Test Report issued under the responsibility of:

TEST REPORT
IEC 62368-1
Audio/video, information and communication technology equipment
Part 1: Safety requirements

Report Number..... :	AOC251014011S
Date of issue ..... :	2025-10-24
Total number of pages ..... :	106 pages
Name of Testing Laboratory preparing the Report ..... :	Shenzhen AOCE Electronic Technology Service Co., Ltd Room 202, 2nd Floor, No.12th Building of Xinhe Tongfuyu Industrial Park, Fuhai Street, Baoan District, Shenzhen, Guangdong, China
Applicant's name ..... :	Guangzhou Infinity Technology Co., Ltd
Address ..... :	Room 814, No. 8 East Pazhou Avenue, Haizhu District, Guangzhou
Test specification:	
Standard ..... :	☒ IEC 62368-1:2018 ☒ EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES
Test procedure..... :	Test report
Non-standard test method..... :	N/A
TRF template used ..... :	IECEE OD-2020-F1:2021, Ed.1.4
Test Report Form No. ..... :	IEC62368_1E
Test Report Form(s) Originator.... :	UL(US)
Master TRF ..... :	Dated 2022-04-14

General disclaimer:

The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Issuing Testing Laboratory. The authenticity of this Test Report and its contents can be verified by contacting the Testing Laboratory, responsible for this Test Report.

Test item description .....:	VR Game Machine
Trade Mark .....:	N/A
Manufacturer.....:	Guangzhou Infinity Technology Co., Ltd Room 814, No. 8 East Pazhou Avenue, Haizhu District, Guangzhou
Model/Type reference .....:	VR Cinema, VR Shooting, VR Racing, VR Roller Coaster, VR Flying, 5D/9D Cinema
Ratings .....:	Input: 220-240V~, 50/60Hz, 4800W Max

Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):

☒	**Testing Laboratory:**	Shenzhen AOCE Electronic Technology Service Co., Ltd	
Testing location/ address ..... :		Room 202, 2nd Floor, No.12th Building of Xinhe Tongfuyu Industrial Park, Fuhai Street, Baoan District, Shenzhen, Guangdong, China	
Tested by (name, function, signature) ..... :		Bill Hu Technical Engineer	
Approved by (name, function, signature) .. :		Robin Liu Technical Manager	
☐	**Testing procedure: CTF Stage 1:**		
Testing location/ address ..... :			
Tested by (name, function, signature) ..... :			
Approved by (name, function, signature) .. :			
☐	**Testing procedure: CTF Stage 2:**		
Testing location/ address ..... :			
Tested by (name + signature) ..... :			
Witnessed by (name, function, signature) . :			
Approved by (name, function, signature) .. :			
☐	**Testing procedure: CTF Stage 3:**		
☐	**Testing procedure: CTF Stage 4:**		
Testing location/ address ..... :			
Tested by (name, function, signature) ..... :			
Witnessed by (name, function, signature) . :			
Approved by (name, function, signature) .. :			
Supervised by (name, function, signature) :			

List of Attachments (including a total number of pages in each attachment): **Attachment No.1:** EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES **Attachment No.2:** Photo document.	
Summary of testing:	
Tests performed (name of test and test clause): The submitted samples were found to comply with the requirements of: IEC 62368-1: 2018	**Testing location:** Shenzhen AOCE Electronic Technology Service Co., Ltd Room 202, 2nd Floor, No.12th Building of Xinhe Tongfuyu Industrial Park, Fuhai Street, Baoan District, Shenzhen, Guangdong, China
Summary of compliance with National Differences (List of countries addressed): EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES ☒ **The product fulfils the requirements of EN IEC 62368-1:2020+A11:2020.**	

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.

VR Game Machine
VR Cinema

Input: 220-240 V~, 50/60 Hz, 4800W max

Manufacturer: Guangzhou Infinity Technology Co., Ltd

Address: Room 814, No. 8 East Pazhou Avenue, Haizhu District, Guangzhou

Made in China

Note:

1. The above marking are the minimum requirements by the safety standard. For the final production samples, the additional markings which do not give rise to misunderstanding may be added.

Test item particulars:	
Product group .....:	☒ end product ☐ built-in component
Classification of use by .....:	☒ Ordinary person ☒ Children likely present ☐ Instructed person ☐ Skilled person
Supply connection.....:	☒ AC mains ☐ DC mains ☐ not mains connected: ☐ ES1 ☐ ES2 ☐ ES3
Supply tolerance .....:	☒ +10%/-10% ☐ +20%/-15% ☐ +____%/ -_____% ☐ None
Supply connection – type .....:	☐ pluggable equipment type A - ☐ non-detachable supply cord ☐ appliance coupler ☐ direct plug-in ☒ pluggable equipment type B - ☐ non-detachable supply cord ☒ appliance coupler ☐ permanent connection ☐ mating connector ☐ other: Not directly connected to the mains
Considered current rating of protective device.....:	☒ 16A for building; Location: ☒ building ☒ equipment ☐ N/A
Equipment mobility .....:	☐ movable ☐ hand-held ☐ transportable ☐ direct plug-in ☒ stationary ☐ for building-in ☐ wall/ceiling-mounted ☐ SRME/rack-mounted ☐ other:
Overvoltage category (OVC) .....:	☐ OVC I ☒ OVC II ☐ OVC III ☐ OVC IV
Class of equipment .....:	☒ Class I ☐ Class II ☐ Class III ☐ Not classified ☐ other:
Special installation location .....:	☒ N/A ☐ restricted access area ☐ outdoor location ☐ other:
Pollution degree (PD) .....:	☐ PD 1 ☒ PD 2 ☐ PD 3
Manufacturer's specified T_{ma}.....:	40 °C ☐ Outdoor: minimum ___°C
IP protection class .....:	☒ IPX0 ☐ IP___
Power systems .....:	☒ TN ☐ TT ☐ IT - ___ V_{L-L} ☐ not AC mains
Altitude during operation (m) .....:	☐ 2000 m or less ☒ 5000 m
Altitude of test laboratory (m) .....:	☒ 2000 m or less ☐ _____ m
Mass of equipment (kg) .....:	Approx. 300 kg

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 .....:	2025-09-14
Date (s) of performance of tests .....:	2025-09-14 to 2025-10-15
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 IECEE 02:	
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided .....:	☐ **Yes** ☒ **Not applicable**
When differences exist; they shall be identified in the General product information section.	
Name and address of factory (ies) ..... :	Guangzhou Infinity Technology Co., Ltd Room 814, No. 8 East Pazhou Avenue, Haizhu District, Guangzhou
General product information and other remarks: 1. This apparatus is VR Game Machine used for information technology equipment or audio/video equipment, the maximum ambient temperature and altitude are 40°C and 5000m. 2. Equipment contain one built-in switching mode power supply. 3. The external outputs ports are in accordance with the PS1. 4. All models are same except for model name. 5. All tests are performed on model VR Cinema.	

OVERVIEW OF ENERGY SOURCES AND SAFEGUARDS				
Clause	**Possible Hazard**			
5	Electrically-caused injury			
Class and Energy Source (e.g. ES3: Primary circuit)	Body Part (e.g. Ordinary)	Safeguards		
		B	S	R
ES3: All circuits expect for output circuits	Ordinary	N/A	N/A	Enclosure, see 5.3.2, 5.4.2, 5.4.3, 5.5.3, 5.5.4.
ES1: Output of power board	Ordinary	N/A	N/A	N/A
ES1: All output ports	Ordinary	N/A	N/A	N/A
ES1: Accessible parts	Ordinary	N/A	N/A	N/A
6	Electrically-caused fire			
Class and Energy Source (e.g. PS2: 100 Watt circuit)	Material part (e.g. Printed board)	Safeguards		
		B	1st S	2nd S
PS3 circuit	Enclosure	See 6.3	Metal	N/A
PS3 circuit	PCB	See 6.3	Min.V-0	N/A
PS3 circuit	Internal / external wiring	See 6.3.1	See 6.5 (Equipment safeguards, rated VW-1)	N/A
PS3 circuit	Other combustible components / materials	See 6.3	See 6.4.5, 6.4.6	N/A
PS1 circuit	All combustible material for output terminal	N/A	N/A	N/A
7	Injury caused by hazardous substances			
Class and Energy Source (e.g. Ozone)	Body Part (e.g., Skilled)	Safeguards		
		B	S	R
RTC Battery	Skilled	See Annex M	N/A	N/A
8	Mechanically-caused injury			
Class and Energy Source (e.g. MS3: Plastic fan blades)	Body Part (e.g. Ordinary)	Safeguards		
		B	S	R
MS3: Equipment Mass	Ordinary	N/A	N/A	N/A
MS1: Sharp edges and corners	Ordinary	N/A	N/A	N/A
9	Thermal burn			
Class and Energy Source (e.g. TS1: Keyboard caps)	Body Part (e.g., Ordinary)	Safeguards		
		B	S	R
TS1: All accessible parts	Ordinary	N/A	N/A	N/A
10	Radiation			

Class and Energy Source (e.g. RS1: PMP sound output)	Body Part (e.g., Ordinary)	Safeguards		
		B	S	R
RS1: LED backlight of LCD panel	Ordinary	N/A	N/A	N/A
RS1: LCD Panel	Ordinary	N/A	N/A	N/A
RS1: LED indicator light	Ordinary	N/A	N/A	N/A
Supplementary Information: “B” – Basic Safeguard; “S” – Supplementary Safeguard; “R” – Reinforced Safeguard				

ENERGY SOURCE DIAGRAM
Optional. Manufacturers are to provide the energy sources diagram identify declared energy sources and identifying the demarcations are between power sources. Recommend diagram be provided included in power supply and multipart systems. Insert diagram below. Example diagram designs are; Block diagrams; image(s) with layered data; mechanical drawings
☒ **ES** ☒ **PS** ☒ **MS** ☒ **TS** ☒ **RS** (See **OVERVIEW OF ENERGY SOURCES AND SAFEGUARDS**)

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Clause	Requirement + Test	Result - Remark	Verdict

4	**GENERAL REQUIREMENTS**		P
4.1.1	Acceptance of materials, components and subassemblies	(See appended Table 4.1.2.)	P
4.1.2	Use 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. See also Annex G	P
4.1.3	Equipment design and construction	Evaluation of safeguards regarding access to ES3 and to limiting the outputs to fulfill ES1, and protection in regard to risk of spread of fire, mechanical-caused injury and thermal burn considered.	P
4.1.4	Specified ambient temperature for outdoor use (°C) .....:		N/A
4.1.5	Constructions and components not specifically covered		N/A
4.1.8	Liquids and liquid filled components (LFC)		N/A
4.1.15	Markings and instructions	(See Annex F)	P
4.4.3	Safeguard robustness		P
4.4.3.1	General		P
4.4.3.2	Steady force tests	(See Clause T.5)	P
4.4.3.3	Drop tests		N/A
4.4.3.4	Impact tests	(See Clause T.6)	P
4.4.3.5	Internal accessible safeguard tests		N/A
4.4.3.6	Glass impact tests		N/A
4.4.3.7	Glass fixation tests		N/A
	Glass impact test (1J)		N/A
	Push/pull test (10 N)		N/A
4.4.3.8	Thermoplastic material tests		N/A
4.4.3.9	Air comprising a safeguard		P
4.4.3.10	Accessibility, glass, safeguard effectiveness	All safeguard remains effective	P
4.4.4	Displacement of a safeguard by an insulating liquid		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
4.4.5	Safety interlocks		N/A
4.5	**Explosion**		P
4.5.1	General	No explosion observed during normal / abnormal / single fault conditions.	P
4.5.2	No explosion during normal/abnormal operating condition	(See Clause B.2, B.3)	P
	No harm by explosion during single fault conditions	(See Clause B.4)	P
4.6	**Fixing of conductors**		P
	Fix conductors not to defeat a safeguard		P
	Compliance is checked by test ..... :	(See Clause T.2)	P
4.7	**Equipment for direct insertion into mains socket–outlets**		N/A
4.7.2	Mains plug part complies with relevant standard .. :		N/A
4.7.3	Torque (Nm) ..... :		N/A
4.8	**Equipment containing coin/button cell batteries**		N/A
4.8.1	General	Equipment for use in locations and button cell unlikely that children will be present	N/A
4.8.2	Instructional safeguard ..... :		N/A
4.8.3	Battery compartment door/cover construction		N/A
	Open torque test		N/A
4.8.4.2	Stress relief test		N/A
4.8.4.3	Battery replacement test		N/A
4.8.4.4	Drop test		N/A
4.8.4.5	Impact test		N/A
4.8.4.6	Crush test		N/A
4.8.5	Compliance		N/A
	30N force test with test probe		N/A
	20N force test with test hook		N/A
4.9	**Likelihood of fire or shock due to entry of conductive object**		P
4.10	**Component requirements**		P
4.10.1	Disconnect Device	(See Annex L)	P
4.10.2	Switches and relays	(See appended table 4.1.2.)	P

5	**ELECTRICALLY-CAUSED INJURY**	P
5.2	**Classification and limits of electrical energy sources**	P

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Clause	Requirement + Test	Result - Remark	Verdict
5.2.2	ES1, ES2 and ES3 limits	(See appended table 5.2)	P
5.2.2.2	Steady-state voltage and current limits .....:	(See appended table 5.2)	P
5.2.2.3	Capacitance limits .....:	(See appended table 5.2)	N/A
5.2.2.4	Single pulse limits .....:	No single pulse introduced	N/A
5.2.2.5	Limits for repetitive pulses .....:	(See appended table 5.2)	N/A
5.2.2.6	Ringing signals	No ringing signals.	N/A
5.2.2.7	Audio signals		N/A
5.3	**Protection against electrical energy sources**		P
5.3.1	General Requirements for accessible parts to ordinary, instructed and skilled persons	See below.	P
5.3.1 a)	Accessible ES1/ES2 derived from ES2/ES3 circuits		P
5.3.1 b)	Skilled persons not unintentional contact ES3 bare conductors		N/A
5.3.2.1	Accessibility to electrical energy sources and safeguards	Only ES1 parts are accessible by ordinary person.	P
	Accessibility to outdoor equipment bare parts	No outdoor equipment.	N/A
5.3.2.2	Contact requirements		P
	Test with test probe from Annex V	No bare parts at ES2 or ES3 basic safeguard could be accessed by operator.	—
5.3.2.2 a)	Air gap – electric strength test potential (V) .....:		N/A
5.3.2.2 b)	Air gap – distance (mm) .....:	>0.3	P
5.3.2.3	Compliance		P
5.3.2.4	Terminals for connecting stripped wire	No such structure	N/A
5.4	**Insulation materials and requirements**		P
5.4.1.2	Properties of insulating material		P
5.4.1.3	Material is non-hygroscopic		P
5.4.1.4	Maximum operating temperature for insulating materials .....:	(See appended table 5.4.1.4, 9.3, B.1.5, B.2.6)	P
5.4.1.5	Pollution degrees .....:	PD2	P
5.4.1.5.2	Test for pollution degree 1 environment and for an insulating compound	Pollution degree 2 is applied.	N/A
5.4.1.5.3	Thermal cycling test		N/A
5.4.1.6	Insulation in transformers with varying dimensions		N/A
5.4.1.7	Insulation in circuits generating starting pulses		N/A
5.4.1.8	Determination of working voltage .....:	(See appended table 5.4.1.8)	P

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Clause	Requirement + Test	Result - Remark	Verdict
5.4.1.9	Insulating surfaces	Considered.	P
5.4.1.10	Thermoplastic parts on which conductive metallic parts are directly mounted		P
5.4.1.10.2	Vicat test.....:		N/A
5.4.1.10.3	Ball pressure test .....:	(See appended table 5.4.1.10.3)	P
5.4.2	Clearances	(See appended table 5.4.2, 5.4.3)	P
5.4.2.1	General requirements		P
	Clearances in circuits connected to AC Mains, Alternative method		N/A
5.4.2.2	Procedure 1 for determining clearance	(See appended table 5.4.2, 5.4.3)	P
	Temporary overvoltage .....:	2000Vpeak.	—
5.4.2.3	Procedure 2 for determining clearance	(See appended table 5.4.2, 5.4.3)	P
5.4.2.3.2.2	a.c. mains transient voltage.....:	2500Vpeak.	—
5.4.2.3.2.3	d.c. mains transient voltage .....:		—
5.4.2.3.2.4	External circuit transient voltage.....:		—
5.4.2.3.2.5	Transient voltage determined by measurement .....:		—
5.4.2.4	Determining the adequacy of a clearance using an electric strength test .....:	Not such procedure used.	N/A
5.4.2.5	Multiplication factors for clearances and test voltages .....:	Up to 5000m, Factor 1.48	P
5.4.2.6	Clearance measurement .....:	(See appended table 5.4.2, 5.4.3)	P
5.4.3	Creepage distances	(See appended table 5.4.2, 5.4.3)	P
5.4.3.1	General	See below.	P
5.4.3.3	Material group .....:	IIIa or IIIb	—
5.4.3.4	Creepage distances measurement .....:	(See appended table 5.4.2, 5.4.3)	P
5.4.4	Solid insulation		P
5.4.4.1	General requirements		P
5.4.4.2	Minimum distance through insulation .....:	(See appended table 5.4.4.2)	P
5.4.4.3	Insulating compound forming solid insulation	Certified source of photo couplers used. (See append table 4.1.2)	P

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Clause	Requirement + Test	Result - Remark	Verdict
5.4.4.4	Solid insulation in semiconductor devices	(See clause 5.4.4.3)	P
5.4.4.5	Insulating compound forming cemented joints	No such construction within the EUT	N/A
5.4.4.6	Thin sheet material	See below.	P
5.4.4.6.1	General requirements	At least 3 layers of insulation tape are used for reinforced insulation and are not expected to be subject to handling or abrasion during ordinary or instructed person servicing.	P
5.4.4.6.2	Separable thin sheet material	Three layers are provided as reinforced insulation any two layers passed the electric strength test for reinforced insulation.	P
	Number of layers (pcs) .....:	See above	P
5.4.4.6.3	Non-separable thin sheet material	No non-separable thin sheet material.	N/A
	Number of layers (pcs) ..... :		N/A
5.4.4.6.4	Standard test procedure for non-separable thin sheet material ..... :		N/A
5.4.4.6.5	Mandrel test		N/A
5.4.4.7	Solid insulation in wound components	See G.5.3 and G.6.1	P
5.4.4.9	Solid insulation at frequencies >30 kHz, E_P, K_R, d, V_{PW} (V) ..... :	(See appended Tables 5.4.4.9)	P
	Alternative by electric strength test, tested voltage (V), K_R ..... :	(See appended Tables 5.4.4.9)	P
5.4.5	Antenna terminal insulation		P
5.4.5.1	General		P
5.4.5.2	Voltage surge test	Surge test with 50 discharges at a maximum rate of 12/min from a 1 nF capacitor charged to 10 kV performed.	P
5.4.5.3	Insulation resistance (MΩ)..... :	>4 MΩ	P
	Electric strength test .....:		P
5.4.6	Insulation of internal wire as part of supplementary safeguard	No such insulation of internal wire as part of supplementary insulation	N/A
5.4.7	Tests for semiconductor components and for cemented joints		N/A
5.4.8	Humidity conditioning		P

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Clause	Requirement + Test	Result - Remark	Verdict
	Relative humidity (%), temperature (°C), duration (h) ..... :	95%, 40°C, 120h	—
5.4.9	Electric strength test	(See appended table 5.4.9)	P
5.4.9.1	Test procedure for type test of solid insulation.....:	Method 1 used.	P
5.4.9.2	Test procedure for routine test		N/A
5.4.10	Safeguards against transient voltages from external circuits	No such external circuits.	N/A
5.4.10.1	Parts and circuits separated from external circuits		N/A
5.4.10.2	Test methods		N/A
5.4.10.2.1	General		N/A
5.4.10.2.2	Impulse test ..... :		N/A
5.4.10.2.3	Steady-state test..... :		N/A
5.4.10.3	Verification for insulation breakdown for impulse test ..... :		N/A
5.4.11	Separation between external circuits and earth	No connection to external circuits with transient voltage.	N/A
5.4.11.1	Exceptions to separation between external circuits and earth		N/A
5.4.11.2	Requirements		N/A
	SPDs bridge separation between external circuit and earth		N/A
	Rated operating voltage U_{op} (V)..... :		—
	Nominal voltage U_{peak} (V)..... :		—
	Max increase due to variation ΔU_{sp} ..... :		—
	Max increase due to ageing ΔU_{sa} ..... :		—
5.4.11.3	Test method and compliance ..... :		N/A
5.4.12	Insulating liquid		N/A
5.4.12.1	General requirements		N/A
5.4.12.2	Electric strength of an insulating liquid ..... :		N/A
5.4.12.3	Compatibility of an insulating liquid ..... :		N/A
5.4.12.4	Container for insulating liquid ..... :		N/A
5.5	**Components as safeguards**		P
5.5.1	General		P
5.5.2	Capacitors and RC units	Approved X capacitor and Y capacitor provided. (See appended table 4.1.2)	P
5.5.2.1	General requirement		P

