



Test Report issued under the responsibility of:



TEST REPORT IEC 60950-1 Information technology equipment – Safety – Part 1: General requirements	
Report Number..... :	CN22QISV 001
Date of issue	Sep. 08, 2022
Total number of pages	63
Name of Testing Laboratory preparing the Report	TÜV Rheinland (Shenzhen) Co., Ltd.
Applicant's name	Shen Zhen MTC Co., Ltd.
Address.....	MTC Industry Park, 1st Lilang Road Xialilang community, Nanwan street, Longgang District Shenzhen Guangdong P.R. China
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.	IEC60950_1G
Test Report Form(s) Originator	SGS Fimko Ltd
Master TRF	Dated 2019-07-02
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Test item description..... :	LCD Monitor	
Trade Mark..... :		
Manufacturer	Sharp NEC Display Solutions, Ltd. 4-28, Mita 1-chome, Minato-ku, Tokyo, 108-0073 Japan	
Model/Type reference	E224F, E224F-BK, AS224F, AS224F-BK, E224F-**, AS224F-** (* can be A-Z, 0-9 or "-" or blank. For marketing purpose, no safety affected)	
Ratings	Input: 100-240V~, 50/60Hz, 0.4-0.25A (1.3A for Mexico)	
Testing procedure and testing location:		
☒	CB Testing Laboratory:	TÜV Rheinland (Shenzhen) Co., Ltd.
Testing location/ address..... :		1601-1604, 17-18F, Tower A Building 2, Shenzhen International Innovation Valley, Dashi 1st Road, Xili Street, Xili Community, Nanshan District, Shenzhen 518052, China
☐	Associated CB Testing Laboratory:	N/A
Testing location/ address..... :		N/A
Tested by (name + signature)		Jammy Zhang (Project Handler) 
Approved by (name + signature)..... :		Julia Yan (Reviewer) 
☐	Testing procedure: TMP/CTF Stage 1:	N/A
Testing location/ address..... :		N/A
Tested by (name + signature)		
Approved by (name + signature)..... :		
☐	Testing procedure: WMT/CTF Stage 2:	N/A
Testing location/ address..... :		N/A
Tested by (name + signature)		
Witnessed by (name + signature)..... :		
Approved by (name + signature)..... :		
☐	Testing procedure: SMT/CTF Stage 3 or 4:	N/A
Testing location/ address..... :		N/A
Tested by (name + signature)		
Witnessed by (name + signature)..... :		
Approved by (name + signature)..... :		
Supervised by (name + signature)		

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

- Attachment 1: Measurement Section (2 pages)
- Attachment 2: National differences (69 pages)
- Attachment 3: Photo documentation (13 pages)

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

1. Following tests performed during evaluation

<u>Clause(s)</u>	<u>Test(s)</u>
1.6.2	Input Current Test
1.7.11	Durability of Marking Test
2.1.1.1	Access to energized parts
2.1.1.5	Energy Hazard in Operator Access Area
2.1.1.7	Discharge of Capacitors
2.2.2	SELV limits for Normal Conditions
2.2.3	SELV limits for Abnormal Conditions
2.4	Limited current circuits
2.5	Limited Power Sources
2.6.3.4	Resistance of Earthing Circuit
2.9.2	Humidity Conditioning
2.10.2	Working Voltage over Insulation
2.10.3 & 2.10.4	Clearance and creepage distance measurements
4.2.3	Steady force test 30 N
4.2.4	Steady force test
4.2.5	Impact test
4.2.7	Stress relief test
4.2.10	Wall or ceiling mounted test
4.5	Maximum Temperature Test
4.5.5	Ball pressure test
4.6.5	Adhesives for constructional purposes
5.1.6	Touch Current and PE current
5.2	Electric Strength Test
5.3	Fault Condition Test

If not otherwise specified, tests were performed on models E224F-BK as to represent other similar models.
 The EUTs passed the tests.

Testing location:

All tests as described in Test Case and Measurement Sections were performed at the laboratory described on page 2

Summary of compliance with National Differences:

EU Group Differences, EU Special National Conditions, AU, CA, JP, US, KR.

Explanation of used codes: AU=Australia, CA=Canada, JP=Japan, US=United States of America, KR=Korea.

For National Differences see attachment 2 of this test report.

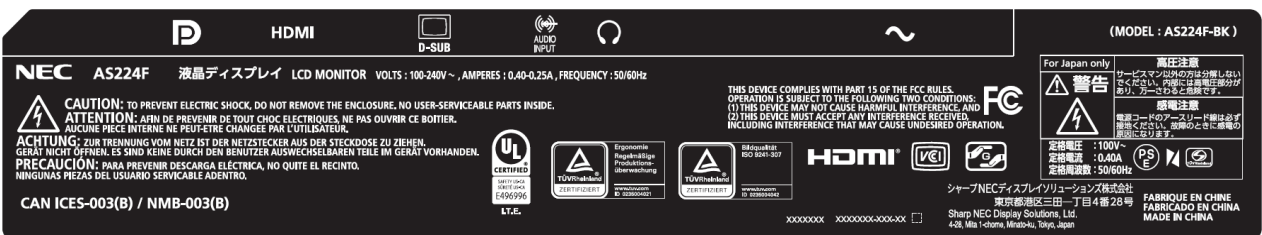
☒ The product fulfils the requirements of EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013

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.



For model E224F-BK



For model AS224F-BK

Notes: Since similar label used, only label for models above listed to represent other similar ones.

Test item particulars.....:	
Equipment mobility.....:	☒ movable ☐ hand-held ☐ transportable ☐ stationary ☐ for building-in ☐ direct plug-in
Connection to the mains.....:	☒ pluggable equipment ☒ type A ☐ type B ☐ permanent connection ☒ detachable power supply cord ☐ non-detachable power supply cord ☐ not directly connected to the mains
Operating condition.....:	☒ continuous ☐ rated operating / resting time:
Access location	☒ operator accessible ☐ restricted access location
Over voltage category (OVC)	☐ OVC I ☒ OVC II ☐ OVC III ☐ OVC IV ☐ other:
Mains supply tolerance (%) or absolute mains supply values	±10% (requested by client)
Tested for IT power systems	☒ Yes (only for Norway) ☐ No
IT testing, phase-phase voltage (V)	230V
Class of equipment	☒ Class I ☐ Class II ☐ Class III ☐ Not classified
Considered current rating of protective device as part of the building installation (A)	16A (20A for North America)
Pollution degree (PD)	☐ PD 1 ☒ PD 2 ☐ PD 3
IP protection class	IPX0
Altitude during operation (m)	Up to 5000m
Altitude of test laboratory (m)	Below 2000m
Mass of equipment (kg)	Weight: 4.95Kg (with Base stand), 2.9Kg (without Base stand)
Possible test case verdicts:	
- 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)	
Testing.....:	
Date of receipt of test item	Jul. 18, 2022
Date (s) of performance of tests	Jul. 18, 2022 to Aug. 08, 2022
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.	
Manufacturer's Declaration per sub-clause 4.2.5 of IEC 60950-1G:	

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) : Shen Zhen MTC Co., Ltd. MTC Industry Park, 1st Lilang Road Xialilang community, Nanwan street, Longgang District Shenzhen Guangdong P.R. China																	
General product information: The equipment models are a LCD Monitor for use with information technology equipment. All models are identical to each other except model name. The unit has the following features: 1. LCD panel type: LED backlight, 22 inch; 2. Main board includes one HDMI, one DP in, one VGA, one Audio in port and one Headphone. 3. Max. ambient temperature 40°C declared by the client; 4. As applicant's request, equipment operating up to altitude 5000m was considered, the required clearance multiplied by altitude correction factor 1.48 according to the Table A.2 of IEC 60664:1992 +A1:2000+A2:2002 standard. 5. For other National Differences listed below, see attachment 2 of this test report. CN*, IS#. Explanation of used codes: CN*=China, IS#=Israel. * National differences to IEC 60950-1:2005 evaluated. # National differences to IEC 60950-1:2005+A1 evaluated.																	
Abbreviations used in the report: <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">- normal conditions</td> <td style="width: 33%;">N.C.</td> <td style="width: 33%;">- single fault conditions</td> <td style="width: 33%;">S.F.C</td> </tr> <tr> <td>- functional insulation</td> <td>OP</td> <td>- basic insulation</td> <td>BI</td> </tr> <tr> <td>- double insulation</td> <td>DI</td> <td>- supplementary insulation</td> <td>SI</td> </tr> <tr> <td>- between parts of opposite polarity</td> <td>BOP</td> <td>- reinforced insulation</td> <td>RI</td> </tr> </table>		- normal conditions	N.C.	- single fault conditions	S.F.C	- functional insulation	OP	- basic insulation	BI	- double insulation	DI	- supplementary insulation	SI	- between parts of opposite polarity	BOP	- reinforced insulation	RI
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Indicate used abbreviations (if any)																	

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
1	GENERAL		P
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 thermal controls.	N/A
1.5.4	Transformers	Transformers used are suitable for their intended application and comply with the relevant requirements of the standard and particularly Annex C.	P
1.5.5	Interconnecting cables	SELV output cable provided as part of this equipment and no higher energy levels than 240VA, it's not possible to present a hazard.	N/A
1.5.6	Capacitors bridging insulation	Between lines: X2 type capacitor (CX1) according to IEC 60384-14. Between primary and earthing: Y1 or Y2 capacitor (CY3, CY4) according to IEC 60384-14 Between primary and secondary earthing: Y1 or Y2 type capacitor (CY5) according to IEC 60384-14	P
1.5.7	Resistors bridging insulation		N/A
1.5.7.1	Resistors bridging functional, basic or supplementary insulation	Bleeder Resistors (R1=R2=R3=R4=1MΩ) bridging functional used	P
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

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.5.8	Components in equipment for IT power systems	Y1 or Y2 subclass capacitors according to IEC 60384-14 provided between phase and earth are rated 250Vac min.	P
1.5.9	Surge suppressors		N/A
1.5.9.1	General		N/A
1.5.9.2	Protection of VDRs		N/A
1.5.9.3	Bridging of functional insulation by a VDR		N/A
1.5.9.4	Bridging of basic insulation by a VDR		N/A
1.5.9.5	Bridging of supplementary, double or reinforced insulation by a VDR		N/A

1.6	Power interface		P
1.6.1	AC power distribution systems	TN and IT power system	P
1.6.2	Input current	(see appended table 1.6.2)	P
1.6.3	Voltage limit of hand-held equipment	This appliance is not hand-held equipment.	N/A
1.6.4	Neutral conductor	The neutral conductor insulated from earth and from the body throughout the equipment as if it were a line conductor.	P

1.7	Marking and instructions		P
1.7.1	Power rating and identification markings	See below	P
1.7.1.1	Power rating marking		P
	Multiple mains supply connections.....:	Single power source	P
	Rated voltage(s) or voltage range(s) (V)	100-240V~	P
	Symbol for nature of supply, for d.c. only.....:	AC source	N/A
	Rated frequency or rated frequency range (Hz) ...:	50/60Hz	P
	Rated current (mA or A)	0.4-0.25A	P
1.7.1.2	Identification markings		P
	Manufacturer's name or trade-mark or identification mark	See copy of marking plate	P
	Model identification or type reference	See copy of marking plate	P
	Symbol for Class II equipment only	Class I equipment	N/A

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Other markings and symbols	Additional symbol or marking does not give rise to misunderstanding.	P
1.7.1.3	Use of graphical symbols		N/A
1.7.2	Safety instructions and marking	English version provided. (Version in other language will be provided when submitted for national approval)	P
1.7.2.1	General		P
1.7.2.2	Disconnect devices	AC inlet serves as disconnect device.	P
1.7.2.3	Overcurrent protective device	Not such equipment.	N/A
1.7.2.4	IT power distribution systems		N/A
1.7.2.5	Operator access with a tool	No operator accessible area that needs to be accessed by the use of a tool.	N/A
1.7.2.6	Ozone	Not such equipment.	N/A
1.7.3	Short duty cycles	Equipment is designed for continuous operation.	N/A
1.7.4	Supply voltage adjustment	No voltage selector.	N/A
	Methods and means of adjustment; reference to installation instructions		N/A
1.7.5	Power outlets on the equipment	No power outlets provided.	N/A
1.7.6	Fuse identification (marking, special fusing characteristics, cross-reference)	Fuse used, marking provided on PCB: F1 T3.15AL/250V	P
1.7.7	Wiring terminals	See below.	N/A
1.7.7.1	Protective earthing and bonding terminals	AC inlet used. Symbol marked besides earthing pin of AC inlet.	P
1.7.7.2	Terminals for a.c. mains supply conductors	AC inlet used.	P
1.7.7.3	Terminals for d.c. mains supply conductors	No such terminals.	N/A
1.7.8	Controls and indicators	See below	N/A
1.7.8.1	Identification, location and marking	No safety relevant indications and markings.	N/A
1.7.8.2	Colours	No safety relevant indications and markings.	N/A
1.7.8.3	Symbols according to IEC 60417.....		N/A
1.7.8.4	Markings using figures	No figures used.	N/A
1.7.9	Isolation of multiple power sources	Single power source	N/A

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.7.10	Thermostats and other regulating devices	Such devices not used.	N/A
1.7.11	Durability	The label was subjected to the permanence of marking test. The label was rubbed with cloth soaked with water for 15 sec. And then again for 15 sec. With the cloth soaked with petroleum spirit. After this test there was no damage to the label. The marking on the label did not fade. There was no curling and lifting of the label edge.	P
1.7.12	Removable parts	No removable part.	P
1.7.13	Replaceable batteries	No battery provided.	N/A
	Language(s)		—
1.7.14	Equipment for restricted access locations	Not intended for use in restricted access locations.	N/A

2	PROTECTION FROM HAZARDS		P
2.1	Protection from electric shock and energy hazards		P
2.1.1	Protection in operator access areas	Only SELV signal interface accessible by operator.	P
2.1.1.1	Access to energized parts	See below	P
	Test by inspection	Protection established by plastic enclosure.	P
	Test with test finger (Figure 2A)	Protection established by plastic enclosure.	P
	Test with test pin (Figure 2B)	No access to any energized parts.	P
	Test with test probe (Figure 2C)		N/A
2.1.1.2	Battery compartments	No battery compartment.	N/A
2.1.1.3	Access to ELV wiring	No ELV wiring in operator accessible area.	N/A
	Working voltage (V _{peak} or V _{rms}); minimum distance through insulation (mm)	(see appended table 2.10.5)	—
2.1.1.4	Access to hazardous voltage circuit wiring	No hazardous voltage wiring in operator accessible area.	N/A

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
2.1.1.5	Energy hazards	The energy does not exceed 240VA between any two points in accessible connector of secondary circuit.	P
2.1.1.6	Manual controls	No manual controls.	N/A
2.1.1.7	Discharge of capacitors in equipment	Capacitance: CX1:0.33μF Bleeder Resistors R1=R2=R3=R4=1MΩ used	P
	Measured voltage (V); time-constant (s).....	Supplied with 264Vac/60Hz, Vpeak: 356V, 37%Vpeak: 132V, measured value: 0.3 sec. After 1 sec voltage drop to 10V.	—
2.1.1.8	Energy hazards – d.c. mains supply	Connected to a.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	Not such equipment.	N/A
2.1.2	Protection in service access areas	No operator accessible area that needs to be accessed by the use of a tool.	N/A
2.1.3	Protection in restricted access locations	Not intended for use in restricted access locations.	N/A

2.2	SELV circuits		P
2.2.1	General requirements	The secondary circuits were tested as SELV. See 2.2.2 to 2.2.4.	P
2.2.2	Voltages under normal conditions (V)	Between any conductors of the SELV circuits 42.4 V peak or 60 V d.c. are not exceeded. See appended table 2.2.	P
2.2.3	Voltages under fault conditions (V)	Single fault did not cause excessive voltage in accessible SELV circuits. Limits of 71V peak and 120V peak. were not exceeded within 0.2 seconds and limits 42.4V peak and 60V d.c. were not exceeded for longer than 0.2 seconds.	P
2.2.4	Connection of SELV circuits to other circuits	See sub-clauses 2.2.2 and 2.2.3. and 2.4.2	P

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

2.3	TNV circuits		N/A
2.3.1	Limits		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

2.4	Limited current circuits		P
2.4.1	General requirements		P
2.4.2	Limit values		P
	Frequency (Hz) :	50.7k	—
	Measured current (mA) :	13.2	—
	Measured voltage (V)..... :	27.4	—
	Measured circuit capacitance (nF or µF) :	CY5: 2200pF	—
2.4.3	Connection of limited current circuits to other circuits	See sub-clauses 2.4.1 and 2.4.2	P

2.5	Limited power sources		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	A regulating network limits the output in compliance with table 2B and 2C both under normal operating condition and after any single fault.	P
	Use of integrated circuit (IC) current limiters	No such device	N/A
	d) Overcurrent protective device limited output	No such device	N/A

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
	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	N/A

2.6	Provisions for earthing and bonding		P
2.6.1	Protective earthing	Class I appliance inlet terminal provided as protective earthing terminal, and accessible metal plate is connected to earthed metal fire enclosure. The test of 2.6.3.4 complied.	P
2.6.2	Functional earthing	Functional earthing in the secondary circuit is accessible at the HDMI connector separated from the primary by reinforced insulation.	P
	Use of symbol for functional earthing		N/A
2.6.3	Protective earthing and protective bonding conductors		P
2.6.3.1	General	Appliance inlet used. Power cord provided with the unit.	P
2.6.3.2	Size of protective earthing conductors		P
	Rated current (A), cross-sectional area (mm ²), AWG	See table 1.5.1	—
2.6.3.3	Size of protective bonding conductors	The metal enclosure is earthed by screws; PCB screws fix the earthed trace to the metal enclosure.	P
	Rated current (A), cross-sectional area (mm ²), AWG	The test of 2.6.3.4 complied.	—
	Protective current rating (A), cross-sectional area (mm ²), AWG	See table 1.5.1	—
2.6.3.4	Resistance of earthing conductors and their terminations; resistance (Ω), voltage drop (V), test current (A), duration (min)	(See attachment 1 appended table 2.6.3.4)	P
2.6.3.5	Colour of insulation	Green /yellow color wire used.	P
2.6.4	Terminals	See below	P
2.6.4.1	General		P
2.6.4.2	Protective earthing and bonding terminals	Earthing terminal in appliance inlet provided as protective earthing terminal.	P

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Rated current (A), type, nominal thread diameter (mm)	Rated current: 0.45-0.3A. The earthing terminal in approved AC inlet serves as main PE terminal. The screws connect the power board to metal chassis, as the protective bonding terminal. The test of 2.6.3.4 complied.	—
2.6.4.3	Separation of the protective earthing conductor from protective bonding conductors	Separated PE and protective bonding conductor used.	P
2.6.5	Integrity of protective earthing	See below	P
2.6.5.1	Interconnection of equipment	Not depending on interconnection for protective earthing.	P
2.6.5.2	Components in protective earthing conductors and protective bonding conductors	No switch or overcurrent protective device in protective earthing or bonding conductor	P
2.6.5.3	Disconnection of protective earth	Appliance inlet used for disconnection of protective earth.	P
2.6.5.4	Parts that can be removed by an operator	AC inlet with PE terminal used.	P
2.6.5.5	Parts removed during servicing		N/A
2.6.5.6	Corrosion resistance	All safety earthing connections comply with Annex J.	P
2.6.5.7	Screws for protective bonding	No self-tapping screws are used. For the earth connection to the metal chassis a spring washer and a screw are used.	N/A
2.6.5.8	Reliance on telecommunication network or cable distribution system	No TNV circuit.	N/A

2.7	Overcurrent and earth fault protection in primary circuits		P
2.7.1	Basic requirements	The equipment relies on fuse or circuit breaker of the wall outlet protection of the building installation in regard to L to N short-circuits and earth fault condition. A build-in fuse provided as overcurrent protection device (see 5.3)	P
	Instructions when protection relies on building installation	Pluggable equipment type A.	N/A
2.7.2	Faults not simulated in 5.3.7	The protection devices are well dimensioned and mounted.	P

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
2.7.3	Short-circuit backup protection	Building installation is considered as providing short-circuit backup protection.	P
2.7.4	Number and location of protective devices	Overcurrent protection by one built-in fuse.	P
2.7.5	Protection by several devices	Protection provided by one fuse only	N/A
2.7.6	Warning to service personnel.....	No service work necessary.	N/A

2.8	Safety interlocks		N/A
2.8.1	General principles	No safety interlocks used	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
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

2.9	Electrical insulation		P
2.9.1	Properties of insulating materials	Natural rubber, asbestos or hygroscopic material not used.	P
2.9.2	Humidity conditioning	Performed at 40°C, 95% R.H. for 120 h (requested by manufacturer) for all sources of transformer.	P
	Relative humidity (%), temperature (°C)	See above.	—
2.9.3	Grade of insulation	See above.	P
2.9.4	Separation from hazardous voltages	The adequate levels of safety insulation provided and maintained to comply with the requirements of this standard.	P

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Method(s) used	SELV separated from primary by reinforced or double insulation. (Method 1). Metal plate of LCD panel used as earth screen between accessible part and primary trace side (see appended table 2.6.3.4) (Method 2)	—

2.10	Clearances, creepage distances and distances through insulation		P
2.10.1	General	See 2.10.3, 2.10.4 and 2.10.5.	P
2.10.1.1	Frequency	Considered.	P
2.10.1.2	Pollution degrees	2	P
2.10.1.3	Reduced values for functional insulation	Considered	P
2.10.1.4	Intervening unconnected conductive parts	Considered	P
2.10.1.5	Insulation with varying dimensions	Insulation kept homogenous.	N/A
2.10.1.6	Special separation requirements	Not applied.	N/A
2.10.1.7	Insulation in circuits generating starting pulses	No such circuit.	N/A
2.10.2	Determination of working voltage		P
2.10.2.1	General	The rms and the peak voltage were measured with unit connected to a 240V TN power system. Pollution Degree 2 and Overvoltage Category II considered.	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 advantage of annex G is not considered.	P
2.10.3.1	General	Considered.	P
2.10.3.2	Mains transient voltages		P
	a) AC mains supply	240V a.c. and 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

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Clause	Requirement + Test	Result - Remark	Verdict
2.10.3.4	Clearances in secondary circuits	Sub-clause 5.3.4 considered.	P
2.10.3.5	Clearances in circuits having starting pulses		N/A
2.10.3.6	Transients from a.c. mains supply	Normal transient voltage considered (overvoltage category II for primary circuit).	N/A
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 appended table 2.10.3 and 2.10.4.	P
2.10.4.1	General	CTI rating for all materials of minimum 100.	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	See below.	P
2.10.5.2	Distances through insulation	(see appended table 2.10.5)	P
2.10.5.3	Insulating compound as solid insulation		N/A
2.10.5.4	Semiconductor devices	(see appended table 1.5.1)	P
2.10.5.5	Cemented joints	No such construction.	N/A
2.10.5.6	Thin sheet material – General		P
2.10.5.7	Separable thin sheet material	Used in transformer.	P
	Number of layers (pcs)	2 layers for reinforced insulation.	—
2.10.5.8	Non-separable thin sheet material		N/A
2.10.5.9	Thin sheet material – standard test procedure		P
	Electric strength test		—
2.10.5.10	Thin sheet material – alternative test procedure	(see appended table 5.2)	P
	Electric strength test		—

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Clause	Requirement + Test	Result - Remark	Verdict
2.10.5.11	Insulation in wound components	Approved triple insulated wire used in T1	P
2.10.5.12	Wire in wound components		P
	Working voltage		P
	a) Basic insulation not under stress		N/A
	b) Basic, supplementary, reinforced insulation		P
	c) Compliance with Annex U	Wire complies with Annex U, three layers insulation.	P
	Two wires in contact inside wound component; angle between 45° and 90°	All pins are prevent contact by insulation tube.	P
2.10.5.13	Wire with solvent-based enamel in wound components	No such construction.	N/A
	Electric strength test		—
	Routine test		N/A
2.10.5.14	Additional insulation in wound components	No such construction.	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	See below.	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	No coated printed boards.	N/A
2.10.6.3	Insulation between conductors on the same inner surface of a printed board	No multi-layer PCBs provided.	N/A
2.10.6.4	Insulation between conductors on different layers of a printed board	No multi-layer PCBs provided.	N/A
	Distance through insulation		N/A
	Number of insulation layers (pcs).....	Single layer PCB	N/A
2.10.7	Component external terminations		N/A
2.10.8	Tests on coated printed boards and coated components	No such boards and components.	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

