous voltage circuit wiring		N/A
2.1.1.5	Energy hazards .....	Energy dose not exceed 240 VA between any two points in o/p connector of secondary circuit (see appended tables 2.1.1.5)	P
2.1.1.6	Manual controls	No such devices	N/A
2.1.1.7	Discharge of capacitors in equipment		N/A
	Measured voltage (V); time-constant (s) .....		—
2.1.1.8	Energy hazards – d.c. mains supply	Not direct connected to the d.c. mains	N/A
	a) Capacitor connected to the d.c. mains supply .:		N/A
	b) Internal battery connected to the d.c. mains supply:		N/A
2.1.1.9	Audio amplifiers .....	No such device within the EUT	N/A
2.1.2	Protection in service access areas		N/A
2.1.3	Protection in restricted access locations		N/A

<b>2.2</b>	<b>SELV circuits</b>		<b>P</b>
2.2.1	General requirements	See below, the secondary circuits were tested as SELV	P

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Clause	Requirement + Test	Result - Remark	Verdict
2.2.2	Voltages under normal conditions (V) .....	All accessible voltages are less 42.4 Vpeak or 60 Vdc and are classified as SELV circuits (see appended table 2.2.2)	P
2.2.3	Voltages under fault conditions (V) .....	Single fault did not cause excessive voltage in accessible SELV circuits. Limits of 71 Vpeak and 120 Vdc were not exceeded within 0.2 s and limits 42.4 Vpeak and 60 Vdc were not exceeded for longer than 0.2 s	P
2.2.4	Connection of SELV circuits to other circuits .....	SELV circuits are only connected to other SELV circuits	P

<b>2.3</b>	<b>TNV circuits</b>		N/A
2.3.1	Limits	No TNV circuit within the EUT	N/A
	Type of TNV circuits .....		—
2.3.2	Separation from other circuits and from accessible parts		N/A
2.3.2.1	General requirements		N/A
2.3.2.2	Protection by basic insulation		N/A
2.3.2.3	Protection by earthing		N/A
2.3.2.4	Protection by other constructions .....		N/A
2.3.3	Separation from hazardous voltages		N/A
	Insulation employed.....		—
2.3.4	Connection of TNV circuits to other circuits		N/A
	Insulation employed.....		—
2.3.5	Test for operating voltages generated externally		N/A

<b>2.4</b>	<b>Limited current circuits</b>		P
2.4.1	General requirements	The limits of 2.4.2 were not exceeded under normal operating conditions and single fault conditions	P
2.4.2	Limit values		P
	Frequency (Hz) .....	(see appended table 2.4.2)	—
	Measured current (mA).....	(see appended table 2.4.2)	—
	Measured voltage (V) .....	(see appended table 2.4.2)	—
	Measured circuit capacitance (nF or µF).....	(see appended table 2.4.2)	—

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Clause	Requirement + Test	Result - Remark	Verdict

2.4.3	Connection of limited current circuits to other circuits	Output circuit as limited current circuit connected to other circuits	P
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<b>2.5</b>	<b>Limited power sources</b>		P
	a) Inherently limited output		N/A
	b) Impedance limited output		N/A
	c) Regulating network or IC current limiter, limits output under normal operating and single fault condition	Complied with table 2B	P
	Use of integrated circuit (IC) current limiters	No such device within the EUT	N/A
	d) Overcurrent protective device limited output		N/A
	Max. output voltage (V), max. output current (A), max. apparent power (VA)..... :	(see appended table 2.5)	—
	Current rating of overcurrent protective device (A) .. :	No such device within the EUT	—

<b>2.6</b>	<b>Provisions for earthing and bonding</b>		N/A
2.6.1	Protective earthing	The EUT is a Class II equipment	N/A
2.6.2	Functional earthing		N/A
	Use of symbol for functional earthing .....		N/A
2.6.3	Protective earthing and protective bonding conductors		N/A
2.6.3.1	General		N/A
2.6.3.2	Size of protective earthing conductors		N/A
	Rated current (A), cross-sectional area (mm <sup>2</sup> ), AWG .....		—
2.6.3.3	Size of protective bonding conductors		N/A
	Rated current (A), cross-sectional area (mm <sup>2</sup> ), AWG .....		—
	Protective current rating (A), cross-sectional area (mm <sup>2</sup> ), AWG .....		—
2.6.3.4	Resistance of earthing conductors and their terminations; resistance ( $\Omega$ ), voltage drop (V), test current (A), duration (min) .....		N/A
2.6.3.5	Colour of insulation .....		N/A
2.6.4	Terminals		N/A
2.6.4.1	General		N/A
2.6.4.2	Protective earthing and bonding terminals		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

	Rated current (A), type, nominal thread diameter (mm) .....		—
2.6.4.3	Separation of the protective earthing conductor from protective bonding conductors		N/A
2.6.5	Integrity of protective earthing		N/A
2.6.5.1	Interconnection of equipment		N/A
2.6.5.2	Components in protective earthing conductors and protective bonding conductors		N/A
2.6.5.3	Disconnection of protective earth		N/A
2.6.5.4	Parts that can be removed by an operator		N/A
2.6.5.5	Parts removed during servicing		N/A
2.6.5.6	Corrosion resistance		N/A
2.6.5.7	Screws for protective bonding		N/A
2.6.5.8	Reliance on telecommunication network or cable distribution system		N/A

<b>2.7</b>	<b>Overcurrent and earth fault protection in primary circuits</b>		P
2.7.1	Basic requirements	Integral part of equipment	P
	Instructions when protection relies on building installation	Neither pluggable equipment type B nor permanently connected equipment	N/A
2.7.2	Faults not simulated in 5.3.7		N/A
2.7.3	Short-circuit backup protection	Building installation is considered as the short-circuit backup protection	P
2.7.4	Number and location of protective devices .....	One fuse (RF1) or fusible resistor (RF1) and one fuse (FS1) are located in the primary circuit	P
2.7.5	Protection by several devices	Only one protection device	N/A
2.7.6	Warning to service personnel .....	The EUT is not such kinds of design	N/A

<b>2.8</b>	<b>Safety interlocks</b>		N/A
2.8.1	General principles	No safety interlock or similar devices used within the EUT	N/A
2.8.2	Protection requirements		N/A
2.8.3	Inadvertent reactivation		N/A
2.8.4	Fail-safe operation		N/A
	Protection against extreme hazard		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

2.8.5	Moving parts		N/A
2.8.6	Overriding		N/A
2.8.7	Switches, relays and their related circuits		N/A
2.8.7.1	Separation distances for contact gaps and their related circuits (mm) .....		N/A
2.8.7.2	Overload test		N/A
2.8.7.3	Endurance test		N/A
2.8.7.4	Electric strength test		N/A
2.8.8	Mechanical actuators		N/A

<b>2.9</b>	<b>Electrical insulation</b>		P
2.9.1	Properties of insulating materials	No natural rubber, hygroscopic materials or asbestos are used as insulation	P
2.9.2	Humidity conditioning	120 hours (considered the tropical conditions) This test was conducted on EUT with different vendor's transformer and all transformer listed in table 1.5.1 were evaluated	P
	Relative humidity (%), temperature (°C) .....	93 %, 40 °C	—
2.9.3	Grade of insulation	Considered	P
2.9.4	Separation from hazardous voltages	SELV circuits separated from primary by double / reinforce insulation	P
	Method(s) used .....	Method 1	—

<b>2.10</b>	<b>Clearances, creepage distances and distances through insulation</b>		P
2.10.1	General		P
2.10.1.1	Frequency .....	Considered	P
2.10.1.2	Pollution degrees .....	Pollution degree 2	P
2.10.1.3	Reduced values for functional insulation	Refer sub-clause 5.3.4	P
2.10.1.4	Intervening unconnected conductive parts		N/A
2.10.1.5	Insulation with varying dimensions	Not applicable	N/A
2.10.1.6	Special separation requirements	No TNV circuit	N/A
2.10.1.7	Insulation in circuits generating starting pulses	No lamps	N/A
2.10.2	Determination of working voltage	See below	P

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2.10.2.1	General	The rms and the peak voltage were measured on the switching power supply. The unit was connected to a 240V TN power system	P
2.10.2.2	RMS working voltage	(see appended table 2.10.2)	P
2.10.2.3	Peak working voltage	(see appended table 2.10.2)	P
2.10.3	Clearances	See below and alternative method of annex G is not considered	P
2.10.3.1	General		P
2.10.3.2	Mains transient voltages	Normal transient voltage considered	P
	a) AC mains supply .....	Overvoltage Category II	P
	b) Earthed d.c. mains supplies .....		N/A
	c) Unearthed d.c. mains supplies .....		N/A
	d) Battery operation .....		N/A
2.10.3.3	Clearances in primary circuits	(see appended table 2.10.3 and 2.10.4)	P
2.10.3.4	Clearances in secondary circuits	(see sub-clause 5.3.4)	P
2.10.3.5	Clearances in circuits having starting pulses	No such device within the EUT	N/A
2.10.3.6	Transients from a.c. mains supply .....	1500 V <sub>peak</sub>	P
2.10.3.7	Transients from d.c. mains supply .....		N/A
2.10.3.8	Transients from telecommunication networks and cable distribution systems .....		N/A
2.10.3.9	Measurement of transient voltage levels		N/A
	a) Transients from a mains supply		N/A
	For an a.c. mains supply .....		N/A
	For a d.c. mains supply .....		N/A
	b) Transients from a telecommunication network :		N/A
2.10.4	Creepage distances	See below	P
2.10.4.1	General	Considered	P
2.10.4.2	Material group and comparative tracking index		P
	CTI tests .....	Material group IIIb is assumed to be used	—
2.10.4.3	Minimum creepage distances	(see appended table 2.10.3 and 2.10.4)	P
2.10.5	Solid insulation		P
2.10.5.1	General		N/A
2.10.5.2	Distances through insulation		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
2.10.5.3	Insulating compound as solid insulation	No insulation compound	N/A
2.10.5.4	Semiconductor devices		N/A
2.10.5.5.	Cemented joints		N/A
2.10.5.6	Thin sheet material – General		N/A
2.10.5.7	Separable thin sheet material		N/A
	Number of layers (pcs) .....		—
2.10.5.8	Non-separable thin sheet material		N/A
2.10.5.9	Thin sheet material – standard test procedure		N/A
	Electric strength test		—
2.10.5.10	Thin sheet material – alternative test procedure		N/A
	Electric strength test		—
2.10.5.11	Insulation in wound components	(see Annex U)	P
2.10.5.12	Wire in wound components	Approved triple insulation wire for T1 secondary winding	P
	Working voltage .....	(see appended table 2.10.2)	P
	a) Basic insulation not under stress .....		N/A
	b) Basic, supplementary, reinforced insulation .....	(see Annex U)	N/A
	c) Compliance with Annex U .....	Reinforced insulation, Compliance with Annex U, certified triple insulated wire used (see appended table 1.5.1)	P
	Two wires in contact inside wound component; angle between 45° and 90° .....	Physical separation in the form of insulating tubing provided to relieve mechanical stress at the crossover point	P
2.10.5.13	Wire with solvent-based enamel in wound components	No such device within the EUT	N/A
	Electric strength test		—
	Routine test		N/A
2.10.5.14	Additional insulation in wound components		N/A
	Working voltage .....		N/A
	- Basic insulation not under stress .....		N/A
	- Supplementary, reinforced insulation .....		N/A
2.10.6	Construction of printed boards		P
2.10.6.1	Uncoated printed boards	(see appended table 2.10.3 and 2.10.4)	P
2.10.6.2	Coated printed boards		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
2.10.6.3	Insulation between conductors on the same inner surface of a printed board		N/A
2.10.6.4	Insulation between conductors on different layers of a printed board		N/A
	Distance through insulation		N/A
	Number of insulation layers (pcs) .....:		N/A
2.10.7	Component external terminations		N/A
2.10.8	Tests on coated printed boards and coated components	Uncoated printed board used	N/A
2.10.8.1	Sample preparation and preliminary inspection		N/A
2.10.8.2	Thermal conditioning		N/A
2.10.8.3	Electric strength test		N/A
2.10.8.4	Abrasion resistance test		N/A
2.10.9	Thermal cycling		N/A
2.10.10	Test for Pollution Degree 1 environment and insulating compound		N/A
2.10.11	Tests for semiconductor devices and cemented joints		N/A
2.10.12	Enclosed and sealed parts		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

<b>3</b>	<b>WIRING, CONNECTIONS AND SUPPLY</b>		<b>P</b>
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<b>3.1</b>	<b>General</b>		<b>P</b>
3.1.1	Current rating and overcurrent protection	Adequate cross sectional areas on internal wiring (see appended table 1.5.1)	P
3.1.2	Protection against mechanical damage	Wireways are smooth and free from edges. Wires are adequately fixed to prevent excessive strain on wire and terminals and avoiding damage to the insulation of the conductors	P
3.1.3	Securing of internal wiring	Internal wiring is secured against excessive strain, loosening of terminals and damage to the conductor insulation	P
3.1.4	Insulation of conductors	Insulation on internal conductor is considered to be of adequate quality and suitable for the application and the working voltage involved	P
3.1.5	Beads and ceramic insulators		N/A
3.1.6	Screws for electrical contact pressure	No screws are used as electrical connections	N/A
3.1.7	Insulating materials in electrical connections		N/A
3.1.8	Self-tapping and spaced thread screws	No such screws are used	N/A
3.1.9	Termination of conductors	All conductors are reliably secured	P
	10 N pull test	Considered	P
3.1.10	Sleeving on wiring	No sleeving used as supplementary insulation	N/A

<b>3.2</b>	<b>Connection to a mains supply</b>		<b>P</b>
3.2.1	Means of connection	Integral plug forming as part of the equipment	P
3.2.1.1	Connection to an a.c. mains supply	A mains plug that is part of direct plug-in equipment	P
3.2.1.2	Connection to a d.c. mains supply	No connection to d.c. mains supply	N/A
3.2.2	Multiple supply connections	There is only one supply connection for the EUT	N/A
3.2.3	Permanently connected equipment	The EUT is not such types	N/A

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Clause	Requirement + Test	Result - Remark	Verdict

	Number of conductors, diameter of cable and conduits (mm) .....		—
3.2.4	Appliance inlets		N/A
3.2.5	Power supply cords	The equipment is direct plug-in equipment	N/A
3.2.5.1	AC power supply cords		N/A
	Type .....		—
	Rated current (A), cross-sectional area (mm <sup>2</sup> ), AWG .....		—
3.2.5.2	DC power supply cords		N/A
3.2.6	Cord anchorages and strain relief		N/A
	Mass of equipment (kg), pull (N) .....		—
	Longitudinal displacement (mm) .....		—
3.2.7	Protection against mechanical damage		N/A
3.2.8	Cord guards		N/A
	Diameter or minor dimension D (mm); test mass (g) .....		—
	Radius of curvature of cord (mm) .....		—
3.2.9	Supply wiring space		N/A

<b>3.3</b>	<b>Wiring terminals for connection of external conductors</b>		N/A
3.3.1	Wiring terminals	No wiring terminal	N/A
3.3.2	Connection of non-detachable power supply cords		N/A
3.3.3	Screw terminals		N/A
3.3.4	Conductor sizes to be connected		N/A
	Rated current (A), cord/cable type, cross-sectional area (mm <sup>2</sup> ) .....		—
3.3.5	Wiring terminal sizes		N/A
	Rated current (A), type, nominal thread diameter (mm) .....		—
3.3.6	Wiring terminal design		N/A
3.3.7	Grouping of wiring terminals		N/A
3.3.8	Stranded wire		N/A

<b>3.4</b>	<b>Disconnection from the mains supply</b>		P
3.4.1	General requirement		P
3.4.2	Disconnect devices	Integral plug of forming as part of the equipment is considered as the disconnect device	P

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Clause	Requirement + Test	Result - Remark	Verdict
3.4.3	Permanently connected equipment	The EUT is not such equipment	N/A
3.4.4	Parts which remain energized	When the equipment is disconnected from mains, no remaining parts at hazardous voltage in the equipment	N/A
3.4.5	Switches in flexible cords		N/A
3.4.6	Number of poles - single-phase and d.c. equipment	The disconnect device disconnects both poles simultaneously	P
3.4.7	Number of poles - three-phase equipment	The equipment is single-phase equipment	N/A
3.4.8	Switches as disconnect devices		N/A
3.4.9	Plugs as disconnect devices	The EUT is a direct plug-in equipment	N/A
3.4.10	Interconnected equipment		N/A
3.4.11	Multiple power sources	Only one supply source	N/A

<b>3.5</b>	<b>Interconnection of equipment</b>		P
3.5.1	General requirements		P
3.5.2	Types of interconnection circuits .....	SELV to SELV	P
3.5.3	ELV circuits as interconnection circuits	No ELV interconnection circuits	N/A
3.5.4	Data ports for additional equipment		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

<b>4</b>	<b>PHYSICAL REQUIREMENTS</b>		<b>P</b>
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<b>4.1</b>	<b>Stability</b>		<b>N/A</b>
	Angle of 10°	The EUT is a direct plug-in equipment	<b>N/A</b>
	Test force (N) .....	The EUT is not a floor-standing unit	<b>N/A</b>

<b>4.2</b>	<b>Mechanical strength</b>		<b>P</b>
4.2.1	General	After the tests, the equipment complies with the requirements of subclauses 2.1.1 and 2.10	<b>P</b>
	Rack-mounted equipment.	The EUT is not such type equipment	<b>N/A</b>
4.2.2	Steady force test, 10 N	The EUT is still complying with relevant requirements of this standard	<b>P</b>
4.2.3	Steady force test, 30 N	No internal enclosure in the sense of this standard	<b>N/A</b>
4.2.4	Steady force test, 250 N	The EUT is still complying with relevant requirements of this standard	<b>P</b>
4.2.5	Impact test	The equipment is direct plug-in equipment	<b>N/A</b>
	Fall test		<b>N/A</b>
	Swing test		<b>N/A</b>
4.2.6	Drop test; height (mm) .....	1m, The EUT is still complying with relevant requirements of this standard	<b>P</b>
4.2.7	Stress relief test	89 °C, all the enclosure materials listed in the table 1.5.1 are tested	<b>P</b>
4.2.8	Cathode ray tubes	No such devices within the EUT	<b>N/A</b>
	Picture tube separately certified .....		<b>N/A</b>
4.2.9	High pressure lamps	No such devices within the EUT	<b>N/A</b>
4.2.10	Wall or ceiling mounted equipment; force (N) .....	The EUT is not such equipment	<b>N/A</b>

<b>4.3</b>	<b>Design and construction</b>		<b>P</b>
4.3.1	Edges and corners	The outer surface of the EUT is smoothed	<b>P</b>

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Clause	Requirement + Test	Result - Remark	Verdict
4.3.2	Handles and manual controls; force (N)..... :	No such device within the EUT	N/A
4.3.3	Adjustable controls	No such device within the EUT	N/A
4.3.4	Securing of parts	All parts are suitable fixed	P
4.3.5	Connection by plugs and sockets	No such devices within the EUT	N/A
4.3.6	Direct plug-in equipment		P
	Torque ..... :	Max. 0.02 Nm	—
	Compliance with the relevant mains plug standard ..... :		P
4.3.7	Heating elements in earthed equipment	No such device within the EUT	N/A
4.3.8	Batteries	No such device within the EUT	N/A
	- Overcharging of a rechargeable battery		N/A
	- Unintentional charging of a non-rechargeable battery		N/A
	- Reverse charging of a rechargeable battery		N/A
	- Excessive discharging rate for any battery		N/A
4.3.9	Oil and grease	No such material within the EUT	N/A
4.3.10	Dust, powders, liquids and gases	The EUT does not produce such thing	N/A
4.3.11	Containers for liquids or gases	No such device within the EUT	N/A
4.3.12	Flammable liquids ..... :	No such material is used	N/A
	Quantity of liquid (l) ..... :		N/A
	Flash point (°C) ..... :		N/A
4.3.13	Radiation		P
4.3.13.1	General	See sub-clause 4.3.13.5.	P
4.3.13.2	Ionizing radiation	The EUT does not generate ionizing radiation.	N/A
	Measured radiation (pA/kg) ..... :		—
	Measured high-voltage (kV) ..... :		—
	Measured focus voltage (kV) ..... :		—
	CRT markings ..... :		—
4.3.13.3	Effect of ultraviolet (UV) radiation on materials	The EUT does not produce significant UV radiation.	N/A
	Part, property, retention after test, flammability classification ..... :		N/A
4.3.13.4	Human exposure to ultraviolet (UV) radiation ..... :	The EUT does not produce significant UV radiation	N/A

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Clause	Requirement + Test	Result - Remark	Verdict

4.3.13.5	Lasers (including laser diodes) and LEDs	The LED is for indicating function used only	P
4.3.13.5.1	Lasers (including laser diodes)	No such device within the EUT	N/A
	Laser class .....		—
4.3.13.5.2	Light emitting diodes (LEDs)	The LEDs are only used for indicating function	—
4.3.13.6	Other types .....	No such device within the EUT	N/A

<b>4.4</b>	<b>Protection against hazardous moving parts</b>		N/A
4.4.1	General	No hazardous moving parts within the EUT	N/A
4.4.2	Protection in operator access areas .....		N/A
	Household and home/office document/media shredders		N/A
4.4.3	Protection in restricted access locations .....		N/A
4.4.4	Protection in service access areas		N/A
4.4.5	Protection against moving fan blades		N/A
4.4.5.1	General		N/A
	Not considered to cause pain or injury. a).....		N/A
	Is considered to cause pain, not injury. b) .....		N/A
	Considered to cause injury. c) .....		N/A
4.4.5.2	Protection for users		N/A
	Use of symbol or warning .....		N/A
4.4.5.3	Protection for service persons		N/A
	Use of symbol or warning .....		N/A

<b>4.5</b>	<b>Thermal requirements</b>		P
4.5.1	General	Considered	P
4.5.2	Temperature tests	(See appended table 4.5)	P
	Normal load condition per Annex L .....	See Annex L.7	—
4.5.3	Temperature limits for materials	(See appended table 4.5)	P
4.5.4	Touch temperature limits	(See appended table 4.5)	P
4.5.5	Resistance to abnormal heat .....	(See appended table 4.5.5)	P

<b>4.6</b>	<b>Openings in enclosures</b>		P
4.6.1	Top and side openings		P
	Dimensions (mm) .....	No opening	—
4.6.2	Bottoms of fire enclosures		P



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	Construction of the bottommm, dimensions (mm) .. :	No opening	—
4.6.3	Doors or covers in fire enclosures	No door or cover is provided	N/A
4.6.4	Openings in transportable equipment		N/A
4.6.4.1	Constructional design measures		N/A
	Dimensions (mm) ..... :		—
4.6.4.2	Evaluation measures for larger openings		N/A
4.6.4.3	Use of metallized parts		N/A
4.6.5	Adhesives for constructional purposes	No barriers or screen provided to complying with the relevant requirements of sub-clause 4.6.1, 4.6.2 or 4.6.4	N/A
	Conditioning temperature (°C), time (weeks) ..... :		—

<b>4.7</b>	<b>Resistance to fire</b>		P
4.7.1	Reducing the risk of ignition and spread of flame		P
	Method 1, selection and application of components wiring and materials	Materials with suitable flammability classes are used (See appended table 4.7)	P
	Method 2, application of all of simulated fault condition tests		N/A
4.7.2	Conditions for a fire enclosure	Fire enclosure is provided	P
4.7.2.1	Parts requiring a fire enclosure		P
4.7.2.2	Parts not requiring a fire enclosure		N/A
4.7.3	Materials		P
4.7.3.1	General	The PCBs have material of flammability class V-1 or better	P
4.7.3.2	Materials for fire enclosures	(See appended table 1.5.1)	P
4.7.3.3	Materials for components and other parts outside fire enclosures	No components outside fire enclosure	N/A
4.7.3.4	Materials for components and other parts inside fire enclosures	Internal components except small parts are flammability class V-2 or better	P
4.7.3.5	Materials for air filter assemblies	No such assembly within the EUT	N/A
4.7.3.6	Materials used in high-voltage components	No such assembly within the EUT	N/A

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<b>5</b>	<b>ELECTRICAL REQUIREMENTS AND SIMULATED ABNORMAL CONDITIONS</b>		<b>P</b>
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<b>5.1</b>	<b>Touch current and protective conductor current</b>		<b>P</b>
5.1.1	General	See below	P
5.1.2	Configuration of equipment under test (EUT)	Only one power surge	P
5.1.2.1	Single connection to an a.c. mains supply	Considered	P
5.1.2.2	Redundant multiple connections to an a.c. mains supply	Single connection to a.c. mains supply	N/A
5.1.2.3	Simultaneous multiple connections to an a.c. mains supply		N/A
5.1.3	Test circuit	Test circuit as in figure 5 A is used	P
5.1.4	Application of measuring instrument	Annex D.1 is used	P
5.1.5	Test procedure	Considered	P
5.1.6	Test measurements	See below	P
	Supply voltage (V) .....	(see appended table 5.1)	—
	Measured touch current (mA) .....	(see appended table 5.1)	—
	Max. allowed touch current (mA) .....	(see appended table 5.1)	—
	Measured protective conductor current (mA) .....		—
	Max. allowed protective conductor current (mA)....		—
5.1.7	Equipment with touch current exceeding 3,5 mA	The EUT is not such equipment	N/A
5.1.7.1	General .....		N/A
5.1.7.2	Simultaneous multiple connections to the supply		N/A
5.1.8	Touch currents to telecommunication networks and cable distribution systems and from telecommunication networks	No TNV circuit within the EUT	N/A
5.1.8.1	Limitation of the touch current to a telecommunication network or to a cable distribution system	No TNV circuit within the EUT	N/A
	Supply voltage (V) .....		—
	Measured touch current (mA) .....		—
	Max. allowed touch current (mA) .....		—
5.1.8.2	Summation of touch currents from telecommunication networks	No TNV circuit within the EUT	N/A
	a) EUT with earthed telecommunication ports .....		N/A
	b) EUT whose telecommunication ports have no reference to protective earth		N/A

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<b>5.2</b>	<b>Electric strength</b>		P
5.2.1	General	(See appended table 5.2)	P
5.2.2	Test procedure	(See appended table 5.2)	P

<b>5.3</b>	<b>Abnormal operating and fault conditions</b>		P
5.3.1	Protection against overload and abnormal operation	(see appended table 5.3)	P
5.3.2	Motors	No such device within EUT	N/A
5.3.3	Transformers	(see appended table 5.3 and Annex C)	P
5.3.4	Functional insulation .....	Methods c)	P
5.3.5	Electromechanical components	No such component within EUT	N/A
5.3.6	Audio amplifiers in ITE .....	No such component within EUT	N/A
5.3.7	Simulation of faults	(See appended table 5.3)	P
5.3.8	Unattended equipment	There are no thermostats and similar components within the EUT	N/A
5.3.9	Compliance criteria for abnormal operating and fault conditions	No fire propagated beyond the equipment, no molten metal was emitted and the enclosures no deformed	P
5.3.9.1	During the tests	No fire propagated beyond the equipment, no molten metal was emitted and the enclosures no deformed	P
5.3.9.2	After the tests	After test, the EUT still complies with relevant requirements of this standard	P

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<b>6</b>	<b>CONNECTION TO TELECOMMUNICATION NETWORKS</b>		N/A
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<b>6.1</b>	<b>Protection of telecommunication network service persons, and users of other equipment connected to the network, from hazards in the equipment</b>		N/A
6.1.1	Protection from hazardous voltages		N/A
6.1.2	Separation of the telecommunication network from earth		N/A
6.1.2.1	Requirements	No TNV circuit within the EUT	N/A
	Supply voltage (V) .....		—
	Current in the test circuit (mA) .....		—
6.1.2.2	Exclusions .....		N/A

<b>6.2</b>	<b>Protection of equipment users from overvoltages on telecommunication networks</b>		N/A
6.2.1	Separation requirements	No TNV circuit within the EUT	N/A
6.2.2	Electric strength test procedure		N/A
6.2.2.1	Impulse test		N/A
6.2.2.2	Steady-state test		N/A
6.2.2.3	Compliance criteria		N/A

<b>6.3</b>	<b>Protection of the telecommunication wiring system from overheating</b>		N/A
	Max. output current (A) .....	The EUT is not connected to telecommunication network	—
	Current limiting method .....		—

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

<b>7</b>	<b>CONNECTION TO CABLE DISTRIBUTION SYSTEMS</b>		N/A
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<b>7.1</b>	<b>General</b>		N/A
7.2	Protection of cable distribution system service persons, and users of other equipment connected to the system, from hazardous voltages in the equipment	The EUT is not connected to cable distribution system	N/A
7.3	Protection of equipment users from overvoltages on the cable distribution system		N/A
7.4	Insulation between primary circuits and cable distribution systems		N/A
7.4.1	General		N/A
7.4.2	Voltage surge test		N/A
7.4.3	Impulse test		N/A

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
<b>A</b>	<b>ANNEX A, TESTS FOR RESISTANCE TO HEAT AND FIRE</b>		N/A
<b>A.1</b>	<b>Flammability test for fire enclosures of movable equipment having a total mass exceeding 18 kg, and of stationary equipment (see 4.7.3.2)</b>	The EUT is not such equipment	N/A
A.1.1	Samples .....		—
	Wall thickness (mm) .....		—
A.1.2	Conditioning of samples; temperature (°C) .....		N/A
A.1.3	Mounting of samples .....		N/A
A.1.4	Test flame (see IEC 60695-11-3)		N/A
	Flame A, B, C or D .....		—
A.1.5	Test procedure		N/A
A.1.6	Compliance criteria		N/A
	Sample 1 burning time (s) .....		—
	Sample 2 burning time (s) .....		—
	Sample 3 burning time (s) .....		—
<b>A.2</b>	<b>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 (see 4.7.3.2 and 4.7.3.4)</b>		N/A
A.2.1	Samples, material .....		—
	Wall thickness (mm) .....		—
A.2.2	Conditioning of samples; temperature (°C) .....		N/A
A.2.3	Mounting of samples .....		N/A
A.2.4	Test flame (see IEC 60695-11-4)		N/A
	Flame A, B or C .....		—
A.2.5	Test procedure		N/A
A.2.6	Compliance criteria		N/A
	Sample 1 burning time (s) .....		—
	Sample 2 burning time (s) .....		—
	Sample 3 burning time (s) .....		—
A.2.7	Alternative test acc. to IEC 60695-11-5, cl. 5 and 9		N/A
	Sample 1 burning time (s) .....		—
	Sample 2 burning time (s) .....		—
	Sample 3 burning time (s) .....		—
<b>A.3</b>	<b>Hot flaming oil test (see 4.6.2)</b>		N/A
A.3.1	Mounting of samples		N/A
A.3.2	Test procedure		N/A

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

A.3.3	Compliance criterion		N/A
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<b>B</b>	<b>ANNEX B, MOTOR TESTS UNDER ABNORMAL CONDITIONS (see 4.7.2.2 and 5.3.2)</b>		N/A
<b>B.1</b>	<b>General requirements</b>	No such device within EUT	N/A
	Position .....		—
	Manufacturer .....		—
	Type .....		—
	Rated values .....		—
<b>B.2</b>	<b>Test conditions</b>		N/A
<b>B.3</b>	<b>Maximum temperatures</b>		N/A
<b>B.4</b>	<b>Running overload test</b>		N/A
<b>B.5</b>	<b>Locked-rotor overload test</b>		N/A
	Test duration (days) .....		—
	Electric strength test: test voltage (V) .....		—
<b>B.6</b>	<b>Running overload test for d.c. motors in secondary circuits</b>		N/A
B.6.1	General		N/A
B.6.2	Test procedure		N/A
B.6.3	Alternative test procedure		N/A
B.6.4	Electric strength test; test voltage (V) .....		N/A
<b>B.7</b>	<b>Locked-rotor overload test for d.c. motors in secondary circuits</b>		N/A
B.7.1	General		N/A
B.7.2	Test procedure		N/A
B.7.3	Alternative test procedure		N/A
B.7.4	Electric strength test; test voltage (V) .....		N/A
<b>B.8</b>	<b>Test for motors with capacitors</b>		N/A
<b>B.9</b>	<b>Test for three-phase motors</b>		N/A
<b>B.10</b>	<b>Test for series motors</b>		N/A
	Operating voltage (V) .....		—

<b>C</b>	<b>ANNEX C, TRANSFORMERS (see 1.5.4 and 5.3.3)</b>		P
	Position .....	T1 (see the illustration on Table C.2 for physical construction)	—
	Manufacturer .....	See appended table 1.5.1	—
	Type .....	See appended table 1.5.1	—

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

	Rated values .....	Class B	—
	Method of protection .....	With external overcurrent protection	—
<b>C.1</b>	<b>Overload test</b>	(see appended table 5.3)	P
<b>C.2</b>	<b>Insulation</b>	(see appended tables 5.2 and C2)	P
	Protection from displacement of windings.....	The end-turn of each winding is fixed by insulating tape	P

<b>D</b>	<b>ANNEX D, MEASURING INSTRUMENTS FOR TOUCH-CURRENT TESTS (see 5.1.4)</b>		P
<b>D.1</b>	<b>Measuring instrument</b>		P
<b>D.2</b>	<b>Alternative measuring instrument</b>		N/A

<b>E</b>	<b>ANNEX E, TEMPERATURE RISE OF A WINDING (see 1.4.13)</b>		N/A
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<b>F</b>	<b>ANNEX F, MEASUREMENT OF CLEARANCES AND CREEPAGE DISTANCES (see 2.10 and Annex G)</b>		P
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<b>G</b>	<b>ANNEX G, ALTERNATIVE METHOD FOR DETERMINING MINIMUM CLEARANCES</b>		N/A
<b>G.1</b>	<b>Clearances</b>		N/A
G.1.1	General		N/A
G.1.2	Summary of the procedure for determining minimum clearances		N/A
<b>G.2</b>	<b>Determination of mains transient voltage (V)</b>		N/A
G.2.1	AC mains supply .....		N/A
G.2.2	Earthed d.c. mains supplies .....		N/A
G.2.3	Unearthed d.c. mains supplies .....		N/A
G.2.4	Battery operation .....		N/A
<b>G.3</b>	<b>Determination of telecommunication network transient voltage (V) .....</b>		N/A
<b>G.4</b>	<b>Determination of required withstand voltage (V)</b>		N/A
G.4.1	Mains transients and internal repetitive peaks .....		N/A
G.4.2	Transients from telecommunication networks .....		N/A
G.4.3	Combination of transients		N/A
G.4.4	Transients from cable distribution systems		N/A
<b>G.5</b>	<b>Measurement of transient voltages (V)</b>		N/A



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Clause	Requirement + Test	Result - Remark	Verdict

	a) Transients from a mains supply		N/A
	For an a.c. mains supply		N/A
	For a d.c. mains supply		N/A
	b) Transients from a telecommunication network		N/A
<b>G.6</b>	<b>Determination of minimum clearances ..... :</b>		N/A

<b>H</b>	<b>ANNEX H, IONIZING RADIATION (see 4.3.13)</b>		N/A
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<b>J</b>	<b>ANNEX J, TABLE OF ELECTROCHEMICAL POTENTIALS (see 2.6.5.6)</b>		N/A
	Metal(s) used .....		—

<b>K</b>	<b>ANNEX K, THERMAL CONTROLS (see 1.5.3 and 5.3.8)</b>		N/A
K.1	Making and breaking capacity	No such component within the EUT	N/A
K.2	Thermostat reliability; operating voltage (V) .....		N/A
K.3	Thermostat endurance test; operating voltage (V) .....		N/A
K.4	Temperature limiter endurance; operating voltage (V) .....		N/A
K.5	Thermal cut-out reliability		N/A
K.6	Stability of operation		N/A

<b>L</b>	<b>ANNEX L, NORMAL LOAD CONDITIONS FOR SOME TYPES OF ELECTRICAL BUSINESS EQUIPMENT (see 1.2.2.1 and 4.5.2)</b>		P
L.1	Typewriters		N/A
L.2	Adding machines and cash registers		N/A
L.3	Erasers		N/A
L.4	Pencil sharpeners		N/A
L.5	Duplicators and copy machines		N/A
L.6	Motor-operated files		N/A
L.7	Other business equipment	Max. normal load operation	P

<b>M</b>	<b>ANNEX M, CRITERIA FOR TELEPHONE RINGING SIGNALS (see 2.3.1)</b>		N/A
M.1	Introduction		N/A
M.2	Method A		N/A
M.3	Method B		N/A
M.3.1	Ringling signal		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

M.3.1.1	Frequency (Hz) .....		—
M.3.1.2	Voltage (V) .....		—
M.3.1.3	Cadence; time (s), voltage (V) .....		—
M.3.1.4	Single fault current (mA) .....		—
M.3.2	Tripping device and monitoring voltage .....		N/A
M.3.2.1	Conditions for use of a tripping device or a monitoring voltage		N/A
M.3.2.2	Tripping device		N/A
M.3.2.3	Monitoring voltage (V) .....		N/A

