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Longhua District, Shenzhen, Guangdong, China

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Report No.: CTC20210068S01

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TEST REPORT

Product name : IP Phone
Trademark : XonTel

Model No.: XT-40G

Applicant....: XonTel Technology Trd. Co. W.L.L

Address of applicant: Kuwait City , Qibla , Aladel Tower , F21 , state of Kuwait

Test date Dec. 25, 2020 to Jan. 26 2021

Date of issue...... Jan. 26, 2021

Test result.....: Pass *

^{*} In the configuration tested, the EUT complied with the standard EN 62368-1:2014+A11:2017.



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Gerene Zhao

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TEST REPORT IEC 62368-1

Audio/video, information and communication technology equipment Part 1: Safety requirements

Report Number...... CTC20210068S01

Tested by (+ signature): Serene Zhao

Compiled by (+ signature) Hardy Huang

Approved by (+ signature): Totti Zhao

Date of issue Jan. 26, 2021

Total number of pages: 53 pages

Testing laboratory: CTC Laboratories, Inc.

2/F., Building 1 and 1-2/F., Building 2, Jiaquan Building,

Address Guanlan High-Tech Park, Longhua District, Shenzhen,

Guangdong, China

Testing location: As above

Applicant's name XonTel Technology Trd. Co. W.L.L

Address : Kuwait City , Qibla , Aladel Tower , F21 , state of Kuwait

Test specification:

Standard : IEC 62368-1:2014 (Second Edition)

Test procedure....: CE Attestation

Non-standard test method: N/A

Test Report Form No.: IEC62368_1B

Test Report Form(s) Originator: UL(US)

Master TRF: 2014-03

This test report is specially limited to the above client company and product model only. It may not be duplicated without prior written consent of CTC. Test.

Test Item description IP Phone

Trade Mark XonTel

Manufacturer...... Same as applicant.

Model/Type reference..... XT-40G

Ratings...... 5V === 2A(Supply by external power adapter) /48VDC

Ethernet (POE) complied switch

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

Attachment 1: European group differences and national differences (11 pages)

Attachment 2: Photo Documentation (8 pages)

Summary of testing:

Tests performed (name of test and test clause):

All applicable tests as described in Test Case and Measurement Sections were performed.

Following tests performed during evaluation

	Personnea aannig e samaanness
5.2	Electrical energy source classifications
5.4.1.4,	Maximum operating temperatures for
6.3.2, 9.0, B.2.6	materials, components and systems
B.2.5	Input tests
B.3	Simulated Abnormal operating condition
	tests
B.4	Simulated single fault conditions
F.3.9	Durability, legibility and permanence of
	markings
Н	CRITERIA FOR TELEPHONE RINGING
	SIGNALS
T.2	Steady force test, 10 N
T.5	Steady force test, 250 N
T.6	Enclosure impact test
T.7	Drop tests
T.8	Stress relief test

The submitted sample was found to comply with the requirements of above tests.

Testing location:

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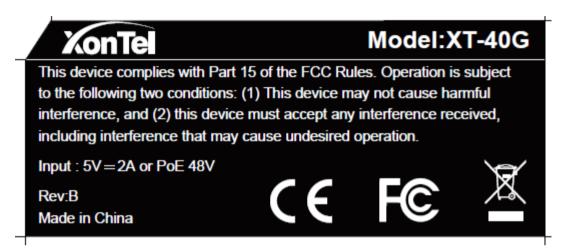
Summary of compliance with National Differences:

EU Group Differences, EU Special National Conditions

☑ The product fulfils the requirements of EN 62368-1:2014+A11:2017.

Copy of marking plate(s):

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.



Importer:XXX XXX XXX XXX XXX XXX Address:XXX XXX XXX XXX XXX XXX XXX XXX

Notes:

- 1. Since similar label used, only label for model above listed to represent other similar ones.
- 2. The height dimension of CE mark should not less than 5mm, height dimension of WEEE mark should not less than 7mm.

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Test item particulars:			
Classification of use by:	☐ Ordinary person		
	Instructed person		
	Skilled person☐ Children likely to be present		
Supply Connection:	AC Mains DC Mains		
	External Circuit - not Mains connected		
	- S ES1 ES2 ES3		
Supply % Tolerance:	<u></u> +10%/-10%		
	+20%/-15%		
	None		
Supply Connection – Type:	pluggable equipment type A -		
	non-detachable supply cord		
	appliance coupler		
	direct plug-in		
	mating connector		
	pluggable equipment type B -		
	non-detachable supply cord		
	☐ appliance coupler ☐ permanent connection		
	mating connector other: building-in equipment		
	shall be evaluated in end system (see also general		
	product information).		
Considered assurant retinar of protective device on new	not directly connected to the mains		
Considered current rating of protective device as part of building or equipment installation	(Not directly connected to mains)		
	Installation location: building; equipment		
Equipment mobility:	□ movable □ hand-held □ transportable □ stationary □ for building-in □ direct plug-in		
	rack-mounting wall-mounted		
Over voltage category (OVC):			
	OVC IV dther: _ class III appliance		
Class of equipment	☐ Class I ☐ Class II ☐ Class III		
Access location:	☐ restricted access location ☐ N/A		
Pollution degree (PD)	☐ PD 1		
Manufacturer's specified maximum operating	45°C		
ambient:			
IP protection class:	☐ IP		
Power Systems:			
Altitude during operation (m):			
Altitude of test laboratory (m):			

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Mass of equipment (kg)	⊠ 1.09kg			
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:	Mar. 10, 2020			
Date (s) of performance of tests	Mar. 10, 2020 to Mar. 27, 2020			
GENERAL REMARKS:				
"(See appended table)" refers to a table appended t	"(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report. Throughout this report a □ comma / ⋈ point is used as the decimal separator.			
Manufacturer's Declaration per sub-clause 4.2.5 of	IECEE 02:			
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided	☐ Yes ☑ Not applicable			
When differences exist; they shall be identified in the General product information section.				
Name and address of factory (ies): XonTel Technology Trd. Co. W.L.L Kuwait City , Qibla , Aladel Tower , F21 , state of Kuwait				
GENERAL PRODUCT INFORMATION:				
1. The product in this report is an IP Phone, class III	equipment used for information technology equipment.			
2. The maximum ambient temperature specified by r	manufacturer is +45°C.			
3. The product shall be charged by a suitable rated and certified DC power supply accordingly to IEC/EN 60950-1 with Limited Power Sources, or accordingly to IEC/EN 62368-1 with output within PS 2.				
	200268S01, except for changing the applicant, the model name. About the changes, no additional tests ed from the original test report CTC20200268S01.			