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Clause	Requirement + Test	Result - Remark	Verdict
2.10.11	Tests for semiconductor devices and cemented joints		N/A
2.10.12	Enclosed and sealed parts	No hermetically sealed component.	N/A

3	WIRING, CONNECTIONS AND SUPPLY		P
3.1	General		P
3.1.1	Current rating and overcurrent protection		P
3.1.2	Protection against mechanical damage	Wires do not touch sharp edges which could damage the insulation and cause hazard.	P
3.1.3	Securing of internal wiring	Internal wires with only basic insulation are routed so that they are not close to any live bare components. Wires are secured by pluggable connectors.	P
3.1.4	Insulation of conductors	The insulation of the individual conductors suitable for the application and the working voltage. For the insulation Material see 3.1.1.	P
3.1.5	Beads and ceramic insulators	Not used.	N/A
3.1.6	Screws for electrical contact pressure		P
3.1.7	Insulating materials in electrical connections	The integrity of protective bonding made by screw, PCB trace and spring washer.	P
3.1.8	Self-tapping and spaced thread screws	Not used.	N/A
3.1.9	Termination of conductors	All conductors are reliably secured.	P
	10 N pull test	Force of 10N applied to the termination points of the conductors.	P
3.1.10	Sleeving on wiring	No sleeving used on wiring for supplementary insulation.	N/A

3.2	Connection to a mains supply		P
3.2.1	Means of connection	See below.	P
3.2.1.1	Connection to an a.c. mains supply	AC inlet used.	P
3.2.1.2	Connection to a d.c. mains supply	Only a.c. mains supply.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
3.2.2	Multiple supply connections	Only for one mains connection.	N/A
3.2.3	Permanently connected equipment	Unit is not permanently connected equipment.	N/A
	Number of conductors, diameter of cable and conduits (mm)		—
3.2.4	Appliance inlets	Approved appliance inlet used.	P
3.2.5	Power supply cords	Approved AC power supply cords used	P
3.2.5.1	AC power supply cords	See table 1.5.1	P
	Type		—
	Rated current (A), cross-sectional area (mm ²), AWG		—
3.2.5.2	DC power supply cords	AC Source.	N/A
3.2.6	Cord anchorages and strain relief	Appliance inlet used.	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

3.3	Wiring terminals for connection of external conductors		N/A
3.3.1	Wiring terminals	AC inlet used.	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 ²)		—
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

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Clause	Requirement + Test	Result - Remark	Verdict

3.4	Disconnection from the mains supply		P
3.4.1	General requirement	See below.	P
3.4.2	Disconnect devices	Appliance inlet used as disconnect device.	P
3.4.3	Permanently connected equipment	Not permanently connected equipment.	N/A
3.4.4	Parts which remain energized	When AC coupler is disconnected from inlet, there are no parts remaining with hazardous voltage or energy in the equipment.	P
3.4.5	Switches in flexible cords	None	N/A
3.4.6	Number of poles - single-phase and d.c. equipment	The appliance coupler disconnects both poles simultaneously.	P
3.4.7	Number of poles - three-phase equipment	Single phase equipment.	N/A
3.4.8	Switches as disconnect devices		N/A
3.4.9	Plugs as disconnect devices		N/A
3.4.10	Interconnected equipment	Only interconnected with other unit through SELV interface.	P
3.4.11	Multiple power sources	Only one supply connection provided.	N/A

3.5	Interconnection of equipment		P
3.5.1	General requirements	This power supply is not considered for connection to TNV.	P
3.5.2	Types of interconnection circuits	Interconnection circuits of SELV through the connector. No ELV interconnection circuits.	P
3.5.3	ELV circuits as interconnection circuits	No ELV interconnection.	N/A
3.5.4	Data ports for additional equipment	All data ports are located on the interface board and Interface board, which is supplied by LPS.	P

4	PHYSICAL REQUIREMENTS		P
4.1	Stability		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Angle of 10°	<7Kg	N/A
	Test force (N)		N/A

4.2	Mechanical strength		P
4.2.1	General	See below. After tests, unit complies with the requirements of sub-clauses 2.1.1, 2.6.1, 2.10 and 4.4.1.	P
	Rack-mounted equipment.	(See Annex DD)	N/A
4.2.2	Steady force test, 10 N	10 N applied to all internal components.	P
4.2.3	Steady force test, 30 N	Internal metal enclosure used. After tests, unit complies with 2.1.1, 2.6.1, 2.10.	P
4.2.4	Steady force test, 250 N	250 N applied to plastic enclosure. No energy or other hazards.	P
4.2.5	Impact test	500g steel ball falls freely from 1.3m on top, back and bottom of plastic enclosure, no access to hazardous parts.	P
	Fall test		P
	Swing test		P
4.2.6	Drop test; height (mm)		N/A
4.2.7	Stress relief test	For the plastic enclosure after 7 hours at 70°C and cooling down to room temperature, no shrinkage, distortion or loosening any enclosure part was found.	P
4.2.8	Cathode ray tubes	No CRT in the unit.	N/A
	Picture tube separately certified		N/A
4.2.9	High pressure lamps	No high pressure lamp provided.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
4.2.10	Wall or ceiling mounted equipment; force (N) :	An addition force 85.3 N (3 times the mass without base 2.9kg) applied to the unit with the VESA adaptor kit and sustained for 1 min. The unit withstood the load test without damage or breakage from the VESA adaptor kit. VESA compatible wall mounting kit, four M4x 12 mm (100 x 100 mm) with screws to secure.	P

4.3	Design and construction		P
4.3.1	Edges and corners	Edges and corners of the enclosure are rounded.	P
4.3.2	Handles and manual controls; force (N) :	No handles or controls provided.	N/A
4.3.3	Adjustable controls	No such controls provided.	N/A
4.3.4	Securing of parts	All parts secured properly. Spring washer used for securing screws.	P
4.3.5	Connection by plugs and sockets		N/A
4.3.6	Direct plug-in equipment	No such equipment.	N/A
	Torque :		—
	Compliance with the relevant mains plug standard :		N/A
4.3.7	Heating elements in earthed equipment	No heating elements provided.	N/A
4.3.8	Batteries	No batteries provided.	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 oil or grease.	N/A
4.3.10	Dust, powders, liquids and gases	Equipment in intended use not considered to be exposed to these.	N/A
4.3.11	Containers for liquids or gases	No container for liquid or gas.	N/A
4.3.12	Flammable liquids :	No such flammable liquid.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Quantity of liquid (l)		N/A
	Flash point (°C)		N/A
4.3.13	Radiation		P
4.3.13.1	General	See below	P
4.3.13.2	Ionizing radiation	No 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	No ultraviolet radiation	N/A
	Part, property, retention after test, flammability classification		N/A
4.3.13.4	Human exposure to ultraviolet (UV) radiation	No ultraviolet radiation	N/A
4.3.13.5	Lasers (including laser diodes) and LEDs	See below	P
4.3.13.5.1	Lasers (including laser diodes)		N/A
	Laser class		—
4.3.13.5.2	Light emitting diodes (LEDs)	Indicating light and panel backlight considered as exempt group according to IEC 62471 series	—
4.3.13.6	Other types		N/A

4.4	Protection against hazardous moving parts		N/A
4.4.1	General	No moving parts	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

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Clause	Requirement + Test	Result - Remark	Verdict
4.4.5.3	Protection for service persons		N/A
	Use of symbol or warning		N/A

4.5	Thermal requirements		P
4.5.1	General	Equipment loaded with rated output current.	P
4.5.2	Temperature tests	(see appended table 4.5)	P
	Normal load condition per Annex L	(see appended table 4.5)	—
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

4.6	Openings in enclosures		P
4.6.1	Top and side openings	(See attachment 1 appended table 4.6.1 and 4.6.2).	P
	Dimensions (mm)	(See attachment 1 appended table 4.6.1 and 4.6.2)	—
4.6.2	Bottoms of fire enclosures	(See attachment 1 appended table 4.6.1 and 4.6.2)	P
	Construction of the bottom, dimensions (mm) ..		—
4.6.3	Doors or covers in fire enclosures	No doors or covers.	N/A
4.6.4	Openings in transportable equipment	Not 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		P
	Conditioning temperature (°C), time (weeks).....	100°C, one weeks	—

4.7	Resistance to fire		P
4.7.1	Reducing the risk of ignition and spread of flame	No excessive temperatures. No easily burning materials employed. Fire enclosure provided. Safety relevant components used within their specified temperature limits.	P
	Method 1, selection and application of components wiring and materials	(see appended table 4.7)	P

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Clause	Requirement + Test	Result - Remark	Verdict
	Method 2, application of all of simulated fault condition tests		N/A
4.7.2	Conditions for a fire enclosure	Fire enclosure provided.	P
4.7.2.1	Parts requiring a fire enclosure	With having the following parts: • Components in primary • Components in secondary (not applied all fault condition test) Fire enclosure necessary.	P
4.7.2.2	Parts not requiring a fire enclosure	For components complying with method 2 of 4.7.1. See table 5.3.	P
4.7.3	Materials		P
4.7.3.1	General	PCB rated V-1 or better.	P
4.7.3.2	Materials for fire enclosures	Earthed metal enclosure is considered as fire enclosure, which complies without test.	P
4.7.3.3	Materials for components and other parts outside fire enclosures	5VB plastic enclosure used, which is outside the fire enclosure.	P
4.7.3.4	Materials for components and other parts inside fire enclosures	Internal components except small parts are V-2, HF-2 or better.	P
4.7.3.5	Materials for air filter assemblies	No air filters provided.	N/A
4.7.3.6	Materials used in high-voltage components	No high voltage components provided.	N/A

5	ELECTRICAL REQUIREMENTS AND SIMULATED ABNORMAL CONDITIONS		P
5.1	Touch current and protective conductor current		P
5.1.1	General	See sub-clauses 5.1.2 to 5.1.6.	P
5.1.2	Configuration of equipment under test (EUT)	EUT has only one mains connection.	P
5.1.2.1	Single connection to an a.c. mains supply		P
5.1.2.2	Redundant multiple connections to an 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	Equipment of figure 5A used.	P
5.1.4	Application of measuring instrument	Using measuring instrument in annex D.	P

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Clause	Requirement + Test	Result - Remark	Verdict
5.1.5	Test procedure		P
5.1.6	Test measurements	(see appended table 5.1.6)	P
	Supply voltage (V)		—
	Measured touch current (mA)		—
	Max. allowed touch current (mA)		—
	Measured protective conductor current (mA)		—
	Max. allowed protective conductor current (mA) ..		—
5.1.7	Equipment with touch current exceeding 3,5 mA	Touch current does not exceed 3.5mA.	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.	N/A
5.1.8.1	Limitation of the touch current to a telecommunication network or to a cable distribution system		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		N/A
	a) EUT with earthed telecommunication ports		N/A
	b) EUT whose telecommunication ports have no reference to protective earth		N/A

5.2	Electric strength		P
5.2.1	General	(see appended table 5.2)	P
5.2.2	Test procedure	(see appended table 5.2)	P

5.3	Abnormal operating and fault conditions		P
5.3.1	Protection against overload and abnormal operation	(see appended table 5.3)	P
5.3.2	Motors	No motors.	N/A
5.3.3	Transformers	(see appended Annex C and table 5.3)	P
5.3.4	Functional insulation	By short-circuited, results see appended table 5.3.	P

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Clause	Requirement + Test	Result - Remark	Verdict
5.3.5	Electromechanical components	No electromechanical component.	N/A
5.3.6	Audio amplifiers in ITE	(see appended table 5.3.)	P
5.3.7	Simulation of faults	(see appended table 5.3.)	P
5.3.8	Unattended equipment	No such equipment.	N/A
5.3.9	Compliance criteria for abnormal operating and fault conditions		P
5.3.9.1	During the tests	No fire or molten metal occurred and no deformation of enclosure during the tests.	P
5.3.9.2	After the tests	No reduction of clearance and creepage distance. Electric strength test is made on basic, supplementary and reinforced insulation after test.	P

6	CONNECTION TO TELECOMMUNICATION NETWORKS		N/A
6.1	Protection of telecommunication network service persons, and users of other equipment connected to the network, from hazards in the equipment		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		N/A
	Supply voltage (V)		—
	Current in the test circuit (mA)		—
6.1.2.2	Exclusions		N/A

6.2	Protection of equipment users from overvoltages on telecommunication networks		N/A
6.2.1	Separation requirements		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

6.3	Protection of the telecommunication wiring system from overheating		N/A
	Max. output current (A)		—
	Current limiting method		—

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Clause	Requirement + Test	Result - Remark	Verdict
7	CONNECTION TO CABLE DISTRIBUTION SYSTEMS		N/A
7.1	General		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		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

A	ANNEX A, TESTS FOR RESISTANCE TO HEAT AND FIRE		P
A.1	Flammability test for fire enclosures of movable equipment having a total mass exceeding 18 kg, and of stationary equipment (see 4.7.3.2)		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).....		—
A.2	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)		P
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

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Clause	Requirement + Test	Result - Remark	Verdict
	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).....		—
A.3	Hot flaming oil test (see 4.6.2)		N/A
A.3.1	Mounting of samples		N/A
A.3.2	Test procedure		N/A
A.3.3	Compliance criterion		N/A

B	ANNEX B, MOTOR TESTS UNDER ABNORMAL CONDITIONS (see 4.7.2.2 and 5.3.2)		N/A
B.1	General requirements		N/A
	Position		—
	Manufacturer		—
	Type		—
	Rated values		—
B.2	Test conditions		N/A
B.3	Maximum temperatures		N/A
B.4	Running overload test		N/A
B.5	Locked-rotor overload test		N/A
	Test duration (days)		—
	Electric strength test: test voltage (V)		—
B.6	Running overload test for d.c. motors in secondary circuits		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

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Clause	Requirement + Test	Result - Remark	Verdict
B.7	Locked-rotor overload test for d.c. motors in secondary circuits		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.8	Test for motors with capacitors		N/A
B.9	Test for three-phase motors		N/A
B.10	Test for series motors		N/A
	Operating voltage (V) :		—

C	ANNEX C, TRANSFORMERS (see 1.5.4 and 5.3.3)		P
	Position :	T1	—
	Manufacturer :	See table 1.5.1	—
	Type :	See table 1.5.1	—
	Rated values :	See table 1.5.1	—
	Method of protection :	By protection circuit	—
C.1	Overload test	(see appended table 5.3)	P
C.2	Insulation	See below	P
	Protection from displacement of windings :	By bobbin and insulation tape	P

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

E	ANNEX E, TEMPERATURE RISE OF A WINDING (see 1.4.13)		N/A
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F	ANNEX F, MEASUREMENT OF CLEARANCES AND CREEPAGE DISTANCES (see 2.10 and Annex G)		P
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G	ANNEX G, ALTERNATIVE METHOD FOR DETERMINING MINIMUM CLEARANCES		N/A
G.1	Clearances		N/A
G.1.1	General		N/A

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
G.1.2	Summary of the procedure for determining minimum clearances		N/A
G.2	Determination of mains transient voltage (V)		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
G.3	Determination of telecommunication network transient voltage (V)		N/A
G.4	Determination of required withstand voltage (V)		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
G.5	Measurement of transient voltages (V)		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
G.6	Determination of minimum clearances		N/A
H	ANNEX H, IONIZING RADIATION (see 4.3.13)		N/A
J	ANNEX J, TABLE OF ELECTROCHEMICAL POTENTIALS (see 2.6.5.6)		P
	Metal(s) used	The internal metal enclosure is made of mild steel, screw spring washer are made of Ni on steel, the combined electrochemical potential is below 0.6V according to Table J.1.	—
K	ANNEX K, THERMAL CONTROLS (see 1.5.3 and 5.3.8)		N/A
K.1	Making and breaking capacity		N/A
K.2	Thermostat reliability; operating voltage (V)		N/A
K.3	Thermostat endurance test; operating voltage (V)		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
K.4	Temperature limiter endurance; operating voltage (V)		N/A
K.5	Thermal cut-out reliability		N/A
K.6	Stability of operation	(see appended table 5.3)	N/A

L	ANNEX L, NORMAL LOAD CONDITIONS FOR SOME TYPES OF ELECTRICAL BUSINESS EQUIPMENT (see 1.2.2.1 and 4.5.2)		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	(See 1.6.2)	P

M	ANNEX M, CRITERIA FOR TELEPHONE RINGING SIGNALS (see 2.3.1)		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
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

N	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)		N/A
N.1	ITU-T impulse test generators		N/A
N.2	IEC 60065 impulse test generator		N/A

P	ANNEX P, NORMATIVE REFERENCES		—
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IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
Q	ANNEX Q, Voltage dependent resistors (VDRs) (see 1.5.9.1)		N/A
	- Preferred climatic categories	Approved VDRs used	N/A
	- Maximum continuous voltage		N/A
	- Combination pulse current		N/A
	Body of the VDR Test according to IEC60695-11-5.....		N/A
	Body of the VDR. Flammability class of material (min V-1).....		N/A
R	ANNEX R, EXAMPLES OF REQUIREMENTS FOR QUALITY CONTROL PROGRAMMES		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
S	ANNEX S, PROCEDURE FOR IMPULSE TESTING (see 6.2.2.3)		N/A
S.1	Test equipment		N/A
S.2	Test procedure		N/A
S.3	Examples of waveforms during impulse testing		N/A
T	ANNEX T, GUIDANCE ON PROTECTION AGAINST INGRESS OF WATER (see 1.1.2)		N/A
			—
U	ANNEX U, INSULATED WINDING WIRES FOR USE WITHOUT INTERLEAVED INSULATION (see 2.10.5.4)		P
		Approved tripled insulated wire used.	—
V	ANNEX V, AC POWER DISTRIBUTION SYSTEMS (see 1.6.1)		P
V.1	Introduction		P
V.2	TN power distribution systems		P
W	ANNEX W, SUMMATION OF TOUCH CURRENTS		N/A
W.1	Touch current from electronic circuits		N/A
W.1.1	Floating circuits		N/A

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

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

Y	ANNEX Y, ULTRAVIOLET LIGHT CONDITIONING TEST (see 4.3.13.3)		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

Z	ANNEX Z, OVERVOLTAGE CATEGORIES (see 2.10.3.2 and Clause G.2)		P
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AA	ANNEX AA, MANDREL TEST (see 2.10.5.8)		N/A
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BB	ANNEX BB, CHANGES IN THE SECOND EDITION		—
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CC	ANNEX CC, Evaluation of integrated circuit (IC) current limiters		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

DD	ANNEX DD, Requirements for the mounting means of rack-mounted equipment		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

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Clause	Requirement + Test	Result - Remark	Verdict
DD.4	Compliance.....:		N/A

EE	ANNEX EE, Household and home/office document/media shredders		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 (Edition / year)	Mark(s) of conformity ¹⁾
LCD panel	Shenzhen China Star Optoelectronics Technology Co., Ltd.	SG215XXX-XX ("X" MAY BE 0-9,A-Z or blank) (Test model: SG2151B05-2) Variable X will not affect safety	22 inch TFT LCD panel without LED backlight	--	Tested within apparatus
Backlight bar	Interchangeable	Interchangeable	Max.300mA, Max.48Vdc	--	Tested within apparatus
Plastic Enclosure	QINGDAO HAIER NEW MATERIAL R & D CO LTD	NH-9022	5VB, thickness 1.5mm min. 60°C	UL 94	UL E230779
Metal Enclosure	Interchangeable	Interchangeable	Metallic. Thickness min. 1mm	--	Tested within apparatus
Base Stand (Optional)	Interchangeable	Interchangeable	Plastic material HB min. weight 2.05 Kg	--	Tested within apparatus
Speaker (2 pcs)	Interchangeable	Interchangeable	4Ω, 2.5W	--	Tested within apparatus
PCB	Interchangeable	Interchangeable	V-1 or better, Min. 130°C	UL 796	UL
Heat-shrinkable tube	CHANGYUAN ELECTRONICS GROUP CO LTD	CB-HFT	600V,125°C, VW-1, min 0.4mm	UL 224	UL E180908
(Alternative)	PENGYUAN ELECTRONICS MATERIAL CO LTD	RHF(600)	600V,125°C, VW-1, min 0.4mm	UL 224	UL E515092
Protective earth wire	GONGGUAN XUHE WIRE AND CABLE CO LTD	3385	green- yellow color Min.22 AWG,min.300VAC, min.105 °C	UL 758	UL E468731
(Alternative)	WONDERFUL HI-TECH CO LTD	3385	green- yellow color Min.22 AWG,min.300VAC, min.105 °C	UL 758	UL E77981

IEC 60950-1					
Clause	Requirement + Test		Result - Remark		Verdict
(Alternative)	DONGGUAN YUAN TAI ELECTRONICS CO LTD	3385	green- yellow color Min.22 AWG,min.300VAC, min.105 °C	UL 758	UL E236360
(Alternative)	Interchangeable	Interchangeable	green- yellow color Min.22 AWG,min.300VAC, min.105 °C	UL 758	UL
Secondary lead wire	Interchangeable	Interchangeable	Min.28 AWG, min.300VAC, min.105 °C	UL 758	UL
For Power Supply board					
AC inlet	ZHE JIANG BEI ER JIA ELECTRONIC CO LTD	ST-A01-002LTC	AC250V, 10A	IEC/EN/UL 60320-1	ENEC:ENEC-03639-M1 UL E225980
(Alternative)	SHENZHEN KANGYONGDA ELECTRONICS CO LTD	DE-14	AC250V, 10A	IEC/EN/UL 60320-1	VDE 40036820 UL E363692
(Alternative)	Interchangeable	Interchangeable	AC250V, 10A	IEC/EN/UL 60320-1	VDE, UL
Fuse (F1)	XC Electronics (Shen zhen) Corp. Ltd.	5TE	AC250V, T3.15AL	IEC/EN 60127-1, IEC/EN 60127-3, UL 248	VDE 40029550 UL E249609
(Alternative)	Sunny East Enterprise Co. LTD.	TSP	AC250V, T3.15AL	IEC/EN 60127-1, IEC/EN 60127-3, UL 248	VDE 40027173 UL E133774
(Alternative)	Conquer Electronics Co., Ltd.	MST	AC250V, T3.15AL	IEC/EN 60127-1, IEC/EN 60127-3, UL 248	VDE 40017118 UL E82636
(Alternative)	Dongguan Better Electronic Technology Co., Ltd.	932	AC250V, T3.15AL	IEC/EN 60127-1, IEC/EN 60127-3, UL 248	VDE 40033369 UL E300003
(Alternative)	Dongguan Reomax Electronics Co., Ltd.	MTS	AC250V, T3.15AL	IEC/EN 60127-1, IEC/EN 60127-3, UL 248	VDE 40039420 UL E340427