<b>N</b>	<b>ANNEX N, IMPULSE TEST GENERATORS (see 1.5.7.2, 1.5.7.3, 2.10.3.9, 6.2.2.1, 7.3.2, 7.4.3 and Clause G.5)</b>		N/A
N.1	ITU-T impulse test generators		N/A
N.2	IEC 60065 impulse test generator		N/A

<b>P</b>	<b>ANNEX P, NORMATIVE REFERENCES</b>		—
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<b>Q</b>	<b>ANNEX Q, Voltage dependent resistors (VDRs) (see 1.5.9.1)</b>		P
	- Preferred climatic categories .....	Approved varistor used	P
	- Maximum continuous voltage .....	See appended table 1.5.1	P
	- Combination pulse current .....	6 kV/3 kA, 1.2/50 µs for voltage and 8/20 µs for current	P
	Body of the VDR Test according to IEC 60695-11-5.....	Body of the VDR complies with V-1 class material	N/A
	Body of the VDR. Flammability class of material ( min V-1).....	Flammability class V-1 material is acceptable	P

<b>R</b>	<b>ANNEX R, EXAMPLES OF REQUIREMENTS FOR QUALITY CONTROL PROGRAMMES</b>		N/A
R.1	Minimum separation distances for unpopulated coated printed boards (see 2.10.6.2)		N/A
R.2	Reduced clearances (see 2.10.3)		N/A

<b>S</b>	<b>ANNEX S, PROCEDURE FOR IMPULSE TESTING (see 6.2.2.3)</b>		N/A
S.1	Test equipment		N/A
S.2	Test procedure		N/A
S.3	Examples of waveforms during impulse testing		N/A

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

<b>T</b>	<b>ANNEX T, GUIDANCE ON PROTECTION AGAINST INGRESS OF WATER (see 1.1.2)</b>		N/A
			—

<b>U</b>	<b>ANNEX U, INSULATED WINDING WIRES FOR USE WITHOUT INTERLEAVED INSULATION (see 2.10.5.4)</b>		P
		Used of three layers of extruded insulation wire and passes the tests of annex U	—

<b>V</b>	<b>ANNEX V, AC POWER DISTRIBUTION SYSTEMS (see 1.6.1)</b>		P
V.1	Introduction		P
V.2	TN power distribution systems		P

<b>W</b>	<b>ANNEX W, SUMMATION OF TOUCH CURRENTS</b>		N/A
W.1	Touch current from electronic circuits		N/A
W.1.1	Floating circuits		N/A
W.1.2	Earthed circuits		N/A
W.2	Interconnection of several equipments		N/A
W.2.1	Isolation		N/A
W.2.2	Common return, isolated from earth		N/A
W.2.3	Common return, connected to protective earth		N/A

<b>X</b>	<b>ANNEX X, MAXIMUM HEATING EFFECT IN TRANSFORMER TESTS (see clause C.1)</b>		N/A
X.1	Determination of maximum input current		N/A
X.2	Overload test procedure		N/A

<b>Y</b>	<b>ANNEX Y, ULTRAVIOLET LIGHT CONDITIONING TEST (see 4.3.13.3)</b>		N/A
Y.1	Test apparatus .....		N/A
Y.2	Mounting of test samples .....		N/A
Y.3	Carbon-arc light-exposure apparatus .....		N/A
Y.4	Xenon-arc light exposure apparatus .....		N/A

<b>Z</b>	<b>ANNEX Z, OVERVOLTAGE CATEGORIES (see 2.10.3.2 and Clause G.2)</b>		P
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<b>AA</b>	<b>ANNEX AA, MANDREL TEST (see 2.10.5.8)</b>		N/A
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IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

<b>BB</b>	<b>ANNEX BB, CHANGES IN THE SECOND EDITION</b>	—	
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<b>CC</b>	<b>ANNEX CC, Evaluation of integrated circuit (IC) current limiters</b>	N/A	
CC.1	General		N/A
CC.2	Test program 1.....:		N/A
CC.3	Test program 2.....:		N/A
CC.4	Test program 3.....:		N/A
CC.5	Compliance.....:		N/A

<b>DD</b>	<b>ANNEX DD, Requirements for the mounting means of rack-mounted equipment</b>	N/A	
DD.1	General		N/A
DD.2	Mechanical strength test, variable N.....:		N/A
DD.3	Mechanical strength test, 250N, including end stops.....:		N/A
DD.4	Compliance.....:		N/A

<b>EE</b>	<b>ANNEX EE, Household and home/office document/media shredders</b>	N/A	
EE.1	General		N/A
EE.2	Markings and instructions		N/A
	Use of markings or symbols.....:		N/A
	Information of user instructions, maintenance and/or servicing instructions.....:		N/A
EE.3	Inadvertent reactivation test.....:		N/A
EE.4	Disconnection of power to hazardous moving parts.		N/A
	Use of markings or symbols.....:		N/A
EE.5	Protection against hazardous moving parts		N/A
	Test with test finger (Figure 2A) .....:		N/A
	Test with wedge probe (Figure EE1 and EE2) .....:		N/A

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

1.5.1	TABLE: List of critical components					P
Object/part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity <sup>1</sup>	
<b>Plastic Material List:</b>						
Enclosure/ Blade holder	SABIC INNOVATIVE PLASTICS B V	SE1X	Min. V-1, min. thick: 1.5 mm, 105 °C	Applicable parts of IEC 60950-1, UL 94	UL recognized E45329	
Alt.	SABIC INNOVATIVE PLASTICS B V	SE1	Min. V-1, min. thick: 1.5 mm, 105 °C	Applicable parts of IEC 60950-1, UL 94	UL recognized E45329	
Alt.	SABIC INNOVATIVE PLASTICS B V	SE100	Min. V-1, min. thick: 1.5 mm, 105 °C	Applicable parts of IEC 60950-1, UL 94	UL recognized E45329	
Alt.	SABIC INNOVATIVE PLASTICS B V	C2950	Min. V-0, min. thick: 1.5 mm, 85 °C	Applicable parts of IEC 60950-1, UL 94	UL recognized E45329	
Alt.	SABIC INNOVATIVE PLASTICS B V	CX7211	Min. V-0, min. thick: 1.5 mm, 90 °C	Applicable parts of IEC 60950-1, UL 94	UL recognized E45329	
Alt.	SABIC INNOVATIVE PLASTICS B V	EXCY0098	Min. V-0, min. thick: 1.5 mm, 90 °C	Applicable parts of IEC 60950-1, UL 94	UL recognized E45329	
Alt.	SABIC INNOVATIVE PLASTICS B V	945	Min. V-0, min. thick: 1.5 mm, 90 °C	Applicable parts of IEC 60950-1, UL 94	UL recognized E45329	
Alt.	FORMOSA CHEMICALS & FIBRE CORP PLASTICS DIV	AC310(+)	Min. V-0, min. thick: 1.5 mm, 85 °C	Applicable parts of IEC 60950-1, UL 94	UL recognized E162823	
Alt.	TEIJIN CHEMICALS LTD	LN-1250P	Min. V-0, min. thick: 1.5 mm, 125 °C	Applicable parts of IEC 60950-1, UL 94	UL recognized E50075	
Alt.	TEIJIN CHEMICALS LTD	LN-1250G	Min. V-0, min. thick: 1.5 mm, 125 °C	Applicable parts of IEC 60950-1, UL 94	UL recognized E50075	
Alt.	CHI MEI CORPORATION	PA-765A	Min. V-1, min. thick: 1.5 mm, 85 °C	Applicable parts of IEC 60950-1, UL 94	UL recognized E56070	
Alt.	CHI MEI CORPORATION	PC-540	Min. V-1, min. thick: 1.5 mm, 70 °C	Applicable parts of IEC 60950-1, UL 94	UL recognized E56070	
PCB	WALEX ELECTRONIC (WUXI) CO LTD	T2A, T2B, T4	Min. V-0, min. 130 °C	Applicable parts of IEC 60950-1, UL 94, UL 796	UL recognized E154355	

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

1.5.1	TABLE: List of critical components					P
Object/part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity <sup>1</sup>	
Alt.	DONGGUAN HE TONG ELECTRONICS CO LTD	CEM1, 2V0, FR4	Min. V-0, min. 130 °C	Applicable parts of IEC 60950-1, UL 94, UL 796	UL recognized E243157	
Alt.	CHEERFUL ELECTRONIC	02, 03, 03A	Min. V-0, min. 130 °C	Applicable parts of IEC 60950-1, UL 94, UL 796	UL recognized E199724	
Alt.	DONGGUAN DAYSUN ELECTRONIC CO LTD	DS2	Min. V-0, min. 130 °C	Applicable parts of IEC 60950-1, UL 94, UL 796	UL recognized E251754	
Alt.	SHANGHAI AREX PRECISION ELECTRONIC CO LTD	02V0, 03V0, 04V0	Min. V-0, min. 130 °C	Applicable parts of IEC 60950-1, UL 94, UL 796	UL recognized E186016	
Alt.	BRITE PLUS ELECTRONICS (SUZHOU) CO LTD	DKV0-3A, DGV0-3A	Min. V-0, min. 130 °C	Applicable parts of IEC 60950-1, UL 94, UL 796	UL recognized E177671	
Alt.	SHENZHEN TONGCHUANG XIN ELECTRONICS CO LTD	TCX	Min. V-0, min. 130 °C	Applicable parts of IEC 60950-1, UL 94, UL 796	UL recognized E250336	
Alt.	PACIFIC WIN INDUSTRIAL LTD	PW-02, PW-03	Min. V-0, min. 130 °C	Applicable parts of IEC 60950-1, UL 94, UL 796	UL recognized E228070	
Alt.	GOLDEN TRIANGLE PCB & TECHNOLOGIES LTD	GT-D	Min. V-0, min. 130 °C	Applicable parts of IEC 60950-1, UL 94, UL 796	UL recognized E340752	
Alt.	KUOTIANG ENT LTD	C-2, C-2A	Min. V-0, min. 130 °C	Applicable parts of IEC 60950-1, UL 94, UL 796	UL recognized E227299	
Fusible resistor (RF1)	ANHUI CHANGSHENG ELECTRONICS CO LTD	RXF21-1W	1 Ω, 1 W	Applicable parts of IEC 60950-1, UL 248-1, UL 248-14	Tested with appliance, UL recognized E306095	
Alt.	SHENZHEN GREAT ELECTRONICS CO LTD	RXF-1W	1 Ω, 1 W	Applicable parts of IEC 60950-1, UL 248-1, UL 248-14	Tested with appliance, UL recognized E301541	

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

1.5.1	TABLE: List of critical components					P
Object/part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity <sup>1</sup>	
Alt.	JIANGSU XINYANG ELECTRONIC COMPONENT CO LTD	RF10-1W	1 $\Omega$ , 1 W	Applicable parts of IEC 60950-1, UL 248-1, UL 248-14	Tested with appliance, UL recognized E312842	
Alt.	SHENZHEN KAYOCOTA ELECTRONICS CO LTD	FRKNP-1WS	1 $\Omega$ , 1 W	Applicable parts of IEC 60950-1, UL 248-1, UL 248-14	Tested with appliance, UL recognized E318056	
Alt.	ANHUI CHANGSHENG ELECTRONICS CO LTD	FRT-1W	1 $\Omega$ , 1 W	Applicable parts of IEC 60950-1, UL 248-1, UL 248-14	Tested with appliance, UL recognized E306095	
Alt.	TZAI YUAN ENTERPRISE CO LTD	KNF1W	1 $\Omega$ , 1 W	Applicable parts of IEC 60950-1, UL 248-1, UL 248-14	Tested with appliance, UL recognized E355632	
Alt.	Yageo Components (Suzhou) Co. Ltd.	FKN	1 $\Omega$ , 1 W	Applicable parts of IEC 60950-1, UL 248-1, UL 248-14	Tested with appliance, UL recognized E323780	
Fuse (FS1) (for Circuit diagram/ PCB layout type 1 & 2),	Conquer Electronics Co., Ltd.	MST series	T1 A or T2 A, 250 V, LBC	IEC 60127-1, IEC 60127-3	VDE 40017118	
Alt.	Ever Island Electric Co., Ltd. And Walter Electric	2010	T1 A or T2 A, 250 V, LBC	IEC 60127-1, IEC 60127-3	VDE 40018781	
Alt.	Bel Fuse Ltd.	RST	T1 A or T2 A, 250 V, LBC	IEC 60127-1, IEC 60127-3	VDE 40011144	
Alt.	Cooper Bussmann LLC	SS-5	T1 A or T2 A, 250 V, LBC	IEC 60127-1, IEC 60127-3	VDE 40015513	
Alt.	Walter Electronic Co. Ltd.	ICP series	T1 A or T2 A, 250 V, LBC	IEC 60127-1, IEC 60127-3	VDE 40012824	
Alt.	Shenzhen Lanson Electronics Co. Ltd.	SMT	T1 A or T2 A, 250 V, LBC	IEC 60127-1, IEC 60127-3	VDE 40012592	
Alt.	Das & Sons International Ltd.	385T	T1 A or T2 A, 250 V, LBC	IEC 60127-1, IEC 60127-3	VDE 40008524	

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

1.5.1	TABLE: List of critical components					P
Object/part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity <sup>1</sup>	
Fuse (RF1) (for Circuit diagram/ PCB layout type 2)	Walter Electronic Co. Ltd.	ICP series	T1 A or T2 A, 250 V, LBC	IEC 60127-1, IEC 60127-3	VDE 40012824	
Alt.	Zhongshan Lanbao Electrical Appliances Co., Ltd.	RTI-10 Serie(s)	T1 A or T2 A, 250 V, LBC	IEC 60127-1, IEC 60127-3	VDE 40017009	
Varistor (MOV1) (optional)	Joyin Co., Ltd.	JVR10N471K, JVR14N471K	Max. Continuous voltage: min 300 Vac (rms), 85 °C, The coating is V-0	IEC 61051-1 IEC 61051-2 IEC 61051-2-2	VDE 005937	
Alt.	Centra Science Corp.	10D471K, 14D471K	Max. Continuous voltage: min 300 Vac (rms), 85 °C, The coating is V-0	IEC 61051-1 IEC 61051-2 IEC 61051-2-2	VDE 40008220	
Alt.	Thinking Electronic Industrial Co., Ltd.	TVR10471K, TVR14471K	Max. Continuous voltage: min 300 Vac (rms), 85 °C, The coating is V-0	IEC 61051-1 IEC 61051-2 IEC 61051-2-2	VDE 005944	
Alt.	Success Electronics Co., Ltd.	SVR10D471K, SVR14D471K	Max. Continuous voltage: min 300 Vac (rms), 85 °C, The coating is V-0	IEC 61051-1 IEC 61051-2 IEC 61051-2-2	VDE 40030401	
Alt.	Ceramate Techn. Co., Ltd.	GNR10D471K, GNR14D471K	Max. Continuous voltage: min 300 Vac (rms), 85 °C, The coating is V-0	IEC 61051-1 IEC 61051-2 IEC 61051-2-2	VDE 40031745	
Alt.	Brightking (Shenzhen) Co., Ltd.	14D471K, 10D471K	Max. Continuous voltage: min 300 Vac (rms), 85 °C, The coating is V-0	IEC 61051-1 IEC 61051-2 IEC 61051-2-2	VDE 40027827	
Alt.	Lien Shun Electronics Co., Ltd.	10D471K, 14D471K	Max. Continuous voltage: min 300 Vac (rms), 85 °C, The coating is V-0	IEC 61051-1 IEC 61051-2 IEC 61051-2-2	VDE 40005858	
Alt.	HONGZHI ENTERPRISES LTD	HEL-10D471K, HEL-14D471K	Max. Continuous voltage: min 300 Vac (rms), 85 °C, The coating is V-0	IEC 61051-1 IEC 61051-2 IEC 61051-2-2	VDE 40008621	
Alt.	GUANGXI NEW FUTURE INFORMATION INDUSTRY CO LTD	10D471K, 14D471K	Max. Continuous voltage: min 300 Vac (rms), 85 °C, The coating is V-0	IEC 61051-1 IEC 61051-2 IEC 61051-2-2	VDE 40030322	



IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

1.5.1	TABLE: List of critical components					P
Object/part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity <sup>1</sup>	
Bridge diode (BD1)	Interchangeable	—	Min. 1.0 A, min. 1000 V	Applicable parts of IEC 60950-1	—	
Electrolytic capacitor (C1, C2)	Interchangeable	—	15 uF, Min. 400 V, 105 °C	Applicable parts of IEC 60950-1	—	
Inductors (LF1)	GlobTek/ENG /BOAM/ HAOPUWEI	RC00258	130 °C	Applicable parts of IEC 60950-1	Test in appliance	
IC (US1)	Interchangeable	—	1.5 mA, 18 Vdd	Applicable parts of IEC 60950-1	—	
Sense Resistor (RS6)	Interchangeable	—	Min. 1.2 Ω	Applicable parts of IEC 60950-1	—	
Sense Resistor (RS7)	Interchangeable	—	Min. 1.1 Ω	Applicable parts of IEC 60950-1	—	
Bridging-Capacitor (CY1, CY2) (optional)	TDK Corporation	CD	Y1, max. 1000 pF, min. 250 Vac, 25/125/21/B	IEC/EN 60384-14	VDE 40029780	
Alt.	Success Electronics Co., Ltd.	SE	Y1, max. 1000 pF, min. 250 Vac, 40/125/56/C	IEC/EN 60384-14	VDE 40037211 VDE 40020002	
Alt.	Success Electronics Co., Ltd.	SB	Y1, max. 1000 pF, min. 250 Vac, 40/125/56/C	IEC/EN 60384-14	VDE 40037221 VDE 40020001	
Alt.	Murata Mfg. Co., Ltd.	KX	Y1, max. 1000 pF, min. 250 Vac, 25/125/21/B	IEC/EN 60384-14	VDE 40002831	
Alt.	Walsin Technology Corp.	AH	Y1, max. 1000 pF, min. 250 Vac, 25/125/21/C	IEC/EN 60384-14	VDE 40001804	
Alt.	JYA-NAY Co., Ltd.	JN	Y1, max. 1000 pF, min. 250 Vac, 25/125/21/C	IEC/EN 60384-14	VDE 40001831	
Alt.	Haohua Electronic Co.	CT7	Y1, max. 1000 pF, min. 250 Vac, 30/125/56/C	IEC/EN 60384-14	VDE 40003902	
Alt.	Hongzhi Enterprises Ltd.	Y	Y1, max. 1000 pF, min. 250 Vac, 25/125/21/B	IEC/EN 60384-14	VDE 40038760	

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

1.5.1	TABLE: List of critical components					P
Object/part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity <sup>1</sup>	
Alt.	Jerro Electronics Corp.	JX series	Y1, max. 1000 pF, min. 250 Vac, 40/125/21/C	IEC/EN 60384-14	VDE 40032158	
<b>Transformer Material List:</b>						
Transformer (T1)	GlobTek/ENG /BOAM/ HAOPUWEI	XF01036	Class B	Applicable parts of IEC 60950-1	Tested with appliance	
- Magnet wire	PACIFIC ELECTRIC WIRE & CABLE (SHENZHEN) CO LTD	UEWN/U	130 °C	Applicable parts of IEC 60950-1	Tested with appliance	
Alt.	PACIFIC ELECTRIC WIRE & CABLE (SHENZHEN) CO LTD	UEWS/U	130 °C	Applicable parts of IEC 60950-1	Tested with appliance	
Alt.	JUNG SHING WIRE CO LTD	UEW-4	130 °C	Applicable parts of IEC 60950-1	Tested with appliance	
Alt.	JUNG SHING WIRE CO LTD	UEY-2	130 °C	Applicable parts of IEC 60950-1	Tested with appliance	
Alt.	JIANGSU HONGLIU MAGNET WIRE TECHNOLOGY CO LTD	2UEW/130	130 °C	Applicable parts of IEC 60950-1	Tested with appliance	
Alt.	CHANGZHOU DAYANG WIRE & CABLE CO LTD	2UEW/130	130 °C	Applicable parts of IEC 60950-1	Tested with appliance	
Alt.	WUXI JUFENG COMPOUND LINE CO LTD	2UEWB	130 °C	Applicable parts of IEC 60950-1	Tested with appliance	
Alt.	JIANGSU DARTONG M & E CO LTD	UEW	130 °C	Applicable parts of IEC 60950-1	Tested with appliance	
Alt.	SHANDONG SAINT ELECTRIC CO LTD	UEW/130	130 °C	Applicable parts of IEC 60950-1	Tested with appliance	
Alt.	ZHEJIANG LANGLI ELECTRIC EQUIPMENTS CO LTD	UEW	130 °C	Applicable parts of IEC 60950-1	Tested with appliance	

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

1.5.1	TABLE: List of critical components					P
Object/part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity <sup>1</sup>	
-Triple-insulated wire	Great Leoflon Industrial Co., Ltd.	TRW (B) Serie(s)	130 °C	IEC 60950-1	VDE 136581	
Alt.	COSMOLINK CO. Ltd.	TIW-M Serie(s)	130 °C	IEC 60950-1	VDE 138053	
Alt.	Furukawa Electric Co., Ltd. Electronics	TEX-E	130 °C	IEC 60950-1	VDE 006735	
Alt.	TOTOKU ELECTRIC CO LTD	TIW-2	130 °C	IEC 60950-1	VDE 40005152	
Alt.	E&B TECHNOLOGY CO LTD	E&B-XXXB, E&B-XXXB-1	130 °C	IEC 60950-1	VDE 40023473	
Alt.	SHENZHEN JIUDING NEW MATERIAL CO LTD	DTIW-B	130 °C	IEC 60950-1	VDE 40037495	
-Bobbin	CHANG CHUN PLASTICS CO LTD	T375J	Min. V-0, 150 °C, Phenolic	Applicable parts of IEC 60950-1, UL 94	Tested with appliance, UL recognized E59481	
Alt.	CHANG CHUN PLASTICS CO LTD	T375HF	Min. V-0, 150 °C, Phenolic	Applicable parts of IEC 60950-1, UL 94	Tested with appliance, UL recognized E59481	
Alt.	SUMITOMO BAKELITE CO LTD	PM-9820	Min. V-0, 150 °C, Phenolic	Applicable parts of IEC 60950-1, UL 94	Tested with appliance, UL recognized E41429	
Alt.	HITACHI CHEMICAL CO LTD	CP-J-8800	Min. V-0, 150 °C, Phenolic	Applicable parts of IEC 60950-1, UL 94	Tested with appliance, UL recognized E42956	
-Insulating tape	3M COMPANY ELECTRICAL MARKETS DIV (EMD)	1350F-1, 1350T-1, 44	Min. 130 °C	Applicable parts of IEC 60950-1, UL 510	Tested with appliance, UL recognized E17385	

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

1.5.1	TABLE: List of critical components					P
Object/part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity <sup>1</sup>	
Alt.	BONDTEC PACIFIC CO LTD	370S	Min. 130 °C	Applicable parts of IEC 60950-1, UL 510	Tested with appliance, UL recognized E175868	
Alt.	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	PZ CT WF	Min. 130 °C	Applicable parts of IEC 60950-1, UL 510	Tested with appliance, UL recognized E165111	
Alt.	JINGJIANG JINGYI ADHESIVE PRODUCT CO LTD	JY25-A	Min. 130 °C	Applicable parts of IEC 60950-1, UL 510	Tested with appliance, UL recognized E246950	
Alt.	CHANG SHU LIANG YI TAPE INDUSTRY CO LTD	LY-XX	Min. 130 °C	Applicable parts of IEC 60950-1, UL 510	Tested with appliance, UL recognized E246820	
Alt.	SHEN ZHEN WEI CHUANG DA PACKAGING MATERIALS CO., LTD.	W-001	Min. 130 °C	Applicable parts of IEC 60950-1, UL 510	Tested with appliance, UL recognized E333581	
-PTFE tubing	GREAT HOLDING INDUSTRIAL CO LTD	TFT / TFS	Min. 300 V, 200 °C	Applicable parts of IEC 60950-1, UL 94	Tested with appliance, UL recognized E156256	
Alt.	SHENZHEN WOER HEAT-SHRINKABLE MATERIAL CO LTD	WF	600 V, 200 °C	Applicable parts of IEC 60950-1, UL 94	Tested with appliance, UL recognized E203950	
Alt.	CHANGYUAN ELECTRONICS (SHENZHEN) CO LTD	CB-TT-T/CB-TT-S	Min. 300 V, 200 °C	Applicable parts of IEC 60950-1, UL 94	Tested with appliance, UL recognized E180908	
Supplementary information:						
1) Provided evidence ensures the agreed level of compliance. See OD-CB2039.						
2) For all transformers under all manufacturers.						

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

1.5.1	TABLE: Opto Electronic Devices		P
Manufacturer.....: See above.			
Type .....: See above.			
Separately tested .....: By VDE			
Bridging insulation.....: Reinforced.			
External creepage distance .....: See above.			
Internal creepage distance .....: See above.			
Distance through insulation .....: See above.			
Tested under the following conditions .....: RI			
Input .....: See above.			
Output .....: See above.			
supplementary information			

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Clause	Requirement + Test	Result - Remark	Verdict

1.6.2	TABLE: Electrical data (in normal conditions)					P
U (V)	I (A)	I <sub>rated</sub> (A)	P (W)	Fuse #	I <sub>fuse</sub> (A)	Condition/status
Test on Circuit diagram/PCB layout type 1 (Model: GTM46161-165.0-USB):						
90 V/50 Hz	0.374	--	20.2	FS1/RF1	0.374	Maximum rated output load
90 V/60 Hz	0.382	--	20.1	FS1/RF1	0.382	Maximum rated output load
100 V/50 Hz	0.341	0.45	19.9	FS1/RF1	0.341	Maximum rated output load
100 V/60 Hz	0.349	0.45	19.8	FS1/RF1	0.349	Maximum rated output load
240 V/50 Hz	0.185	0.45	20.0	FS1/RF1	0.185	Maximum rated output load
240 V/60 Hz	0.185	0.45	20.0	FS1/RF1	0.185	Maximum rated output load
264 V/50 Hz	0.174	--	20.1	FS1/RF1	0.174	Maximum rated output load
264 V/60 Hz	0.176	--	20.4	FS1/RF1	0.176	Maximum rated output load
Test on Circuit diagram/PCB layout type 2 (Model: GTM46161-165.0-USB1A):						
90 V/50 Hz	0.353	--	19.2	FS1/RF1	0.353	Maximum rated output load
90 V/60 Hz	0.354	--	19.2	FS1/RF1	0.354	Maximum rated output load
100 V/50 Hz	0.318	0.45	19.0	FS1/RF1	0.318	Maximum rated output load
100 V/60 Hz	0.319	0.45	19.0	FS1/RF1	0.319	Maximum rated output load
240 V/50 Hz	0.160	0.45	18.9	FS1/RF1	0.160	Maximum rated output load
240 V/60 Hz	0.158	0.45	18.9	FS1/RF1	0.158	Maximum rated output load
264 V/50 Hz	0.149	--	19.1	FS1/RF1	0.149	Maximum rated output load
264 V/60 Hz	0.148	--	19.1	FS1/RF1	0.148	Maximum rated output load
Supplementary information:						

2.1.1.5 c) 1)	TABLE: max. V, A, VA test				P
Voltage (rated) (V)	Current (rated) (A)	Voltage (max.) (V)	Current (max.) (A)	VA (max.) (VA)	
5.5 Vdc	3.14	5.48	3.2	16.0	
supplementary information:					

2.1.1.5 c) 2)	TABLE: stored energy			N/A
Capacitance C (μF)		Voltage U (V)	Energy E (J)	
supplementary information:				

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Clause	Requirement + Test	Result - Remark	Verdict

2.2	TABLE: evaluation of voltage limiting components in SELV circuits			P
Component (measured between)		max. voltage (V) (normal operation)		Voltage Limiting Components
		V peak	V d.c.	
USB output		--	5.5	T1 secondary winding (Pin8-Pin9), RS14
Fault test performed on voltage limiting components		Voltage measured (V) in SELV circuits (V peak or V d.c.)		
T1 secondary winding (Pin 8-Pin 9) short circuit		Unit shut down immediately, no output voltage.		
RS14 short circuit		Unit shut down immediately, no output voltage.		
RS14 open circuit		Unit shut down immediately, no output voltage.		
supplementary information:				

2.5	TABLE: Limited power sources					P
Circuit output tested: USB output						
Note: Measured Uoc (V) with all load circuits disconnected:						
Components	Test condition (Single fault)	Uoc (V)	I <sub>sc</sub> (A)		VA	
			Meas.	Limit	Meas.	Limit
Normal condition	P190700179	5.48 Vdc	3.2	≤ 8.0	16.0	≤ 100
Single fault (RS6 & RS7 Sc)	P190700179	0	Unit shut down	≤ 8.0	Unit shut down	≤ 100
supplementary information:						
Sc=Short circuit, Oc=Open circuit						

2.10.3 and 2.10.4	TABLE: Clearance and creepage distance measurements						P
Clearance (cl) and creepage distance (cr) at/of/between:	U peak (V)	U r.m.s. (V)	Required cl (mm)	cl (mm)	Required cr (mm)	cr (mm)	
L to N before fuse (FI)	420	250	2.22*	3.6	2.4	3.6	
Two poles of fuse (FI)	420	250	2.22*	3.0	2.4	3.0	
Live parts to accessible parts (RI)	420	250	5.92*	7.5	5.92**	7.5	
Primary circuits to secondary circuits (RI)	496	250	5.92*	10.5	5.92**	10.5	
Primary winding to secondary winding (RI)	496	250	5.92*	21.4	5.92**	21.4	
Secondary winding to core (RI)	420	250	5.92*	9.9	5.92**	9.9	
Core to secondary parts (RI)	420	250	5.92*	13.6	5.92**	13.6	

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Clause	Requirement + Test	Result - Remark	Verdict

<b>2.10.3 and 2.10.4</b>	<b>TABLE: Clearance and creepage distance measurements</b>						P
Clearance (cl) and creepage distance (cr) at/of/between:	U peak (V)	U r.m.s. (V)	Required cl (mm)	cl (mm)	Required cr (mm)	cr (mm)	
Supplementary information:							
*Required value was multiplied by the factor 1.48 due to the maximum specified altitude of 5000 m							
**Required creepage not less than required clearance							

<b>2.10.5</b>	<b>TABLE: Distance through insulation measurements</b>						P
Distance through insulation (DTI) at/of:	U peak (V)	U rms (V)	Test voltage (V)	Required DTI (mm)	DTI (mm)		
Enclosure	420	250	3000	0.4	1.5		
Thin sheet material at/of:	U peak (V)	U rms (V)	Test voltage (V)	Required layers	Layers		
-	-	-	-	-	-		
Supplementary information:							

<b>4.3.8</b>	<b>TABLE: Batteries</b>								N/A
The tests of 4.3.8 are applicable only when appropriate battery data is not available									N/A
Is it possible to install the battery in a reverse polarity position?									N/A
	Non-rechargeable batteries			Rechargeable batteries					
	Discharging		Un-intentional charging	Charging		Discharging		Reversed charging	
	Meas. current	Manuf. Specs.		Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.
Max. current during normal condition									
Max. current during fault condition									
Test results:									Verdict
- Chemical leaks									N/A
- Explosion of the battery									N/A
- Emission of flame or expulsion of molten metal									N/A



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Clause	Requirement + Test	Result - Remark	Verdict

- Electric strength tests of equipment after completion of tests		N/A
Supplementary information:		

<b>4.3.8</b>	<b>TABLE: Batteries</b>	N/A
Battery category.....: (Lithium, NiMh, NiCad, Lithium Ion ...)		
Manufacturer.....:		
Type / model .....		
Voltage.....:		
Capacity.....: mAh		
Tested and Certified by (incl. Ref. No.).....:		
Circuit protection diagram:		

MARKINGS AND INSTRUCTIONS (1.7.13 )	
Location of replaceable battery	
Language (s) .....	
Close to the battery .....	
In the servicing instructions .....	
In the operating instructions .....	

4.5	TABLE: Thermal requirements			P
	Supply voltage (V).....:	90 Vac/60 Hz	264 Vac/60 Hz	—
	Ambient Tmin (°C).....:	40		—
	Ambient Tmax (°C).....:	40		—
Maximum measured temperature T of part/at.....:		T (°C)		Allowed T <sub>max</sub> (°C)
Test on model GTM46161-165.0-USB:				
1. Enclosure Inside near Inlet Blade		75.9	73.3	125
2. Choke (LF) Coil		107.7	89.8	110
3. PWB near Rectifier Bridge (BD1)		88.3	73.0	130
4. Capacitor (C1) body near Choke		95.1	81.0	105
5. Capacitor (C2) body near Choke		97.8	88.3	105
6. Capacitor (C3) body near Transformer		104.9	102.1	105
7. PWB near Transformer		102.5	103.1	130
8. Transformer (T1) Primary Winding		107.5	105.2	110

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Clause	Requirement + Test	Result - Remark	Verdict

4.5	TABLE: Thermal requirements					P		
	Supply voltage (V).....:	90 Vac/60 Hz		264 Vac/60 Hz		—		
	Ambient Tmin (°C).....:	40				—		
	Ambient Tmax (°C).....:	40				—		
Maximum measured temperature T of part/at.....:		T (°C)				Allowed T <sub>max</sub> (°C)		
9. Transformer (T1) Secondary Winding		108.7		106.9		110		
10. Transformer (T1) Core		106.4		104.6		Ref.		
11. CY1 body near Transformer		71.1		70.8		125		
12. CY2 body near Transformer		83.6		88.4		125		
13. Capacitor (C4)		91.6		90.6		105		
14. Capacitor (C5)		72.1		71.2		105		
15. Enclosure Inside near Transformer (T1)		78.6		78.1		125		
16. Enclosure Outside near Transformer (T1)		69.9		69.8		95		
17. Ambient		40.0		40.0		--		
Supplementary information:								
Temperature T of winding:		t <sub>1</sub> (°C)	R <sub>1</sub> (Ω)	t <sub>2</sub> (°C)	R <sub>2</sub> (Ω)	T (°C)	Allowed T <sub>max</sub> (°C)	Insulation class
Supplementary information:								

<b>4.5.5</b>	<b>TABLE: Ball pressure test of thermoplastic parts</b>			<b>P</b>
	Allowed impression diameter (mm) .....	≤ 2 mm		—
Part		Test temperature (°C)	Impression diameter (mm)	
Blade holder (SE1X / SE1)		125	1.23	
Blade holder (SE100)		125	1.27	
Blade holder (C2950)		125	1.56	
Blade holder (CX7211 / EXCY0098)		125	1.21	
Blade holder (945)		125	1.23	
Blade holder (HF500R)		125	1.25	
Blade holder (LN-1250P/LN-1250G)		125	1.13	
Blade holder (PA-765A)		125	1.44	
Blade holder (PC-540)		125	1.47	
Bobbin (T375J/T375HF)		125	1.02	

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Clause	Requirement + Test	Result - Remark	Verdict

<b>4.5.5</b>	<b>TABLE: Ball pressure test of thermoplastic parts</b>		<b>P</b>
	Allowed impression diameter (mm) .....	≤ 2 mm	—
Part	Test temperature (°C)	Impression diameter (mm)	
Bobbin (PM-9820)	125	0.98	
Bobbin (CP-J-8800)	125	1.11	
Supplementary information:			

<b>4.7</b>	<b>TABLE: Resistance to fire</b>					<b>P</b>
Part	Manufacturer of material	Type of material	Thickness (mm)	Flammability class	Evidence	
1)	1)	1)	1)	1)	1)	
Supplementary information:						
See appended tables 1.5.1 for detail.						

