



TEST REPORT IEC 62368-1 Audio/video, information and communication technology equipment Part 1: Safety requirements	
Report Number.....	AOC250915029S-R1
Date of issue	2025-09-26
Total number of pages	71 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	Guangdong Mingxing Technology Co., Ltd.
Address	C68-3, Zhaogang WanYang Innovation City, 41 DaWang Avenue, High-tech Zone, Zhaoqing City, Guangdong Province
Test specification:	
Standard	IEC 62368-1:2023
Test procedure.....	Test report
Non-standard test method.....	N/A
TRF template used	IECEE OD-2020-F1:2023, Ed.1.6
Test Report Form No.....	IEC62368_1F
Test Report Form(s) Originator....	UL Solutions (US)
Master TRF	Dated 2023-08-18
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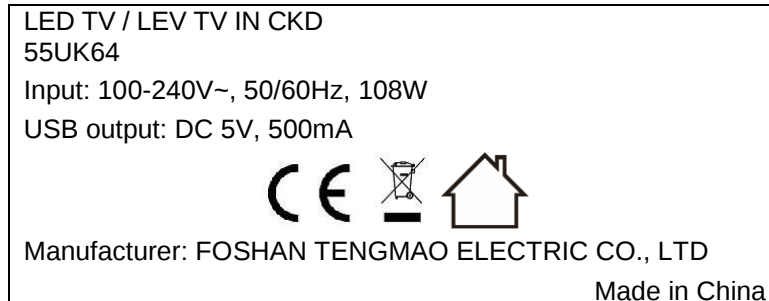
Test item description	LED TV / LED TV IN CKD	
Trade Mark	N/A	
Manufacturer	Guangdong Mingxing Technology Co., Ltd. C68-3, Zhaogang WanYang Innovation City, 41 DaWang Avenue, High-tech Zone, Zhaoqing City, Guangdong Province	
Model/Type reference	55UK64, 1715A, 17P3, 17TD, 1917A, 1922D, 19HS, 19K17D, 19P3, 2021D, 2219A, 2219D, 2219Z, 2224D, 22K19D, 22T19D, 22TP, 2320D, 23K20D, 2422D, 2425D, 24K22D, 24LK50, 24P3, 24TP, 25TP, 2624D, 26K24D, 26LK50, 32A3, 32D9, 32LK50, 32UK50, 32UK64, 40LK50, 40UK50, 40UK64, 43LK50, 43Q6, 43UK50, 43UK64, 49LK50, 50Q6, 50UK50, 50UK64, 55Q6, 55UK50, 55UK64, 65UK50, 65UK64, 75UK50, 75UK64, GS****, HT**** (*can be 0-9, A-Z, blank, hyphen for marketing purpose and no impact safety related construction and critical components)	
Ratings	Input: 100-240V~, 50/60Hz, 108W USB output: DC 5V, 500mA	
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 <i>Bill Hu</i>
Approved by (name, function, signature) ..		Robin Liu Technical Manager <i>Robin Liu</i>
☐	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 1: National deviation	
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: 2023	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): None	

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.

**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; 10A for equipment		
	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	☐ ____ m	
Altitude of test laboratory (m)	☒ 2000 m or less	☐ ____ m	
Mass of equipment (kg)	Approx. 18.5 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: 2025-08-15 Date (s) of performance of tests: 2025-08-15 to 2025-09-12	
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 IEC62368-1:	
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) : FOSHAN TENGMAO ELECTRIC CO., LTD 3RD FLOOR, BUILDING A, PINGZHOU INDUSTRIAL ZONE, NAIHAI DISDRICT, FOSHAN CITY, GUANGDONG	
General product information and other remarks: 1. This apparatus is LED TV / LEV TV IN CKD used for information technology equipment or audio/video equipment. 2. Equipment contain one built-in switching mode power supply. 4. Equipment is only for indoor use and wall/ceiling-mounted for using. 3. The Clearances and Creepage Distances have additionally been assessed for suitability up to 2000 m. 5. The external outputs ports are in accordance with the PS1. 6. The manufacturer specified maximum ambient temperature is 40°C. This report was based on the original report AOC250915029S, only following items are revised, when this report issued, the original report will be withdraw: 1). Update the product name.	

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	1 st S	2 nd 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
MS1: Equipment Mass	Ordinary	N/A	N/A	N/A
MS2: Sharp edges and corners	Ordinary	wall/ceiling-mounted	N/A	N/A
MS3: Equipment mounted > 2m	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**)

IEC 62368-1			
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

IEC 62368-1			
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		P
4.8.1	General		P
4.8.2	Instructional safeguard :	There is a warning sign in the instruction manual	P
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		P
4.8.4.4	Drop test		N/A
4.8.4.5	Impact test		P
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
5.2.2	ES1, ES2 and ES3 limits	(See appended table 5.2)	P

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Clause	Requirement + Test	Result - Remark	Verdict
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	Ringling signals	No ringing signals.	N/A
5.2.2.7	Audio signals	(See Clause E.1)	P
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)	>0.2	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
5.4.1.9	Insulating surfaces	Considered.	P

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Clause	Requirement + Test	Result - Remark	Verdict
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 2000m, Factor 1.0	N/A
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
5.4.4.4	Solid insulation in semiconductor devices	(See clause 5.4.4.3)	P

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Clause	Requirement + Test	Result - Remark	Verdict
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 2 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	Two layers are provided as reinforced insulation any one layer 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 (M Ω)	>4 M Ω	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
	Relative humidity (%), temperature (°C), duration (h)	95%, 40°C, 120h	—

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Clause	Requirement + Test	Result - Remark	Verdict
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
5.5.2.2	Safeguards against capacitor discharge after disconnection of a connector :	(See appended table 5.5.2.2)	P

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Clause	Requirement + Test	Result - Remark	Verdict
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	N/A
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: M4 screw type used	P
5.6.5.2	Corrosion	The potential difference between the two different metals is less than 0.6 V.	P

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

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Clause	Requirement + Test	Result - Remark	Verdict

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)..... :	1mm*12mm 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	Wall/ceiling-mounted 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