IEC 60950-1					
Clause	Requirement + Test		Result - Remark		Verdict
(Alternative)	SUZHOU WALTER ELECTRONIC CO LTD	2010	AC250V, T3.15AL	IEC/EN 60127-1, IEC/EN 60127-3	VDE 40018781
(Alternative)	SUZHOU WALTER ELECTRONIC CO LTD	2010, 2000	AC250V, T3.15AL	UL 248	UL E56092
(Alternative)	ZHONG SHAN LANBAO ELECTRICAL APPLIANCES CO LTD	TB, TR	AC250V, T3.15AL	IEC/EN 60127-1, IEC/EN 60127-3, UL 248	TUV J50420445 UL E213695
X-Capacitor (CX1) (X2 type)	Shenzhen Weidy Industrial Development Co., Ltd.	MKP	AC310V, 0.33μF, 110°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40041066 UL E334332
(Alternative)	Shenzhen Jinghao Capacitor Co., Ltd.	CBB62B	AC280V, 0.33μF, 110°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40018690 UL E252286
(Alternative)	Shenzhen Sincerity Technology Co., Ltd.	MPX/MKP	AC320V, 0.33μF, 110°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40028812 UL E319615
(Alternative)	Xiamen Wanming Electronics Co., Ltd.	MPX	AC275V, 0.33μF, 110°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40023119 UL E320206
(Alternative)	Shenzhen Shenfeng Electronics Co., Ltd.	CBB62	AC275V, 0.33μF, 105°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40031777 UL E345591
(Alternative)	Dongguan Champion Electronic Technology Co., Ltd	MPX	AC350V, 0.33μF, 110°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40044148 UL E477525
(Alternative)	ShenZhen Shanrui Electronics Co., Ltd	MPX	AC310V, 0.33μF, 110°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40039043 UL E364138

IEC 60950-1					
Clause	Requirement + Test			Result - Remark	Verdict
(Alternative)	Fuxin Pan Ocean Electronic Ltd.	MPX-X2	AC275V, 0.33μF, 110°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40015756 UL E352735
(Alternative)	Hongzhi Enterprises Ltd.	MPX	AC310V, 0.33μF, 110°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40023936 UL E192572
Y-Capacitor (CY3, CY4) (Y1 type)	Guangdong South Hongming Electronic Science and Technology Co., Ltd.	F	AC250V, 470pF, 125°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40036393 UL E154899
(Alternative)	Shantou High-New Technology Dev. Zone Songtian Enterprise Co., Ltd	CD	AC400V, 470pF, 125°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40025754 UL E208107
(Alternative)	Shenzhen Weidy Industrial Development Co., Ltd.	WYD	AC250V, 470pF, 125°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40051104 UL E334332
(Alternative)	Dongguan City Dafu Electronics Co. Ltd.	CT7 Y1	AC250V, 470pF, 125°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40041523 UL E465278
(Alternative)	JUSUN (TAISHAN) ELECTRONICS LTD	JB	AC400V, 470pF, 125°C	IEC/EN 60384-14: 2013 UL 60384-14	ENEC: ENEC-01320-A1 UL E253194
(Alternative)	Xiamen Sino Faith Electronic Technology Co. Ltd.	HCY	AC400V, 470pF, 125°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40034792 UL E328673
(Alternative)	Anshan Kei Fat Electronic Ceramic Technical Co., Ltd.	CT7	AC250V, 470pF, 125°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40011817 UL E232980

IEC 60950-1					
Clause	Requirement + Test			Result - Remark	Verdict
(Alternative)	Zonkas Electronic Co., Ltd.	ZD	AC400V, 470pF, 125°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40017350 UL E258931
(Alternative)	Walsin Technology Corp.	AH	AC400V, 470pF, 125°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40001804 UL E146544
(Alternative)	Sichuan Teruixiang Technology International Co Ltd	TY	AC400V, 470pF, 125°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40031733 UL E315719
(Alternative)	Xiamen Wanming Electronics Co., Ltd.	HJ	AC250V, 470pF, 125°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40034438 UL E221839
Y-Capacitor (CY5) (Y1 type)	Guangdong South Hongming Electronic Science and Technology Co., Ltd.	F	AC250V, 2200pF, 125°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40036393 UL E154899
(Alternative)	Shantou High-New Technology Dev. Zone Songtian Enterprise Co., Ltd	CD	AC400V, 2200pF, 125°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40025754 UL E300003
(Alternative)	Shenzhen Weidy Industrial Development Co., Ltd.	WYD	AC250V, 2200pF, 125°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40051104 UL E334332
(Alternative)	Dongguan City Dafu Electronics Co. Ltd.	CT7 Y1	AC250V, 2200pF, 125°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40041523 UL E465278
(Alternative)	JUSUN (TAISHAN) ELECTRONICS LTD	JB	AC400V, 2200pF, 125°C	IEC/EN 60384-14: 2013 UL 60384-14	ENEC: ENEC-01320-A1 UL E253194

IEC 60950-1					
Clause	Requirement + Test			Result - Remark	Verdict
(Alternative)	Xiamen Sino Faith Electronic Technology Co. Ltd.	HCY	AC400V, 2200pF, 125°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40034792 UL E328673
(Alternative)	Anshan Kei Fat Electronic Ceramic Technical Co., Ltd.	CT7	AC250V, 2200pF, 125°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40011817 UL E232980
(Alternative)	Zonkas Electronic Co., Ltd.	ZD	AC250V, 2200pF, 125°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40017350 UL E258931
(Alternative)	Walsin Technology Corp.	AH	AC400V, 2200pF, 125°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40001804 UL E146544
(Alternative)	Sichuan Teruixiang Technology International Co Ltd	TY	AC400V, 2200pF, 125°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40031733 UL E315719
(Alternative)	Xiamen Wanming Electronics Co., Ltd.	HJ	AC250V, 2200pF, 125°C	IEC/EN 60384-14: 2013 UL 60384-14	VDE 40034438 UL E221839
Varistor (RV1)	BRIGHTKING (SHENZHEN) CO LTD	10D681K, 681KD10	420VAC, 105°C	IEC/EN61051-1 IEC/EN61051-2 IEC/EN61051-2-2 UL 1449	VDE 40027827 UL E327997
(Alternative)	Guangdong South Hongming Electronic Science and Technology Co., Ltd.	ZVR10D681	420VAC, 85°C	IEC/EN61051-1 IEC/EN61051-2 IEC/EN61051-2-2 UL 1449	VDE 40027789 UL E321851

IEC 60950-1					
Clause	Requirement + Test		Result - Remark		Verdict
(Alternative)	SHANTOU HIGH-NEW TECHNOLOGY DEVELOPMNT ZONE SONGTIAN ENTERPRISE CO LTD	10D681K	420VAC, 125°C	IEC/EN61051-1 IEC/EN61051-2 IEC/EN61051-2-2 UL 1449	VDE 40023049 UL E330837
(Alternative)	SHENZHEN WEIDY INDUSTRIAL DEVELOPMEN T CO LTD	WZV10D681KT, WZV10D681KTJ	420VAC, 125°C	IEC/EN61051-1 IEC/EN61051-2 IEC/EN61051-2-2 UL 1449	VDE 40052040 UL E490998
(Alternative)	Guizhou Kaili Economic Zone Zhonghao Electronics Co.,LTD.	WLR-10D681KHS	420VAC, 125°C	IEC/EN61051-1 IEC/EN61051-2 IEC/EN61051-2-2 UL 1449	TUV B17069764300 1 UL E488935
(Alternative)	XIAMEN WANMING ELECTRONICS CO LTD	WMR10D681K	420VAC, 85°C	UL 1449	UL E333988
(Alternative)	CENTRA SCIENCE CORP	CNR-10D681K	420VAC, 105°C	IEC/EN61051-1 IEC/EN61051-2 IEC/EN61051-2-2 UL 1449	VDE 40008220 UL E316325
(Alternative)	SHAANXI HUAXING ELECTRONIC GROUP CO LTD	MYG20G10K681	420VAC, 85°C	IEC/EN61051-1 IEC/EN61051-2 IEC/EN61051-2-2 UL 1449	VDE 40018747 UL E329651

IEC 60950-1					
Clause	Requirement + Test		Result - Remark		Verdict
(Alternative)	Dongguan City Dafu Electronics Co Ltd	NDF10D681K	420VAC, 125°C	IEC/EN61051-1 IEC/EN61051-2 IEC/EN61051-2-2 UL 1449	VDE 40050909 UL E502211
(Alternative)	Huizhou Derui Electrical Appliance Co., Ltd	COV-10D681K@	420VAC, 85°C	IEC/EN61051-1 IEC/EN61051-2 IEC/EN61051-2-2	VDE 40047358
(Alternative)	Huizhou Derui Electrical Appliance Co., Ltd	COV10D681K@, COV10D681K	420VAC, 85°C	UL 1449	UL E485395
(Alternative)	Cerglass MFG Inc	10D681K	420VAC, 125°C	IEC/EN61051-1 IEC/EN61051-2 IEC/EN61051-2-2 UL 1449	VDE 40028836 UL E317616
(Alternative)	Guangxi New Future Information Industry Co., Ltd.	10D681K	420VAC, 125°C	IEC/EN61051-1 IEC/EN61051-2 IEC/EN61051-2-2 UL 1449	VDE 40030322 UL E323753
(Alternative)	THINKING ELECTRONIC INDUSTRIAL CO LTD	TVR10681	420VAC, 105°C	IEC/EN61051-1 IEC/EN61051-2 IEC/EN61051-2-2	UL E314979
Transformer (T1)	Huizhou MVT New Power Technology CO., LTD	ZY-T0185	130°C, Class B	Applicable parts in IEC 60950-1 and according to IEC 60085	Tested with appliance

IEC 60950-1					
Clause	Requirement + Test		Result - Remark		Verdict
- Bobbin	CHANGCHUN PLASTICS CO., LTD	T200HF, T220NA	150°C, V-0	UL 94 UL 746	UL E59481
- Insulation Tape	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	CT* (b)(g)	130°C	UL 510	UL E165111
(Alternative)	CHANG SHU LIANG YI TAPE INDUSTRY CO LTD	LY-19-02-15b, LY-19-02-18b	130°C	UL 510	UL E246820
(Alternative)	DONGGUAN SHIN YAHUA ELECTRONIC MATERIAL CO LTD	CT* (b)(g) , CT* (c)(g)	130°C	UL 510	UL E324093
- Magnet Wire	HOI LUEN ELECTRICAL MFR CO LTD	xUEW, xUEW-F	130°C	UL 1446	UL E164409
(Alternative)	ZHEJIANG HONGBO TECHNOLOGY CO LTD	xUEW/130, xUEW/155	130°C	UL 1446	UL E221719
- Triple Insulated wire	HUIZHOU DONGJU FLUO TECH PLASTIC CO LTD	TIW-FXX	155°C	UL 2353	UL E488352
(Alternative)	FURUKAWA ELECTRIC CO., LTD.	TEX-E, TEX-EA	130°C	UL 2353	UL E206440
(Alternative)	TOTOKU ELECTRIC CO LTD	TIW-3LZX@@@%\$, TIW-3X\$	155°C	UL 2353	UL E166483
- Tube	CHANGYUAN ELECTRONICS GROUP CO LTD	CB-TT-T	200°C, VW-1	UL 224	UL E180908
(Alternative)	HUIZHOU DONGJU FLUO TECH PLASTIC CO LTD	TFL	200°C, VW-1	UL 224	UL E478618

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Clause	Requirement + Test		Result - Remark		Verdict
(Alternative)	GREAT HOLDING INDUSTRIAL CO LTD	TFL	200°C, VW-1	UL 224	UL E156256
- varnish	ZHUHAI CHANGXIAN NEW MATERIALS TECHNOLOGY CO LTD	E962	130°C	UL 1446	UL E335405
(Alternative)	SUZHOU TAIHU ELECTRIC ADVANCED MATERIAL CO LTD	T-4260(a)	130°C	UL 1446	UL E228349
Line filter (LF1)	Huizhou MVT New Power Technology Co., LTD	SYUC15-L10.5MA	130°C	IEC/EN 60950-1	Tested with appliance
- Bobbin	Changchun Plastics Co., Ltd.	T200HF, T220NA	150°C, V-0	UL 94 UL 746	UL E59481
- Magnet Wire	HOI LUEN ELECTRICAL MFR CO LTD	xUEW, xUEW-F	130°C	UL 1446	UL E164409
(Alternative)	ZHEJIANG HONGBO TECHNOLOGY CO LTD	xUEW/130, xUEW/155	130°C	UL 1446	UL E221719
Optocoupler (U2)	China Resources Semiconductor (ShenZhen) Ltd.	PC817C, PC817x (x=A-Z)	External:Cl,Cr≥7.62m m, 110°C	DIN EN 60747-5-5 UL 1577	VDE 40042139 UL E465130
(Alternative)	Changzhou Galaxy Century Micro-electronics Co., Ltd.	BL817 (A,B,C,D,L), BL817M (A,B,C,D,L), BL817S (A,B,C,D,L)	External:Cl,Cr≥7.5m m, 100°C	DIN EN 60747-5-5 UL 1577	VDE 40034140 UL E340048
(Alternative)	Shenzhen Orient Components Co. Ltd.	ORPC817 x , ORPC817M x (x can from 0 to 9, A to Z or blank)	External:Cl,Cr≥7.6m m, 110°C	DIN EN 60747-5-5 UL 1577	VDE 40029733 UL E323844

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Clause	Requirement + Test		Result - Remark		Verdict
(Alternative)	CRM ICBG (Wuxi) Co., Ltd.	PC817x (x=A-Z)	External:Cl,Cr≥7.62mm, 110°C	DIN EN 60747-5-5 UL 1577	VDE 40042139 UL E465130
(Alternative)	Everlight Electronics Co., Ltd.	EL817 (May be followed by any letters or numbers)	External:Cl,Cr≥7.6mm, 110°C	DIN EN 60747-5-5 UL 1577	VDE 132249 UL E214129
(Alternative)	Bright Led Electronics Corp	BPC-817 (A,B,C,D,L), BPC-817 M, BPC-817 S	External:Cl,Cr≥7.6mm, 110°C	DIN EN 60747-5-5 UL 1577	VDE 40007240 UL E236324
(Alternative)	Lite-On Technology Corporation	LTV-817	External:Cl,Cr≥7.0mm, 115°C	DIN EN 60747-5-5 UL 1577	VDE 40015248 UL E113898
(Alternative)	COSMO Electronics Corporation	K1010	External:Cl,Cr≥6.5mm, 115°C	DIN EN 60747-5-5 UL 1577	VDE 101347 UL E169586
Current sense resistor (R33)	Interchangeable	Interchangeable	0.47Ω min, 2W	--	Tested within apparatus
Thermistor (RT1)	Interchangeable	Interchangeable	5Ω at 25°C, 5A	--	Tested within apparatus
Bridge Diodes (D1,D2,D3, D4)	Interchangeable	Interchangeable	800V min, 2A min.	--	Tested within apparatus
Switching Transistor (Q1)	Interchangeable	Interchangeable	650V min, 7A min.	--	Tested within apparatus
Electrolytic capacitor (EC1)	Interchangeable	Interchangeable	68uF, 450V min, 105°C	--	Tested within apparatus
Detachable power cord set					
Power Plug (SASO)	SHENZHEN G-CINDA POWER SOLUTION CO LTD	GXD-018	Plug: 3A, 6A, 10A, 13A, AC250V Plug fuse: 10A, 250VAC	SASO 2203	SASO KSA R310565
(Alternative)	I-Sheng	SP-65	AC250V, 3A/6A/10A/13A Plug fuse: 10A, 250VAC	SASO 2203	SASO RZKSA211291 601

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Clause	Requirement + Test		Result - Remark		Verdict
(Alternative)	Interchangeable	Interchangeable	AC250V, 3A/6A/10A/13A Plug fuse: 10A, 250VAC	SASO 2203	KSA or other SASO cert. marks
(Alternative)	I-Sheng	SP-62	AC250V, 3A/5A/10A/13A Plug fuse: 10A, 250VAC	SASO 2203:2018	CVC
(Alternative)	I-Sheng	SP-65	AC250V, 3A/5A/10A Plug fuse: 10A, 250VAC	SASO 2203:2018	CVC
(Alternative)	Interchangeable	Interchangeable	AC250V, 3A/6A/10A/13A Plug fuse: 10A, 250VAC	SASO 2203:2018	CVC or other SASO cert. marks
Power Connector (SASO)	SHENZHEN G- CINDA POWER SOLUTION CO LTD	DRF-005	AC250V, 10A	IEC/EN 60320- 1:2015	VDE 40034483
(Alternative)	I-Sheng	IS-14N	AC250V, 16A	IEC/EN 60320- 1:2015	ENEC16/FI/22/ 01023
(Alternative)	Interchangeable	Interchangeable	AC250V, 10A	IEC/EN 60320- 1:2015	S & other EU certification marks
(Alternative)	I-Sheng	IS-14	AC250V, 10A	IEC/EN 60320- 1:2015	ENEC
(Alternative)	Interchangeable	Interchangeable	AC250V, 10A	IEC/EN 60320- 1:2015	ENEC or other EU certification marks
Power cord (SASO)	SHENZHEN G- CINDA POWER SOLUTION CO LTD	H05VVH2-F	3x0.75mm ²	EN 50525-2-11	VDE 40040170
(Alternative)	I-Sheng	H05VVH2-F	3x0.75mm ²	EN 50525-2-11	VDE 40006070
(Alternative)	Interchangeable	H05VVH2-F	3x0.75mm ²	EN 50525-2- 11:2011	S & other EU certification marks
(Alternative)	I-Sheng	H05VV-F	3x0.75mm ² 3x1.0mm ² 3x1.5mm ²	IEC 60227- 5:2011 EN 50525-2- 11:2011	VDE

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Clause	Requirement + Test			Result - Remark	Verdict
(Alternative)	I-Sheng	H03VV-F	3x0.75mm ²	IEC 60227-5:2011 EN 50525-2-11:2011	VDE
(Alternative)	I-Sheng	H05RR-F	3x0.75mm ²	IEC 60245-4:2011	VDE
(Alternative)	Interchangeable	Interchangeable	3x0.75mm ² 3x1.0mm ² 3x1.5mm ²	EN 50525-2-11:2011 IEC 60245-4:2011 IEC 60227-5:2011	VDE or other EU certification marks
Supplementary information: 1) Provided evidence ensures the agreed level of compliance. See OD-CB2039. 2) License available upon request.					

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Clause	Requirement + Test	Result - Remark	Verdict

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

1.6.2	TABLE: Electrical data (in normal conditions)						P
U (V)	I (A)	Irated (A)	P (W)	Fuse #	Ifuse (A)	Condition/status	
HDMI mode							
90/50Hz	0.27	--	14.6	F1	0.27	Full white screen, Brightness: 100%, Contrast: 100%, 1920*1080@60Hz, 1KHz sinusoidal signal and turned to 1/8 non-clipped output power to speakers: 0.51V	
90/60Hz	0.27	--	14.7	F1	0.27		
100/50Hz	0.24	0.40	14.5	F1	0.24		
100/60Hz	0.25	0.40	14.5	F1	0.25		
240/50Hz	0,11	0.25	14.6	F1	0,11		
240/60Hz	0.12	0.25	14.6	F1	0.12		
264/50Hz	0.11	--	14.7	F1	0.11		
264/60Hz	0.11	--	14.8	F1	0.11		
VGA mode							
90/50Hz	0.29	--	14.4	F1	0.29	Full white screen, Brightness: 100%, Contrast: 100%, 1920*1080@60Hz, 1KHz sinusoidal signal and turned to 1/8 non-clipped output power to speakers: 0.51V	
90/60Hz	0.29	--	14.5	F1	0.29		
100/50Hz	0.25	0.40	14.4	F1	0.25		
100/60Hz	0.26	0.40	14.3	F1	0.26		
240/50Hz	0.12	0.25	14.5	F1	0.12		
240/60Hz	0.13	0.25	14.4	F1	0.13		

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Clause	Requirement + Test				Result - Remark	Verdict
264/50Hz	0.12	--	14.6	F1	0.12	
264/60Hz	0.12	--	14.7	F1	0.12	
DP mode						
90/50Hz	0.29	--	14.9	F1	0.29	Full white screen, Brightness: 100%, Contrast: 100%, 1920*1080@60Hz, 1KHz sinusoidal signal and turned to 1/8 non-clipped output power to speakers: 0.51V
90/60Hz	0.29	--	15.0	F1	0.29	
100/50Hz	0.25	0.40	14.8	F1	0.25	
100/60Hz	0.26	0.40	14.8	F1	0.26	
240/50Hz	0.12	0.25	14.8	F1	0.12	
240/60Hz	0.13	0.25	14.9	F1	0.13	
264/50Hz	0.12	--	15.0	F1	0.12	
264/60Hz	0.12	--	15.1	F1	0.12	
supplementary information						
The measured input current at rated voltage shall be less than or equal to 110 % of rated current. The worst condition has been taken into account.						

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)	
+12(For Power Board output)	--	12.2	3.4	41.4	
supplementary information:					
Supplied by 240V/60Hz					

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

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.		
T1	Pin 3/4 – earth	50.2	--	T1	

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Clause	Requirement + Test	Result - Remark	Verdict
After D9 to earth	--	12.3	D9
LED driver output (for LED backlight) “+” to “-”	--	41.0	--
Fault test performed on voltage limiting components	Voltage measured (V) in SELV circuits (V peak or V d.c.)		
D9 s-c	CON2 output: 0V*		
EC3 s-c	CON2 output: 0V*		
supplementary information:			
Supplied by 240V/60Hz			
*Unit shut down.			

2.5	TABLE: Limited power sources					P
Note: Measured Uoc (V) with all load circuits disconnected						
Components	Test condition (Single fault)	Uoc (V)	Isc (A)		VA	
			Meas.	Limit	Meas.	Limit
+12.0Vdc output (CON2)	Normal	12.3	3.4	8	41.4	100
+12.0Vdc output (CON2)	R33 SC	0	0	8	0	100
SC=Short circuit, SC =Short circuit, *Unit shutdown immediately, no hazard.						

2.10.2	Table: working voltage measurement				P
Location		RMS voltage (V)	Peak voltage (V)	Frequency(Hz)	Comments
Test with unapproved power board:					
T1 pin9/10-Pin1		190	322	51.9K	--
T1 pin9/10-Pin3		210	419	51.9K	--
T1 pin9/10-Pin5		144	287	51.9K	--
T1 pin9/10-Pin6		144	283	60	--
T1 pin7/8-Pin1		135	284	60	--
T1 pin7/8-Pin3		212	442	51.9K	Max. Vpeak Max. Vrms
T1 pin7/8-Pin5		144	287	60	--
T1 pin7/8-Pin6		141	319	51.9K	--
CY3		200	286	60	--
CY5		140	269	60	--
U2 pin1-3		145	278	60	--
U2 pin1-4		149	277	60	--
U2 pin2-3		148	277	60	--

U2 pin2-4	149	279	60	--
supplementary information:				
Input 240V 60Hz				

2.10.5	TABLE: Distance through insulation measurements					P
Distance through insulation (DTI) at/of:		U peak (V)	U rms (V)	Test volt- age (V)	Required DTI (mm)	DTI (mm)
Plastic enclosure		420	250	AC 3000	>0.4	1.
Supplementary information: ¹ . For approved component source see appended table 1.5.1.						

4.3.8	TABLE: Batteries	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:		

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Clause	Requirement + Test	Result - Remark	Verdict

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) :	Test A: 90V, 60Hz (Horizontal) Test B: 264V, 60Hz (Horizontal) Test C: 264V, 60Hz (Vertical, turn left) Test D: 264V, 60Hz (Vertical, turn right)			—	
	Ambient Tmin (°C) :	See below	See below		—	
	Ambient Tmax (°C) :	See below	See below		—	
Maximum measured temperature T of part/at::		T (°C)			Allowed Tmax (°C)	
Test condition		A	B	C	D	--
CON1 body		49.4	50.4	49.3	49.0	70
RV1 body		53.8	53.0	52.7	52.6	105
RT1 body		66.2	57.2	56.9	56.7	105
CX1 body		52.3	52.8	51.8	53.2	110
LF1 coil		53.1	52.9	51.5	54.1	130
CY3 body		58.2	56.8	54.4	58.2	125
CY5 body		51.5	52.2	51.7	52.7	125
PCB near D1		56.8	55.5	54.0	56.4	130
EC1 body		52.0	52.9	52.9	53.9	105
PCB near U1		58.3	61.4	63.4	59.9	130
EC2 body		57.7	60.7	61.8	58.1	105
PCB near Q1		66.1	74.0	72.8	73.9	130
U2 body		55.7	58.0	60.6	54.8	110
T1 coil		68.5	73.4	67.4	71.8	110
T1 core		68.4	72.8	67.0	71.5	110
EC3 body		61.9	66.1	60.9	61.1	105
L1 coil		57.4	60.1	58.6	55.4	130
PCB near U4 (Main Board)		65.0	66.3	68.0	63.8	130
Panel		45.2	45.6	44.0	44.5	80
Plastic enclosure rear inside		43.8	43.4	41.7	42.7	60
Metal Enclosure		46.9	47.6	45.0	47.4	70
Plastic enclosure rear outside		40.9	41.4	41.4	41.3	95
Ambient		40.0	40.0	40.0	40.0	--

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Clause	Requirement + Test	Result - Remark	Verdict

Supplementary information:

The temperatures were measured under worst normal mode defined in 1.2.2.1 and as described in sub-clause 1.6.2 and at voltages as described above.