<b>5.1</b>	<b>TABLE: touch current measurement</b>			<b>P</b>
Measured between:	Measured (mA)	Limit (mA)	Comments/conditions	
L/N to enclosure (with metal foil)	0.005	0.25	--	
L/N to output	0.18	0.25	--	
supplementary information:				

<b>5.2</b>	<b>TABLE: Electric strength tests, impulse tests and voltage surge tests</b>			<b>P</b>
Test voltage applied between:	Voltage shape (AC, DC, impulse, surge)	Test voltage (V)	Breakdown Yes / No	
Primary circuit to body (RI)	AC	3000	No	
Primary circuit to secondary circuit (RI)	AC	3000	No	
Primary winding to secondary winding of T1 (RI)	AC	3000	No	
Secondary winding to core (RI)	AC	3000	No	
Primary and secondary of Y1 capacitor	DC	4242	No	
Supplementary information:				

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Clause	Requirement + Test	Result - Remark	Verdict

<b>5.3</b>	<b>TABLE: Fault condition tests</b>					<b>P</b>
	Ambient temperature (°C).....:				25	—
	Power source for EUT: Manufacturer, model/type, output rating .....				See appended table 1.5.1	—
Component No.	Fault	Supply voltage (Vac)	Test time	Fuse #	Fuse current (A)	Observation
Output	OI	90	4.5 h	FS1/RF1	Max. 0.362 A	Load to 3.646 A, EUT protected immediately, no hazards. Temperature recorded: T1 winding = 123 °C Enclosure: 85 °C
Output	OI	264	4.5 h	FS1/RF1	Max. 0.199 A	Load to 3.630 A, EUT protected immediately, no hazards. Temperature recorded: T1 winding = 119 °C Enclosure: 82 °C
C1	SC	90/264	1 s	FS1/RF1	0	Fuse opened immediately no hazards, repeat 10 times with same result
C2	SC	90/264	1 s	FS1/RF1	0	Fuse opened immediately no hazards, repeat 10 times with same result
DS1	SC	90/264	7 h	FS1/RF1	0.525	Unit work normally no hazards.
RS10	SC	90/264	10 min.	FS1/RF1	0	Unit shutdown, immediately no hazards.
RS7	SC	90/264	10 min.	FS1/RF1	0	Unit shutdown, immediately no hazards.
DS3	SC	90/264	7 h	FS1/RF1	0.017	Unit operated normally. no hazards.
C5	SC	90/264	10 min.	FS1/RF1	0	Output circuit protected instantly. Unit is recoverable. no hazards.
RS20	SC	90/264	1 s	FS1/RF1	0	The Voltage dropped down to 0.64 V. Work for 7 h. Unit is recoverable. no hazards.
1. Supplementary information: 2. S: Short-circuited; O: Open-circuited; O/L: Overloaded; B: Blocked; L: Locked. 3. Observation: The observations during and after fault condition tests. 4. Damaged: Which component (components) damaged during the fault condition test. 5. Temp: The maximum temperature of relevant components. 6. Test with fusible resistor (RF1) (rated 1 Ω, 1 W) and fuse (FS1) (rated T2 A, 250 V).						

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Clause	Requirement + Test	Result - Remark	Verdict

C.2	TABLE: transformers						P
Loc.	Tested insulation	Working voltage peak / V  (2.10.2)	Working voltage rms / V  (2.10.2)	Require d electric strength (5.2)	Required clearance / mm  (2.10.3)	Required creepage distance / mm (2.10.4)	Required distance thr. insul.  (2.10.5)
T1	Reinforced (Sec. – core)	496	149	3000	4.0	4.06	Triple insulated winding complies with Annex U
T1	Reinforced (Pri. – Sec.)	496	149	3000	4.0	4.06	Triple insulated winding complies with Annex U
Loc.	Tested insulation			Test voltage/ V	Measured clearance / mm	Measured creepage dist./ mm	Measured distance thr. insul. / mm; number of layers
T1	Reinforced (Sec. – core)			3000	>7	>7	2
T1	Reinforced (Pri. – Sec.)			3000	>7	>7	2
Supplementary information:							
1) The core of transformer (T1) is considered as primary winding.							
2) The secondary wires are triple wire see appended table 1.5.1 for details.							

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

C.2

TABLE: transformers

P

Transformer (T1)

FRONT VIEW

SIDE VIEW

BOTTOM VIEW

PRIMARY

SECONDARY

" — " TUBE

" ● " START

No.	Winding	Start	Finish	Material	Turns	Tape
1#	N1	2	4	Φ0.25*1P, 2UEW-B	45Ts	1Ts
2#	N4	4	1	Φ0.22*1P, 2UEW-B	20Ts	2Ts
3#	N2	5	3	Φ0.17*1P, 2UEW-B	13Ts	2Ts
4#	N3	9	8	Φ0.8*1P, TAW-B	5Ts	2Ts

A completed list of used test equipment shall be provided in the Test Reports when a Manufacturer Testing Laboratory according to TMP/CTF stage 1 or WMT/CTF stage 2 procedure has been used.

[illegible]

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

<b>2.1.1.7</b>	<b>TABLE: Stored discharge on capacitors test</b>			N/A
Test conditions:	$\tau$ calculated (s)	$\tau$ measured (s)	$t_u \rightarrow 0$ (s)	Remarks:
Supplementary information:				

<b>2.4.2</b>	<b>TABLE: Limited current circuits measurement</b>					P
Location		Voltage (V <sub>peak</sub> )	Current (mA)	Frequency (Hz)	Limit (mA)	Comments
CY1 primary pin to CY2 secondary to earth		0.183	0.366	60	0.7	--
Supplementary information:						
Test voltage: 264 Vac / 60 Hz.						
Rating of bridging components: CY1 = CY2, measured Max. 1000 Pf.						

<b>2.6.3.4</b>	<b>TABLE: Resistance of earthing conductors and their terminals test</b>			N/A
location		resistance measured (m $\Omega$ )	limit	comments
location		drop voltage measured (V)	limit	comments
Supplementary information:				

4.6.1, 4.6.2	TABLE: Enclosure openings			N/A
location		size (mm)	comments	
Supplementary information:				

4.6.4	TABLE: Enclosure openings in transportable equipment		N/A
location	size (mm)	comments	
Supplementary information:			



IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

<p align="center"><b>ATTACHMENT TO TEST REPORT IEC 60950-1</b>  <b>EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES</b>  Information technology equipment – Safety –  Part 1: General requirements</p>			
<b>Differences according to</b> ..... : EN 60950-1:2006/A11:2009/A1:2010/A12:2011/A2:2013			
<b>Attachment Form No.</b> ..... : EU_GD_IEC60950_1F			
<b>Attachment Originator</b> ..... : SGS Fimko Ltd			
<b>Master Attachment</b> ..... : Date 2014-02			
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<b>EN 60950-1:2006/A11:2009/A1:2010/A12:2011/A2:2013 – CENELEC COMMON MODIFICATIONS</b>
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IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN)			
Clause	Requirement + Test	Result - Remark	Verdict
	Clauses, subclauses, notes, tables and figures which are additional to those in IEC60950-1 and it's amendmets are prefixed "Z"		P
Contents  (A2:2013)	Add the following annexes: Annex ZA (normative)      Normative references to international publications with their corresponding European publications Annex ZB (normative)      Special national conditions Annex ZD (informative)    IEC and CENELEC code designations for flexible cords		P
General	Delete all the "country" notes in the reference document (IEC 60950-1:2005) according to the following list: 1.4.8    Note 2    1.5.1    Note 2 & 3    1.5.7.1    Note 1.5.8    Note 2    1.5.9.4    Note    1.7.2.1    Note 4, 5 & 6 2.2.3    Note    2.2.4    Note    2.3.2    Note 2.3.2.1 Note 2    2.3.4    Note 2    2.6.3.3    Note 2 & 3 2.7.1    Note    2.10.3.2    Note 2    2.10.5.13 Note 3 3.2.1.1 Note    3.2.4    Note 3.    2.5.1    Note 2 4.3.6    Note 1 & 2    4.7    Note 4    4.7.2.2    Note 4.7.3.1 Note 2 5.1.7.1    Note 3 & 4    5.3.7    Note 1 6    Note 2 & 5    6.1.2.1    Note 2    6.1.2.2    Note 6.2.2    Note    6.2.2.1    Note 2    6.2.2.2    Note 7.1    Note 3    7.2    Note    7.3    Note 1 & 2 G.2.1    Note 2    Annex H    Note 2		P


IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN)			
Clause	Requirement + Test	Result - Remark	Verdict
General (A1:2010)	Delete all the "country" notes in the reference document (IEC 60950-1:2005/A1:2010) according to the following list: 1.5.7.1 Note 6.1.2.1 Note 2 6.2.2.1 Note 2 EE.3 Note		P
General (A2:2013)	Delete all the "country" notes in the reference document (IEC 60950-1:2005/A2:2013) according to the following list: 2.7.1 Note * 2.10.3.1 Note 2 6.2.2. Note * Note of secretary: Text of Common Modification remains unchanged.		P
1.1.1 (A1:2010)	<b>Replace</b> the text of NOTE 3 by the following. NOTE 3 The requirements of EN 60065 may also be used to meet safety requirements for multimedia equipment. See IEC Guide 112, Guide on the safety of multimedia equipment. For television sets EN 60065 applies.		N/A
1.3.Z1	Add the following subclause: 1.3.Z1 Exposure to excessive sound pressure The apparatus shall be so designed and constructed as to present no danger when used for its intended purpose, either in normal operating conditions or under fault conditions, particularly providing protection against exposure to excessive sound pressures from headphones or earphones. NOTE Z1 A new method of measurement is described in EN 50332-1, Sound system equipment: Headphones and earphones associated with portable audio equipment - Maximum sound pressure level measurement methodology and limit considerations - Part 1: General method for "one package equipment", and in EN 50332-2, Sound system equipment: Headphones and earphones associated with portable audio equipment - Maximum sound pressure level measurement methodology and limit considerations - Part 2: Guidelines to associate sets with headphones coming from different manufacturers.		N/A
(A12:2011)	In EN 60950-1:2006/A12:2011 Delete the addition of 1.3.Z1 / EN 60950-1:2006 Delete the definition 1.2.3.Z1 / EN 60950-1:2006 /A1:2010		N/A
1.5.1 (Added info*)	Add the following NOTE: NOTE Z1 The use of certain substances in electrical and electronic equipment is restricted within the EU: see Directive 2002/95/EC. New Directive 2011/65/11 *		N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN)			
Clause	Requirement + Test	Result - Remark	Verdict
1.7.2.1 (A1:2010)	In addition, for a PORTABLE SOUND SYSTEM, the instructions shall include a warning that excessive sound pressure from earphones and headphones can cause hearing loss.		N/A
1.7.2.1 (A12:2011)	In EN 60950-1:2006/A12:2011 Delete NOTE Z1 and the addition for Portable Sound System. Add the following clause and annex to the existing standard and amendments.		N/A
	<b>Zx Protection against excessive sound pressure from personal music players</b>		N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN)			
Clause	Requirement + Test	Result - Remark	Verdict
	<p><b>Zx.1 General</b></p> <p>This sub-clause specifies requirements for protection against excessive sound pressure from personal music players that are closely coupled to the ear. It also specifies requirements for earphones and headphones intended for use with personal music players.</p> <p>A personal music player is a portable equipment for personal use, that: is designed to allow the user to listen to recorded or broadcast sound or video; and primarily uses headphones or earphones that can be worn in or on or around the ears; and allows the user to walk around while in use.</p> <p>NOTE 1 Examples are hand-held or body-worn portable CD players, MP3 audio players, mobile phones with MP3 type features, PDA's or similar equipment.</p> <p>A personal music player and earphones or headphones intended to be used with personal music players shall comply with the requirements of this sub-clause.</p> <p>The requirements in this sub-clause are valid for music or video mode only.</p> <p>The requirements do not apply: while the personal music player is connected to an external amplifier; or while the headphones or earphones are not used.</p> <p>NOTE 2 An external amplifier is an amplifier which is not part of the personal music player or the listening device, but which is intended to play the music as a standalone music player.</p> <p>The requirements do not apply to: hearing aid equipment and professional equipment;</p> <p>NOTE 3 Professional equipment is equipment sold through special sales channels. All products sold through normal electronics stores are considered not to be professional equipment.</p>		N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN)			
Clause	Requirement + Test	Result - Remark	Verdict
	<p>analogue personal music players (personal music players without any kind of digital processing of the sound signal) that are brought to the market before the end of 2015.</p> <p>NOTE 4 This exemption has been allowed because this technology is falling out of use and it is expected that within a few years it will no longer exist. This exemption will not be extended to other technologies.</p> <p>For equipment which is clearly designed or intended for use by young children, the limits of EN 71-1 apply.</p>		N/A
	<p><b>Zx.2 Equipment requirements</b></p> <p>No safety provision is required for equipment that complies with the following:</p> <p>equipment provided as a package (personal music player with its listening device), where the acoustic output <math>L_{Aeq,T}</math> is <math>\leq 85</math> dBA measured while playing the fixed "programme simulation noise" as described in EN 50332-1; and</p> <p>a personal music player provided with an analogue electrical output socket for a listening device, where the electrical output is <math>\leq 27</math> mV measured as described in EN 50332-2, while playing the fixed "programme simulation noise" as described in EN 50332-1.</p> <p>NOTE 1 Wherever the term acoustic output is used in this clause, the 30 s A-weighted equivalent sound pressure level <math>L_{Aeq,T}</math> is meant. See also Zx.5 and Annex Zx.</p> <p>All other equipment shall:</p> <p>a) protect the user from unintentional acoustic outputs exceeding those mentioned above; and</p> <p>b) have a standard acoustic output level not exceeding those mentioned above, and automatically return to an output level not exceeding those mentioned above when the power is switched off; and</p>		N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN)			
Clause	Requirement + Test	Result - Remark	Verdict
	<p>c) provide a means to actively inform the user of the increased sound pressure when the equipment is operated with an acoustic output exceeding those mentioned above. Any means used shall be acknowledged by the user before activating a mode of operation which allows for an acoustic output exceeding those mentioned above. The acknowledgement does not need to be repeated more than once every 20 h of cumulative listening time; and</p> <p>NOTE 2 Examples of means include visual or audible signals. Action from the user is always required.</p> <p>NOTE 3 The 20 h listening time is the accumulative listening time, independent how often and how long the personal music player has been switched off.</p> <p>d) have a warning as specified in Zx.3; and</p> <p>e) not exceed the following:</p> <p>1) equipment provided as a package (player with its listening device), the acoustic output shall be <math>\leq 100</math> dBA measured while playing the fixed "programme simulation noise" described in EN 50332-1; and</p> <p>2) a personal music player provided with an analogue electrical output socket for a listening device, the electrical output shall be <math>\leq 150</math> mV measured as described in EN 50332-2, while playing the fixed "programme simulation noise" described in EN 50332-1.</p> <p>For music where the average sound pressure (long term <math>L_{Aeq,T}</math>) measured over the duration of the song is lower than the average produced by the programme simulation noise, the warning does not need to be given as long as the average sound pressure of the song is below the basic limit of 85 dBA. In this case T becomes the duration of the song.</p> <p>NOTE 4 Classical music typically has an average sound pressure (long term <math>L_{Aeq,T}</math>) which is much lower than the average programme simulation noise. Therefore, if the player is capable to analyse the song and compare it with the programme simulation noise, the warning does not need to be given as long as the average sound pressure of the song is below the basic limit of 85 dBA.</p> <p>For example, if the player is set with the programme simulation noise to 85 dBA, but the average music level of the song is only 65 dBA, there is no need to give a warning or ask an acknowledgement as long as the average sound level of the song is not above the basic limit of 85 dBA.</p>		N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN)			
Clause	Requirement + Test	Result - Remark	Verdict
	<p><b>Zx.3 Warning</b></p> <p>The warning shall be placed on the equipment, or on the packaging, or in the instruction manual and shall consist of the following:</p> <p style="padding-left: 40px;">the symbol of Figure 1 with a minimum height of 5 mm; and</p> <p style="padding-left: 40px;">the following wording, or similar:</p> <p>“To prevent possible hearing damage, do not listen at high volume levels for long periods.”</p> <div style="text-align: center;">  </div> <p><b>Figure 1 – Warning label (IEC 60417-6044)</b></p> <p>Alternatively, the entire warning may be given through the equipment display during use, when the user is asked to acknowledge activation of the higher level.</p>		N/A
	<b>Zx.4 Requirements for listening devices (headphones and earphones)</b>		N/A
	<p><b>Zx.4.1 Wired listening devices with analogue input</b></p> <p>With 94 dBA sound pressure output <math>L_{Aeq,T}</math>, the input voltage of the fixed “programme simulation noise” described in EN 50332-2 shall be <math>\geq 75</math> mV.</p> <p>This requirement is applicable in any mode where the headphones can operate (active or passive), including any available setting (for example built-in volume level control).</p> <p>NOTE The values of 94 dBA – 75 mV correspond with 85dBA – 27 mV and 100 dBA – 150 mV.</p>		N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN)			
Clause	Requirement + Test	Result - Remark	Verdict
	<p><b>Zx.4.2 Wired listening devices with digital input</b></p> <p>With any playing device playing the fixed “programme simulation noise” described in EN 50332-1 (and respecting the digital interface standards, where a digital interface standard exists that specifies the equivalent acoustic level), the acoustic output <math>L_{Aeq,T}</math> of the listening device shall be <math>\leq 100</math> dBA.</p> <p>This requirement is applicable in any mode where the headphones can operate, including any available setting (for example built-in volume level control, additional sound feature like equalization, etc.).</p> <p>NOTE An example of a wired listening device with digital input is a USB headphone.</p>		N/A
	<p><b>Zx.4.3 Wireless listening devices</b></p> <p>In wireless mode: with any playing and transmitting device playing the fixed programme simulation noise described in EN 50332-1; and respecting the wireless transmission standards, where an air interface standard exists that specifies the equivalent acoustic level; and with volume and sound settings in the listening device (for example built-in volume level control, additional sound feature like equalization, etc.) set to the combination of positions that maximize the measured acoustic output for the above mentioned programme simulation noise, the acoustic output <math>L_{Aeq,T}</math> of the listening device shall be <math>\leq 100</math> dBA.</p> <p>NOTE An example of a wireless listening device is a Bluetooth headphone.</p>		N/A
	<p><b>Zx.5 Measurement methods</b></p> <p>Measurements shall be made in accordance with EN 50332-1 or EN 50332-2 as applicable. Unless stated otherwise, the time interval T shall be 30 s.</p> <p>NOTE Test method for wireless equipment provided without listening device should be defined.</p>		N/A



IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN)			
Clause	Requirement + Test	Result - Remark	Verdict
2.7.1	<p>Replace the subclause as follows:</p> <p>Basic requirements</p> <p>To protect against excessive current, short-circuits and earth faults in PRIMARY CIRCUITS, protective devices shall be included either as integral parts of the equipment or as parts of the building installation, subject to the following, a), b) and c):</p> <p>a) except as detailed in b) and c), protective devices necessary to comply with the requirements of 5.3 shall be included as parts of the equipment;</p> <p>b) for components in series with the mains input to the equipment such as the supply cord, appliance coupler, r.f.i. filter and switch, short-circuit and earth fault protection may be provided by protective devices in the building installation;</p>	Considered	P
	<p>c) it is permitted for PLUGGABLE EQUIPMENT TYPE B or PERMANENTLY CONNECTED EQUIPMENT, to rely on dedicated overcurrent and short-circuit protection in the building installation, provided that the means of protection, e.g. fuses or circuit breakers, is fully specified in the installation instructions.</p> <p>If reliance is placed on protection in the building installation, the installation instructions shall so state, except that for PLUGGABLE EQUIPMENT TYPE A the building installation shall be regarded as providing protection in accordance with the rating of the wall socket outlet.</p>		P
2.7.2	This subclause has been declared 'void'.		N/A
3.2.3	Delete the NOTE in Table 3A, and delete also in this table the conduit sizes in parentheses.		N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN)			
Clause	Requirement + Test	Result - Remark	Verdict
3.2.5.1	<p>Replace "60245 IEC 53" by "H05 RR-F"; "60227 IEC 52" by "H03 VV-F or H03 VVH2-F"; "60227 IEC 53" by "H05 VV-F or H05 VVH2-F2".</p> <p>In Table 3B, replace the first four lines by the following: Up to and including 6   0,75 <sup>a)</sup>   Over 6 up to and including 10   (0,75) <sup>b)</sup> 1,0   Over 10 up to and including 16   (1,0) <sup>c)</sup> 1,5  </p> <p>In the conditions applicable to Table 3B delete the words "in some countries" in condition <sup>a)</sup>.</p> <p>In NOTE 1, applicable to Table 3B, delete the second sentence.</p>		N/A
3.2.5.1 (A2:2013)	NOTE Z1 The harmonised code designations corresponding to the IEC cord types are given in Annex ZD		N/A
3.3.4	<p>In Table 3D, delete the fourth line: conductor sizes for 10 to 13 A, and replace with the following: Over 10 up to and including 16   1,5 to 2,5   1,5 to 4  </p> <p>Delete the fifth line: conductor sizes for 13 to 16 A</p>		N/A
4.3.13.6 (A1:2010)	<p>Replace the existing NOTE by the following: NOTE Z1 Attention is drawn to: 1999/519/EC: Council Recommendation on the limitation of exposure of the general public to electromagnetic fields 0 Hz to 300 GHz, and 2006/25/EC: Directive on the minimum health and safety requirements regarding the exposure of workers to risks arising from physical agents (artificial optical radiation).</p>		N/A
	Standards taking into account mentioned Recommendation and Directive which demonstrate compliance with the applicable EU Directive are indicated in the OJEC.		N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN)			
Clause	Requirement + Test	Result - Remark	Verdict
Annex H	Replace the last paragraph of this annex by: At any point 10 cm from the surface of the OPERATOR ACCESS AREA, the dose rate shall not exceed 1 $\mu$ Sv/h (0,1 mR/h) (see NOTE). Account is taken of the background level. Replace the notes as follows: NOTE These values appear in Directive 96/29/Euratom. Delete NOTE 2.		N/A
Bibliography	Additional EN standards.		—
<b>ZA</b>	<b>NORMATIVE REFERENCES TO INTERNATIONAL PUBLICATIONS WITH THEIR CORRESPONDING EUROPEAN PUBLICATIONS</b>		—

ZB ANNEX (normative) SPECIAL NATIONAL CONDITIONS (EN)			
Clause	Requirement + Test	Result - Remark	Verdict
1.2.4.1	In <b>Denmark</b> , certain types of Class I appliances (see 3.2.1.1) may be provided with a plug not establishing earthing conditions when inserted into Danish socket-outlets.		N/A
1.2.13.14 (A11:2009)	In <b>Norway</b> and <b>Sweden</b> , for requirements see 1.7.2.1 and 7.3 of this annex.		N/A
1.5.7.1 (A11:2009)	In <b>Finland</b> , <b>Norway</b> and <b>Sweden</b> , resistors bridging BASIC INSULATION in CLASS I PLUGGABLE EQUIPMENT TYPE A must comply with the requirements in 1.5.7.1. In addition when a single resistor is used, the resistor must withstand the resistor test in 1.5.7.2.		N/A
1.5.8	In <b>Norway</b> , due to the IT power system used (see annex V, Figure V.7), capacitors are required to be rated for the applicable line-to-line voltage (230 V).		P
1.5.9.4	In <b>Finland</b> , <b>Norway</b> and <b>Sweden</b> , the third dashed sentence is applicable only to equipment as defined in 6.1.2.2 of this annex.		N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
<b>ZB ANNEX (normative)</b> <b>SPECIAL NATIONAL CONDITIONS (EN)</b>			
Clause	Requirement + Test	Result - Remark	Verdict
1.7.2.1	<p>In <b>Finland, Norway and Sweden</b>, CLASS I PLUGGABLE EQUIPMENT TYPE A intended for connection to other equipment or a network shall, if safety relies on connection to protective earth or if surge suppressors are connected between the network terminals and accessible parts, have a marking stating that the equipment must be connected to an earthed mains socket-outlet.</p> <p>The marking text in the applicable countries shall be as follows:</p> <p>In <b>Finland</b>: "Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan"</p> <p>In <b>Norway</b>: "Apparatet må tilkoples jordet stikkontakt"</p> <p>In <b>Sweden</b>: "Apparaten skall anslutas till jordat uttag"</p>		P
1.7.2.1 (A11:2009)	<p>In <b>Norway and Sweden</b>, the screen of the cable distribution system is normally not earthed at the entrance of the building and there is normally no equipotential bonding system within the building. Therefore the protective earthing of the building installation need to be isolated from the screen of a cable distribution system.</p> <p>It is however accepted to provide the insulation external to the equipment by an adapter or an interconnection cable with galvanic isolator, which may be provided by e.g. a retailer.</p> <p>The user manual shall then have the following or similar information in Norwegian and Swedish language respectively, depending on in what country the equipment is intended to be used in:</p> <p>"Equipment connected to the protective earthing of the building installation through the mains connection or through other equipment with a connection to protective earthing – and to a cable distribution system using coaxial cable, may in some circumstances create a fire hazard. Connection to a cable distribution system has therefore to be provided through a device providing electrical isolation below a certain frequency range (galvanic isolator, see EN 60728-11)."</p>		

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
<b>ZB ANNEX (normative)</b> <b>SPECIAL NATIONAL CONDITIONS (EN)</b>			
Clause	Requirement + Test	Result - Remark	Verdict
	<p>NOTE In Norway, due to regulation for installations of cable distribution systems, and in Sweden, a galvanic isolator shall provide electrical insulation below 5 MHz. The insulation shall withstand a dielectric strength of 1,5 kV r.m.s., 50 Hz or 60 Hz, for 1 min.</p> <p>Translation to Norwegian (the Swedish text will also be accepted in Norway):</p> <p>“Utstyr som er koplet til beskyttelsesjord via nettplugg og/eller via annet jordtilkoplet utstyr – og er tilkoplet et kabel-TV nett, kan forårsake brannfare. For å unngå dette skal det ved tilkopling av utstyret til kabel-TV nettet installeres en galvanisk isolator mellom utstyret og kabel- TV nettet.”</p> <p>Translation to Swedish:</p> <p>”Utrustning som är kopplad till skyddsjord via jordat vägguttag och/eller via annan utrustning och samtidigt är kopplad till kabel-TV nät kan i vissa fall medföra risk för brand. För att undvika detta skall vid anslutning av utrustningen till kabel-TV nät galvanisk isolator finnas mellan utrustningen och kabel-TV nätet.”</p>		N/A
1.7.2.1 (A2:2013)	<p>In <b>Denmark</b>, CLASS I PLUGGABLE EQUIPMENT TYPE A intended for connection to other equipment or a network shall, if safety relies on connection to protective earth or if surge suppressors are connected between the network terminals and accessible parts, have a marking stating that the equipment must be connected to an earthed mains socket-outlet.</p> <p>The marking text in <b>Denmark</b> shall be as follows:  In <b>Denmark</b>: “Apparatets stikprop skal tilsluttes en stikkontakt med jord, som giver forbindelse til stikproppens jord.”</p>		N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
<b>ZB ANNEX (normative)</b> <b>SPECIAL NATIONAL CONDITIONS (EN)</b>			
Clause	Requirement + Test	Result - Remark	Verdict
1.7.5	In <b>Denmark</b> , socket-outlets for providing power to other equipment shall be in accordance with the Heavy Current Regulations, Section 107-2-D1, Standard Sheet DK 1-3a, DK 1-5a or DK 1-7a, when used on Class I equipment. For STATIONARY EQUIPMENT the socket-outlet shall be in accordance with Standard Sheet DK 1-1b or DK 1-5a.		N/A
1.7.5 (A11:2009)	For <b>CLASS II EQUIPMENT</b> the socket outlet shall be in accordance with Standard Sheet DKA 1-4a.		
1.7.5 (A2:2013)	In <b>Denmark</b> , socket-outlets for providing power to other equipment shall be in accordance with the DS 60884-2-D1:2011.  For class I equipment the following Standard Sheets are applicable: DK 1-3a, DK 1-1c, DK 1-1d, DK 1-5a or DK 1-7a, with the exception for STATIONARY EQUIPMENT where the socket-outlets shall be in accordance with Standard Sheet DK 1-1b, DK 1-1c, DK 1-1d or DK 1-5a.  Socket outlets intended for providing power to Class II apparatus with a rated current of 2,5 A shall be in accordance with DS 60884-2-D1 standard sheet DKA 1-4a. Other current rating socket outlets shall be in compliance with by DS 60884-2-D1 Standard Sheet DKA 1-3a or DKA 1-3b.  Justification the Heavy Current Regulations, 6c		N/A
2.2.4	In <b>Norway</b> , for requirements see 1.7.2.1, 6.1.2.1 and 6.1.2.2 of this annex.		N/A
2.3.2	In <b>Finland</b> , <b>Norway</b> and <b>Sweden</b> there are additional requirements for the insulation. See 6.1.2.1 and 6.1.2.2 of this annex.		N/A
2.3.4	In <b>Norway</b> , for requirements see 1.7.2.1, 6.1.2.1 and 6.1.2.2 of this annex.		N/A
2.6.3.3	In the <b>United Kingdom</b> , the current rating of the circuit shall be taken as 13 A, not 16 A.		P

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
<b>ZB ANNEX (normative)</b> <b>SPECIAL NATIONAL CONDITIONS (EN)</b>			
Clause	Requirement + Test	Result - Remark	Verdict
2.7.1	In the <b>United Kingdom</b> , to protect against excessive currents and short-circuits in the PRIMARY CIRCUIT of DIRECT PLUG-IN EQUIPMENT, tests according to 5.3 shall be conducted, using an external protective device rated 30 A or 32 A. If these tests fail, suitable protective devices shall be included as integral parts of the DIRECT PLUG-IN EQUIPMENT, so that the requirements of 5.3 are met.		N/A
2.10.5.13	In <b>Finland, Norway and Sweden</b> , there are additional requirements for the insulation, see 6.1.2.1 and 6.1.2.2 of this annex.		N/A
3.2.1.1	In <b>Switzerland</b> , supply cords of equipment having a RATED CURRENT not exceeding 10 A shall be provided with a plug complying with SEV 1011 or IEC 60884-1 and one of the following dimension sheets: SEV 6532-2.1991 Plug Type 15 3P+N+PE 250/400 V, 10 A		N/A
	SEV 6533-2.1991 Plug Type 11 L+N 250 V, 10 A SEV 6534-2.1991 Plug Type 12 L+N+PE 250 V, 10 A  In general, EN 60309 applies for plugs for currents exceeding 10 A. However, a 16 A plug and socket-outlet system is being introduced in Switzerland, the plugs of which are according to the following dimension sheets, published in February 1998: SEV 5932-2.1998: Plug Type 25 , 3L+N+PE 230/400 V, 16 A  SEV 5933-2.1998: Plug Type 21, L+N, 250 V, 16A  SEV 5934-2.1998: Plug Type 23, L+N+PE 250 V,		N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
<b>ZB ANNEX (normative)</b> <b>SPECIAL NATIONAL CONDITIONS (EN)</b>			
Clause	Requirement + Test	Result - Remark	Verdict
3.2.1.1	<p>In <b>Denmark</b>, supply cords of single-phase equipment having a rated current not exceeding 13 A shall be provided with a plug according to the Heavy Current Regulations, Section 107-2-D1.</p> <p>CLASS I EQUIPMENT provided with socket-outlets with earth contacts or which are intended to be used in locations where protection against indirect contact is required according to the wiring rules shall be provided with a plug in accordance with standard sheet DK 2-1a or DK 2-5a.</p> <p>If poly-phase equipment and single-phase equipment having a RATED CURRENT exceeding 13 A is provided with a supply cord with a plug, this plug shall be in accordance with the Heavy Current Regulations, Section 107-2-D1 or EN 60309-2.</p>		N/A
3.2.1.1 (A2:2013)	<p>In <b>Denmark</b>, supply cords of single-phase equipment having a rated current not exceeding 13 A shall be provided with a plug according to DS 60884-2-D1.</p> <p>CLASS I EQUIPMENT provided with socket-outlets with earth contacts or which are intended to be used in locations where protection against indirect contact is required according to the wiring rules shall be provided with a plug in accordance with standard sheet DK 2-1a or DK 2-5a.</p> <p>If a single-phase equipment having a RATED CURRENT exceeding 13 A or if a poly-phase equipment is provided with a supply cord with a plug, this plug shall be in accordance with the standard sheets DK 6-1a in DS 60884-2-D1 or EN 60309-2.</p> <p>Justification the Heavy Current Regulations, 6c</p>		N/A



IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
<b>ZB ANNEX (normative)</b> <b>SPECIAL NATIONAL CONDITIONS (EN)</b>			
Clause	Requirement + Test	Result - Remark	Verdict
3.2.1.1	<p>In <b>Spain</b>, supply cords of single-phase equipment having a rated current not exceeding 10 A shall be provided with a plug according to UNE 20315:1994.</p> <p>Supply cords of single-phase equipment having a rated current not exceeding 2,5 A shall be provided with a plug according to UNE-EN 50075:1993.</p> <p>CLASS I EQUIPMENT provided with socket-outlets with earth contacts or which are intended to be used in locations where protection against indirect contact is required according to the wiring rules, shall be provided with a plug in accordance with standard UNE 20315:1994.</p> <p>If poly-phase equipment is provided with a supply cord with a plug, this plug shall be in accordance with UNE-EN 60309-2.</p>		N/A
3.2.1.1	<p>In the <b>United Kingdom</b>, apparatus which is fitted with a flexible cable or cord and is designed to be connected to a mains socket conforming to BS 1363 by means of that flexible cable or cord and plug, shall be fitted with a 'standard plug' in accordance with Statutory Instrument 1768:1994 - The Plugs and Sockets etc. (Safety) Regulations 1994, unless exempted by those regulations.</p> <p>NOTE 'Standard plug' is defined in SI 1768:1994 and essentially means an approved plug conforming to BS 1363 or an approved conversion plug.</p>		N/A
3.2.1.1	<p>In <b>Ireland</b>, apparatus which is fitted with a flexible cable or cord and is designed to be connected to a mains socket conforming to I.S. 411 by means of that flexible cable or cord and plug, shall be fitted with a 13 A plug in accordance with Statutory Instrument 525:1997 - National Standards Authority of Ireland (section 28) (13 A Plugs and Conversion Adaptors for Domestic Use) Regulations 1997.</p>		N/A
3.2.4	<p>In <b>Switzerland</b>, for requirements see 3.2.1.1 of this annex.</p>		P

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
<b>ZB ANNEX (normative)</b> <b>SPECIAL NATIONAL CONDITIONS (EN)</b>			
Clause	Requirement + Test	Result - Remark	Verdict
3.2.5.1	In the <b>United Kingdom</b> , a power supply cord with conductor of 1,25 mm <sup>2</sup> is allowed for equipment with a rated current over 10 A and up to and including 13 A.		N/A
3.3.4	In the <b>United Kingdom</b> , the range of conductor sizes of flexible cords to be accepted by terminals for equipment with a RATED CURRENT of over 10 A up to and including 13 A is:  • 1,25 mm <sup>2</sup> to 1,5 mm <sup>2</sup> nominal cross-sectional area.		N/A
4.3.6	In the <b>United Kingdom</b> , the torque test is performed using a socket outlet complying with BS 1363 part 1:1995, including Amendment 1:1997 and Amendment 2:2003 and the plug part of DIRECT PLUG-IN EQUIPMENT shall be assessed to BS 1363: Part 1, 12.1, 12.2, 12.3, 12.9, 12.11, 12.12, 12.13, 12.16 and 12.17, except that the test of 12.17 is performed at not less than 125 °C. Where the metal earth pin is replaced by an Insulated Shutter Opening Device (ISOD), the requirements of clauses 22.2 and 23 also apply.		N/A
4.3.6	In <b>Ireland</b> , DIRECT PLUG-IN EQUIPMENT is known as plug similar devices. Such devices shall comply with Statutory Instrument 526:1997 - National Standards Authority of Ireland (Section 28) (Electrical plugs, plug similar devices and sockets for domestic use) Regulations, 1997.		N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
<b>ZB ANNEX (normative)</b> <b>SPECIAL NATIONAL CONDITIONS (EN)</b>			
Clause	Requirement + Test	Result - Remark	Verdict
5.1.7.1	<p>In <b>Finland, Norway and Sweden</b> TOUCH CURRENT measurement results exceeding 3,5 mA r.m.s. are permitted only for the following equipment:</p> <ul style="list-style-type: none"> <li>• STATIONARY PLUGGABLE EQUIPMENT TYPE A that is intended to be used in a RESTRICTED ACCESS LOCATION where equipotential bonding has been applied, for example, in a telecommunication centre; and has provision for a permanently connected PROTECTIVE EARTHING CONDUCTOR; and is provided with instructions for the installation of that conductor by a SERVICE PERSON;</li> <li>• STATIONARY PLUGGABLE EQUIPMENT TYPE B;</li> <li>• STATIONARY PERMANENTLY CONNECTED EQUIPMENT.</li> </ul>		N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
<b>ZB ANNEX (normative)</b> <b>SPECIAL NATIONAL CONDITIONS (EN)</b>			
Clause	Requirement + Test	Result - Remark	Verdict
6.1.2.1 (A1:2010)	<p>In <b>Finland, Norway and Sweden</b>, add the following text between the first and second paragraph of the compliance clause:</p> <p>If this insulation is solid, including insulation forming part of a component, it shall at least consist of either</p> <ul style="list-style-type: none"> <li>- two layers of thin sheet material, each of which shall pass the electric strength test below, or</li> <li>- one layer having a distance through insulation of at least 0,4 mm, which shall pass the electric strength test below.</li> </ul> <p>Alternatively for components, there is no distance through insulation requirements for the insulation consisting of an insulating compound completely filling the casing, so that CLEARANCES and CREEPAGE DISTANCES do not exist, if the component passes the electric strength test in accordance with the compliance clause below and in addition</p> <ul style="list-style-type: none"> <li>- passes the tests and inspection criteria of 2.10.11 with an electric strength test of 1,5 kV multiplied by 1,6 (the electric strength test of 2.10.10 shall be performed using 1,5 kV), and</li> <li>- is subject to ROUTINE TESTING for electric strength during manufacturing, using a test voltage of 1,5 kV.</li> </ul>		P