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Clause	Requirement + Test	Result - Remark	Verdict
8.7	Equipment mounted to wall, ceiling or other structure		P
8.7.1	Mount means type	MS3, mounted >2m	P
8.7.2	Test methods	Test 1 + Test 3	P
	Test 1, additional downwards force (N).....	726N	P
	Test 2, number of attachment points and test force (N)		N/A
	Test 3 Nominal diameter (mm) and applied torque (Nm).....	Diameter of screws: M4 and M6. Torque: 1.2N.m (Use for M4 screws) and 2.5N.m (Use for M6 screws)	P
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

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Clause	Requirement + Test	Result - Remark	Verdict
8.12	Telescoping or rod antennas		N/A
	Button/ball diameter (mm)		—

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,	P

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Clause	Requirement + Test	Result - Remark	Verdict
		the luminance is far less than 10000 cd/m ² . LED indicator as low power application.	
	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

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Clause	Requirement + Test	Result - Remark	Verdict
10.6.6.3	Cordless listening devices		N/A
	Max. acoustic output $L_{Aeq,T}$, dB(A)		N/A

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	(See Annex E)	P
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	Equipment remote control is considered (See appended tables B.3, B.4)	P
B.3.7	Audio amplifier abnormal operating conditions	(See appended table B.2.5)	P
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

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Clause	Requirement + Test	Result - Remark	Verdict
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
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		P
E.1	Electrical energy source classification for audio signals		P
	Maximum non-clipped output power (W).....	9.07	—
	Rated load impedance (Ω)	8	—
	Open-circuit output voltage (V).....	8.52	—

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Clause	Requirement + Test	Result - Remark	Verdict
	Instructional safeguard	No safeguard necessary	—
E.2	Audio amplifier normal operating conditions		P
	Audio signal source type	1KHz	—
	Audio output power (W)	1.14	—
	Audio output voltage (V)	3.02	—
	Rated load impedance (Ω)	8	—
	Requirements for temperature measurement	(See appended table 5.4.1.4, 9.3, B.1.5, B.2.6)	P
E.3	Audio amplifier abnormal operating conditions	(See appended table B.3, B.4)	P
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

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Clause	Requirement + Test	Result - Remark	Verdict
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
F.3.5.3	Replacement fuse identification and rating markings :	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 T5AL/250Vac	P
	Instructional safeguards for neutral fuse :		N/A
F.3.5.4	Replacement battery identification marking :	The incorrect battery cannot be installed, and the correct battery type instructions are marked at the bottom of the battery compartment. (For equipment remote control)	P
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

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Clause	Requirement + Test	Result - Remark	Verdict
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
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

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Clause	Requirement + Test	Result - Remark	Verdict
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
	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	Approved TIW used for secondary winding of T101	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

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Clause	Requirement + Test	Result - Remark	Verdict
G.5.2.4	No insulation breakdown		N/A
G.5.3	Transformers	See below.	P
G.5.3.1	Compliance method..... :	The transformers meet the requirements given in G.5.3.2 and G.5.3.3.	P
	Position :	T101	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, insulation tape and TIW	—
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	No Motors used.	N/A
G.5.4.1	General requirements		N/A
G.5.4.2	Motor overload test conditions		N/A
G.5.4.3	Running overload test		N/A
G.5.4.4.2	Locked-rotor overload test		N/A
	Test duration (days) :		—
G.5.4.5	Running overload test for DC motors		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
G.5.4.5.2	Tested in the unit		N/A
G.5.4.5.3	Alternative method		N/A
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	Approved triple insulated wires comply with Annex J.	P
G.6.2	Enamelled winding wire insulation	Solvent-based enamel winding is not considered basic insulation.	N/A
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) :	Complied with Table G.7.	P
G.7.3	Cord anchorages and strain relief for non-detachable power supply cords		P
G.7.3.2	Cord strain relief		P
G.7.3.2.1	Requirements		P
	Strain relief test force (N)..... :	100N	P
G.7.3.2.2	Strain relief mechanism failure		P
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		P
G.7.4	Cord Entry		P
G.7.5	Non-detachable cord bend protection		P
G.7.5.1	Requirements		P
G.7.5.2	Test method and compliance		P
	Overall diameter or minor overall dimension, <i>D</i> (mm) :		—
	Radius of curvature after test (mm) :		—
G.7.6	Supply wiring space		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
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
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		N/A
G.8.2.1	General		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

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

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Clause	Requirement + Test	Result - Remark	Verdict
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..... :		—
	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		P
J.1	General		P
	Winding wire insulation :	Approved triple insulated wire used. (See appended table 4.1.2)	—
	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)	—

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

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

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

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
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) :	1mm*12mm 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
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

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Clause	Requirement + Test	Result - Remark	Verdict
	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
	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)		—

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Clause	Requirement + Test		Verdict
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
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		N/A
V.2	Accessible part criterion		P

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

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Clause	Requirement + Test	Result - Remark	Verdict
Y.6.2	Impact test :		N/A

IEC 62368-1			
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	--	
	USB1 output terminal “+/-” to earth	Normal	--	0.142mA _{pk}	SS	--	ES1
		Abnormal – see table B.3, B.4 for detail	--	0.142mA _{pk}	SS	--	
		Single fault – see table B.3, B.4 for detail	--	0.166mA _{pk}	SS	--	
	USB2 Output “+” to “-”	Normal	Max. 5.05V _{dc}	--	SS	--	ES1
		Abnormal – see table B.3, B.4 for detail	Max. 5.05V _{dc}	--	SS	--	
		Single fault – see table B.3, B.4 for detail	Max. 5.05V _{dc}	--	SS	--	
	USB2 output terminal “+/-” to earth	Normal	--	0.142mA _{pk}	SS	--	ES1
		Abnormal – see table B.3, B.4 for detail	--	0.142mA _{pk}	SS	--	
		Single fault – see table B.3, B.4 for detail	--	0.142mA _{pk}	SS	--	
	LCD Panel (with metal foil) to earth	Normal	--	0.117mA _{pk}	SS	--	ES1
		Abnormal – see table B.3, B.4 for detail	--	0.117mA _{pk}	SS	--	
		Single fault – see table B.3, B.4 for detail	--	0.117mA _{pk}	SS	--	
	L/N to earthed	Normal	--	0.193mA _{pk}	SS	--	ES1