According to test data of table 1.6.2, heating test performed on configuration (DP interface) can represent other configurations.

The maximum ambient temperature permitted by the manufacturer's specification is 40°C.

The max. Temperature is calculated as follows:

Class B → $T_{max} = 120 - 10 = 110^{\circ}\text{C}$

Above temperature value have been re-calculate to ambient temperature: 40°C.

Temperature T of winding:	t1 (°C)	R1 (Ω)	t2 (°C)	R2 (Ω)	T (°C)	Allowed Tmax (°C)	Insulation class

Supplementary information:

4.5.5	TABLE: Ball pressure test of thermoplastic parts			P
	Allowed impression diameter (mm):	≤ 2 mm		—
Part		Test temperature (°C)	Impression diameter (mm)	
T1 Bobbin		125	0.9	
LF1 Bobbin		125	0.8	
Supplementary information				

4.7	TABLE: Resistance to fire				P
Part	Manufacturer of material	Type of material	Thickness (mm)	Flammability class	Evidence
--	--	--	--	--	--
Supplementary information: See table 1.5.1					

5.1	TABLE: touch current measurement			P
Measured between:		Measured (mA)	Limit (mA)	Comments/conditions
Supplied with 264V/60Hz.				
L/N pins and earthed metal part	0.33	3.5	Switch 'e' opened	
L/N pins and plastic enclosure (with metal foil)	0.01	0.25	Switch 'e' closed	
L/N pins and secondary terminals	0.08	0.25	Switch 'e' closed	
supplementary information:				

IEC 60950-1				
Clause	Requirement + Test		Result - Remark	Verdict
5.2	TABLE: Electric strength tests, impulse tests and voltage surge tests			P
Test voltage applied between:		Voltage shape (AC, DC, impulse, surge)	Test voltage (V)	Breakdown Yes / No
Basic/supplementary				
L to N (Fuse F1 disconnected)		AC	1500	No
L/N pins to earthed metal part		AC	1500	No
Reinforced:				
Unit: Primary to secondary terminals		AC	3000	No
Unit: Primary to plastic enclosure		AC	3000	No
Unit primary to LCD panel		AC	3000	No
T1: Primary winding to secondary winding		AC	3000	No
T1: Core to secondary winding		AC	3000	No
Each layer of insulation tape covered the transformer T1		AC	3000	No
Supplementary information: Test after humidity treatment, heating test, and for the first 3 reinforced insulation items after each fault condition test. Test were performed on product with each source of transformer and each source of insulation tape used in and around transformer listed in table 1.5.1 *Core of T1 considered as primary part.				

5.3	TABLE: Fault condition tests					P
	Ambient temperature (°C)		See below			—
	Power source for EUT: ManuFacturer, model/type, output rating		--			—
Component No.	Fault	Supply voltage (V)	Test time	Fuse #	Fuse current (A)	Observation
D1	s-c	264	1 s	F1	--	F1 opened immediately, no hazards.
D3	s-c	264	1 s	F1	--	F1 opened immediately, no hazards.
EC1	s-c	264	1 s	F1	--	F1 opened immediately, no hazards.
EC2	s-c	264	10 mins	F1	0.03	Unit shut down, no damage, no hazards.
U1 pin 1-5	s-c	264	10 mins	F1	0.03	Unit shut down, no damage, no hazards.
U1 pin 2-5	s-c	264	10 mins	F1	0.03	Unit shut down, no damage, no hazards.
R33	s-c	264	1 s	F1	--	F1 opened immediately, no hazards.

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Clause	Requirement + Test				Result - Remark	Verdict
Q1 D-S	s-c	264	1 s	F1	--	F1 opened immediately, no hazards.
Q1 D-G	s-c	264	1 s	F1	--	F1 opened immediately, no hazards.
Q1 S-G	s-c	264	10 mins	F1	0.03	Unit shut down, no damage, no hazards.
D9	s-c	264	10 mins	F1	0.03	Unit shut down, no damage, no hazards.
EC3	s-c	264	10 mins	F1	0.03	Unit shut down, no damage, no hazards.
U2 pin 1-2	s-c	264	10 mins	F1	0.03	Unit shut down, no damage, no hazards.
U2 pin 3-4	s-c	264	10 mins	F1	0.03	Unit shut down, no damage, no hazards.
U2 pin 1	o-c	264	10 mins	F1	0.03	Unit shut down, no damage, no hazards.
U2 pin 3	o-c	264	10 mins	F1	0.03	Unit shut down, no damage, no hazards.
T1 pin 1-3	s-c	264	10 mins	F1	0.03	Unit shut down, no damage, no hazards.
T1 pin 5-6	s-c	264	10 mins	F1	0.03	Unit shut down, no damage, no hazards.
T1 pin 10-7	s-c	264	10 mins	F1	0.03	Unit shut down, no damage, no hazards.
Ventilation openings	block	264	2h25mins	F1	0.12	Unit operated normally, No damage, No hazard. The max. Temp. of U2 body:44.6°C T1 coil: 60.6°C, T1 core: 60.0°C, Panel: 31.7°C Plastic enclosure rear inside: 29.5°C Metal enclosure: 33.8°C Plastic enclosure rear outside: 27.4°C Ambient=25.0°C

IEC 60950-1						
Clause	Requirement + Test				Result - Remark	Verdict
T1 pin 9/10 to earth (After D9)	o-l	264	6hrs 30mins	F1	0.12->0.28- >0.37->0.03	Overload to 3.5A then unit shut down. Temp. was stabled at 3.4A, No damage, No hazard. The max. Temp. of U2 body:52.5°C T1 coil: 123.8°C, T1 core: 123.5°C, Panel: 29.6°C Plastic enclosure rear inside: 27.7°C Metal enclosure: 38.2°C Plastic enclosure rear outside: 25.7°C Ambient=25.0°C
Speaker	s-c	264	1hrs57mins	F1	0.13	Unit operated normally, No damage, No hazard. The max. Temp. of U2 body: 45.0°C T1 coil: 61.5°C, T1 core: 61.0°C, Panel: 30.5°C Plastic enclosure rear inside: 26.4°C Metal enclosure: 33.3°C Plastic enclosure rear outside: 26.2°C Ambient=25.0°C
Speaker	max. non-clipped	264	2hrs5mins	F1	0.14	Unit operated normally, No damage, No hazard. The max. Temp. of U2 body: 45.1°C T1 coil: 64.2°C, T1 core: 63.5°C, Panel: 30.0°C Plastic enclosure rear inside: 28.2°C Metal enclosure: 34.0°C Plastic enclosure rear outside: 27.4°C Ambient=25.0°C

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Clause	Requirement + Test	Result - Remark	Verdict

Supplementary information: The unit passed 3000V hi-pot test between primary and accessible output connector after single fault test above.

In fault column, s-c=short-circuited, o-c=open-circuited, o-l=over-loaded.

1. Transformer winding and core temperature limit is 150°C= (175-10-(40-25)) °C;
2. Opto-coupler U2 temperature limit is 125-(40-25) °C =110°C;
3. Test repeated three times with the same result when component damaged;
4. During fault condition where the fuse opened, the same result was obtained when test repeated with each fuse type.

C.2	TABLE: transformers (T1)							P
Loc.	Tested insulation	Working voltage peak / V (2.10.2)	Working voltage rms / V (2.10.2)	Required electric strength (5.2)	Required clearance / mm (2.10.3)*	Required creepage distance / mm (2.10.4)#	Required distance thr. insul. (2.10.5)	
Primary to secondary	Reinforced	442	250	AC 3000	6.2	6.2	Min. two layers insulation tape; or 0.4mm DTI	
Primary to core	Core considered as primary parts	--	--	--	--	--	--	
Core to secondary	Reinforced	442	250	AC 3000	6.2	6.2	Min. two layers insulation tape; or 0.4mm DTI	
Loc.	Tested insulation			Test voltage/ V	Measured clearance / mm	Measured creepage dist./ mm	Measured distance thr. insul. / mm; number of layers	
Primary to secondary	Reinforced			AC 3000	7.5	7.5	TIW used	
Primary to core	Core considered as primary parts			--	--	--	--	
Core to secondary	Reinforced			AC 3000	8.1	8.1	TIW used	

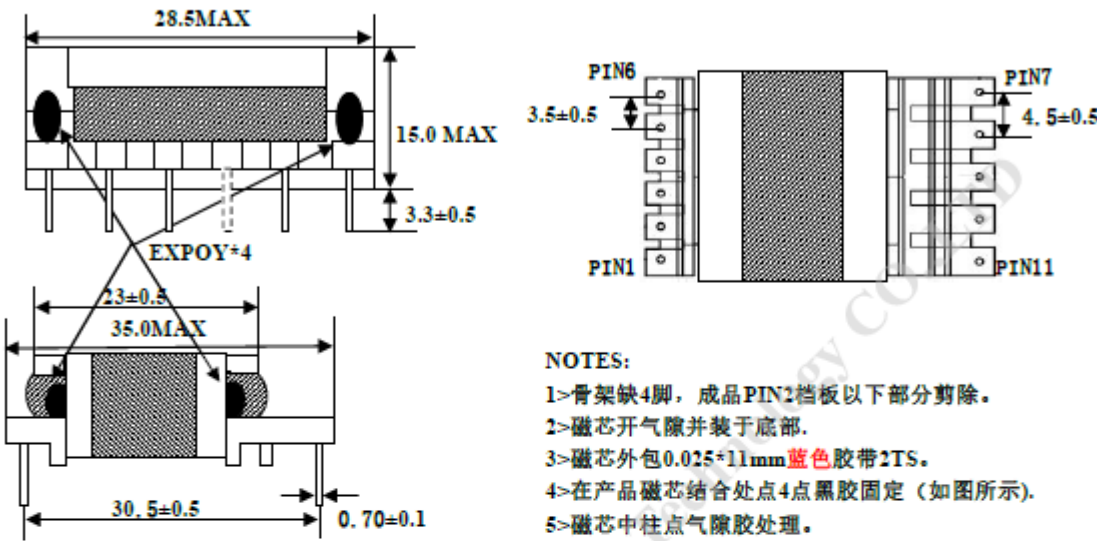
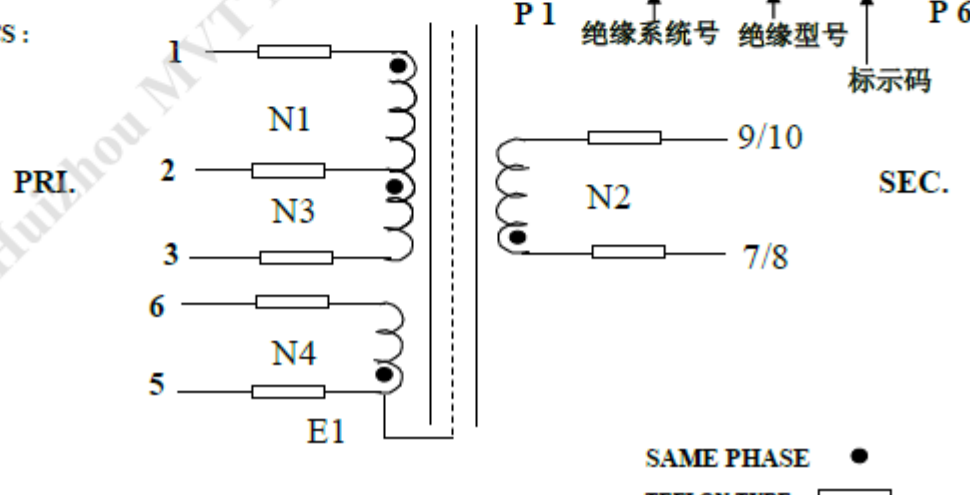
supplementary information:

* Required clearance multiplied by altitude correction factor 1.48 according to the Table A.2 of IEC 60664: 1992+A1:2000+A2:2002 standard. (Equipment operating up to altitudes 5000m)

The limit value of creepage distance adjust according to the larger clearance distance used.

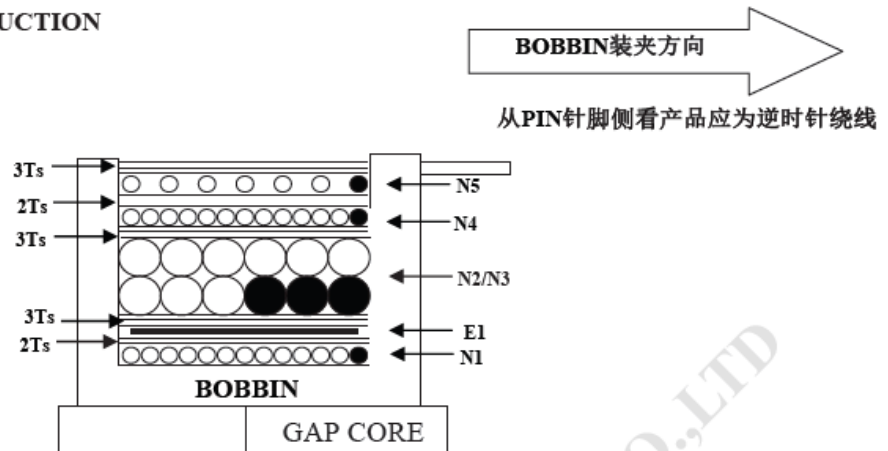
Concentric windings on bobbin. 2 layers insulation tape are provided around outer winding and outer winding is primary. 3 layers insulation tape are provided between each adjacent primary windings and secondary windings. Triple insulated wire used as secondary winding. All pins are prevent contact by insulation tube.

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Clause	Requirement + Test	Result - Remark	Verdict

C.2	TABLE: transformers	P
1. IDENTIFICATION PART TYPE:EQ27 变压器 PART NAME:ZY-T0185 C9 MANUFACTURER : Huizhou MVT New Power Technology CO.,LTD 2. MECHANICAL DIMENSION(UNIT:mm)  NOTES: 1>骨架缺4脚, 成品PIN1档板以下部分剪除。 2>磁芯开气隙并装于底部。 3>磁芯外包0.025*11mm蓝色胶带2TS。 4>在产品磁芯结合处点4点黑胶固定 (如图所示)。 5>磁芯中柱点气隙胶处理。 6>标签6*20 (透明底黑字) ,贴于产品顶部。 3. SCHEMATICS :  变压器编号 ↓ 麦威新 → MSC ZY-T0185 YYWW ← 年周 E518473 ZY-T C9 P 1 绝缘系统号 绝缘型号 标示码 P 6 PRI. 1 N1 2 N3 3 N4 6 N2 5 E1 SEC. 9/10 7/8 SAME PHASE ● TEFLON TUBE: □		

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

4. WINDING CONSTRUCTION



5. WINDING	TERMINAL	WIRE SIZE	TURNS	TAPE LAYERS 0.025*6.2mm蓝色
N1	1----2	2UEWΦ0.30mm*2	14Ts	2TS
E1	5-----	0.025*5mm*45mm背胶铜箔	0.95Ts	3TS
N2	7/8----9/10	TRW(B)Φ0.40mm*3	4Ts	3TS
N3	2---3	2UEWΦ0.30mm*2	14Ts	2TS
N4	5----6	2UEWΦ0.20mm*1	5Ts	3TS

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

10. MATERIAL INFORMATION			
ITEM	MATERIAL	SUPPLIER OR MANUFACTURER	TEMP.RATING
CORE	EQ27 (TD4a) Bs(100°C)=400mT; Ae=93 mm ²	ZHEJIANG TONGDA MACANETIC PRODUCTS CO., LTD	
	EQ27(JF44) Bs(100°C)=400mT; Ae=93 mm ²	WUXI SPINEL MAGNETIC CO.,LTD OR EQUAL	
WIRE	xUEW/MW 75-C xUEW-F/MW 79-C UL NO. E164409	HOI LUEN ELECTRICAL MFR CO LTD	130°C/155°C
	xUEW/130/MW 75-C xUEW/155/MW 79-C UL NO. E221719	ZHEJIANG HONGBO TECHNOLOGY CO LTD	130°C/155°C
BOBBIN	T200HF/T220NA UL NO.E59481 94V-0	CHANGCHUN PLASTICS CO., LTD	150°C
	PM9820 PM9825 UL NO.E41429 94V-0	SUMIDUREZ SINGAPORE PTE LTD	150°C
INSULATION VARNISH	E 962 UL NO.E335405 MW 28-C	ZHUHAI CHANGXIAN NEW MATERIALS TECHNOLOGY CO LTD	130°C
	T-4260(a) UL NO.E228349 MW 28-C	SUZHOU TAIHU ELECTRIC ADVANCED MATERIAL CO LTD	130°C
TAPE	CT*(b)(g) UL NO .E165111	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	130°C
	CT*(b)(g) CT*(c)(g) UL NO.E324093	DONGGUAN SHIN YAHUA ELECTRONIC MATERIAL CO LTD	130°C
	LY-19-02-15b LY-19-02-18b UL NO.E246820	CHANG SHU LIANG YI TAPE INDUSTRY CO LTD	130°C
TUBE	CB-TT-L E180908	CHANGYUAN ELECTRONICS GROUP CO LTD	200°C
	TFL.E478618	HUIZHOU DONGJU FLUO TECH PLASTIC CO LTD	200°C
	TFL E156256	GREAT HOLDING INDUSTRIAL CO LTD	200°C
supplemental insulation	TEX-E,TEX-EA UL E206440	FURUKAWA ELECTRIC CO., LTD.	130°C
	TIW-FXX ULNO;E488352 VDE40047395	HUIZHOU DONGJU FLUO TECH PLASTIC CO LTD	155°C
	TIW-3LZX@@@%\$ TIW-3X\$ UL E166483	TOTOKU ELECTRIC CO LTD	155°C

Measurement Section				
Clause	Requirement + Test		Result - Remark	Verdict
2.6.3.4	TABLE: ground continue test			P
Location		Resistant measured (mΩ)	Voltage drop (V)	Comments
AC inlet PE pin to Metal enclosure		13	0.41	32A, 2 minutes
AC inlet PE pin to Metal enclosure		10	0.40	40A, 2 minutes
Note: Pass: < 0.1 Ohm				

Measurement Section			
Clause	Requirement + Test	Result - Remark	Verdict
4.6.1, 4.6.2	TABLE: Enclosure opening measurements		P
Location		Size (mm)	Comments
Horizontal position			
Metal enclosure			
Top		Max. Ø1.8mm	Numerous circle openings provided.
Left		No openings.	--
Right		No openings.	--
Rear		Max. Ø1.8mm	Numerous circle openings provided.
		Width 0.85mm	Numerous rectangle openings provided.
Bottom		Max. Ø1.8mm Centre to Centre: 3.5mm	Numerous circle openings provided.
Vertical used(turn left)			
Top		No openings.	--
Left		Max. Ø1.8mm	Numerous circle openings provided.
Right		Max. Ø1.8mm	Numerous circle openings provided.
Rear		Max. Ø1.8mm	Numerous circle openings prov©ided.
		Width 0.85mm	Numerous rectangle openings provided.
Bottom		No openings.	--
Vertical used(turn right)			
Top		No openings.	--
Left		Max. Ø1.8mm	Numerous circle openings provided.
Right		Max. Ø1.8mm	Numerous circle openings provided.
Rear		Max. Ø1.8mm	Numerous circle openings provided.
		Width 0.85mm	Numerous rectangle openings provided.
Bottom		No openings.	--
Supplementary information:			

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

**ATTACHMENT TO TEST REPORT IEC 60950-1
EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES**

Information technology equipment – Safety –

Part 1: General requirements

Differences according to.....:	EN 60950-1:2006/A11:2009/A1:2010/A12:2011/A2:2013
Attachment Form No.:	EU_GD_IEC60950_1G
Attachment Originator	SGS Fimko Ltd
Master Attachment	Date 2014-02
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EN 60950-1:2006/A11:2009/A1:2010/A12:2011/A2:2013 – CENELEC COMMON MODIFICATIONS

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
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

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IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN)			
Clause	Requirement + Test	Result - Remark	Verdict
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)	Replace 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.	Added.	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	Deleted.	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 *	Added.	N/A
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.	Added.	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.	Not portable Sound System.	N/A

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN)			
Clause	Requirement + Test	Result - Remark	Verdict
	Add the following clause and annex to the existing standard and amendments.		
	Zx Protection against excessive sound pressure from personal music players		N/A
	Zx.1 General 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. 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. 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. 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. The requirements in this sub-clause are valid for music or video mode only. 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. 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. The requirements do not apply to: □□ hearing aid equipment and professional equipment; NOTE 3 Professional equipment is equipment sold through special sales channels. All products sold through normal electronics stores are considered not to be professional	Not portable Sound System.	N/A

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN)			
Clause	Requirement + Test	Result - Remark	Verdict
	equipment.		
	☐ ☐ 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. 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. For equipment which is clearly designed or intended for use by young children, the limits of EN 71-1 apply.		N/A
	Zx.2 Equipment requirements No safety provision is required for equipment that complies with the following: ☐ ☐ equipment provided as a package (personal music player with its listening device), where the acoustic output $L_{Aeq,T}$ is ≤ 85 dBA measured while playing the fixed "programme simulation noise" as described in EN 50332-1; and ☐ ☐ a personal music player provided with an analogue electrical output socket for a listening device, where the electrical output is ≤ 27 mV measured as described in EN 50332-2, while playing the fixed "programme simulation noise" as described in EN 50332-1. NOTE 1 Wherever the term acoustic output is used in this clause, the 30 s A-weighted equivalent sound pressure level $L_{Aeq,T}$ is meant. See also Zx.5 and Annex Zx. All other equipment shall: a) protect the user from unintentional acoustic outputs exceeding those mentioned above; and 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	Not portable Sound System.	N/A
	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		N/A

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IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN)			
Clause	Requirement + Test	Result - Remark	Verdict
	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 NOTE 2 Examples of means include visual or audible signals. Action from the user is always required. 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. d) have a warning as specified in Zx.3; and e) not exceed the following: 1) equipment provided as a package (player with its listening device), the acoustic output shall be ≤ 100 dBA measured while playing the fixed "programme simulation noise" described in EN 50332-1; and 2) a personal music player provided with an analogue electrical output socket for a listening device, the electrical output shall be ≤ 150 mV measured as described in EN 50332-2, while playing the fixed "programme simulation noise" described in EN 50332-1. For music where the average sound pressure (long term $L_{Aeq,T}$) 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. NOTE 4 Classical music typically has an average sound pressure (long term $L_{Aeq,T}$) 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. 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.		
	Zx.3 Warning The warning shall be placed on the equipment, or on the packaging, or in the instruction manual and shall consist of the following: □□□ the symbol of Figure 1 with a minimum height of 5 mm; and	Not portable Sound System.	N/A

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN)			
Clause	Requirement + Test	Result - Remark	Verdict
	□□□the following wording, or similar: “To prevent possible hearing damage, do not listen at high volume levels for long periods.”  Figure 1 – Warning label (IEC 60417-6044) 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.		
	Zx.4 Requirements for listening devices (headphones and earphones)		N/A
	Zx.4.1 Wired listening devices with analogue input With 94 dBA sound pressure output $L_{Aeq,T}$, the input voltage of the fixed “programme simulation noise” described in EN 50332-2 shall be ≥ 75 mV. 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). NOTE The values of 94 dBA – 75 mV correspond with 85dBA – 27 mV and 100 dBA – 150 mV.	No listening devices.	N/A
	Zx.4.2 Wired listening devices with digital input 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 $L_{Aeq,T}$ of the listening device shall be ≤ 100 dBA. This requirement is applicable in any mode where the headphones can operate, including any	No listening devices.	N/A