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Abbreviations used in the report:

normal conditions
 functional insulation
 double insulation
 DI
 single fault conditions
 basic insulation
 SI

- between parts of opposite

polarity BOP - reinforced insulation RI

Indicate used abbreviations (if any)

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ENERGY SOURCE IDENTIFICATION AND CLASSIFICATION TABLE:

(Note 1: Identify the following six (6) energy source forms based on the origin of the energy.)

(Note 2: The identified classification e.g., ES2, TS1, should be with respect to its ability to cause pain or injury on the body or its ability to ignite a combustible material. Any energy source can be declared Class 3 as a worse case classification e.g. PS3, ES3.

Electrically-caused injury (Clause 5):

(Note: Identify type of source, list sub-assembly or circuit designation and corresponding energy source

classification)

Example: +5 V dc input ES1

Source of electrical energy	Corresponding classification (ES)	
All internal circuits	ES1	
DC input circuits	ES1	
Ringing signals	ES2	

Electrically-caused fire (Clause 6):

(Note: List sub-assembly or circuit designation and corresponding energy source classification)

Example: Battery pack (maximum 85 watts): PS2

Source of power or PIS	Corresponding classification (PS)
DC input circuits	PS1
USB port	PS1

Injury caused by hazardous substances (Clause 7)

(Note: Specify hazardous chemicals, whether produces ozone or other chemical construction not addressed as part of the component evaluation.)

Example: Liquid in filled component Glycol

Source of hazardous substances	Corresponding chemical
N/A	N/A

Mechanically-caused injury (Clause 8)

(Note: List moving part(s), fan, special installations, etc. & corresponding MS classification based on Table 35.) Example: Wall mount unit MS2

Source of kinetic/mechanical energy	Corresponding classification (MS)
Edges and corners of enclosure	MS1
Mass of the unit	MS1

Thermal burn injury (Clause 9)

(Note: Identify the surface or support, and corresponding energy source classification based on type of part, location, operating temperature and contact time in Table 38.)

Example: Hand-held scanner – thermoplastic enclosure TS1

Source of thermal energy	Corresponding classification (TS)
External surface	TS1

Radiation (Clause 10)

(Note: List the types of radiation present in the product and the corresponding energy source classification.) Example: DVD – Class 1 Laser Product RS1

Type of radiation	Corresponding classification (RS)
LED indicator	RS1

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ENERGY SOURCE DIAGRAM			
Indicate which energy sources are included in the energy source diagram. Insert diagram below			
(Refer to above table)			



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Clause	Possible Hazard			
5.1	Electrically-caused injury			
Body Part	Energy Source (ES3: Primary Filter circuit)	Safeguards		
(e.g. Ordinary)		Basic	Supplementary	Reinforced (Enclosure)
Ordinary person	ES1: All internal circuits ES1: DC input circuits	N/A	N/A	N/A
Ordinary person	ES2: Ringing signal	Equipment	N/A	N/A
6.1	Electrically-caused fire			
Material part	Energy Source		Safeguards	
(e.g. mouse enclosure)		Basic	Supplementary	Reinforced
Combustible materials within equipment	PS1: <15 Watt circuit	N/A	N/A	N/A
Outside enclosure	PS1: <15 Watt circuit	N/A	N/A	N/A
7.1	Injury caused by hazardous s	ous substances		
Body Part	Energy Source (hazardous material)	Safeguards		
(e.g., skilled)		Basic	Supplementary	Reinforced
N/A (no such sources)	N/A	N/A	N/A	N/A
8.1	Mechanically-caused injury			
Body Part	Energy Source	Safeguards		
(e.g. Ordinary)	(MS3:High Pressure Lamp)	Basic	Supplementary	Reinforced (Enclosure)
Ordinary	MS1: Edges and corners	N/A	N/A	N/A
Mass of the unit	MS1	N/A	N/A	N/A
9.1	Thermal Burn –			
Body Part	Energy Source	Safeguards		
(e.g., Ordinary)	(TS2)	Basic	Supplementary	Reinforced
Ordinary	TS1: Accessible parts	N/A	N/A	N/A
10.1	Radiation			
Body Part	Energy Source (Output from audio port)		Safeguards	
(e.g., Ordinary)		Basic	Supplementary	Reinforced
Ordinary	No radiation	N/A	N/A	N/A

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

4	GENERAL REQUIREMENTS		Р
4.1.1	Acceptance of materials, components and subassemblies	See appended table 4.1.2	Р
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	Р
4.1.3	Equipment design and construction	Evaluation of safeguards regarding limiting the outputs to fulfill ES1 and protection in regard to risk of spread of fire, mechanical and thermal burn injury considered.	Р
4.1.15	Markings and instructions:	(See Annex F)	Р
4.4.4	Safeguard robustness	See below.	Р
4.4.4.2	Steady force tests:	(See Annex T.2 and T.5)	Р
4.4.4.3	Drop tests:	See Annex T.7	Р
4.4.4.4	Impact tests:	See Annex T.6	Р
4.4.4.5	Internal accessible safeguard enclosure and barrier tests:	The external enclosure cannot be opened without damaging the product.	N/A
4.4.4.6	Glass Impact tests:	No such glass used.	N/A
4.4.4.7	Thermoplastic material tests:	Not thermoplastic material	N/A
4.4.4.8	Air comprising a safeguard:	Class 1 energy source	N/A
4.4.4.9	Accessibility and safeguard effectiveness	Class 1 energy source	N/A
4.5	Explosion	No explosion occurs during normal/abnormal operation and single fault conditions	Р
4.6	Fixing of conductors	No conductors to fix.	N/A
4.6.1	Fix conductors not to defeat a safeguard		N/A
4.6.2	10 N force test applied to:		N/A
4.7	Equipment for direct insertion into mains socket - outlets	Not equipment for direct insertion into mains socket - outlets	N/A
4.7.2	Mains plug part complies with the relevant standard:		N/A
4.7.3	Torque (Nm):		N/A
4.8	Products containing coin/button cell batteries		N/A

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IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
4.8.2	Instructional safeguard		N/A
4.8.3	Battery Compartment Construction		N/A
	Means to reduce the possibility of children removing the battery		_
4.8.4	Battery Compartment Mechanical Tests:		N/A
4.8.5	Battery Accessibility		N/A
4.9	Likelihood of fire or shock due to entry of conductive object	PS1	N/A