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Clause	Requirement + Test			Result - Remark			Verdict
	accessible parts (Metal enclosure)	Abnormal – see table B.3, B.4 for detail	--	0.193mA _{pk}	SS	--	
		Single fault – see table B.3, B.4 for detail	--	0.193mA _{pk}	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	
T101 Pin 1-5	167	343	58.63k	--	
T101 Pin 1-6	164	344	58.63k	--	
T101 Pin 1-7	166	343	58.63k	--	
T101 Pin 1-8	164	342	58.63k	--	
T101 Pin 1-10	296	626	58.63k	--	
T101 Pin 1-11	367	636	58.63k	--	
T101 Pin 2-5	164	347	58.63k	--	
T101 Pin 2-6	154	254	58.63k	--	
T101 Pin 2-7	159	369	58.63k	--	
T101 Pin 2-8	166	357	58.63k	--	
T101 Pin 2-10	376	619	58.63k	--	
T101 Pin 2-11	380	684	58.63k	Max. Vpeak and Vrms	
T101 Pin 3-5	163	273	58.63k	--	
T101 Pin 3-6	166	370	58.63k	--	
T101 Pin 3-7	164	279	58.63k	--	
T101 Pin 3-8	162	273	58.63k	--	
T101 Pin 3-10	200	457	58.63k	--	
T101 Pin 3-11	376	674	58.63k	--	
T101 Pin 4-5	253	414	58.63k	--	
T101 Pin 4-6	260	428	58.63k	--	
T101 Pin 4-7	241	422	58.63k	--	
T101 Pin 4-8	252	417	58.63k	--	
T101 Pin 4-10	295	633	58.63k	--	

IEC 62368-1				
Clause	Requirement + Test		Result - Remark	Verdict
T101 Pin 4-11	263	593	58.63k	--
U104 Pin 3-1	166	347	60	--
U104 Pin 4-1	167	350	60	--
U104 Pin 3-2	166	345	60	--
U104 Pin 4-2	164	347	60	--
U205 Pin 3-1	166	348	60	--
U205 Pin 4-1	164	343	60	--
U205 Pin 3-2	165	346	60	--
U205 Pin 4-2	165	346	60	--
CY1 Primary pin to secondary pin	110	165	60	--
CY2 Primary pin to secondary pin	111	169	60	--
CY4 Primary pin to secondary pin	163	335	60	--
CY5 Primary pin to secondary pin	162	337	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:					
--					

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:					
--					

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)

IEC 62368-1								
Clause	Requirement + Test				Result - Remark			Verdict
Basic / supplementary:								
Different polarity of L/N before fuse	<420	<250	60	1.5	4.2	--	2.5	4.2
Different polarity of Fuse F1	<420	<250	60	1.5	2.8	--	2.5	4.9
Primary trace to secondary trace under CY1	<420	<250	60	1.5	7.9	--	2.5	7.9
Primary trace to secondary trace under CY2	<420	<250	60	1.5	8.0	--	2.5	8.0
Transformer T101 core to primary winding	684	380	58.63k	1.5	6.3	--	3.8	6.3
Transformer T101 core to secondary winding	684	380	58.63k	1.5	6.0	--	3.8	6.0
Reinforced:								
Primary trace to secondary trace under U104	<420	<250	60	3.0	8.0	--	5.0	8.0
Primary trace to secondary trace under U205	<420	<250	60	3.0	8.0	--	5.0	8.0
Primary trace to secondary trace under CY4	<420	<250	60	3.0	8.0	--	5.0	8.0
Primary trace to secondary trace under CY5	<420	<250	60	3.0	8.0	--	5.0	8.0
Primary circuit to accessible enclosure	<420	<250	60	3.0	7.9	--	5.0	7.9
Primary trace to secondary trace under T101	684	380	58.63k	3.0	11.4	--	7.6	11.4
Primary winding to secondary winding of T101	684	380	58.63k	3.0	12.0	--	7.6	12.0
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. The secondary of T101 used triple insulated wire, core as primary of T101.								

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 T101	684Vac	Reinforce	0.4	Min. 0.7	
Photo Coupler (U104)	420Vac	Reinforce	0.4	Min. 0.4	
Photo Coupler (U205)	420Vac	Reinforce	0.4	Min. 0.4	

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Clause	Requirement + Test		Result - Remark	Verdict
Insulation sheet	420Vac	Reinforce	0.4	Min. 0.8
Insulation tape	684Vac	Reinforce	2 layers	Min.2 layers
Supplementary information:				
--				

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 T101 (Phenolic) ¹⁾	--	58.63	0.71	Min. 0.7	Reinforce	684Vac	
Insulation tape (Polyethylene) ²⁾	--	58.63	0.46	Min.2 layers	Reinforce	684Vac	
Supplementary information:							
N/A							

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	
T101 primary winding to core		DC	2500VDC	No	
T101 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 T101		DC	4000VDC	No	
Insulation tape used in and around transformer T101 (one layer)		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	

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Clause	Requirement + Test		Result - Remark		Verdict
Phase to Neutral	264Vac, 60Hz	Normal	--	12V	ES1
Phase to Neutral	264Vac, 60Hz	RX1 OC	--	28V	ES1
Phase to Neutral	264Vac, 60Hz	RX2 OC	--	28V	ES1
Supplementary information:					
X-capacitors installed for testing: CX1=0.68uF					
☒ bleeding resistor rating: RX1=RX2= RX3= RX4=1.5MΩ.					
☐ 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 appliance inlet to CY1, CY2 earthed pin	32	2	--	0.021	
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)	
L/N to output terminal	Normal	264Vac	--	0.142mA _{pk}	60	ES1
	Abnormal – see table B.3, B.4 for detail	264Vac	--	0.142mA _{pk}	60	ES1
	Single fault – see table B.3, B.4 for detail	264Vac	--	0.166mA _{pk}	60	ES1
LCD panel with metal foil	Normal	264Vac	--	0.117mA _{pk}	60	ES1
	Abnormal – see table B.3, B.4 for detail	264Vac	--	0.117mA _{pk}	60	ES1
	Single fault – see table B.3, B.4 for detail	264Vac	--	0.117mA _{pk}	60	ES1
Supplementary information:						
Abbreviation: SC= short circuit; OC= open circuit						

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Clause	Requirement + Test	Result - Remark	Verdict