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN)			
Clause	Requirement + Test	Result - Remark	Verdict
	available setting (for example built-in volume level control, additional sound feature like equalization, etc.). NOTE An example of a wired listening device with digital input is a USB headphone.		
	Zx.4.3 Wireless listening devices 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 abovementioned programme simulation noise, the acoustic output $L_{Aeq,T}$ of the listening device shall be ≤ 100 dBA. NOTE An example of a wireless listening device is a Bluetooth headphone.	No listening devices.	N/A
	Zx.5 Measurement methods 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. NOTE Test method for wireless equipment provided without listening device should be defined.	No listening devices.	N/A
2.7.1	Replace the subclause as follows: Basic requirements 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): 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; 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	Replaced.	P

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN)			
Clause	Requirement + Test	Result - Remark	Verdict
	devices in the building installation;		
	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. 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.	No PLUGGABLE EQUIPMENT TYPE B or PERMANENTLY CONNECTED EQUIPMENT.	N/A
2.7.2	This subclause has been declared 'void'.	Declared.	N/A
3.2.3	Delete the NOTE in Table 3A, and delete also in this table the conduit sizes in parentheses.	Deleted.	N/A
3.2.5.1	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". In Table 3B, replace the first four lines by the following: Up to and including 6 0,75 a) Over 6 up to and including 10 (0,75) b) 1,0 Over 10 up to and including 16 (1,0) c) 1,5 In the conditions applicable to Table 3B delete the words "in some countries" in condition a). In NOTE 1, applicable to Table 3B, delete the second sentence.	No power cord provided.	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	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 Delete the fifth line: conductor sizes for 13 to 16 A	Deleted.	N/A
4.3.13.6 (A1:2010)	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	Replaced.	N/A

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN)			
Clause	Requirement + Test	Result - Remark	Verdict
	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).		
	Standards taking into account mentioned Recommendation and Directive which demonstrate compliance with the applicable EU Directive are indicated in the OJEC.	Replaced.	N/A
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 µSv/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.	No X-ray radiation.	N/A
Bibliography	Additional EN standards.		—

ZA	NORMATIVE REFERENCES TO INTERNATIONAL PUBLICATIONS WITH THEIR CORRESPONDING EUROPEAN PUBLICATIONS	—
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ZB ANNEX (normative) SPECIAL NATIONAL CONDITIONS (EN)			
Clause	Requirement + Test	Result - Remark	Verdict
1.2.4.1	In Denmark , 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 Norway and Sweden , for requirements see 1.7.2.1 and 7.3 of this annex.	No cable distribution systems.	N/A
1.5.7.1 (A11:2009)	In Finland , Norway and Sweden , 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.	No such resistors.	N/A
1.5.8	In Norway , 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).		N/A
1.5.9.4	In Finland , Norway and Sweden , the third dashed	No TNV circuits.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict

ZB ANNEX (normative) SPECIAL NATIONAL CONDITIONS (EN)			
Clause	Requirement + Test	Result - Remark	Verdict
	sentence is applicable only to equipment as defined in 6.1.2.2 of this annex.		
1.7.2.1	In Finland, Norway and Sweden, 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. The marking text in the applicable countries shall be as follows: In Finland: "Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan" In Norway: "Apparatet må tilkoples jordet stikkontakt" In Sweden: "Apparaten skall anslutas till jordat uttag"		N/A
1.7.2.1 (A11:2009)	In Norway and Sweden, 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. 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. 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: "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)."		

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

ZB ANNEX (normative) SPECIAL NATIONAL CONDITIONS (EN)			
Clause	Requirement + Test	Result - Remark	Verdict
	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. Translation to Norwegian (the Swedish text will also be accepted in Norway): “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.” Translation to Swedish: ”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.”		N/A
1.7.2.1 (A2:2013)	In Denmark, 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. The marking text in Denmark shall be as follows: In Denmark: “Apparatets stikprop skal tilsluttes en stikkontakt med jord, som giver forbindelse til stikproppens jord.”		N/A
1.7.5 1.7.5 (A11:2009)	In Denmark, 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. For CLASS II EQUIPMENT the socket outlet shall be in		N/A

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

ZB ANNEX (normative) SPECIAL NATIONAL CONDITIONS (EN)			
Clause	Requirement + Test	Result - Remark	Verdict
	accordance with Standard Sheet DKA 1-4a.		
1.7.5 (A2:2013)	In Denmark, 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	No socket outlet.	N/A
2.2.4	In Norway , for requirements see 1.7.2.1, 6.1.2.1 and 6.1.2.2 of this annex.	No TNV circuits.	N/A
2.3.2	In Finland , Norway and Sweden there are additional requirements for the insulation. See 6.1.2.1 and 6.1.2.2 of this annex.	No TNV circuits.	N/A
2.3.4	In Norway , for requirements see 1.7.2.1, 6.1.2.1 and 6.1.2.2 of this annex.	No TNV circuits.	N/A
2.6.3.3	In the United Kingdom , the current rating of the circuit shall be taken as 13 A, not 16 A.		P
2.7.1	In the United Kingdom , 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 Finland , Norway and Sweden , there are additional requirements for the insulation, see 6.1.2.1 and 6.1.2.2 of this annex.	No TNV circuits.	N/A
3.2.1.1	In Switzerland , supply cords of equipment having a RATED CURRENT not exceeding 10 A shall be	No such power cord set provided.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict

ZB ANNEX (normative) SPECIAL NATIONAL CONDITIONS (EN)			
Clause	Requirement + Test	Result - Remark	Verdict
	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 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, 16 A		
3.2.1.1	In Denmark, 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. 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. 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.	No such power cord set provided.	N/A
3.2.1.1 (A2:2013)	In Denmark, 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. 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	No such power cord set provided.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict

ZB ANNEX (normative) SPECIAL NATIONAL CONDITIONS (EN)			
Clause	Requirement + Test	Result - Remark	Verdict
	shall be provided with a plug in accordance with standard sheet DK 2-1a or DK 2-5a. 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. Justification the Heavy Current Regulations, 6c		
3.2.1.1	In Spain , 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. 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. 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. If poly-phase equipment is provided with a supply cord with a plug, this plug shall be in accordance with UNE-EN 60309-2.	No such power cord set provided.	N/A
3.2.1.1	In the United Kingdom , 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. NOTE 'Standard plug' is defined in SI 1768:1994 and essentially means an approved plug conforming to BS 1363 or an approved conversion plug.	No such power cord set provided.	N/A
3.2.1.1	In Ireland , 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)	No such power cord set provided.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict

ZB ANNEX (normative) SPECIAL NATIONAL CONDITIONS (EN)			
Clause	Requirement + Test	Result - Remark	Verdict
	Regulations 1997.		
3.2.4	In Switzerland , for requirements see 3.2.1.1 of this annex.	No such power cord set provided.	N/A
3.2.5.1	In the United Kingdom , a power supply cord with conductor of 1,25 mm ² is allowed for equipment with a rated current over 10 A and up to and including 13 A.	No such power cord set provided.	N/A
3.3.4	In the United Kingdom , 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 ² to 1,5 mm ² nominal cross-sectional area.	No such power cord set provided.	N/A
4.3.6	In the United Kingdom , 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.	Not a direct plug-in equipment.	N/A
4.3.6	In Ireland , 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
5.1.7.1	In Finland, Norway and Sweden TOUCH CURRENT measurement results exceeding 3,5 mA r.m.s. are permitted only for the following equipment: • 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		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

ZB ANNEX (normative) SPECIAL NATIONAL CONDITIONS (EN)			
Clause	Requirement + Test	Result - Remark	Verdict
	PERSON; • STATIONARY PLUGGABLE EQUIPMENT TYPE B; • STATIONARY PERMANENTLY CONNECTED EQUIPMENT.		
6.1.2.1 (A1:2010)	In Finland, Norway and Sweden, add the following text between the first and second paragraph of the compliance clause: If this insulation is solid, including insulation forming part of a component, it shall at least consist of either - two layers of thin sheet material, each of which shall pass the electric strength test below, or - one layer having a distance through insulation of at least 0,4 mm, which shall pass the electric strength test below. 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 - 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 - is subject to ROUTINE TESTING for electric strength during manufacturing, using a test voltage of 1,5 kV.		N/A
	It is permitted to bridge this insulation with an optocoupler complying with 2.10.5.4 b). It is permitted to bridge this insulation with a capacitor complying with EN 60384-14:2005, subclass Y2. A capacitor classified Y3 according to EN 60384-14:2005, may bridge this insulation under the following conditions: - 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	No TNV circuits.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict

ZB ANNEX (normative) SPECIAL NATIONAL CONDITIONS (EN)			
Clause	Requirement + Test	Result - Remark	Verdict
	60950-1:2006, 6.2.2.1; - the additional testing shall be performed on all the test specimens as described in EN 60384-14: - 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.		
6.1.2.2	In Finland, Norway and Sweden , 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.	No TNV circuits.	N/A
7.2	In Finland, Norway and Sweden , 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 Norway and Sweden , for requirements see 1.2.13.14 and 1.7.2.1 of this annex.		N/A

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Annex ZD (informative) IEC and CENELEC code designations for flexible cords		
Type of flexible cord	Code designations	
	IEC	CENELEC
PVC insulated cords		
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
Rubber insulated cords		
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
Cords having high flexibility		
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

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Clause	Requirement + Test	Result - Remark	Verdict

ATTACHMENT TO TEST REPORT IEC 60950-1 with A1:2009 and A2:2013 CANADA NATIONAL DIFFERENCES Information technology equipment – Safety – Part 1: General requirements	
Differences according to.....:	CAN/CSA-C22.2 No. 60950-1-07, Amd 1:2011, Amd 2:2014
Attachment Form No.....:	CA_ND_IEC60950_1g
Attachment Originator	CSA
Master Attachment	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.	In accordance with the National Electrical Code (NEC), ANSI/NFPA 70, and unless marked or otherwise identified, the Standard for 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.	Not such equipment	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 CEC/NEC.		N/A
	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
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		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Conditions," unless it is part of a range that extends into the "Normal Operating Conditions."		
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.	No fuse used for output.	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.	No such components provided.	N/A
	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.	No power supply cord provided.	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, is required to comply with special earthing, wiring, marking and installation instruction requirements.	No connection to a centralized d.c. power system.	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.		N/A
3.2.5	Power supply cords are required to be no longer than 4.5 m in length.	No power supply cord provided.	N/A
	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.	See above.	N/A
	Flexible power supply cords are required to be compatible with Article 400 of the NEC, and Tables	See above.	N/A

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	11 and 12 of the CEC.		
3.2.9	Permanently connected equipment is required to have a suitable wiring compartment and wire bending space.		N/A
3.3	Wiring terminals and associated spacings for field wiring connections shall comply with CSA C22.2 No. 0		N/A
3.3.3	Wire binding screws are not permitted to attach conductors larger than 10 AWG (5.3 mm ²).		N/A
3.3.4	Terminals for permanent wiring, including protective earthing terminals, are required to be suitable for US/Canadian 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 motor control devices.	N/A
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 switches and circuit breakers.	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.	No battery systems.	N/A
4.3.12	The maximum quantity of flammable liquid stored in equipment is required to comply with NFPA 30.	No flammable liquid.	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).	No laser.	N/A
4.7	For computer room applications, automated information storage systems with combustible media greater than 0.76 m ³ (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.	Not automated information storage systems.	N/A
4.7.3.1	For computer room applications, enclosures with	No such enclosures.	N/A

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	combustible material measuring greater than 0.9 m ² (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).	No ionizing radiation.	N/A
OTHER DIFFERENCES			
The following key national differences are based on requirements other than national regulatory requirements.			
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.	Components are approved by UL, also to relevant Canadian standard, see appended table 1.5.1 of IEC 60950-1 test report for details.	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	No connection to the DC mains supply.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	equipment.		
2.3.1	For TNV-2 and TNV-3 circuits with other than ringing signals and with voltages exceeding 42.4 V _{peak} or 60 V _{d.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.	No TNV circuits.	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.	No TNV circuits	N/A
2.6.2	Equipment with functional earthing is required to be marked with the functional earthing symbol (IEC 60417-6092).		N/A
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.		P
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 CRT.	N/A
4.3.2	Equipment with handles is required to comply with special loading tests.	No handle provided.	N/A
4.3.8	Battery packs for both portable and stationary applications are required to comply with special component requirements.		N/A
5.1.8.3	Equipment intended to receive telecommunication ringing signals is required to comply with a special touch current measurement tests.	No TNV circuits.	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.		N/A
	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.		N/A
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.	No TNV circuits.	N/A
Annex EE	UL articulated accessibility probe (Fig EE.3) required for assessing accessibility to document/media shredders instead of the Figure	Not document/media shredders equipment.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	2A test finger.		
M.2	Continuous ringing signals up to 16 mA only are permitted if the equipment is subjected to special installation and performance restrictions.	No TNV circuits.	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.	No TNV circuits.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict

ATTACHMENT TO TEST REPORT IEC 60950-1 with A1: 2009 and A2:2013 U.S.A. NATIONAL DIFFERENCES 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_IEC60950_1G
Attachment Originator.....:	UL
Master Attachment.....:	Date 2014-07
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	Special national conditions		P
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	In accordance with the National Electrical Code (NEC), ANSI/NFPA 70, and unless marked or otherwise identified, the Standard for Electronic Computer/Data-Processing Equipment, ANSI/NFPA 75.	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.	Not such equipment.	N/A
1.4.14	For Pluggable Equipment Type A, the protection in the installation is assumed to be 20A.	Considered.	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. 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	Single-phase equipment.	P
	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		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	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 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	No wiring terminals	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	No such fuses.	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).	No fuse used for output.	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.	No such components provided.	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 shall be in accordance with the NEC/CEC.	Pluggable equipment type A.	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
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	No connection to a centralized d.c. power system.	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 equipment is not permanently connected equipment.	N/A

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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	The equipment is not permanently connected equipment.	N/A
3.3	Wiring terminals and associated spacings for field wiring connections shall comply with CSA C22.2 No. 0.	Neither wiring terminal nor associated spacings.	N/A
3.3.3	Wire binding screws are not permitted to attach conductors larger than 10 AWG (5.3 mm ²).	No wire binding screws.	N/A
3.3.4	Terminals for permanent wiring, including protective earthing terminals, are suitable for Canadian/US wire gauge sizes, are	No terminals for permanent wiring.	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 wiring terminal.	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,	No motor control devices.	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 are required to have the "on" position indicated by the handle in the up position.	No such switches and circuit breakers.	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	No battery systems.	N/A
4.3.12	The maximum quantity of flammable liquid stored in equipment is required to comply with NFPA 30.	No flammable liquid.	N/A

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
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).	No laser.	N/A
4.7	For computer room applications, automated information storage systems with combustible media greater than 0.76 m ³ (27 cu ft) have a provision for connection of either automatic sprinklers or a gaseous agent extinguishing system with an extended discharge	Not automated information storage systems.	N/A
4.7.3.1	For computer room applications, enclosures with combustible material measuring greater than 0.9 m ² (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.	No such enclosures.	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.	See above.	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).	No ionizing radiation.	N/A
	OTHER NATIONAL DIFFERENCES		P
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,	Components are approved by UL, see appended table 1.5.1 of IEC 60950-1 test report.	P

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IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	surge protective devices, tubing, vehicle battery adapters, wire connectors, and wire and cables		
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	No connection to DC mains 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 _{peak} or 60 V _{d.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.	No TNV circuits within the equipment.	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.	No TNV circuits within the equipment.	N/A
2.6.2	Equipment with functional earthing marked with the functional earthing symbol (IEC 60417-6092)		N/A
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.		P
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 CRT.	N/A
4.3.2	Equipment with handles complies with special loading tests	Not applicable.	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 is required to comply with a special touch current measurement tests.	No TNV circuits within the equipment.	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		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		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	components as necessary		
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	No TNV circuits within the 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	The equipment is not such equipment.	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.	No TNV circuits within the equipment.	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	No TNV circuits within the equipment.	N/A

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

ATTACHMENT TO TEST REPORT IEC 60950-1 (AUSTRALIA/NEW ZEALAND) NATIONAL DIFFERENCES (Information technology equipment-safety)			
Differences according to.....: AS/NZS 60950.1:2015			
Attachment Form No.....: AU_NZ_ND_IEC60950_1G			
Attachment Originator JAS-ANZ			
Master Attachment 2017-06			
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	National Differences		
Appendix ZZ	Variations to IEC 60950-1, Ed 2.2 (2013) for Australia and New Zealand		P
1.2	DEFINITIONS		P
	After definition 'PERSON, SERVICE', insert the following new definition: POTENTIAL IGNITION SOURCE.....1.2.12.201	Inserted.	P
1.5	COMPONENTS		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'	Inserted or deleted.	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	Inserted.	P

Attachment 2

Report No.: CN22437-03

IEC60950_1G - ATTACHMENT

Clause	Requirement + Test	Result - Remark	Verdict												
1.7	MARKINGS AND INSTRUCTIONS		P												
1.7.1.3	Delete existing text and replace 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	Deleted.	P												
2.9	ELECTRICAL INSULATION		P												
2.9.2	Variation Second paragraph, delete the word 'designated'	Deleted.	P												
3.2.5	POWER SUPPLY CORDS		N/A												
Table 3B	Variation 1..... Delete te the first four rows and replace with the following: <table><tr><td>Over 0.2 up to and including 3</td><td>0.5^a</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)^b 1.00</td><td>16 [1.3]</td></tr><tr><td>Over 10 up to including 16</td><td>(1.0)^c 1.5</td><td>14 [2]</td></tr></table>	Over 0.2 up to and including 3	0.5 ^a	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) ^b 1.00	16 [1.3]	Over 10 up to including 16	(1.0) ^c 1.5	14 [2]	Deleted. No power cord set provided.	N/A
Over 0.2 up to and including 3	0.5 ^a	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) ^b 1.00	16 [1.3]													
Over 10 up to including 16	(1.0) ^c 1.5	14 [2]													
	2..... Delete te NOTE 1 and renumber existing NOTE 2 as 'NOTE'	Deleted.	N/A												
	3..... Delete te Footnote ^a and replace with the following: ^a 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 mm ² three-core supply flexible cords are not permitted; see AS/NZS 3191)	Deleted.	N/A												
4.3	DESIGN AND CONSTRUCTION		N/A												
4.3.6	Variation Delete the third paragraph and replace with the following:		N/A												

IEC60950_1G - 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>	Not a direct plug-in equipment.	N/A
4.3.8	Addition Eighth paragraph, <i>insert</i> the following new note after the first dash item:	No Batteries.	N/A
	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.		N/A
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	No Lasers.	N/A
	Third paragraph, first sentence, after 'IEC 60825-1', <i>insert</i> the following text: or AS/NZS 60825.1	Inserted.	N/A
	Fourth paragraph, after 'IEC 60825-1', <i>insert</i> the following text: or AS/NZS 60825.1	Inserted.	N/A
4.7	RESISTANCE TO FIRE		P
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	Added. The alternative method is not considered.	N/A
6	CONNECTION TO TELECOMMUNICATIONS NETWORKS		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	No TNV.	N/A

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
6.2.2.1	Variation For Australia only, <i>delete</i> the first paragraph including the Notes, and <i>replace</i> with the following: 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. The interval between successive impulses is 60 s and the initial voltage, U_c, is: (i) for 6.2.1 a): 7.0 kV for hand-held telephones and for headsets and 2.5 kV for other equipment; and (ii)..... For 6.2.1 b) and 6.2.1 c): 1.5kV	No TNV.	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	Variation For Australia only, delete the second paragraph including the Note, and replace with the following: In Australia only, the a.c. test voltage is (i) for 6.2.1 a): 3kV; and (ii)..... for 6.2.1b) and 6.2.1c): 1.5kV	No TNV.	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	CONNECTION TO CABLE DISTRIBUTION NETWORK		N/A
7.3	Addition <i>Add</i> 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	No cable distribution systems.	N/A

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

Annex P	Addition <i>Add</i> the following Normative References: AS/NZS 3191, Electric flexible cords AS/NZS 3112, Approval and test specification—Plugs and socket-outlets	Added.	N/A
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	Special national conditions (if any)		P
1.2.12	FLAMMABILITY		P
1.2.12.15	Addition After Clause 1.2.12.15, <i>insert</i> the following new clause:	Added.	P
1.2.12.201	POTENTIAL IGNITION SOURCE 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
4	PHYSICAL REQUIREMENTS		P
4.1	Addition After Clause 4.1, <i>insert</i> new Clause 4.1.201 as follows:	Added.	P
4.1.201	Display devices used for television purposes 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	Not such equipment.	N/A
4.3	DESIGN AND CONSTRUCTION		N/A
4.3.8	Addition After Clause 4.3.8, <i>add</i> the following new clause as follows	Added.	N/A

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
4.3.8.201	Products containing coin/button cell batteries and batteries designated R1 The requirements of AS/NZS 60065:2012 Amendment 1:2015, Clause 14.10.201 apply for this Clause.	No coin/button cell battery used.	N/A
4.7	RESISTANCE TO FIRE		P
4.7.3.6	Addition After Clause 4.7.3.6, <i>add</i> new clauses as follows:	Added.	P
4.7.201	Resistance to fire—Alternative tests	Added. The alternative method is not considered.	N/A
4.7.201.1	General 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.	Added. The alternative method is not considered.	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 ³ , 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	Added. The alternative method is not considered.	N/A
	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
	<i>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</i>		N/A
	<i>For the base material of printed boards, compliance shall be checked by the test of 4.7.201.5</i>		N/A

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	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	Testing of non-metallic materials 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.	Added. The alternative method is not considered.	N/A
4.7.201.3	Testing of insulating materials 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:	Added. The alternative method is not considered.	N/A

Attachment 2

Report No.: CNZS-01-00

IEC60950_1G - ATTACHMENT

Clause	Requirement + Test	Result - Remark	Verdict	
	Clause of AS/NZS 60695.11.5	Change	Added. The alternative method is not considered.	N/A
	9 Test procedure			
	9.2 Application of Needle-flame	<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		
	9.3 Number of test specimens	<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.		
	11 Evaluation of test results	<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	

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
4.7.201.4	Testing in the event of non-extinguishing material 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.	Added. The alternative method is not considered.	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
4.7.201.5	Testing of printed boards 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.	Added. The alternative method is not considered.	N/A

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	The test is not carried out if the – Printed board does not carry any POTENTIAL IGNITION SOURCE; – 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 – 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 <i>Compliance shall be determined using the smallest thickness of the material.</i>		N/A
	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.		N/A

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

ATTACHMENT TO TEST REPORT IEC 60950-1 with A1: 2009 and A2:2013 JAPAN NATIONAL DIFFERENCES Information technology equipment – Safety – Part 1: General requirements			
Differences according to.....: J60950-1 (H29) Attachment Form No.....: JP_ND_IEC60950_1G Attachment Originator JQA Master Attachment 2017-11			
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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.		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: - using BASIC INSULATION, and - 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. 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. b) Provision of an independent earthing terminal, when 2-core mains cord (without earthing conductor) is used. Note – CLASS 0I EQUIPMENT may have a part constructed with Double Insulation or Reinforced Insulation.		N/A
1.3.2	Add the following notes after the first paragraph: Note 1 Transportable or similar equipment that are		N/A