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Clause	Requirement + Test	Result - Remark	Verdict
5.5.2.2	Safeguards against capacitor discharge after disconnection of a connector ..... :	(See appended table 5.5.2.2)	P
5.5.3	Transformers	(See Annex G.5.3)	P
5.5.4	Optocouplers	(See Annex G.12)	P
5.5.5	Relays	No such relay used as safeguard	N/A
5.5.6	Resistors	(See Annex G.8)	P
5.5.7	SPDs	(See Annex G.10)	P
5.5.8	Insulation between the mains and an external circuit consisting of a coaxial cable ..... :	No such external circuits.	N/A
5.5.9	Safeguards for socket-outlets in outdoor equipment		N/A
	RCD rated residual operating current (mA)..... :		—
5.6	**Protective conductor**		P
5.6.2	Requirement for protective conductors		P
5.6.2.1	General requirements		P
5.6.2.2	Colour of insulation	No switches, current limiting devices or over current protective devices use in Protective conductors.	P
5.6.3	Requirement for protective earthing conductors		P
	Protective earthing conductor size (mm^2) ..... :	See table 4.1.2	—
	Protective earthing conductor serving as a reinforced safeguard		N/A
	Protective earthing conductor serving as a double safeguard		N/A
5.6.4	Requirements for protective bonding conductors	The green/yellow wire was fasten to the internal metal enclosure by screw.	P
5.6.4.1	Protective bonding conductors		P
	Protective bonding conductor size (mm^2). ..... :	(See table 4.1.2)	—
5.6.4.2	Protective current rating (A)..... :	16A	P
5.6.5	Terminals for protective conductors		P
5.6.5.1	Terminal size for connecting protective earthing conductors (mm)..... :	Earth pin of appliance inlet used for protective earthing terminal	P
	Terminal size for connecting protective bonding conductors (mm) .....:	Protective bonding conductor is metal enclosure, the terminal for protective bonding conductor: M3.5 (diameter: 3.5mm) screw type used	P

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Clause	Requirement + Test	Result - Remark	Verdict
5.6.5.2	Corrosion	The potential difference between the two different metals is less than 0.6 V.	P
5.6.6	Resistance of the protective bonding system		P
5.6.6.1	Requirements		P
5.6.6.2	Test Method ..... :	(See appended table 5.6.6)	P
5.6.6.3	Resistance (Ω) or voltage drop ..... :	(See appended table 5.6.6)	P
5.6.7	Reliable connection of a protective earthing conductor		P
5.6.8	Functional earthing		N/A
	Conductor size (mm^2) ..... :		N/A
	Class II with functional earthing marking ..... :		N/A
	Appliance inlet cl & cr (mm) ..... :		N/A
5.7	**Prospective touch voltage, touch current and protective conductor current**		P
5.7.2	Measuring devices and networks		P
5.7.2.1	Measurement of touch current	(See appended table 5.7.4)	P
5.7.2.2	Measurement of voltage	(See appended table 5.7.4)	P
5.7.3	Equipment set-up, supply connections and earth connections		P
5.7.4	Unearthed accessible parts ..... :	Touch current at unearthed accessible conductive parts is not exceeding ES1 limits. (See appended table 5.7.4)	P
5.7.5	Earthed accessible conductive parts ..... :	(See appended table 5.7.5)	P
5.7.6	Requirements when touch current exceeds ES2 limits		N/A
	Protective conductor current (mA) ..... :		N/A
	Instructional Safeguard ..... :		N/A
5.7.7	Prospective touch voltage and touch current associated with external circuits	No connection to external circuits with transient voltage.	N/A
5.7.7.1	Touch current from coaxial cables		N/A
5.7.7.2	Prospective touch voltage and touch current associated with paired conductor cables		N/A
5.7.8	Summation of touch currents from external circuits		N/A
	a) Equipment connected to earthed external circuits, current (mA) ..... :		N/A
	b) Equipment connected to unearthed external circuits, current (mA) ..... :		N/A
5.8	**Backfeed safeguard in battery backed up supplies**		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Mains terminal ES.....:		N/A
	Air gap (mm).....:		N/A

6	**ELECTRICALLY- CAUSED FIRE**		P
6.2	**Classification of PS and PIS**		P
6.2.2	Power source circuit classifications.....:	(See appended table 6.2.2)	P
6.2.3	Classification of potential ignition sources	(See appended table 6.2.2)	P
6.2.3.1	Arcing PIS .....:	(See appended table 6.2.3.1)	P
6.2.3.2	Resistive PIS .....:	(See appended table 6.2.3.2)	P
6.3	**Safeguards against fire under normal operating and abnormal operating conditions**		P
6.3.1	No ignition and attainable temperature value less than 90 % defined by ISO 871 or less than 300 °C for unknown materials ..... :	(See appended table 5.4.1.4, 9.3, B.1.5, B.2.6)	P
	Combustible materials outside fire enclosure .....:	(See appended table 5.4.1.4, 9.3, B.1.5, B.2.6)	P
6.4	**Safeguards against fire under single fault conditions**		P
6.4.1	Safeguard method	Method of Control fire spread used.	P
6.4.2	Reduction of the likelihood of ignition under single fault conditions in PS1 circuits		N/A
6.4.3	Reduction of the likelihood of ignition under single fault conditions in PS2 and PS3 circuits		N/A
6.4.3.1	Supplementary safeguards		N/A
6.4.3.2	Single Fault Conditions ..... :		N/A
	Special conditions for temperature limited by fuse		N/A
6.4.4	Control of fire spread in PS1 circuits		N/A
6.4.5	Control of fire spread in PS2 circuits	See below.	P
6.4.5.2	Supplementary safeguards	Compliance detailed as follows: - Printed board: rated V-1 or VTM-1 min. class material; - Other components other than PCB and wires are mounted on PCB rated V-1 or VTM-1 min., or made of V-2, VTM-2 or HF2 min. - Isolating transformer: complying with G.5.3.	P

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Clause	Requirement + Test	Result - Remark	Verdict
6.4.6	Control of fire spread in PS3 circuits	Compliance detailed as follows: − Parts as in 6.4.5 above − Fire enclosure: metal enclosure used.	P
6.4.7	Separation of combustible materials from a PIS	See the following details.	N/A
6.4.7.2	Separation by distance	All components and combustible materials other than small parts are either rated at least V-2 class material or mounted on PCB material with rated min. V-1 class material, and metal enclosure used.	N/A
6.4.7.3	Separation by a fire barrier	See above.	N/A
6.4.8	Fire enclosures and fire barriers	Equipment enclosure was evaluated as a fire enclosure.	P
6.4.8.2	Fire enclosure and fire barrier material properties	See the following details.	P
6.4.8.2.1	Requirements for a fire barrier	No fire barrier is used.	N/A
6.4.8.2.2	Requirements for a fire enclosure	Metal enclosure used.	P
6.4.8.3	Constructional requirements for a fire enclosure and a fire barrier	See below	P
6.4.8.3.1	Fire enclosure and fire barrier openings		P
6.4.8.3.2	Fire barrier dimensions		P
6.4.8.3.3	Top openings and properties		N/A
	Openings dimensions (mm)..... :		N/A
6.4.8.3.4	Bottom openings and properties		N/A
	Openings dimensions (mm)..... :		N/A
	Flammability tests for the bottom of a fire enclosure		N/A
	Instructional Safeguard.....:		N/A
6.4.8.3.5	Side openings and properties		P
	Openings dimensions (mm)..... :	Ø1.9mm Max	P
6.4.8.3.6	Integrity of a fire enclosure, condition met: a), b) or c)..... :		N/A
6.4.8.4	Separation of a PIS from a fire enclosure and a fire barrier distance (mm) or flammability rating ..... :	Metal enclosure used	P
6.4.9	Flammability of insulating liquid.....:		N/A
6.5	**Internal and external wiring**		P
6.5.1	General requirements	See below.	P

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Clause	Requirement + Test	Result - Remark	Verdict
6.5.2	Requirements for interconnection to building wiring ..... :	The material of VW-1 on internal wiring were considered compliance equal to equivalent to IEC/TS 60695-11-21 relevant standards.	P
6.5.3	Internal wiring size (mm^2) for socket-outlets..... :		N/A
6.6	**Safeguards against fire due to the connection to additional equipment**		P
7	**INJURY CAUSED BY HAZARDOUS SUBSTANCES**		P
7.2	**Reduction of exposure to hazardous substances**		N/A
7.3	**Ozone exposure**		N/A
7.4	**Use of personal safeguards or personal protective equipment (PPE)**		N/A
	Personal safeguards and instructions ..... :		—
7.5	**Use of instructional safeguards and instructions**		N/A
	Instructional safeguard (ISO 7010)..... :		—
7.6	**Batteries and their protection circuits**		P
8	**MECHANICALLY-CAUSED INJURY**		P
8.2	**Mechanical energy source classifications**		P
8.3	**Safeguards against mechanical energy sources**		P
8.4	**Safeguards against parts with sharp edges and corners**		P
8.4.1	Safeguards		P
	Instructional Safeguard.....:	MS1 applied for edges and corners.	P
8.4.2	Sharp edges or corners	MS1	P
8.5	**Safeguards against moving parts**		N/A
8.5.1	Fingers, jewellery, clothing, hair, etc., contact with MS2 or MS3 parts		N/A
	MS2 or MS3 part required to be accessible for the function of the equipment		N/A
	Moving MS3 parts only accessible to skilled person		N/A
8.5.2	Instructional safeguard.....:		N/A
8.5.4	Special categories of equipment containing moving parts		N/A
8.5.4.1	General		N/A
8.5.4.2	Equipment containing work cells with MS3 parts		N/A
8.5.4.2.1	Protection of persons in the work cell		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
8.5.4.2.2	Access protection override		N/A
8.5.4.2.2.1	Override system		N/A
8.5.4.2.2.2	Visual indicator		N/A
8.5.4.2.3	Emergency stop system		N/A
	Maximum stopping distance from the point of activation (m).....:		N/A
	Space between end point and nearest fixed mechanical part (mm) .....:		N/A
8.5.4.2.4	Endurance requirements		N/A
	Mechanical system subjected to 100 000 cycles of operation		N/A
	- Mechanical function check and visual inspection		N/A
	- Cable assembly .....:		N/A
8.5.4.3	Equipment having electromechanical device for destruction of media		N/A
8.5.4.3.1	Equipment safeguards		N/A
8.5.4.3.2	Instructional safeguards against moving parts .....:		N/A
8.5.4.3.3	Disconnection from the supply		N/A
8.5.4.3.4	Cut type and test force (N).....:		N/A
8.5.4.3.5	Compliance		N/A
8.5.5	High pressure lamps		N/A
	Explosion test.....:		N/A
8.5.5.3	Glass particles dimensions (mm) .....:		N/A
8.6	**Stability of equipment**		P
8.6.1	General	stationary equipment	P
	Instructional safeguard.....:		N/A
8.6.2	Static stability		N/A
8.6.2.2	Static stability test .....:		N/A
8.6.2.3	Downward force test		N/A
8.6.3	Relocation stability		N/A
	Wheels diameter (mm) .....:		—
	Tilt test		N/A
8.6.4	Glass slide test		N/A
8.6.5	Horizontal force test.....:		N/A
8.7	**Equipment mounted to wall, ceiling or other structure**		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
8.7.1	Mount means type .....:		N/A
8.7.2	Test methods		N/A
	Test 1, additional downwards force (N).....:		N/A
	Test 2, number of attachment points and test force (N).....:		N/A
	Test 3 Nominal diameter (mm) and applied torque (Nm).....:		N/A
8.8	**Handles strength**		N/A
8.8.1	General		N/A
8.8.2	Handle strength test		N/A
	Number of handles.....:		—
	Force applied (N) .....:		—
8.9	**Wheels or casters attachment requirements**		N/A
8.9.2	Pull test		N/A
8.10	**Carts, stands and similar carriers**		N/A
8.10.1	General		N/A
8.10.2	Marking and instructions.....:		N/A
8.10.3	Cart, stand or carrier loading test		N/A
	Loading force applied (N) .....:		N/A
8.10.4	Cart, stand or carrier impact test		N/A
8.10.5	Mechanical stability		N/A
	Force applied (N) .....:		—
8.10.6	Thermoplastic temperature stability		N/A
8.11	**Mounting means for slide-rail mounted equipment (SRME)**		N/A
8.11.1	General		N/A
8.11.2	Requirements for slide rails		N/A
	Instructional Safeguard.....:		N/A
8.11.3	Mechanical strength test		N/A
8.11.3.1	Downward force test, force (N) applied.....:		N/A
8.11.3.2	Lateral push force test		N/A
8.11.3.3	Integrity of slide rail end stops		N/A
8.11.4	Compliance		N/A
8.12	**Telescoping or rod antennas**		N/A
	Button/ball diameter (mm) .....:		—

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Clause	Requirement + Test	Result - Remark	Verdict
9	**THERMAL BURN INJURY**		P
9.2	**Thermal energy source classifications**		P
9.3	**Touch temperature limits**		P
9.3.1	Touch temperatures of accessible parts .....:	All accessible surfaces are classified as TS1 (See appended table 5.4.1.4, 9.3, B.1.5, B.2.6)	P
9.3.2	Test method and compliance	(See appended table 5.4.1.4, 9.3, B.1.5, B.2.6)	P
9.4	**Safeguards against thermal energy sources**		P
9.5	**Requirements for safeguards**		P
9.5.1	Equipment safeguard		P
9.5.2	Instructional safeguard.....:		N/A
9.6	**Requirements for wireless power transmitters**		N/A
9.6.1	General		N/A
9.6.2	Specification of the foreign objects		N/A
9.6.3	Test method and compliance .....:		N/A

10	**RADIATION**		P
10.2	**Radiation energy source classification**		P
10.2.1	General classification	See OVERVIEW OF ENERGY SOURCES AND SAFEGUARDS	P
	Lasers ..... :		—
	Lamps and lamp systems..... :	RS1	—
	Image projectors ..... :		—
	X-Ray..... :		—
	Personal music player ..... :		—
10.3	**Safeguards against laser radiation**		N/A
	The standard(s) equipment containing laser(s) comply .....:		N/A
10.4	**Safeguards against optical radiation from lamps and lamp systems (including LED types)**		P
10.4.1	General requirements	LED backlight of LCD panel, the luminance is far less than 10000 cd/m^2. LED indicator as low power application.	P

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Clause	Requirement + Test	Result - Remark	Verdict
	Instructional safeguard provided for accessible radiation level needs to exceed		N/A
	Risk group marking and location.....:		N/A
	Information for safe operation and installation		N/A
10.4.2	Requirements for enclosures		N/A
	UV radiation exposure .....:		N/A
10.4.3	Instructional safeguard .....:		N/A
10.5	**Safeguards against X-radiation**		N/A
10.5.1	Requirements		N/A
	Instructional safeguard for skilled persons .....:		—
10.5.3	Maximum radiation (pA/kg).....:		—
10.6	**Safeguards against acoustic energy sources**		N/A
10.6.1	General		N/A
10.6.2	Classification		N/A
	Acoustic output $L_{Aeq,T}$, dB(A).....:		N/A
	Unweighted RMS output voltage (mV).....:		N/A
	Digital output signal (dBFS).....:		N/A
10.6.3	Requirements for dose-based systems		N/A
10.6.3.1	General requirements		N/A
10.6.3.2	Dose-based warning and automatic decrease		N/A
10.6.3.3	Exposure-based warning and requirements		N/A
	30 s integrated exposure level (MEL30) .....:		N/A
	Warning for MEL ≥ 100 dB(A) .....:		N/A
10.6.4	Measurement methods		N/A
10.6.5	Protection of persons		N/A
	Instructional safeguards .....:		N/A
10.6.6	Requirements for listening devices (headphones, earphones, etc.)		N/A
10.6.6.1	Corded listening devices with analogue input		N/A
	Listening device input voltage (mV).....:		N/A
10.6.6.2	Corded listening devices with digital input		N/A
	Max. acoustic output $L_{Aeq,T}$, dB(A) .....:		N/A
10.6.6.3	Cordless listening devices		N/A
	Max. acoustic output $L_{Aeq,T}$, dB(A) .....:		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
B	**NORMAL OPERATING CONDITION TESTS, ABNORMAL OPERATING CONDITION TESTS AND SINGLE FAULT CONDITION TESTS**		P
B.1	**General**		P
B.1.5	Temperature measurement conditions	(See appended table B.1.5)	P
B.2	**Normal operating conditions**		P
B.2.1	General requirements ..... :	(See Test Item Particulars and appended test tables)	P
	Audio Amplifiers and equipment with audio amplifiers ..... :		N/A
B.2.3	Supply voltage and tolerances	+10% and -10% for a.c. mains.	P
B.2.5	Input test ..... :	(See appended table B.2.5)	P
B.3	**Simulated abnormal operating conditions**		P
B.3.1	General	(See appended tables B.3, B.4)	P
B.3.2	Covering of ventilation openings	(See appended table B.3, B.4)	P
	Instructional safeguard ..... :	TS1	P
B.3.3	DC mains polarity test	The equipment is not connected to a D.C. mains.	N/A
B.3.4	Setting of voltage selector	No voltage selector	N/A
B.3.5	Maximum load at output terminals	(See appended tables B.3, B.4)	P
B.3.6	Reverse battery polarity		N/A
B.3.7	Audio amplifier abnormal operating conditions		N/A
B.3.8	Safeguards functional during and after abnormal operating conditions ..... :	(See appended tables B.3, B.4)	P
B.4	**Simulated single fault conditions**		P
B.4.1	General		P
B.4.2	Temperature controlling device	No such devices.	N/A
B.4.3	Blocked motor test	No motor used.	N/A
B.4.4	Functional insulation	(See appended tables B.3, B.4)	P
B.4.4.1	Short circuit of clearances for functional insulation	(See appended tables B.3, B.4)	P
B.4.4.2	Short circuit of creepage distances for functional insulation	(See appended tables B.3, B.4)	P
B.4.4.3	Short circuit of functional insulation on coated printed boards	No coated printed boards	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
B.4.5	Short-circuit and interruption of electrodes in tubes and semiconductors	(See appended tables B.3, B.4)	P
B.4.6	Short circuit or disconnection of passive components	(See appended tables B.3, B.4)	P
B.4.7	Continuous operation of components	The equipment is continuous operating type and no such components intended for short time operation or intermittent operation.	N/A
B.4.8	Compliance during and after single fault conditions ..... :	(See appended tables B.3, B.4)	P
B.4.9	Battery charging and discharging under single fault conditions	(See Annex M)	P
C	**UV RADIATION**		N/A
C.1	**Protection of materials in equipment from UV radiation**		N/A
C.1.2	Requirements	No such UV generated from the equipment.	N/A
C.1.3	Test method		N/A
C.2	**UV light conditioning test**		N/A
C.2.1	Test apparatus..... :		N/A
C.2.2	Mounting of test samples		N/A
C.2.3	Carbon-arc light-exposure test		N/A
C.2.4	Xenon-arc light-exposure test		N/A
D	**TEST GENERATORS**		N/A
D.1	**Impulse test generators**		N/A
D.2	**Antenna interface test generator**		N/A
D.3	**Electronic pulse generator**		N/A
E	**TEST CONDITIONS FOR EQUIPMENT CONTAINING AUDIO AMPLIFIERS**		N/A
E.1	**Electrical energy source classification for audio signals**		N/A
	Maximum non-clipped output power (W)..... :		—
	Rated load impedance (Ω) ..... :		—
	Open-circuit output voltage (V)..... :		—
	Instructional safeguard ..... :		—
E.2	**Audio amplifier normal operating conditions**		N/A
	Audio signal source type ..... :		—
	Audio output power (W)..... :		—
	Audio output voltage (V) ..... :		—

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Clause	Requirement + Test	Result - Remark	Verdict
	Rated load impedance (Ω) ..... :		—
	Requirements for temperature measurement		N/A
E.3	Audio amplifier abnormal operating conditions		N/A
F	**EQUIPMENT MARKINGS, INSTRUCTIONS, AND INSTRUCTIONAL SAFEGUARDS**		P
F.1	**General**		P
	Language ..... :	English. Versions in other languages will be provided when national certificate approval.	—
F.2	**Letter symbols and graphical symbols**		P
F.2.1	Letter symbols according to IEC60027-1	Letter symbols for quantities and units are complied with IEC 60027-1.	P
F.2.2	Graphic symbols according to IEC, ISO or manufacturer specific	Graphical symbols are complied with IEC 60417, ISO 3864-2, ISO 7000 or ISO 7010.	P
F.3	**Equipment markings**		P
F.3.1	Equipment marking locations	The equipment marking is located on the surface and is easily visible.	P
F.3.2	Equipment identification markings	See below.	P
F.3.2.1	Manufacturer identification ..... :	See copy of marking plate	P
F.3.2.2	Model identification ..... :	See copy of marking plate	P
F.3.3	Equipment rating markings	See copy of marking plate	P
F.3.3.1	Equipment with direct connection to mains	See copy of marking plate	P
F.3.3.2	Equipment without direct connection to mains		N/A
F.3.3.3	Nature of the supply voltage..... :	See copy of marking plate	P
F.3.3.4	Rated voltage..... :	See copy of marking plate	P
F.3.3.5	Rated frequency ..... :	See copy of marking plate	P
F.3.3.6	Rated current or rated power..... :	See copy of marking plate	P
F.3.3.7	Equipment with multiple supply connections	Only one connection.	N/A
F.3.4	Voltage setting device	No voltage setting device.	N/A
F.3.5	Terminals and operating devices	See below.	P
F.3.5.1	Mains appliance outlet and socket-outlet markings ..... :	No such devices within the equipment.	N/A
F.3.5.2	Switch position identification marking..... :	The identification markings are marking on the switch	P