5	ELECTRICALLY-CAUSED INJURY		Р
5.2.1	Electrical energy source classifications:	(See appended table 5.2)	Р
5.2.2	ES1, ES2 and ES3 limits		Р
5.2.2.2	Steady-state voltage and current:	(See appended table 5.2)	Р
5.2.2.3	Capacitance limits:	No such capacitance within the EUT	N/A
5.2.2.4	Single pulse limits:	No such single pulses generated in the EUT or applied to it.	N/A
5.2.2.5	Limits for repetitive pulses:	No such repetitive pulses within the EUT	N/A
5.2.2.6	Ringing signals:	ES2	Р
5.2.2.7	Audio signals:	No such audio signals	N/A
5.3	Protection against electrical energy sources	Only ES1 circuit for this product.	N/A
5.3.1	General Requirements for accessible parts to ordinary, instructed and skilled persons		N/A
5.3.2.1	Accessibility to electrical energy sources and safeguards		N/A
5.3.2.2	Contact requirements		N/A
	a) Test with test probe from Annex V:		N/A
	b) Electric strength test potential (V):		N/A
	c) Air gap (mm):		N/A
5.3.2.4	Terminals for connecting stripped wire	No such terminals.	N/A
5.4	Insulation materials and requirements		Р
5.4.1.2	Properties of insulating material	The choice and application have taken into account as specified in this Clause 5 and Annex T and natural rubber, hygroscopic materials or asbestos are not used as insulation.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict	
5.4.1.3	Humidity conditioning:	No hygroscopic material used.	N/A	
5.4.1.4	Maximum operating temperature for insulating materials:		N/A	
5.4.1.5	Pollution degree:	2		
5.4.1.5.2	Test for pollution degree 1 environment and for an insulating compound	Pollution degree 2 is applied. No insulating compound applied.	N/A	
5.4.1.5.3	Thermal cycling	See above	N/A	
5.4.1.6	Insulation in transformers with varying dimensions	No such transformer within the EUT	N/A	
5.4.1.7	Insulation in circuits generating starting pulses	No such starting pulses within the EUT	N/A	
5.4.1.8	Determination of working voltage		N/A	
5.4.1.9	Insulating surfaces		N/A	
5.4.1.10	Thermoplastic parts on which conductive metallic parts are directly mounted	No such thermoplastic parts.	N/A	
5.4.1.10.2	Vicat softening temperature:		N/A	
5.4.1.10.3	Ball pressure:		N/A	
5.4.2	Clearances	Class 1 energy source	N/A	
5.4.2.2	Determining clearance using peak working voltage		N/A	
5.4.2.3	Determining clearance using required withstand voltage:		N/A	
	a) a.c. mains transient voltage:		_	
	b) d.c. mains transient voltage:		_	
	c) external circuit transient voltage:		_	
	d) transient voltage determined by measurement :		_	
5.4.2.4	Determining the adequacy of a clearance using an electric strength test		N/A	
5.4.2.5	Multiplication factors for clearances and test voltages:		N/A	
5.4.3	Creepage distances:	Class 1 energy source	N/A	
5.4.3.1	General		N/A	
5.4.3.3	Material Group:		_	
5.4.4	Solid insulation		N/A	
5.4.4.2	Minimum distance through insulation:		N/A	
5.4.4.3	Insulation compound forming solid insulation		N/A	
5.4.4.4	Solid insulation in semiconductor devices		N/A	
5.4.4.5	Cemented joints		N/A	

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	IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict	
5.4.4.6	Thin sheet material		N/A	
5.4.4.6.1	General requirements		N/A	
5.4.4.6.2	Separable thin sheet material		N/A	
	Number of layers (pcs):		N/A	
5.4.4.6.3	Non-separable thin sheet material		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		N/A	
5.4.4.9	Solid insulation at frequencies >30 kHz:		N/A	
5.4.5	Antenna terminal insulation		N/A	
5.4.5.1	General		N/A	
5.4.5.2	Voltage surge test		N/A	
	Insulation resistance (MΩ):		N/A	
5.4.6	Insulation of internal wire as part of supplementary safeguard:	No such insulation of internal wire as part of supplementary safeguard.	N/A	
5.4.7	Tests for semiconductor components and for cemented joints		N/A	
5.4.8	Humidity conditioning	No test requirement .	N/A	
	Relative humidity (%):			
	Temperature (°C):			
	Duration (h):		_	
5.4.9	Electric strength test:		N/A	
5.4.9.1	Test procedure for a solid insulation type test		N/A	
5.4.9.2	Test procedure for routine tests		N/A	
5.4.10	Protection against transient voltages between external circuit	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	
5.4.11	Insulation between external circuits and earthed circuitry:	No such connections for external circuit applied within the EUT	N/A	

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	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
5.4.11.1	Exceptions to separation between external circuits and earth	No such connections to external circuit as above.	N/A
5.4.11.2	Requirements		N/A
	Rated operating voltage U _{op} (V):		_
	Nominal voltage U _{peak} (V):		_
	Max increase due to variation U _{sp} :		_
	Max increase due to ageing ΔUsa:		_
	U _{op} = U _{peak} + Δ U _{sp} + ΔU _{sa} :		_
5.5	Components as safeguards		
5.5.1	General		N/A
5.5.2	Capacitors and RC units		N/A
5.5.2.1	General requirement		N/A
5.5.2.2	Safeguards against capacitor discharge after disconnection of a connector:		N/A
5.5.3	Transformers		N/A
5.5.4	Optocouplers		N/A
5.5.5	Relays		N/A
5.5.6	Resistors		N/A
5.5.7	SPD's		N/A
5.5.7.1	Use of an SPD connected to reliable earthing		N/A
5.5.7.2	Use of an SPD between mains and protective earth		N/A
5.5.8	Insulation between the mains and external circuit consisting of a coaxial cable:		N/A
5.6	Protective conductor class III e	equipment with no means of earthing	N/A
5.6.2	Requirement for protective conductors		N/A
5.6.2.1	General requirements		N/A
5.6.2.2	Colour of insulation		N/A
5.6.3	Requirement for protective earthing conductors		NA
	Protective earthing conductor size (mm²):		
5.6.4	Requirement for protective bonding conductors		N/A
5.6.4.1	Protective bonding conductors		N/A
	Protective bonding conductor size (mm²):		_
	Protective current rating (A):		_