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	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. 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.		
1.5.1	Replace the first paragraph with the follows: 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. Replace Note 1 with the following: 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. Note 2 JIS or an IEC component standard is considered relevant only if the component in question clearly falls within its scope. Add the following after the last paragraph: 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. A power supply cord set complying with JIS C 8286 is regarded to comply with this requirement. 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.	Replaced. Evaluated during national approval.	N/A
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.		N/A
1.5.5	Add the following Note after the last paragraph: NOTE An interconnection cord sets provided with	No power cord set provided.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	interconnecting coupler for mains supply complying with JIS C 8283-2-2 should comply with JIS C 8286.		
1.5.9.1	Add the following in the last of NOTE 1. Gas discharge tube connected in series with VDR may be used.		N/A
1.7	Replace EE.2 and EE.4 with the following: JA.1 Shredder warning JA.3 Shredder power disconnection		N/A
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. Evaluated during national approval.	N/A
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. Evaluated during national approval.	N/A
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).		N/A
1.7.5	Replace the second paragraph with the following. Socket-outlets conforming to JISC8282-1 are examples of standard power supply outlets.		N/A
1.7.5A	Add the following new clause after 1.7.5. 1.7.5A Power supply cord set 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. " Use only designated cord set attached in this equipment" <i>Example in Japanese:</i> "この機器に同こん(細)した指定の電源コードセットだけを使用して下さい。" 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		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	operating instruction 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 <i>instruction should provide the information that the cord set is exclusively used with the equipment and not allowed to use with other equipment.</i>		
1.7.14A	Add the following new clause after 1.7.14. 1.7.14A Marking for CLASS 0I EQUIPMENT For CLASS 0I EQUIPMENT, the following or equivalent instructions shall be marked. - the following instruction shall be marked on the mains plug or on the visible place of the main body "Provide an earthing connection" <i>Example in Japanese:</i> "必ず接地接続を行ってください。" - the following instruction shall be marked on the visible place of the main body or written in the operating instructions: "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." <i>Example in Japanese:</i> 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。		N/A
1.7.14B	Add the following new clause after 1.7.14A 1.7.14B Protective earthing conductor used for CLASS 0I EQUIPMENT 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)		N/A
2.1.1.1	Replace item b) of 2.1.1.1 with the following. 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,	Replaced.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	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. 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.		
2.5	Replace "IEC 60730-1" with "JIS C 9730-1" (in item b)).	Added	N/A
2.6.2	Delete the following line. • the symbol , IEC 60417-5018 (2011-07);		N/A
2.6.3.2	Add the following after the first paragraph. 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. - Use of annealed copper wire with 1.6 mm diameter or corrosion-inhibiting metal wire having equivalent to or more strength and thickness. - Single core cord or single core cable with 1.25 mm² or more cross-sectional area		N/A
2.6.3.5	Add the following after the first paragraph. 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.		N/A
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 01 EQUIPMENT provided with the separate main protective earthing terminal other than appliance inlet, the separate main protective earthing		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	terminal may be treated as mains protective earthing terminal.		
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".		N/A
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.	Replaced.	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	Replaced.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	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.		
2.10.9	Replace "1.4.5" in the third paragraph with "1.4.12".	Replaced.	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
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		N/A

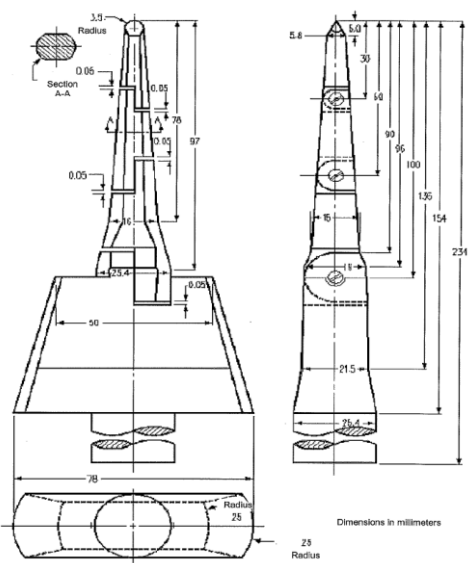
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Clause	Requirement + Test	Result - Remark	Verdict
	Mains plug for PLUGGABLE EQUIPMENT TYPE A shall comply with JIS C 8282-1 or equivalent to or better performance. Power supply cord set complying with JIS C 8286 is regarded to meet the requirements. 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.		
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.		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.		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.	Replaced.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict																										
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																										
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.	Replaced.	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.		N/A																										
5.1.6	Replace Table 5A. as follows <table border="1"> <thead> <tr> <th>Type of equipment</th><th>Terminal A of measuring instrument connected to:</th><th>Maximum TOUCH CURRENT mA r.m.s. ^a</th><th>Maximum PROTECTIVE CONDUCTOR CURRENT</th></tr> </thead> <tbody> <tr> <td>ALL equipment</td><td>Accessible parts and circuits not connected to protective earth ^b</td><td>0,25</td><td>-</td></tr> <tr> <td rowspan="2">HAND-HELD</td><td>Main protective earthing terminal of CLASS I EQUIPMENT</td><td>0,75</td><td>-</td></tr> <tr> <td>Main protective earthing terminal of CLASS 0 I EQUIPMENT</td><td>0,5</td><td>-</td></tr> <tr> <td rowspan="2">MOVABLE (other than HAND_HELD, but including TRANSPORTABLE EQUIPMENT)</td><td>Main protective earthing terminal of CLASS I EQUIPMENT</td><td>3,5</td><td>-</td></tr> <tr> <td>Main protective earthing terminal of CLASS 0 I EQUIPMENT</td><td>1.0</td><td>-</td></tr> <tr> <td>STATIONARY, PLUGGABLE TYPE A</td><td>Main protective earthing terminal of CLASS I EQUIPMENT</td><td>3,5</td><td>-</td></tr> </tbody> </table>	Type of equipment	Terminal A of measuring instrument connected to:	Maximum TOUCH CURRENT mA r.m.s. ^a	Maximum PROTECTIVE CONDUCTOR CURRENT	ALL equipment	Accessible parts and circuits not connected to protective earth ^b	0,25	-	HAND-HELD	Main protective earthing terminal of CLASS I EQUIPMENT	0,75	-	Main protective earthing terminal of CLASS 0 I EQUIPMENT	0,5	-	MOVABLE (other than HAND_HELD, but including TRANSPORTABLE EQUIPMENT)	Main protective earthing terminal of CLASS I EQUIPMENT	3,5	-	Main protective earthing terminal of CLASS 0 I EQUIPMENT	1.0	-	STATIONARY, PLUGGABLE TYPE A	Main protective earthing terminal of CLASS I EQUIPMENT	3,5	-	Replaced.	P
Type of equipment	Terminal A of measuring instrument connected to:	Maximum TOUCH CURRENT mA r.m.s. ^a	Maximum PROTECTIVE CONDUCTOR CURRENT																										
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	Main protective earthing terminal of CLASS 0 I EQUIPMENT	0,5	-																										
MOVABLE (other than HAND_HELD, but including TRANSPORTABLE EQUIPMENT)	Main protective earthing terminal of CLASS I EQUIPMENT	3,5	-																										
	Main protective earthing terminal of CLASS 0 I EQUIPMENT	1.0	-																										
STATIONARY, PLUGGABLE TYPE A	Main protective earthing terminal of CLASS I EQUIPMENT	3,5	-																										

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Clause	Requirement + Test			Result - Remark	
		Main protective earthing terminal of CLASS 0 I EQUIPMENT	1,0	-	
	ALL other STATIONARY EQUIPMENT - not subject to the conditions of 5.1.7 - subject to the conditions of 5.1.7	Main protective earthing terminal of CLASS I EQUIPMENT	3.5 -	- 5 % of input current	
		Main protective earthing terminal of CLASS 0 I EQUIPMENT	1.0 -	- -	
		a 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. b 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.			
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: <i>- 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;</i>				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				N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	output; Replace the 4th dashed paragraph with the following: - 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; Replace the 5th dashed paragraph with the following: -10 000 cycles of turning the input pin on and off with a capacitor rated $425 \mu\text{F} \pm 10 \mu\text{F}$ connected to the input supply while keeping enable active and shorting the output; Replace the 6th dashed paragraph with the following: -10 000 cycles of turning the input pin on and off with an ferrite-core inductor having $350 \text{ mH} \pm 10 \text{ mH}$ inductance at 1 kHz and less than 1Ω d.c. resistance connected to the input supply and return while keeping enable active and shorting the output; Replace the 10th dashed paragraph with the following: -3 cycles of exposing the device (not energized) to $70^\circ\text{C} \pm 2^\circ\text{C}$ for 24 h; followed by at least 1 h at room ambient; followed by at least 3 h at $-30^\circ\text{C} \pm 2^\circ\text{C}$; followed by 3 h at room ambient; Replace the 11th dashed paragraph with the following: -10 cycles of exposing the device (while energized) to $50^\circ\text{C} \pm 2^\circ\text{C}$ for 10 min; followed by 10 min at $0^\circ\text{C} \pm 2^\circ\text{C}$ with a 5 min period of transition from one state to the other;		
Annex EE	Replace Annex EE with the following Annex JA. Annex JA (normative) Document shredding machines HOUSEHOLD AND HOME/OFFICE DOCUMENT/MEDIA SHREDDERS shall additionally comply with the requirements of this annex. JA.1 Markings and instructions The symbol  (JIS S 0101:2000, 6.2.1) and the following precautions for use shall be marked on		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	readily visible part adjacent to document feed opening. The marking shall be clearly legible, permanent, and easily discernible; 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.) 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) 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) 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) - 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.) JA.2 Inadvertent reactivation 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. JA.3 Disconnection from the mains supply 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. 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		

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Clause	Requirement + Test	Result - Remark	Verdict
	indicated with proper terms or symbols. Compliance is checked by inspection.		
	JA.4 Protection against hazardous moving parts Any warning shall not be used instead of the structure for preventing access to hazardous moving parts. Document shredding machines shall comply with the following requirements. 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. 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.		N/A
	 Figure JA.1 Test finger		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
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Distance from the tip (mm)	Thickness of probe (mm)
0	2
12	4
180	24

Note 1 - The thickness of the probe varies linearly, with slope changes at the respective points shown in the table.

Note 2 - The allowable dimensional tolerance of the probe is;

for ≤ 25 mm: ± 0.13 mm

for > 25 mm: ± 0.3 mm.

Figure JA.2 Wedge-probe

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Clause	Requirement + Test	Result - Remark	Verdict
Appendix	Appendix 12 J3000 (H25) Special National conditions, National deviation and other information according to MITI Ordinance No. 85.		—
1	General requirement When equipment provides with appliance inlet complying with JIS C 8283-1(2008), soldered parts of appliance inlet is not applied by force during insert or removal of connector. This is not applied when inlet body is fixed itself and not fixed by solder.	Inlet is fixed by adequate mechanical construction, not rely on soldering.	P
2	Requirement for equipment		—
2.1	Heater Appliances When diode is used in parallel at the power sources for adjustment of power consumption, the equipment shall remain safe for operation under open condition of one diode.		N/A
	The current rating of one diode shall be more than main current. The diodes connected in parallel are same type.		N/A
	The heating test specified by clause 11 of JIS C 9335-1(2003) and a specified in applicable individual requirements under open condition of one diode of parallel shall comply with the requirements.		N/A
2.2	Electric heater with glowing heating elements	Not electric stove.	N/A
	Surface treatment by paint or adhesive on protective frame or protective mesh shall not be used.		N/A
	Caution marking like below shall be on - easily visible place of the equipment or - Instruction manual 「注意 当該機器から、使用初期段階で揮発性有機化合物及びカルボニル化合物が最も放散するおそれがあるため、その際には十分換気を行うこと。」		N/A
3	Components used in equipment	No relevant equipment or component.	N/A
3.1	Motor capacitors used in ventilating fan, electric fan, air conditioner, electric washing machine, refrigerator or electric freezer shall be comply with - capacitors with protective elements or protective mechanism complying with JIS C 4908(2007) - P2 capacitor complying with IEC 60252-1(2001) Capacitor complying with below is acceptable		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Enclosed by metal or ceramic		N/A
	No non-metallic materials within 50 mm from capacitor surface		N/A
	Non-metallic material within 50mm from capacitor surface comply with needle frame test of JIS C 9335-1(2003), Annex E		N/A
	Non-metallic material within 50 mm from capacitor surface comply with V-1 test of JIS C 60965-11-10(2006).		N/A
3.2	Plug directly inserted to outlet used refrigerator or electric freezer. Shall comply with - Face contact with outlet shall have CTI with more than 400 according to JIS C 2134(2007) or - Supporting material of blades shall comply with glow wire test by temperature of 750°C according to JIS C 60695-2-11(2004) or JIS C 60695-2-12(2004). Materials having glow wire frame temperature of 775 °C are acceptable.		N/A

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ATTACHMENT TO TEST REPORT IEC 60950 - 1, ed2, amd1 ISRAEL NATIONAL DIFFERENCES (INFORMATION TECHNOLOGY EQUIPMENT – SAFETY: GENERAL REQUIREMENTS)			
Differences according to.....: National standard SI 60950 - 1, ed2, amd1.			
Attachment Form No.....: IL_ND_IEC60950_1C			
Attachment Originator Standards Institution of Israel			
Master Attachment Date 2015-12			
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	National Differences		
1.6	Power interface The clause is applicable with the following addition:		P
1.6.1	AC Power distribution systems		N/A
	- 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	Marking and instructions The clause is applicable with the following additions:		N/A
1.7.1	Power rating		N/A
	- Subclause 1.7.201 shall be added after the clause, as follows:		N/A
1.7.201	Marking in the Hebrew language		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	The marking in the Hebrew language shall be in accordance with the Consumer Protection Order (Marking of goods), 1983. In addition to the marking required by clause 1.7.1, the following items shall be marked in the Hebrew language: 1. Name of the apparatus and its commercial designation; 2. Manufacturer's name and his address; if the equipment is imported, the importer's name and his address; 3. Manufacturer's registered trademark, if any; 4. Name of the model and serial number, if any; 5. Country of manufacture. 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.	Shall be evaluated during national approval.	N/A
1.7.2	Safety instructions and marking		N/A
1.7.2.1	General - The following shall be added at the end of the clause: All the instruction and all the warnings related to safety shall also be written in the Hebrew language.	Shall be evaluated during national approval.	N/A
- At the end of clause 1, clause 1.201 shall be added as follows:			
1.201	Power consumption in standby mode The equipment shall comply with the requirements 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 %.	Shall be evaluated during national approval.	N/A
2	Protection from hazards The clause is applicable with the following additions:		N/A

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
2.9.4	Separation from hazardous voltages The following shall be added at the beginning of the clause: 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: 1) Network system earthing - (TN-C-S, TN-S); 2) Network system earthing - (TT); 3) Network Insulation Terre - (IT); 4) Isolated transformer; 5) Safety extra low voltage; 6) Residual current circuit breaker; 7) Reinforced insulation; Double insulation	Shall be evaluated during national approval.	N/A
- Clause 2.201 shall be added at the end of clause 2, as follows:			
2.201	Prevention of electromagnetic interference The device shall meet the requirements of the relevant part of the Israeli Standard series, SI 961. 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.	Shall be evaluated during national approval.	N/A
3	Wiring, connections and supply The clause is applicable with the following additions:		N/A
3.2	Connection to a mains supply		N/A
3.2.1	Means of connection		N/A
3.2.1.1	Connection to an a.c. mains supply After the Note, the following note shall be added: Note: In Israel, the supply plug shall comply with the requirements in Israeli Standard, SI 32 Part 1.1.		N/A
3.2.1.2	Connection to a d.c. mains supply After the first paragraph, the following note shall be added: Note: As of the date of publication of this Standard, there is no Israeli Standard for connection accessories to d.c.	Not connected to d.c. mains supply.	N/A

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

	Special national conditions (if any)		
	ANNEX P Normative references		P
	The annex is applicable with the following modifications and additions: In place of some of the International Standards cited in the Standard and noted in this annex, the following Israeli Standards shall apply:		P

The referenced International Standard	The substituted Israeli Standard	Comments
IEC 60317 (all parts) ^(b)	SI 1067 Part 1 – Enamelled ^(c) round copper wires with high mechanical properties	The Israeli Standard is identical to the International Electrotechnical Commission Standard, IEC 317-1: 1980-02.
	SI 1067 Part 2 – Self-fluxing enamelled ^(c) round copper wires	The Israeli Standard is identical to the International Electrotechnical Commission Standard, IEC 307-4: 1980-02.
	SI 1067 Part 3 – Enamelled ^(c) round copper wires with a temperature index of 180 °C	The Israeli Standard is identical to the International Electrotechnical Commission Standard, IEC 317-8: 1980-02.
IEC 60320 (all parts) ^(b)	SI 60320 Part 1 – Appliance couplers for household and similar general purposes: General requirements	The Israeli Standard, excluding national modifications and additions noted, is identical to the International Electrotechnical Commission Standard, IEC 60320-1: Second edition: 2001-06.
	SI 60320 Part 2.1 – Appliance couplers for household and similar general purposes: Sewing machine couplers	The Israeli Standard, excluding national modifications and additions noted, is identical to the International Electrotechnical Commission Standard, IEC 60320-2-1: Second edition: 2000-07.
	SI 60320 Part 2.2 – Appliance couplers for household and similar general purposes: Interconnection couplers for household and similar equipment	The Israeli Standard, excluding national modifications and additions noted, is identical to the International Electrotechnical Commission Standard, IEC 60320-2-2: Second edition: 1998-08.

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Clause	Requirement + Test	Result - Remark	Verdict

	SI 60320 Part 2.3 – Appliance couplers for household and similar general purposes: appliance coupler with a degree of protection higher than IPXO	The Israeli Standard, excluding national modifications and additions noted, is identical to the International Electrotechnical Commission Standard, IEC 60320-2-3: First edition: 1998-09.
IEC 60364-1: 2001	Electricity Law, 1954, with its Regulations and updates	–
IEC 60730-1: 1999 Amendment 1 (2003)	SI 60730 Part 1 – Automatic electrical controls for household and similar use: General requirements	The Israeli Standard, excluding national modifications and additions noted, is identical to the International Electrotechnical Commission Standard, IEC 60730-1: Edition 3.2: 2007-03.
IEC 60825-1	SI 60825 Part 1 – Safety of products: Equipment classification and requirements	The Israeli Standard, excluding national modifications and additions noted, is identical to the International Electrotechnical Commission Standard, IEC 60825-1: Second edition: 2007-03.
IEC 60947-1: 2004	SI 60947 Part 1 – Low-voltage switchgear and controlgear: General rules	The Israeli Standard, excluding national modifications and additions noted, is identical to the International Electrotechnical Commission Standard, IEC 60947-1: Edition 5.0: 2007-06.
IEC 61058-1: 2000	SI 61058 Part 1 – Switches for appliances: General requirements	The Israeli Standard, excluding national modifications and additions noted, is identical to the International Electrotechnical Commission Standard, IEC 61058-1: Edition 3.1: 2001.
ISO 3864 (all parts) ^(b)	SI 3864 Part 1 ^(a) – Graphic symbols -	The Israeli Standard, excluding national modifications and additions noted, is identical to the International Organization for Standardization Standard, ISO 3864-1: First edition: 2002-05-15.

Notes:

- (a) The Standard is being revised.
- (b) In the International Standard series, there are parts not yet adopted as Israeli Standards. This table notes the relevant Israeli Standards, and in the Comments column, the corresponding parts of the International Standard series.
- (c) Not relevant to the translation.

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

- The following shall be added to the annex:	
	Israeli Standards SI 961 (all parts) – Electromagnetic compatibility Israeli Laws, Regulations and documents Electricity Law, 1954, with its Regulations and updates Consumer Protection Order (Marking of goods), 1983, Kovetz HaTakanot 4465 dated 1983-02-24 Energy Sources Regulations (Maximum electrical power in standby mode for domestic and office electrical appliances), 2011

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

ATTACHMENT TO TEST REPORT IEC 60950-1 KOREA NATIONAL DIFFERENCES (Information technology equipment – Safety – Part 1: General requirements)			
Differences according to: K 60950-1(2011-12)			
TRF template used:: IECEE OD-2020-F3, Ed. 1.1			
Attachment Form No.: KR_ND_IEC60950_1G			
Attachment Originator: KTL			
Master Attachment: 2022-05-20			
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1.5.1	Plugs for the connection of the apparatus to the supply mains shall comply with the Korean plug standard sheets(KSC 8305)	Not a direct plug-in equipment.	N/A
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Special national conditions			
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 60Hz are accepted.		P
Instruction	Instruction manuals shall be in Korean	The requirements have to be checked during the national approval.	N/A

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

ATTACHMENT TO TEST REPORT IEC 60950-1 CHINA NATIONAL DIFFERENCES Information technology equipment Safety – Part 1: General requirements			
Differences according to: GB 4943.1--2011			
Attachment Form No.: CN_ND_IEC60950_1A			
Attachment Originator: CQC			
Master Attachment: Date 2012-10			
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	China National Differences		
1.5. 2	Add a note behind the first dashed paragraph. Note: A component used shall comply with related requirements corresponding altitude of 5000m.	Added. Shall be provided accordingly during national approval.	N/A
1.7	Add a paragraph before the last paragraph: The required marking and instruction should be given in normative Chinese unless otherwise specified.	Added. Shall be provided accordingly during national approval.	N/A
1.7.1	Amend dashed paragraph at the fifth paragraph : 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. And the RATED FREQUENCY or RATED FREQUENCY RANGE should be 50Hz or include 50Hz.	220Vac for single phase considered.	P

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
1.7.2.1	Add requirements of warning for equipment intended to be used at altitude not exceeding 2000m or at non-tropical climate regions: 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. "Only used at altitude not exceeding 2000m."  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. "Only used in not-tropical climate regions."  If only the symbol used, the explanation of the symbol shall be contained in the instruction manual. The above statements shall be given in a language acceptable to the regions where the apparatus is intended to be used.	The product is applied for 5000m. The marking plate of China shall be provided accordingly during national approval.	N/A
2.7.1	Amended the first paragraph 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.	Considered.	P

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
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 $40\pm 2^{\circ}\text{C}$ 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 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.	Amended. Considered.	P
2.10.3.1	Amend 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 IEC 60664-1. 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 IEC 60664-1. 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.	Changed.	P

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
2.10.3.3& 2.10.3.4	Add "(applicable for altitude up to 2000m)" in header of Table 2K - 2L and 2M.	Added	N/A
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 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/T16935.1 (IEC 60664-1). 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/T16935.1.	Added. Considered	P
3.2.1.1	Add a 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.	Added.	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.	No CRT.	N/A
Annex E	Amend last section: 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. 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.	Amended.	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/T16935.1. 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 IEC 60664-1. 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.	Changed. Shall be evaluated during the national approval.	N/A

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
Annex DD (normative)	Added annex DD: Instructions for the new safety warning labels. DD.1 Altitude warning label  Meaning of the label: Evaluation for apparatus only based on altitude not exceeding 2000m, therefor it's the only operating condition applied for the equipment .There may be some potential safety hazard if the equipment is used at altitude above 2000m. DD.2 Climate warning label  Meaning of the label: Evaluation for apparatus only based on temperate climate condition, therefor it's the only operating condition applied for the equipment .There may be some potential safety hazard if the equipment is used in tropical climate region.	The product is applied for 5000m. The marking plate of China shall be provided accordingly during national approval.	N/A
Annex EE (informative)	Added annex EE: Illustration relative to safety explanation in normative Chinese 、 Tibetan 、 Mongolian 、 Zhuang Language and Uighur.	Added. Shall be provided accordingly during national approval.	N/A

	Special national conditions		
1.1.2	GB4943.1-2011 applies to equipment used at altitudes not exceeding 5000m above sea level, primarily in regions with moderate or tropical climates. Revise the third dashed paragraph of 1.1.2 as: —equipment intended to be used in vehicles, on board ships or aircraft, at altitudes greater than 5000m;	Amended.	P
1.4.5	Amend the second paragraph by the following: If the equipment is intended for direct connection to an AC mains supply, the tolerances on RATED VOLTAGE shall be taken as +10% and -10%.	Added. Considered.	P