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Clause	Requirement + Test	Result - Remark	Verdict
F.3.5.3	Replacement fuse identification and rating markings ..... :	For the built-in power supply board part: The Fuse is located within the equipment and not replaceable by an ordinary person or an instructed person. The fuse marking is marked on PCB near fuse: F1 T3.15A/250Vac For the AC inlet part: Fuse is replaceable by an ordinary person or an instructed person, the rating of the fuse is displayed on the AC inlet compartment. The fuse marking is marked on the fuse body: F10AL/ 250V	P
	Instructional safeguards for neutral fuse ..... :		N/A
F.3.5.4	Replacement battery identification marking ..... :		N/A
F.3.5.5	Neutral conductor terminal		N/A
F.3.5.6	Terminal marking location	Not permanently connected equipment	P
F.3.6	Equipment markings related to equipment classification		P
F.3.6.1	Class I equipment		P
F.3.6.1.1	Protective earthing conductor terminal ..... :	The symbol with “ ⏚ ” is located adjacent to earthed terminal of appliance inlet	P
F.3.6.1.2	Protective bonding conductor terminals ..... :	The symbol with “ ⏚ ” is located adjacent to earthed terminal of appliance inlet	P
F.3.6.2	Equipment class marking ..... :	See copy of marking plate.	P
F.3.6.3	Functional earthing terminal marking ..... :		N/A
F.3.7	Equipment IP rating marking ..... :	IPX0	N/A
F.3.8	External power supply output marking ..... :		N/A
F.3.9	Durability, legibility and permanence of marking	All markings required are easily discernible under normal lighting conditions.	P
F.3.10	Test for permanence of markings	After rubbing test by water and petroleum spirit, the marking still legible; it is not easily possible to remove the marking plate and show no curling.	P

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Clause	Requirement + Test	Result - Remark	Verdict
F.4	**Instructions**		P
	a) Information prior to installation and initial use	Relevant safety caution texts and installation instruction are available	P
	b) Equipment for use in locations where children not likely to be present		N/A
	c) Instructions for installation and interconnection	Relevant safety caution texts and installation instruction are available.	P
	d) Equipment intended for use only in restricted access area		N/A
	e) Equipment intended to be fastened in place		N/A
	f) Instructions for audio equipment terminals		N/A
	g) Protective earthing used as a safeguard		N/A
	h) Protective conductor current exceeding ES2 limits		N/A
	i) Graphic symbols used on equipment		N/A
	j) Permanently connected equipment not provided with all-pole mains switch		N/A
	k) Replaceable components or modules providing safeguard function		N/A
	l) Equipment containing insulating liquid		N/A
	m) Installation instructions for outdoor equipment		N/A
F.5	Instructional safeguards		N/A
G	**COMPONENTS**		P
G.1	**Switches**		P
G.1.1	General	(See appended table 4.1.2)	P
G.1.2	Ratings, endurance, spacing, maximum load	(See appended table 4.1.2)	P
G.1.3	Test method and compliance		N/A
G.2	**Relays**		N/A
G.2.1	Requirements	No relays	N/A
G.2.2	Overload test		N/A
G.2.3	Relay controlling connectors supplying power to other equipment		N/A
G.2.4	Test method and compliance		N/A
G.3	**Protective devices**		P
G.3.1	Thermal cut-offs	No thermal cut-offs	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Thermal cut-outs separately approved according to IEC 60730 with conditions indicated in a) & b)		N/A
	Thermal cut-outs tested as part of the equipment as indicated in c)		N/A
G.3.1.2	Test method and compliance		N/A
G.3.2	Thermal links		N/A
G.3.2.1	a) Thermal links tested separately according to IEC 60691 with specifics		N/A
	b) Thermal links tested as part of the equipment		N/A
G.3.2.2	Test method and compliance		N/A
G.3.3	PTC thermistors	No PTC thermistors	N/A
G.3.4	Overcurrent protection devices	Approved fuse is used (See appended table 4.1.2)	P
G.3.5	Safeguards components not mentioned in G.3.1 to G.3.4		N/A
G.3.5.1	Non-resettable devices suitably rated and marking provided		N/A
G.3.5.2	Single faults conditions ..... :		N/A
G.4	**Connectors**		P
G.4.1	Spacings		P
G.4.2	Mains connector configuration..... :	Approved AC inlet used	P
G.4.3	Plug is shaped that insertion into mains socket-outlets or appliance coupler is unlikely	No misconnection likely.	P
G.5	**Wound components**		P
G.5.1	Wire insulation in wound components		P
G.5.1.2	Protection against mechanical stress	Physical separation is provided (by insulating tube and insulation tape).	P
G.5.2	Endurance test		N/A
G.5.2.1	General test requirements		N/A
G.5.2.2	Heat run test		N/A
	Test time (days per cycle) ..... :		—
	Test temperature (°C)..... :		—
G.5.2.3	Wound components supplied from the mains		N/A
G.5.2.4	No insulation breakdown		N/A
G.5.3	Transformers	See below.	P

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Clause	Requirement + Test	Result - Remark	Verdict
G.5.3.1	Compliance method..... :	The transformers meet the requirements given in G.5.3.2 and G.5.3.3.	P
	Position ..... :	T1	P
	Method of protection..... :	Over current protection by circuit design.	P
G.5.3.2	Insulation	Primary windings and secondary windings are separated by Reinforced insulation.	P
	Protection from displacement of windings..... :	By bobbin, core, margin tape and insulation tape	—
G.5.3.3	Transformer overload tests	(See appended tables B.3, B.4)	P
G.5.3.3.1	Test conditions	Tested in the complete equipment.	P
G.5.3.3.2	Winding temperatures	(See appended table B.3, B.4)	P
G.5.3.3.3	Winding temperatures - alternative test method		N/A
G.5.3.4	Transformers using FIW		N/A
G.5.3.4.1	General		N/A
	FIW wire nominal diameter..... :		—
G.5.3.4.2	Transformers with basic insulation only		N/A
G.5.3.4.3	Transformers with double insulation or reinforced insulation..... :		N/A
G.5.3.4.4	Transformers with FIW wound on metal or ferrite core		N/A
G.5.3.4.5	Thermal cycling test and compliance		N/A
G.5.3.4.6	Partial discharge test		N/A
G.5.3.4.7	Routine test		N/A
G.5.4	Motors		P
G.5.4.1	General requirements		P
G.5.4.2	Motor overload test conditions	Tested in the complete equipment.	P
G.5.4.3	Running overload test		P
G.5.4.4.2	Locked-rotor overload test		P
	Test duration (days) ..... :	60 number of times	—
G.5.4.5	Running overload test for DC motors		N/A
G.5.4.5.2	Tested in the unit		N/A
G.5.4.5.3	Alternative method		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
G.5.4.6	Locked-rotor overload test for DC motors		N/A
G.5.4.6.2	Tested in the unit		N/A
	Maximum Temperature ..... :		N/A
G.5.4.6.3	Alternative method		N/A
G.5.4.7	Motors with capacitors		N/A
G.5.4.8	Three-phase motors		N/A
G.5.4.9	Series motors		N/A
	Operating voltage ..... :		—
G.6	**Wire Insulation**		P
G.6.1	General		P
G.6.2	Enamelled winding wire insulation		P
G.7	**Mains supply cords**		P
G.7.1	General requirements		P
	Type ..... :	(See appended table 4.1.2)	—
G.7.2	Cross sectional area (mm^2 or AWG) ..... :	(See appended table 4.1.2)	P
G.7.3	Cord anchorages and strain relief for non-detachable power supply cords		N/A
G.7.3.2	Cord strain relief		N/A
G.7.3.2.1	Requirements		N/A
	Strain relief test force (N) ..... :		N/A
G.7.3.2.2	Strain relief mechanism failure		N/A
G.7.3.2.3	Cord sheath or jacket position, distance (mm) ..... :		N/A
G.7.3.2.4	Strain relief and cord anchorage material		N/A
G.7.4	Cord Entry		N/A
G.7.5	Non-detachable cord bend protection		N/A
G.7.5.1	Requirements		N/A
G.7.5.2	Test method and compliance		N/A
	Overall diameter or minor overall dimension, *D* (mm) ..... :		—
	Radius of curvature after test (mm) ..... :		—
G.7.6	Supply wiring space		N/A
G.7.6.1	General requirements		N/A
G.7.6.2	Stranded wire		N/A
G.7.6.2.1	Requirements		N/A
G.7.6.2.2	Test with 8 mm strand		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
G.8	**Varistors**		P
G.8.1	General requirements	Approved varistors used. (See appended table 4.1.2)	P
G.8.2	Safeguards against fire		P
G.8.2.1	General	Metal enclosure used	N/A
G.8.2.2	Varistor overload test		N/A
G.8.2.3	Temporary overvoltage test		N/A
G.9	**Integrated circuit (IC) current limiters**		N/A
G.9.1	Requirements	No IC current limiters used.	N/A
	IC limiter output current (max. 5A)..... :		—
	Manufacturers' defined drift ..... :		—
G.9.2	Test Program		N/A
G.9.3	Compliance		N/A
G.10	**Resistors**		P
G.10.1	General	Certified bleeder resistors used.	P
G.10.2	Conditioning		N/A
G.10.3	Resistor test		N/A
G.10.4	Voltage surge test		N/A
G.10.5	Impulse test		N/A
G.10.6	Overload test		N/A
G.11	**Capacitors and RC units**		P
G.11.1	General requirements	The X-Capacitor and the Y-Capacitor are used as safeguard and complied with IEC/EN 60384-14 (See appended table 4.1.2).	P
G.11.2	Conditioning of capacitors and RC units		P
G.11.3	Rules for selecting capacitors		P
G.12	**Optocouplers**		P
	Optocouplers comply with IEC 60747-5-5 with specifics	The optocouplers used in the equipment are complied with IEC/EN 60747-5-5. (See appended table 4.1.2)	P
	Type test voltage $V_{ini,a}$..... :	See above.	—
	Routine test voltage, $V_{ini,b}$ ..... :	See above.	—
G.13	**Printed boards**	See below.	P

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Clause	Requirement + Test	Result - Remark	Verdict
G.13.1	General requirements	See below.	P
G.13.2	Uncoated printed boards	The insulation between conductors on the outer surfaces of an uncoated printed board complied with the minimum clearance and creepage requirements.	P
G.13.3	Coated printed boards		N/A
G.13.4	Insulation between conductors on the same inner surface		N/A
G.13.5	Insulation between conductors on different surfaces	For Double-sided single-layers PCB of main board, the cl/cr. distance complies with the requirement.	P
	Distance through insulation ..... :	See above.	P
	Number of insulation layers (pcs) ..... :		—
G.13.6	Tests on coated printed boards		N/A
G.13.6.1	Sample preparation and preliminary inspection		N/A
G.13.6.2	Test method and compliance		N/A
G.14	**Coating on components terminals**		N/A
G.14.1	Requirements ..... :	(See Clause G.13)	N/A
G.15	**Pressurized liquid filled components**		N/A
G.15.1	Requirements		N/A
G.15.2	Test methods and compliance		N/A
G.15.2.1	Hydrostatic pressure test		N/A
G.15.2.2	Creep resistance test		N/A
G.15.2.3	Tubing and fittings compatibility test		N/A
G.15.2.4	Vibration test		N/A
G.15.2.5	Thermal cycling test		N/A
G.15.2.6	Force test		N/A
G.15.3	Compliance		N/A
G.16	**IC including capacitor discharge function (ICX)**		N/A
G.16.1	Condition for fault tested is not required		N/A
	ICX with associated circuitry tested in equipment		N/A
	ICX tested separately		N/A
G.16.2	Tests		N/A
	Smallest capacitance and smallest resistance specified by ICX manufacturer for impulse test..... :		—

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Clause	Requirement + Test	Result - Remark	Verdict
	Mains voltage that impulses to be superimposed on ..... :		—
	Largest capacitance and smallest resistance for ICX tested by itself for 10000 cycles test ..... :		—
G.16.3	Capacitor discharge test..... :		N/A
H	**CRITERIA FOR TELEPHONE RINGING SIGNALS**		N/A
H.1	**General**		N/A
H.2	**Method A**		N/A
H.3	**Method B**		N/A
H.3.1	Ringing signal	No telephone ringing signals.	N/A
H.3.1.1	Frequency (Hz) ..... :		—
H.3.1.2	Voltage (V) ..... :		—
H.3.1.3	Cadence; time (s) and voltage (V) ..... :		—
H.3.1.4	Single fault current (mA):..... :		—
H.3.2	Tripping device and monitoring voltage		N/A
H.3.2.1	Conditions for use of a tripping device or a monitoring voltage		N/A
H.3.2.2	Tripping device		N/A
H.3.2.3	Monitoring voltage (V) ..... :		N/A
J	**INSULATED WINDING WIRES FOR USE WITHOUT INTERLEAVED INSULATION**		N/A
J.1	**General**		N/A
	Winding wire insulation..... :		—
	Solid round winding wire, diameter (mm) ..... :		N/A
	Solid square and rectangular (flatwise bending) winding wire, cross-sectional area (mm^2)..... :		N/A
J.2/J.3	Tests and Manufacturing	(See separate test report)	—
K	**SAFETY INTERLOCKS**		N/A
K.1	**General requirements**		N/A
	Instructional safeguard ..... :		N/A
K.2	**Components of safety interlock safeguard mechanism**		N/A
K.3	**Inadvertent change of operating mode**		N/A
K.4	**Interlock safeguard override**		N/A
K.5	**Fail-safe**		N/A
K.5.1	Under single fault condition		N/A
K.6	**Mechanically operated safety interlocks**		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
K.6.1	Endurance requirement		N/A
K.6.2	Test method and compliance ..... :		N/A
K.7	**Interlock circuit isolation**		N/A
K.7.1	Separation distance for contact gaps & interlock circuit elements		N/A
	In circuit connected to mains, separation distance for contact gaps (mm)..... :		N/A
	In circuit isolated from mains, separation distance for contact gaps (mm)..... :		N/A
	Electric strength test before and after the test of K.7.2 ..... :		N/A
K.7.2	Overload test, Current (A) ..... :		N/A
K.7.3	Endurance test		N/A
K.7.4	Electric strength test		N/A
L	**DISCONNECT DEVICES**		P
L.1	**General requirements**	Appliance coupler used for disconnect device	P
L.2	**Permanently connected equipment**		N/A
L.3	**Parts that remain energized**		N/A
L.4	**Single-phase equipment**	The disconnect device disconnect both poles simultaneously.	P
L.5	**Three-phase equipment**		N/A
L.6	**Switches as disconnect devices**		N/A
L.7	**Plugs as disconnect devices**		P
L.8	**Multiple power sources**		N/A
	Instructional safeguard ..... :		N/A
M	**EQUIPMENT CONTAINING BATTERIES AND THEIR PROTECTION CIRCUITS**		P
M.1	**General requirements**		P
M.2	**Safety of batteries and their cells**		P
M.2.1	Batteries and their cells comply with relevant IEC standards ..... :	(See appended table 4.1.2)	P
M.3	**Protection circuits for batteries provided within the equipment**		P
M.3.1	Requirements		P
M.3.2	Test method		P
	Overcharging of a rechargeable battery		N/A
	Excessive discharging		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Unintentional charging of a non-rechargeable battery	(See appended table M.3)	P
	Reverse charging of a rechargeable battery		N/A
M.3.3	Compliance	(See appended table M.3)	P
M.4	**Additional safeguards for equipment containing a portable secondary lithium battery**		N/A
M.4.1	General		N/A
M.4.2	Charging safeguards		N/A
M.4.2.1	Requirements		N/A
M.4.2.2	Compliance ..... :		N/A
M.4.3	Fire enclosure ..... :		N/A
M.4.4	Drop test of equipment containing a secondary lithium battery		N/A
M.4.4.2	Preparation and procedure for the drop test		N/A
M.4.4.3	Drop, Voltage on reference and dropped batteries (V); voltage difference during 24 h period (%): ..... :		N/A
M.4.4.4	Check of the charge/discharge function		N/A
M.4.4.5	Charge / discharge cycle test		N/A
M.4.4.6	Compliance		N/A
M.5	**Risk of burn due to short-circuit during carrying**		N/A
M.5.1	Requirement		N/A
M.5.2	Test method and compliance		N/A
M.6	**Safeguards against short-circuits**		N/A
M.6.1	External and internal faults		N/A
M.6.2	Compliance		N/A
M.7	**Risk of explosion from lead acid and NiCd batteries**		N/A
M.7.1	Ventilation preventing explosive gas concentration		N/A
	Calculated hydrogen generation rate ..... :		N/A
M.7.2	Test method and compliance		N/A
	Minimum air flow rate, Q (m^3/h) ..... :		N/A
M.7.3	Ventilation tests		N/A
M.7.3.1	General		N/A
M.7.3.2	Ventilation test – alternative 1		N/A
	Hydrogen gas concentration (%) ..... :		N/A
M.7.3.3	Ventilation test – alternative 2		N/A
	Obtained hydrogen generation rate ..... :		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
M.7.3.4	Ventilation test – alternative 3		N/A
	Hydrogen gas concentration (%) ..... :		N/A
M.7.4	Marking ..... :		N/A
M.8	**Protection against internal ignition from external spark sources of batteries with aqueous electrolyte**		N/A
M.8.1	General		N/A
M.8.2	Test method		N/A
M.8.2.1	General		N/A
M.8.2.2	Estimation of hypothetical volume V_Z (m^3/s)..... :		—
M.8.2.3	Correction factors ..... :		—
M.8.2.4	Calculation of distance *d* (mm) ..... :		—
M.9	**Preventing electrolyte spillage**		N/A
M.9.1	Protection from electrolyte spillage		N/A
M.9.2	Tray for preventing electrolyte spillage		N/A
M.10	Instructions to prevent reasonably foreseeable misuse		P
	Instructional safeguard ..... :		N/A
N	**ELECTROCHEMICAL POTENTIALS**		N/A
	Material(s) used ..... :		—
O	**MEASUREMENT OF CREEPAGE DISTANCES AND CLEARANCES**		P
	Value of *X* (mm)..... :	Measurement is in accordance with applicable figures.	—
P	**SAFEGUARDS AGAINST CONDUCTIVE OBJECTS**		P
P.1	**General**		P
P.2	**Safeguards against entry or consequences of entry of a foreign object**		P
P.2.1	General		P
P.2.2	Safeguards against entry of a foreign object		P
	Location and Dimensions (mm) ..... :	Ø1.9mm Max	—
P.2.3	Safeguards against the consequences of entry of a foreign object		N/A
P.2.3.1	Safeguard requirements		N/A
	The ES3 and PS3 keep-out volume in Figure P.3 not applicable to transportable equipment		N/A
	Transportable equipment with metalized plastic parts..... :		N/A
P.2.3.2	Consequence of entry test..... :		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
P.3	**Safeguards against spillage of internal liquids**		N/A
P.3.1	General		N/A
P.3.2	Determination of spillage consequences		N/A
P.3.3	Spillage safeguards		N/A
P.3.4	Compliance		N/A
P.4	**Metallized coatings and adhesives securing parts**		N/A
P.4.1	General		N/A
P.4.2	Tests		N/A
	Conditioning, T_C (°C) ..... :		—
	Duration (weeks)..... :		—
Q	**CIRCUITS INTENDED FOR INTERCONNECTION WITH BUILDING WIRING**		P
Q.1	**Limited power sources**		P
Q.1.1	Requirements		P
	a) Inherently limited output		N/A
	b) Impedance limited output		N/A
	c) Regulating network limited output	(See appended table Q.1)	P
	d) Overcurrent protective device limited output		N/A
	e) IC current limiter complying with G.9		N/A
Q.1.2	Test method and compliance ..... :	(See appended table Q.1)	P
	Current rating of overcurrent protective device (A) ..... :		N/A
Q.2	**Test for external circuits – paired conductor cable**		N/A
	Maximum output current (A) ..... :		N/A
	Current limiting method ..... :		—
R	**LIMITED SHORT CIRCUIT TEST**		N/A
R.1	**General**		N/A
R.2	**Test setup**		N/A
	Overcurrent protective device for test..... :		—
R.3	**Test method**		N/A
	Cord/cable used for test ..... :		—
R.4	**Compliance**		N/A
S	**TESTS FOR RESISTANCE TO HEAT AND FIRE**		N/A
S.1	**Flammability test for fire enclosures and fire barrier materials of equipment where the steady state power does not exceed 4 000 W**		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Samples, material ..... :		—
	Wall thickness (mm) ..... :		—
	Conditioning (°C) ..... :		—
	Test flame according to IEC 60695-11-5 with conditions as set out		N/A
	- Material not consumed completely		N/A
	- Material extinguishes within 30s		N/A
	- No burning of layer or wrapping tissue		N/A
S.2	**Flammability test for fire enclosure and fire barrier integrity**		N/A
	Samples, material ..... :		—
	Wall thickness (mm) ..... :		—
	Conditioning (°C) ..... :		—
S.3	**Flammability test for the bottom of a fire enclosure**		N/A
S.3.1	Mounting of samples		N/A
S.3.2	Test method and compliance		N/A
	Mounting of samples ..... :		—
	Wall thickness (mm) ..... :		—
S.4	**Flammability classification of materials**		N/A
S.5	**Flammability test for fire enclosures and fire barrier materials of equipment where the steady state power exceeding 4 000 W**		N/A
	Samples, material ..... :		—
	Wall thickness (mm) ..... :		—
	Conditioning (°C) ..... :		—
T	**MECHANICAL STRENGTH TESTS**		P
T.1	**General**		P
T.2	**Steady force test, 10 N ..... :**	(See appended table T.2)	P
T.3	**Steady force test, 30 N ..... :**		N/A
T.4	**Steady force test, 100 N ..... :**		N/A
T.5	**Steady force test, 250 N ..... :**	(See appended table T.5)	P
T.6	**Enclosure impact test**	(See appended table T.6)	P
	Fall test		P
	Swing test		P
T.7	**Drop test ..... :**		N/A
T.8	**Stress relief test..... :**		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
T.9	**Glass Impact Test .....:**		N/A
T.10	**Glass fragmentation test**		N/A
	Number of particles counted.....:	No such glass provided.	N/A
T.11	**Test for telescoping or rod antennas**		N/A
	Torque value (Nm) ..... :	No such antennas provided.	N/A
U	**MECHANICAL STRENGTH OF CATHODE RAY TUBES (CRT) AND PROTECTION AGAINST THE EFFECTS OF IMPLOSION**		N/A
U.1	**General**		N/A
	Instructional safeguard **:**		N/A
U.2	**Test method and compliance for non-intrinsically protected CRTs**		N/A
U.3	**Protective screen**		N/A
V	**DETERMINATION OF ACCESSIBLE PARTS**		P
V.1	**Accessible parts of equipment**		P
V.1.1	General	Following the probes test specified in this annex Figure V.1, V.2, V.3 are suitable.	P
V.1.2	Surfaces and openings tested with jointed test probes		P
V.1.3	Openings tested with straight unjointed test probes		N/A
V.1.4	Plugs, jacks, connectors tested with blunt probe		P
V.1.5	Slot openings tested with wedge probe		N/A
V.1.6	Terminals tested with rigid test wire		P
V.2	**Accessible part criterion**		P
X	**ALTERNATIVE METHOD FOR DETERMINING CLEARANCES FOR INSULATION IN CIRCUITS CONNECTED TO AN AC MAINS NOT EXCEEDING 420 V PEAK (300 V RMS)**		N/A
	Clearance .....:		N/A
Y	**CONSTRUCTION REQUIREMENTS FOR OUTDOOR ENCLOSURES**		N/A
Y.1	**General**		N/A
Y.2	**Resistance to UV radiation**		N/A
Y.3	**Resistance to corrosion**		N/A
Y.3	**Resistance to corrosion**		N/A
Y.3.1	Metallic parts of outdoor enclosures are resistant to effects of water-borne contaminants by ..... :		N/A
Y.3.2	Test apparatus		N/A
Y.3.3	Water – saturated sulphur dioxide atmosphere		N/A
Y.3.4	Test procedure ..... :		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
Y.3.5	Compliance		N/A
Y.4	**Gaskets**		N/A
Y.4.1	General		N/A
Y.4.2	Gasket tests		N/A
Y.4.3	Tensile strength and elongation tests		N/A
	Alternative test methods ..... :		N/A
Y.4.4	Compression test		N/A
Y.4.5	Oil resistance		N/A
Y.4.6	Securing means		N/A
Y.5	**Protection of equipment within an outdoor enclosure**		N/A
Y.5.1	General		N/A
Y.5.2	Protection from moisture		N/A
	Relevant tests of IEC 60529 or Y.5.3 ..... :		N/A
Y.5.3	Water spray test		N/A
Y.5.4	Protection from plants and vermin		N/A
Y.5.5	Protection from excessive dust		N/A
Y.5.5.1	General		N/A
Y.5.5.2	IP5X equipment		N/A
Y.5.5.3	IP6X equipment		N/A
Y.6	**Mechanical strength of enclosures**		N/A
Y.6.1	General		N/A
Y.6.2	Impact test ..... :		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