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	0.193	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)
USB1 Output port: 5Vdc	Normal	5.11	2.25	9.88	3	PS1
	U101 pin 8-10 SC	0	0	0	3	
	U104 pin 1-3 SC	0	0	0	3	
	U104 pin 1 OC	0	0	0	3	
	U205 pin 1-3 SC	0	0	0	3	
	U205 pin 1 OC	0	0	0	3	
	EC212 SC	0	0	0	3	
USB2 Output port: 5Vdc	Normal	5.05	1.96	9.63	3	PS1
	U101 pin 8-10 SC	0	0	0	3	
	U104 pin 1-3 SC	0	0	0	3	
	U104 pin 1 OC	0	0	0	3	
	U205 pin 1-3 SC	0	0	0	3	

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Clause	Requirement + Test			Result - Remark		Verdict
	U205 pin 1 OC	0	0	0	3	
	EC212 SC	0	0	0	3	
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, speaker, RJ45 port, HDMI port.		--	--	--	Yes (declaration)
Supplementary information:					
--					

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	
--	--	--	--	--	
Supplementary information:					
--					

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 (°C)	Ambient (°C)	Object (°C)	Ambient (°C)	Object (°C)	Ambient (°C)	Object (°C)	Ambient (°C)
--	--	--	--	--	--	--	--	--
Supplementary information:								
--								

5.4.1.4, 9.3, B.1.5, B.2.6	TABLE: Temperature measurements				P	
Supply voltage (V) :		99V/60Hz		264V/60Hz		—
Ambient temperature during test Tamb (°C) :		25.0	40.0	25.0	40.0	—
Maximum measured temperature <i>T</i> of part/at:		<i>T</i> (°C)				Allowed <i>T</i> _{max} (°C)
Power cord		32.6	47.6	30.9	45.9	--
AC inlet		46.1	61.1	43.3	58.3	70
Input wire		54.0	69.0	48.6	63.6	105
AC connector (CON1)		70.9	85.9	58.3	73.3	85
CY2 body		68.4	83.4	57.4	72.4	125
RV1 body		79.3	94.3	61.7	76.7	125
LY1 coil		90.4	105.4	60.3	75.3	130
CX1 body		83.1	98.1	60.9	75.9	100
LY2 Coil		106.6	121.6	64.2	79.2	130
L101 Coil		107.1	122.1	73.7	88.7	130
L101 bobbin		106.8	121.8	73.2	88.2	130
C010 body		86.7	101.7	66.6	81.6	105
EC101 body		81.6	96.6	67.6	82.6	105
C106 body		77.3	92.3	68.3	83.3	105
T101 Coil		92.8	107.8	87.4	102.4	110
T101 bobbin		88.4	103.4	84.0	99.0	110
U205 body		83.3	98.3	72.7	87.7	100
EC102 body		85.1	100.1	73.2	88.2	105

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Clause	Requirement + Test				Result - Remark		Verdict
EC204 body	75.9	90.9	72.2	87.2	105		
CY5 body	83.7	98.7	77.1	92.1	125		
CY4 body	73.4	88.4	69.1	84.1	125		
L201 Coil	80.5	95.5	77.5	92.5	130		
L201 bobbin	74.1	89.1	71.1	86.1	130		
PCB near PQ201	78.0	93.0	74.7	89.7	130		
PCB near U1001	93.5	108.5	80.5	95.5	130		
Mylar near T101	78.7	93.7	73.1	88.1	120		
PCB near IC7	75.0	90.0	73.7	88.7	130		
PCB near US1	57.3	72.3	53.5	68.5	130		
PCB near UF1	76.0	91.0	74.7	89.7	130		
PCB near UD2	69.6	84.6	68.3	83.3	130		
Internal output wire (12V)	59.1	74.1	57.0	72.0	80		
RTC battery	59.0	74.0	56.7	71.7	--		
Metal enclosure near T101, outside	54.3	--	50.5	--	60		
Metal enclosure near LCD panel board, outside	46.5	--	45.2	--	60		
Metal enclosure near main board, outside	46.9	--	45.9	--	60		
Switch	43.6	--	42.9	--	77		
Metal enclosure near between USB port and HDMI port, outside	49.5	--	48.8	--	60		
LCD panel	47.6	--	46.2	--	71		
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:							
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
90	50	1.714	--	108.06	--	F1	1.714	Signal input mode: HDMI Audio: 1/8 of Max. available output power with 1 kHz sine wave signal input Video: Three vertical bar signal input with max. brightness and max.
90	60	1.723	--	108.13	--	F1	1.723	
100	50	1.686	--	106.19	108	F1	1.686	
100	60	1.696	--	106.24	108	F1	1.696	
240	50	0.773	--	101.87	108	F1	0.773	
240	60	0.791	--	101.94	108	F1	0.791	

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Clause		Requirement + Test				Result - Remark		Verdict
264	50	0.661	--	101.69	--	F1	0.661	contrast. USB port load: 5VDC, 0.5A for each port.
264	60	0.674	--	101.76	--	F1	0.674	
Supplementary information:								
The input signal offered by RJ45 input port, USB input port, TF Card input port or SIM card input port, is very little effective on power.								
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
BG1 Pin 1-4	SC	264Vac	1s	F1	0	Unit shut down, F1 fuse immediately open, no hazardous.
EC101	SC	264Vac	1s	F1	0	Unit shut down, F1 fuse immediately open, no hazardous.
U101 pin 8-10	SC	264Vac	1s	F1	0	Unit shut down, F1 fuse immediately open, no hazardous.
U101 pin 2-3	SC	264Vac	1s	F1	0	Unit shut down, F1 fuse immediately open, no hazardous.
U101 pin 2-10	SC	264Vac	1s	F1	0	Unit shut down, F1 fuse immediately open, no hazardous.
PQ101 pin G-D	SC	264Vac	1s	F1	0	Unit shut down, F1 fuse immediately open, no hazardous.
PQ101 pin G-S	SC	264Vac	10mins	F1	0.01	Unit shut down immediately, No damage. No hazards.
PQ101 pin D-S	SC	264Vac	1s	F1	0	Unit shut down, F1 fuse immediately open, no hazardous.
T101 pin 1-3	SC	264Vac	10mins	F1	0.01	Unit shut down immediately, No damage. No hazards.
T101 pin 4-5	SC	264Vac	10mins	F1	0.01	Unit shut down immediately, No damage. No hazards.