IEC60950_1G - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
1.4.12.1	Tma: The maximum ambient temperature permitted by the manufacturer's specification, or 35 °C, whichever is greater. Add 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 to be operated at 2000m-5000m above sea level, its temperature test conditions and temperature limits are under consideration.	Amended. Considered.	P

Product: LCD Monitor

Type Designation: See test report

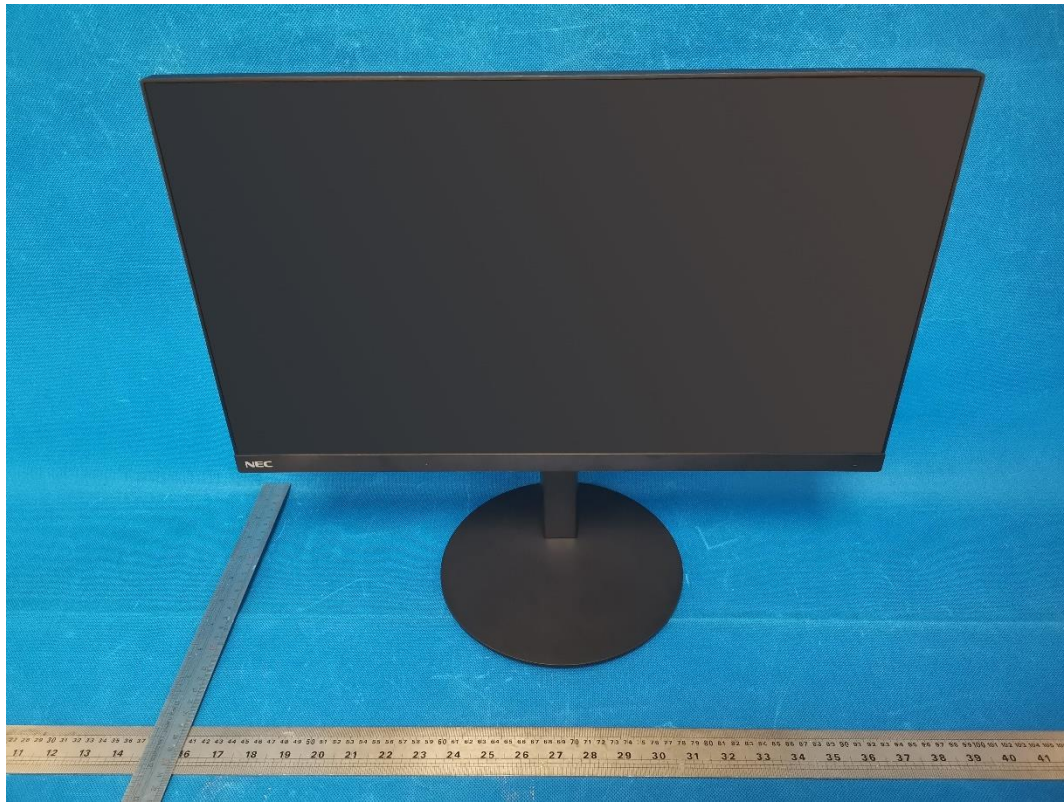


Figure 1. Front view for horizontal used



Figure 2. Rear view for horizontal used

Product: LCD Monitor

Type Designation: See test report

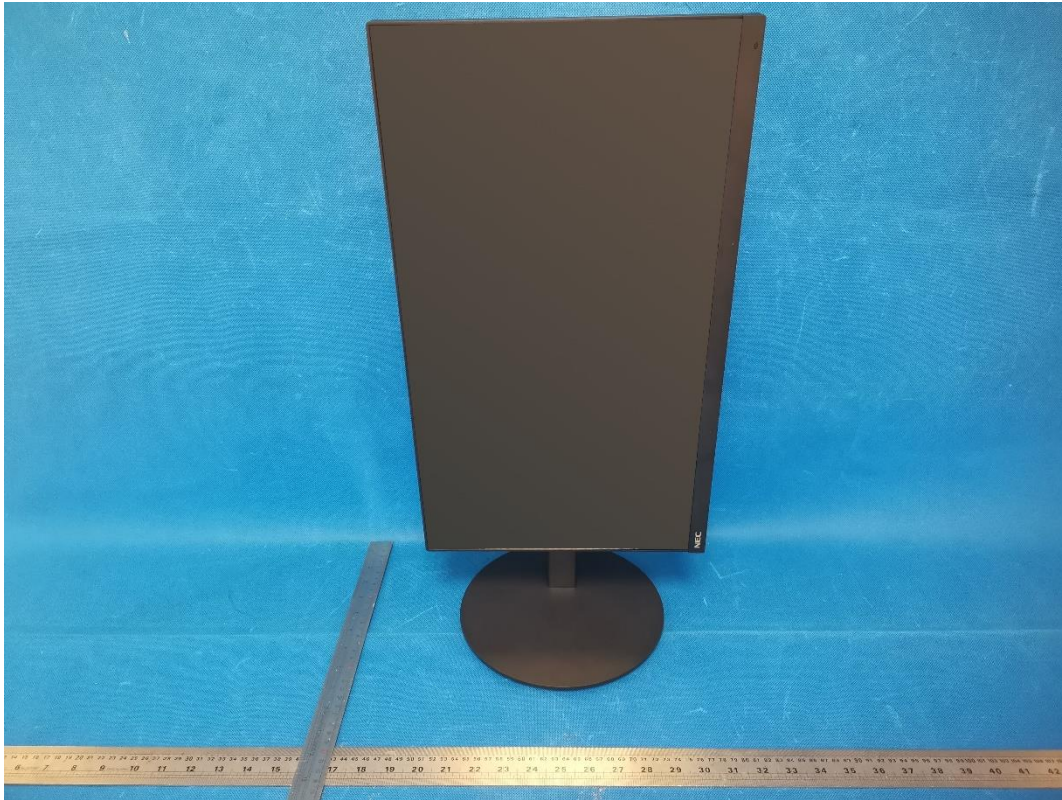


Figure 3. Front view for vertical used turn left



Figure 4. Rear view for vertical used turn left

Product: LCD Monitor

Type Designation: See test report

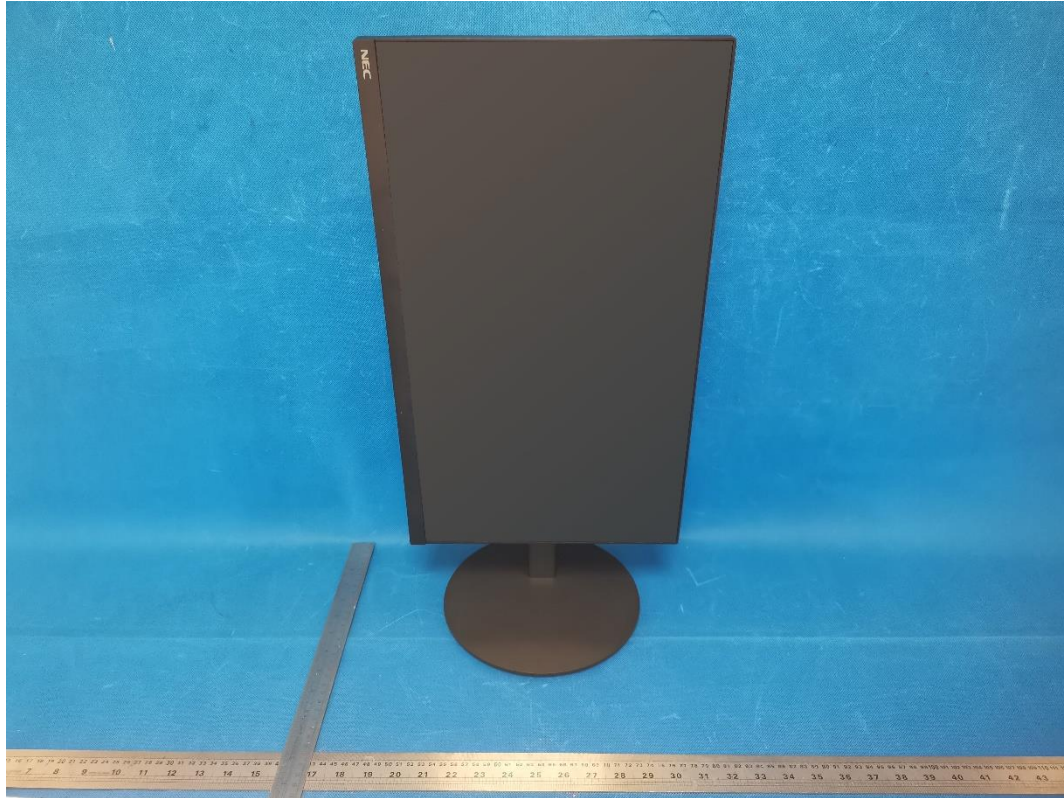


Figure 5. Front view for vertical used turn right



Figure 6. Rear view for vertical used turn right

Product: LCD Monitor

Type Designation: See test report



Figure 7. Terminal view



Figure 8. Terminal view

Product: LCD Monitor

Type Designation: See test report

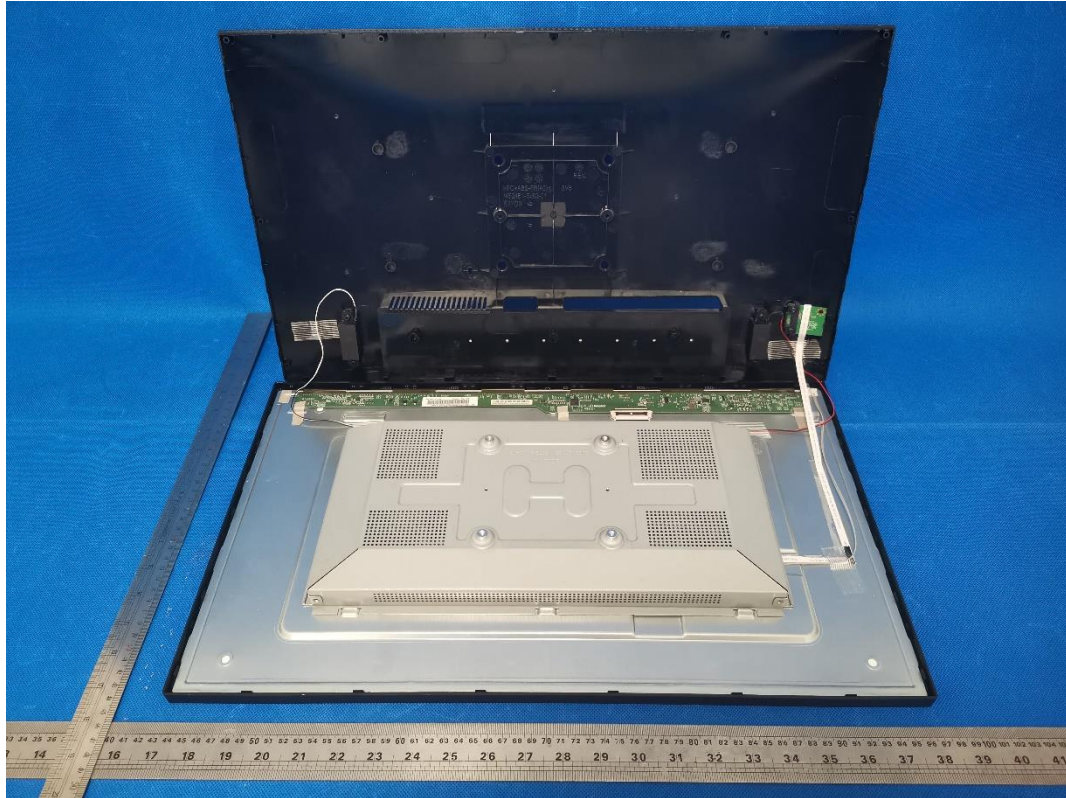


Figure 9. Internal view

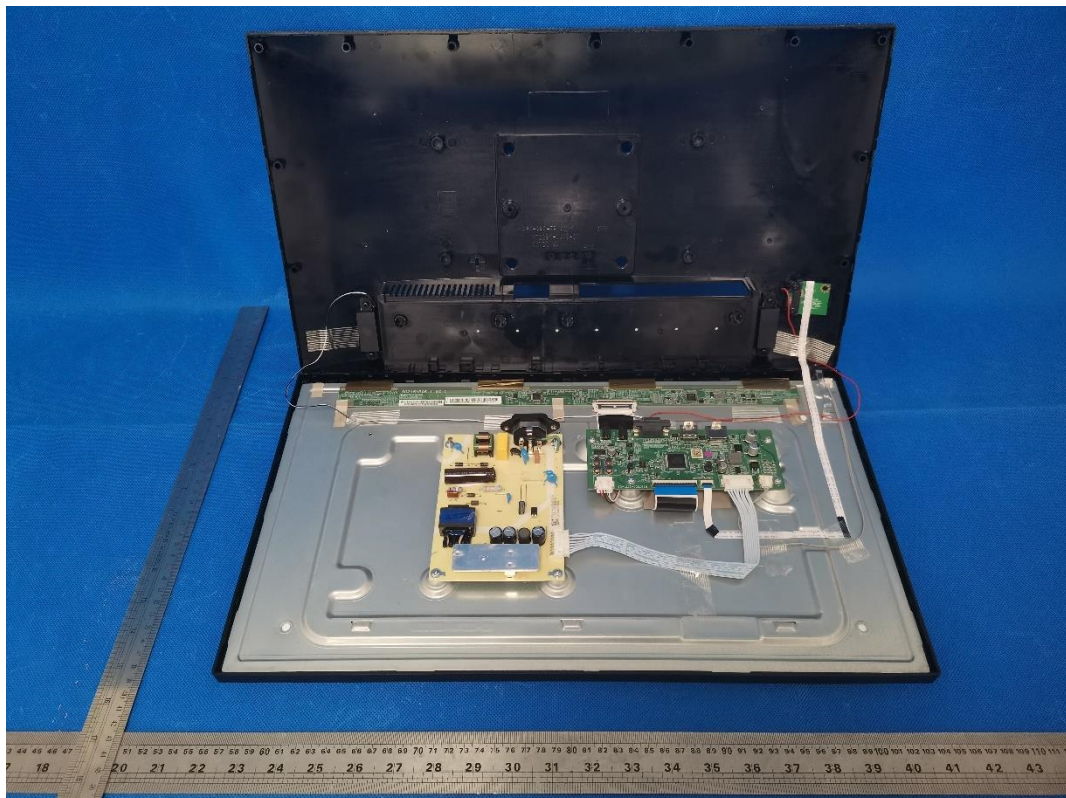


Figure 10. Internal view

Product: LCD Monitor

Type Designation: See test report

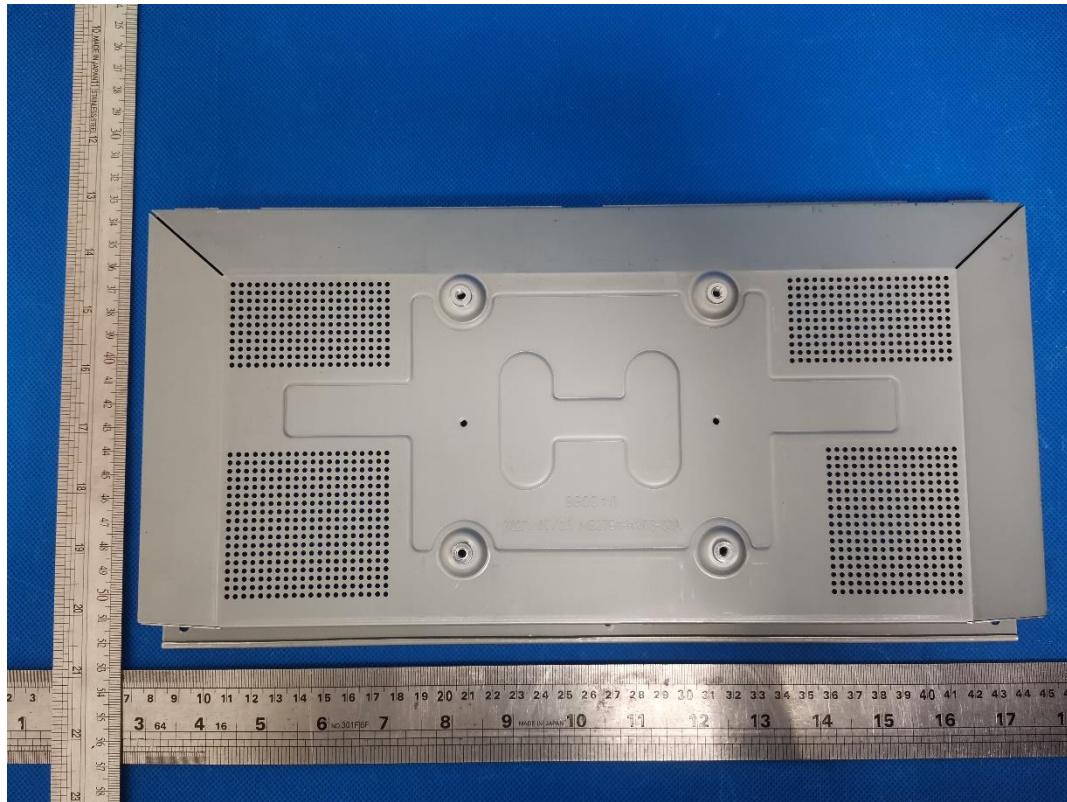