5.2	TABLE: Classification of electrical energy sources						P
Supply Voltage	Location (e.g. circuit designation)	Test conditions	Parameters				ES Class
			U (V)	I (mA)	Type[1)]	Additional Info [2)]	
264Vac 60Hz	Primary circuits supplied by a.c. mains supply	Normal	--	--	SS	--	ES3 (declared)
		Abnormal – see table B.3, B.4 for detail	--	--	SS	--	
		Single fault – see table B.3, B.4 for detail	--	--	SS	--	
264Vac 60Hz	+12V output “+” to “-” for power board	Normal	Max. 12.17Vdc	--	SS	--	ES1
		Abnormal – see table B.3, B.4 for detail	Max. 12.17Vdc	--	SS	--	
		Single fault – see table B.3, B.4 for detail	Max. 12.17Vdc	--	SS	--	
264Vac 60Hz	USB(J98) Output “+” to “-”	Normal	Max. 5.09Vdc	--	SS	--	ES1
		Abnormal – see table B.3, B.4 for detail	Max. 5.09Vdc	--	SS	--	
		Single fault – see table B.3, B.4 for detail	Max. 5.09Vdc	--	SS	--	
264Vac 60Hz	USB(J98) output terminal “+/-” to earth	Normal	--	0.254mApk	SS	--	ES1
		Abnormal – see table B.3, B.4 for detail	--	0.254mApk	SS	--	
		Single fault – see table B.3, B.4 for detail	--	0.254mApk	SS	--	
264Vac 60Hz	USB(J9118) Output “+” to “-”	Normal	Max. 5.07Vdc	--	SS	--	ES1
		Abnormal – see table B.3, B.4 for detail	Max. 5.07Vdc	--	SS	--	
		Single fault – see table B.3, B.4 for detail	Max. 5.07Vdc	--	SS	--	
264Vac	USB(J9118) output	Normal	--	0.254mApk	SS	--	ES1

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Clause	Requirement + Test			Result - Remark			Verdict
60Hz	terminal “+/-” to earth	Abnormal – see table B.3, B.4 for detail	--	0.254mApk	SS	--	
		Single fault – see table B.3, B.4 for detail	--	0.254mApk	SS	--	
264Vac 60Hz	USB(J59) Output “+” to “-”	Normal	Max. 5.09Vdc	--	SS	--	ES1
		Abnormal – see table B.3, B.4 for detail	Max. 5.09Vdc	--	SS	--	
		Single fault – see table B.3, B.4 for detail	Max. 5.09Vdc	--	SS	--	
264Vac 60Hz	USB(J59) output terminal “+/-” to earth	Normal	--	0.254mApk	SS	--	ES1
		Abnormal – see table B.3, B.4 for detail	--	0.254mApk	SS	--	
		Single fault – see table B.3, B.4 for detail	--	0.254mApk	SS	--	
264Vac 60Hz	USB(J100) Output “+” to “-”	Normal	Max. 5.07Vdc	--	SS	--	ES1
		Abnormal – see table B.3, B.4 for detail	Max. 5.07Vdc	--	SS	--	
		Single fault – see table B.3, B.4 for detail	Max. 5.07Vdc	--	SS	--	
264Vac 60Hz	USB(J100) output terminal “+/-” to earth	Normal	--	0.254mApk	SS	--	ES1
		Abnormal – see table B.3, B.4 for detail	--	0.254mApk	SS	--	
		Single fault – see table B.3, B.4 for detail	--	0.254mApk	SS	--	
264Vac 60Hz	USB(J9120) Output “+” to “-”	Normal	Max. 5.06Vdc	--	SS	--	ES1
		Abnormal – see table B.3, B.4 for detail	Max. 5.06Vdc	--	SS	--	
		Single fault – see table B.3, B.4 for detail	Max. 5.06Vdc	--	SS	--	

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Clause	Requirement + Test			Result - Remark			Verdict
264Vac 60Hz	USB(J9120) output terminal “+/-” to earth	Normal	--	0.254mApk	SS	--	ES1
		Abnormal – see table B.3, B.4 for detail	--	0.254mApk	SS	--	
		Single fault – see table B.3, B.4 for detail	--	0.254mApk	SS	--	
264Vac 60Hz	HDMI output terminal	Normal	Max.5.11 Vdc	--	SS	--	ES1
		Abnormal – see table B.3, B.4 for detail	Max.5.11 Vdc	--	SS	--	
		Single fault – see table B.3, B.4 for detail	Max.5.11 Vdc	--	SS	--	
264Vac 60Hz	HDMI output terminal to earth	Normal	--	0.254mApk	SS	--	ES1
		Abnormal – see table B.3, B.4 for detail	--	0.254mApk	SS	--	
		Single fault – see table B.3, B.4 for detail	--	0.254mApk	SS	--	
264Vac 60Hz	RJ45 Output terminal	Normal	Max.2.67 Vdc	--	--	--	ES1
		Abnormal – see table B.3, B.4 for detail	Max.2.67 Vdc	--	--	--	
		Single fault – see table B.3, B.4 for detail	Max.2.67 Vdc	--	--	--	
264Vac 60Hz	RJ45 Output terminal to earth	Normal	--	0.254mApk	SS	--	ES1
		Abnormal – see table B.3, B.4 for detail	--	0.254mApk	SS	--	
		Single fault – see table B.3, B.4 for detail	--	0.254mApk	SS	--	
264Vac 60Hz	Earphone Output terminal	Normal	Max.2.74 Vdc	--	SS	--	ES1
		Abnormal – see table B.3, B.4 for detail	Max.2.74 Vdc	--	SS	--	

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Clause	Requirement + Test	Result - Remark	Verdict

		Single fault – see table B.3, B.4 for detail	Max.2.74 Vdc	--	SS	--	
264Vac 60Hz	Earphone Output terminal to earth	Normal	--	0.254mApk	SS	--	ES1
		Abnormal – see table B.3, B.4 for detail	--	0.254mApk	SS	--	
		Single fault – see table B.3, B.4 for detail	--	0.254mApk	SS	--	
264Vac 60Hz	TF Card Output terminal	Normal	Max.3.24 Vdc	--	SS	--	ES1
		Abnormal – see table B.3, B.4 for detail	Max.3.24 Vdc	--	SS	--	
		Single fault – see table B.3, B.4 for detail	Max.3.24 Vdc	--	SS	--	
264Vac 60Hz	TF Card Output terminal to earth	Normal	--	0.254mApk	SS	--	ES1
		Abnormal – see table B.3, B.4 for detail	--	0.254mApk	SS	--	
		Single fault – see table B.3, B.4 for detail	--	0.254mApk	SS	--	
264Vac 60Hz	SIM Card Output terminal	Normal	Max.2.08 Vdc	--	SS	--	ES1
		Abnormal – see table B.3, B.4 for detail	Max.2.08 Vdc	--	SS	--	
		Single fault – see table B.3, B.4 for detail	Max.2.08 Vdc	--	SS	--	
264Vac 60Hz	SIM Card Output terminal to earth	Normal	--	0.254mApk	SS	--	ES1
		Abnormal – see table B.3, B.4 for detail	--	0.254mApk	SS	--	
		Single fault – see table B.3, B.4 for detail	--	0.254mApk	SS	--	
264Vac	Type-C Output “+” to “-”	Normal	Max. 5.08Vdc	--	SS	--	ES1

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Clause	Requirement + Test	Result - Remark	Verdict

60Hz		Abnormal – see table B.3, B.4 for detail	Max. 5.08Vdc	--	SS	--	
		Single fault – see table B.3, B.4 for detail	Max. 5.08Vdc	--	SS	--	
264Vac 60Hz	Type-C output terminal “+/-” to earth	Normal	--	0.254mApk	SS	--	ES1
		Abnormal – see table B.3, B.4 for detail	--	0.254mApk	SS	--	
		Single fault – see table B.3, B.4 for detail	--	0.254mApk	SS	--	
264Vac 60Hz	LCD Panel (with metal foil) to earth	Normal	--	0.137mApk	SS	--	ES1
		Abnormal – see table B.3, B.4 for detail	--	0.137mApk	SS	--	
		Single fault – see table B.3, B.4 for detail	--	0.137mApk	SS	--	
Supplementary information:							
1) Type: Steady state (SS), Capacitance (CP), Single pulse (SP), Repetitive pulses (RP), etc. 2) Additional Info: Frequency, Pulse duration, Pulse off time, Capacitance value, etc.							

5.4.1.8	**TABLE: Working voltage measurement**	P

Location	RMS voltage (V)	Peak voltage (V)	Frequency (Hz)	Comments
T1 Pin 3 to 11,12	**264**	**596**	32.63k	**Max. Vpeak and Vrms**
T1 Pin 4 to 11,12	246	588	32.63k	--
T1 Pin 2 to 11,12	240	398	32.63k	--
T1 Pin 5 to 11,12	239	426	32.63k	--
T1 Pin 6 to 11,12	232	510	32.63k	--
T1 Pin 7 to 11,12	232	502	32.63k	--
T1 Pin 3 to 14,15	263	589	32.63k	--
T1 Pin 4 to 14,15	239	428	32.63k	--
T1 Pin 2 to 14,15	241	498	32.63k	--
T1 Pin 5 to 14,15	231	507	32.63k	--
T1 Pin 6 to 14,15	231	507	32.63k	--

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Clause	Requirement + Test	Result - Remark	Verdict

T1 Pin 7 to 14,15	229	398	32.63k	
CY1 pin pri to sec	124	192	60	--
CY2 pin pri to sec	138	204	60	--
CY3 pin pri to sec	229	386	60	--
U2 Pin 1 to 3	233	380	60	--
U2 Pin 1 to 4	233	380	60	--
U2 Pin 2 to 3	234	374	60	--
U2 Pin 2 to 4	234	374	60	--
Supplementary information:				
Tested voltage: 240Vac, 60Hz; load: Maximum working state of all units				

5.4.1.10.2	**TABLE: Vicat softening temperature of thermoplastics**			N/A
Method.....:		ISO 306 / B50		—
Object/ Part No./Material	Manufacturer/trademark	Thickness (mm)	T softening (°C)	
--	--	--	--	
Supplementary information:				
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5.4.1.10.3	**TABLE: Ball pressure test of thermoplastics**			P
Allowed impression diameter (mm).....:		≤ 2 mm		—
Object/Part No./Material	Manufacturer/trademark	Thickness (mm)	Test temperature (°C)	Impression diameter (mm)
AC inlet (CON1 for power board)	See 4.1.2	Min.1.5	125	1.29
Supplementary information:				
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5.4.2, 5.4.3	**TABLE: Minimum Clearances/Creepage distance**								P
Clearance (cl) and creepage distance (cr) at/of/between:	U_p (V)	U_{rms} (V)	Freq [1)] (Hz)	Required cl (mm)	cl (mm)	E.S. [2)] (V)	Required cr (mm)	cr (mm)	
Basic / supplementary:									
Different polarity of L/N before fuse	<420	<250	60	2.3 (1.5*1.48)	3.8	--	2.5	3.8	
Different polarity of Fuse F1	<420	<250	60	2.3 (1.5*1.48)	2.9	--	2.5	2.9	

IEC 62368-1								
Clause	Requirement + Test				Result - Remark			Verdict
Live parts to metal enclosure	<420	<250	60	2.3 (1.5*1.48)	4.1	--	2.5	6.4
Primary trace to secondary trace under CY1	<420	<250	60	2.3 (1.5*1.48)	7.6	--	2.5	7.6
Primary trace to secondary trace under CY2	<420	<250	60	2.3 (1.5*1.48)	7.6	--	2.5	7.6
Transformer T1 core to primary winding	596	264	32.63k	2.3 (1.5*1.48)	6.9	--	2.7	6.9
Transformer T1 core to secondary winding	596	264	32.63k	2.3 (1.5*1.48)	7.5	--	2.7	7.5
Reinforced:								
Primary trace to secondary trace under U2	<420	<250	60	4.5 (3.0*1.48)	6.9	--	5.0	6.9
Primary trace to secondary trace under CY3	<420	<250	60	4.5 (3.0*1.48)	7.3	--	5.0	7.3
Primary trace to secondary trace under T1	596	264	32.63k	4.5 (3.0*1.48)	14.8	--	5.4	14.8
Primary winding to secondary winding of T1	596	264	32.63k	4.5 (3.0*1.48)	11.0	--	5.4	11.0
T1 core to secondary parts (EC6)	596	264	32.63k	4.5 (3.0*1.48)	6.4		5.4	17.5
Supplementary information:								
1) Only for frequency above 30 kHz 2) Complete Electric Strength voltage (E.S. (V) when 5.4.2.4 applied) 3) For clearance and creepage did not describe above are far larger than limit above. 4) The equipment to be operated up to 5000 m above sea level, each clearance multiplied with an altitude correction factor of 1.48.								

5.4.4.2	**TABLE: Minimum distance through insulation**			P
Distance through insulation (DTI) at/of	Peak voltage (V)	Insulation	Required DTI (mm)	Measured DTI (mm)
Bobbin of T1	596Vac	Reinforce	0.4	Min. 0.75
Photo Coupler (U2)	420Vac	Reinforce	0.4	Min. 0.4
Insulation sheet	596Vac	Reinforce	0.4	Min. 0.8
Insulation tape	596Vac	Reinforce	2 layers	3 layers
Supplementary information:				
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IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

5.4.4.9	TABLE: Solid insulation at frequencies >30 kHz					P
Insulation material	E_P	Frequency (kHz)	K_R	Thickness d (mm)	Insulation	V_{PW} (Vpk)
Bobbin of T1 (Phenolic)[1)]	17	32.63	0.71	Min. 0.75	Reinforce	596Vac
Insulation tape (Polyethylene)[2)]	49	32.63	0.46	3 layers	Reinforce	596Vac
Supplementary information:						
Alternate method: [1)]Required electric strength test voltage: 1.2 x 2 x 596 / 0.71 = 2015 Vpk [2)]Required electric strength test voltage: 1.2 x 2 x 596 / 0.46 = 3110 Vpk						

5.4.9	TABLE: Electric strength tests			P
Test voltage applied between:	Voltage shape (Surge, Impulse, AC, DC, etc.)	Test voltage (V)	Breakdown Yes / No	
Basic/supplementary				
L to N (with F1 opened)	DC	2500VDC	No	
L/N to metal enclosure	DC	2500VDC	No	
T1 primary winding to core	DC	2500VDC	No	
T1 secondary winding to core	DC	2500VDC	No	
Reinforced:				
L/N to USB/HDMI/RJ45 output port	DC	4000VDC	No	
L/N to LCD panel wrapped with metal foil	DC	4000VDC	No	
Primary to secondary of transformer T1	DC	4000VDC	No	
Insulation tape used in and around transformer T1 (two layers)	DC	4000VDC	No	
Insulation sheet	DC	4000VDC	No	
Supplementary information:				
--				

5.5.2.2	TABLE: Stored discharge on capacitors				P
Location	Supply voltage (V)	Operating and fault condition [1)]	Switch position	Measured voltage (Vpk)	ES Class
Phase to Neutral	264Vac, 60Hz	Normal	--	4V	ES1
Phase to Neutral	264Vac, 60Hz	RX1 OC	--	12V	ES1
Phase to Neutral	264Vac, 60Hz	RX2 OC	--	12V	ES1

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

Supplementary information:
X-capacitors installed for testing: CX1=0.47uF ☒ bleeding resistor rating: RX1=RX2= RX3= RX4=1MΩ. ☐ ICX: 1) Normal operating condition (e.g., normal operation, or open fuse), SC= short circuit, OC= open circuit

5.6.6	**TABLE: Resistance of protective conductors and terminations**			P
Location	Test current (A)	Duration (min)	Voltage drop (V)	Resistance (Ω)
PE of appliance inlet to farthest metal enclosure	32	2	--	0.021
PE of power cord to farthest metal enclosure	32	2	--	0.072
Supplementary information:				
--				