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
<b>ZB ANNEX (normative)</b> <b>SPECIAL NATIONAL CONDITIONS (EN)</b>			
Clause	Requirement + Test	Result - Remark	Verdict
	<p>It is permitted to bridge this insulation with an optocoupler complying with 2.10.5.4 b).</p> <p>It is permitted to bridge this insulation with a capacitor complying with EN 60384-14:2005, subclass Y2.</p> <p>A capacitor classified Y3 according to EN 60384-14:2005, may bridge this insulation under the following conditions:</p> <ul style="list-style-type: none"> <li>- the insulation requirements are satisfied by having a capacitor classified Y3 as defined by EN 60384-14, which in addition to the Y3 testing, is tested with an impulse test of 2,5 kV defined in EN 60950-1:2006, 6.2.2.1;</li> <li>- the additional testing shall be performed on all the test specimens as described in EN 60384-14:</li> <li>- the impulse test of 2,5 kV is to be performed before the endurance test in EN 60384-14, in the sequence of tests as described in EN 60384-14.</li> </ul>		P
6.1.2.2	In <b>Finland, Norway</b> and <b>Sweden</b> , the exclusions are applicable for PERMANENTLY CONNECTED EQUIPMENT, PLUGGABLE EQUIPMENT TYPE B and equipment intended to be used in a RESTRICTED ACCESS LOCATION where equipotential bonding has been applied, e.g. in a telecommunication centre, and which has provision for a permanently connected PROTECTIVE EARTHING CONDUCTOR and is provided with instructions for the installation of that conductor by a SERVICE PERSON.		N/A
7.2	In <b>Finland, Norway</b> and <b>Sweden</b> , for requirements see 6.1.2.1 and 6.1.2.2 of this annex.  The term TELECOMMUNICATION NETWORK in 6.1.2 being replaced by the term CABLE DISTRIBUTION SYSTEM.		N/A
7.3 (A11:2009)	In <b>Norway</b> and <b>Sweden</b> , for requirements see 1.2.13.14 and 1.7.2.1 of this annex.		N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

### Annex ZD (informative)

#### IEC and CENELEC code designations for flexible cords

Type of flexible cord	Code designations	
	IEC	CENELEC
<b>PVC insulated cords</b>		
Flat twin tinsel cord	60227 IEC 41	H03VH-Y
Light polyvinyl chloride sheathed flexible cord	60227 IEC 52	H03VV-F H03VVH2-F
Ordinary polyvinyl chloride sheathed flexible cord	60277 IEC 53	H05VV-F H05VVH2-F
<b>Rubber insulated cords</b>		
Braided cord	60245 IEC 51	H03RT-F
Ordinary tough rubber sheathed flexible cord	60245 IEC 53	H05RR-F
Ordinary polychloroprene sheathed flexible cord	60245 IEC 57	H05RN-F
Heavy polychloroprene sheathed flexible cord	60245 IEC 66	H07RN-F
<b>Cords having high flexibility</b>		
Rubber insulated and sheathed cord	60245 IEC 86	H03RR-H
Rubber insulated, crosslinked PVC sheathed cord	60245 IEC 87	H03RV4-H
Crosslinked PVC insulated and sheathed cord	60245 IEC 88	H03V4V4-H

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
<p align="center"><b>ATTACHMENT TO TEST REPORT IEC 60950-1 (AUSTRALIA/NEW ZEALAND) NATIONAL DIFFERENCES (Information technology equipment – Safety)</b></p>			
Differences according to ..... : AS/NZS 60950.1:2015			
Attachment Form No. .... : AU_NZ_ND_IEC 60950_1G			
Attachment Originator ..... : JAS-ANZ			
Master Attachment..... : 2017-06			
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	<b>National Differences</b>	—
<b>Appendix ZZ</b>	Variations to IEC 60950-1, Ed 2.2 (2013) for Australia and New Zealand	—
<b>1.2</b>	<b>DEFINITIONS</b>	P
	After definition 'PERSON, SERVICE', insert the following new definition: POTENTIAL IGNITION SOURCE.....1.2.12.201	P
<b>1.5</b>	<b>COMPONENTS</b>	P
1.5.1	1. First paragraph, insert the following text after the words 'IEC component standard' or the relevant Australian/New Zealand Standard 2. In the Note, insert the following text after the word standard: or the relevant Australian/New Zealand Standard 3. Second paragraph, delete the words 'without further evaluation'	P
1.5.2	1. First paragraph, insert the following text after the word 'standard' or an Australian/New Zealand Standard 2. First paragraph, second dash item, second line, insert the following text after the word 'standard' or an Australian/New Zealand Standard 3. First paragraph, second dash item, last line, insert the following text after the word 'standard': or an Australian/New Zealand Standard	P
<b>1.7</b>	<b>MARKINGS AND INSTRUCTIONS</b>	P

Appendix Z

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IEC 60950-1_1F - ATTACHMENT																
Clause	Requirement + Test		Result - Remark	Verdict												
1.7.1.3	<i>Delete</i> existing text and <i>replace</i> with the following: Graphical symbols placed on the equipment as a requirement of this standard, shall be in accordance with IEC 60417 or ISO 3864-2 or ISO 7000, if available. In the absence of suitable symbols, the manufacturer may design specific graphical symbols.  Symbols as required by this standard placed on the equipment shall be explained in the user manual			P												
2.9	<b>ELECTRICAL INSULATION</b>			N/A												
2.9.2	Variation Second paragraph, <i>delete</i> the word 'designated'			N/A												
3.2.5	<b>POWER SUPPLY CORDS</b>			N/A												
Table 3B	Variation  1. <i>Delete</i> the first four rows and replace with the following: <table><tr><td>Over 0.2 up to and including 3</td><td>0.5<sup>a</sup></td><td>18 [0.8]</td></tr><tr><td>Over 3 up to and including 7.5</td><td>0.75</td><td>16 [1.3]</td></tr><tr><td>Over 7.5 up to including 10</td><td>(0.75)<sup>b</sup> 1.00</td><td>16 [1.3]</td></tr><tr><td>Over 10 up to including 16</td><td>(1.0)<sup>c</sup> 1.5</td><td>14 [2]</td></tr></table>		Over 0.2 up to and including 3	0.5 <sup>a</sup>	18 [0.8]	Over 3 up to and including 7.5	0.75	16 [1.3]	Over 7.5 up to including 10	(0.75) <sup>b</sup> 1.00	16 [1.3]	Over 10 up to including 16	(1.0) <sup>c</sup> 1.5	14 [2]		N/A
Over 0.2 up to and including 3	0.5 <sup>a</sup>	18 [0.8]														
Over 3 up to and including 7.5	0.75	16 [1.3]														
Over 7.5 up to including 10	(0.75) <sup>b</sup> 1.00	16 [1.3]														
Over 10 up to including 16	(1.0) <sup>c</sup> 1.5	14 [2]														
	1. <i>Delete</i> NOTE 1 and renumber existing NOTE 2 as 'NOTE'			N/A												
	2. <i>Delete</i> Footnote <sup>a</sup> and replace with the following: <sup>a</sup> This nominal cross-sectional area is only allowed for Class II appliances if the length of the power supply cord, measured between the point where the cord, or cord guard, enters the appliance, and the to the plug does not exceed 2 m (0,5 mm2 three-core supply flexible cords are not permitted; see AS/NZS 3191)			N/A												
4.3	<b>DESIGN AND CONSTRUCTION</b>			N/A												
4.3.6	Variation  <i>Delete</i> the third paragraph and <i>replace</i> with the following:			N/A												



IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	<i>Equipment with a plug portion, suitable for insertion into a 10 A 3-pin flat-pin socket-outlet complying with AS/NZS 3112 shall comply with the requirements in AS/NZS 3112 for equipment with integral pins for insertion into socket-outlets</i>		N/A
4.3.8	Addition Eighth paragraph, <i>insert</i> the following new note after the first dash item:		P
	NOTE 6.201 In cases where the voltage source is provided by power from an unassociated power source, consideration should be given to the effects of possible single fault conditions in the unassociated equipment. If the power source is unknown then it should be assumed that the maximum limit of SELV may be applied to the source input under assumed single fault conditions in the source when assessing the charging circuit in the equipment under test.		P
4.3.13.5.1	Variation <i>Delete</i> the first paragraph and <i>replace</i> with the following: Except as permitted below, equipment shall be classified and labelled according to IEC 60825-1 or AS/NZS 60825.1, IEC 60825-2 or AS/NZS 60825.2 and IEC 60825-12, as applicable		N/A
	Third paragraph, first sentence, after 'IEC 60825-1', <i>insert</i> the following text: or AS/NZS 60825.1		N/A
	Fourth paragraph, after 'IEC 60825-1', <i>insert</i> the following text: or AS/NZS 60825.1		N/A
<b>4.7</b>	<b>RESISTANCE TO FIRE</b>		N/A
4.7	Addition At the end of Clause 4.7, <i>insert</i> the following text: For alternate tests refer to Clause 4.7.201		N/A
<b>6</b>	<b>CONNECTION TO TELECOMMUNICATIONS NETWORKS</b>		N/A
6.2.2	Variation For Australia only, <i>delete</i> the first paragraph and Note, and <i>replace</i> with the following: In Australia only, compliance with 6.2.2 shall be checked by the tests of both 6.2.2.1 and 6.2.2.2		N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
6.2.2.1	<p>Variation</p> <p>For Australia only, <i>delete</i> the first paragraph including the Notes, and <i>replace</i> with the following:</p> <p>In Australia only, the electrical separation is subjected to 10 impulses of alternating polarity, using the impulse test generator Reference 1 of Table N.1.</p> <p>The interval between successive impulses is 60 s and the initial voltage, <math>U_c</math>, is:</p> <p>(i) ..... for 6.2.1 a): 7.0 kV for hand-held telephones and for headsets and 2.5 kV for other equipment; and</p> <p>(ii) ..... For 6.2.1 b) and 6.2.1 c): 1.5kV</p>		N/A
	NOTE 201 The 7 kV impulse simulates lightning surges on typical rural and semi-rural network lines		N/A
	NOTE 202 The value of 2.5 kV for 6.2.1 a) was chosen to ensure the adequacy of the insulation concerned and does not necessarily simulate likely overvoltages		N/A
6.2.2.2	<p>Variation</p> <p>For Australia only, delete the second paragraph including the Note, and replace with the following:</p> <p>In Australia only, the a.c. test voltage is</p> <p>(i) ..... for 6.2.1 a): 3kV; and</p> <p>(ii) ..... for 6.2.1b) and 6.2.1c): 1.5 kV</p>		N/A
	NOTE 201 Where there are capacitors across the insulation under test, it is recommended that d.c. test voltages are used.		N/A
	NOTE 202 The 3 kV and 1.5 kV values have been determined considering the low frequency induced voltages from the power supply distribution system.		N/A
7	<b>CONNECTION TO CABLE DISTRIBUTION NETWORK</b>		N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
7.3	Addition Add the following before the first paragraph: Equipment providing functions that fall only within the scope of AS/NZS 60065 and that incorporate a PSTN interface, are not required to comply with this Clause where the only ports provided on the equipment, in addition to a coaxial cable connection and a PSTN interface, are audio or video ports and analogue or data ports not intended to be used for telecommunications purposes		N/A
Annex P	Addition Add the following Normative References: AS/NZS 3191, Electric flexible cords AS/NZS 3112, Approval and test specification—Plugs and socket-outlets		N/A
	<b>Special national conditions (if any)</b>		P
<b>1.2.12</b>	<b>FLAMMABILITY</b>		P
1.2.12.15	Addition After Clause 1.2.12.15, <i>insert</i> the following new clause:		P
<b>1.2.12.201</b>	<b>POTENTIAL IGNITION SOURCE</b> Possible fault which can start a fire if the open-circuit voltage measured across an interruption or faulty contact exceeds a value of 50 V (peak) a.c. or d.c. and the product of the peak value of this voltage and the measured r.m.s. current under normal operating conditions exceeds 15 VA		P
	Such a faulty contact or interruption in an electrical connection includes those which may occur in CONDUCTIVE PATTERNS on PRINTED BOARDS		P
	NOTE 1 An electronic protection circuit may be used to prevent such a fault from becoming a POTENTIAL IGNITION SOURCE		P
	NOTE 2 This definition is from AS/NZS 60065:2012, Clause 2.8.11.		P
<b>4</b>	<b>PHYSICAL REQUIREMENTS</b>		P
4.1	Addition After Clause 4.1, <i>insert</i> new Clause 4.1.201 as follows:		N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
<b>4.1.201</b>	<b>Display devices used for television purposes</b> Display devices which may be used for television purposes, with a mass of 7 kg or more, shall comply with the requirements for stability and mechanical hazards, including the additional stability requirements for television receivers, specified in AS/NZS 60065		N/A
<b>4.3</b>	<b>DESIGN AND CONSTRUCTION</b>		P
4.3.8	Addition After Clause 4.3.8, <i>add</i> the following new clause as follows		P
<b>4.3.8.201</b>	<b>Products containing coin/button cell batteries and batteries designated R1</b> The requirements of AS/NZS 60065:2012 Amendment 1:2015, Clause 14.10.201 apply for this Clause.		N/A
<b>4.7</b>	<b>RESISTANCE TO FIRE</b>		P
4.7.3.6	Addition After Clause 4.7.3.6, <i>add</i> new clauses as follows:		P
<b>4.7.201</b>	<b>Resistance to fire—Alternative tests</b>		N/A
<b>4.7.201.1</b>	<b>General</b> Parts of non-metallic material shall be resistant to ignition and spread of fire. This requirement does not apply to decorative trims, knobs and other parts unlikely to be ignited or to propagate flames from inside the apparatus, or the following: a) Components that are contained in an enclosure having a flammability category of V-0 according to AS/NZS 60695.11.10 and having openings only for the connecting wires filling the openings completely, and for ventilation not exceeding 1 mm in width regardless of length.		N/A
	b) The following parts which would contribute negligible fuel to a fire: – small mechanical parts, the mass of which does not exceed 4 g, such as mounting parts, gears, cams, belts and bearings; – small electrical components, such as capacitors with a volume not exceeding 1,750 mm <sup>3</sup> , integrated circuits, transistors and optocoupler packages, if these components are mounted on material of flammability category V-1, or better, according to AS/NZS 60695.11.10		N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	NOTE In considering how to minimize propagation of fire and what 'small parts are, account should be taken of the cumulative effect of small parts adjacent to each other for the possible effect of propagating the fire from one part to another		N/A
	Compliance shall be checked by the tests of 4.7.201.2, 4.7.201.3, 4.7.201.4 and 4.7.201.5		N/A
	For the base material of printed boards, compliance shall be checked by the test of 4.7.201.5		N/A
	The tests shall be carried out on parts of non-metallic material which have been removed from the apparatus. When the glow-wire test is carried out, the parts shall be placed in the same orientation as they would be in normal use. These tests are not carried out on internal wiring		N/A
4.7.201.2	<b>Testing of non-metallic materials</b> Parts of non-metallic material shall be subject to the glow-wire test of AS/NZS 60695.2.11 which shall be carried out at 550 °C Parts for which the glow-wire test cannot be carried out, such as those made of soft or foamy material, shall meet the requirements specified in ISO 9772 for category FH-3 material. The glow-wire test shall be not carried out on parts of material classified at least FH-3 according to ISO 9772 provided that the sample tested was not thicker than the relevant part.		N/A
4.7.201.3	<b>Testing of insulating materials</b> Parts of insulating material supporting POTENTIAL IGNITION SOURCES shall be subject to the glow-wire test of AS/NZS 60695.2.11 which shall be carried out at 750°C. The test shall be also carried out on other parts of insulating material which are within a distance of 3 mm of the connection. NOTE Contacts in components such as switch contacts are considered to be connections. For parts which withstand the glow-wire test but produce a flame, other parts above the connection within the envelope of a vertical cylinder having a diameter of 20 mm and a height of 50 mm shall be subjected to the needle-flame test. However, parts shielded by a barrier which meets the needle-flame test shall not be tested. The needle-flame test shall be made in accordance with AS/NZS 60695.11.5 with the following modifications:		N/A

Appendix E

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IEC 60950-1_1F - ATTACHMENT				
Clause	Requirement + Test		Result - Remark	Verdict
	<b>Clause of AS/NZS 60695.11.5</b>	<b>Change</b>		N/A
	<b>9 Test procedure</b>			
	<b>9.2 Application of Needle-flame</b>	<i>Delete</i> the first and second paragraphs and <i>replace</i> with the following: The specimen shall be arranged so that the flame can be applied to a vertical or horizontal edge as shown in the examples of Figure 1. If possible, the flame shall be applied at least 10 mm from a corner. The duration of application of the test flame shall be 30 s ± 1 s		
	<b>9.3 Number of test specimens</b>	<i>Delete</i> existing text and <i>replace</i> with the following: The test shall be made on one specimen. If the specimen does not withstand the test, the test may be repeated on two further specimens, both of which shall withstand the test.		
	<b>11 Evaluation of test results</b>	<i>Delete</i> existing text and <i>replace</i> with the following: The duration of burning (tb) shall not exceed 30 s. However, for printed circuit boards, it shall not exceed 15s		
	The needle-flame test shall not be carried out on parts of material classified as V-0 or V-1 according to AS/NZS 60695.11.10, provided that the sample tested was not thicker than the relevant part			N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
<b>4.7.201.4</b>	<b>Testing in the event of non-extinguishing material</b> If parts, other than enclosures, do not withstand the glow wire tests of 4.7.201.3 by failure to extinguish within 30 s after the removal of the glow-wire tip, the needle-flame test detailed in 4.7.201.3 shall be made on all parts of non-metallic material which are within a distance of 50 mm or which are likely to be impinged upon by flame during the tests of 4.7.201.3. Parts shielded by a separate barrier which meets the needle-flame test need not be tested.		N/A
	NOTE 1 If the enclosure does not withstand the glow-wire test the equipment is considered to have failed to meet the requirements of Clause 4.7.201 without the need for consequential testing.		N/A
	NOTE 2 If other parts do not withstand the glow-wire test due to ignition of the tissue paper and if this indicates that burning or glowing particles can fall onto an external surface underneath the equipment, the equipment is considered to have failed to meet the requirements of Clause 4.7.201 without the need for consequential testing		N/A
	NOTE 3 Parts likely to be impinged upon by the flame are considered to be those within the envelope of a vertical cylinder having a radius of 10 mm and a height equal to the height of the flame, positioned above the point of the material supporting, in contact with, or in close proximity to, connections.		N/A
<b>4.7.201.5</b>	<b>Testing of printed boards</b> The base material of printed boards shall be subjected to the needle-flame test of Clause 4.7.201.3. The flame shall be applied to the edge of the board where the heat sink effect is lowest when the board is positioned as in normal use. The flame shall not be applied to an edge, consisting of broken perforations, unless the edge is less than 3 mm from a POTENTIAL IGNITION SOURCE.		N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	<p>The test is not carried out if the</p> <ul style="list-style-type: none"> <li>– Printed board does not carry any POTENTIAL IGNITION SOURCE;</li> <li>– Base material of printed boards, on which the available apparent power at a connection exceeds 15 VA operating at a voltage exceeding 50 V and equal or less than 400 V (peak) a.c. or d.c. under normal operating conditions, is of flammability category V-1 or better according to AS/NZS 60695.11.10, or the printed boards are protected by an enclosure meeting the flammability category V-0 according to AS/NZS 60695.11.10, or made of metal, having openings only for connecting wires which fill the openings completely; or</li> <li>– Base material of printed boards, on which the available apparatus power at a connection exceeds 15 VA operating at a voltage exceeding 400 V (peak) a.c. or d.c. under normal operating conditions, and base material of printed boards supporting spark gaps which provides protection against overvoltages, is of flammability category V-0 according to AS/NZS 60695.11.10 or the printed boards are contained in a metal enclosure, having openings only for connecting wires which fill the openings completely.</li> </ul> <p><i>Compliance shall be determined using the smallest thickness of the material.</i></p>		N/A
	<p>NOTE Available apparent power is the maximum apparent power which can be drawn from the supplying circuit through a resistive load whose value is chosen to maximise the apparent power for more than 2 m when the circuit supplied is disconnected.</p>		N/A



IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
<b>ATTACHMENT TO TEST REPORT IEC 60950-1 with A1:2009 and A2:2013</b> <b>CANADA NATIONAL DIFFERENCES</b> Information technology equipment – Safety – Part 1: General requirements			
<b>Differences according to</b> ..... : CAN/CSA-C22.2 No. 60950-1-07, Amd 1:2011, Amd 2:2014			
<b>Attachment Form No.</b> ..... : CA_ND_IEC 60950_1G			
<b>Attachment Originator</b> ..... : CSA			
<b>Master Attachment</b> ..... : Date (2015-05)			
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1.1.1	All equipment is to be designed to allow installation in accordance with the National Electrical Code (NEC), ANSI/NFPA 70, the Canadian Electrical Code (CEC), Part I, CAN/CSA C22.1, and when applicable, the National Electrical Safety Code, IEEE C2. Also, unless marked or otherwise identified, installation is allowed per the Standard for the Protection of Electronic Computer/Data-Processing Equipment, ANSI/NFPA 75.		P
1.1.2	Baby monitors are required to additionally comply with ASTM F2951, Consumer Safety Specification for Baby Monitors.		N/A
1.4.14	For Pluggable Equipment Type A, the protection in the installation is assumed to be 20 A.		P
1.5.5	For lengths exceeding 3.05 m, external interconnecting flexible cord and cable assemblies are required to be a suitable cable type (e.g., DP, CL2) specified in the CEC/NEC. For lengths 3.05 m or less, external interconnecting flexible cord and cable assemblies that are not types specified in the CEC/NEC are required to have special construction features and identification markings.		N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
1.7.1	Equipment for use on a.c. mains supply systems with a neutral and more than one phase conductor (e.g. 120/240 V, 3-wire) require a special marking format for electrical ratings.  A voltage rating that exceeds an attachment plug cap rating is only permitted if it does not exceed the extreme operating conditions in Table 2 of CAN/CSA C22.2 No. 235, and if it is part of a range that extends into the Table 2 "Normal Operating Conditions." Likewise, a voltage rating shall not be lower than the specified "Normal Operating Conditions," unless it is part of a range that extends into the "Normal Operating Conditions."		N/A
1.7.7	Wiring terminals intended to supply Class 2 outputs in accordance with CEC Part 1 or NEC shall be marked with the voltage rating and "Class 2" or equivalent. Marking shall be located adjacent to the terminals and shall be visible during wiring.		N/A
2.5	Where a fuse is used to provide Class 2, Limited Power Source, or TNV current limiting, it shall not be operator-accessible unless it is not interchangeable.		N/A
2.6	Equipment with isolated ground (earthing) receptacles are required to comply with NEC 250.146(D) and CEC 10-112 and 10-906(8).		N/A
2.7.1	Suitable NEC/CEC branch circuit protection rated at the maximum circuit rating is required for all standard supply outlets and receptacles (such as supplied in power distribution units) if the supply branch circuit protection is not suitable.  Power distribution transformers distributing power at 100 volts or more, and rated 10 kVA or more, require special transformer overcurrent protection.		N/A
3.2	Wiring methods (terminals, leads, etc.) used for the connection of the equipment to the mains shall be in accordance with the NEC/CEC.		N/A
3.2.1	Power supply cords are required to have attachment plugs rated not less than 125 percent of the rated current of the equipment.		N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
3.2.1.2	Equipment connected to a centralized d.c. power system, and having one pole of the DC mains input terminal connected to the main protective earthing terminal in the equipment, is required to comply with special earthing, wiring, marking and installation instruction requirements.		N/A
3.2.3	Permanent connection of equipment to the mains supply by a power supply cord is not permitted, except for certain equipment, such as ATMs.	The EUT is not such equipment	N/A
3.2.5	Power supply cords are required to be no longer than 4.5 m in length Minimum cord length is required to be 1.5 m, with certain constructions such as external power supplies allowed to consider both input and output cord lengths into the requirement. Flexible power supply cords are required to be compatible with Article 400 of the NEC, and Tables 11 and 12 of the CEC.		N/A
3.2.9	Permanently connected equipment is required to have a suitable wiring compartment and wire bending space.	The EUT is not such equipment	N/A
3.3	Wiring terminals and associated spacings for field wiring connections shall comply with CSA C22.2 No. 0.	No wiring terminal	N/A
3.3.3	Wire binding screws are not permitted to attach conductors larger than 10 AWG (5.3 mm <sup>2</sup> ).		N/A
3.3.4	Terminals for permanent wiring, including protective earthing terminals, are required to be suitable for Canadian/U.S. wire gauge sizes, rated 125 percent of the equipment rating, and be specially marked when specified (1.7.7).		N/A
3.3.5	First column of Table 3E revised to require "Smaller of the RATED CURRENT of the equipment or the PROTECTIVE CURRENT RATING of the circuit under consideration."		N/A
3.4.2	Motor control devices are required for cord-connected equipment with a motor if the equipment is rated more than 12 A, or if the motor has a nominal voltage rating greater than 120 V, or is rated more than 1/3 hp (locked rotor current over 43 A).	No such device	N/A



IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
3.4.8	Vertically-mounted disconnect switches and circuit breakers are required to have the "on" position indicated by the handle in the up position.	No such device	N/A
3.4.11	For computer room applications, equipment with battery systems capable of supplying 750 VA for five minutes are required to have a battery disconnect means that may be connected to the computer room remote power-off circuit.		N/A
4.3.12	The maximum quantity of flammable liquid stored in equipment is required to comply with NFPA 30.		N/A
4.3.13.5.1	Equipment with lasers is required to meet the U.S. Code of Federal Regulations 21 CFR 1040 (and the Canadian Radiation Emitting Devices Act, REDR C1370).		N/A
4.7	For computer room applications, automated information storage systems with combustible media greater than 0.76 m <sup>3</sup> (27 cu ft) are required to have a provision for connection of either automatic sprinklers or a gaseous agent extinguishing system with an extended discharge.		N/A
4.7.3.1	For computer room applications, enclosures with combustible material measuring greater than 0.9 m <sup>2</sup> (10 sq ft) or a single dimension greater than 1.8 m (6 ft) are required to have a flame spread rating of 50 or less.  For other applications, enclosures with the same dimensions require a flame spread rating of 200 or less.  Non-metallic enclosures of equipment for use in spaces used for environmental air (plenums) are required to comply with UL 2043.		N/A
Annex H	Equipment that produces ionizing radiation is required to comply with the U.S. Code of Federal Regulations, 21 CFR 1020 (and the Canadian Radiation Emitting Devices Act, REDR C1370).		N/A
	<b>OTHER DIFFERENCES</b>		—
	The following key national differences are based on requirements other than national regulatory requirements		—
<b>Sub-Clause</b>	<b>National Difference</b>		—

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
1.5.1	Some components and materials associated with the risk of fire, electric shock, or personal injury are required to have component or material ratings in accordance with the applicable national (Canadian and/or U.S.) component or material standard requirements. These components include:  attachment plugs, battery packs (rechargeable type, used with transportable equipment), cathode ray tubes, circuit breakers, communication circuit accessories, connectors (used for current interruption of non-LPS circuits), cord sets and power supply cords, direct plug-in equipment, enclosures (outdoor), flexible cords and cables, fuses (branch circuit), fuseholders, ground-fault current interrupters, industrial control equipment, insulating tape, interconnecting cables, lampholders, limit controls, printed wiring, protectors for communications circuits, receptacles, solid state controls, supplementary protectors, switches (including interlock switches), thermal cutoffs, thermostats, (multi-layer) transformer winding wire, transient voltage surge suppressors, tubing, wire connectors, and wire and cables.	See safety component list	P
1.6.1.2	A circuit for connection to the DC Mains Supply is classified as either a SELV Circuit, TNV-2 Circuit or Hazardous Voltage Circuit depending on the maximum operating voltage of the supply. This maximum operating voltage shall include consideration of the battery charging "float voltage" associated with the intended supply system, regardless of the marked power rating of the equipment.		N/A
2.3.1	For TNV-2 and TNV-3 circuits with other than ringing signals and with voltages exceeding 42.4 V <sub>peak</sub> or 60 V <sub>d.c.</sub> , the maximum acceptable current through a 2000 ohm resistor (or greater) connected across the voltage source with other loads disconnected is 7.1 mA peak or 30 mA d.c. under normal operating conditions.		N/A
2.3.2.1	In the event of a single fault between TNV and SELV circuits, the limits of 2.2.3 apply to SELV Circuits and accessible conductive parts.		N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
2.6.3.4	Protective bonding conductors of non-standard protective bonding constructions (e.g., printed circuit traces) may be subjected to the additional limited short circuit test conditions specified.		N/A
4.2.8.1	Enclosures around CRTs with a face diameter of 160 mm or more are required to reduce the risk of injury due to the implosion of the CRT.	No such device within the EUT	N/A
4.3.2	Equipment with handles is required to comply with special loading tests.		N/A
5.1.8.3	Equipment intended to receive telecommunication ringing signals is required to comply with a special touch current measurement tests.		N/A
5.3.7	Internal (e.g., card cage) SELV circuit connectors and printed wiring board connectors that are accessible to the operator and that deliver power are to be overloaded.  During abnormal operating testing, if a circuit is interrupted by the opening of a component, the test shall be repeated twice (three tests total) using new components as necessary.	Considered	P
6.4	Equipment intended for connection to telecommunication network outside plant cable is required to be protected against overvoltage from power line crosses in accordance with 6.4 and Annex NAC.		N/A
Annex EE	Articulated accessibility probe (Fig EE.3) required for assessing accessibility to document/media shredders instead of the Figure 2A test finger.	The EUT is not such equipment	N/A
M.2	Continuous ringing signals up to 16 mA only are permitted if the equipment is subjected to special installation and performance restrictions.		N/A
Annex NAD	Equipment connected to a telecommunication and cable distribution networks and supplied with an earphone intended to be held against, or in the ear is required to comply with special acoustic pressure requirements.		N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
<p align="center"><b>National Differences China (CN)</b>  <b>IEC 60950-1, 2nd ed.</b>  (GB 4943.1:2011) Last modification 2013-09-26</p>			

1.1.2	Revise the third dashed paragraph as: —equipment intended to be used in vehicles, on board ships or aircraft, at altitudes greater than 5000 m;		N/A
1.4.5	At the end of the third dashed paragraph, added following paragraph: If the equipment is intended for direct connection to an AC mains supply, the tolerances on RATED VOLTAGE shall be taken as +10%,-10% unless a wider tolerance is declared by the manufacturer. Delete the contents which behind the first dash.		P
1.4.12.1	Tma in clause 1.4.12.1 amended as: Tma: is the maximum ambient temperature permitted by the manufacturer's specification, or 35 °C, whichever is greater. And note 1: for equipment not to be operated at tropical climatic conditions, Tma: is the maximum ambient temperature permitted by the manufacturer's specification, or 25 °C, whichever is greater. Add note 2: for equipment is to be operated at 2000m-5000m above sea level, its temperature test conditions and temperature limits are considered.	Unit was applied for tropical climates and operated altitude 5000 m	P
1.5.2	Add a note behind the first dash: A component used shall comply with related requirements corresponding altitude of 5000m.		N/A
1.7	Add one paragraph before the last paragraph: The required marking and instruction should be given in normative Chinese unless otherwise specified.	Should be evaluated at national approval	P

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
1.7.1	<p>Based on the AC mains supply of China, the RATED VOLTAGE should be 220V (single phase) or 380V (three-phases) for single rated voltage, for RATED VOLTAGE RANGE, it should cover 220V or 380V (three-phases), for multiple RATED VOLTAGES, one of them should be 220V or 380V (three-phases) and set on 220V or 380V (three-phases) when manufactured.</p> <p>And the RATED FREQUENCY or RATED FREQUENCY RANGE should be 50Hz or include 50Hz.</p>		P
1.7.2.1	<p>Add requirements of warning for equipment intended to be used at altitudes not exceeding 2000m or at non-tropical climate regions:</p> <p>For equipment intended to be used at altitude not exceeding 2000m, a warning label containing the following or a similar appropriate wording or a symbol as in annex DD shall fixed to the equipment at readily visible place.</p> <p>"Only used at altitude not exceeding 2000m."</p>  <p>If only symbol used, the explanation of the symbol shall be contained in the instruction manual.</p> <p>For equipment intended to be used in not-tropical climate regions, a warning label containing the following or a similar appropriate wording or a symbol as in annex DD shall fixed to the equipment at readily visible place.</p> <p>"Only used in not-tropical climate regions."</p>  <p>If only symbol used, the explanation of the symbol shall be contained in the instruction manual.</p> <p>The above statements shall be given in a language acceptable to the regions where the apparatus is intended to be used.</p>		N/A



IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
2.7.1	Amended as: Protection in PRIMARY CIRCUITS against overcurrent short-circuits and earth faults shall be provided as an integral part of the equipment except special provisions. And the protective device shall meet the requirement of Clause 5.3. Delete note of Clause 2.7.1.		P
2.9	Humidity conditioning This section applies for equipment to be operated at tropical climatic conditions, humidity conditioning dealt with tropical climatic conditions. For equipment not to be operated at tropical climatic conditions, its humidity conditioning complies with rules of CTL 624/07.		P
2.9.2	First section of Clause 2.9.2 amended as two sections: Where required by 2.9.1, 2.10.8.3, 2.10.10 or 2.10.11, humidity conditioning is conducted for 120 h in a cabinet or room containing air with ambient temperature $40 \pm 2$ °C and a relative humidity of $(93 \pm 3)\%$ . During this conditioning the component or subassembly is not energized. For equipment not to be operated at tropical climatic conditions, Where required by 2.9.1, 2.10.8.3, 2.10.10 or 2.10.11, humidity conditioning is conducted for 48 h in a cabinet or room containing air with a relative humidity of $(93 \pm 3)\%$ . The temperature of the air, at all places where samples can be located, is maintained within 2 °C of any convenient value t between 20 °C and 30 °C such that condensation does not occur. Due to pretreatment of equipment operated at high altitude area is humidity conditioning withstand hot shock, specific requirements are to be considered. Add note: For equipment to be operated at 2000 m - 5000m above sea level, assessment and requirement of humidity conditioning for Insulation material properties are considered.	The apparatus intended to be used at tropical climate	P

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
2.10.3.1	Change the third paragraph of Clause 2.10.3.1 to be: These requirements apply for equipment to be operated up to 2000 m above sea level. For equipment to be operated at more than 2000 m above sea level and up to 5000m above sea level, the minimum CLEARANCE shall be multiplied by the factor 1.48 corresponding altitude of 5000m given in Table A.2 of GB/T 16935.1. For equipment to be operated at more than 5000 m above sea level, the minimum CLEARANCE shall be multiplied by the factor given in Table A.2 of GB/T 16935.1. Linear interpolation is permitted between the nearest two points in Table A.2. The calculated minimum CLEARANCE using this multiplication factor shall be rounded up to the next higher 0,1 mm increment.	Unit was applied for tropical climates and operated altitude 5000 m	P
2.10.3.4	Add a new section above Table 2K and in Clause 2.10.3.4: minimum CLEARANCES determined by above rules apply for equipment to be operated up to 2000m above sea level. For equipment to be operated at 2000 m - 5000m above sea level, the minimum CLEARANCE shall be multiplied by the factor 1.48 corresponding altitude of 5000m given in Table A.2 of GB/T 16935.1. For equipment to be operated at more than 5000 m above sea level, the minimum CLEARANCE shall be multiplied by the factor given in Table A.2 of GB/T 16935.1. Add "(apply for up to 2000m)" in header of Table 2K, 2L and 2M.	Unit was applied for tropical climates and operated altitude 5000 m	P
3.2.1.1	Add on paragraph before the last paragraph: Plugs connected to AC mains supply shall comply with GB 1002 or GB 1003 or GB/T 11918 as applicable.		N/A
4.2.8	Clause 4.2.8 cathode ray tubes quoted Clause 18 of GB8898-2011. Delete note of Clause 4.2.8.		N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
Annex E	Last section amended as: For comparison of winding temperatures determined by the resistance method of this annex with the temperature limits of Table 4B, 35 °C shall be added to the calculated temperature rise. And add note: for equipment not to be operated at tropical climatic conditions, 25 °C shall be added to the calculated temperature rise to compare with the temperature of Table 4B.		N/A
Annex G.6	Change the second section of Clause G.6 to be: for equipment to be operated at 2000 m - 5000m above sea level, the minimum CLEARANCE shall be multiplied by the factor 1.48 corresponding altitude of 5000m given in Table A.2 of GB/T 16935.1. For equipment to be operated at more than 5000 m above sea level, the minimum CLEARANCE shall be multiplied by the factor given in Table A.2 of GB/T 16935.1. Linear interpolation is permitted between the nearest two points in Table A.2. The calculated minimum CLEARANCE using this multiplication factor shall be rounded up to the next higher 0,1 mm increment.  A component that has been demonstrated to comply with National、Industry standards or the relevant national standard shall be subjected to the applicable tests of this standard as part of the equipment.		N/A
Annex BB	Amended as : The differences between Chinese national standards GB 4943.1-2011 and GB 4943-2001.		P
Annex DD	Added annex DD: Instructions of the new safety warning labels.	The EUT is consider using at altitudes $\leq 5000$ m and tropical climate regions	N/A
Other amendments	In accordance with the relevant CTL decisions and the amendments of IEC 60950-1, the specific requirements or mistakes in IEC standard are corrected or editorially modified in this part, Including clause 1.7, 2.1.1.7, 2.9.2, Table 2H, Figure 2H, F.8, F.9, M.3 and Annex U.		P