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Clause	Requirement + Test				Result - Remark	Verdict
T101 pin 6-7	SC	264Vac	10mins	F1	0.01	Unit shut down immediately, No damage. No hazards.
T101 pin 10-11	SC	264Vac	10mins	F1	0.01	Unit shut down immediately, No damage. No hazards.
U104 pin 1-2	SC	264Vac	10mins	F1	0.01	Unit shut down immediately, No damage. No hazards.
U104 pin 3-4	SC	264Vac	10mins	F1	0.01	Unit shut down immediately, No damage. No hazards.
U205 pin 1-2	SC	264Vac	10mins	F1	0.01	Unit shut down immediately, No damage. No hazards.
U205 pin 3-4	SC	264Vac	10mins	F1	0.01	Unit shut down immediately, No damage. No hazards.
U104 pin 1	OC	264Vac	10mins	F1	0.01	Unit shut down immediately, No damage. No hazards.
U104 pin 3	OC	264Vac	10mins	F1	0.01	Unit shut down immediately, No damage. No hazards.
U205 pin 1	OC	264Vac	10mins	F1	0.01	Unit shut down immediately, No damage. No hazards.
U205 pin 3	OC	264Vac	10mins	F1	0.01	Unit shut down immediately, No damage. No hazards.
EC212	SC	264Vac	10mins	F1	0.01	Unit shut down immediately, No damage. No hazards.
C223	SC	264Vac	10mins	F1	0.01	Unit shut down immediately, No damage. No hazards.
UY3 pin 2-4	SC	264Vac	10mins	F1	0.674	Unit normal working, No damage. No hazards.
UL2 pin 2-4	SC	264Vac	10mins	F1	0.674	Unit normal working, No damage. No hazards.
C10	SC	264Vac	10mins	F1	0.674	Unit normal working, No damage. No hazards.

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Clause	Requirement + Test			Result - Remark		Verdict
USB1 Output terminal "+", "-"	SC	264Vac	10mins	F1	0.674→0.611	USB1 port shut down immediately, USB2 port normal working, recoverable when fault condition removed. No damage, no hazard.
USB2 Output terminal "+", "-"	SC	264Vac	10mins	F1	0.674→0.611	USB2 port shut down immediately, USB1 port normal working, recoverable when fault condition removed. No damage, no hazard.
Speakers	Max. non-clipped audio output power	264Vac	6h14mins	F1	0.715	The unit operated under the fault condition and ran for thermal equilibrium. No hazard, No damage.
Speakers	SC	264Vac	4h12mins	F1	0.675	The unit operated under the fault condition and ran for thermal equilibrium. No hazard, No damage.
Blocked	Blocked	264Vac	3h17mins	F1	0.674	The unit operated under the fault condition and ran for thermal equilibrium. No hazard, No damage.
USB1 Output terminal:5Vdc	OL	264Vac	8h12mins	F1	0.685	Output current load to 1.94A maximum. USB1 output shutdown when output current to 1.95A maximum. No damaged, no hazards.
USB2 Output terminal:5Vdc	OL	264Vac	7h2mins		0.682	Output current load to 1.88A maximum. USB1 output shutdown when output current to 1.89A maximum. No damaged, no hazards.
Transformer T101 output (12Vdc)	OL	264Vac	7h14mins	F1	0.755	Output current load to 8A maximum. T101 output shutdown when output current to 8.1A maximum. No damaged, no hazards. Measured maximum temperature: T101 Coil: 129.7°C; T101 bobbin: 125.0°C; Metal enclosure near T101, outside: 56.9°C; Metal enclosure near LCD

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Clause	Requirement + Test				Result - Remark	Verdict
					panel board, outside: 45.9°C; Metal enclosure near main board, outside: 44.8°C; Switch: 39.9°C; Metal enclosure near between USB port and HDMI port, outside: 46.9°C; LCD panel: 44.9°C; Ambient: 25.0°C	
Supplementary information:						
Abbreviation: SC= short circuit; OC= open circuit; OL= Overload						

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			2mA		
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		--	0	--	--	--	--
		--	0.002 (UL2 pin 4-8 SC)	--	--	--	--
		--	0 (RL44 SC)	--	--	--	--
		--	0 (CL19 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;							

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Clause	Requirement + Test	Result - Remark	Verdict

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
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
USB1 Output terminal: 5Vdc	Normal	5.11	5	2.25	8	9.88	100
	U101 pin 8-10 SC	0	5	0	8	0	100
	U104 pin 1-3 SC	0	5	0	8	0	100
	U104 pin 1 OC	0	5	0	8	0	100
	U205 pin 1-3 SC	0	5	0	8	0	100
	U205 pin 1 OC	0	5	0	8	0	100
	EC212 SC	0	5	0	8	0	100
USB2 Output terminal: 5Vdc	Normal	5.05	5	1.96	8	9.63	100
	U101 pin 8-10 SC	0	5	0	8	0	100
	U104 pin 1-3 SC	0	5	0	8	0	100
	U104 pin 1 OC	0	5	0	8	0	100
	U205 pin 1-3 SC	0	5	0	8	0	100
	U205 pin 1 OC	0	5	0	8	0	100
	EC212 SC	0	5	0	8	0	100
HDMI port	Normal	5.02	5	0	8	0	100

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Clause	Requirement + Test			Result - Remark			Verdict
	U1 pin 1-2 SC	0	5	0	8	0	100
	U1 pin 2-3 SC	0	5	0	8	0	100
	D2 SC	0	5	0	8	0	100
	U3 pin 2-4 SC	0	5	0	8	0	100
Supplementary Information:							
--							