5.7.4	**TABLE: Unearthed accessible parts**				P
Location	Operating and fault conditions	Supply Voltage (V)	Parameters		ES class
			Voltage (V_{rms} or V_{pk})	Current (A_{rms} or A_{pk}) / Freq. (Hz)	
USB Output “+” to “-”	Normal	264Vac	Max. 5.09Vdc	-- / 60	ES1
	Abnormal – see table B.3, B.4 for detail	264Vac	Max. 5.09Vdc	-- / 60	ES1
	Single fault – see table B.3, B.4 for detail	264Vac	Max. 5.09Vdc	-- / 60	ES1
Type-C Output “+” to “-”	Normal	264Vac	Max. 5.08Vdc	-- / 60	ES1
	Abnormal – see table B.3, B.4 for detail	264Vac	Max. 5.08Vdc	-- / 60	ES1
	Single fault – see table B.3, B.4 for detail	264Vac	Max. 5.08Vdc	-- / 60	ES1
LCD Panel (with metal foil) to earth	Normal	264Vac	--	0.137mApk / 60	ES1
	Abnormal – see table B.3, B.4 for detail	264Vac	--	0.137mApk / 60	ES1
	Single fault – see table B.3, B.4 for detail	264Vac	--	0.137mApk / 60	ES1

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

Supplementary information:
Abbreviation: SC= short circuit; OC= open circuit

5.7.5	TABLE: Earthed accessible conductive part			P
Supply voltage (V) ..... :	264V			—
Phase(s) ..... :	[X] Single Phase; [ ] Three Phase: [ ] Delta [ ] Wye			—
Power Distribution System ..... :	☒ TN ☐ TT ☐ IT			—
Location	Fault Condition No in IEC 60990 clause 6.2.2	Touch current (mA)	Comment	
L/N to earthed accessible parts (Metal enclosure)	1	0.421mApeak	ES1	
Supplementary Information:				
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5.8	TABLE: Backfeed safeguard in battery backed up supplies					N/A
Location	Supply voltage (V)	Operating and fault condition	Time (s)	Open-circuit voltage (V)	Touch current (A)	ES Class
--	--	--	--	--	--	--
Supplementary information:						
Abbreviation: SC= short circuit, OC= open circuit						

6.2.2	TABLE: Power source circuit classifications					P
Location	Operating and fault condition	Voltage (V)	Current (A)	Max. Power[1)] (W)	Time (S)	PS class
Input circuit	--	--	-	--	--	PS3 (Declared)
Internal power supply board DC terminal	Normal	12.29	14.1	157.9	5S	PS3
	U2 pin 1-2 SC	0	0	0	3S	PS1
	U2 pin 3-4 SC	0	0	0	3S	
	U2 pin 1 OC	0	0	0	3S	
	U4 pin 2-4 SC	0	0	0	3S	
	C18 SC	0	0	0	3S	
	R46 SC	0	0	0	3S	
USB(J98) Output terminal: 5Vdc	Normal	5.09	4.55	8.15	3S	PS1
	U2 pin 1-2 SC	0	0	0	3S	
	U2 pin 3-4 SC	0	0	0	3S	

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Clause	Requirement + Test			Result - Remark		Verdict
	U2 pin 1 OC	0	0	0	3S	
	U4 pin 2-4 SC	0	0	0	3S	
	D37 SC	0	0	0	3S	
	R9873 SC	0	0	0	3S	
USB(J9118) Output terminal: 5Vdc	Normal	5.07	1.5	6.89	3S	PS1
	U2 pin 1-2 SC	0	0	0	3S	
	U2 pin 3-4 SC	0	0	0	3S	
	U2 pin 1 OC	0	0	0	3S	
	U4 pin 2-4 SC	0	0	0	3S	
	D35 SC	0	0	0	3S	
	U23013 Pin 1-5 SC	0	0	0	3S	
USB(J59) Output terminal: 5Vdc	Normal	5.09	1.45	5.97	3S	PS1
	U2 pin 1-2 SC	0	0	0	3S	
	U2 pin 3-4 SC	0	0	0	3S	
	U2 pin 1 OC	0	0	0	3S	
	U4 pin 2-4 SC	0	0	0	3S	
	D38 SC	0	0	0	3S	
	U62 Pin 1-5 SC	0	0	0	3S	
Type-C(J56) Output terminal: 5Vdc	Normal	5.08	1.5	6.72	3S	PS1
	U2 pin 1-2 SC	0	0	0	3S	
	U2 pin 3-4 SC	0	0	0	3S	
	U2 pin 1 OC	0	0	0	3S	
	U4 pin 2-4 SC	0	0	0	3S	
	D8231 SC	0	0	0	3S	
	U27 Pin 1-5 SC	0	0	0	3S	
USB(J100) Output terminal: 5Vdc	Normal	5.07	1.5	6.63	3S	PS1
	U2 pin 1-2 SC	0	0	0	3S	
	U2 pin 3-4 SC	0	0	0	3S	
	U2 pin 1 OC	0	0	0	3S	
	U4 pin 2-4 SC	0	0	0	3S	
	D8221 SC	0	0	0	3S	
	U23015 Pin 1-5 SC	0	0	0	3S	
USB(J9120) Output	Normal	5.06	1.5	6.51	3S	PS1

IEC 62368-1						
Clause	Requirement + Test			Result - Remark		Verdict
terminal: 5Vdc	U2 pin 1-2 SC	0	0	0	3S	
	U2 pin 3-4 SC	0	0	0	3S	
	U2 pin 1 OC	0	0	0	3S	
	U4 pin 2-4 SC	0	0	0	3S	
	D45 SC	0	0	0	3S	
	U65 Pin 1-5 SC	0	0	0	3S	
HDMI Output port	Normal	5.11	0	0	3S	PS1
	U2 pin 1-2 SC	0	0	0	3S	
	U2 pin 3-4 SC	0	0	0	3S	
	U2 pin 1 OC	0	0	0	3S	
	U4 pin 2-4 SC	0	0	0	3S	
	D100 SC	0	0	0	3S	
	R91 SC	0	0	0	3S	
RJ45 Output port	Normal	2.67	0	0	3S	PS1
	U2 pin 1-2 SC	0	0	0	3S	
	U2 pin 3-4 SC	0	0	0	3S	
	U2 pin 1 OC	0	0	0	3S	
	U4 pin 2-4 SC	0	0	0	3S	
	D3150 SC	0	0	0	3S	
	R9369 SC	0	0	0	3S	
Earphone Output port	Normal	2.74	0	0	3S	PS1
	U2 pin 1-2 SC	0	0	0	3S	
	U2 pin 3-4 SC	0	0	0	3S	
	U2 pin 1 OC	0	0	0	3S	
	U4 pin 2-4 SC	0	0	0	3S	
	ED703 SC	0	0	0	3S	
	R9520 SC	0	0	0	3S	
TF Card Output port	Normal	3.24	0	0	3S	PS1
	U2 pin 1-2 SC	0	0	0	3S	
	U2 pin 3-4 SC	0	0	0	3S	
	U2 pin 1 OC	0	0	0	3S	
	U4 pin 2-4 SC	0	0	0	3S	
	ED6 SC	0	0	0	3S	
	R0402 SC	0	0	0	3S	

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Clause	Requirement + Test	Result - Remark	Verdict

SIM Card Output port	Normal	2.08	0	0	3S	PS1
	U2 pin 1-2 SC	0	0	0	3S	
	U2 pin 3-4 SC	0	0	0	3S	
	U2 pin 1 OC	0	0	0	3S	
	U4 pin 2-4 SC	0	0	0	3S	
	D1906 SC	0	0	0	3S	
	R395 SC	0	0	0	3S	

Supplementary information:

Abbreviation: SC= short circuit; OC= open circuit

1) Measured after 3 s for PS1 and measured after 5 s for PS2 and PS3.

6.2.3.1	TABLE: Determination of Arcing PIS			P
Location	Open circuit voltage after 3 s (Vpk)	Measured r.m.s current (A)	Calculated value	Arcing PIS? Yes / No
All internal circuits / components except for USB-A port, Type-C port and other external output ports	--	--	--	Yes (declaration)

Supplementary information:

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6.2.3.2	TABLE: Determination of resistive PIS		P
Location	Operating and fault condition	Dissipate power (W)	Resistive PIS? Yes / No
All internal circuits / components	--	--	Yes (declaration)

Supplementary information:

Abbreviation: SC= short circuit; OC= open circuit

8.5.5	TABLE: High pressure lamp			N/A
Lamp manufacturer	Lamp type	Explosion method	Longest axis of glass particle (mm)	Particle found beyond 1 m Yes / No
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Supplementary information:

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IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

9.6	**TABLE: Temperature measurements for wireless power transmitters**								N/A
Supply voltage (V)..... :	--								—
Max. transmit power of transmitter (W)..... :	--								—
Foreign objects	w/o receiver and direct contact		with receiver and direct contact		with receiver and at distance of 2 mm		with receiver and at distance of 5 mm		
	Object (ºC)	Ambient (ºC)	Object (ºC)	Ambient (ºC)	Object (ºC)	Ambient (ºC)	Object (ºC)	Ambient (ºC)	
--	--	--	--	--	--	--	--	--	
Supplementary information:									
--									

5.4.1.4, 9.3, B.1.5, B.2.6	**TABLE: Temperature measurements**				P
Supply voltage (V) :	198V/50Hz		264V/50Hz		—
Ambient temperature during test Tamb (°C) :	25.0	40.0	25.0	40.0	—
Maximum measured temperature *T* of part/at:	*T* (°C)				Allowed T_{max} (°C)
Power supply board part					
Power cord	28.4	43.4	27.9	42.9	70
AC inlet	32.5	47.5	31.8	46.8	70
Input wire	41.6	56.6	37.7	52.7	105
AC connector (CON1)	45.2	60.2	39.7	54.7	85
LF1 Coil	52.0	67.0	41.2	56.2	130
LF2 Coil	85.5	100.5	50.1	65.1	130
CX1 body	78.5	93.5	48.9	63.9	110
RV1 body	78.0	93.0	57.6	72.6	125
CY1 body	55.4	70.4	43.3	58.3	125
PCB near BD1	72.2	87.2	60.7	75.7	130
PCB near Q1	79.7	94.7	69.9	84.9	130
C1 Body	58.0	73.0	48.6	63.6	105
C4 Body	81.3	96.3	73.1	88.1	105
T1 Coil	84.1	99.1	82.7	97.7	110
T1 bobbin	77.0	92.0	75.1	90.1	110
U2 Body	63.2	78.2	60.2	75.2	110
CY3 Body	55.7	70.7	53.0	68.0	125

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Clause	Requirement + Test	Result - Remark	Verdict

Insulation sheet near T1	52.6	67.6	50.7	65.7	80
PCB near U1	66.1	81.1	61.7	76.7	130
PCB near U4	67.0	82.0	67.2	82.2	130
C5 Body	73.0	88.0	66.6	81.6	105
C18 Body	81.2	96.2	81.7	96.7	105
CN1	51.0	66.0	50.4	65.4	80
Output wire	49.9	64.9	49.4	64.4	80
LCD panel power supply board part					
L1 coil	52.0	67.0	51.6	66.6	100
PCB near U101	51.6	66.6	51.2	66.2	130
PCB near Q202	46.6	61.6	46.1	61.1	130
Main board part					
PCB near U9	90.7	105.7	90.3	105.3	130
PCB near U6	72.9	87.9	72.7	87.7	130
PCB near U4 and U5 and U1	64.2	79.2	64.0	79.0	130
PCB near U2	66.2	81.2	66.1	81.1	130
RTC battery	39.1	54.1	39.0	54.0	--
PCB near U9	58.9	73.9	58.8	73.8	130
PCB near U10	53.5	68.5	53.3	68.3	130
Touch temperature part					
Power switch	32.0	--	50.4	--	77
Metal enclosure near T1, outside (Top)	39.7	--	38.1	--	60
Metal enclosure near LCD panel board, outside (Top)	39.9	--	39.4	--	60
Metal enclosure near main board, outside (Top)	41.0	--	40.9	--	60
Metal enclosure near Type-C port, outside	43.0	--	43.0	--	60
LCD panel (Left)	28.4	--	28.3	--	56
LCD panel (Right)	27.1	--	26.9	--	56
Metal enclosure near main board, outside (Bottom)	39.9	--	38.5	--	60
Metal enclosure near LCD panel board, outside (Bottom)	35.8	--	35.4	--	60
Metal enclosure near T1, outside (Bottom)	37.1	--	37.0	--	60

Temperature T of winding:	t_1 (°C)	R_1 (Ω)	t_2 (°C)	R_2 (Ω)	T (°C)	Allowed T_{max} (°C)	Insulation class
--	--	--	--	--	--	--	--
Supplementary information:							

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Clause	Requirement + Test	Result - Remark	Verdict

Tested with HDMI mode.

B.2.5	TABLE: Input test							P
U (V)	Hz	I (A)	I rated (A)	P (W)	P rated (W)	Fuse No	I fuse (A)	Condition/status
198	50	25.096	--	4771.1	--	F1	25.096	Maximum working state
198	60	25.094	--	4770.7	--	F1	25.094	
220	50	22.683	--	4770.3	4800	F1	22.683	
220	60	22.681	--	4769.9	4800	F1	22.681	
240	50	20.870	--	4768.9	4800	F1	20.870	
240	60	20.870	--	4768.8	4800	F1	20.870	
264	50	19.065	--	4769.1	--	F1	19.065	
264	60	19.065	--	4769.1	--	F1	19.065	
Supplementary information:								
Equipment may be have rated current or rated power or both. Both should be measured.								

B.3, B.4	TABLE: Abnormal operating and fault condition tests					P
Ambient temperature T_{amb} (°C)..... :			25°C if not specified			—
Power source for EUT: Manufacturer, model/type, outputrating .. :			--			—
Component No.	Condition	Supply voltage (V)	Test time	Fuse no.	current (A)	Observation
BD1 Pin 1-4	SC	264Vac	1s	F1	19.065→0	Unit shut down, F1 fuse immediately open, no hazardous. The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→0V; USB(J9118):5.07Vdc→0V; USB(J59):5.09Vdc→0V; Type-C:5.08Vdc→0V; USB(J9120):5.06Vdc→0V; USB(J100):5.07Vdc→0V.
C1	SC	264Vac	1s	F1	19.065→0	Unit shut down, F1 fuse immediately open, no hazardous. The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→0V; USB(J9118):5.07Vdc→0V;

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Clause	Requirement + Test				Result - Remark	Verdict
						USB(J59):5.09Vdc→0V; Type-C:5.08Vdc→0V; USB(J9120):5.06Vdc→0V; USB(J100):5.07Vdc→0V.
D5	SC	264Vac	1s	F1	19.065→0	Unit shut down, F1 fuse immediately open, no hazardous. The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→0V; USB(J9118):5.07Vdc→0V; USB(J59):5.09Vdc→0V; Type-C:5.08Vdc→0V; USB(J9120):5.06Vdc→0V; USB(J100):5.07Vdc→0V.
Q1 Pin G-D	SC	264Vac	1s	F1	19.065→0	Unit shut down, F1 fuse immediately open, no hazardous. The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→0V; USB(J9118):5.07Vdc→0V; USB(J59):5.09Vdc→0V; Type-C:5.08Vdc→0V; USB(J9120):5.06Vdc→0V; USB(J100):5.07Vdc→0V.
Q1 Pin G-S	SC	264Vac	10mins	F1	19.065→0.011	Unit shut down immediately, No damage. No hazards. The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→0V; USB(J9118):5.07Vdc→0V; USB(J59):5.09Vdc→0V; Type-C:5.08Vdc→0V; USB(J9120):5.06Vdc→0V; USB(J100):5.07Vdc→0V.
Q1 Pin D-S	SC	264Vac	1s	F1	19.065→0	Unit shut down, F1 fuse immediately open, no hazardous. The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→0V; USB(J9118):5.07Vdc→0V; USB(J59):5.09Vdc→0V; Type-C:5.08Vdc→0V; USB(J9120):5.06Vdc→0V; USB(J100):5.07Vdc→0V.

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Clause	Requirement + Test				Result - Remark	Verdict
U1 Pin 5-6	SC	264Vac	1s	F1	19.065→0	Unit shut down, F1 fuse immediately open, no hazardous. The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→0V; USB(J9118):5.07Vdc→0V; USB(J59):5.09Vdc→0V; Type-C:5.08Vdc→0V; USB(J9120):5.06Vdc→0V; USB(J100):5.07Vdc→0V.
U1 Pin 2-6	SC	264Vac	1s	F1	19.065→0	Unit shut down, F1 fuse immediately open, no hazardous. The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→0V; USB(J9118):5.07Vdc→0V; USB(J59):5.09Vdc→0V; Type-C:5.08Vdc→0V; USB(J9120):5.06Vdc→0V; USB(J100):5.07Vdc→0V.
U1 Pin 4-6	SC	264Vac	1s	F1	19.065→0	Unit shut down, F1 fuse immediately open, no hazardous. The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→0V; USB(J9118):5.07Vdc→0V; USB(J59):5.09Vdc→0V; Type-C:5.08Vdc→0V; USB(J9120):5.06Vdc→0V; USB(J100):5.07Vdc→0V.
T1 Pin 3-4	SC	264Vac	10mins	F1	19.065→0.011	Unit shut down immediately, No damage. No hazards. The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→0V; USB(J9118):5.07Vdc→0V; USB(J59):5.09Vdc→0V; Type-C:5.08Vdc→0V; USB(J9120):5.06Vdc→0V; USB(J100):5.07Vdc→0V.
T1 Pin 2-7	SC	264Vac	10mins	F1	19.065→0.011	Unit shut down immediately, No damage. No hazards. The EUT USB output and Type-C output voltage

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Clause	Requirement + Test				Result - Remark	Verdict
						during and after the test: USB(J98):5.09Vdc→0V; USB(J9118):5.07Vdc→0V; USB(J59):5.09Vdc→0V; Type-C:5.08Vdc→0V; USB(J9120):5.06Vdc→0V; USB(J100):5.07Vdc→0V.
T1 Pin 11-14	SC	264Vac	10mins	F1	19.065→0.011	Unit shut down immediately, No damage. No hazards. The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→0V; USB(J9118):5.07Vdc→0V; USB(J59):5.09Vdc→0V; Type-C:5.08Vdc→0V; USB(J9120):5.06Vdc→0V; USB(J100):5.07Vdc→0V.
U2 Pin 1-2	SC	264Vac	10mins	F1	19.065→0.011	Unit shut down immediately, No damage. No hazards. The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→0V; USB(J9118):5.07Vdc→0V; USB(J59):5.09Vdc→0V; Type-C:5.08Vdc→0V; USB(J9120):5.06Vdc→0V; USB(J100):5.07Vdc→0V.
U2 Pin 3-4	SC	264Vac	10mins	F1	19.065→0.011	Unit shut down immediately, No damage. No hazards. The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→0V; USB(J9118):5.07Vdc→0V; USB(J59):5.09Vdc→0V; Type-C:5.08Vdc→0V; USB(J9120):5.06Vdc→0V; USB(J100):5.07Vdc→0V.
U2 Pin 3	OC	264Vac	10mins	F1	19.065→0.011	Unit shut down immediately, No damage. No hazards. The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→0V; USB(J9118):5.07Vdc→0V; USB(J59):5.09Vdc→0V; Type-C:5.08Vdc→0V; USB(J9120):5.06Vdc→0V; USB(J100):5.07Vdc→0V.

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Clause	Requirement + Test				Result - Remark	Verdict
U2 Pin 1	OC	264Vac	10mins	F1	19.065→0.011	Unit shut down immediately, No damage. No hazards. The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→0V; USB(J9118):5.07Vdc→0V; USB(J59):5.09Vdc→0V; Type-C:5.08Vdc→0V; USB(J9120):5.06Vdc→0V; USB(J100):5.07Vdc→0V.
U4 pin 2-4	SC	264Vac	10mins	F1	19.065→0.011	Unit shut down immediately, No damage. No hazards. The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→0V; USB(J9118):5.07Vdc→0V; USB(J59):5.09Vdc→0V; Type-C:5.08Vdc→0V; USB(J9120):5.06Vdc→0V; USB(J100):5.07Vdc→0V.
C18	SC	264Vac	10mins	F1	19.065→0.011	Unit shut down immediately, No damage. No hazards. The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→0V; USB(J9118):5.07Vdc→0V; USB(J59):5.09Vdc→0V; Type-C:5.08Vdc→0V; USB(J9120):5.06Vdc→0V; USB(J100):5.07Vdc→0V.
R41	SC	264Vac	10mins	F1	19.065	Unit normal working, No damage. No hazards. The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→5.09Vdc; USB(J9118):5.07Vdc→5.07Vdc; USB(J59):5.09Vdc→5.09Vdc; Type-C:5.08Vdc→5.08Vdc; USB(J9120):5.06Vdc→5.06Vdc; USB(J100):5.07Vdc→5.07Vdc.
C276	SC	264Vac	10mins	F1	19.065→0.011	Unit shut down immediately, No damage. No hazards.