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
Quoting standards and reference documents	<p>The principles of quoting and referring to other standards in Annex P and reference documents of IEC 60950-1 are as follows:</p> <p>If the date of the reference document is given, only that edition applies, excluding any subsequent corrigenda and amendments. However, parties to agreements based on this part are encouraged to investigate the possibility of applying the most recent editions of the reference documents. For undated references, the latest edition of the referenced document applies, including any corrigenda and amendments.</p> <p>For the usage of international standards in Chinese national standards and industry standards is various, in the aim of achieving easy operation and based on the requirements of GB/T 1.1 and GB/T 20000.2, when quoting an entire international standard in the normative quoting files and reference documents of Annex P of this part, the principles of quotation are as follows:</p> <ul style="list-style-type: none"> <li>- If there is no national standard or industry standard corresponding to the international standard, then the international standard is quoted;</li> <li>- If there is national standard or industry standard corresponding to the international standard, then either the national or industry standard is quoted;</li> <li>- If the date of the national standard or industry standard is not given, the latest edition of the standard applies;</li> <li>- The national standard or industry standard number, corresponding international standard number and the consistency level code should be identified in parentheses behind the listed national standard or industry standard.</li> </ul> <p>When quoting several chapters or clauses of the international standard, the principles of quotation are as follows:</p> <ul style="list-style-type: none"> <li>- If there is no national standard or industry standard corresponding to the international standard, then the international standard is quoted;</li> </ul>		P

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	- If there is national standard or industry standard corresponding to the international standard, then either the national or industry standard is quoted.		P
Quoting standards and reference documents (cont.)	Meanwhile, in order to retain the relevant information on international standards, informative annex CC is increased, which gives the table about the comparison of the normative quoting files and reference documents in IEC 60950-1: 2005.		P

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
<p align="center"><b>ATTACHMENT TO TEST REPORT IEC 60950-1</b>  <b>ISRAEL NATIONAL DIFFERENCES</b>  Information technology equipment – Safety –  Part 1: General requirements</p>			
<b>Differences according to</b> ..... : SI 60950 Part 1 (2012)		Last modification 2014-01-02	

	Special national conditions	—
1.1.1	Replace the text of Note 3 as follows: The requirements of Israel Standard SI 60065 may also be used to meet safety requirements for multimedia equipment. See IEC Guide 112, Guide on the safety of multimedia equipment.	N/A
1.6	The clause is applicable with the following addition:	N/A
1.6.1	- At the end of the clause, the following note shall be added: Note: In Israel, the clause is subject to the Electricity Law, 1954, its regulations and updates.	N/A
1.7	The clause is applicable with the following additions:	N/A
1.7.1	- Subclause 1.7.201 shall be added after the clause, as follows:	N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
1.7.201	<p><b>Marking in the Hebrew language</b></p> <p>The marking in the Hebrew language shall be in accordance with the Consumer Protection Order (Marking of goods), 1983.</p> <p>In addition to the marking required by clause 1.7.1, the following items shall be marked in the Hebrew language:</p> <ol style="list-style-type: none"> <li>1. Name of the apparatus and its commercial designation;</li> <li>2. Manufacturer's name and address. If the apparatus is imported, the importer's name and address;</li> <li>3. Manufacturer's registered trademark, if any;</li> <li>4. Name of the model and serial number, if any;</li> <li>5. Country of manufacture.</li> </ol> <p>The items shall be marked on the apparatus or on its packaging, or on a label well attached to the apparatus or its packaging, by bonding or sewing, such that the label cannot be easily removed.</p>	Should be evaluated at national approval	N/A
1.7.2.1	<p>- The following shall be added to the end of the clause:</p> <p>All the instructions and warnings related to safety shall also be written in the Hebrew language.</p> <p>- At the end of clause 1, clause 1.201 shall be added as follows:</p>		N/A
1.201	<p><b>Power consumption in standby mode</b></p> <p>The equipment shall comply with the requirement of the Energy Sources Regulations (Maximum electrical power in standby mode for domestic and office electrical appliances), 2011, with a permitted deviation of up to 10 %.</p>		N/A
2	The clause is applicable with the following additions:	Considered.	P

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
2.9.4	<p>- The following shall be added at the beginning of the clause:</p> <p>According to the Electricity Law, 1954, and the Electricity Regulations (Earthing and protection means from electricity at voltages up to 1,000 V), 1991, in Israel, seven means of protection from electricity are permitted, as follows:</p> <ol style="list-style-type: none"> <li>1) Network system earthing – (TN-C-S, TN-S);</li> <li>2) Network system earthing – (TT);</li> <li>3) Network Insulation Terre – (IT);</li> <li>4) Isolated transformer;</li> <li>5) Safety extra low voltage;</li> <li>6) Residual current circuit breaker;</li> <li>7) Reinforced insulation; Double insulation</li> </ol> <p>-Clause 2.201 shall be added at the end of clause 2, as follows:</p>		N/A
2.201	<p><b>Prevention of electromagnetic interference</b></p> <p>The device shall meet the requirements of the relevant part of the Israeli Standard series, SI 961.</p> <p>If the device contains components for prevention of electromagnetic interference, the devices shall not lower the safety level of the device, as required by this Standard.</p>	Should be evaluated at national approval.	N/A
3	The clause is applicable with the following additions:		N/A
3.2.1.1	<p><b>Connection to an a.c. mains supply</b></p> <p>After the Note, the following note shall be added:</p> <p>Note:</p> <p>In Israel, the supply plug shall comply with the requirements in Israeli Standard. SI 32 Part 1.1.</p>		N/A
3.2.1.2	<p><b>Connection to a d.c. mains supply</b></p> <p>After the first paragraph, the following note shall be added:</p> <p>Note:</p> <p>As of the date of publication of this Standard, there is no Israeli Standard for connection accessories to d.c.</p>		N/A



IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
Annex P	<p>Normative references</p> <p>The annex is applicable with the following modifications and additions:</p> <p>In place of some of the International Standards cited in the Standard and noted in this annex, the following Israeli Standard shall apply.</p>	Considered	P

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
<b>J 60950-1(H27) TEST REPORT</b> (Deviations from IEC 60950-1:2005, second edition) Special National conditions, National deviation and other information according to MITI Ordinance No. 85. <u>Japanese unique deviations</u> in J60950-1(H27) (=JIS C 6950-1:2014)			
1.2.4.1	Replace the existing NOTE as NOTE 1, and add NOTE 2 as following:  NOTE 2: Even if the equipment is designed as CLASS I EQUIPMENT, if a 2-pin plug adaptor with a protective earthing lead wire (adaptor which converts a plug for CLASS I EQUIPMENT to a 2-pin plug with no earthing contact) or a cord set having a 2-pin plug with a protective earthing lead wire is packed as accessory together with the equipment or if use of those is recommended to the users, the equipment is considered as CLASS 0I EQUIPMENT.	Class II equipment, not Class 0I equipment	N/A
1.2.4.3A	Add 1.2.4.3A as following: 1.2.4.3A CLASS 0I EQUIPMENT Equipment having a main plug without earthing contact, which protection against electric shock is achieved by: - using BASIC INSULATION; and - for the measures to connect conductive part(s) regarded as part at HAZARDIOUS VOLTAGE in the event of fault of BASIC INSULATION to PROTECTIVE EARTHING CONDUCTOR, equipping any one of the following: a) mains plug with a protective earthing lead wire, this includes the following cases: - where a 2-pin plug adaptor with a protective earthing lead wire is packed as accessory together with the equipment; or - where use of it is recommended. b) independent protective earthing terminal (see 2.6.5.8A) if the equipment uses a power supply cord of two conductors (exclude earthing conductor)  NOTE - CLASS 0I EQUIPMENT may have a part constructed with DOUBLE INSULATION or REINFORCED INSULATION.	Class II equipment, not Class 0I equipment	N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
1.3.2	<p>Add the following NOTES after first paragraph:</p> <p>NOTE 1 TRANSPORTABLE or similar equipment that are relocated frequently for intended usage it is recommended not to design as CLASS I or CLASS 0I EQUIPMENT unless it is intended to be installed by a SERVICE PERSON or installation personnel.</p> <p>NOTE 2 Considering wiring circumstance in Japan, equipment intended to be installed where the provision for earthing connection is unlikely should not be designed as CLASS I or CLASS 0I EQUIPMENT unless it is intended to be installed by a SERVICE PERSON or installation personnel.</p>	Class II equipment, not Class 0I equipment	N/A
1.5.1	<p>Replace the first paragraph with the following:</p> <p>Where safety is involved, components shall comply either with the requirements of this standard, with the safety aspects of the relevant JIS component standards, or IEC component standards in case there is no applicable JIS component standard available. However, a component that falls within the scope of METI Ministerial ordinance No. 85 is properly used in accordance with its marked ratings, requirements of 1.5.4, 2.8.7 and 3.2.5 apply, and in addition, for connector of power cord set which is capable of insertion to one of appliance inlets specified in either IEC 60320-1 or JIS C 8283-1, the connector shall comply with the dimensions of the appropriate connector specified in IEC 60320-1 or JIS C 8283-1.</p> <p>Replace NOTE 1 with the following:</p> <p>NOTE 1 A JIS or an IEC component standard is considered relevant only if the component in question clearly falls within its scope.</p>	Replaced	P

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
1.5.2	<p>Replace first sentence in the first dashed paragraph with the following:</p> <ul style="list-style-type: none"> <li>- a component that has been demonstrated to comply with a JIS component standard harmonized with the relevant IEC component standard, or where such JIS component standard is not available, a component that has been demonstrated to comply with the relevant IEC component standard shall be checked for correct application and use in accordance with its rating.</li> </ul> <p>Replace existing NOTE to NOTE 1 without modification of the sentence in the second dashed paragraph.</p> <p>Replace “where no relevant IEC component standard exists” to “where neither the relevant IEC component standard nor JIS standard corresponding to the relevant IEC component standard exists” in the third dashed paragraph.</p> <p>Add NOTE 2 as follows:</p> <p>NOTE 2 If an appliance inlet with a rated current of 10A, which is of STANDARD SHEET C14 specified in JIS C 8283-1, is used for equipment with a rated voltage of 125V or less; and with a rated current of exceeding 10A, refer to 1.7.5A.</p>	Replaced	N/A
1.5.9.1	<p>General</p> <p>Replace the following at first dash of NOTE 2:</p> <p>JIS C5381-21 [ Part 21 of Low pressure surge protection device : Performance requirement and test method of surge protection device (SPD) which connected with communication channel and signal]</p>	No gas discharge tube (GDT) and VDR used.	N/A
1.5.9.4	<p>Add the following at last paragraph:</p> <p>It is permitted to use a gas discharge tube (GDT) in series with a VDR that bridges BASIC INSULATION in accordance with the conditions in this subclause if the GDT complies with the requirements for FUNCTIONAL INSULATION.</p>	No gas discharge tube (GDT) and VDR used.	N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
1.7.1	<p>Replace the existing dashed items for manufacturer's name etc. and for model identification etc. with the following respectively:</p> <ul style="list-style-type: none"> <li>- manufacturer's (or responsible business operator's) name or trade-mark or identification mark;</li> <li>- manufacturer's (or responsible business operator's) model identification or type reference;</li> </ul> <p>In the last paragraph, replace "ISO 7000 or IEC 60417" with "JIS S 0101, ISO 7000 or IEC 60417".</p>	See copy of marking plate	P
1.7.2.1	<p>Add the following:</p> <p>Instructions and the marking(s) on equipment, which related to safety, shall be made in Japanese.</p>	Shall be evaluated when subjected to national approval	N/A
1.7.5	<p>Replace IEC 60083 with JIS C 8303 in the second paragraph.</p>	No outlets	N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
1.7.5A	<p>Add the following new clause after 1.7.5</p> <p>1.7.5.A Power supply cord set</p> <p>If an appliance inlet with a rated current of 10 A, which is of STANDARD SHEET C14 specified in JIS C 8283-1, is used for equipment with a rated voltage of 125 V or less and with a rated current of exceeding 10 A, the operating instructions shall provide the following or equivalent instruction:</p> <p>“この機器に同こん（梱）した指定の電源コードセットだけを使用する。”</p> <p>For equipment with an appliance inlet, if a power supply cord set is not provided by packing together with the equipment, the operating instructions shall provide information on the applicable power supply cord set.</p> <p>NOTE For the combination of CLASS 0I EQUIPMENT equipped with an appliance inlet with earthing contact and a power supply cord set of two conductors (exclude earthing conductor), to pack the power supply cord set together with the equipment and to provide a sentence calling attention of the following purport in the operating instructions are recommended, because such power supply cord set is a special kind of cord set:</p> <ul style="list-style-type: none"> <li>- this is usable only for this equipment; and</li> <li>- to use this for other equipment is not allowed.</li> </ul>	<p>Shall be evaluated when subjected to national approval</p>	N/A
1.7.14A	<p>Add the following new clause after 1.7.14</p> <p>1.7.14A Marking for protective earthing connection for CLASS 0I EQUIPMENT</p> <p>CLASS 0I EQUIPMENT shall be provided with the following or equivalent instruction:</p> <ul style="list-style-type: none"> <li>- on the mains-plug or the easily visible section of equipment, the following instruction: 必ず接地接続を行って下さい。</li> <li>- in the easily visible section of equipment or in the operating instructions, the following instruction: 接地接続は必ず、電源プラグを電源につなぐ前に行って下さい。 また、接地接続を外す場合は、必ず電源プラグを電源から切り離してから行って下さい。</li> </ul>	<p>Class II equipment, not Class 0I equipment</p>	N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
1.7.14B	<p>Add the following new clause after 1.7.14</p> <p>1.7.14B Protective earth wire used for CLASS 0I EQUIPMENT</p> <p>For CLASS 0I EQUIPMENT equipped with a separate protective earthing terminal as main protective earthing terminal, if a protective earth wire is not provided by packing together with the equipment, the operating instructions shall provide information on the applicable protective earth wire. (See 2.6.3.2.)</p>	Class II equipment, not Class 0I equipment	N/A
2.1.1.1	<p>In b) of the fifth paragraph, replace "IEC 60083, IEC 60309, IEC 60320, IEC 60906-1 or IEC 60906-2" with "JIS C 8303, (the Ministerial Ordinance establishing Technical Requirements for Electrical Appliances and Materials, METI Ordinance No. 85, Clause 1 (METI Ordinance No. 34 of 2013), JIS C 8285, the IEC 60309 series of standards, the JIS C 8283 series of standards, the IEC 60320 series of standards".</p>	Replaced	P
2.6.3.2	<p>Add the following:</p> <p>If the conductor of protective earthing lead wire or the protective earth wire of CLASS 0I EQUIPMENT is of single-core, it shall be one of the following:</p> <ul style="list-style-type: none"> <li>- annealed copper wire of 1,6 mm in diameter, or metallic wire having the same or more strength and diameter and being not easily corrosive; or</li> <li>- single-core cord or single-core cable (sheathed flexible cable), which have a cross-sectional area of at least 1,25 mm<sup>2</sup>.</li> </ul>	Class II equipment, not Class 0I equipment	N/A
2.6.3.5	<p>Add the following:</p> <p>However, this requirement does not apply to the inside conductor of power supply cord (or power supply cord set), which has been molded together with a plug and a connector and has been sheathed.</p>		N/A
2.6.4.2	<p>Add the following:</p> <p>For CLASS 0I EQUIPMENT equipped with a separate protective earthing terminal, the protective earthing terminal may be used as the main protective earthing terminal.</p>	Class II equipment	N/A
2.6.5.4	<p>Replace 1st sentence with the following.</p> <p>"Protective earthing conductors" with "Protective earthing conductors of CLASS I EQUIPMENT".</p>	Class II equipment	N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
2.6.5.6	Replace “protective earthing terminals” with “protective earthing and protective bonding terminals”.	Class II equipment	N/A
2.6.5.8A	Add the following new clause. after 2.6.5.8A 2.6.5.8A Earthing of CLASS 0I EQUIPMENT Plugs with a lead wire for earthing shall not be used for equipment having a rated voltage exceeding 150V. For plugs with a lead wire for earthing, the lead wire shall not be earthed by a clip. CLASS 0I EQUIPMENT shall be provided with an earthing terminal or lead wire for earthing in the external location where easily visible.	Class II equipment, not Class 0I equipment.	N/A
2.9.3 Table 2H	Deleted the following mark of Figure 2H: B13 e) and S2 d)		N/A
2.9.3 Figure 2H	Addition of marking for table 2H: B8, B9, B12, B13, S1		N/A
2.10.3.1	In the third paragraph, replace IEC 60664-1 with JIS C 60664-1. Replace the 8th paragraph with the following: The above minimum CLEARANCES for connectors do not apply to: - connectors that comply with JIS C 8285, the IEC 60309 series of standards, the JIS C 8283 series of standards, the IEC 60320 series of standards or JIS C 8303; and - connectors that comply with the Ministerial Ordinance establishing Technical Requirements for Electrical Appliances and Materials MEIT Ordinance No. 85, Clause 1 (METI Ordinance No. 34 of 2013), and comply with the dimensions specified in the JIS C 8283 series of standards, JIS C 8303 or IEC 60309-2; see also 1.5.2.	Replaced	P
2.10.3.2	In the bottom column of Table 2J, add the following: In Japan, the MAINS TRANSIENT VOLTAGE value against the nominal AC MAINS SUPPLY voltage of 100 V is decided by applying the columns for the AC MAINS SUPPLY voltage of 150 V.	Added	P



IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
2.10.3.3	In Table 2L, add the following into the column specifying the additional CLEARANCES and at the end:  For intermediate voltage values between the PEAK WORKING VOLTAGE values given in this table, linear interpolation is permitted between the nearest two points, the calculated additional minimum CLEARANCE being rounded up to the next higher 0,1 mm increment.	Added	P
2.10.4.3	Replace the 6th paragraph with the following: The above minimum CLEPAGE DISTANCES for connectors do not apply to: - connectors that comply with JIS C 8285, the IEC 60309 series of standards, the JIS C 8283 series of standards, the IEC 60320 series of standards or JIS C 8303; and - connectors that comply with the Ministerial Ordinance establishing Technical Requirements for Electrical Appliances and Materials MEIT Ordinance No. 85, Clause 1 (METI Ordinance No. 34 of 2013), and comply with the dimensions specified in the JIS C 8283 series of standards, JIS C8303 or IEC 60309-2; see also 1.5.2.	Replaced	P
2.10.9	Replace clause which as test method of $T^1$ from 1.4.5 to 1.4.12.	Replaced.	N/A
3.2.1.1	Add the following: When equipment with an appliance inlet connects to AC mains supply, see clause 1.7.5A for the relevant mark of power supply cord set.		N/A
3.2.3	Add the following after Table 3A: Table 3A applies when cables complying JIS C 3662 or JIS C 3663 are used. In case of other cables, cable entries shall be so designed that a conduit suitable for the cable used can be fitted.	Not permanently connected equipment	N/A
3.2.4	Add the following: The equipment shall have a structure of which the soldered sections of the terminals of appliance inlet are not subjected to mechanical stress during the insertion or removal of the connector, except the case fixing the appliance inlet itself mechanically but not only by soldering.	Appliance inlet is fixed by adequate mechanical construction, not rely on soldering	P

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
3.2.5.1	At the end of the first dashed item, replace “; and” with “, or be a sheathed cord complying with Appendix 1 specified in the Interpretation for the Ministerial Ordinance establishing Technical Requirements for Electrical Appliances and Materials MEIT Ordinance No. 85, Clause 1 (METI Ordinance No. 34 of 2013) ; and”.		N/A
	In the second dashed item, replace “insulated:” with “insulated, be a cord of the following or be a sheathed cord complying with Appendix 1 specified in the Interpretation for the Ministerial Ordinance establishing Technical Requirements for Electrical Appliances and Materials MEIT Ordinance No. 85, Clause 1 (METI Ordinance No. 34 of 2013), :”		N/A
	In the third dashed item, add the following: However, the coating of the protective earth conductor inside covered with sheath (cord set) power cord integrally formed with the connector and the plug need not be a combination of green and yellow. In addition, the power cord of CLASS OI EQUIPMENT having a protective earth conductor separately, it is not necessary to provide a protective earth conductor.		N/A
	Replace the existing fourth dashed item with the following: - if those complying with JIS C 3662-5 or JIS C 3663-4, have conductors with cross-sectional areas not less than those specified in Table 3B, and if others, comply with the relevant wiring rules.  In Table 3B, replace “IEC 60320” with “the JIS C8283 series of standards or the IEC 60320 series of standards”.	No power supply cord provided.	N/A
3.3.4	Add the following note to Table 3D: For cables other than those complying with JIS C 3662 or JIS C 3663, terminals shall be suitable for the size of the intended cables.	No such terminals used	N/A
3.3.7	Add the following after the first sentence: This requirement is not applicable to the external earthing terminal of CLASS OI EQUIPMENT.	No such terminals used	N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
4.3.4	Add the following after the first sentence: This requirement also applies to those connections in CLASS 0I EQUIPMENT, where CLEARANCE or CREEPAGE DISTANCES of BASIC INSULATION would be reduced to less than the values specified in 2.10.	Class II equipment, not Class 0I equipment	N/A
4.3.5	In the paragraph, replace "IEC 60083 or IEC 60320" with "the JIS C 8283 series of standards, JIS C 8303 or JIS C 8358".	Replaced	P
4.5.3	In the item b in Table 4B, add the following: NOTE If no data of material is available, Appendix 4, 1(1),3 specified in the Interpretation for "the Ministerial Ordinance establishing Technical Requirements for Electrical Appliances and Materials MEIT Ordinance No. 85, Clause 1 (METI Ordinance No. 34 of 2013)" is applicable. In the item c in Table 4B, replace IEC 60085 with JIS C 4003.	Replaced	P
5.1.3	Add a note after the first paragraph as follows: NOTE In Japan, three-phase power distribution systems of delta connection are typical, therefore, in such case, test is conducted using the test circuit from IEC 60990, figure 13.	Single phase power distribution system used	N/A
5.1.6	Replace Table 5A as follows	Replaced. Class II equipment, not Class 0I equipment.	P

IEC 60950-1_1F - ATTACHMENT				
Clause	Requirement + Test		Result - Remark	Verdict
	<b>Type of equipment</b>	<b>Terminal A of measuring instrument connected to:</b>	<b>Maximum TOUCH CURRENT mA r.m.s.<sup>a</sup></b>	<b>Maximum PROTECTIVE CONDUCTOR CURRENT</b>
	All equipment	Accessible parts and circuits not connected to protective earth <sup>b</sup>	0,25	–
	HAND-HELD	Class I equipment main protective earthing terminal	0,75	–
		Class 0I equipment main protective earthing terminal	0,5	–
	MOVABLE (other than HAND-HELD, but including TRANSPORTABLE EQUIPMENT)	Class I equipment main protective earthing terminal	3,5	–
		Class 0I equipment main protective earthing terminal	1,0	–
	STATIONARY, PLUGGABLE TYPE A	Class I equipment main protective earthing terminal	3,5	–
		Class 0I equipment main protective earthing terminal	1,0	–
	All other STATIONARY EQUIPMENT – not subject to the conditions of 5.1.7 – subject to the conditions of 5.1.7	Class I equipment main protective earthing terminal	3,5 –	– 5 % of input current
		Class 0I equipment main protective earthing terminal	1,0 –	– –
	<sup>a</sup> If peak values of TOUCH CURRENT are measured, the maximum values are obtained by multiplying the r.m.s. values in the table by 1,414.			
	<sup>b</sup> Some unearthed accessible parts are covered in 1.5.6 and 1.5.7 and the requirements of 2.4 apply. These may be different from those in 5.1.6.			
6	Add following in the end of NOTE 1: For suitable additional measures, see Annex JB.		No TNV.	N/A
6.1.2.1	Add the following: NOTE 3 For example, the highest nominal voltage is 230 V in Europe and 120 V in North America.		No TNV.	N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
Annex G.6	<p>Replace the existing 8<sup>th</sup> paragraph with the following: The above minimum CLEARANCES for connectors do not apply to:</p> <ul style="list-style-type: none"> <li>- connectors that comply with JIS C 8285, the IEC 60309 series of standards, the JIS C 8283 series of standards, the IEC 60320 series of standards or JIS C 8303; and</li> <li>- connectors that with the Ministerial Ordinance establishing Technical Requirements for Electrical Appliances and Materials (MEIT Ordinance No. 34 of 2013) and comply with the dimensions specified in the JIS C 8283 series of standards, JIS C 8303 or IEC 60309-2; see also 1.5.2.</li> </ul>	The alternative method was not considered	N/A
Annex M	<p>In M.1, replace the existing paragraph with the following: One of the two methods specified in this annex shall be applied. NOTE Method A specified in the annex is typical of analogue telephone network in Europe and Method B of those in North America.</p>	No telephone ringing signals	N/A
Annex P	Replace the existing Annex P with the following:	Replaced.	P

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	<p style="text-align: center;"><b>Annex P</b> (normative)</p> <p style="text-align: center;"><b>Normative references</b></p> <p>The following reference documents are indispensable for the application of this standard. If the date of the reference document is given, only that edition applies, and any newer edition and subsequent amendments do not apply. If the date of the reference document is not given, the latest edition including the amendments applies. Further information on the reference documents, including how to obtain copies, can be found on the following internet sites:</p> <p style="text-align: center;"> <a href="http://www.jisc.go.jp/">http://www.jisc.go.jp/</a>  <a href="http://www.iec.ch">http://www.iec.ch</a>  <a href="http://www.iso.org">http://www.iso.org</a>  <a href="http://www.itu.int">http://www.itu.int</a> </p> <p><b>JIS B 0205-2</b>, ISO general purpose metric screw threads - Part2: General plan NOTE Corresponding IS: <b>ISO 261</b>, ISO general purpose metric screw threads— General plan (IDT)</p> <p><b>JIS B 0205-3</b>, ISO general purpose metric screw threads - Part3 : Selected sizes for screws, bolts and nuts NOTE Corresponding IS: <b>ISO 262</b>, ISO general purpose metric screw threads - Selected sizes for screws, bolts and nuts (IDT)</p> <p><b>JIS C 0448</b>, Coding of indicating devices and actuators by colours and supplementary means NOTE Corresponding IS: <b>IEC 60073</b>, Basic and safety principles for man-machine interface, marking and identification - Coding principles for indicator devices and actuators (IDT)</p> <p><b>JIS C 2134</b>, Method for the determination of the proof and the comparative tracking indices of solid insulating materials NOTE Corresponding IS: <b>IEC 60112</b>, Method for the determination of the proof and the comparative tracking indices of insulating materials (IDT)</p> <p><b>JIS C 3215</b> (all parts), Specifications for particular types of winding wires NOTE Corresponding IS: <b>IEC 60317</b> (all parts), Specifications for particular types of winding wires (IDT)</p> <p><b>JIS C 3661-1:1998</b>, Electrical test methods for electric cables - Part 1: Electrical tests for cables, cords and wires for voltages up to and including 450/750V NOTE Corresponding IS: <b>IEC 60885-1:1987</b>, Electrical test methods for electric cables. Part 1: Electrical tests for cables, cords and wires for voltages up to and including 450/750 V (IDT)</p> <p><b>JIS C 3662</b> (all parts), Polyvinyl chloride insulated cables of rated voltages up to and including 450/750V - Part 1 : General requirements NOTE Corresponding IS: <b>IEC 60227</b> (all parts), Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V (MOD)</p> <p><b>JIS C 3663</b> (all parts), Rubber insulated cables - Rated voltages up to and including 450/750 V NOTE Corresponding IS: <b>IEC 60245</b> (all parts), Rubber insulated cables - Rated voltages up to and including 450/750 V (MOD)</p> <p><b>JIS C 4003</b>, Electrical insulation-Thermal evaluation and designation NOTE Corresponding IS: <b>IEC 60085:2004</b>, Electrical insulation - Thermal classification (MOD)</p> <p><b>JIS C 4526-1:2005</b>, Switches for appliances - Part 1: General requirements NOTE Corresponding IS: <b>IEC 61058-1:2000</b>, Switches for appliances - Part 1: General requirements (MOD)</p> <p><b>JIS C 5101-14:2009</b>, Fixed capacitors for use in electronic equipment - Part 14: Sectional specification: Fixed capacitors for electromagnetic interference suppression and connection to the supply mains NOTE Corresponding IS: <b>IEC 60384-14:2005</b>, Fixed capacitors for use in electronic equipment - Part 14: Sectional specification: Fixed capacitors for electromagnetic interference suppression and connection to the supply mains (IDT)</p> <p><b>JIS C 6065:2007 and Amendment 1:2009</b>, Audio, video and similar electronic apparatus - Safety requirements NOTE Corresponding IS: <b>IEC 60065:2001</b>, Audio, video and similar electronic apparatus - Safety requirements and Amendment 1:2005 (MOD)</p> <p><b>JIS C 6802</b>, Safety of laser products NOTE Corresponding IS: <b>IEC 60825-1</b>, Safety of laser products-Part 1: Equipment classification and requirements (IDT)</p> <p><b>JIS C 6803</b>, Safety of laser products-Safety of optical fiber communication systems NOTE Corresponding IS: <b>IEC 60825-2</b>, Safety of laser products-Part 2: Safety of optical fibre communication</p>		

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	<p>systems (OFCS) (IDT)</p> <p><b>JIS C 6804</b>, Safety of laser products-Safety of free space optical communication systems used for transmission of information NOTE Corresponding IS: <b>IEC 60825-12</b>, Safety of laser products - Part 12: Safety of free space optical communication systems used for transmission of information (IDT)</p> <p><b>JIS C 8201-1:2007</b>, Low-voltage switchgear and controlgear-Part 1: General rules NOTE Corresponding IS: <b>IEC 60947-1:2004</b>, Low-voltage switchgear and controlgear - Part 1: General rules (MOD)</p> <p><b>JIS C 8283</b> (all parts), Appliance couplers for household and similar general purposes NOTE Corresponding IS: <b>IEC 60320</b> (all parts), Appliances couplers for household and similar general purposes (MOD)</p> <p><b>JIS C 8285</b>, Plugs, socket-outlets and couplers for industrial purposes NOTE Corresponding IS: <b>IEC 60309-1</b>, Plugs, socket-outlets and couplers for industrial purposes - Part 1: General requirements (MOD)</p> <p><b>JIS C 8303</b>, Plugs and receptacles for domestic and similar general use</p> <p><b>JIS C 8358:1994</b>, Appliance couplers for domestic and similar use</p> <p><b>JIS C 9730-1:2010</b>, Automatic electrical controls for household and similar use - Part 1:General requirements NOTE Corresponding IS: <b>IEC 60730-1:1999</b>, Automatic electrical controls for household and similar use - Part 1: General requirements and Amendment 1:2003 (MOD)</p> <p><b>JIS C 60068-2-78</b>, Environmental testing - Test Cab:Damp heat,steady state NOTE Corresponding IS: <b>IEC 60068-2-78</b>, Environmental testing - Part 2-78: Tests - Test Cab: Damp heat, steady state (IDT)</p> <p><b>JIS C 60364-1:2006</b>, Low-voltage electrical installations - Part 1: Fundamental principles, assessment of general characteristics, definitions NOTE Corresponding IS: <b>IEC 60364-1:2001</b>, Electrical installations of buildings - Part 1: Fundamental principles, assessment of general characteristics, definitions (IDT)</p> <p><b>JIS C 60664-1:2009</b>, Insulation coordination for equipment within low-voltage systems - Part 1:Principles,requirements and tests NOTE Corresponding IS: <b>IEC 60664-1:1992</b>, Insulation coordination for equipment within low-voltage systems - Part 1: Principles, requirements and tests, Amendment 1:2000 and Amendment 2:2002 (IDT)</p> <p><b>JIS C 60695-2-11</b>, Fire hazard testing - Glow-wire flammability test method for end-products NOTE Corresponding IS: <b>IEC 60695-2-11</b>, Fire hazard testing - Part 2-11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products (IDT)</p> <p><b>JIS C 60695-2-20</b>, Fire hazard testing—Part 2 : Glowing /Hot wire based test methods—Section 20 : Hot-wire coil ignitability test on materials NOTE Corresponding IS: <b>IEC/TS 60695-2-20</b>, Fire hazard testing - Part 2-20: Glowing/hot wire based test methods - Hot-wire coil ignitability - Apparatus test method and guidance (IDT)</p> <p><b>JIS C 60695-10-2</b>, Fire hazard testing-Part 10-2: Abnormal heat-Ball pressure test NOTE Corresponding IS: <b>IEC 60695-10-2</b>, Fire hazard testing - Part 10-2: Abnormal heat - Ball pressure test (IDT)</p> <p><b>JIS C 60695-11-5:2007</b>, Fire hazard testing-Part 11-5:Test flames-Needle-flame test method - Apparatus, confirmatory test arrangement and guidance NOTE Corresponding IS: <b>IEC 60695-11-5:2004</b>, Fire hazard testing - Part 11-5: Test flames - Needle-flame test method - Apparatus, confirmatory test arrangement and guidance (IDT)</p> <p><b>JIS C 60695-11-10</b>, Fire hazard testing-Part 11-10:Test flames - 50 W horizontal and vertical flame test methods NOTE Corresponding IS: <b>IEC 60695-11-10</b>, Fire hazard testing - Part 11-10: Test flames - 50 W horizontal and vertical flame test methods (IDT)</p> <p><b>JIS C 60695-11-20</b>, Fire hazard testing-Part 11-20: Test flames - 500 W flame test methods NOTE Corresponding IS: <b>IEC 60695-11-20</b>, Fire hazard testing - Part 11-20: Test flames - 500 W flame test methods (IDT)</p> <p><b>JIS C 7550:2011</b>, Safety for lighting of lamp and lamp system on biology</p> <p><b>JIS C 60695-10-3:2005</b>, Fire resistance test – Electrical' Electron – Part 10-3 : Thermal caused abnormal – Deformation test of molded stress after released NOTE Corresponding IS: <b>IEC 60695-10-3:2002</b>, Fire hazard testing – Part 10-3 : Abnormal heat – Mould stress relief distortion test (IDT)</p> <p><b>JIS K 7110</b>, Plastics - Determinaion of Izod impact strength</p>		