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	IEC 62368-1				
Clause	Requirement + Test	Result - Remark	Verdict		
5.6.4.3	Current limiting and overcurrent protective devices		N/A		
5.6.5	Terminals for protective conductors		N/A		
5.6.5.1	Requirement		N/A		
	Conductor size (mm²), nominal thread diameter (mm)		N/A		
5.6.5.2	Corrosion		N/A		
5.6.6	Resistance of the protective system		N/A		
5.6.6.1	Requirements		N/A		
5.6.6.2	Test Method Resistance (Ω):		N/A		
5.6.7	Reliable earthing		N/A		
5.7	Prospective touch voltage, touch current and prot	ective conductor current	N/A		
5.7.2	Measuring devices and networks	class III equipment	N/A		
5.7.2.1	Measurement of touch current:		N/A		
5.7.2.2	Measurement of prospective touch voltage		N/A		
5.7.3	Equipment set-up, supply connections and earth connections		N/A		
	System of interconnected equipment (separate connections/single connection):		_		
	Multiple connections to mains (one connection at a time/simultaneous connections):		_		
5.7.4	Earthed conductive accessible parts:		N/A		
5.7.5	Protective conductor current		N/A		
	Supply Voltage (V)		_		
	Measured current (mA)		_		
	Instructional Safeguard:		N/A		
5.7.6	Prospective touch voltage and touch current due to external circuits		N/A		
5.7.6.1	Touch current from coaxial cables		N/A		
5.7.6.2	Prospective touch voltage and touch current from external circuits		N/A		
5.7.7	Summation of touch currents from external circuits		N/A		
	a) Equipment with earthed external circuits Measured current (mA):		N/A		
	b) Equipment whose external circuits are not referenced to earth. Measured current (mA):		N/A		

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Clause	Requirement + Test	Result - Remark	Verdict		

6	ELECTRICALLY- CAUSED FIRE		Р
6.2	Classification of power sources (PS) and potential ig	gnition sources (PIS)	Р
6.2.2	Power source circuit classifications	PS (power source) classification determined by measuring the maximum power in Figures 34 and 35 for load and power source circuits.	Р
6.2.2.1	General	See the following details.	Р
6.2.2.2	Power measurement for worst-case load fault :		Р
6.2.2.3	Power measurement for worst-case power source fault:		Р
6.2.2.4	PS1:		Р
6.2.2.5	PS2:		N/A
6.2.2.6	PS3:		N/A
6.2.3	Classification of potential ignition sources		N/A
6.2.3.1	Arcing PIS:		N/A
6.2.3.2	Resistive PIS:		N/A
6.3	Safeguards against fire under normal operating and	abnormal operating conditions	Р
6.3.1 (a)	No ignition and attainable temperature value less than 90 % defined by ISO 871 or less than 300 °C for unknown materials:	No ignition and no such temperature attained within the equipment. (See appended table 5.4.1.4, 6.3.2, 9.0, B.2.6)	Р
6.3.1 (b)	Combustible materials outside fire enclosure		N/A
6.4	Safeguards against fire under single fault conditions		Р
6.4.1	Safeguard Method		N/A
6.4.2	Reduction of the likelihood of ignition under single fault conditions in PS1 circuits	PS1	Р
6.4.3	Reduction of the likelihood of ignition under single fault conditions in PS2 and PS3 circuits		N/A
6.4.3.1	General		Р
6.4.3.2	Supplementary Safeguards		Р
	Special conditions if conductors on printed boards are opened or peeled		N/A
6.4.3.3	Single Fault Conditions:	(See appended table B.4)	Р
	Special conditions for temperature limited by fuse	No such consideration.	N/A
6.4.4	Control of fire spread in PS1 circuits		Р
6.4.5	Control of fire spread in PS2 circuits	PS1	N/A
6.4.5.2	Supplementary safeguards:	No supplementary safeguards.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict	
6.4.6	Control of fire spread in PS3 circuit	Not PS3 circuit.	N/A	
6.4.7	Separation of combustible materials from a PIS		Р	
6.4.7.1	General:		Р	
6.4.7.2	Separation by distance		Р	
6.4.7.3	Separation by a fire barrier		N/A	
6.4.8	Fire enclosures and fire barriers	See below.	Р	
6.4.8.1	Fire enclosure and fire barrier material properties		N/A	
6.4.8.2.1	Requirements for a fire barrier		N/A	
6.4.8.2.2	Requirements for a fire enclosure		N/A	
6.4.8.3	Constructional requirements for a fire enclosure and a fire barrier	See below	Р	
6.4.8.3.1	Fire enclosure and fire barrier openings		N/A	
6.4.8.3.2	Fire barrier dimensions	No fire barrier.	N/A	
6.4.8.3.3	Top Openings in Fire Enclosure: dimensions (mm)	No openning	N/A	
	Needle Flame test		N/A	
6.4.8.3.4	Bottom Openings in Fire Enclosure, condition met a), b) and/or c) dimensions (mm):		N/A	
	Flammability tests for the bottom of a fire enclosure:		N/A	
6.4.8.3.5	Integrity of the fire enclosure, condition met: a), b) or c):		N/A	
6.4.8.4	Separation of PIS from fire enclosure and fire barrier distance (mm) or flammability rating:		Р	
6.5	Internal and external wiring	1	N/A	
6.5.1	Requirements		N/A	
6.5.2	Cross-sectional area (mm²)		_	
6.5.3	Requirements for interconnection to building wiring		N/A	
6.6	Safeguards against fire due to connection to additional equipment		N/A	
	External port limited to PS2 or complies with Clause Q.1		N/A	

7	INJURY CAUSED BY HAZARDOUS SUBSTANCES		N/A
7.2	Reduction of exposure to hazardous substances	Not exposure to hazardous substances.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
7.3	Ozone exposure		N/A
7.4	Use of personal safeguards (PPE)		N/A
	Personal safeguards and instructions:		_
7.5	Use of instructional safeguards and instructions		N/A
	Instructional safeguard (ISO 7010)		_
7.6	Batteries:	No battery used.	N/A