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Clause	Requirement + Test				Result - Remark	Verdict
						The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→0V; USB(J9118):5.07Vdc→0V; USB(J59):5.09Vdc→0V; Type-C:5.08Vdc→0V; USB(J9120):5.06Vdc→0V; USB(J100):5.07Vdc→0V.
U23013 Pin 1-5	SC	264Vac	10mins	F1	19.065→0.514	USB(J9118) port shut down immediately, other parts work normally, recoverable when fault condition removed. No damage, no hazard. The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→5.09Vdc; USB(J9118):5.07Vdc→0V; USB(J59):5.09Vdc→5.09Vdc; Type-C:5.08Vdc→5.08Vdc; USB(J9120):5.06Vdc→5.06Vdc; USB(J100):5.07Vdc→5.07Vdc.
U62 Pin 1-5 SC	SC	264Vac	10mins	F1	19.065→0.518	USB(J59) port shut down immediately, other parts work normally, recoverable when fault condition removed. No damage, no hazard. The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→5.09Vdc; USB(J9118):5.07Vdc→5.07Vdc; USB(J59):5.09Vdc→0V; Type-C:5.08Vdc→5.08Vdc; USB(J9120):5.06Vdc→5.06Vdc; USB(J100):5.07Vdc→5.07Vdc.
U23015 Pin 1-5 SC	SC	264Vac	10mins	F1	19.065→0.514	USB(J9120) port shut down immediately, other parts work normally, recoverable when fault condition removed. No damage, no

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Clause	Requirement + Test				Result - Remark	Verdict
						hazard. The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→5.09Vdc; USB(J9118):5.07Vdc→5.07Vdc; USB(J59):5.09Vdc→5.09V; Type-C:5.08Vdc→5.08Vdc; USB(J9120):5.06Vdc→0V; USB(J100):5.07Vdc→5.07Vdc.
U65 Pin 1-5 SC	SC	264Vac	10mins	F1	19.065→0.517	USB(J100) port shut down immediately, other parts work normally, recoverable when fault condition removed. No damage, no hazard. The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→5.09Vdc; USB(J9118):5.07Vdc→5.07Vdc; USB(J59):5.09Vdc→5.09V; Type-C:5.08Vdc→5.08Vdc; USB(J9120):5.06Vdc→5.06Vdc; USB(J100):5.07Vdc→0V.
U27 Pin 1-5 SC	SC	264Vac	10mins	F1	19.065→0.521	Type-C(J56) port shut down immediately, other parts work normally, recoverable when fault condition removed. No damage, no hazard. The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→5.09Vdc; USB(J9118):5.07Vdc→5.07Vdc; USB(J59):5.09Vdc→5.09Vdc; Type-C:5.08Vdc→0V; USB(J9120):5.06Vdc→5.06Vdc; USB(J100):5.07Vdc→5.07Vdc.
USB(J98) Output	SC	264Vac	10mins	F1	19.065→	USB(J98) port shut down immediately, other parts

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Clause	Requirement + Test				Result - Remark		Verdict
terminal “+”, “-”					0.391	work normally, recoverable when fault condition removed. No damage, no hazard. The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→0Vdc; USB(J9118):5.07Vdc→5.07 Vdc; USB(J59):5.09Vdc→5.09Vd c; Type-C:5.08Vdc→5.08Vdc; USB(J9120):5.06Vdc→5.06 Vdc; USB(J100):5.07Vdc→5.07V dc.	
USB(J9118) Output terminal “+”, “-”	SC	264Vac	10mins	F1	19.065→ 0.518	USB(J9118) port shut down immediately, other parts work normally, recoverable when fault condition removed. No damage, no hazard. The EUT USB output voltage during and after the test: USB(J98):5.09Vdc→5.09Vd c; USB(J9118):5.07Vdc→0V; USB(J59):5.09Vdc→5.09Vd c; Type-C:5.08Vdc→5.08Vdc; USB(J9120):5.06Vdc→5.06 Vdc; USB(J100):5.07Vdc→5.07V dc.	
USB(J59) Output terminal “+”, “-”	SC	264Vac	10mins	F1	19.065→ 0.522	USB(J59) port shut down immediately, other parts work normally, recoverable when fault condition removed. No damage, no hazard. The EUT USB output voltage during and after the test: USB(J98):5.09Vdc→5.09Vd c; USB(J9118):5.07Vdc→5.07 Vdc; USB(J59):5.09Vdc→0V; Type-C:5.08Vdc→5.08Vdc; USB(J9120):5.06Vdc→5.06	

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Clause	Requirement + Test				Result - Remark	Verdict
						Vdc; USB(J100):5.07Vdc→5.07Vdc.
USB(J9120) Output terminal “+”, “-”	SC	264Vac	10mins	F1	19.065→0.518	USB(J9120) port shut down immediately, other parts work normally, recoverable when fault condition removed. No damage, no hazard. The EUT USB output voltage during and after the test: USB(J98):5.09Vdc→5.09Vdc; USB(J9118):5.07Vdc→5.07Vdc; USB(J59):5.09Vdc→5.09Vdc; Type-C:5.08Vdc→5.08Vdc; USB(J9120):5.06Vdc→0V; USB(J100):5.07Vdc→5.07Vdc.
USB(J100) Output terminal “+”, “-”	SC	264Vac	10mins	F1	19.065→0.521	USB(J100) port shut down immediately, other parts work normally, recoverable when fault condition removed. No damage, no hazard. The EUT USB output voltage during and after the test: USB(J98):5.09Vdc→5.09Vdc; USB(J9118):5.07Vdc→5.07Vdc; USB(J59):5.09Vdc→5.09Vdc; Type-C:5.08Vdc→5.08Vdc; USB(J9120):5.06Vdc→5.06Vdc; USB(J100):5.07Vdc→0V.
Type-C(J56) Output terminal “+”, “-”	SC	264Vac	10mins	F1	19.065→0.526	Type-C(J56) port shut down immediately, other parts work normally, recoverable when fault condition removed. No damage, no hazard. The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→5.09Vdc;

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Clause	Requirement + Test				Result - Remark	Verdict
						USB(J9118):5.07Vdc→5.07 Vdc; USB(J59):5.09Vdc→5.09Vdc; Type-C:5.08Vdc→0V; USB(J9120):5.06Vdc→5.06 Vdc; USB(J100):5.07Vdc→5.07Vdc.
USB(J98) Output terminal “+”, “-”	OL	264Vac	8h57mins	F1	19.065→ 19.603→ 19.621→ 19.627→ 19.621→ 0.408	Output power load to 8.15W maximum. When the output exceeds 8.15W, the unit power drop, When the output current reaches 4.6A, all output ports are protected and the display screen works normally.No damaged, no hazards. Measured maximum temperature: T1 Coil:90.0°C; T1 bobbin: 81.9°C; Metal enclosure near T1, outside:40.7 °C; Metal enclosure near LCD panel board, outside: 42.0°C; Metal enclosure near main board, outside: 46.0°C; Power switch:51.3°C; Metal enclosure near Type-C port, outside: 48.6°C; LCD panel: 28.4°C; Ambient: 25.0°C The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→0V; USB(J9118):5.07Vdc→0V; USB(J59):5.09Vdc→0V; Type-C:5.08Vdc→0V; USB(J9120):5.06Vdc→0V; USB(J100):5.07Vdc→0V.
USB(J9118) Output terminal “+”, “-”	OL	264Vac	7h15mins	F1	19.065→ 19.568→ 19.589→ 19.601→ 19.609→ 0.522	Output current load to 1.5A maximum. USB(J9118) output shutdown when output current to 1.55A maximum. No damaged, no hazards. Measured maximum temperature:

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Clause	Requirement + Test				Result - Remark	Verdict
						T1 Coil:89.8°C; T1 bobbin: 82.0°C; Metal enclosure near T1, outside:40.7 °C; Metal enclosure near LCD panel board, outside: 42.2°C; Metal enclosure near main board, outside: 45.9°C; Power switch:51.6 °C; Metal enclosure near Type-C port, outside: 48.8°C; LCD panel: 28.6°C; Ambient: 25.0°C The EUT USB output voltage during and after the test: USB(J98):5.09Vdc→5.09Vdc; USB(J9118):5.07Vdc→0V; USB(J59):5.09Vdc→5.09Vdc; Type-C:5.08Vdc→5.08Vdc; USB(J9120):5.06Vdc→5.06Vdc; USB(J100):5.07Vdc→5.07Vdc.
USB(J59) Output terminal “+”, “-”	OL	264Vac	30mins	F1	0.602	Output current load to 1.45A maximum. USB(J98) output shutdown when output current to 1.5A maximum. No damaged, no hazards. The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→5.09Vdc; USB(J9118):5.07Vdc→5.07Vdc; USB(J59):5.09Vdc→0V; Type-C:5.08Vdc→5.08Vdc; USB(J9120):5.06Vdc→5.06Vdc; USB(J100):5.07Vdc→5.07Vdc.
Type-C(J56) Output terminal “+”, “-”	OL	264Vac	6h32mins	F1	19.065→ 19.516→ 19.534→ 19.544→ 0.472	Output current load to 1.5A maximum. Type-C(J56) output shutdown when output current to 1.55A maximum. No damaged, no hazards.

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Clause	Requirement + Test				Result - Remark	Verdict
						Measured maximum temperature: T1 Coil:89.7°C; T1 bobbin: 81.8°C; Metal enclosure near T1, outside:40.8 °C; Metal enclosure near LCD panel board, outside: 42.2°C; Metal enclosure near main board, outside: 45.9°C; Power switch:52.4 °C; Metal enclosure near Type-C port, outside: 48.5°C; LCD panel: 28.7°C; Ambient: 25.0°C The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→5.09Vdc; USB(J9118):5.07Vdc→5.07Vdc; USB(J59):5.09Vdc→5.09Vdc; Type-C:5.08Vdc→0V; USB(J9120):5.06Vdc→5.06Vdc; USB(J100):5.07Vdc→5.07Vdc.
USB(J100) Output terminal “+”, “-”	OL	264Vac	7h15mins	F1	19.065→ 19.571→ 19.589→ 19.598→ 19.612→ 0.521	Output current load to 1.5A maximum. USB(J100) output shutdown when output current to 1.55A maximum. No damaged, no hazards. Measured maximum temperature: T1 Coil:90.4°C; T1 bobbin: 82.1°C; Metal enclosure near T1, outside:40.6°C; Metal enclosure near LCD panel board, outside: 42.3°C; Metal enclosure near main board, outside: 46.1°C; Power switch:51.5 °C; Metal enclosure near Type-C port, outside: 48.5°C; LCD panel: 28.5°C;

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Clause	Requirement + Test				Result - Remark	Verdict
						Ambient: 25.0°C The EUT USB output voltage during and after the test: USB(J98):5.09Vdc→5.09Vdc; USB(J9118):5.07Vdc→0V; USB(J59):5.09Vdc→5.09Vdc; Type-C:5.08Vdc→5.08Vdc; USB(J9120):5.06Vdc→5.06Vdc; USB(J100):5.07Vdc→0V.
USB(J9120) Output terminal “+”, “-”	OL	264Vac	30mins	F1	0.601	Output current load to 1.5A maximum. USB(J9120) output shutdown when output current to 1.55A maximum. No damaged, no hazards. The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→5.09Vdc; USB(J9118):5.07Vdc→5.07Vdc; USB(J59):5.09Vdc→0V; Type-C:5.08Vdc→5.08Vdc; USB(J9120):5.06Vdc→0V; USB(J100):5.07Vdc→5.07Vdc.
Blocked	Blocked	264Vac	5h23mins	F1	19.065	The unit operated under the fault condition and ran for thermal equilibrium. No hazard, No damage. Measured maximum temperature: T1 Coil:94.2°C; T1 bobbin: 91.2°C; Metal enclosure near T1, outside:42.6 °C; Metal enclosure near LCD panel board, outside: 45.0°C; Metal enclosure near main board, outside: 40.0°C; Power switch:45.2 °C; Metal enclosure near Type-C port, outside: 36.4°C; LCD panel: 29.3°C;

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Clause	Requirement + Test				Result - Remark	Verdict
						Ambient: 25.0°C The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→5.09Vdc ; USB(J9118):5.07Vdc→5.07Vdc; USB(J59):5.09Vdc→5.09Vdc ; Type-C:5.08Vdc→5.08Vdc; USB(J9120):5.06Vdc→5.06Vdc; USB(J100):5.07Vdc→5.07Vdc.
Transformer T1 output (12Vdc)	OL	264Vac	7h14mins	F1	19.065→0.789→1.097→1.352→0	T1 output power board was overloaded to 9.0A, the power board was damaged after about 1h operation, and the fuse F1 was opened immediately. Unrecoverable, no hazards. Measured maximum temperature: T1 Coil:159.5°C; T1 bobbin:153.1 °C; Metal enclosure near T1, outside: 60.1°C; Metal enclosure near LCD panel board, outside: 46.3°C; Metal enclosure near main board, outside: 37.4°C; Power switch:48.1 °C; Metal enclosure near Type-C port, outside:34.8 °C; LCD panel: 26.6°C; Ambient: 25.0°C The EUT USB output and Type-C output voltage during and after the test: USB(J98):5.09Vdc→0V; USB(J9118):5.07Vdc→0V; USB(J59):5.09Vdc→0V; Type-C:5.08Vdc→0V; USB(J9120):5.06Vdc→0V; USB(J100):5.07Vdc→0V.
Supplementary information:						
Abbreviation: SC= short circuit; OC= open circuit; OL= Overload						

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

M.3	TABLE: Protection circuits for batteries provided within the equipment		P
Is it possible to install the battery in a reverse polarity position? .....:		No	—

Equipment Specification	Charging	
	Voltage (V)	Current (A)
	3.0Vdc	20mA (Rated discharging current)
	3.0Vdc	5mA (Rated unintentional charging current)

Manufacturer/type	Battery specification					
	Non-rechargeable batteries		Rechargeable batteries			
	Discharging current (A)	Unintentional charging current (A)	Charging		Discharging current (A)	Reverse charging current (A)
			Voltage (V)	Current (A)		
CR2032	1.17mA	0	--	--	--	--
	1.02mA (D33 pin 1-3 SC)	0.15mA (D33 pin 1-3 SC)	--	--	--	--
	1.05mA (D33 pin 2-3 SC)	0.16mA (D33 pin 2-3 SC)	--	--	--	--
	1.05mA (D33 pin 1-2 SC)	0.16mA (D33 pin 1-2 SC)				
	1.17mA (R551 SC)	0.59mA (R551 SC)	--	--	--	--

Note: The tests of M.3.2 are applicable only when above appropriate data is not available.		
Specified battery temperature (°C) .....:	--	—

Component No.	Fault condition	Charge/ discharge mode	Test time	Temp. (°C)	Current (A)	Voltage (V)	Observation
--	--	--	--	--	--	--	--

Supplementary information:

Abbreviation: SC= short circuit; OC= open circuit NL= no chemical leakage; NS= no spillage of liquid; NE= no explosion; NF= no emission of flame or expulsion of molten metal.

M.4.2	TABLE: Charging safeguards for equipment containing a secondary lithium battery	N/A

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

Maximum specified charging voltage (V) ..... :	--	—
Maximum specified charging current (A) ..... :	--	—
Highest specified charging temperature (°C) ..... :	--	—
Lowest specified charging temperature (°C) ..... :	--	—

Battery manufacturer/type	Operating and fault condition	Measurement			Observation
		Charging voltage (V)	Charging current (A)	Temp. (°C)	
--	--	--	--	--	--
Supplementary information:					
Abbreviation: SC= short circuit; OC= open circuit; MSCV= maximum specified charging voltage; MSCC= maximum specified charging current; HSCT= highest specified charging temperature; LSCT= lowest specified charging temperature					

Q.1	**TABLE: Circuits intended for interconnection with building wiring (LPS)**						P
Output Circuit	Condition	U_{oc} (V)	Time (s)	I_{sc} (A)		S (VA)	
				Meas.	Limit	Meas.	Limit
USB(J98) Output terminal: 5Vdc	Normal	5.09	5	4.55	8	8.15	100
	U2 pin 1-2 SC	0	5	0	8	0	100
	U2 pin 3-4 SC	0	5	0	8	0	100
	U2 pin 1 OC	0	5	0	8	0	100
	U4 pin 2-4 SC	0	5	0	8	0	100
	D37 SC	0	5	0	8	0	100
	R9873 SC	0	5	0	8	0	100
USB(J9118) Output terminal: 5Vdc	Normal	5.07	5	1.5	8	6.89	100
	U2 pin 1-2 SC	0	5	0	8	0	100
	U2 pin 3-4 SC	0	5	0	8	0	100
	U2 pin 1 OC	0	5	0	8	0	100
	U4 pin 2-4 SC	0	5	0	8	0	100
	D35	0	5	0	8	0	100
	U23013 Pin 1-5	0	5	0	8	0	100
USB(J59) Output terminal: 5Vdc	Normal	5.09	5	1.45	8	5.97	100
	U2 pin 1-2 SC	0	5	0	8	0	100
	U2 pin 3-4 SC	0	5	0	8	0	100
	U2 pin 1 OC	0	5	0	8	0	100

IEC 62368-1							
Clause	Requirement + Test			Result - Remark			Verdict
	U4 pin 2-4 SC	0	5	0	8	0	100
	D38 SC	0	5	0	8	0	100
	U62 Pin 1-5 SC	0	5	0	8	0	100
Type-C(J56) Output terminal: 5Vdc	Normal	5.08	5	1.5	8	6.72	100
	U2 pin 1-2 SC	0	5	0	8	0	100
	U2 pin 3-4 SC	0	5	0	8	0	100
	U2 pin 1 OC	0	5	0	8	0	100
	U4 pin 2-4 SC	0	5	0	8	0	100
	D8231 SC	0	5	0	8	0	100
	U27 Pin 1-5 SC	0	5	0	8	0	100
USB(J9120) Output terminal: 5Vdc	Normal	5.07	5	1.5	8	6.51	100
	U2 pin 1-2 SC	0	5	0	8	0	100
	U2 pin 3-4 SC	0	5	0	8	0	100
	U2 pin 1 OC	0	5	0	8	0	100
	U4 pin 2-4 SC	0	5	0	8	0	100
	D8221 SC	0	5	0	8	0	100
	U23015 Pin 1-5 SC	0	5	0	8	0	100
USB(J100) Output terminal: 5Vdc	Normal	5.06	5	1.5	8	6.63	100
	U2 pin 1-2 SC	0	5	0	8	0	100
	U2 pin 3-4 SC	0	5	0	8	0	100
	U2 pin 1 OC	0	5	0	8	0	100
	U4 pin 2-4 SC	0	5	0	8	0	100
	D45 SC	0	5	0	8	0	100
	U65 Pin 1-5 SC	0	5	0	8	0	100
HDMI Output terminal	Normal	5.11	5	0	8	0	100
	U2 pin 1-2 SC	0	5	0	8	0	100
	U2 pin 3-4 SC	0	5	0	8	0	100
	U2 pin 1 OC	0	5	0	8	0	100
	U4 pin 2-4 SC	0	5	0	8	0	100
	D100 SC	0	5	0	8	0	100
	R91 SC	0	5	0	8	0	100
RJ45 Output terminal	Normal	2.67	5	0	8	0	100

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Clause	Requirement + Test	Result - Remark	Verdict

Earphone terminal	Normal	2.74	5	0	8	0	100
TF Card terminal	Normal	3.24	5	0	8	0	100
SIM Card terminal	Normal	2.08	5	0	8	0	100
Supplementary Information:							
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T.2, T.3, T.4, T.5	**TABLE: Steady force test**					P
Part/Location	Material	Thickness (mm)	Probe	Force (N)	Test Duration (s)	Observation
Internal components / wire	--	--	V.2	10	5	No reduction the clearances and creepage distances.
Top enclosure	Metal	Min. 1.0	--	250	5	No damage, No hazard
Side enclosure	Metal	Min. 1.0	--	250	5	No damage, No hazard
Bottom enclosure	Metal	Min. 1.0	--	250	5	No damage, No hazard
Supplementary information:						
--						

T.6, T.9	**TABLE: Impact test**				P
Location/part	Material	Thickness (mm)	Height (mm)	Observation	
Top enclosure	Metal	Min. 1.0	1300	No damage, No hazard	
Side enclosure	Metal	Min. 1.0	1300	No damage, No hazard	
Bottom enclosure	Metal	Min. 1.0	1300	No damage, No hazard	
Supplementary information:					
--					

T.7	**TABLE: Drop test**				N/A
Location/part	Material	Thickness (mm)	Height (mm)	Observation	
--	--	--	--	--	
Supplementary information:					
--					

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

T.8	TABLE: Stress relief test					N/A
Location/Part	Material	Thickness (mm)	Oven Temperature (°C)	Duration (h)	Observation	
--	--	--	--	--	--	
Supplementary information:						
--						