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Clause	Requirement + Test	Result - Remark	Verdict
	<p>NOTE Corresponding IS: <b>ISO 180</b>, Plastics - Determination of Izod impact strength (MOD)</p> <p><b>JIS K 7111</b> (all parts), Plastics-Determination of Charpy impact properties - Part 1: Non-instrumented impact test</p> <p>NOTE Corresponding IS: <b>ISO 179</b> (all parts), Plastics - Determination of Charpy impact properties (MOD)</p> <p><b>JIS K 7127</b>, Plastics - Determination of tensile properties—Part 3 : Test conditions for films and sheets</p> <p>NOTE Corresponding IS: <b>ISO 527-3</b>, Plastics - Determination of tensile properties - Part 3: Test conditions for films and sheets (IDT)</p> <p><b>JIS K 7160</b>, Plastics—Determination of tensile-impact strength</p> <p>NOTE Corresponding IS: <b>ISO 8256</b>, Plastics - Determination of tensile-impact strength (IDT)</p> <p><b>JIS K 7161</b>, Plastics—Determination of tensile properties—Part 1 : General principles</p> <p>NOTE Corresponding IS: <b>ISO 527-1</b>, Plastics - Determination of tensile properties - Part 1: General principles (IDT)</p> <p><b>JIS K 7162</b>, Plastics - Determination of tensile properties - Part 2 : Test conditions for moulding and extrusion plastics</p> <p>NOTE Corresponding IS: <b>ISO 527-2</b>, Plastics - Determination of tensile properties - Part 2: Test conditions for moulding and extrusion plastics (IDT)</p> <p><b>JIS K 7164</b>, Plastics - Determination of tensile properties - Test conditions for isotropic and orthotropic fibre-reinforced plastic composites</p> <p>NOTE Corresponding IS: <b>ISO 527-4</b>, Plastics - Determination of tensile properties - Part 4: Test conditions for isotropic and orthotropic fibre-reinforced plastic composites (MOD)</p> <p><b>JIS K 7165</b>, Plastics-Determination of tensile properties-Part 5: Test conditions for unidirectional fibre-reinforced plastic composites</p> <p>NOTE Corresponding IS: <b>ISO 527-5</b>, Plastics - Determination of tensile properties - Part 5: Test conditions for unidirectional fibre-reinforced plastic composites (MOD)</p> <p><b>JIS K 7171</b>, Plastics - Determination of flexural properties</p> <p>NOTE Corresponding IS: <b>ISO 178</b>, Plastics - Determination of flexural properties (IDT)</p> <p><b>JIS K 7241</b>, Cellular plastics-Determination of horizontal burning characteristics of small specimens subjected to a small flame</p> <p>NOTE Corresponding IS: <b>ISO 9772</b>, Cellular plastics - Determination of horizontal burning characteristics of small specimens subjected to a small flame (IDT)</p> <p><b>JIS K 7341</b>, Plastics-Determination of burning behaviour of thin flexible vertical specimens in contact with a small-flame ignition source</p> <p>NOTE Corresponding IS: <b>ISO 9773</b>, Plastics - Determination of burning behaviour of thin flexible vertical specimens in contact with a small-flame ignition source (IDT)</p> <p><b>JIS K 7350-1</b>, Plastics - Methods of exposure to laboratory light sources - Part 1: General guidance</p> <p>NOTE Corresponding IS: <b>ISO 4892-1</b>, Plastics - Methods of exposure to laboratory light sources - Part 1: General guidance (IDT)</p> <p><b>JIS K 7350-2</b>, Plastics - Methods of exposure to laboratory light sources - Part 2 : Xenon-arc lamps</p> <p>NOTE Corresponding IS: <b>ISO 4892-2</b>, Plastics - Methods of exposure to laboratory light sources - Part 2: Xenon-arc lamps (MOD)</p> <p><b>JIS K 7350-4</b>, Plastics - Methods of exposure to laboratory light sources - Part 4: Open-flame carbon-arc lamps</p> <p>NOTE Corresponding IS: <b>ISO 4892-4</b>, Plastics - Methods of exposure to laboratory light sources - Part 4: Open-flame carbon-arc lamps (MOD)</p> <p><b>JIS S 0101:2000</b>, Graphical warning symbols for consumers</p> <p><b>TS C 60695-11-3</b>, Fire hazard testing - Part 11-3: Test flames - 500 W flames - Apparatus and confirmational test methods</p> <p>NOTE Corresponding IS: <b>IEC 60695-11-3</b>, Fire hazard testing - Part 11-3: Test flames - 500 W flames - Apparatus and confirmational test methods (IDT)</p> <p><b>TS C 60695-11-4</b>, Fire hazard testing - Part 11-4: Test flames - 50 W flames - Apparatus and confirmational test methods</p> <p>NOTE Corresponding IS: <b>IEC 60695-11-4</b>, Fire hazard testing - Part 11-4: Test flames - 50 W flames - Apparatus and confirmational test methods (IDT)</p> <p><b>IEC 60216-4-1</b>, Electrical insulating materials - Thermal endurance properties - Part 4-1: Ageing ovens - Single-chamber ovens</p> <p><b>IEC 60309</b> (all parts), Plugs, socket-outlets and couplers for industrial purposes</p> <p><b>IEC 60317</b> (all parts), Specifications for particular types of winding wires</p> <p><b>IEC 60317-43</b>, Specifications for particular types of winding wires - Part 43: Aromatic polyimide tape wrapped</p>		



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Clause	Requirement + Test	Result - Remark	Verdict
	<p>round copper wire, class 240</p> <p><b>IEC 60320</b> (all parts), Appliance couplers for household and similar general purposes</p> <p><b>IEC 60417-DB:2002</b>, Graphical symbols for use on equipment (For DB, see the online database of the IEC.)</p> <p><b>IEC 60747-5-5</b>, Semiconductor devices - Discrete devices - Part 5-5: Optoelectronic devices – Photocouplers</p> <p><b>IEC/TR 60825-9</b>, Safety of laser products - Part 9: Compilation of maximum permissible exposure to incoherent optical radiation</p> <p><b>IEC 60851-3:1996</b>, Winding wires - Test methods - Part 3: Mechanical properties and Amendment 1:1997</p> <p><b>IEC 60851-5:1996</b>, Winding wires - Test methods - Part 5: Electrical properties, Amendment 1:1997 and Amendment 2:2004</p> <p><b>IEC 60851-6:1996</b>, Methods of test for winding wires - Part 6: Thermal properties</p> <p><b>IEC 60947-1:2004</b>, Low-voltage switchgear and controlgear - Part 1: General rules</p> <p><b>IEC 60990:1999</b>, Methods of measurement of touch current and protective conductor current</p> <p><b>IEC 61051-2</b>, Varistors for use in electronic equipment - Part 2: Sectional specification for surge suppression varistors</p> <p><b>ISO 180</b>, Plastics - Determination of Izod impact strength</p> <p><b>ISO 3864-2</b>: Graphical symbols – Safety colours and safety signs – Part 2: principles for product safety labels.</p> <p><b>ISO 4892-1</b>, Plastics - Methods of exposure to laboratory light sources - Part 1: General guidance</p> <p><b>ISO 7000-DB:2004</b>, Graphical symbols for use on equipment - Index and synopsis (For DB, see the online database of the IEC.)</p> <p><b>ISO 8256</b>, Plastics - Determination of tensile-impact strength</p> <p><b>ITU-T Recommendation K.44</b>, Resistibility tests for telecommunication equipment exposed to overvoltages and overcurrents - Basic Recommendation</p>		
Annex U.2.4	<p>Replace the existing NOTE as NOTE1, add NOTE 2 as follows:</p> <p>NOTE 2 by taking into account environmental impact, “(for example, 1.1.1-trichloroethane)” described in the corresponding IEC standard was deleted.</p>		N/A
Annex V.1	<p>Replace “In 3.1.2 of IEC 60364-1” with “312 of JIS C 60364-1”.</p>		P
Annex W.1	<p>Replace second and third sentence in the first paragraph with the following:</p> <p>This distinction between earthed and unearthed (floating) circuit is not the same as between CLASS I EQUIPMENT, CLASS 0I EQUIPMENT and CLASS II EQUIPMENT. Floating circuits can exist in CLASS I EQUIPMENT or CLASS 0I EQUIPMENT and earthed circuits in CLASS II EQUIPMENT.</p>		N/A
Annex AA	<p>Replace figure AA.3 which correct the position of insulating metal sheet.</p>	Replaced.	N/A
Annex BB	<p>(Reference) [Change point which from IEC 60950-1 : 2001 (v1) to IEC 60950-1 : 2005 (v2)]</p> <p>(Deleted text body)</p>		—

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
Annex CC	<b>Evaluation of integrated circuit (IC) current limiters</b>	No such integrated circuit	N/A
CC.2	<b>Test program 1</b>		N/A
	10 000 cycles of turning enable on and off with an iron-core inductor having $(0.35 \pm 0.1)$ mH inductance at 1 kHz and less than $1 \Omega$ DC resistance value connected in the output circuit;		N/A
	10 000 cycles of turning enable on and off with the input connected to a capacitor rated $425 \mu\text{F} \pm 10 \mu\text{F}$ and shorting the output;		N/A
	10 000 cycles of turning the input pin on and off with an iron-core inductor having $(0.35 \pm 0.1)$ mH inductance at 1 kHz and less than $1 \Omega$ DC resistance value connected to the input supply and return while keeping enable active and shorting the output;		N/A
CC.3	<b>Test program 2</b>		N/A
	Note: It's advisable to use that in conformity with IEC 60127-2 for quick-fusing type fuse.		N/A
Annex EE	<b>Household and home/office document/media shredders</b>	No such equipment.	N/A
	Note: Delete requirements of this Annex which corresponding IS and replace this Annex by Annex JA.		N/A
	Foreword of Annex JA (Requirements for shredder) was replaced by following: It shall conformity with requirements of this Annex for that add to body with Household and home/office document /media shredders.		N/A

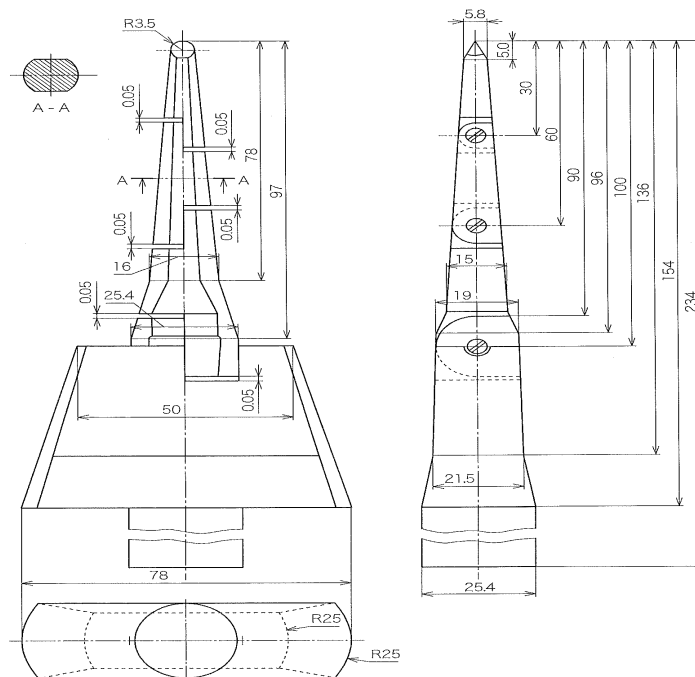
IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
Annex JA	<p>Add a new annex JA with the following contents.</p> <p style="text-align: center;"><b>Annex JA</b> (normative)</p> <p>Requirements for document shredding machines (see 1.7, 2.8.3, 3.4 and 4.4)</p> <p>Introduction</p> <p>This annex specifies the safety requirements for document shredding machines, except those of STATIONARY EQUIPMENT used by connecting directly to 3-phase AC MAINS SUPPLY of a voltage not the than 200V.</p> <p>Document shredding machines shall comply with the requirements of this annex in addition to other requirements specified in this standard, except those of STATIONARY EQUIPMENT used by connecting directly to three-phase AC MAINS SUPPLY of a voltage not less than 200V.</p>	Not document shredding machine.	N/A
JA.1	<p><b>Markings and instructions</b></p> <p>In the easily visible part near to the slot for documents, by a method of clearly legible and permanent and by using easily understandable terms, document shredding machines shall have markings of the symbol  specified in 6.2.1 (general cautions) of JIS S 0101:2000, Graphical warning symbols for consumers, and also the following precautions for use:</p> <ul style="list-style-type: none"> <li>- that use by an infants/children may cause a hazard of injury etc.;</li> <li>- that a hand can be drawn into the mechanical section for shredding when touching the document-slot;</li> <li>- that clothing can be drawn into the mechanical section for shredding when touching the document-slot;</li> <li>- that hairs can be drawn into the mechanical section for shredding when touching the document-slot;</li> <li>- in case of equipment incorporating a commutator motor, that equipment may catch fire or explode by spraying of flammable gas.</li> </ul>	Not document shredding machine	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
JA.2	<p><b>Inadvertent reactivation</b></p> <p>Any safety interlock that can be operated by means of the test finger, Figure JA.1, is considered to be likely to cause inadvertent reactivation of the hazard.</p> <p>Compliance is checked by inspection and, where necessary, by a test with the test finger, Figure JA.1</p>	Not document shredding machine	N/A
JA.3	<p><b>Disconnect switch</b></p> <p>Document shredding machines shall incorporate an isolating switch complying with sub-clause 3.4.2 as the device disconnecting the power of hazardous moving parts. For this switch, two-position (single-use) switch or multi-position (multifunction) switch (e.g., slide switch) may be used.</p> <p>If two-position switch, the positions for "ON" and "OFF" shall be indicated in accordance with sub-clause 1.7.8. If multi-position switch, the position for "OFF" shall be indicated in accordance with sub-clause 1.7.8 and other positions shall be indicated with proper terms or symbols.</p> <p>Compliance is checked by inspection.</p>	Not document shredding machine	N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
JA.4	<p><b>Protection in operator access area</b></p> <p>Any warning shall not be used instead of the structure for preventing access to hazardous moving parts.</p> <p>Document shredding machines shall comply with the following requirements.</p> <p>Insert the test finger, Figure JA.1, into all openings in MECHANICAL ENCLOSURES without applying appreciable force. It shall not be possible to touch hazardous moving parts with the test finger. This consideration applies to all sides of MECHANICAL ENCLOSURES when the equipment is mounted as intended . Before testing with the test finger, remove the parts detachable without a tool.</p> <p>Insert the wedge-probe, Figure JA.2, into the document-slot. And, against all directions of openings, if straight-cutting type, a force of 45 N shall apply to the probe, and 90 N if cross-cutting type. In this case, the weight of the probe is to be factored into the overall applied force. Before testing with the wedge-probe, remove the parts detachable without a tool. It shall not be possible to touch any hazardous moving parts, including the shredding roller or the mechanical section for shedding, with the probe.</p>	Not document shredding machine	N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

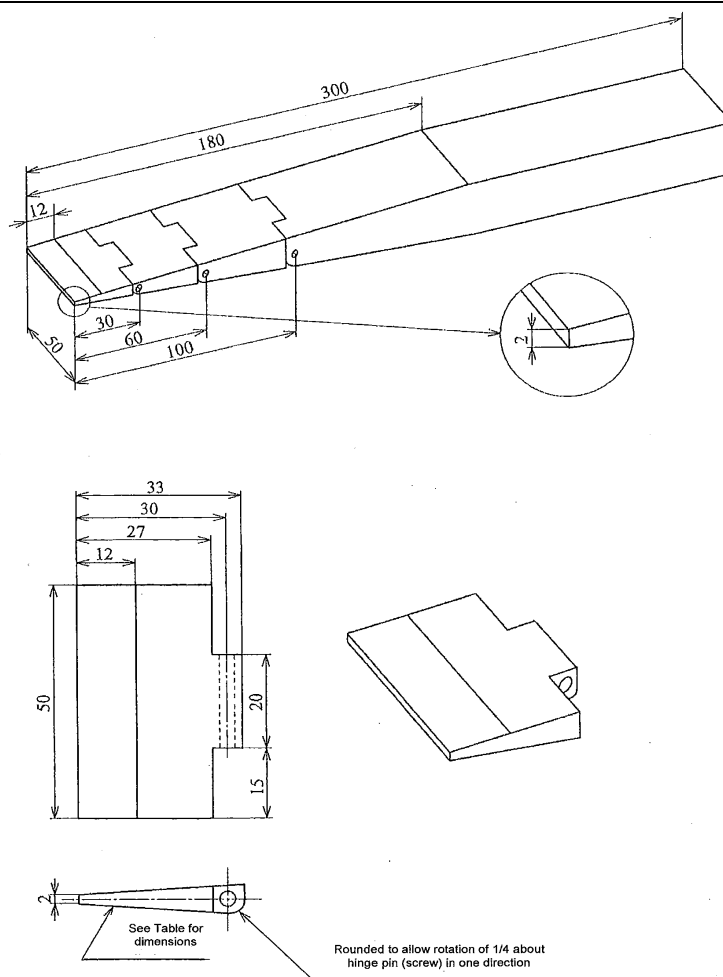
Dimensions in millimeters



**Figure JA.1 Test finger**

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Clause	Requirement + Test	Result - Remark	Verdict
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Details of the tip of wedge

Dimensions in millimeters

Distance from the tip	Thickness of probe
0	2
12	4
180	24

The thickness of the probe varies linearly, except changing the slope at the respective points shown in the table. The allowable dimensional tolerance of the probe shall be  $\pm 0,127$  mm.

**Figure JA.2 Wedge-probe.**

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Clause	Requirement + Test	Result - Remark	Verdict
Annex JB	<p><b>Add Annex JB as follows:</b></p> <p><b>Annex JB</b> (informative)</p> <p>Current conditions Installation environment on overvoltages and overcurrents, and the measures (see NOTE 1 in Clause 6)</p> <p>Introduction</p> <p>This standard is based on “<b>ITU-T Recommendation K.11:1993</b>” to stipulate requirement for equipment on a premise to install in the environment where appropriate measures were taken for so that overvoltage more than peak 1.5kV does not hang to the apparatus. But in Japan due to environment is difficult to integrate with “<b>ITU-T Recommendation K.11:1993</b>”, in here explain for desirable environment and show actions to be taken how to make a desirable setting environment.</p>	Added	N/A



IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
JB.1	<p><b>A desirable setting environment</b></p> <p>When lead electric wires in building for any kind service of metal wire, for overvoltage restraint and overcurrent restraint, it is desirable that be close to each other including grounding conductor. It is important to make it close each other especially the lead in point of power line, communication line and grounding conductor. In that case, attention is necessary for electromagnetic induction where occurred between a communication line and the power line which are not covered. It is desirable that set up main grounding terminal which close to lead in point of power line and communication line in building as much as possible. Due to minimize the surge current in building for all shielding conductor of cable which lead in building, it shall connected directly with main grounding terminal in lead in point via surge protection device (SPD) e.g. arrester and so on. It shall be considered corrosion measures in joint if necessary.</p> <p>It is desirable that SPD which set on communication line is close to lead in point toward the building as much as possible. Furthermore set the SPD near the main power line, and it may make the distance from SPD to a grounding conductor as short as possible. It is effective if use a short grounding conductor with low impedance for that decrease surge voltage between electric power system protection conductor and the communication line.</p>		N/A
	<p>Desirable setting environment for TT electric power system is as figure JB.1. Established SPD as that excessive potential difference does not occur between communication side and the electricity side, and recommend that ground wire of both are connected with a short conductor. Concerning the detail for recommend setting environment, see</p> <p><b>ITU-T Recommendation K.11:1993, K.21:1996, K.27:1996, K.31:1993 and K.66:2004.</b></p>		N/A


IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
<p>Figure JB.1 – Sample of desirable setting for TT electric power system of single phase three-wire type + neutral line</p> <p>(From ITU-T Recommendation K.66:2004)</p> <p>Note:</p> <p>a) All bonding line to a main grounding terminal makes it as short as possible (Less than 1.5m in the place that danger of direct lightning is high).</p> <p>b) The connected line which from SPD to main grounding terminal is as short as possible (less 1.5m).</p> <p>c) Setting for SPD (omitted the detail). All SPD connected line is short as possible (less 0.5m).</p>			
JB.2	<p><b>Situation and countermeasure of setting environment for overvoltage and overcurrent</b></p> <p>In Japan, TT type often adopted for electric power system. Typical example is as figure JB.2. For this TT type, on condition that it shall be an electric power system which does not wired with grounding conductor except neutral line, and it shall be connected with grounding terminal which have an electrically independent different from this grounding terminal of neutral line by user for equipment which need to connect with ground.</p>		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
<p>電力供給源</p> <p>Grounded electric wire and grounded equipment in particularly</p> <p>Figure JB.2 – Example of three-wire type TT electric power system</p>			
	<p>But as thing are stand, there are a lot of cases that an outlet is not prepared with the grounding terminal which is appropriate in the setting place of the equipment. On the other hand, grounding resistance value of SPD where set at lead-in point of communication line sometime is not enough low, it make that dielectric breakdown was occurred due to the voltage that a thunder surge current evoked for grounding resistance which flow into the communication line and drift to the ground through SPD. The same result is expected that grounding resistance value is not enough low too if set SPD on electric power system. This status is as figure JB.3.</p> <p>As figure JB.1, it can decrease effectively by connecting both with the conductor of the low resistance value when excessive potential difference occurred in internal equipment.</p>		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
<p>Figure JB.3 - Insufficient grounding and setting environment of bonding (From ITU-T Recommendation K.66:2004)</p>			
	It is desirable that provide the information for set environment which appropriate measures were given based on <b>ITU-T Recommendation K.11:1993</b> when perform design and sale network connected equipment.		N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
<b>ATTACHMENT TO TEST REPORT</b> <b>IEC 60950-1 with A1: 2009 and A2:2013</b> <b>JAPAN NATIONAL DIFFERENCES</b> <b>Information technology equipment – Safety – Part 1: General requirements</b>			
<b>Differences according to</b> ..... : J60950-1 (H29)			
<b>Attachment Form No.</b> .... : JP_ND_IEC 60950_1G			
<b>Attachment Originator</b> ..... : JQA			
<b>Master Attachment</b> ..... : 2017-11			
<b>Copyright © 2017 IEC System for Conformity Testing and Certification of Electrical Equipment (IECEE), Geneva, Switzerland. All rights reserved.</b>			
	<b>National Differences</b>		
1.2.4.1	Add the following new notes.  Note: Even if the equipment is designed as Class I, the equipment is regarded as CLASS 0I EQUIPMENT (see 1.2.4.3A) when 2-pin adaptor with earthing lead wire or cord set having 2-pin plug with earthing lead wire is provided or recommended.	The EUT is a Class II equipment	N/A
1.2.4.3A	Add the following new clause. 1.2.4.3A CLASS 0I EQUIPMENT Equipment having attachment plug without earthing blade, where protection against electric shock is achieved by: <ul style="list-style-type: none"> <li>- using BASIC INSULATION, and</li> <li>- providing either of the following a) or b) in order to connect those conductive parts that might assume a HAZARDOUS VOLTAGES in the event of BASIC INSULATION fault to the PROTECTIVE EARTHING CONDUCTOR in the building wiring.               <ul style="list-style-type: none"> <li>a) Provision of 2-pin plug with earthing lead including the condition of that 2-pin adaptor with earthing lead wire is provided or recommended.</li> <li>b) Provision of an independent earthing terminal, when 2-core mains cord (without earthing conductor) is used.</li> </ul> </li> </ul> Note – CLASS 0I EQUIPMENT may have a part constructed with Double Insulation or Reinforced Insulation.		N/A


IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
1.3.2	<p>Add the following notes after the first paragraph:</p> <p>Note 1 Transportable or similar equipment that are relocated frequently for intended usage should not be designed as Class I or CLASS 0I EQUIPMENT unless it is intended to be installed by service personnel.</p> <p>Note 2 Considering wiring circumstance in Japan, equipment intended to be installed where the provision for earthing connection is unlikely should not be designed as Class I or CLASS 0I EQUIPMENT unless it is intended to be installed by service personnel.</p>		N/A
1.5.1	<p>Replace the first paragraph with the follows:</p> <p>Where safety is involved, components shall comply either with the requirements of this standard, with the safety aspects of the relevant JIS component standard, or IEC component standards, or components shall have equivalent to or better properties than these.</p> <p>Replace Note 1 with the following:</p> <p>Note 1 Components complying with the interpretation of Ministerial Ordinance on stipulating technical requirements for the Electrical Appliance is regarded to have equivalent to or better performance.</p> <p>Note 2 JIS or an IEC component standard is considered relevant only if the component in question clearly falls within its scope.</p> <p>Add the following after the last paragraph:</p> <p>For an appliance connector that is able to fit with appliance inlet compatible with the standard sheet of IEC 60320-1 or JIS C 8283-1, the size of the connector shall comply with relevant standard sheet of IEC 60320-1 or JIS C 8283-1.</p> <p>A power supply cord set complying with JIS C 8286 is regarded to comply with this requirement.</p> <p>Note 3 A power supply cord set provided with appliance connector that is able to fit with appliance inlet compatible with the standard sheet of IEC 60320-1 or JIS C 8283-1 should comply with JIS C 8286.</p>	Replaced	P

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
1.5.2	Add the following Note 2 after the 4th dashed paragraph: Note 2 See 1.7.5A when Type C.14 appliance coupler rated 10 A per JIS C 8283-1 is used with an equipment rated not more than 125 V and rated more than 10 A.	Replaced	P
1.5.5	Add the following Note after the last paragraph:  NOTE An interconnection cord sets provided with interconnecting coupler for mains supply complying with JIS C 8283-2-2 should comply with JIS C 8286.	Added	P
1.5.9.1	Add the following in the last of NOTE 1. Gas discharge tube connected in series with VDR may be used.	No gas discharge tube	N/A
1.7	Replace EE.2 and EE.4 with the following:  JA.1 Shredder warning JA.3 Shredder power disconnection	Added	P
1.7.1.2	Replace first and second dashed paragraphs with the followings: - manufacturer's or responsible company's name or trade-mark or identification mark; - manufacturer's or responsible company's model identification or type reference;	Replaced	P
1.7.2.1	Add the following after the second paragraph. Instruction or equipment marking regarding safety shall be written in Japanese unless otherwise permitted in this standard.	Added	P
1.7.2.5	Replace the last sentence with the following: An acceptable marking for an electric shock   hazard is (6.2.4 of JIS S 0101).	Replaced	P
1.7.5	Replace the second paragraph with the following.  Socket-outlets conforming to JISC8282-1 are examples of standard power supply outlets.	Replaced	P

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Clause	Requirement + Test	Result - Remark	Verdict
1.7.5A	<p>Add the following new clause after 1.7.5.</p> <p>1.7.5A Power supply cord set</p> <p>If appliance coupler according to IEC60320-1, C.14(rated current: 10A) is used in equipment whose rated voltage is less than 125V and rated current is over 10A, the following instruction or equivalent shall be described in the operating instruction.</p> <p>“Use only designated cord set attached in this equipment”</p> <p>Example in Japanese:</p> <p>“この機器に同梱した指定の電源コードセットだけを使用して下さい。”</p> <p>If appliance coupler is used for connection to the mains and if the cord set is not provided within the package for the equipment, suitable information regarding to the cord set shall be described in the operating instruction</p> <p>Note Since the combination of appliance inlet with earthing pin and two-core cord set (without earthing conductor) is special, the cord set should be attached in the equipment and the operating instruction should provide the information that the cord set is exclusively used with the equipment and not allowed to use with other equipment.</p>		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
1.7.14A	<p>Add the following new clause after 1.7.14.</p> <p>1.7.14A Marking for CLASS 0I EQUIPMENT</p> <p>For CLASS 0I EQUIPMENT, the following or equivalent instructions shall be marked.</p> <ul style="list-style-type: none"> <li>- the following instruction shall be marked on the mains plug or on the visible place of the main body</li> </ul> <p>“Provide an earthing connection”</p> <p><i>Example in Japanese:</i></p> <p>“必ず接地接続を行ってください。”</p> <ul style="list-style-type: none"> <li>- the following instruction shall be marked on the visible place of the main body or written in the operating instructions:</li> </ul> <p>“Provide an earthing connection before the mains plug is connected to the mains. And, when disconnecting the earthing connection, be sure to disconnect after pulling out the mains plug from the mains.”</p> <p><i>Example in Japanese:</i></p> <p>接地接続は必ず、電源プラグを電源につなぐ前に行ってください。 また、接地接続を外す場合は、必ず電源プラグを電源から切り離してから行ってください。</p>		N/A
1.7.14B	<p>Add the following new clause after 1.7.14A</p> <p>1.7.14B Protective earthing conductor used for CLASS 0I EQUIPMENT</p> <p>For CLASS 0I EQUIPMENT provided with independent main protective earthing terminal, where the cord for the protective earthing connection is not provided within the package for the equipment, the suitable information for the protective earthing connection shall be provided in the operating instruction. (See 2.6.3.2)</p>		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
2.1.1.1	<p>Replace item b) of 2.1.1.1 with the following.</p> <p>b) A test with the test finger, Figure 2A, which shall not contact parts described above when applied to openings in the ENCLOSURES after removal of parts that can be detached by an OPERATOR, including fuseholders, and with OPERATOR access doors and covers open. It is permitted to leave lamps in place for this test. Connectors that can be separated by an OPERATOR, other than those complying with JIS C 8303 or JIS C 8285 or IEC 60309 series or JIS C 8283 series or IEC 60320 series, shall also be tested during disconnection. But even if the connector does not comply with these standards, the one having equivalent to or better performance need not be tested during disconnection.</p> <p>Note 4 Connectors complying with Appendix 4 of the interpretation of Ministerial Ordinance on stipulating technical requirements for the Electrical Appliance is regarded to have equivalent to or better performance.</p>	Replaced	P
2.5	Replace "IEC 60730-1" with "JIS C 9730-1" (in item b)).	Replaced	P
2.6.2	<p>Delete the following line.</p> <p>• the symbol , IEC 60417-5018 (2011-07);</p>	The EUT is a Class II equipment	N/A
2.6.3.2	<p>Add the following after the first paragraph.</p> <p>However where the single core conductor is used for protective earthing lead or earthing cord for CLASS 01 EQUIPMENT, either of the following condition shall be met.</p> <ul style="list-style-type: none"> <li>- Use of annealed copper wire with 1.6 mm diameter or corrosion-inhibiting metal wire having equivalent to or more strength and thickness.</li> <li>- Single core cord or single core cable with 1.25 mm<sup>2</sup> or more cross-sectional area</li> </ul>		N/A
2.6.3.5	<p>Add the following after the first paragraph.</p> <p>However this requirement does not apply to internal conductor of the cord set that is covered by the sheath of mains cord and is formed together with mains plug and appliance connector.</p>		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
2.6.4.2	Replace the first paragraph with the following. Equipment required to have protective earthing shall have a main protective earthing terminal. For equipment with a DETACHABLE POWER SUPPLY CORD, the earthing terminal in the appliance inlet is regarded as the main protective earthing terminal. However, for CLASS 0I EQUIPMENT provided with the separate main protective earthing terminal other than appliance inlet, the separate main protective earthing terminal may be treated as mains protective earthing terminal.	The EUT is a Class II equipment	N/A
2.6.5.4	Replace the first sentence with the following. Protective earthing connections of CLASS I EQUIPMENT shall make earlier and break later than the supply connections in each of the following:  Add the following after last paragraph:  Note For CLASS 0I EQUIPMENT, 1.7.14A is applied instead of this requirement.		N/A
2.6.5.8A	Add the following new clause after 2.6.5.8 2.6.5.8A Earthing of CLASS 0I EQUIPMENT Plugs with a lead wire for earthing shall not be used for equipment having a rated voltage exceeding 150V. For plugs with a lead wire for earthing, the lead wire shall not be earthed by a clip. CLASS 0I EQUIPMENT shall be provided with an earthing terminal or lead wire for earthing in the external location where easily visible.		N/A
2.7.6	Replace "ISO 3864, No. 5036" with "6.2.4 of JIS S 0101".	Replaced	P

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Clause	Requirement + Test	Result - Remark	Verdict
2.10.3.1	Replace the 8th paragraph with the following The above minimum CLEARANCE for connectors do not apply to connectors that comply with JIS C 8285, IEC60309 series of standards, JIS C 8283 series of standards, IEC60320 series of standards, JIS C 8303, or even if it does not comply with the above standards but the one having equivalent to or better performance and dimension which comply with JIS C 8283 series of standards, JIS C 8303 or IEC 60309-2. Note Connectors complying with Appendix 4 of the interpretation of Ministerial Ordinance on stipulating technical requirements for the Electrical Appliance is regarded to have equivalent to or better performance.		N/A
2.10.3.2 Table 2J	In Japan, the value of the main power supply transient voltage for the nominal ac main power supply voltage of 100 V is determined by applying the row of AC main power supply voltage 150 V.		N/A
2.10.4.3	Replace the 6th paragraph with the following The above minimum CREEPAGE DISTANCE for connectors do not apply to connectors that comply with JIS C 8285, IEC60309 series of standards, JIS C 8283 series of standards, IEC60320 series of standards, JIS C 8303, or even if it does not comply with the above standards but the one having equivalent to or better performance and dimension which comply with JIS C 8283 series of standards, JIS C 8303 or IEC 60309-2. Note Connectors complying with Appendix 4 of the interpretation of Ministerial Ordinance on stipulating technical requirements for the Electrical Appliance is regarded to have equivalent to or better performance.		N/A
2.10.9	Replace "1.4.5" in the third paragraph with "1.4.12".		N/A
3.2.3	Add the following after the third paragraph. Table 3A applies when cables complying JIS C 3662 series of standards or JIS C 3663 series of standards are used. In case of other cables, cable entries shall be so designed that the cable could be fitted in a conduit.		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
3.2.4	Add the following as 4th dashed paragraph. - be so constructed that mechanical stress shall not transmit to the soldering part of inlet terminal during insertion or removal of the connector except that the body of the inlet is secured and is secured not only soldering.		N/A
3.2.5.1	Add the following after Note 3: Note 4 In Japan, mains cords having equivalent to or better electro-mechanical and fire safety performance as above and complying with Appendix 1 of the interpretation of Ministerial Ordinance on stipulating technical requirements for the Electrical Appliance can be used. Replace the paragraph after Note 3 with the following. For equipment required to have protective earthing, a PROTECTIVE EARTHING CONDUCTOR shall be included in the MAINS SUPPLY cord except for CLASS 0I EQUIPMENT having separate protective earthing conductor from mains cord.  Add the following after the second paragraph after Note 3:  Note 5 For the cross-sectional area of mains cord described in Note 4, relevant Japanese wiring regulation can be applied.		N/A
3.2.5A	Add the following new clause after 3.2.5  3.2.5A AC mains plug Mains plug for PLUGGABLE EQUIPMENT TYPE A shall comply with JIS C 8282-1 or equivalent to or better performance. Power supply cord set complying with JIS C 8286 is regarded to meet the requirements. Mains plug with fuse link for PLUGGABLE EQUIPMENT TYPE A shall comply with JIS C 8282-2-1 or equivalent to or better performance. Note Mains plug complying with Appendix 4 of the interpretation of Ministerial Ordinance on stipulating technical requirements for the Electrical Appliance is regarded to have equivalent to or better performance.		N/A


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Clause	Requirement + Test	Result - Remark	Verdict
3.3.4 Table 3D	Add the following note to Table 3D: Note For cables other than those complying with JIS C 3662 series of standards or JIS C 3663 series of standards, the terminals shall be suitable for the size of the intended cables.		N/A
3.3.7	Add the following after the first sentence: This requirement is not applicable to the external earthing terminal of CLASS 0I EQUIPMENT.	No such terminals	N/A
4.2.8	Add the following after the first paragraph:  Note Intrinsically protected picture tube is required to comply with JIS C 6965 in clause 18 of JIS C 6065. No intrinsically protected picture tube which is out of scope of JIS C 6965 is required to test according to sub-clause 18.2 of JIS C 6065.		N/A
4.3.4	Add the following after the first sentence: This requirement also applies to those connections in CLASS 0I EQUIPMENT, where CLEARANCE or CREEPAGE DISTANCES over BASIC INSULATION would be reduced to less than the values specified in 2.10.	No such parts	N/A
4.3.5	Replace the first dashed paragraph with the following.  Within a manufacturer's unit or system, plugs and sockets likely to be used by the OPERATOR or by a SERVICE PERSON shall not be employed in a manner likely to create a hazard due to misconnection. In particular, connectors complying with IEC 60320/JIS C 8283 series of standards or JIS C 8303 or JIS C 8358 shall not be used for SELV CIRCUITS or TNV CIRCUITS. Keying, location or, in the case of connectors accessible only to a SERVICE PERSON, clear markings are permitted to meet the requirement.	No such parts	N/A
4.3.6	Replace the 1st paragraph with the following DIRECT PLUG-IN EQUIPMENT shall not impose undue stress on the socket-outlet. The mains plug part shall comply with the standard for the relevant mains plug. (see 3.2.5A)		N/A
4.4.2	Replace the paragraph with the following:  HOUSEHOLD AND HOME/OFFICE DOCUMENT/MEDIA SHREDDERS shall also comply with Annex JA.		N/A