8	MECHANICALLY-CAUSED INJURY		Р
8.1	General	No moving parts in the equipment — see below regarding edges and corners.	Р
8.2	Mechanical energy source classifications	MS1	Р
8.3	Safeguards against mechanical energy sources		N/A
8.4	Safeguards against parts with sharp edges and corners	Edges and corners of the enclosure are rounded.	Р
8.4.1	Safeguards		N/A
8.5	Safeguards against moving parts	No moving parts.	N/A
8.5.1	MS2 or MS3 part required to be accessible for the function of the equipment		N/A
8.5.2	Instructional Safeguard:		_
8.5.4	Special categories of equipment comprising moving parts		N/A
8.5.4.1	Large data storage equipment		N/A
8.5.4.2	Equipment having electromechanical device for destruction of media		N/A
8.5.4.2.1	Safeguards and Safety Interlocks		N/A
8.5.4.2.2	Instructional safeguards against moving parts		N/A
	Instructional Safeguard		_
8.5.4.2.3	Disconnection from the supply		N/A
8.5.4.2.4	Probe type and force (N)		N/A
8.5.5	High Pressure Lamps		N/A
8.5.5.1	Energy Source Classification		N/A
8.5.5.2	High Pressure Lamp Explosion Test		N/A
8.6	Stability	Classification MS1 according to table 35, line 5 and no stability requirements.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict	
8.6.1	Product classification		N/A	
	Instructional Safeguard:		_	
8.6.2	Static stability		N/A	
8.6.2.2	Static stability test		N/A	
	Applied Force:		_	
8.6.2.3	Downward Force Test		N/A	
8.6.3	Relocation stability test		N/A	
	Unit configuration during 10° tilt:		_	
8.6.4	Glass slide test		N/A	
8.6.5	Horizontal force test (Applied Force):		N/A	
	Position of feet or movable parts:		_	
8.7	Equipment mounted to wall or ceiling	Not such equipment.	N/A	
8.7.1	Mounting Means (Length of screws (mm) and mounting surface)		N/A	
8.7.2	Direction and applied force:		N/A	
8.8	Handles strength	No handles provided.	N/A	
8.8.1	Classification		N/A	
8.8.2	Applied Force		N/A	
8.9	Wheels or casters attachment requirements	No wheels or casters.	N/A	
8.9.1	Classification		N/A	
8.9.2	Applied force		_	
8.10	Carts, stands and similar carriers	No carts, stands or similar carriers.	N/A	
8.10.1	General		N/A	
8.10.2	Marking and instructions		N/A	
	Instructional Safeguard:			
8.10.3	Cart, stand or carrier loading test and compliance		N/A	
	Applied force:		_	
8.10.4	Cart, stand or carrier impact test		N/A	
8.10.5	Mechanical stability		N/A	
	Applied horizontal force (N)		_	
8.10.6	Thermoplastic temperature stability (°C)		N/A	
8.11	Mounting means for rack mounted equipment	Not such equipment.	N/A	
8.11.1	General		N/A	
8.11.2	Product Classification		N/A	

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8.11.3	Mechanical strength test, variable N		N/A
8.11.4	Mechanical strength test 250N, including end stops		N/A
8.12	Telescoping or rod antennas	No such parts.	N/A
	Button/Ball diameter (mm)		_

9	THERMAL BURN INJURY		Р
9.2	Thermal energy source classifications	TS1: accessible parts, based on a max. Tma of 25°C	Р
9.3	Safeguard against thermal energy sources	TS1.	N/A
9.4	Requirements for safeguards		N/A
9.4.1	Equipment safeguard		N/A
9.4.2	Instructional safeguard		N/A

10	RADIATION		Р
10.2	Radiation energy source classification	RS1: The LED only used for indicating, which is considered as low power & inherently exempt group according to IEC 62471	Р
10.2.1	General classification		Р
10.3	Protection against laser radiation	No laser radiation	N/A
	Laser radiation that exists equipment:		_
	Normal, abnormal, single-fault		
	Instructional safeguard		_
	Tool:		_
10.4	Protection against visible, infrared, and UV radiation	No protection needed for RS1 indicating LED.	N/A
10.4.1	General		N/A
10.4.1.a)	RS3 for Ordinary and instructed persons:		N/A
10.4.1.b)	RS3 accessible to a skilled person:		N/A
	Personal safeguard (PPE) instructional safeguard		_
10.4.1.c)	Equipment visible, IR, UV does not exceed RS1		N/A
10.4.1.d)	Normal, abnormal, single-fault conditions:		N/A
10.4.1.e)	Enclosure material employed as safeguard is opaque:		N/A

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Clause	Requirement + Test	Result - Remark	Verdict	
10.4.1.f)	UV attenuation:		N/A	
10.4.1.g)	Materials resistant to degradation UV:		N/A	
10.4.1.h)	Enclosure containment of optical radiation:		N/A	
10.4.1.i)	Exempt Group under normal operating conditions:		N/A	
10.4.2	Instructional safeguard		N/A	
10.5	Protection against x-radiation	No such x-radiation generated from the equipment	N/A	
10.5.1	X- radiation energy source that exists equipment:		N/A	
	Normal, abnormal, single fault conditions		N/A	
	Equipment safeguards:		N/A	
	Instructional safeguard for skilled person:		N/A	
10.5.3	Most unfavourable supply voltage to give maximum radiation:		_	
	Abnormal and single-fault condition:		N/A	
	Maximum radiation (pA/kg):		N/A	
10.6	Protection against acoustic energy sources	Not such equipment.	N/A	
10.6.1	General		N/A	
10.6.2	Classification		N/A	
	Acoustic output, dB(A):		N/A	
	Output voltage, unweighted r.m.s:		N/A	
10.6.4	Protection of persons		N/A	
	Instructional safeguards		N/A	
	Equipment safeguard prevent ordinary person to RS2		_	
	Means to actively inform user of increase sound pressure:		_	
	Equipment safeguard prevent ordinary person to RS2		_	
10.6.5	Requirements for listening devices (headphones, earphones, etc.)		N/A	
10.6.5.1	Corded passive listening devices with analog input		N/A	
	Input voltage with 94 dB(A) L _{Aeq} acoustic pressure output:		_	
10.6.5.2	Corded listening devices with digital input		N/A	
	Maximum dB(A):		_	

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Clause	Requirement + Test	Result - Remark	Verdict
10.6.5.3	Cordless listening device		N/A
	Maximum dB(A):		_