X	TABLE: Alternative method for determining minimum clearances distances			N/A
Clearance distanced between:	Peak of working voltage (V)	Required cl (mm)	Measured cl (mm)	
--	--	--	--	
Supplementary information:				
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4.1.2	TABLE: Critical components information				P
Object / part No.	Manufacturer / trademark	Type / model	Technical data	Standard	Mark(s) of conformity[1)]
Unit part					
Metal enclosure	Xiamen Hezheda Industry and Trade Co., Ltd	VR Cinema	Metal, Min. thickness: 1.0mm	IEC/EN 62368-1	Tested with appliance
PCB (LCD panel board)	GuangDong Kingshine Electronic Technology Co Ltd	XY-K	V-0, 130 °C	UL 94	UL
PCB (Mian board)	XIN FENG FU CHANG FA ELECTRONIC CO LTD	FCF-4	V-0, 130°C	UL 94	UL
AC inlet	Yueqing Qiyang Electronics Co., Ltd.	AC-14-F16	10A, 250V~	IEC 60320-1	VDE
-Power switch	Yueqing Leniu Electronics Co., Ltd	KCD1	AC 250V, 32A, 1E+4, T85	IEC 61058-1	VDE
-Fuse	XC Electronics (Shen Zhen) Corp. Ltd.	5F	F10AL 250V	IEC/EN 60127-1 IEC/EN 60217-2	VDE
Internal wire (Primary)	DONGGUAN TAIXIN WIRE CO LTD	1015	Rated min. 18 AWG. 600 V. 80 °C, min. VW-1	UL 758	UL
Internal wire (Secondary)	DONGGUAN TAIXIN WIRE CO LTD	1007	Rated min. 22 AWG. 300 V. 80 °C, min. VW-1	UL 758	UL
Earth wire	DONGGUAN TAIXIN WIRE CO LTD	1007	Rated min. 18 AWG. 300 V. 80 °C, min. VW-1	UL 758	UL
LED Panel (2Pcs)	Fuzhou BOE Optoelectronics Technology Co., Ltd	HV430FHB-N10	42.5" TFT-LCD, with LED backlight, 1920(RGB)*1080	IEC/AS/NZS 62368-1	Tested with appliance
RTC battery	CHANGZHOU JINTAN CHAOCHUANG BATTERY CO LTD	CR2032	3.0Vdc, 220mAh, Max. abnormal charging current 5 mA	UL 1642	UL
Power supply board part					
PCB	GOLDENMAX INTERNATIONAL TECHNOLOGY (ZHUHAI) LTD	GF432	V-0, 130°C	UL 94	UL
AC connector (CON1)	ZHEJIANG JIESHITAI ELECTRONICS CO LTD	Female part: A3962Y-(02~14); Male part: A3962AW-(02~14)	250Vac, 32A, 85°C	UL 1977 EN 61984	UL VDE

(Alternative)	JOWLE TECHNOLOGY CO LTD	A3963WR2-3P-D	250Vac, 7A, 85°C	UL 1977	UL
Fuse (F1)	XC Electronics (Shen Zhen) Corp. Ltd.	5TE	T25A/250V	IEC/EN 60127-1 IEC/EN 60127-3	VDE
(Alternative)	Hollyland Company Limited	5TE	T25A/250V	IEC/EN 60127-1 IEC/EN 60127-3	VDE
Thermistor (RT1)	Thinking Electronic Industrial Co., Ltd.	UL: SCK-054 TUV: SCK-051	4A, 5Ω	UL 1434 EN 60730-1 EN 60539-1	UL
Varistor (RV1)	Hongzhi Enterprises Ltd.	HEL10D681K	420Vac, 125 °C, Min. coating V-1	IEC 61051-1 IEC 61051-2 IEC 61051-2-2	VDE
(Alternative)	Shantou High-New Technology Dev. Zone Songtian Enterprise Co., Ltd.	10D681K	420Vac, 125 °C, Min. coating V-1	IEC 61051-1 IEC 61051-2 IEC 61051-2-2	VDE
(Alternative)	Thinking Electronic Industrial Co., Ltd.	TVR10681-D	420Vac, 125 °C, Min. coating V-1	IEC 61051-1 IEC 61051-2 IEC 61051-2-2	VDE
X Capacitor (CX1)	Shenzhen Sincerity Technology Co., Ltd.	MPX/MKP	Rated Min.275Vac Max.0.47uF, Min.110°C, X2 type	IEC/EN 60384-14	VDE
(Alternative)	Shantou High-New Technology Dev. Zone Songtian Enterprise Co., Ltd.	MPX	Rated Min.275Vac Max.0.47uF, Min.110°C, X2 type	IEC/EN 60384-14	VDE
(Alternative)	Hongzhi Enterprises Ltd.	MPX (X2) / MPX	Rated Min.275Vac Max.0.47uF, Min.110°C, X2 type	IEC/EN 60384-14	VDE
Y Capacitor (CY1, CY2)	Shantou High-New Technology Dev. Zone Songtian Enterprise Co., Ltd.	CD-Series	Rated max. 1000pF; Min.AC 250V; Y1 type; 125°C	IEC/EN 60384-14	VDE
(Alternative)	Hongzhi Enterprises Ltd.	X1Y1 Series	Rated max. 1000pF; Min.AC 250V; Y1 type; 125°C	IEC/EN 60384-14	VDE
(Alternative)	Welson Industrial Co., Ltd.	WD	Rated max. 1000pF; Min.AC 250V; Y1 type; 125°C	IEC/EN 60384-14	VDE
Y Capacitor (CY3	Shantou High-New Technology Dev. Zone Songtian Enterprise Co., Ltd.	CD-Series	Rated max. 2200pF; Min.AC 250V; Y1 type; 125°C	IEC/EN 60384-14	VDE

(Alternative)	Hongzhi Enterprises Ltd.	X1Y1 Series	Rated max. 2200pF; Min.AC 250V; Y1 type; 125°C	IEC/EN 60384-14	VDE
(Alternative)	Welson Industrial Co., Ltd.	WD	Rated max. 2200pF; Min.AC 250V; Y1 type; 125°C	IEC/EN 60384-14	VDE
Optocoupler (U2)	Everlight Electronics Co., Ltd.	EL817V	Double protection optical isolators, providing 4000 vac isolation Dti. ≥0.4mm, ext.cl.=ext.cr.≥7.6mm, 110°C	IEC/EN60747-5-5	VDE
Transformer (T1)	ZIXING HUIHUA ELECTRONICS CO., LTD	EFD43-TOSN-1215	Class B	IEC/AS/NZS 62368-1	Tested with appliance
-Core	Dongci Electronics Co., Ltd	JF44	Mn-Zn FERRITE	IEC/AS/NZS 62368-1	Tested with appliance
-Bobbin	CHANG CHUN PLASTICS CO LTD	T375J(G5)(G6)	Phenolic, V-0, 150 degree C, Min. thickness 0.75 mm	UL 94 UL 746	UL
-Magnet Wire	HUIZHOU CITY DENGGAODA ELECTROTECH CO LTD	X UEW	130 °C	UL 1446	UL
-Insulating Tape	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	CT* (c)(g)	130 °C	UL 510	UL
- Insulating Tape (for extended winding)	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	PF* (d)(g)	180 °C	UL 510	UL
-Margin Tape	JINGJIANG JINGYI ADHESIVE PRODUCT CO LTD	WF310 (a)	130 °C	UL 510	UL
-Tube	Shenzhen Zhongdianchengua ng Electronic Co Ltd	CG-T	PTFE 200 °C, 300 V	UL 224	UL
-Varnish	SHEN ZHEN XING SHI DA SCIEN TECH.CO., LTD	SD-1182	130 °C	UL 1446	UL
(Alternative)	HANG CHEUNG COATINGS (HUIYANG) LTD	8562*	155 °C	UL 1446	UL
Line filter (LF1)	ZIXING HUIHUA ELECTRONICS CO LTD	LD4200-LF1	130 °C	IEC/AS/NZS 62368-1	Tested with appliance

-Bobbin	CHANG CHUN PLASTICS CO LTD	T375J(G5)(G6)	Phenolic, V-0, 150 degree C, Min. thickness 0.45 mm	UL 94 UL 746	UL
-Magnet Wire	WUXI JUFENG COMPOUND LINE CO LTD	xUEWN*$, QAN-x/130*	130 °C	UL 1446	UL
-Triple insulation wire	Shenzhen Darun Science and Technology Co., Ltd	UL: DRTIW-B VDE: DRTIW-B130	130 °C	UL 1446 IEC/EN 62368-1	UL VDE
(Alternative)	E&B TECHNOLOGY CO LTD	VDE: E&B-XXXB* UL: E&B-XXXB*	130 °C	UL 1446 IEC/EN 62368-1	UL VDE
(Alternative)	Suzhou Yusheng Electronic Co., Ltd.	TIW-B*	130 °C	UL 1446 IEC/EN 62368-1	UL VDE
-Tube	SHENZHEN WOER HEAT-SHRINKABLE MATERIAL CO LTD	RSFR-H	600V, 125°C	UL 224	UL
-Varnish	SHENZHEN XINGSHIDA SCIEN TECH PROD CO LTD	SD-1182	130 °C	UL 1446	UL
(Alternative)	ZHUHAI CHANGXIAN NEW MATERIALS TECHNOLOGY CO LTD	E962	130 °C	UL 1446	UL
Line filter (LF2)	SHENZHEN AMORHPOUSTECH CO LTD	LD1360-LF2	130 °C	IEC/AS/NZS 62368-1	Tested with appliance
-Bobbin	CHANG CHUN PLASTICS CO LTD	T200HF	Phenolic, V-0, 150 degree C, Min. thickness 0.45 mm	UL 94 UL 746	UL
-Magnet wire	WUXI JUFENG COMPOUND LINE CO LTD	xUEWN*$, QAN-x/130*	130 °C	UL 1446	UL
-Varnish	SHENZHEN XINGSHIDA SCIEN TECH PROD CO LTD	SD-1182	130 °C	UL 1446	UL
(Alternative)	HANG CHEUNG COATINGS (HUIYANG) LTD	8562*	155 °C	UL 1446	UL
Discharged resistance (RX1, RX2, RX3, RX4)	Viking Tech Corporation Kaoshiung Branch	HVR12	Each Max. 1 MΩ, min. 1/4 W	IEC 62368-1	VDE
Electronic capacitor (C1, C2, C3, C4)	Dongguan Xunda Electronics Co., LTD	P2034	Min.420V,Min.47 uF,105°C	IEC/AS/NZS 62368-1	Tested with appliance

Electronic capacitor (C11)	Dongguan Xunda Electronics Co., LTD	H320(M)	Min.50V,Min.22 uF,105°C	IEC/AS/NZS 62368-1	Tested with appliance
Electronic capacitor (C12)	Dongguan Xunda Electronics Co., LTD	H701(M)	Min.50V,Min.4.7 uF,105°C	IEC/AS/NZS 62368-1	Tested with appliance
Bridge Diode (BD1)	Shandong Jingdao Microelectronics Co., ltd	GBU 806G	Min. 600v, Min. 8A	IEC/AS/NZS 62368-1	Tested with appliance
MOSFET (Q1)	InPower Semiconductor Co., Ltd.	ITA13N60A	Min.650V, Min.12A	IEC/AS/NZS 62368-1	Tested with appliance
Insulation sheet	SHENZHEN TEESUN TECHNOLOGY CO LTD	TS-FR370F	V-0, 80°C, Min thickness 0.4 mm	UL 94, UL 746	UL
(Alternative)	SUZHOU OMAY OPTICAL MATERIALS CO LTD	SE42B	V-0, 80°C, Min thickness 0.4 mm	UL 94, UL 746	UL
Supplementary information:					
[1] Provided evidence ensures the agreed level of compliance. See OD-2039. [2] Description line content is optional. Main line description needs to clearly detail the component used for testing.					

IEC62368_1E - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

ATTACHMENT TO TEST REPORT

IEC 62368-1

EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES

(AUDIO/VIDEO, INFORMATION AND COMMUNICATION TECHNOLOGY EQUIPMENT - PART 1: SAFETY REQUIREMENTS)

Differences according to ..... : EN IEC 62368-1:2020+A11:2020

Attachment Form No. ..... : EU_GD_IEC62368_1E

Attachment Originator..... : UL(Demko)

Master Attachment..... : 2021-02-04

	CENELEC COMMON MODIFICATIONS (EN)		P
	Clause numbers in the cells that are shaded light grey are clause references in EN IEC 62368-1:2020+A11:2020. All other clause numbers in that column, except for those in the paragraph below, refers to IEC 62368-1:2018. Clauses, subclauses, notes, tables, figures and annexes which are additional to those in IEC 62368-1:2018 are prefixed “Z”.		P
	Add the following annexes: Annex ZA (normative) Normative references to international publications with their corresponding European publications Annex ZB (normative) Special national conditions Annex ZC (informative) A-deviations Annex ZD (informative) IEC and CENELEC code designations for flexible cords		P
1	**Modification to Clause 3.**		N/A
3.3.19	**Sound exposure** *Replace 3.3.19 of IEC 62368-1 with the following definitions:*		N/A
3.3.19.1	**momentary exposure level, MEL** metric for estimating 1 s sound exposure level from the HD 483-1 S2 test signal applied to both channels, based on EN 50332-1:2013, 4.2. Note 1 to entry: MEL is measured as A-weighted levels in dB. Note 2 to entry: See B.3 of EN 50332-3:2017 for additional information.		N/A

IEC62368_1E - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
3.3.19.3	**sound exposure, *E*** A-weighted sound pressure (p) squared and integrated over a stated period of time, T Note 1 to entry: The SI unit is Pa^2 s. $E = \int_0^T p(t)^2 \, dt$		N/A
3.3.19.4	**sound exposure level, *SEL*** logarithmic measure of sound exposure relative to a reference value, E_0, typically the 1 kHz threshold of hearing in humans. Note 1 to entry: *SEL* is measured as A-weighted levels in dB. $SEL = 10 \lg\left(\frac{E}{E_0}\right)$ dB Note 2 to entry: See B.4 of EN 50332-3:2017 for additional information.		N/A
3.3.19.5	**digital signal level relative to full scale, dBFS** levels reported in dBFS are always r.m.s. Full scale level, 0 dBFS, is the level of a dc-free 997-Hz sine wave whose undithered positive peak value is positive digital full scale, leaving the code corresponding to negative digital full scale unused Note 1 to entry: It is invalid to use dBFS for non-r.m.s. levels. Because the definition of full scale is based on a sine wave, the level of signals with a crest factor lower than that of a sine wave may exceed 0 dBFS. In particular, square wave signals may reach +3,01 dBFS.		N/A
2	**Modification to Clause 10**		N/A
10.6	**Safeguards against acoustic energy sources** Replace 10.6 of IEC 62368-1 with the following:		N/A
10.6.1.1	**Introduction** **Safeguard** requirements for protection against long-term exposure to excessive sound pressure levels from personal music players closely coupled to the ear are specified below. Requirements for earphones and headphones intended for use with personal music players are also covered. A personal music player is a portable equipment intended for use by an **ordinary person**, that:		N/A

IEC62368_1E - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	– is designed to allow the user to listen to audio or audiovisual content / material; and – uses a listening device, such as headphones or earphones that can be worn in or on or around the ears; and – has a player that can be body worn (of a size suitable to be carried in a clothing pocket) and is intended for the user to walk around with while in continuous use (for example, on a street, in a subway, at an airport, etc.). EXAMPLES Portable CD players, MP3 audio players, mobile phones with MP3 type features, PDAs or similar equipment. Personal music players shall comply with the requirements of either 10.6.2 or 10.6.3. NOTE 1 Protection against acoustic energy sources from telecom applications is referenced to ITU-T P.360. NOTE 2 It is the intention of the Committee to allow the alternative methods for now, but to only use the dose measurement method as given in 10.6.5 in future. Therefore, manufacturers are encouraged to implement 10.6.5 as soon as possible. Listening devices sold separately shall comply with the requirements of 10.6.6. These requirements are valid for music or video mode only. The requirements do not apply to: – 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 equipment. – hearing aid equipment and other devices for assistive listening; – the following type of analogue personal music players: • long distance radio receiver (for example, a multiband radio receiver or world band radio receiver, an AM radio receiver), and • cassette player/recorder; 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. – a player while connected to an external amplifier that does not allow the user to walk around while in use. For equipment that is clearly designed or intended		