Figure 11. Internal view

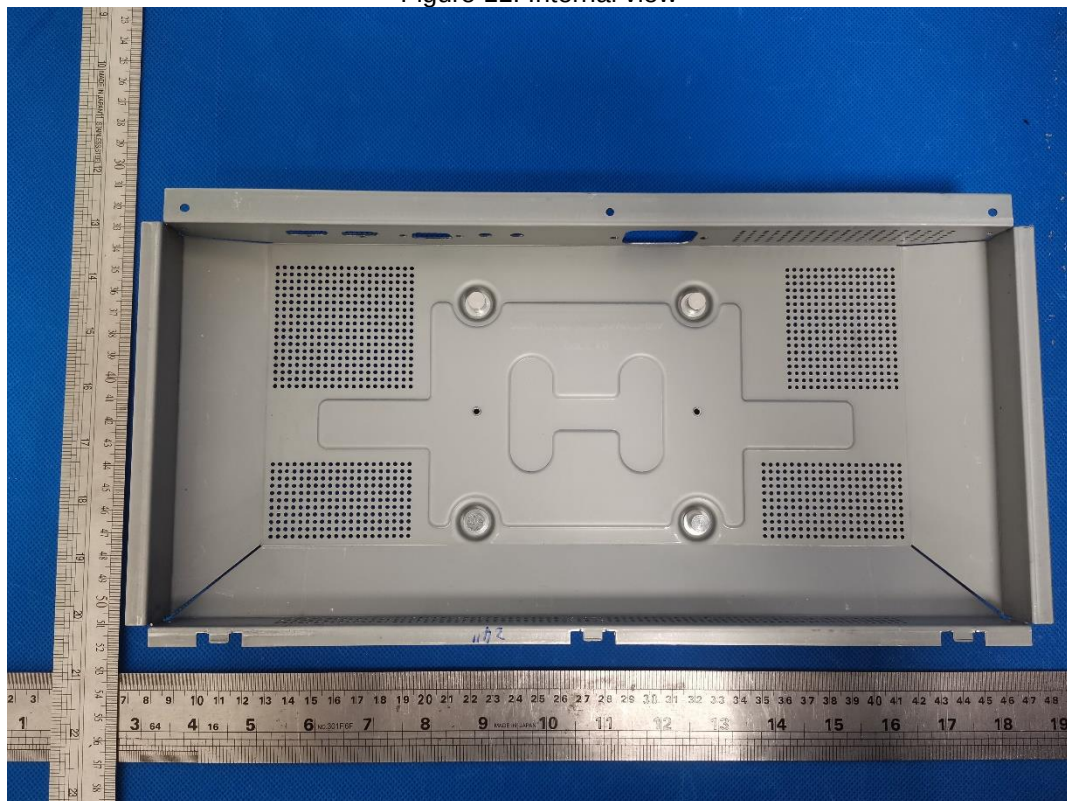


Figure 12. Internal view

Product: LCD Monitor

Type Designation: See test report

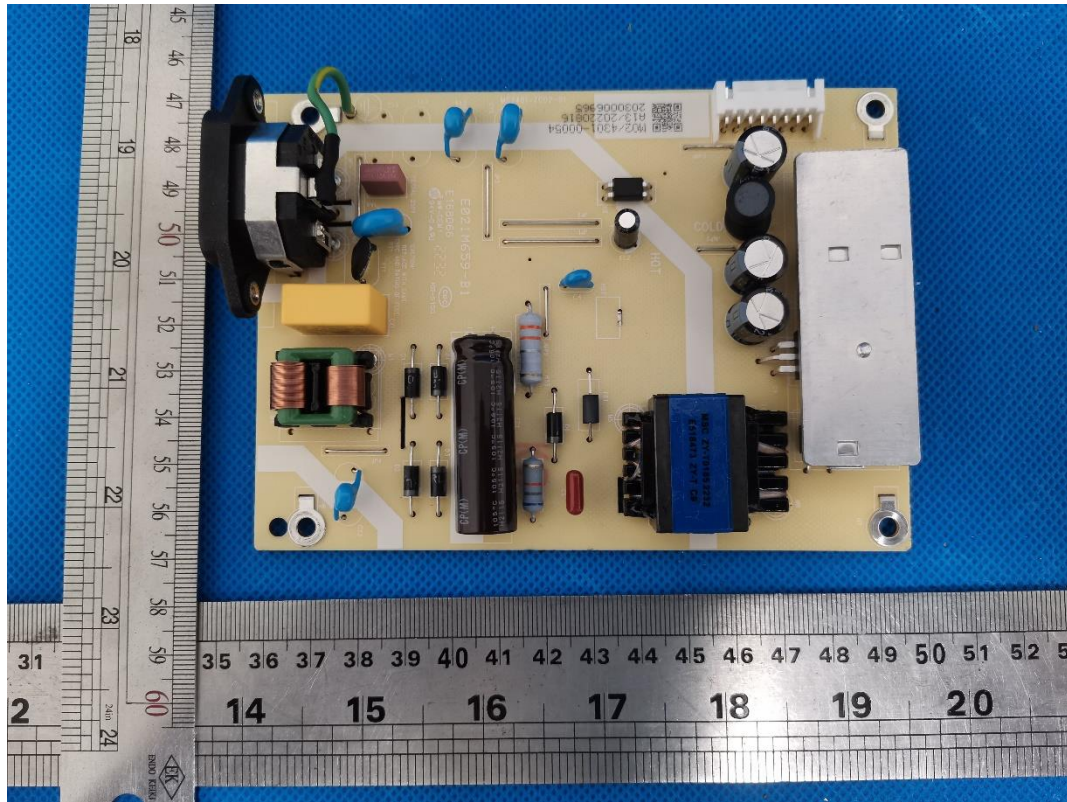


Figure 13. Component side of power board

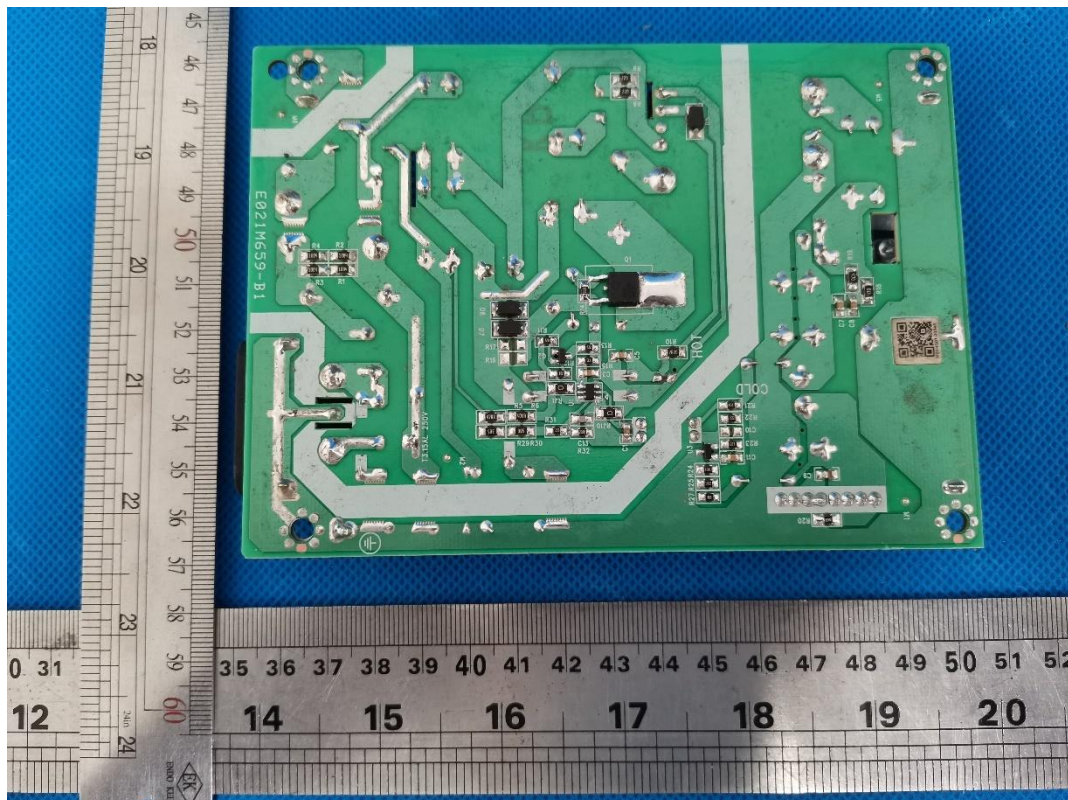


Figure 14. Trace side of power board

Product: LCD Monitor

Type Designation: See test report

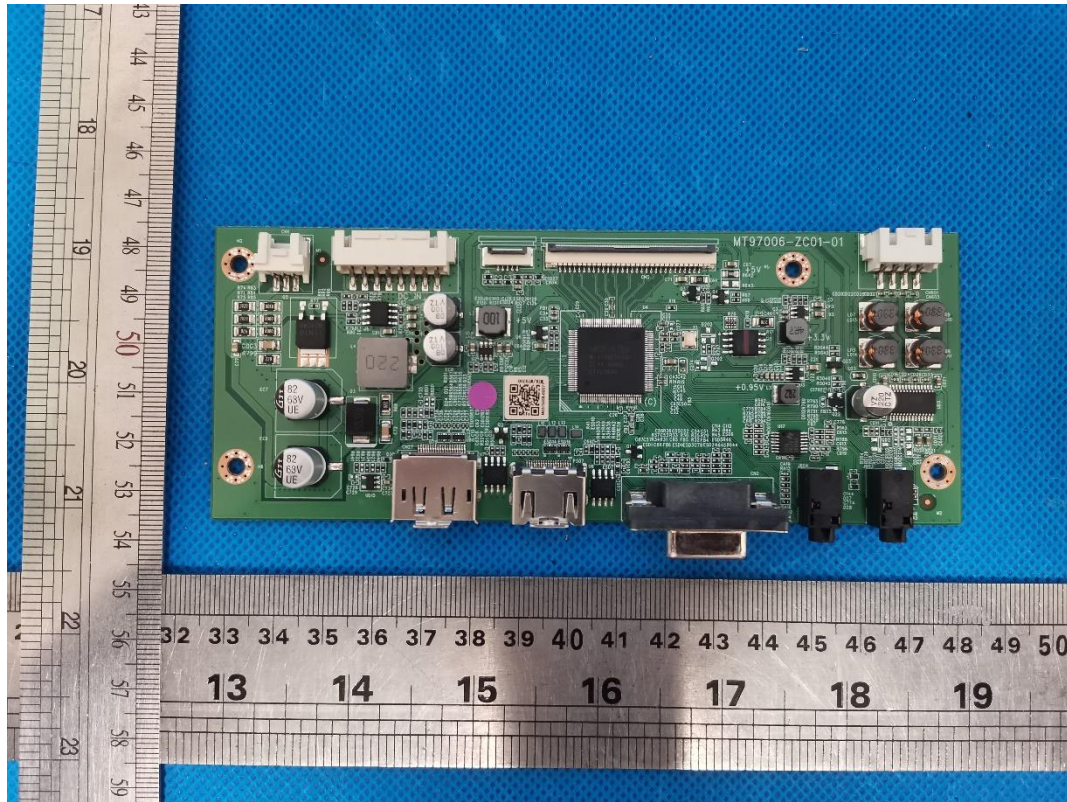


Figure 15. Component side of main board

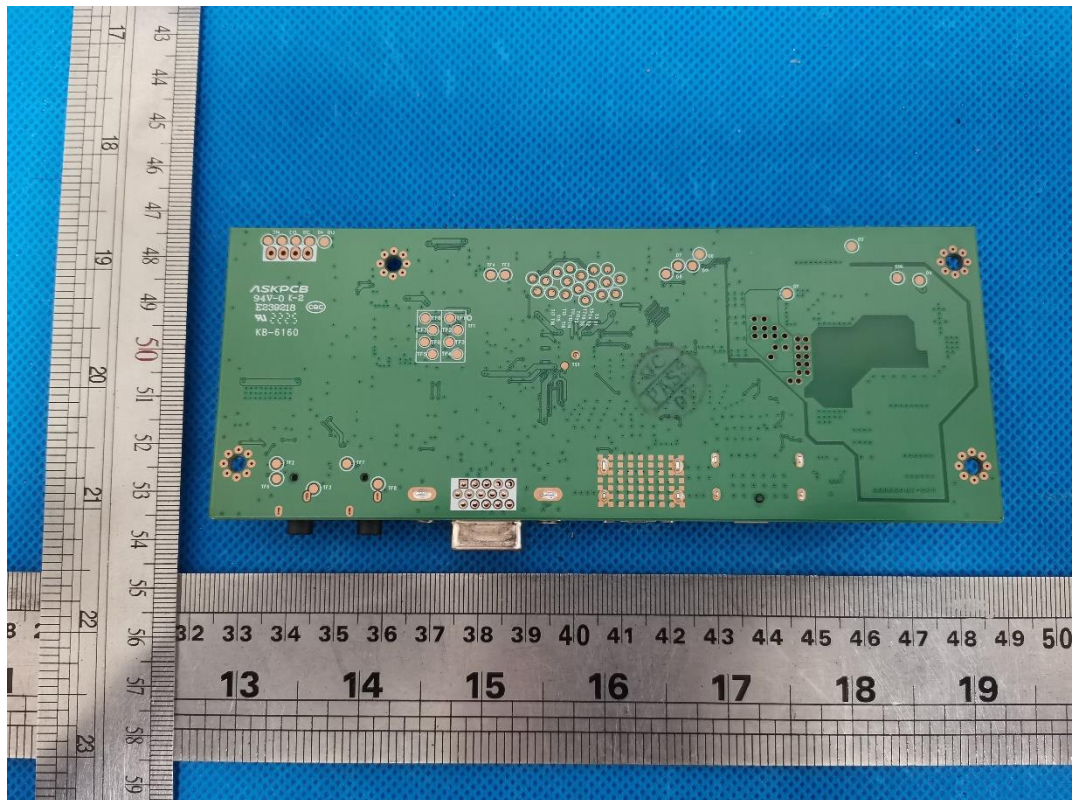


Figure 16. Trace side of main board

Product: LCD Monitor

Type Designation: See test report

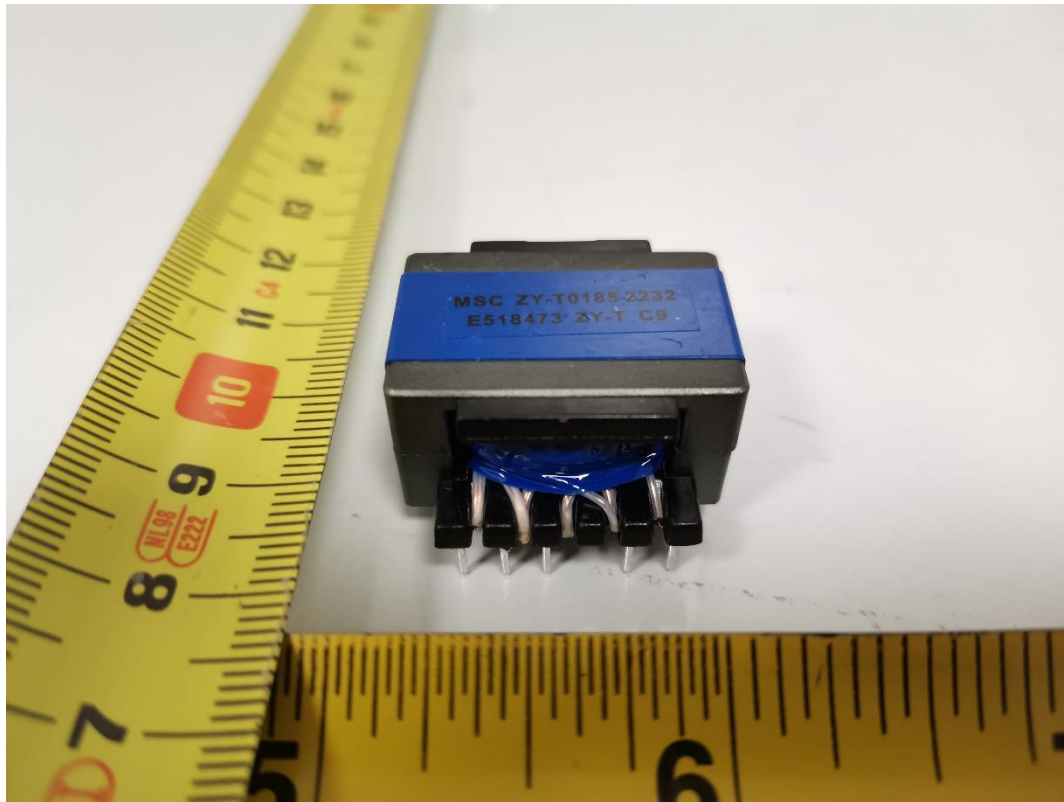


Figure 17. Transformer T1 view

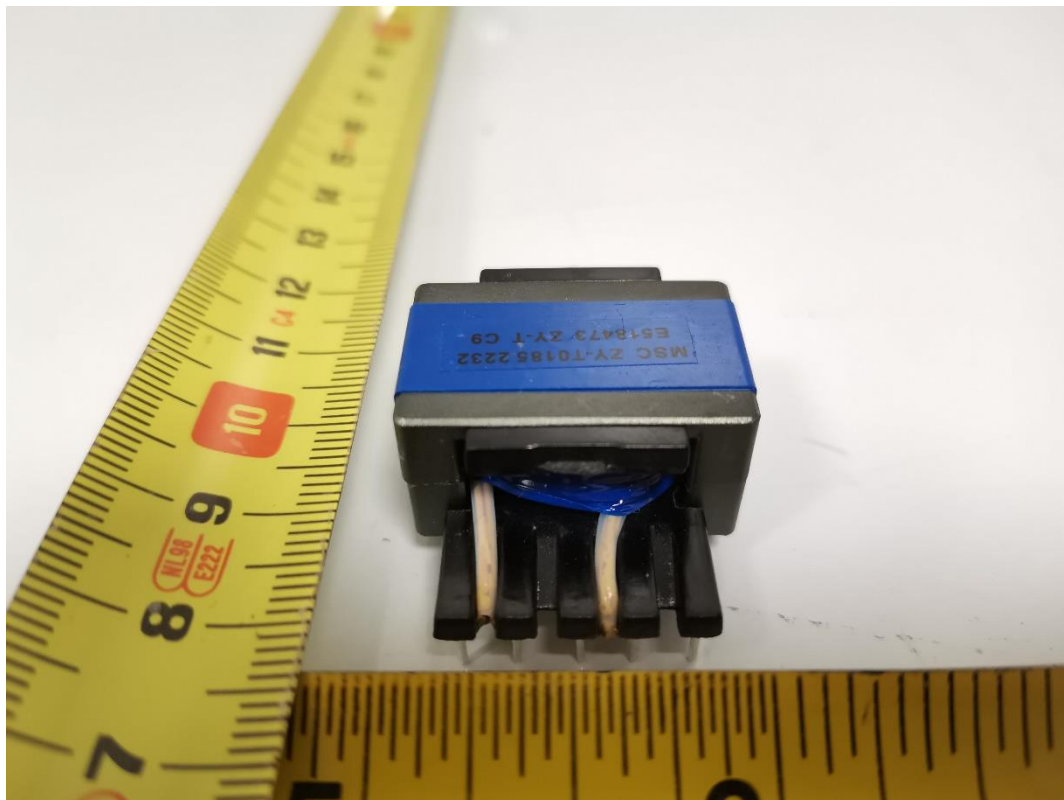


Figure 18. Transformer T1 view

Product: LCD Monitor

Type Designation: See test report

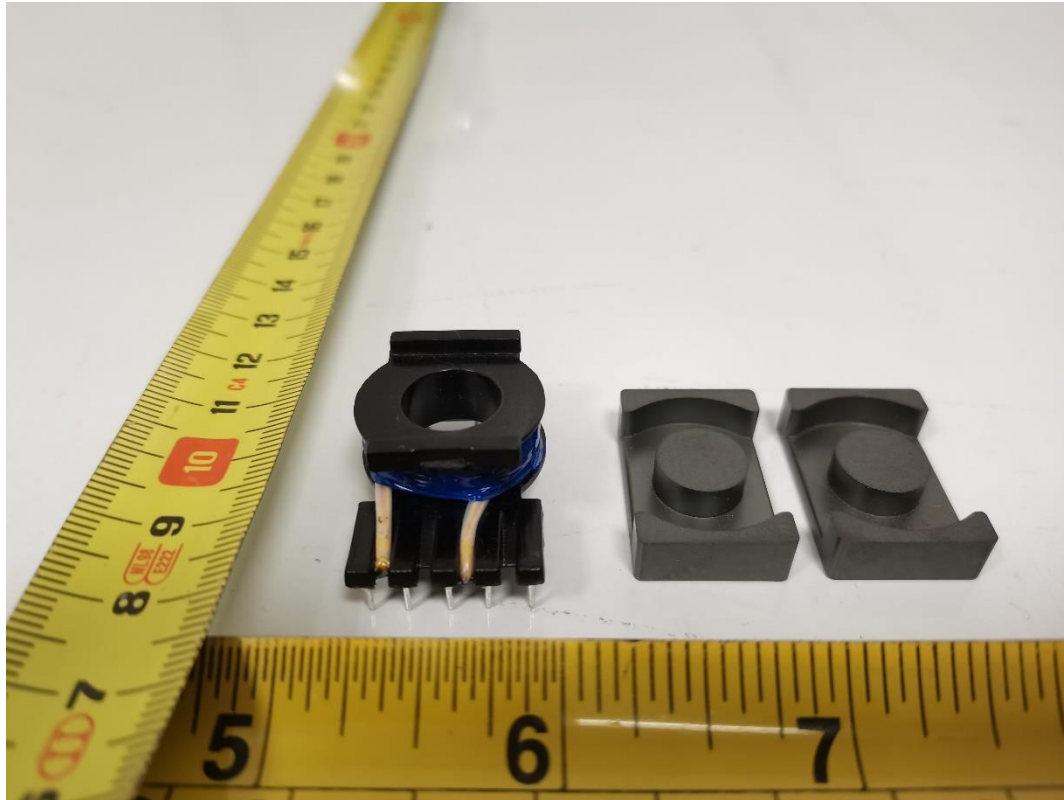


Figure 19. Transformer T1 view

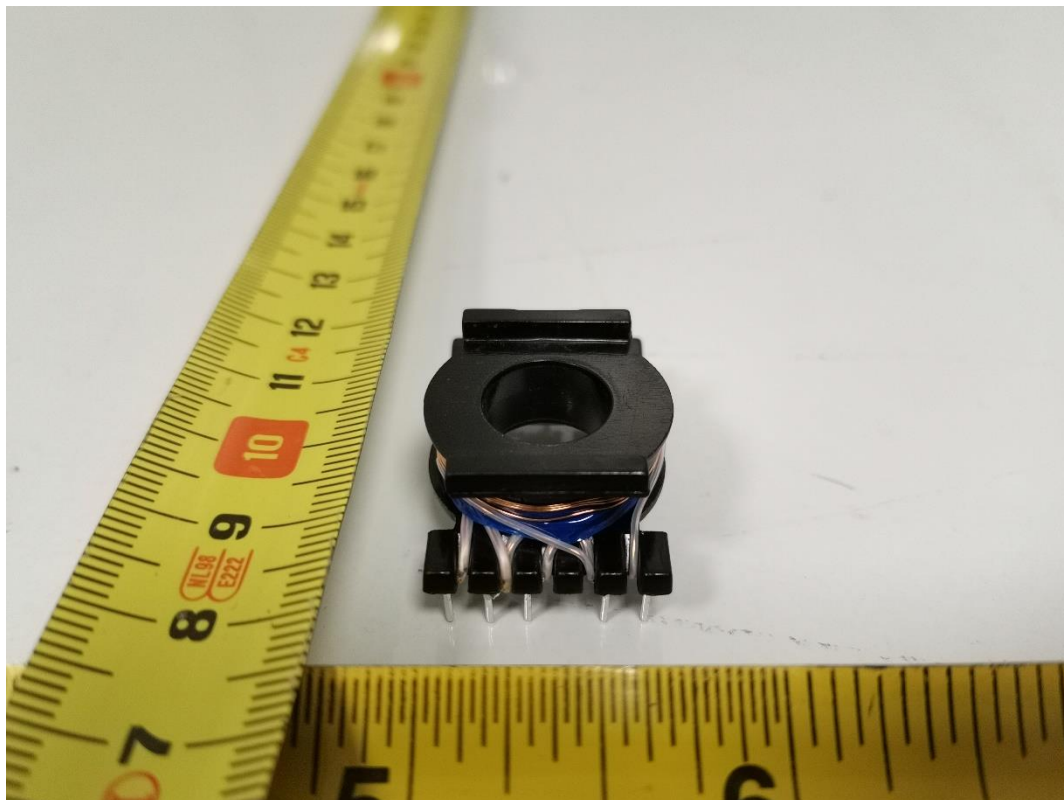


Figure 20. Transformer T1 view

Product: LCD Monitor

Type Designation: See test report

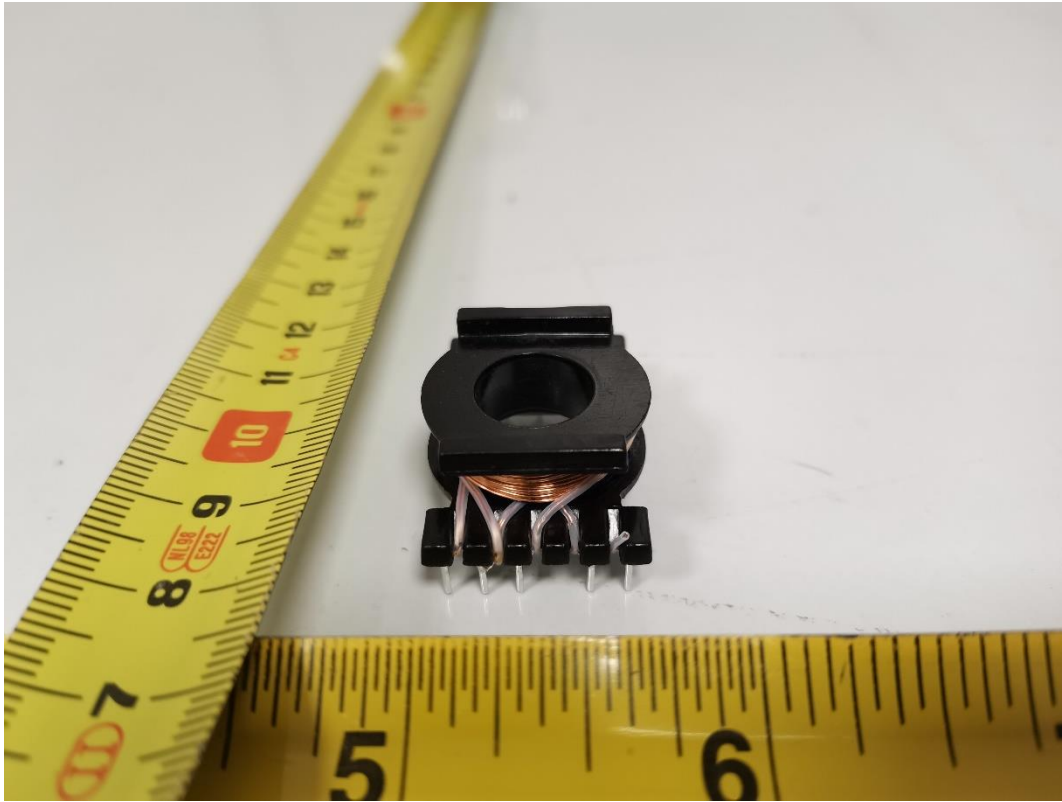


Figure 21. Transformer T1 view



Figure 22. Transformer T1 view

Product: LCD Monitor

Type Designation: See test report

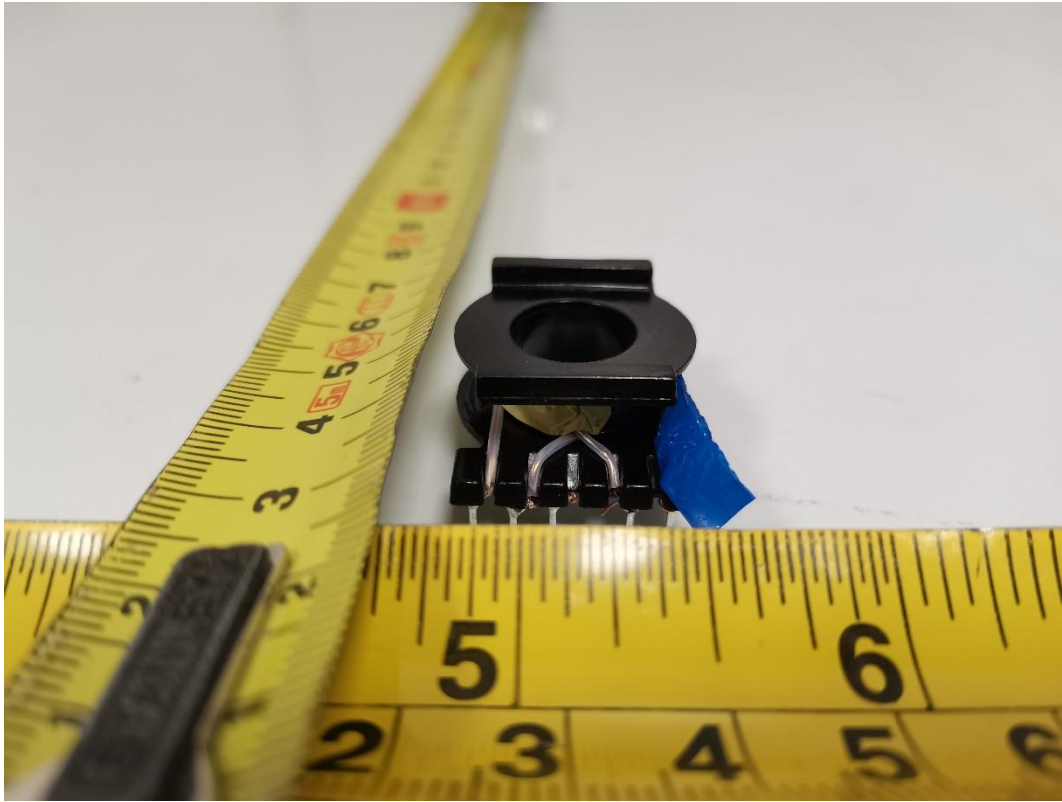


Figure 23. Transformer T1 view



Figure 24. Transformer T1 view

Product: LCD Monitor

Type Designation: See test report



Figure 25. Transformer T1 view