В	NORMAL OPERATING CONDITION TESTS, ABOUTION TESTS AND SINGLE FAULT COND		Р
B.2	Normal Operating Conditions	See the following details.	Р
B.2.1	General requirements:	(See summary of testing & appended test tables)	Р
	Audio Amplifiers and equipment with audio amplifiers:	Not such equipment.	N/A
B.2.3	Supply voltage and tolerances	(See appended table B.2.5)	Р
B.2.5	Input test:	(See appended table B.2.5)	Р
B.3	Simulated abnormal operating conditions		Р
B.3.1	General requirements:	(See appended table B.3)	Р
B.3.2	Covering of ventilation openings	(See appended table B.3)	Р
B.3.3	D.C. mains polarity test	The EUT is not connected to a D.C. mains	N/A
B.3.4	Setting of voltage selector:	No setting of voltage selector within the EUT	N/A
B.3.5	Maximum load at output terminals	No output terminals	N/A
B.3.6	Reverse battery polarity	No battery.	N/A
B.3.7	Abnormal operating conditions as specified in Clause E.2.	(See appended table B.3)	Р
B.3.8	Safeguards functional during and after abnormal operating conditions		Р
B.4	Simulated single fault conditions		Р
B.4.2	Temperature controlling device open or short-circuited:	No such device used.	N/A
B.4.3	Motor tests	No motors used.	N/A
B.4.3.1	Motor blocked or rotor locked increasing the internal ambient temperature:		N/A
B.4.4	Short circuit of functional insulation	See the following details.	Р
B.4.4.1	Short circuit of clearances for functional insulation	(See appended table B.3&B.4)	Р
B.4.4.2	Short circuit of creepage distances for functional insulation	(See appended table B.3&B.4)	Р
B.4.4.3	Short circuit of functional insulation on coated printed boards	No coated printed boards within the EUT.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
B.4.5	Short circuit and interruption of electrodes in tubes and semiconductors		N/A
B.4.6	Short circuit or disconnect of passive components	(See appended table B.3&B.4)	Р
B.4.7	Continuous operation of components	The EUT is continuous operating type and no such components intended for short time operation or intermittent operation.	N/A
B.4.8	Class 1 and Class 2 energy sources within limits during and after single fault conditions	No change to circuits classified in 5.3.	Р
B.4.9	Battery charging under single fault conditions:	No battery.	N/A
С	UV RADIATION		N/A
C.1	Protection of materials in equipment from UV radiation	No such UV generated from the equipment.	N/A
C.1.2	Requirements	See above.	N/A
C.1.3	Test method	See above.	N/A
C.2	UV light conditioning test	See above.	N/A
C.2.1	Test apparatus	See above.	N/A
C.2.2	Mounting of test samples	See above.	N/A
C.2.3	Carbon-arc light-exposure apparatus	See above.	N/A
C.2.4	Xenon-arc light exposure apparatus	See above.	N/A
D	TEST GENERATORS		N/A
D 1	Impulse test generators	No such consideration	NI/A

D	TEST GENERATORS		N/A
D.1	Impulse test generators	No such consideration.	N/A
D.2	Antenna interface test generator	See above.	N/A
D.3	Electronic pulse generator	See above.	N/A

E	TEST CONDITIONS FOR EQUIPMENT CONTAINING AUDIO AMPLIFIERS		Р
E.1	Audio amplifier normal operating conditions		Р
	Audio signal voltage (V):		_
	Rated load impedance (Ω)	64Ω	_
E.2	Audio amplifier abnormal operating conditions		Р

F	EQUIPMENT MARKINGS, INSTRUCTIONS, AND INSTRUCTIONAL SAFEGUARDS		Р
F.1	General requirements	See the following details.	Р
	Instructions – Language:	English.	_
F.2	Letter symbols and graphical symbols	See the following details.	Р

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Clause	Requirement + Test	Result - Remark	Verdict	
F.2.1	Letter symbols according to IEC60027-1	Letter symbols for quantities and units are complied with IEC 60027-1.	Р	
F.2.2	Graphic symbols IEC, ISO or manufacturer specific	Graphical symbols are complied with IEC 60417, ISO 3864-2, ISO 7000 or ISO 7010.	Р	
F.3	Equipment markings		Р	
F.3.1	Equipment marking locations	Equipment marking is located on the enclosure surface and is easily visible.	Р	
F.3.2	Equipment identification markings	See the following details.	Р	
F.3.2.1	Manufacturer identification	See copy of marking on page 4.	_	
F.3.2.2	Model identification	See page 2 for details.	_	
F.3.3	Equipment rating markings	See the following details.	Р	
F.3.3.1	Equipment with direct connection to mains		N/A	
F.3.3.2	Equipment without direct connection to mains		Р	
F.3.3.3	Nature of supply voltage		_	
F.3.3.4	Rated voltage		_	
F.3.3.4	Rated frequency		_	
F.3.3.6	Rated current or rated power:		_	
F.3.3.7	Equipment with multiple supply connections	Equipment does not have multiple supply connections.	N/A	
F.3.4	Voltage setting device	No voltage selector provide within the equipment.	N/A	
F.3.5	Terminals and operating devices		N/A	
F.3.5.1	Mains appliance outlet and socket-outlet markings:		N/A	
F.3.5.2	Switch position identification marking:		N/A	
F.3.5.3	Replacement fuse identification and rating markings:		N/A	
F.3.5.4	Replacement battery identification marking:		N/A	
F.3.5.5	Terminal marking location		N/A	
F.3.6	Equipment markings related to equipment classification	Class III equipment.	N/A	
F.3.6.1	Class I Equipment		N/A	
F.3.6.1.1	Protective earthing conductor terminal		N/A	
F.3.6.1.2	Neutral conductor terminal		N/A	
F.3.6.1.3	Protective bonding conductor terminals		N/A	

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F.3.6.2	Class II equipment (IEC60417-5172)		N/A	
F.3.6.2.1	Class II equipment with or without functional earth		N/A	
F.3.6.2.2	Class II equipment with functional earth terminal marking		N/A	
F.3.7	Equipment IP rating marking:	IPX0.	_	
F.3.8	External power supply output marking		N/A	
F.3.9	Durability, legibility and permanence of marking	Marking is considered to be legible and easily discernible. See also the following details.	Р	
F.3.10	Test for permanence of markings	The label was subjected to the permanence of marking test. The label was rubbed with cloth soaked with water for 15 sec. And then again for 15 sec. With the cloth soaked with petroleum spirit. After this test there was no damage to the label. The marking on the label did not fade. After each test, the marking remained legible.	Р	
F.4	Instructions		Р	
	a) Equipment for use in locations where children not likely to be present - marking		N/A	
	b) Instructions given for installation or initial use		Р	
	c) Equipment intended to be fastened in place		Р	
	d) Equipment intended for use only in restricted access area		N/A	
	e) Audio equipment terminals classified as ES3 and other equipment with terminals marked in accordance F.3.6.1	No such terminals provided.	N/A	
	f) Protective earthing employed as safeguard		N/A	
	g) Protective earthing conductor current exceeding ES2 limits		N/A	
	h) Symbols used on equipment	No such symbols used as a safeguard considered.	N/A	
	i) Permanently connected equipment not provided with all-pole mains switch	Not permanently connected equipment.	N/A	
	j) Replaceable components or modules providing safeguard function	No such markings.	N/A	
F.5	Instructional safeguards	No instructional safeguard is considered as necessary.	N/A	

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Clause Requirement + Test Result - Remark V			
	Where "instructional safeguard" is referenced in the test report it specifies the required elements, location of marking and/or instruction	No instructional safeguard required in the equipment.	N/A