IEC62368_1E - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	primarily for use by children, the limits of the relevant toy standards may apply. The relevant requirements are given in EN 71-1:2011, 4.20 and the related tests methods and measurement distances apply.		
10.6.1.2	**Non-ionizing radiation from radio frequencies in the range 0 to 300 GHz** The amount of non-ionizing radiation is regulated by European Council Recommendation 1999/519/EC of 12 July 1999 on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz). For intentional radiators, ICNIRP guidelines should be taken into account for Limiting Exposure to Time-Varying Electric, Magnetic, and Electromagnetic Fields (up to 300 GHz). For hand-held and body mounted devices, attention is drawn to EN 50360 and EN 50566.		N/A
10.6.2	**Classification of devices without the capacity to estimate sound dose**		N/A
10.6.2.1	**General** This standard is transitioning from short-term based (30 s) requirements to long-term based (40 hour) requirements. These clauses remain in effect only for devices that do not comply with sound dose estimation as stipulated in EN 50332-3. For classifying the acoustic output $L_{Aeq,T}$, measurements are based on the A-weighted equivalent sound pressure level over a 30 s period. 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, measurements may be done over the duration of the complete song. In this case, T becomes the duration of the song. NOTE Classical music, acoustic music and broadcast 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 content 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 does not exceed the required limit. For example, if the player is set with the programme simulation noise to 85 dB, but the average music level of the song is only 65 dB, 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 dB.		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
10.6.2.2	**RS1 limits (to be superseded, see 10.6.3.2)** RS1 is a class 1 acoustic energy source that does not exceed the following: – for equipment provided as a package (player with its listening device), and with a proprietary connector between the player and its listening device, or where the combination of player and listening device is known by other means such as setting or automatic detection, the $L_{Aeq,T}$ acoustic output shall be ≤ 85 dB when playing the fixed "programme simulation noise" described in EN 50332-1. – for equipment provided with a standardized connector (for example, a 3,5 phone jack) that allows connection to a listening device for general use, the unweighted r.m.s. output voltage shall be ≤ 27 mV (analogue interface) or -25 dBFS (digital interface) when playing the fixed "programme simulation noise" described in EN 50332-1. – The RS1 limits will be updated for all devices as per 10.6.3.2.		N/A
10.6.2.3	**RS2 limits (to be superseded, see 10.6.3.3)** RS2 is a class 2 acoustic energy source that does not exceed the following: – for equipment provided as a package (player with its listening device), and with a proprietary connector between the player and its listening device, or when the combination of player and listening device is known by other means such as setting or automatic 130 detection, the $L_{Aeq,T}$ acoustic output shall be ≤ 100 dB(A) when playing the fixed "programme simulation noise" as described in EN 50332-1. – for equipment provided with a standardized connector (for example, a 3,5 phone jack) that allows connection to a listening device for general use, the unweighted r.m.s. output voltage shall be ≤ 150 mV (analogue interface) or -10 dBFS (digital interface) when playing the fixed "programme simulation noise" as described in EN 50332-1.		N/A
10.6.2.4	**RS3 limits** RS3 is a class 3 acoustic energy source that exceeds RS2 limits.		N/A
10.6.3	**Classification of devices (new)**		N/A
10.6.3.1	**General** Previous limits (10.6.2) created abundant false		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	negative and false positive PMP sound level warnings. New limits, compliant with The Commission Decision of 23 June 2009, are given below.		
10.6.3.2	**RS1 limits (new)** RS1 is a class 1 acoustic energy source that does not exceed the following: – for equipment provided as a package (player with its listening device), and with a proprietary connector between the player and its listening device, or where the combination of player and listening device is known by other means such as setting or automatic detection, the $L_{Aeq,T}$ acoustic output shall be ≤ 80 dB when playing the fixed “programme simulation noise” described in EN 50332-1. – for equipment provided with a standardized connector (for example, a 3,5 phone jack) that allows connection to a listening device for general use, the unweighted r.m.s. output voltage shall be ≤ 15 mV (analogue interface) or -30 dBFS (digital interface) when playing the fixed “programme simulation noise” described in EN 50332-1.		N/A
10.6.3.3	**RS2 limits (new)** RS2 is a class 2 acoustic energy source that does not exceed the following: – for equipment provided as a package (player with its listening device), and with a proprietary connector between the player and its listening device, or where the combination of player and listening device is known by other means such as setting or automatic detection, the weekly sound exposure level, as described in EN 50332-3, shall be ≤ 80 dB when playing the fixed "programme simulation noise" described in EN 50332-1. – for equipment provided with a standardized connector (for example, a 3,5 phone jack) that allows connection to a listening device for general use, the unweighted r.m.s. output level, integrated over one week, as described in EN50332-3, shall be ≤ 15 mV (analogue interface) or -30 dBFS (digital interface) when playing the fixed “programme simulation noise” described in EN 50332-1.		N/A
10.6.4	**Requirements for maximum sound exposure**		N/A
10.6.4.1	**Measurement methods** All volume controls shall be turned to maximum during tests.		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Measurements shall be made in accordance with EN 50332-1 or EN 50332-2 as applicable.		
10.6.4.2	**Protection of persons** Except as given below, protection requirements for parts **accessible** to **ordinary persons**, **instructed persons** and **skilled persons** are given in 4.3. NOTE 1 Volume control is not considered a **safeguard.** Between RS2 and an **ordinary person**, the **basic safeguard** may be replaced by an **instructional safeguard** in accordance with Clause F.5, except that the **instructional safeguard** shall be placed on the equipment, or on the packaging, or in the instruction manual. Alternatively, the **instructional safeguard** may be given through the equipment display during use. The elements of the **instructional safeguard** shall be as follows: – element 1a: the symbol  , IEC 60417-6044 (2011-01) – element 2: “High sound pressure” or equivalent wording – element 3: “Hearing damage risk” or equivalent wording – element 4: “Do not listen at high volume levels for long periods.” or equivalent wording An **equipment safeguard** shall prevent exposure of an **ordinary person** to an RS2 source without intentional physical action from the **ordinary person** and shall automatically return to an output level not exceeding what is specified for an RS1 source when the power is switched off. The equipment shall provide a means to actively inform the user of the increased sound level when the equipment is operated with an output exceeding RS1. Any means used shall be acknowledged by the user before activating a mode of operation which allows for an output exceeding RS1. The acknowledgement does not need to be repeated more than once every 20 h of cumulative listening time. NOTE 2 Examples of means include visual or audible signals. Action from the user is always needed. NOTE 3 The 20 h listening time is the accumulative listening		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	time, independent of how often and how long the personal music player has been switched off. A **skilled person** shall not be unintentionally exposed to RS3.		
10.6.5	**Requirements for dose-based systems**		N/A
10.6.5.1	**General requirements** Personal music players shall give the warnings as provided below when tested according to EN 50332-3, using the limits from this clause. The manufacturer may offer optional settings to allow the users to modify when and how they wish to receive the notifications and warnings to promote a better user experience without defeating the safeguards. This allows the users to be informed in a method that best meets their physical capabilities and device usage needs. If such optional settings are offered, an administrator (for example, parental restrictions, business/educational administrators, etc.) shall be able to lock any optional settings into a specific configuration. The personal music player shall be supplied with easy to understand explanation to the user of the dose management system, the risks involved, and how to use the system safely. The user shall be made aware that other sources may significantly contribute to their sound exposure, for example work, transportation, concerts, clubs, cinema, car races, etc.		N/A
10.6.5.2	**Dose-based warning and requirements** When a dose of 100 % *CSD* is reached, and at least at every 100 % further increase of *CSD*, the device shall warn the user and require an acknowledgement. In case the user does not acknowledge, the output level shall automatically decrease to compliance with class RS1. The warning shall at least clearly indicate that listening above 100 % *CSD* leads to the risk of hearing damage or loss.		N/A
10.6.5.3	**Exposure-based requirements** With only dose-based requirements, cause and effect could be far separated in time, defying the purpose of educating users about safe listening practice. In addition to dose-based requirements, a PMP shall therefore also put a limit to the short-		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	term sound level a user can listen at. The exposure-based limiter (EL) shall automatically reduce the sound level not to exceed 100 dB(A) or 150 mV integrated over the past 180 s, based on methodology defined in EN 50332-3. The EL settling time (time from starting level reduction to reaching target output) shall be 10 s or faster. Test of EL functionality is conducted according to EN 50332-3, using the limits from this clause. For equipment provided as a package (player with its listening device), the level integrated over 180 s shall be 100 dB or lower. For equipment provided with a standardized connector, the unweighted level integrated over 180 s shall be no more than 150 mV for an analogue interface and no more than -10 dBFS for a digital interface. NOTE In case the source is known not to be music (or test signal), the EL may be disabled.		
10.6.6	**Requirements for listening devices (headphones, earphones, etc.)**		N/A
10.6.6.1	**Corded listening devices with analogue input** With 94 dB L_{Aeq} acoustic pressure output of the listening device, and with the volume and sound settings in the listening device (for example, built-in volume level control, additional sound features like equalization, etc.) set to the combination of positions that maximize the measured acoustic output, the input voltage of the listening device when playing the fixed “programme simulation noise” as described in EN 50332-1 shall be ≥ 75 mV. NOTE The values of 94 dB and 75 mV correspond with 85 dB and 27 mV or 100 dB and 150 mV.		N/A
10.6.6.2	**Corded listening devices with digital input** With any playing device playing the fixed “programme simulation noise” described in EN 50332-1, and with the volume and sound settings in the listening device (for example, built-in volume level control, additional sound features like equalization, etc.) set to the combination of positions that maximize the measured acoustic output, the $L_{Aeq,T}$ acoustic output of the listening device shall be ≤ 100 dB with an input signal of -10 dBFS.		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
10.6.6.3	**Cordless listening devices** In cordless mode, – with any playing and transmitting device playing the fixed programme simulation noise described in EN 50332-1; and – respecting the cordless transmission standards, where an air interface standard exists that specifies the equivalent acoustic level; and – with volume and sound settings in the receiving device (for example, built-in volume level control, additional sound features like equalization, etc.) set to the combination of positions that maximize the measured acoustic output for the above mentioned programme simulation noise, the $L_{Aeq,T}$ acoustic output of the listening device shall be ≤ 100 dB with an input signal of -10 dBFS.		N/A
10.6.6.4	**Measurement method** *Measurements shall be made in accordance with EN 50332-2 as applicable.*		N/A
3	**Modification to the whole document**		P
	Delete all the “country” notes in the reference document according to the following list:		P

0.2.1	Note 1 and 2	1	Note 4 and 5	3.3.8.1	Note 2
3.3.8.3	Note 1	4.1.15	Note	4.7.3	Note 1 and 2
5.2.2.2	Note	5.4.2.3.2.2 Table 12	Note c	5.4.2.3.2.4	Note 1 and 3
5.4.2.3.2.4 Table 13	Note 2	5.4.2.5	Note 2	5.4.5.1	Note
5.4.10.2.1	Note	5.4.10.2.2	Note	5.4.10.2.3	Note
5.5.2.1	Note	5.5.6	Note	5.6.4.2.1	Note 2 and 3 and 4
5.6.8	Note 2	5.7.6	Note	5.7.7.1	Note 1 and Note 2
8.5.4.2.3	Note	10.2.1 Table 39	Note 3 and 4 and 5	10.5.3	Note 2
~~10.6.1~~	Note 3	F.3.3.6	Note 3	Y.4.1	Note
Y.4.5	Note				

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Clause	Requirement + Test	Result - Remark	Verdict
4	**Modification to Clause 1**		N/A
1	***Add*** *the following note:* *NOTE Z1 The use of certain substances in electrical and electronic equipment is restricted within the EU: see Directive 2011/65/EU.*		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

5	**Modification to 4.Z1**		N/A
4.Z1	***Add*** *the following new subclause after 4.9:* To protect against excessive current, short-circuits and earth faults in circuits connected to an a.c. **mains**, 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 B.3.1 and B.4 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 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.		N/A
6	**Modification to 5.4.2.3.2.4**		N/A
5.4.2.3.2.4	***Add*** *the following to the end of this subclause:* The requirement for interconnection with **external circuit** is in addition given in EN 50491-3:2009.		N/A
7	**Modification to 10.2.1**		N/A
10.2.1	Add the following to [c] and [d] in table 39: For additional requirements, see 10.5.1.		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

8	**Modification to 10.5.1**		N/A
10.5.1	***Add*** *the following after the first paragraph:* For RS 1 compliance is checked by measurement under the following conditions: In addition to the normal operating conditions, all controls adjustable from the outside by hand, by any object such as a tool or a coin, and those internal adjustments or pre-sets which are not locked in a reliable manner, are adjusted so as to give maximum radiation whilst maintaining an intelligible picture for 1 h, at the end of which the measurement is made. NOTE Z1 Soldered joints and paint lockings are examples of adequate locking. The dose-rate is determined by means of a radiation monitor with an effective area of 10 cm^2, at any point 10 cm from the outer surface of the apparatus. Moreover, the measurement shall be made under fault conditions causing an increase of the high voltage, provided an intelligible picture is maintained for 1 h, at the end of which the measurement is made. For RS1, the dose-rate shall not exceed 1 µSv/h taking account of the background level. NOTE Z2 These values appear in Directive 96/29/Euratom of 13 May 1996.		N/A
9	**Modification to G.7.1**		N/A
G.7.1	***Add*** *the following note:* NOTE Z1 The harmonized code designations corresponding to the IEC cord types are given in Annex ZD.		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

10	**Modification to Bibliography**		P
	Add the following notes for the standards indicated: IEC 60130-9 NOTE Harmonized as EN 60130-9. IEC 60269-2 NOTE Harmonized as HD 60269-2. IEC 60309-1 NOTE Harmonized as EN 60309-1. IEC 60364 NOTE some parts harmonized in HD 384/HD 60364 series. IEC 60601-2-4 NOTE Harmonized as EN 60601-2-4. IEC 60664-5 NOTE Harmonized as EN 60664-5. IEC 61032:1997 NOTE Harmonized as EN 61032:1998 (not modified). IEC 61508-1 NOTE Harmonized as EN 61508-1. IEC 61558-2-1 NOTE Harmonized as EN 61558-2-1. IEC 61558-2-4 NOTE Harmonized as EN 61558-2-4. IEC 61558-2-6 NOTE Harmonized as EN 61558-2-6. IEC 61643-1 NOTE Harmonized as EN 61643-1. IEC 61643-21 NOTE Harmonized as EN 61643-21. IEC 61643-311 NOTE Harmonized as EN 61643-311. IEC 61643-321 NOTE Harmonized as EN 61643-321. IEC 61643-331 NOTE Harmonized as EN 61643-331.		P
11	**ADDITION OF ANNEXES**		N/A
ZB	**ANNEX ZB, SPECIAL NATIONAL CONDITIONS (EN)**		N/A
4.1.15	**Denmark, Finland, Norway** and **Sweden** To the end of the subclause the following is added: **Class I pluggable equipment type A** intended for connection to other equipment or a network shall, if safety relies on connection to reliable earthing or if surge suppressors are connected between the network terminals and **accessible** parts, have a marking stating that the equipment shall be connected to an earthed **mains** socket-outlet. The marking text in the applicable countries shall be as follows: In **Denmark**: “Apparatets stikprop skal tilsluttes en stikkontakt med jord som giver forbindelse til stikproppens jord.” 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

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Clause	Requirement + Test	Result - Remark	Verdict
4.7.3	**United Kingdom** To the end of the subclause the following is added: The torque test is performed using a socket-outlet complying with BS 1363, and the plug part shall be assessed to the relevant clauses of BS 1363. Also see Annex G.4.2 of this annex		N/A
5.2.2.2	**Denmark** After the 2nd paragraph add the following: A warning (marking safeguard) for high touch current is required if the touch current exceeds the limits of 3,5 mA a.c. or 10 mA d.c.		N/A
5.4.11.1 and Annex G	**Finland and Sweden** To the end of the subclause the following is added: For separation of the telecommunication network from earth the following is applicable: 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. If this insulation forms part of a semiconductor component (e.g. an optocoupler), there is no distance through insulation requirement 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 5.4.8 with an electric strength test of 1,5 kV multiplied by 1,6 (the electric strength test of 5.4.9 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

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Clause	Requirement + Test	Result - Remark	Verdict
	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 5.4.11; • 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.		
5.5.2.1	**Norway** After the 3rd paragraph the following is added: Due to the IT power system used, capacitors are required to be rated for the applicable line-to-line voltage (230 V).		N/A
5.5.6	**Finland, Norway** and **Sweden** To the end of the subclause the following is added: Resistors used as **basic safeguard** or bridging **basic insulation** in **class I pluggable equipment type A** shall comply with G.10.1 and the test of G.10.2.		N/A
5.6.1	**Denmark** **Add** to the end of the subclause Due to many existing installations where the socket-outlets can be protected with fuses with higher rating than the rating of the socket-outlets the protection for pluggable equipment type A shall be an integral part of the equipment. *Justification:* In Denmark an existing 13 A socket outlet can be protected by a 20 A fuse.		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
5.6.4.2.1	**Ireland and United Kingdom** After the indent for **pluggable equipment type A**, the following is added: – the **protective current rating** is taken to be 13 A, this being the largest rating of fuse used in the **mains** plug.		N/A
5.6.4.2.1	**France** After the indent for **pluggable equipment type A**, the following is added: – in certain cases, the **protective current rating** of the circuit supplied from the mains is taken as 20 A instead of 16 A.		N/A
5.6.5.1	To the second paragraph the following is added: The range of conductor sizes of flexible cords to be accepted by terminals for equipment with a rated current over 10 A and up to and including 13 A is: 1,25 mm^2 to 1,5 mm^2 in cross-sectional area.		N/A
5.6.8	**Norway** To the end of the subclause the following is added: Equipment connected with an earthed mains plug is classified as **class I equipment**. See the Norway marking requirement in 4.1.15. The symbol IEC 60417-6092, as specified in F.3.6.2, is accepted.		N/A
5.7.6	**Denmark** To the end of the subclause the following is added: The installation instruction shall be affixed to the equipment if the **protective conductor current** exceeds the limits of 3,5 mA a.c. or 10 mA d.c.		N/A
5.7.6.2	**Denmark** To the end of the subclause the following is added: The warning (marking safeguard) for high touch current is required if the touch current or the protective current exceed the limits of 3,5 mA.		N/A
5.7.7.1	**Norway and Sweden** To the end of the subclause the following is added: The screen of the television 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 needs to be isolated from the screen of a cable distribution system.		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	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 a retailer, for example. 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: “Apparatus connected to the protective earthing of the building installation through the mains connection or through other apparatus with a connection to protective earthing – and to a television distribution system using coaxial cable, may in some circumstances create a fire hazard. Connection to a television distribution system therefore has to be provided through a device providing electrical isolation below a certain frequency range (galvanic isolator, see EN 60728-11)” NOTE In Norway, due to regulation for CATV-installations, 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): “Apparater som er koplet til beskyttelsesjord via nettplugg og/eller via annet jordtilkoplet utstyr – og er tilkoplet et koaksialbasert kabel-TV nett, kan forårsake brannfare. For å unngå dette skal det ved tilkopling av apparater til kabel-TV nett installeres en galvanisk isolator mellom apparatet og kabel-TV nettet.” Translation to Swedish: ”Apparater 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 apparaten till kabel-TV nät galvanisk isolator finnas mellan apparaten och kabel-TV nätet.”.		

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Clause	Requirement + Test	Result - Remark	Verdict
8.5.4.2.3	**United Kingdom** Add the following after the 2nd dash bullet in 3rd paragraph: An emergency stop system complying with the requirements of IEC 60204-1 and ISO 13850 is required where there is a risk of personal injury.		N/A
B.3.1 and B.4	**Ireland and United Kingdom** The following is applicable: To protect against excessive currents and short-circuits in the primary circuit of **direct plug-in equipment**, tests according to Annexes B.3.1 and B.4 shall be conducted using an external miniature circuit breaker complying with EN 60898-1, Type B, rated 32A. If the equipment does not pass these tests, suitable protective devices shall be included as an integral part of the **direct plug-in equipment**, until the requirements of Annexes B.3.1 and B.4 are met		N/A
G.4.2	**Denmark** To the end of the subclause the following is added: Supply cords of single phase appliances having a rated current not exceeding 13 A shall be provided with a plug according to DS 60884-2-D1:2011. 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 a single-phase equipment having a RATED CURRENT exceeding 13 A or if a polyphase 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. Mains socket outlets intended for providing power to Class II apparatus with a rated current of 2,5 A shall be in accordance DS 60884-2-D1:2011 standard sheet DKA 1-4a. Other current rating socket outlets shall be in compliance with Standard Sheet DKA 1-3a		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	or DKA 1-1c. Mains socket-outlets with earth shall be in compliance with DS 60884-2-D1:2011 Standard Sheet DK 1-3a, DK 1-1c, DK1-1d, DK 1-5a or DK 1-7a *Justification:* Heavy Current Regulations, Section 6c		
G.4.2	**United Kingdom** To the end of the subclause the following is added: The plug part of direct plug-in equipment shall be assessed to BS 1363: Part 1, 12.1, 12.2, 12.3, 12.9, 12.11, 12.12, 12.13, 12.16, and 12.17, except that the test of 12.17 is performed at not less than 125 °C. Where the metal earth pin is replaced by an Insulated Shutter Opening Device (ISOD), the requirements of clauses 22.2 and 23 also apply.		N/A
G.7.1	**United Kingdom** To the first paragraph the following is added: Equipment 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 shall be fitted with a 'standard plug' in accordance with the Plugs and Sockets etc. (Safety) Regulations 1994, Statutory Instrument 1994 No. 1768, 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.		N/A
G.7.1	**Ireland** To the first paragraph the following is added: Apparatus which is fitted with a flexible cable or cord shall be provided with a plug in accordance with Statutory Instrument 525: 1997, "13 A Plugs and Conversion Adapters for Domestic Use Regulations: 1997. S.I. 525 provides for the recognition of a standard of another Member State which is equivalent to the relevant Irish Standard		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
G.7.2	**Ireland and United Kingdom** To the first paragraph the following is added: A power supply cord with a conductor of 1,25 mm^2 is allowed for equipment which is rated over 10 A and up to and including 13 A.		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

ZC	**ANNEX ZC, NATIONAL DEVIATIONS (EN)**		N/A
10.5.2	**Germany** The following requirement applies: For the operation of any cathode ray tube intended for the display of visual images operating at an acceleration voltage exceeding 40 kV, authorization is required, or application of type approval (Bauartzulassung) and marking. *Justification*: German ministerial decree against ionizing radiation (Röntgenverordnung), in force since 2002-07-01, implementing the European Directive 96/29/EURATOM. **NOTE** Contact address: Physikalisch-Technische Bundesanstalt, Bundesallee 100, D-38116 Braunschweig, Tel.: Int+49-531-592-6320, Internet: http://www.ptb.de		N/A

IEC62368_1E - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

ZD	**IEC and CENELEC CODE DESIGNATIONS FOR FLEXIBLE CORDS (EN)**	N/A
		N/A

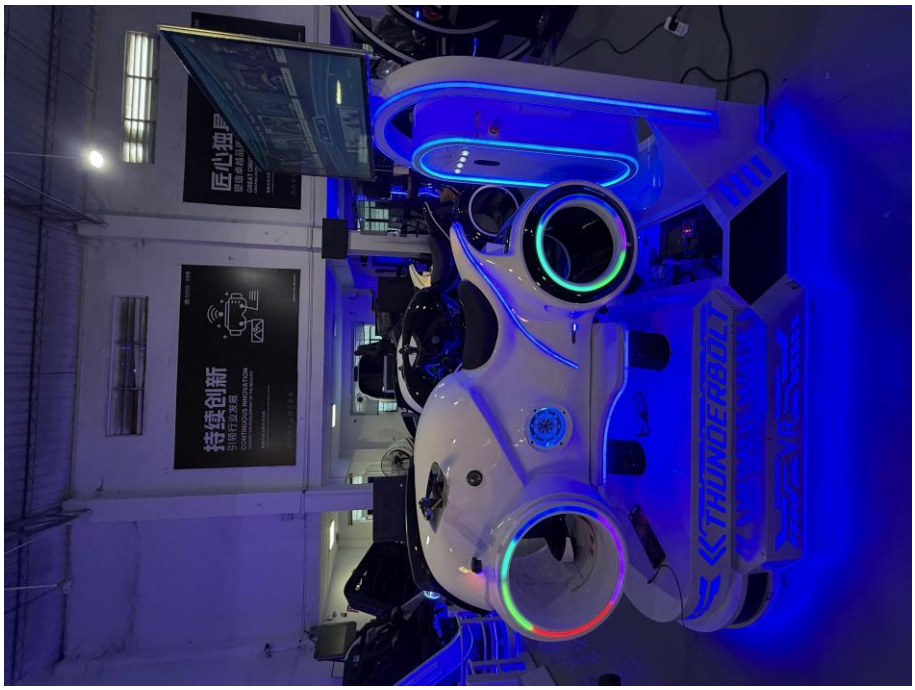
Type of flexible cord	Code designations	
	IEC	CENELEC
PVC insulated cords		
Flat twin tinsel cord	60227 IEC 41	H03VH-Y
Light polyvinyl chloride sheathed flexible cord	60227 IEC 52	H03VV-F H03VVH2-F
Ordinary polyvinyl chloride sheathed flexible cord	60227 IEC 53	H05VV-F H05VVH2-F
Rubber insulated cords		
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
Cords insulated and sheathed with halogen-free thermoplastic compounds		
Light halogen-free thermoplastic insulated and sheathed flexible cords		H03Z1Z1-F H03Z1Z1H2-F
Ordinary halogen-free thermoplastic insulated and sheathed flexible cords		H05Z1Z1-F H05Z1Z1H2-F

Photos

Overview

Overview

Overview



Overview