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:							
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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:					
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T.7	TABLE: Drop test				N/A
Location/part	Material	Thickness (mm)	Height (mm)	Observation	
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Supplementary information:					
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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:					
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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)	
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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	Interchangeable	Interchangeable	Metal, Min. thickness: 1.0mm	IEC/J 62368-1	Tested with appliance	
PCB (LCD panel board)	Taiwan Printed Circuit Board Techvest Co Ltd	MV-0	V-0, 130°C	UL 94	UL E88441	
PCB (Main board)	Jiangxi Zhongluo Electronics Co., Ltd	JXZL-1	V-0, 130°C	UL 94	UL 521374	
(Alternative)	Interchangeable	Interchangeable	V-0, 130°C	UL 94	UL	
Silicone (for main PCB IC)	HANGZHOU ZHIJIANG SILICONE CHEMICALS CO LTD	JS-1184B(f1)	V-0, 105°C	UL 746C	UL E335227	
(Alternative)	Sika(Jiangsu)Industrial Material Ltd.	CV315(f1), EAE829(f1)	V-0, 150°C	UL 746C	UL E339949	
Plug	Dongguan Ubill Electrical Co., Ltd.	UBL 8008/ AP-411A	250V~, 13A	SASO 2203:2018	(intertek) Certif .No.: 200410108G ZU-VOC001	
Power cord	Dongguan Ubill Electrical Co., Ltd.	H03VVH2-F 2x0.75	2 x 0.75 mm ²	EN 50525-2-11	VDE	
AC inlet	Shenzhen Kangyongda Electronics Co., Ltd.	DE-14-Serie(s)	10A, 250V~	IEC/EN 60320-1	VDE 40036820	
Power switch	LECI Electronics Co., Ltd	RS601 Serie(s), RS601D Serie(s)	6(4) A, 250V~, T85	IEC 61058-1, IEC 61058-1-1	VDE 40017430	
Internal wire (Primary)	KAI TAT INDUSTRIES CO	1672	Rated min. 18 AWG. 300 V. 105 °C, min. VW-1	UL 758	UL E214382	
Internal wire (Secondary)	Guangdong Shouyi Wire and Cable Co Ltd	1007	Rated min. 26 AWG. 300 V. 80 °C, min. VW-1	UL 758	UL E469565	
Earth wire	DONGGUAN DANYANG ELECTRONIC WIRE CO LTD	1015	Rated min. 16 AWG. 600 V. 105 °C, min. VW-1	UL 758	UL E332522	

RTC battery	Shenzhen Lidea Battery Co., Ltd.	CR2032	3.0Vdc, 250mAh, Max. abnormal charging current 2 mA	IEC 60086-4	CB (SGS) Certif. No.: FI-47879 Report No.: SZES210100 058001
Speakers	Interchangeable	Interchangeable	$8\Omega \pm 15\%$, Max. 7W, 2pcs	IEC/J 62368-1	Tested with appliance
Remote control	FOSHAN TENGMAO ELECTRIC CO., LTD.	A04-17S-0001	DC 3.0V	IEC/J 62368-1	Tested with appliance
- Plastic enclosure	Interchangeable	Interchangeable	HB or better, thickness: 1.5 mm min, Max. 60 °C	UL 94	UL
-PCB	Interchangeable	Interchangeable	V-1 or better, min. 130 °C	UL 94	UL
Power supply board part					
PCB	MEI ZHOU CHAO JIE ELECTRONIC CO LTD	CJ-3638CF	V-0, 130°C	UL 94	UL E313924
(Alternative)	Interchangeable	Interchangeable	V-0, 130°C	UL 94	UL
AC connector (CON1)	ZHEJIANG KUAILI ELECTRONICS CO LTD	KL VH3.96-3A	PP, 250V, 7A, 85°C	UL 1977	UL E307817
(Alternative)	ZHEJIANG JIESHITAI ELECTRONICS CO LTD	A3962AW-03	PP, 250V, 7A, 85°C	UL 1977	UL E314369
(Alternative)	ZHEJIANG AMA & HIEN TECHNOLOGY CO LTD	VH-3AW2-C, VHC-2AW-D	PP, 250V, 7A, 85°C	UL 1977	UL E231546
Fuse (F1)	Dongguan Better Electronics Technology Co., Ltd.	932	T5AL250V	IEC/EN60127-1 IEC/EN60127-3	VDE 40033369
(Alternative)	Conquer Electronics Co., Ltd.	MST	T5AL250V	IEC/EN60127-1 IEC/EN60127-3	VDE 40017118
(Alternative)	XC Electronics (Shen Zhen) Corp. Ltd.	5TE	T5AL250V	IEC/EN60127-1 IEC/EN60127-3	VDE 40036821
(Alternative)	Suzhou Walter Electronic Co. Ltd.	2010	T5AL250V	IEC/EN60127-1 IEC/EN60127-3	VDE 40018781
(Alternative)	Shenzhen Lanson Electronics Co. Ltd.	SMT T5A250V	T5AL250V	IEC/EN60127-1 IEC/EN60127-3	VDE 40013102

Thermistor (RT1)	Thinking Electronic Industrial Co., Ltd.	SCK-028	2Ω, 8A	UL 1434 EN 60539-1 EN 60730-1	UL E138827 TÜV Rh Certif. No.: R 50050155
(Alternative)	HONGZHI ENTERPRISES LTD	1.5D-15	1.5Ω, 8A	UL 1434 IEC/ EN 60539-1	UL E319959 TÜV SÜD: Certif. No.: B 001617 0001 Rev. 02
(Alternative)	NANJING SHIHENG ELECTRONICS CO LTD	MF72 1.5D15	1.5Ω, 8A	UL 1434 EN 60539-1	UL E241319 TÜV Rh Certif. No.: R 50245892
(Alternative)	Various	Various	Min.1.5Ω ,8A	UL 1434 EN 60539-1	UL, TUV
Varistor (RV1)	THERMISTOR-MOV ELECTRONICS CO LTD	HVR10D681 HVR10D681-J	420VAC, 125°C, Min. V-0	IEC 61051-1 IEC 61051-2 IEC 61051-2-2	TÜV Rh Certif. No.: J 50420593
(Alternative)	Thinking Electronic Industrial Co., Ltd.	TVR10681-V	420VAC, 105 °C, Min. V-0	IEC 61051-1 IEC 61051-2 IEC 61051-2-2	VDE 005944
(Alternative)	Guangdong South Hongming Electronic Science and Technology Co., Ltd.	ZVR10D681	420VAC, 125 °C, Min. V-0	IEC 61051-1 IEC 61051-2 IEC 61051-2-2	VDE 40027789
(Alternative)	Shantou High-New Technology Dev. Zone Songtian Enterprise Co., Ltd.	10D681K	420VAC, 125 °C, Min. V-0	IEC 61051-1 IEC 61051-2 IEC 61051-2-2	VDE 40023049
X Capacitor (CX1)	Shenzhen Jing Yu Electronics Co., Ltd.	CBBX2	275VAC, 0.68μF, 100 °C, X2	IEC/EN 60384-14	VDE 40025597
(Alternative)	WINDAY ELECTRONIC (DONG GUAN) CO., LTD	MPX Serie(s)	275VAC, 0.68μF, 100 °C, X2	IEC/EN 60384-14	VDE 40030283
(Alternative)	DAIN ELECTRONICS CO LTD	MPX	275VAC, 0.68μF, 100 °C, X2	IEC/EN 60384-14	VDE 40018798
(Alternative)	Dongguan Weiqing Electronic Co., Ltd.	MPX	310VAC, 0.68μF, 110 °C, X2	IEC/EN 60384-14	VDE 40040406
(Alternative)	KNSCHA ELECTRONICS CO., LIMITED	MPX/MKP	310VAC, 0.68μF, 110 °C, X2	IEC/EN 60384-14	VDE 40045532
(Alternative)	Shenzhen Weidy Industrial Development Co., Ltd.	MKP	310VAC, 0.68μF, 110 °C, X2	IEC/EN 60384-14	VDE 40041066