G	COMPONENTS		Р
G.1	Switches		N/A
G.1.1	General requirements	No switch used.	N/A
G.1.2	Ratings, endurance, spacing, maximum load		N/A
G.2	Relays		N/A
G.2.1	General requirements	No such relay provided within the equipment.	N/A
G.2.2	Overload test	See above.	N/A
G.2.3	Relay controlling connectors supply power	See above.	N/A
G.2.4	Mains relay, modified as stated in G.2	See above.	N/A
G.3	Protection Devices		N/A
G.3.1	Thermal cut-offs	No thermal cut-off provided within the equipment.	N/A
G.3.1.1a) &b)	Thermal cut-outs separately approved according to IEC 60730 with conditions indicated in a) & b)	See above.	N/A
G.3.1.1c)	Thermal cut-outs tested as part of the equipment as indicated in c)	See above.	N/A
G.3.1.2	Thermal cut-off connections maintained and secure	See above.	N/A
G.3.2	Thermal links		N/A
G.3.2.1a)	Thermal links separately tested with IEC 60691	No thermal link provided within the equipment.	N/A
G.3.2.1b)	Thermal links tested as part of the equipment	See above.	N/A
	Aging hours (H)	See above.	
	Single Fault Condition:	See above.	_
	Test Voltage (V) and Insulation Resistance (Ω). :	See above.	_
G.3.3	PTC Thermistors	No PTC thermistor provided within the equipment.	N/A
G.3.4	Overcurrent protection devices	No overcurrent protection devices	N/A
G.3.5	Safeguards components not mentioned in G.3.1 to	G.3.5	N/A
G.3.5.1	Non-resettable devices suitably rated and marking provided	No such safeguards components	N/A
G.3.5.2	Single faults conditions:		N/A
G.4	Connectors		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
G.4.1	Spacings	No such connector .	N/A
G.4.2	Mains connector configuration:		N/A
G.4.3	Plug is shaped that insertion into mains socket- outlets or appliance coupler is unlikely		N/A
G.5	Wound Components		N/A
G.5.1	Wire insulation in wound components	No wound components	N/A
G.5.1.2 a)	Two wires in contact inside wound component, angle between 45° and 90°		N/A
G.5.1.2 b)	Construction subject to routine testing		N/A
G.5.2	Endurance test on wound components		N/A
G.5.2.1	General test requirements		N/A
G.5.2.2	Heat run test		N/A
	Time (s)		
	Temperature (°C):		_
G.5.2.3	Wound Components supplied by mains		N/A
G.5.3	Transformers		N/A
G.5.3.1	Requirements applied (IEC61204-7, IEC61558-1/-2, and/or IEC62368-1):	No transformers	N/A
	Position:		_
	Method of protection:		_
G.5.3.2	Insulation		N/A
	Protection from displacement of windings:		_
G.5.3.3	Overload test:		N/A
G.5.3.3.1	Test conditions		N/A
G.5.3.3.2	Winding Temperatures testing in the unit		N/A
G.5.3.3.3	Winding Temperatures - Alternative test method		N/A
G.5.4	Motors		N/A
G.5.4.1	General requirements	No motors used.	N/A
	Position:		_
G.5.4.2	Test conditions		N/A
G.5.4.3	Running overload test		N/A
G.5.4.4	Locked-rotor overload test		N/A
	Test duration (days):		_
G.5.4.5	Running overload test for d.c. motors in secondary circuits		N/A

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G.5.4.5.2	Tested in the unit		N/A	
	Electric strength test (V):		_	
G.5.4.5.3	Tested on the Bench - Alternative test method; test time (h)		N/A	
	Electric strength test (V)		_	
G.5.4.6	Locked-rotor overload test for d.c. motors in secondary circuits		N/A	
G.5.4.6.2	Tested in the unit		N/A	
	Maximum Temperature:		N/A	
	Electric strength test (V)		N/A	
G.5.4.6.3	Tested on the bench - Alternative test method; test time (h)		N/A	
	Electric strength test (V):		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		N/A	
G.6.1	General	No power supply cord used	N/A	
G.6.2	Solvent-based enamel wiring insulation		N/A	
G.7	Mains supply cords		N/A	
G.7.1	General requirements	Not directly connected to mains	N/A	
	Туре		_	
	Rated current (A)		_	
	Cross-sectional area (mm²), (AWG):		_	
G.7.2	Compliance and test method		N/A	
G.7.3	Cord anchorages and strain relief for non- detachable power supply cords		N/A	
G.7.3.2	Cord strain relief		N/A	
G.7.3.2.1	Requirements		N/A	
	Strain relief test force (N)		_	
G.7.3.2.2	Strain relief mechanism failure		N/A	
G.7.3.2.3	Cord sheath or jacket position, distance (mm):		_	
G.7.3.2.4	Strain relief comprised of polymeric material		N/A	
G.7.4	Cord Entry:		N/A	

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Clause	Requirement + Test	Result - Remark	Verdict		
G.7.5	Non-detachable cord bend protection		N/A		
G.7.5.1	Requirements		N/A		
G.7.5.2	Mass (g)				
	Diameter (m):				
	Temperature (°C)				
G.7.6	Supply wiring space		N/A		
G.7.6.2	Stranded wire		N/A		
G.7.6.2.1	Test with 8 mm strand		N/A		
G.8	Varistors		N/A		
G.8.1	General requirements	No varistors used.	N/A		
G.8.2	Safeguard against shock		N/A		
G.8.3	Safeguard against fire		N/A		
G.8.3.2	Varistor overload test		N/A		
G.8.3.3	Temporary overvoltage		N/A		
G.9	Integrated Circuit (IC) Current Limiters		N/A		
G.9.1 a)	Manufacturer defines limit at max. 5A.	No IC current limiter provided within the equipment.	N/A		
G.9.1 b)	Limiters do not have manual operator or reset		N/A		
G.9.1 c)	Supply source does not exceed 250 VA:		_		
G.9.1 d)	IC limiter output current (max. 5A):		_		
G.9.1 e)	Manufacturers' defined drift		_		
G.9.2	Test Program 1		N/A		
G.9.3	Test Program 2		N/A		
G.9.4	Test Program 3		N/A		
G.10	Resistors		N/A		
G.10.1	General requirements		N/A		
G.10.2	Resistor test		N/A		
G.10.3	Test for resistors serving as safeguards between the mains and an external circuit consisting of a coaxial cable	No such resistors	N/A		
G.10.3.1	General requirements		N/A		
G.10.3.2	Voltage surge test		N/A		
G.10.3.3	Impulse test		N/A		
G.11	Capacitor and RC units		N/A		
G.11.1	General requirements	No capacitor and RC units	N/A		