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Clause	Requirement + Test		Result - Remark	Verdict
4.5.3	Add the following note to footnote b) of Table 4B: NOTE In case no data for the material is available, Appendix 4, 1. (1). b. 3 of the Interpretation on the Ministerial Ordinance stipulating Technical Specifications for Electrical Appliances is regarded as maximum temperature limit of the material.			N/A
5.1.3	Add a note after the first paragraph as follows: Note – Attention should be drawn to that majority of three-phase power system in Japan is of delta connection, and therefore, in that case, test is conducted using the test circuit from IEC 60990, figure 13.		Single phase equipment.	N/A
5.1.6	Replace Table 5A. as follows:		Class III equipment	N/A
	Type of equipment	Terminal A of measuring instrument connected to:	Maximum TOUCH CURRENT mA r.m.s. <sup>1)</sup>	Maximum PROTECTIVE CONDUCT OR CURRENT
	ALL equipment	ALL equipment Accessible parts and circuits not connected to protective earth	0.25	--
	HAND-HELD	Equipment main protective earthing terminal of CLASS I EQUIPMENT	0.75	--
		Equipment main protective earthing terminal of CLASS 0I EQUIPMENT	0.5	--
	MOVABLE (other than HAND-HELD, but including TRANSPORTABLE EQUIPMENT)	Equipment main protective earthing terminal of CLASS I EQUIPMENT	3.5	--
		Equipment main protective earthing terminal of CLASS 0I EQUIPMENT	1.0	--
	STATIONARY, PLUGGABLE TYPE A	Equipment main protective earthing terminal of CLASS I EQUIPMENT	3.5	--
		Equipment main protective earthing terminal of CLASS 0I EQUIPMENT	1.0	--

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Clause	Requirement + Test		Result - Remark	Verdict
	ALL other STATIONARY EQUIPMENT - not subject to the conditions of 5.1.7 - subject to the conditions of 5.1.7	Equipment main protective earthing terminal of CLASS I EQUIPMENT	3.5 --	-- 5% of input current
		Equipment main protective earthing terminal of CLASS 0I EQUIPMENT	1.0 --	-- --
	Note a) If peak values of TOUCH-CURRENT are measured, the maximum values obtained by multiplying the r.m.s. values by 1.414. b) Accessible part of non earthing part shall be apply clause 1.5.6, 1.5.7 and 2.4. These may differ clause 5.1.6.			
Annex G	Replace the paragraph before Table G.2 with the following The above minimum CLEARANCE for connectors do not apply to connectors that comply with JIS C 8285, IEC60309 series of standards, JIS C 8283 series of standards, IEC60320 series of standards, JIS C 8303, and 1.5.1 of this standard in which dimension is comply with JIS C 8283 series, JIS C 8303 or IEC 60309-2.			N/A
Annex V V.1	Replace "3.1.2" in the first line of V.1 with "312" in the first line.			N/A
Annex W W.1	Replace the third sentence in the first paragraph with the following: Floating circuits can exist in CLASS I EQUIPMENT, CLASS 0I EQUIPMENT and earthed circuits can exist in CLASS II EQUIPMENT.			N/A
Annex BB	This annex is not applicable.			N/A
Annex CC CC.2	Replace the third dashed paragraph with the following: - 10 000 cycles of turning enable on and off with the input connected to a capacitor rated 425 uF ± 10 uF and shorting the output;			N/A
CC.3	Add note at end of CC.3: Note: The fast blow fuse should be the one complying with JIS C 6575-2.			N/A
CC.4	Replace the 2nd dashed paragraph with the following:  - 10 000 cycles of turning enable on and off with a 100 Ω ± 5 Ω resistor and a 425 uF ± 10 uF capacitor in parallel with the output;			N/A

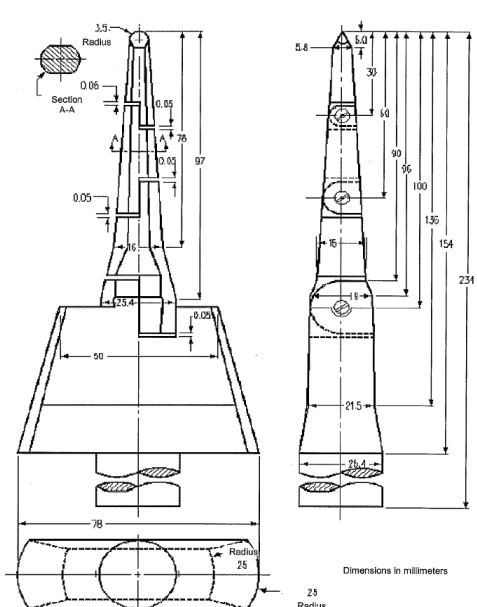


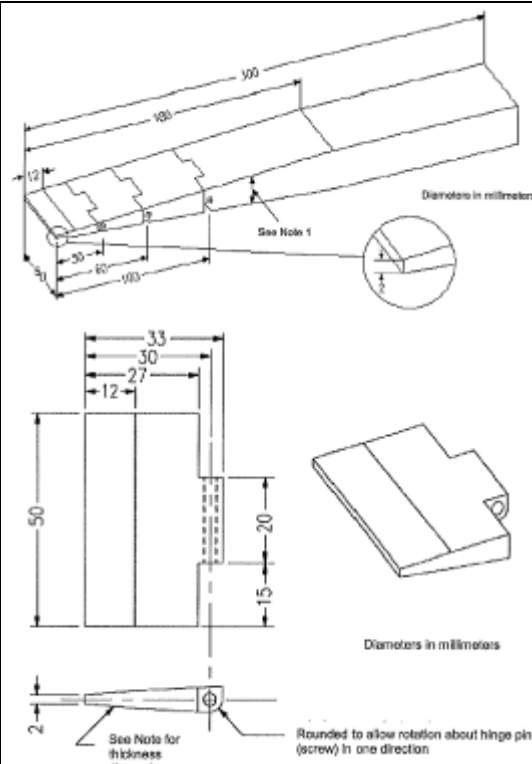
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Clause	Requirement + Test	Result - Remark	Verdict
	<p>Replace the 4th dashed paragraph with the following:</p> <p>- 10 000 cycles of turning enable on and off with the input connected to a capacitor rated <math>425 \mu\text{F} \pm 10 \mu\text{F}</math> and shorting the output;</p> <p>Replace the 5th dashed paragraph with the following:</p> <p>–10 000 cycles of turning the input pin on and off with a capacitor rated <math>425 \mu\text{F} \pm 10 \mu\text{F}</math> connected to the input supply while keeping enable active and shorting the output;</p> <p>Replace the 6th dashed paragraph with the following:</p> <p>–10 000 cycles of turning the input pin on and off with an ferrite-core inductor having <math>350 \text{ mH} \pm 10 \text{ mH}</math> inductance at 1 kHz and less than <math>1 \Omega</math> d.c. resistance connected to the input supply and return while keeping enable active and shorting the output;</p> <p>Replace the 10th dashed paragraph with the following:</p> <p>–3 cycles of exposing the device (not energized) to <math>70 \text{ }^{\circ}\text{C} \pm 2 \text{ }^{\circ}\text{C}</math> for 24 h; followed by at least 1 h at room ambient; followed by at least 3 h at <math>-30 \text{ }^{\circ}\text{C} \pm 2 \text{ }^{\circ}\text{C}</math>; followed by 3 h at room ambient;</p> <p>Replace the 11th dashed paragraph with the following:</p> <p>–10 cycles of exposing the device (while energized) to <math>50 \text{ }^{\circ}\text{C} \pm 2 \text{ }^{\circ}\text{C}</math> for 10 min; followed by 10 min at <math>0 \text{ }^{\circ}\text{C} \pm 2 \text{ }^{\circ}\text{C}</math> with a 5 min period of transition from one state to the other;</p>		
Annex EE	<p>Replace Annex EE with the following Annex JA.</p> <p style="text-align: center;">Annex JA (normative) Document shredding machines</p> <p>HOUSEHOLD AND HOME/OFFICE</p>	See below information	--

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Clause	Requirement + Test	Result - Remark	Verdict
	<p>DOCUMENT/MEDIA SHREDDERS shall additionally comply with the requirements of this annex.</p> <p><b>JA.1 Markings and instructions</b></p> <p>The symbol  (JIS S 0101:2000, 6.2.1) and the following precautions for use shall be marked on readily visible part adjacent to document feed opening. The marking shall be clearly legible, permanent, and easily discernible;</p> <p>子供が使用することによって、傷害などの危害が発生するおそれがある。 ; (that use by infants/children may cause a hazard of injury etc.)</p> <p>文書投入口に手を触れることによって、細断機構に引き込まれるおそれがある。 ; (that a hand can be drawn into the mechanical section for shredding when touching the document-slot)</p> <p>文書投入口に衣類が触れることによって、細断機構に引き込まれるおそれがある。 ; (that clothing can be drawn into the mechanical section for shredding when touching the document-slot)</p> <p>文書投入口に髪の毛が触れることによって、細断機構に引き込まれるおそれがある。 ; (that hairs can be drawn into the mechanical section for shredding when touching the document-slot)</p> <p>- in case of equipment incorporating a commutator motor, 可燃性ガスを噴射することによって引火又は爆発するおそれがある。 (that equipment may catch fire or explode by spraying of flammable gas.)</p> <p><b>JA.2 Inadvertent reactivation</b></p> <p>Any safety interlock that can be operated by means of the test finger, Figure JA.1, is considered to be likely to cause inadvertent reactivation of the hazard. Compliance is checked by inspection and, where necessary, by a test with the test finger, Figure JA.1.</p> <p><b>JA.3 Disconnection from the mains supply</b></p> <p>Document shredding machines shall incorporate an isolating switch complying with sub-clause 3.4.2 as the device disconnecting the power of hazardous moving parts. For this switch, two-position (single-use) switch or multi-position (multifunction) switch (e.g., slide switch) may be used.</p>		

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Clause	Requirement + Test	Result - Remark	Verdict
	<p>If two-position switch, the positions for "ON" and "OFF" shall be indicated in accordance with sub-clause 1.7.8. If multi-position switch, the position for "OFF" shall be indicated in accordance with sub-clause 1.7.8 and other positions shall be indicated with proper terms or symbols. Compliance is checked by inspection.</p>		
	<p><b>JA.4 Protection against hazardous moving parts</b></p> <p>Any warning shall not be used instead of the structure for preventing access to hazardous moving parts.</p> <p>Document shredding machines shall comply with the following requirements.</p> <p>Insert the test finger, Figure JA.1, into all openings in MECHANICAL ENCLOSURES without applying appreciable force. It shall not be possible to touch hazardous moving parts with the test finger. This consideration applies to all sides of MECHANICAL ENCLOSURES when the equipment is mounted as intended. Before testing with the test finger, remove the parts detachable without a tool.</p> <p>Insert the wedge-probe, Figure JA.2, into the document-slot. And, against all directions of openings, if straight-cutting type, a force of 45 N shall apply to the probe, and 90 N if cross-cutting type. In this case, the weight of the probe is to be factored into the overall applied force. Before testing with the wedge-probe, remove the parts detachable without a tool. It shall not be possible to touch any hazardous moving parts, including the shredding roller or the mechanical section for shredding, with the probe.</p>		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	 <p>Figure JA.1 Test finger</p>		N/A

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Clause	Requirement + Test	Result - Remark	Verdict								
	<div><p><b>(Details of the tip of wedge)</b></p><table><tr><th>Distance from the tip (mm)</th><th>Thickness of probe (mm)</th></tr><tr><td>0</td><td>2</td></tr><tr><td>12</td><td>4</td></tr><tr><td>180</td><td>24</td></tr></table><p>Note 1 - The thickness of the probe varies linearly, with slope changes at the respective points shown in the table.</p><p>Note 2 –The allowable dimensional tolerance of the probe is;</p><p>for <math>\leq 25</math> mm: <math>\pm 0.13</math> mm</p><p>for <math>&gt; 25</math> mm: <math>\pm 0.3</math> mm.</p><p><b>Figure JA.2 Wedge-probe</b></p></div>	Distance from the tip (mm)	Thickness of probe (mm)	0	2	12	4	180	24		N/A
Distance from the tip (mm)	Thickness of probe (mm)										
0	2										
12	4										
180	24										

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
<b>TTACHMENT TO TEST REPORT</b> <b>IEC 60950-1:2005 (Second Edition) + Am 1:2009</b> <b>(Republic of Korea) NATIONAL DIFFERENCES</b> (Information technology equipment – Safety – Part 1: General requirements)			
<b>Differences according to</b> ..... : K60950-1 (2011-12)			
<b>Attachment Form No.</b> ..... : KR_ND_ IEC 60950_1C			
<b>Attachment Originator</b> ..... : KTR			
<b>Master Attachment</b> ..... : 2018-06			
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	<b>National Differences</b>		
<b>4.3</b>	<b>Design and construction</b>		N/A
4.3.6 (addition)	Plugs for the connection of the apparatus to the supply main shall comply with the Korean requirement (KS C 8305).		N/A
	<b>Special national conditions (if any)</b>		P
Voltage	The marking of rated voltage or rated voltage range, for appliances intended to be connected to the supply mains, shall include 110 V, 220 V or 380 V.		P
Frequency	Only appliances having supply frequency of 60Hz or a frequency range including 60 Hz are accepted.		P
Instruction	Instruction manuals and appliance marking related safety, including nameplate shall be in Korean		P

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Clause	Requirement + Test	Result - Remark	Verdict
<b>ATTACHMENT TO TEST REPORT IEC 60950-1 with A1: 2009 and A2:2013</b> <b>U.S.A. NATIONAL DIFFERENCES</b> Information technology equipment – Safety – Part 1: General requirements			
Differences according to.....:	UL 60950-1-07 (Second Edition) + A1: 2011 + A2: 2014		
Attachment Form No. ....:	US_ND_IEC 60950_1G		
Attachment Originator.....:	UL		
Master Attachment.....:	Date 2014-07		
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	Special national conditions		—
1.1.1	All equipment is designed as to allow installation in accordance with the National Electrical Code (NEC), ANSI/NFPA 70, Canadian Electrical Code (CEC), Part I, CAN/CSA C22.1, and if applicable, the National Electrical Safety Code, IEEE C2		P
	Also, unless marked or otherwise identified, installation is allowed per the Standard for the Protection of Electronic Computer/Data-Processing Equipment, ANSI/NFPA 75		P
1.1.2	Baby monitors are required to additionally comply with ASTM F2951, Consumer Safety Specification for Baby Monitors		N/A
1.4.14	For Pluggable Equipment Type A, the protection in the installation is assumed to be 20A		P
1.5.5	For lengths exceeding 3.05 m, external interconnecting flexible cord and cable assemblies are required to be a suitable cable type (e.g., DP, CL2) specified in the /NEC		N/A
	For lengths 3.05 m or less, external interconnecting flexible cord and cable assemblies that are not types specified in the NEC are required to have special construction features and identification markings		N/A
1.7.1	Equipment for use on a.c. mains supply systems with a neutral and more than one phase conductor (e.g. 120/240 V, 3-wire) require a special marking format for electrical ratings		N/A
	A voltage rating that exceeds an attachment plug cap rating is only permitted if it does not exceed the extreme operating conditions in Table 2 of CAN/CSA C22.2 No. 235, and		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	- if it is part of a range that extends into the Table 2 "Normal Operating Conditions"		N/A
	Likewise, a voltage rating is not to be lower than the specified "Normal Operating Conditions," unless it is part of a range that extends into the "Normal Operating Conditions"		N/A
1.7.7	Wiring terminals intended to supply Class 2 outputs in accordance with NEC or CEC Part 1 or NEC are marked with the voltage rating and "Class 2" or equivalent		N/A
	- Marking is located adjacent to the terminals		N/A
	- Marking is visible during wiring		N/A
2.5	Fuse providing Class 2, Limited Power Source, or TNV current limiting is not operator-accessible unless it is not interchangeable		N/A
2.6	Equipment with isolated ground (earthing) receptacles is in compliance with NEC 250.146(D) and CEC 10-112 and 10-906(8)		N/A
2.7.1	Suitable NEC/CEC branch circuit protection rated at the maximum circuit rating is provided for all standard supply outlets and receptacles (such as supplied in power distribution units) if the supply branch circuit protection is not suitable.		N/A
	Power distribution transformers distributing power at 100 volts or more, and rated 10 kVA or more, provided with special transformer overcurrent protection		N/A
3.2	Wiring methods (terminals, leads, etc.) used for the connection of the equipment to the mains is in accordance with the NEC/CEC		N/A
3.2.1	Attachment plugs of power supply cords are rated not less than 125 percent of the rated current of the equipment		N/A
3.2.1.2	Equipment connected to a centralized d.c. power system, and having one pole of the DC mains input terminal connected to the main protective earthing terminal in the equipment comply with special earthing, wiring, marking and installation instruction requirements		N/A
3.2.3	Permanent connection of equipment to the mains supply by a power supply cord is not permitted, except for certain equipment, such as ATMs	The EUT is not such equipment	N/A



IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
3.2.5	Power supply cords are no longer than 4.5 m in length		N/A
	Minimum cord length is 1.5 m, with certain constructions such as external power supplies allowed to consider both input and output cord lengths into the requirement		N/A
	Flexible power supply cords are compatible with Article 400 of the NEC, and Tables 11 and 12 of the CEC		N/A
3.2.9	Permanently connected equipment has a suitable wiring compartment and wire bending space		N/A
3.3	Wiring terminals and associated spacings for field wiring connections comply with CSA C22.2 No. 0		N/A
3.3.3	Wire binding screws are not attached with conductors larger than 10 AWG (5.3 mm2)		N/A
3.3.4	Terminals for permanent wiring, including protective earthing terminals, are suitable for Canadian/US wire gauge sizes, are		N/A
	- rated 125 per cent of the equipment rating, and		N/A
	- are specially marked when specified (1.7.7)		N/A
3.3.5	Revise first column of Table 3E to "Smaller of the RATED CURRENT of the equipment or the PROTECTIVE CURRENT RATING of the circuit under consideration"	No such device	N/A
3.4.2	Motor control devices are provided for cord-connected equipment with a motor if the equipment is rated more than 12 A,		N/A
	- or if the motor has a nominal voltage rating greater than 120 V		N/A
	- or is rated more than 1/3 hp (locked rotor current over 43 A)		N/A
3.4.8	Vertically-mounted disconnect switches and circuit breakers have the "on" position indicated by the handle in the up position		N/A
3.4.11	For computer room applications, equipment with battery systems capable of supplying 750 VA for five minutes have a battery disconnect means that may be connected to the computer room remote power-off circuit		N/A
4.3.12	The maximum quantity of flammable liquid stored in equipment complies with NFPA 30	No such material within the EUT	N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
4.3.13.5.1	Equipment with lasers meets the U.S. Code of Federal Regulations 21 CFR 1040 (and the Canadian Radiation Emitting Devices Act, REDR C1370).		N/A
4.7	For computer room applications, automated information storage systems with combustible media greater than 0.76 m <sup>3</sup> (27 cu ft) have a provision for connection of either automatic sprinklers or a gaseous agent extinguishing system with an extended discharge		N/A
4.7.3.1	For computer room applications, enclosures with combustible material measuring greater than 0.9m <sup>2</sup> (10 sq ft) or a single dimension greater than 1.8 m (6 ft) have a flame spread rating of 50 or less		N/A
	For other applications, enclosures with the same dimensions require a flame spread rating of 200 or less		N/A
4.7.3.1	Non-metallic enclosures of equipment for use in spaces used for environmental air (plenums) are required to comply with UL 2043		N/A
Annex H	Equipment that produces ionizing radiation complies with U.S. Code of Federal Regulations, 21 CFR 1020 (and the Canadian Radiation Emitting Devices Act, REDR C1370)		N/A
	<b>Other National Differences</b>		—

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
1.5.1	Some components and materials associated with the risk of fire, electric shock, or personal injury have component or material ratings in accordance with the applicable national (Canadian and/or U.S.) component or material standard requirements. These components include: attachment plugs, battery backup systems, battery packs, cathode ray tubes, circuit breakers, communication circuit accessories, connectors (used for current interruption of non-LPS circuits), cord sets and power supply cords, direct plug-in equipment, electrochemical capacitor modules (energy storage modules with ultracapacitors), enclosures (outdoor), flexible cords and cables, fuses (branch circuit), fuseholders, ground-fault current interrupters, industrial control equipment, insulating tape, interconnecting cables, lampholders, limit controls, printed wiring, protectors for communications circuits, receptacles, solid state controls, supplementary protectors, switches (including interlock switches), thermal cut-offs, thermostats, (multi-layer) transformer winding wire, surge protective devices, tubing, vehicle battery adapters, wire connectors, and wire and cables		P
1.6.1.2	A circuit for connection to the DC Mains Supply is classified as a SELV Circuit, TNV-2 Circuit or Hazardous Voltage Circuit depending on the maximum operating voltage of the supply		N/A
	This maximum operating voltage includes consideration of the battery charging "float voltage" associated with the intended supply system, regardless of the marked power rating of the equipment		N/A
2.3.1	For TNV-2 and TNV-3 circuits with other than ringing signals and with voltages exceeding 42.4 V <sub>peak</sub> or 60 Vd.c., the maximum acceptable current through a 2000 ohm resistor (or greater) connected across the voltage source with other loads disconnected is 7.1 mA peak or 30 mA d.c. under normal operating conditions		N/A
2.3.2.1	In the event of a single fault between TNV and SELV circuits, the limits of 2.2.3 apply to SELV Circuits and accessible conductive parts		N/A
2.6.2	Equipment with functional earthing marked with the functional earthing symbol (IEC 60417-6092)		N/A

IEC 60950-1_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
2.6.3.4	Protective bonding conductors of non-standard protective bonding constructions (e.g., printed circuit traces) may be subjected to the additional limited short circuit test conditions specified		N/A
4.2.8.1	Enclosures around CRTs with a face diameter of 160 mm or more reduce the risk of injury due to the implosion of the CRT		N/A
4.3.2	Equipment with handles complies with special loading tests	No such device within the EUT	N/A
4.3.8	Battery packs for both portable and stationary applications comply with special component requirements		N/A
5.1.8.3	Equipment intended to receive telecommunication ringing signals comply with a special touch current measurement tests	No such device within the EUT	N/A
5.3.7	Internal (e.g., card cage) SELV circuit connectors and printed wiring board connectors that are accessible to the operator and that deliver power are overloaded	Considered	P
	During abnormal operating testing, if a circuit is interrupted by the opening of a component, the test is repeated twice (three tests total) using new components as necessary	No such device within the EUT	N/A
6.4	Equipment intended for connection to telecommunication network outside plant cable is protected against overvoltage from power line crosses in accordance with 6.4 and Annex NAC	The EUT is not such equipment	N/A
Annex EE	Articulated accessibility probe (Fig EE.3) is used for assessing accessibility to document/media shredders instead of the Figure 2A test finger		N/A
Annex M.2	Continuous ringing signals up to 16 mA only are permitted if the equipment is subjected to special installation and performance restrictions		N/A
Annex NAD	Equipment connected to a telecommunication and cable distribution networks and supplied with an earphone intended to be held against, or in the ear comply with special acoustic pressure requirements		N/A

Appendix E

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IEC 60950-1_1F - ATTACHMENT				
Clause	Requirement + Test		Result - Remark	Verdict
	<div>Singapore (SG) Differences</div> <div>Ref. Singapore Consumer Protection (Safety Requirements) – Information booklet - chapter 7</div>			
<div>7 SAFETY AUTHORITY’S REQUIREMENTS</div> <div>The Safety Authority monitors the safety of the controlled goods sold in Singapore by investigating all complaints, incidents and accidents reported to the authority. Experiences gained are translated into the Safety Authority’s Requirements. These requirements are to be fulfilled in addition to the applicable safety standards.</div>				
Applicable to all electrical products				
2	All appliances	All appliances must be tested to 230 VAC.		P
3	Voltage selector (voltage mis-match test)	Appliance fitted with voltage selector shall be tested as follows:  Connect appliance to 230 VAC mains with voltage selector switch to settings not suitable for operation at 230 VAC.	No such component within the EUT	N/A
4	Tropical condition test	All appliances (with tropical test requirements in applicable Standards) shall comply with the tropical condition test as stated in the relevant IEC Standards.		P
5	Class I appliances (3-pin mains plug)	All Class I appliances must be fitted with 3-pin mains plugs complied with SS 145/SS 472 that are registered with the Safety Authority.	The EUT is a Class II equipment	N/A
6	Class II appliances (mains plug)	a) All Class II appliances must be fitted with 2-pin mains plug (Appendix T) complied with EN 50075.  b) Class II appliances that are fitted with 3-pin mains plugs must use plugs that are complied with SS 145 and registered with the Safety Authority.	Shall be considered when marketing in the Singapore	N/A

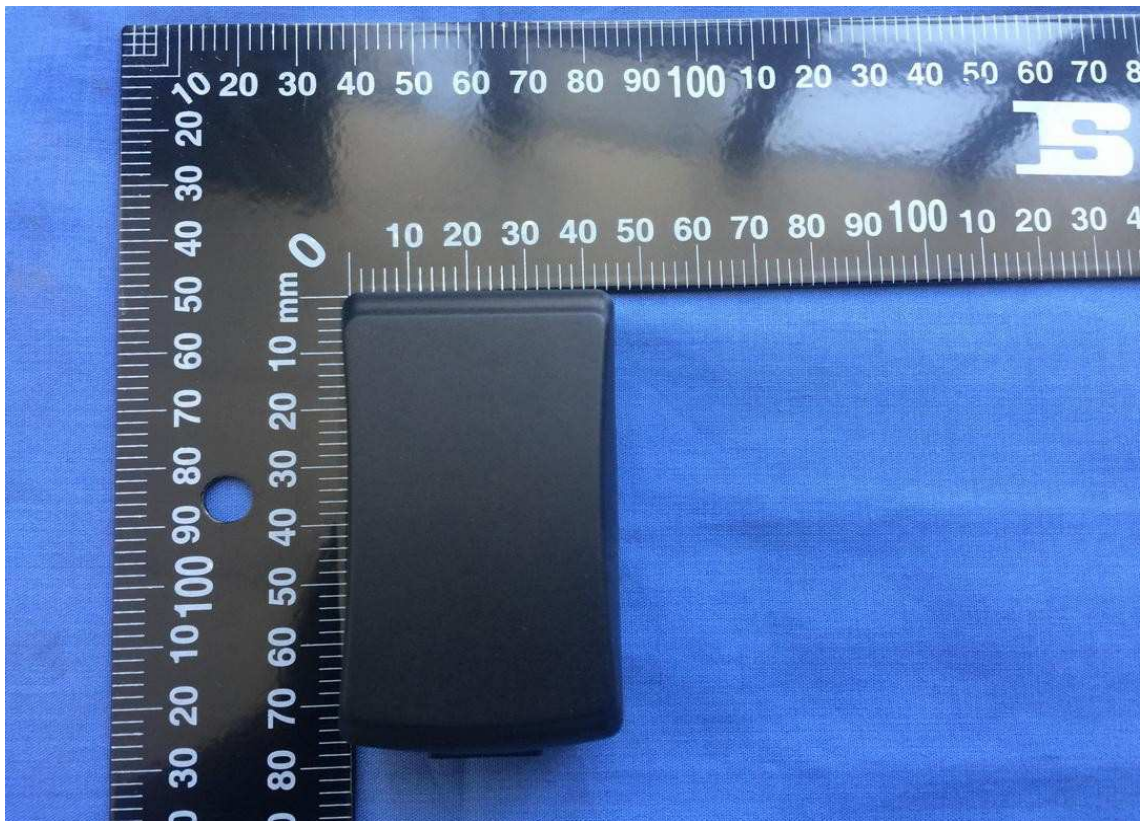
IEC 60950-1_1F - ATTACHMENT				
Clause	Requirement + Test		Result - Remark	Verdict
7	Appliances rated $\geq$ 3 kW or connected to fixed wiring	Electric appliance $\geq$ 3 kW must be connected to fixed wiring. All connection to fixed wiring must be in accordance with Code of Practice CP5.	Electric appliance less than 3 kW	N/A
8	Detachable power cord set (consists of mains plug, mains cord and appliance connector)	Detachable power cord set must be listed in the test report critical component list.	Shall be considered when marketing in the Singapore	N/A
9	Circuit diagrams	Circuit diagrams must be indicated with component's values for products tested to IEC 60065 and IEC 60950.	Shall be considered when marketing in the Singapore	N/A
10	Circuit diagrams of electronic modules in electrical appliances	Circuit diagrams of the electronic modules in the electrical appliances must be provided.	Shall be considered when marketing in the Singapore	N/A
11	Controlled goods likely to be treated as toy by children	Controlled goods, having an enclosure, which is shaped and decorated so that it is likely to be treated as a toy by children, shall not be accepted for certification and registration.	The EUT is not such type equipment	N/A
<b>Applicable to AC adaptor</b>				
13	3-pin AC adaptor (Appendix V)	Test report showing that the 3-pin complied with sub-clauses 12.1 & 12.3 of SS 246 must be submitted.		N/A
14	2-pin AC adaptor (Appendix V)	The 2-pin (Appendix T) shall comply with EN 50075.		N/A
15	Detachable power supply cord set not supplied by Registered Supplier	Registered Supplier who is not supplying the detachable power supply cord set together with the AC Adaptor must provide written instruction to its customer on the type of approved detachable power cord set to use.		N/A
<b>Applicable to computer products</b>				
16	CD/DVD ROM (used in personal computer)	Test certificate showing that CD/DVD ROM has complied with IEC 825 must be provided.	No such device within the EUT	N/A

IEC 60950-1_1F - ATTACHMENT				
Clause	Requirement + Test		Result - Remark	Verdict
17	Modem Card (used in personal computer)	Modem card incorporated in the personal computer must be tested at set level (sub-clauses 5.1 & 6 of IEC 60950) or at component level.	No such device within the EUT	N/A
<b>Applicable to plasma/LCD display monitor</b>				
35	Plasma/LCD display monitor with TV tuner	Plasma/LCD display monitor tested to IEC 60950 would require additional test to clauses 9 (related to antenna only), 10.1, 10.2, 10.3 and 12.5 of IEC 60065.	Not plasma/LCD display monitor equipment	N/A