Y Capacitor (CY1, CY2, CY5)	Guangdong South Hongming Electronic Science and Technology Co., Ltd.	F	250VAC, 470pF, 125 °C, Y1	IEC/EN 60384- 14	VDE 40036393
(Alternative)	WALSIN TECHNOLOGY COR	AH	400VAC, 470pF, 125 °C, Y1	IEC/EN 60384- 14	VDE 40001804
(Alternative)	TDK Corporation	CD	250VAC, 470pF, 125 °C, Y1	IEC/EN 60384- 14	VDE 40029780
(Alternative)	TDK Corporation	CD	400VAC, 470pF, 125 °C, Y1	IEC/EN 60384- 14	VDE 40017931
(Alternative)	Success Electronics Co., Ltd.	SB	250VAC, 470pF, 125 °C, Y1	IEC/EN 60384- 14	VDE 40020001
(Alternative)	Success Electronics Co., Ltd.	SB	250VAC, 470pF, 125°C, Y1	IEC/EN 60384- 14	VDE 40037221
(Alternative)	Dongguan City Dafu Electronics Co. Ltd.	CT7 Y1 Series	440VAC, 470pF, 125 °C, Y1	IEC/EN 60384- 14	VDE 40041523
(Alternative)	Dongguan Weiqing Electronic Co., Ltd.	WD series	250/300/400VAC, 470pF, 125 °C, Y1	IEC/EN 60384- 14	VDE 40050021
(Alternative)	Shantou High- New Technology Dev. Zone Songtian Enterprise Co., Ltd.	CD-Series	400VAC, 470pF, 125 °C, Y1	IEC/EN 60384- 14	VDE 40025754
Y Capacitor (CY4)	Guangdong South Hongming Electronic Science and Technology Co., Ltd.	F	250VAC, 220pF, 125 °C, Y1	IEC/EN 60384- 14	VDE 40036393
(Alternative)	WALSIN TECHNOLOGY COR	AH	400VAC, 220pF, 125 °C, Y1	IEC/EN 60384- 14	VDE 40001804
(Alternative)	TDK Corporation	CD	250VAC, 220pF, 125°C, Y1	IEC/EN 60384- 14	VDE 40029780
(Alternative)	TDK Corporation	CD	400VAC, 220pF, 125 °C, Y1	IEC/EN 60384- 14	VDE 40017931
(Alternative)	Success Electronics Co., Ltd.	SB	250VAC, 220pF, 125°C, Y1	IEC/EN 60384- 14	VDE 40020001
(Alternative)	Success Electronics Co., Ltd.	SB	250VAC, 220pF, 125 °C, Y1	IEC/EN 60384- 14	VDE 40037221
(Alternative)	Dongguan City Dafu Electronics Co. Ltd.	CT7 Y1 Series	440VAC, 220pF, 125 °C, Y1	IEC/EN 60384- 14	VDE 40041523
(Alternative)	Dongguan Weiqing Electronic Co., Ltd.	WD series	250/300/400VAC, 220pF, 125 °C, Y1	IEC/EN 60384- 14	VDE 40050021

(Alternative)	Shantou High-New Technology Dev. Zone Songtian Enterprise Co., Ltd.	CD-Series	400VAC, 220pF, 125 °C, Y1	IEC/EN 60384-14	VDE 40025754
Optocoupler (U104, U205)	LITE-ON TECHNOLOGY CORPORATION	LTV-817	Cr. / Cl.=min. 7.0mm; Dti. > 0.4mm; 100 °C	IEC/EN 60747-5-5	VDE 40015248
(Alternative)	COSMO Electronics Corporation	K1010	Cr. / Cl.=min. 6.5mm; Dti. > 0.4mm; 100 °C	IEC/EN 60747-5-5	VDE 101347
(Alternative)	Everlight Electronics Co., Ltd.	EL817	Cr. / Cl.=min. 7.0mm; Dti. > 0.4mm; 100 °C	IEC/EN 60747-5-5	VDE 132249
(Alternative)	Shenzhen Orient Components Co. Ltd.	ORPC817B	Cr. / Cl.=min. 7.0mm; Dti. > 0.4mm; 100 °C	IEC/EN 60747-5-5	VDE 40029733
(Alternative)	FUJIAN LIGHTNING OPTOELECTRONIC CO., LTD	TD817B1(SL)(T1)-FGV	Cr. / Cl.=min. 7.0mm; Dti. > 0.4mm; 100 °C	IEC/EN 60747-5-5	VDE 40048885
Transformer (T101)	Huizhou Qishuo Technology Co Ltd	T3.40556501-ER	Class B 130°C	IEC/AS/NZS 62368-1	Tested with appliance
Insulation System of T101	Huizhou Qishuo Technology Co Ltd	QS-130	Class B YS-130 (E364920)	UL 1446	UL E524167
-Bobbin	SUMITOMO BAKELITE CO LTD	PM-9820	V-0, 150 °C, Phenolic (PF), Min. thickness: 0.7mm	UL 94, UL746	UL E41429
-Margnet Wire	DONG GUAN YIDA INDUSTRIAL CO LTD	2UEW/130	130°C	UL 1446	UL E344055
-Triple insulation wire	SUZHOU YUSHENG ELECTRONIC CO LTD	UL: TIW-B* VDE: TIW-B	130°C	UL 1446 IEC/ EN 62368-1	UL E332529 VDE 40033527
-Insulating Tape	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	CT* (b)(g)	130°C	UL 510	UL E165111
-Varnish	SUZHOU TAIHU ELECTRIC ADVANCED MATERIAL CO LTD	T4260(a)	155°C	UL 1446	UL E228349
PFC Inductance (L101)	Shenzhen DOZWATT Electronic Technology Co., Ltd	L3.31132011-ER	Class B 130°C	IEC/AS/NZS 62368-1	Tested with appliance
-Bobbin	CHANG CHUN PLASTICS CO LTD	T375J(G5)(G6)	V-0, 150 °C, Phenolic Molding Compound	UL 94, UL746	UL E59481