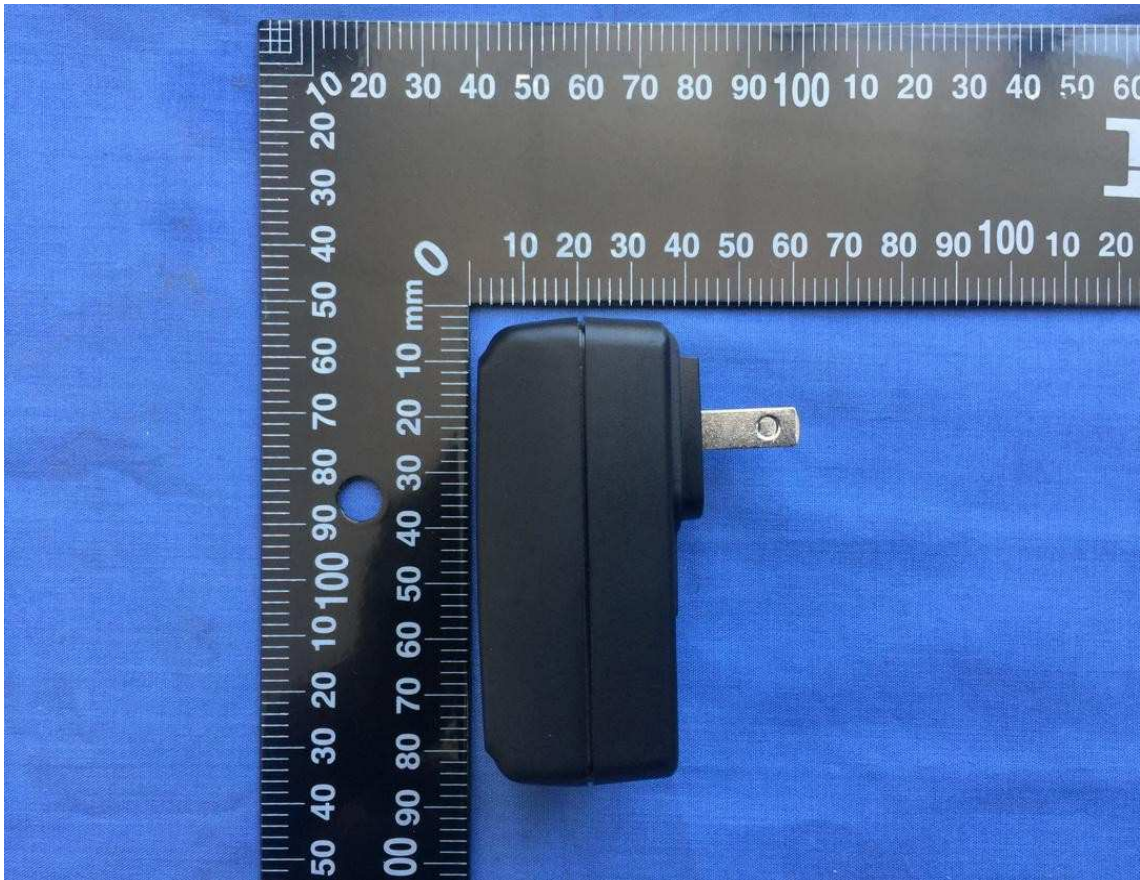




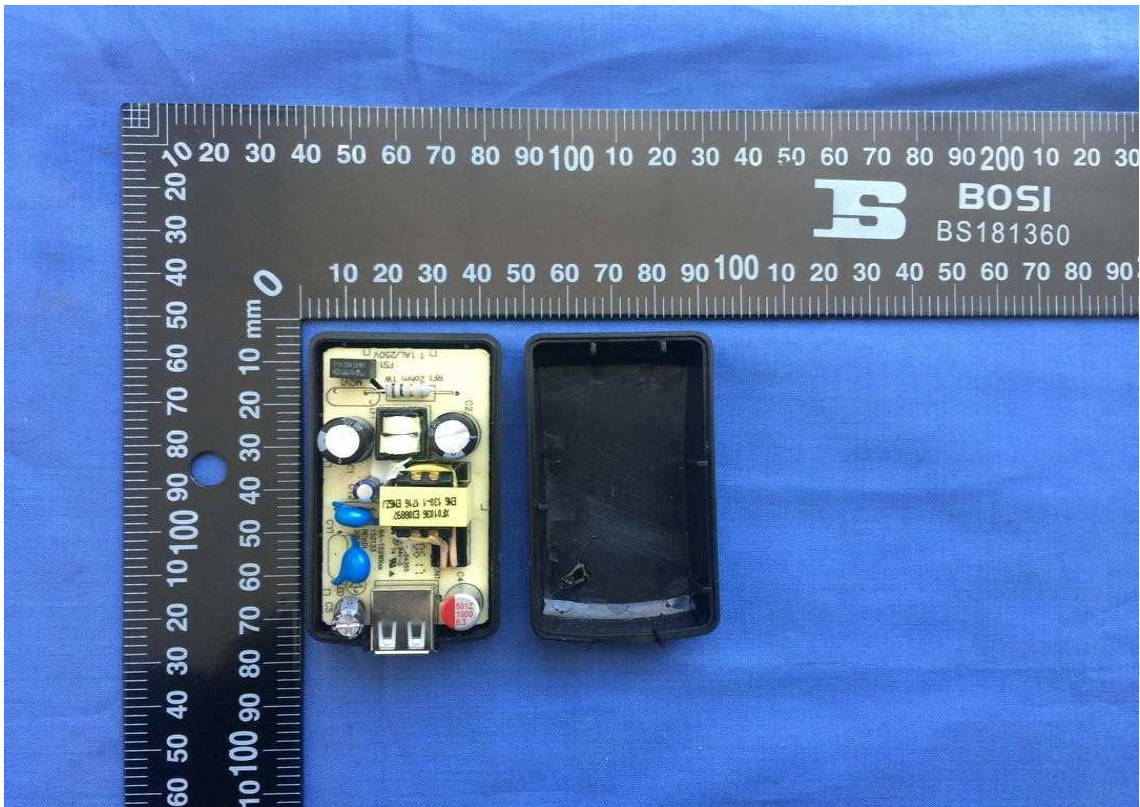
### External view of EUT



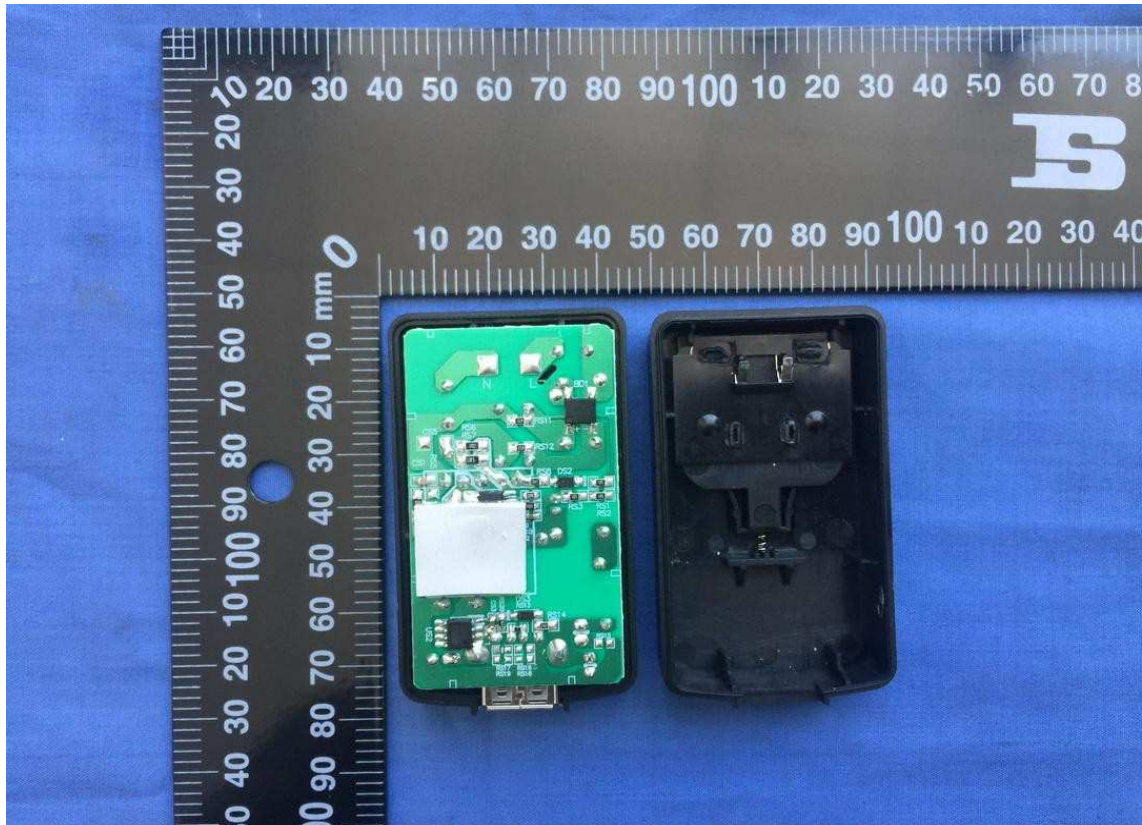




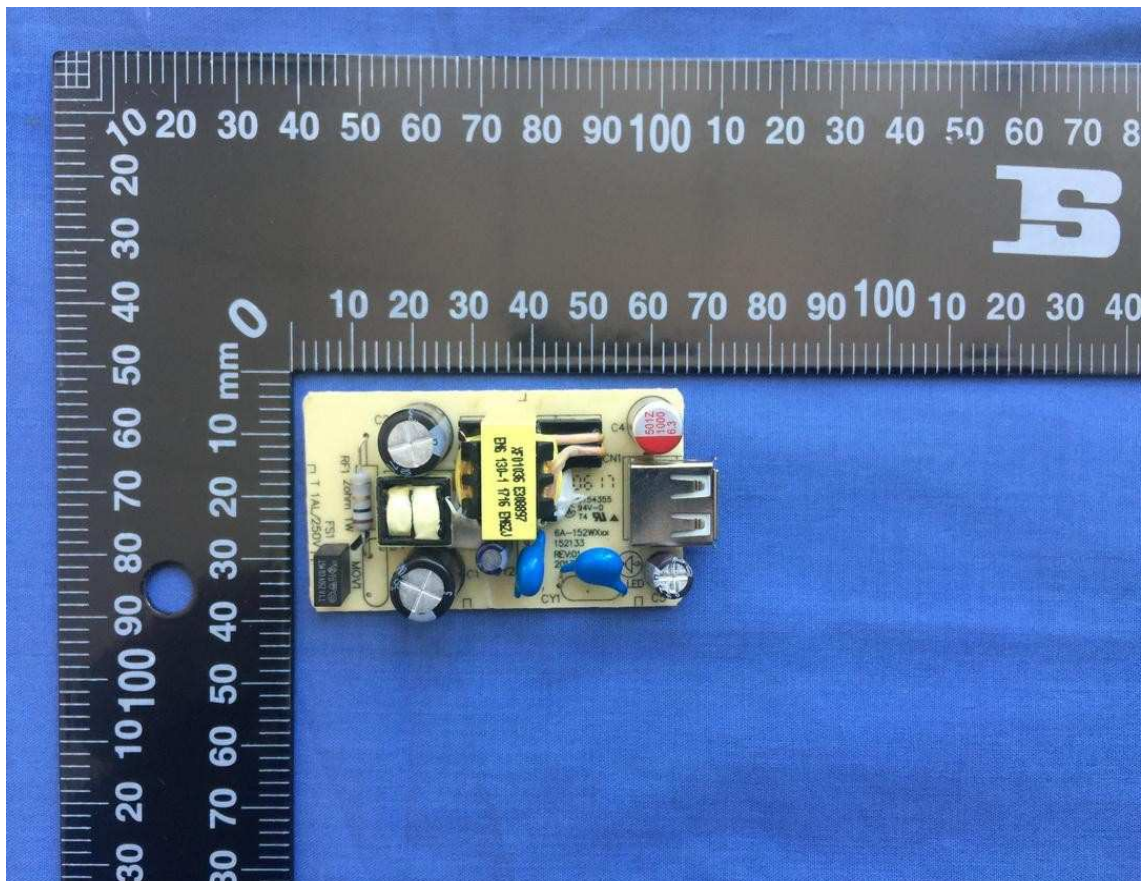
Internal view of EUT





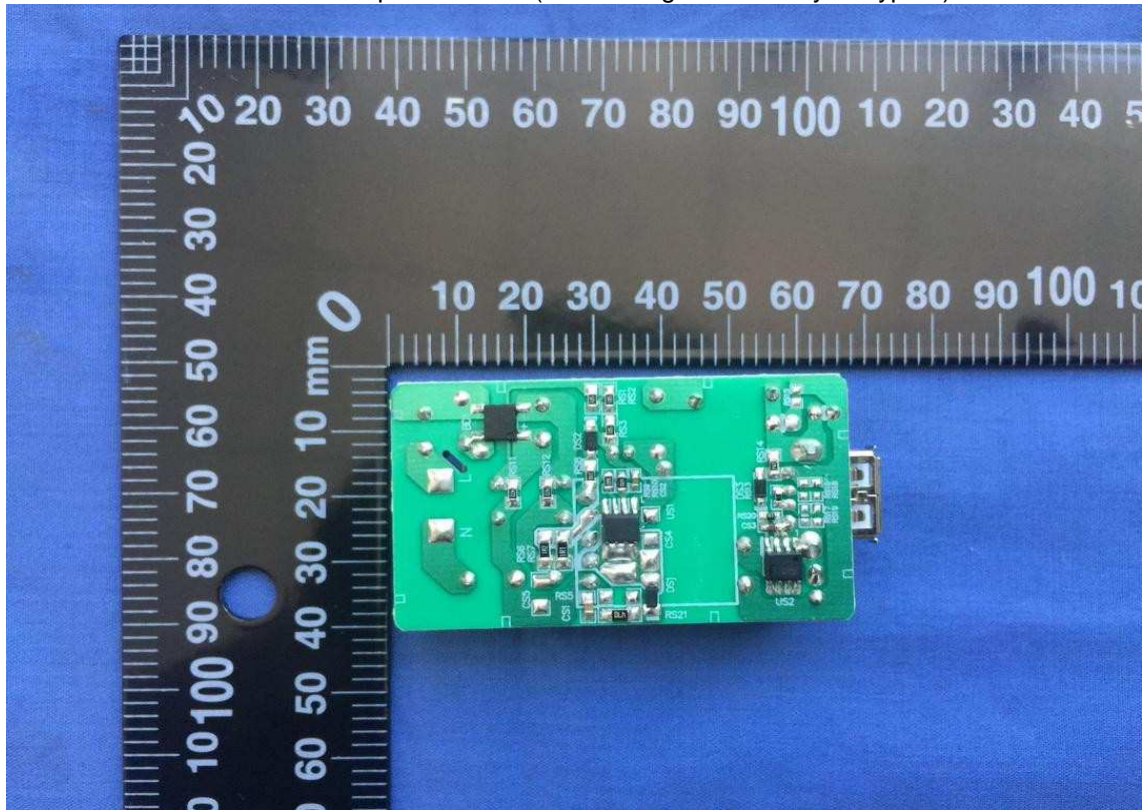


Top view of power board (Circuit diagram/PCB layout type 1)

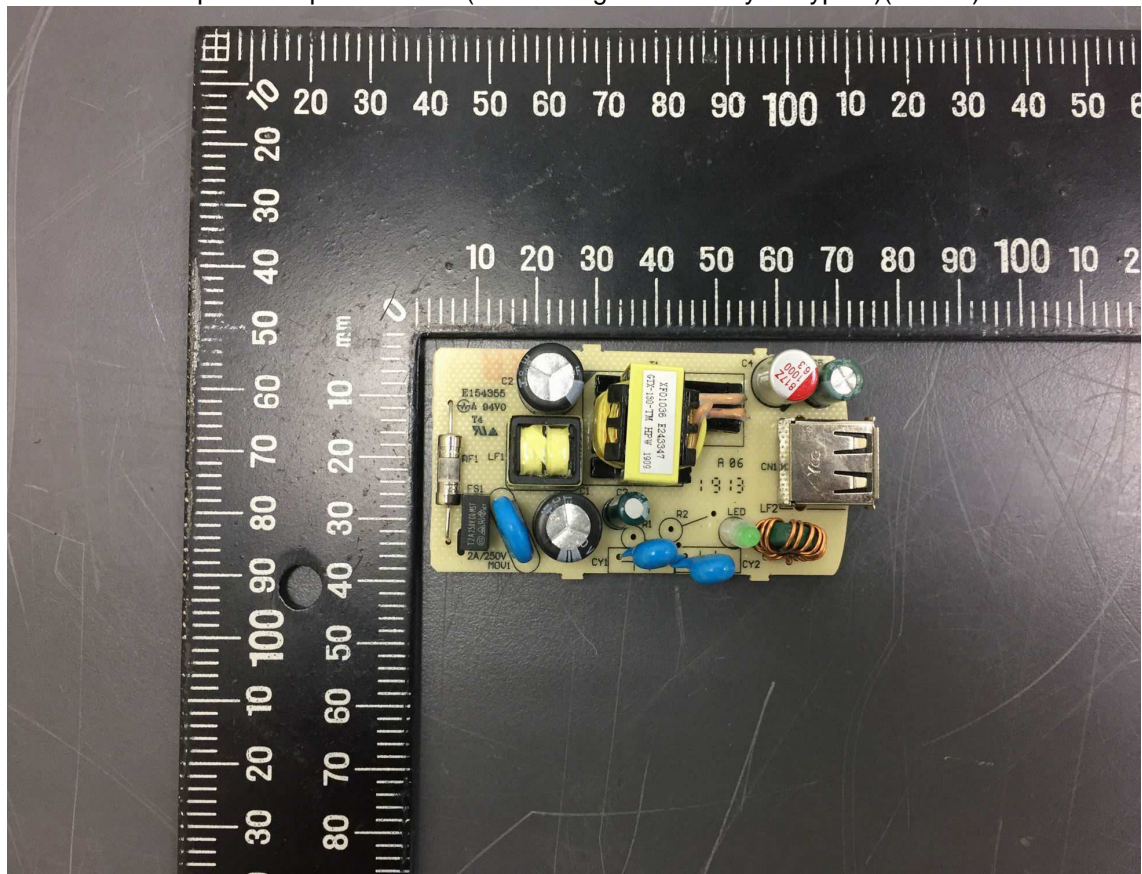




Bottom view of power board (Circuit diagram/PCB layout type 1)

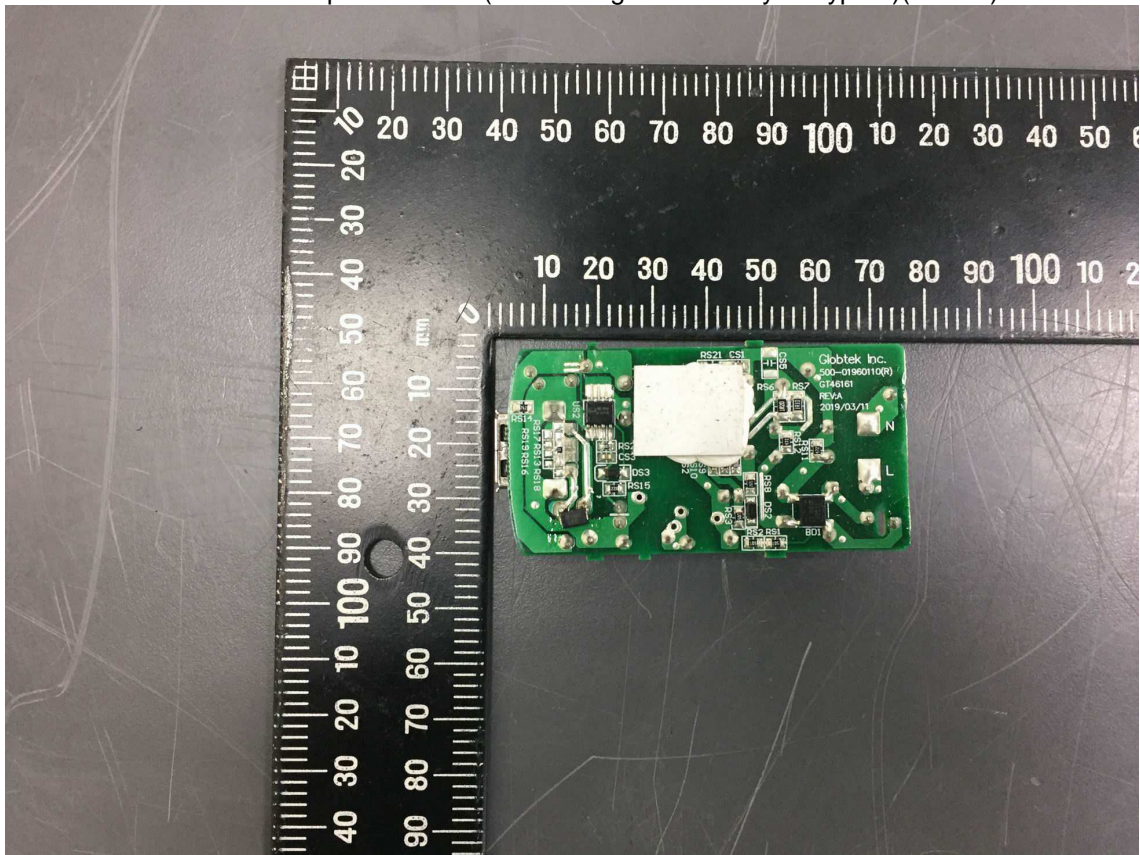


Top view of power board (Circuit diagram/PCB layout type 2)(USB\*1)

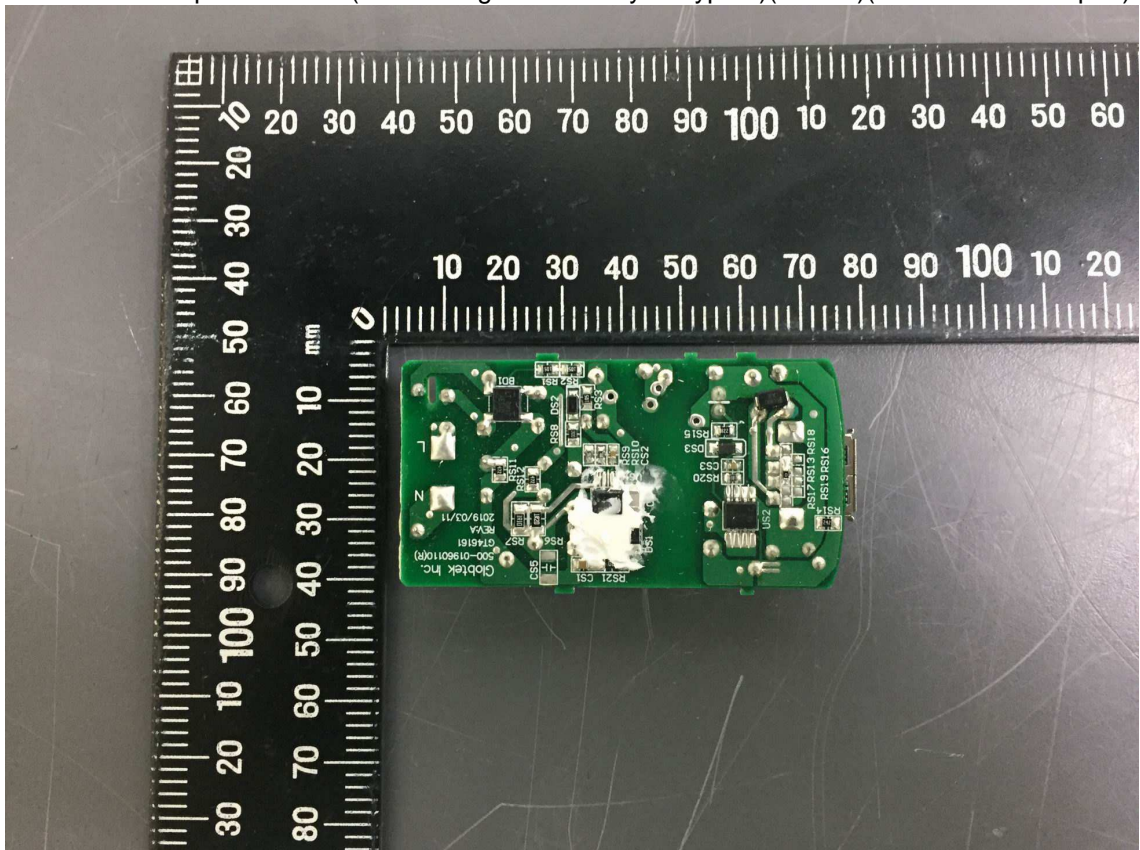




Bottom view of power board (Circuit diagram/PCB layout type 2)(USB\*1)

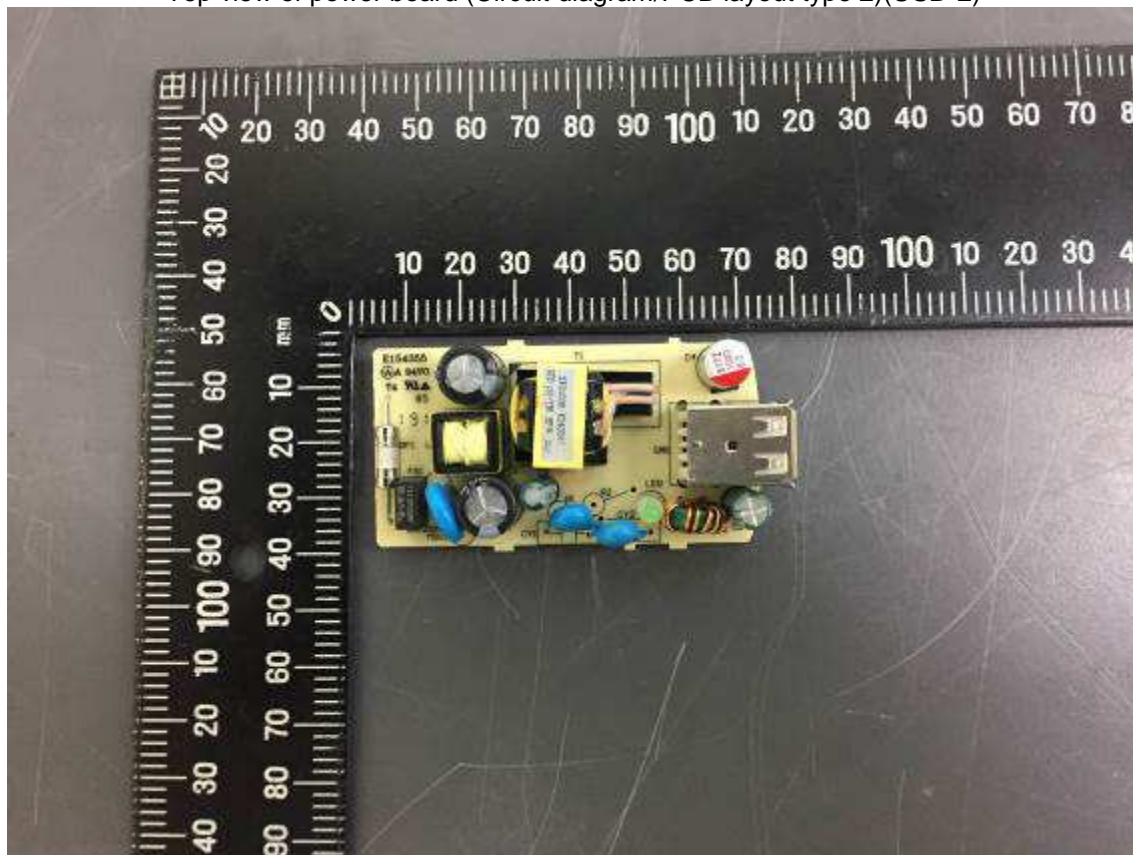


Bottom view of power board (Circuit diagram/PCB layout type 2)(USB\*1)(Remove thermal pad)

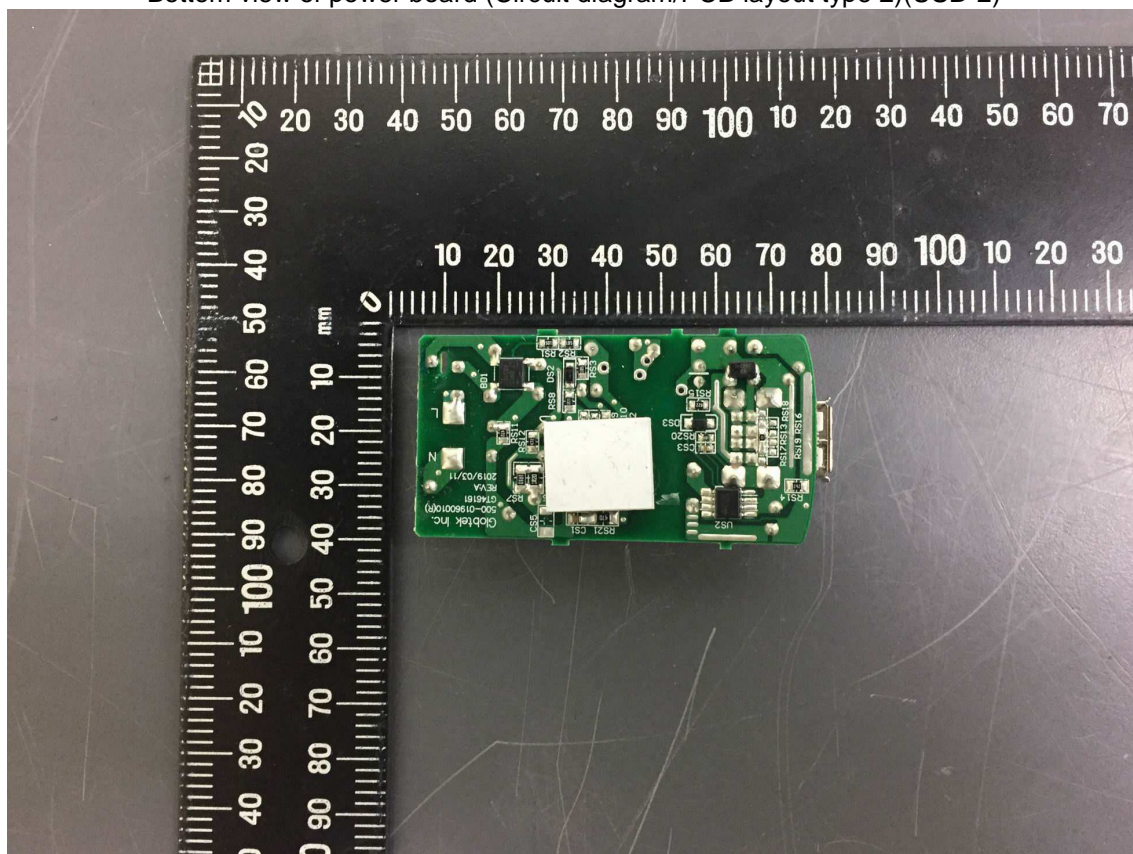




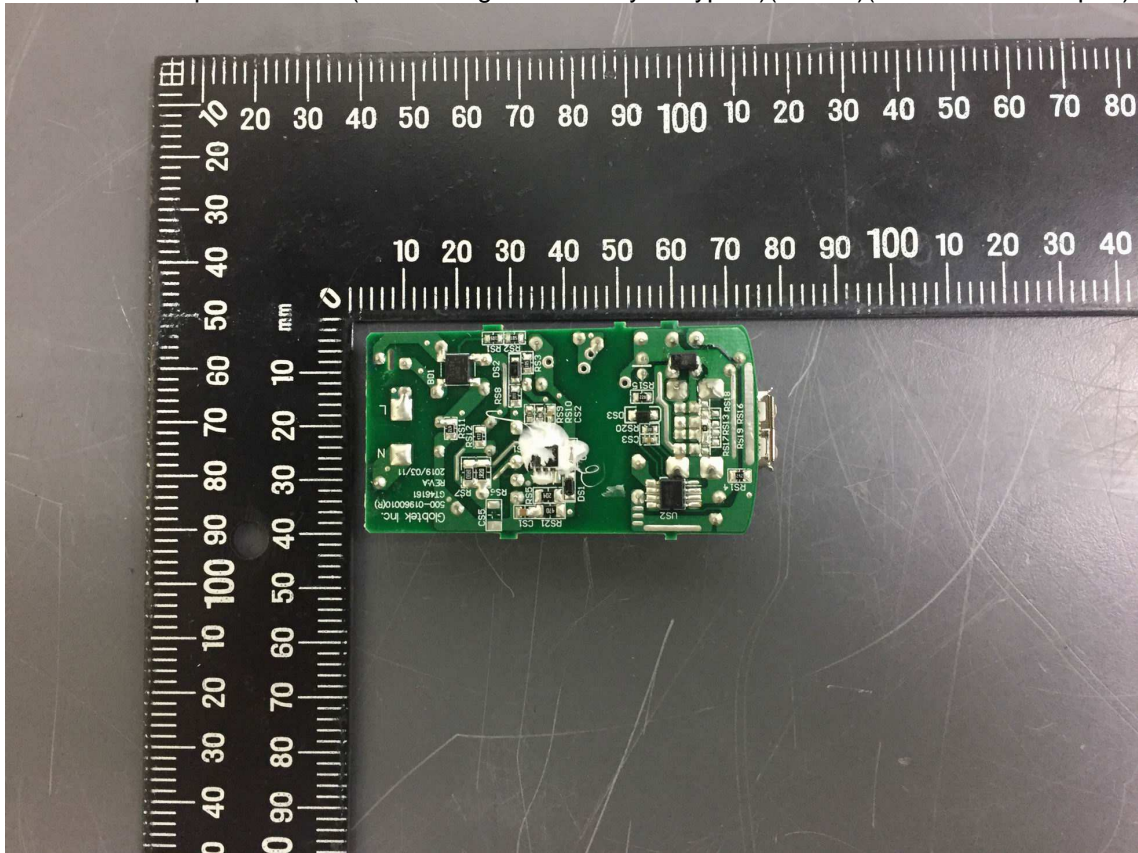
Top view of power board (Circuit diagram/PCB layout type 2)(USB\*2)



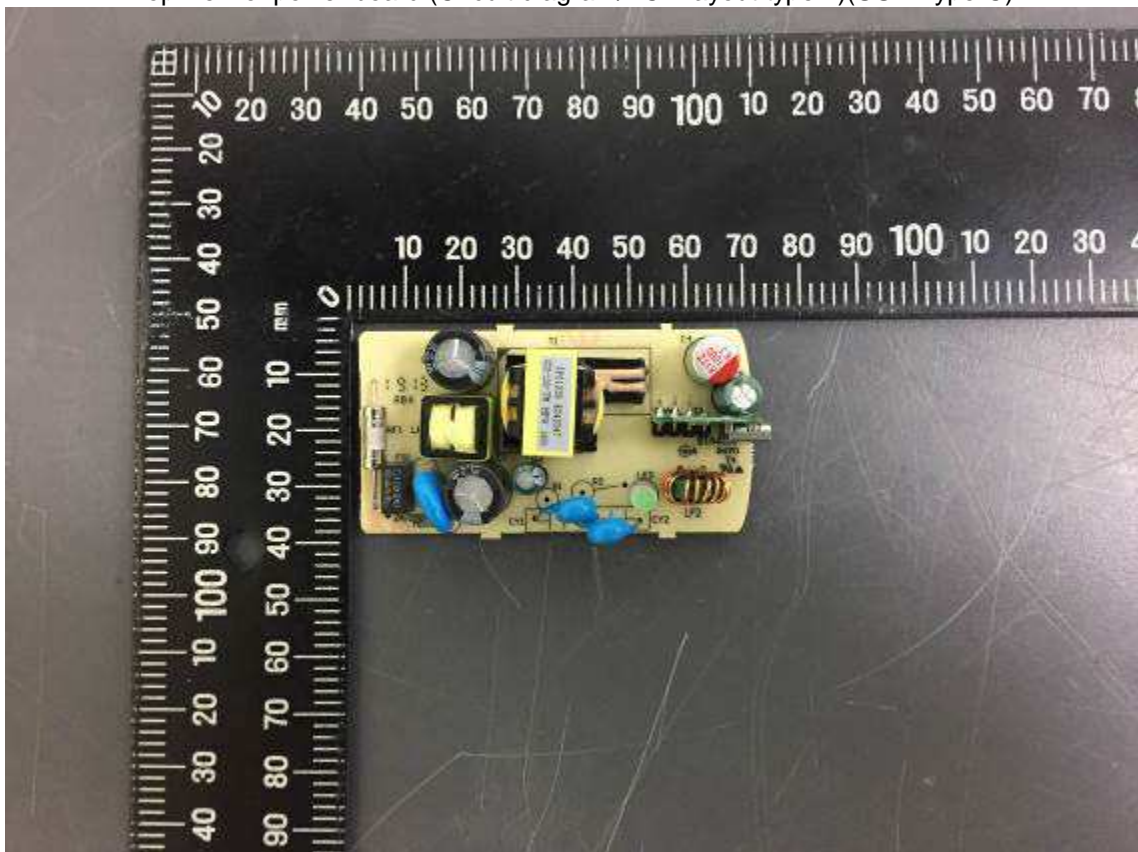
Bottom view of power board (Circuit diagram/PCB layout type 2)(USB\*2)



Bottom view of power board (Circuit diagram/PCB layout type 2)(USB\*2)(Remove thermal pad)

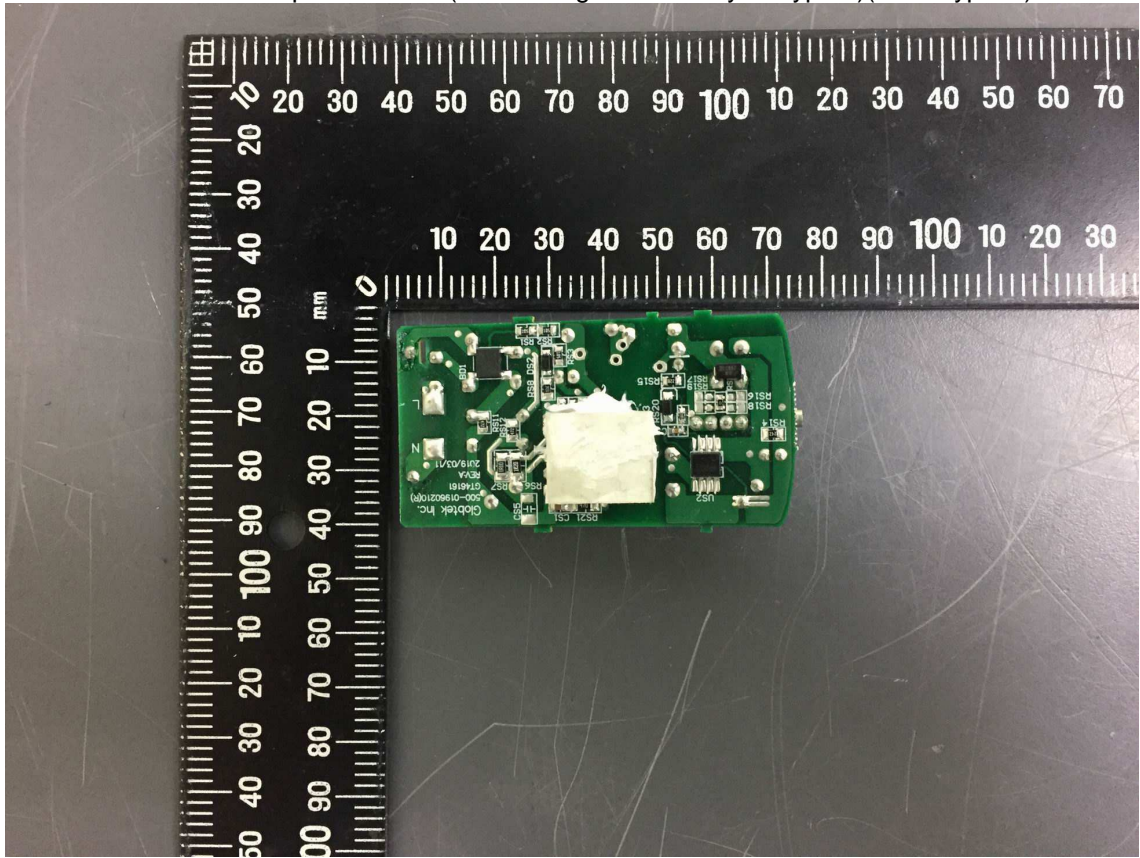


Top view of power board (Circuit diagram/PCB layout type 2)(USB Type-C)

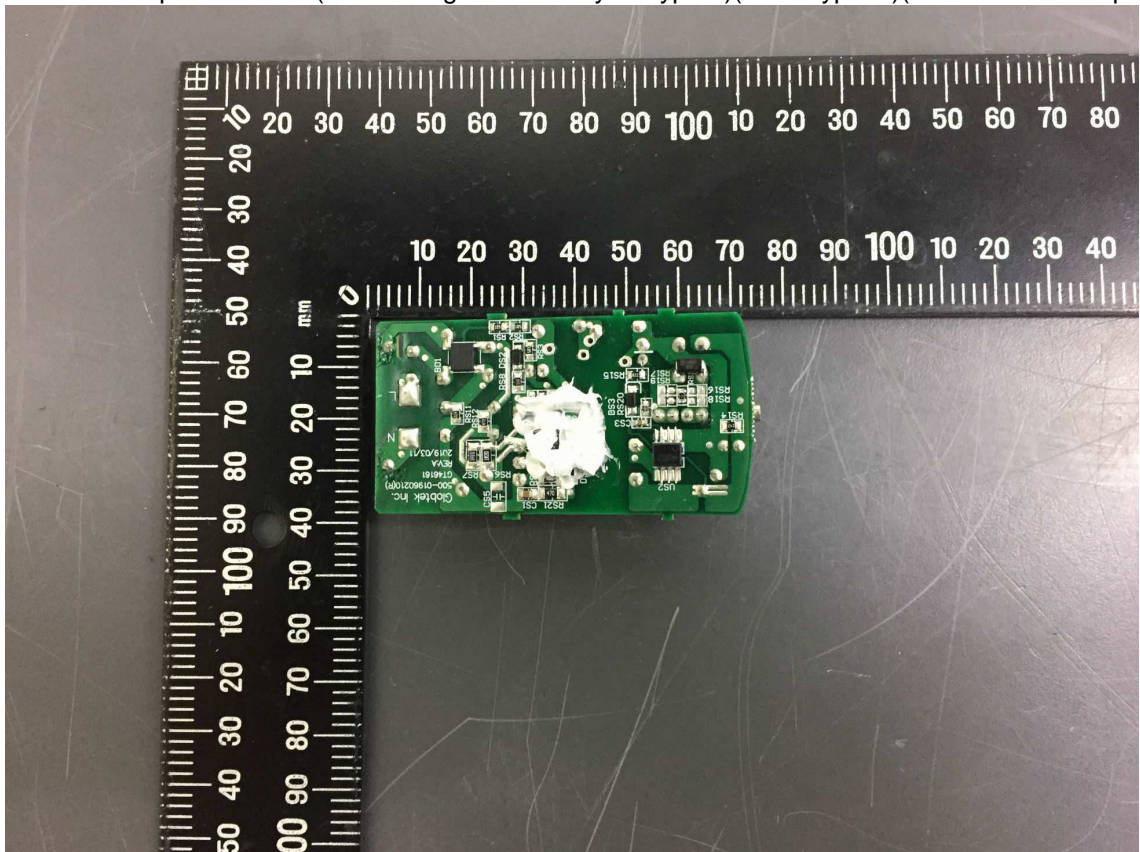




Bottom view of power board (Circuit diagram/PCB layout type 2)(USB Type-C)



Bottom view of power board (Circuit diagram/PCB layout type 2)(USB Type-C)(Remove thermal pad)



Back view of power board (Circuit diagram/PCB layout type 2)