-Magnet Wire	DONG GUAN YIDA INDUSTRIAL CO LTD	2UEW/130	130°C	UL 1446	UL E344055
-Insulating Tape	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	CT*(b)(g)	130°C	UL 510	UL E165111
-Varnish	ZHUHAI CHANGXIAN NEW MATERIALS TECHNOLOGY CO LTD	E962	130°C	UL 1446	UL E335405
Line filter (LY1)	Shenzhen DOZWATT Electronic Technology Co., Ltd	L7.16091822- ER	Class B 130°C	IEC/J 62368-1	Tested with appliance
-Base	CHANG CHUN PLASTICS CO LTD	T375J	V-0, 150 °C,	UL 94, UL746	UL E59481
-Magnet Wire	DONG GUAN YIDA INDUSTRIAL CO LTD	xUEW/130, QA-x/130	130°C	UL 1446	UL E344055
-Triple insulation wire	Shenzhen Kaizhong Hedong New Materials Co., Ltd.	TIW-B	130°C	IEC/EN 62368- 1	VDE 40038861
Alternative	SHANGHAI XIANGXIANG ELECTRON CO LTD	TKW-B	130°C	IEC/EN 62368- 1	VDE 40026588
-Tube	DONGGUAN LING FREE HARDWARE PLASTICS PRODUCT CO LTD	LING FREE PTFE TUBE	200°C	UL 224	UL E352366
-Varnish	ZHUHAI CHANGXIAN NEW MATERIALS TECHNOLOGY CO LTD	E962	130°C	UL 1446	UL E335405
Line filter (LY2)	Shenzhen DOZWATT Electronic Technology Co.,Ltd	L7.24181831- ER	Class B 130°C	IEC/J 62368-1	Tested with appliance
-Base	Changchun Plastic Co., Ltd.	T375HF	V-0, 150 °C	UL 94, UL746	UL E59481
-Magnet wire	WELL ASCENT ELECTRONIC (GANZHOU) CO LTD	SFT-UEWH	180°C	UL 1446	UL E318511

-Varnish	ZHUHAI CHANGXIAN NEW MATERIALS TECHNOLOGY CO LTD	E962	130°C	UL 1446	UL E335405
Discharged resistance (RX1, RX2, RX3, RX4)	COUNTRIES GIANT ELECTRONIC CO LTD	RC1206	1.5Mohm,1/4W	IEC/J 62368-1	Tested with appliance
(Alternative)	Interchangeable	Interchangeabl e	1.5Mohm,1/4W	IEC/J 62368-1	Tested with appliance
Electronic capacitor (EC101)	Interchangeable	Interchangeabl e	Min.450V,Min.120 uF,105°C	IEC/J 62368-1	Tested with appliance
Bridge Diode (BG1)	Interchangeable	Interchangeabl e	Min.600V, Min.10A	IEC/J 62368-1	Tested with appliance
MOSFET (PQ101)	Interchangeable	Interchangeabl e	Min.650V, Min.20A	IEC/J 62368-1	Tested with appliance
MOSFET (PQ102, PQ103)	Interchangeable	Interchangeabl e	Min.500V, Min.8A	IEC/J 62368-1	Tested with appliance
Mylar	Shenzhen Borsun New Material co., Ltd	BN-FP	V-0, 120 °C	UL 94	UL E256822
(Alternative)	SHENZHEN TEESUN TECHNOLOGY CO LTD	TS-FR1370	V-0, 125°C	UL 94	UL E329660
Plastic fastener	Interchangeable	Interchangeabl e	Min.V-0, Min. 120 °C	UL 94	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.					

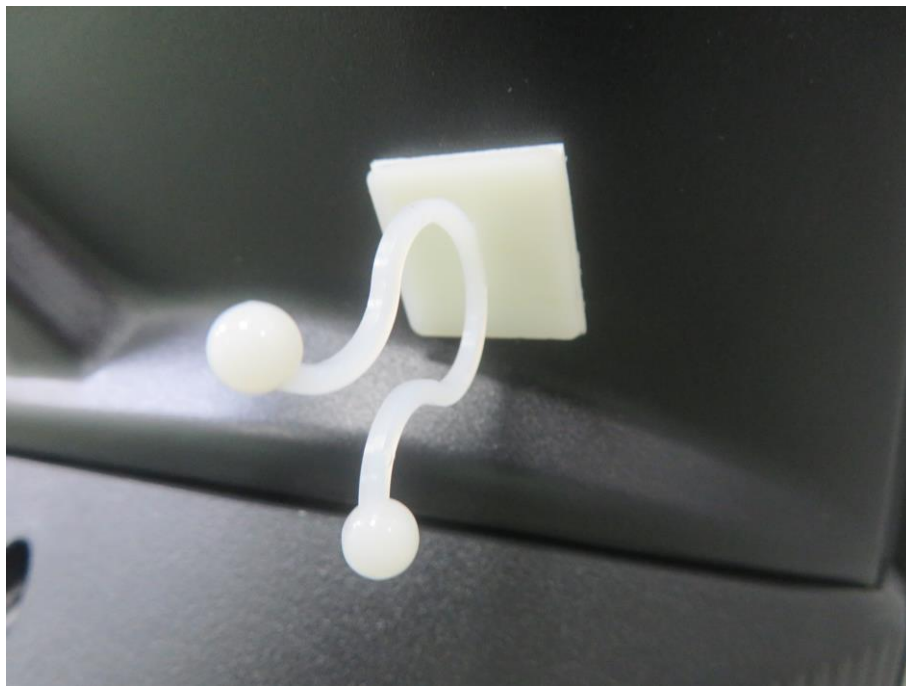
Photos



Overview



Overview



Overview



Overview



Overview