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Clause	Requirement + Test	Result - Remark	Verdict	
G.11.2	Conditioning of capacitors and RC units		N/A	
G.11.3	Rules for selecting capacitors		N/A	
G.12	Optocouplers		N/A	
	Optocouplers comply with IEC 60747-5-5:2007 Spacing or Electric Strength Test (specify option and test results)	No optocouplers	N/A	
	Type test voltage Vini, a:		_	
	Routine test voltage, Vini,b:		_	
G.13	Printed boards		Р	
G.13.1	General requirements	See the following details.	Р	
G.13.2	Uncoated printed boards		Р	
G.13.3	Coated printed boards	No coated printed board or multilayer board applied for within the equipment.	N/A	
G.13.4	Insulation between conductors on the same inner surface	See above.	N/A	
	Compliance with cemented joint requirements (Specify construction):		_	
G.13.5	Insulation between conductors on different surfaces	See above.	N/A	
	Distance through insulation		N/A	
	Number of insulation layers (pcs):		_	
G.13.6	Tests on coated printed boards	See above.	N/A	
G.13.6.1	Sample preparation and preliminary inspection		N/A	
G.13.6.2a)	Thermal conditioning		N/A	
G.13.6.2b)	Electric strength test		N/A	
G.13.6.2c)	Abrasion resistance test		N/A	
G.14	Coating on components terminals		N/A	
G.14.1	Requirements:	No coating on component terminals considered to affect creepage or clearances.	N/A	
G.15	Liquid filled components		N/A	
G.15.1	General requirements	No such device provided within the equipment.	N/A	
G.15.2	Requirements		N/A	
G.15.3	Compliance and test methods		N/A	
G.15.3.1	Hydrostatic pressure test		N/A	
G.15.3.2	Creep resistance test		N/A	

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G.15.3.3	Tubing and fittings compatibility test		N/A	
G.15.3.4	Vibration test		N/A	
G.15.3.5	Thermal cycling test		N/A	
G.15.3.6	Force test		N/A	
G.15.4	Compliance		N/A	
G.16	IC including capacitor discharge function (ICX)		N/A	
a)	Humidity treatment in accordance with sc5.4.8 – 120 hours	No such ICX provided within the equipment.	N/A	
b)	Impulse test using circuit 2 with Uc = to transient voltage:		N/A	
C1)	Application of ac voltage at 110% of rated voltage for 2.5 minutes		N/A	
C2)	Test voltage		_	
D1)	10,000 cycles on and off using capacitor with smallest capacitance resistor with largest resistance specified by manufacturer		N/A	
D2)	Capacitance		_	
D3)	Resistance:			

CRITERIA FOR TELEPHONE RINGING SIGNALS		Р
General	No telephone ringing signal generated within the equipment.	Р
Method A	a) h_{S1}<16mAc) h_{S1}<20mA	Р
Method B		N/A
Ringing signal		N/A
Frequency (Hz)		_
Voltage (V)		_
Cadence; time (s) and voltage (V)		_
Single fault current (mA):		_
Tripping device and monitoring voltage		N/A
Conditions for use of a tripping device or a monitoring voltage complied with		N/A
Tripping device		N/A
Monitoring voltage (V)		_
INSULATED WINDING WIRES FOR USE WITHOUT INTERLEAVED INSULATION		N/A
General requirements		N/A
	Method A Method B Ringing signal Frequency (Hz)	General No telephone ringing signal generated within the equipment. Method A a) hs1<16mA c) hs1<20mA

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Clause	Requirement + Test	Result - Remark	Verdict

K	SAFETY INTERLOCKS	SAFETY INTERLOCKS	
K.1	General requirements	No safety interlock provided within the equipment.	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
	Compliance:		N/A
K.6	Mechanically operated safety interlocks		N/A
K.6.1	Endurance requirement		N/A
K.6.2	Compliance and Test method:		N/A
K.7	Interlock circuit isolation		N/A
K.7.1	Separation distance for contact gaps & interlock circuit elements (type and circuit location):		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	N/A
L.1	General requirements	N/A
L.2	Permanently connected equipment	N/A
L.3	Parts that remain energized	N/A
L.4	Single phase equipment	N/A
L.5	Three-phase equipment	N/A
L.6	Switches as disconnect devices	N/A
L.7	Plugs as disconnect devices	N/A
L.8	Multiple power sources	N/A

М	EQUIPMENT CONTAINING BATTERIES AND THEIR PROTECTION CIRCUITS		N/A
M.1	General requirements	No battery used.	N/A
M.2	Safety of batteries and their cells		N/A
M.2.1	Requirements		N/A
M.2.2	Compliance and test method (identify method):		N/A
M.3	Protection circuits		N/A

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Clause	Requirement + Test	Result - Remark	Verdict		
M.3.1	Requirements		N/A		
M.3.2	Tests		N/A		
	- Overcharging of a rechargeable battery		N/A		
	- Unintentional charging of a non-rechargeable battery		N/A		
	- Reverse charging of a rechargeable battery		N/A		
	- Excessive discharging rate for any battery		N/A		
M.3.3	Compliance		N/A		
M.4	Additional safeguards for equipment containing secondary lithium battery		N/A		
M.4.1	General		N/A		
M.4.2	Charging safeguards		N/A		
M.4.2.1	Charging operating limits		N/A		
M.4.2.2a)	Charging voltage, current and temperature:		_		
M.4.2.2 b)	Single faults in charging circuitry:		_		
M.4.3	Fire Enclosure		N/A		
M.4.4	Endurance of equipment containing a secondary lithium battery		N/A		
M.4.4.2	Preparation		N/A		
M.4.4.3	Drop and charge/discharge function tests		N/A		
	Drop		N/A		
	Charge		N/A		
	Discharge		N/A		
M.4.4.4	Charge-discharge cycle test		N/A		
M.4.4.5	Result of charge-discharge cycle test		N/A		
M.5	Risk of burn due to short circuit during carrying		N/A		
M.5.1	Requirement		N/A		
M.5.2	Compliance and Test Method (Test of P.2.3)		N/A		
M.6	Prevention of short circuits and protection from other effects of electric current		N/A		
M.6.1	Short circuits		N/A		
M.6.1.1	General requirements		N/A		
M.6.1.2	Test method to simulate an internal fault		N/A		
M.6.1.3	Compliance (Specify M.6.1.2 or alternative method):		N/A		
M.6.2	Leakage current (mA):		N/A		

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			age 30 or 30	
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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	
M.7.2	Compliance and test method		N/A	
M.8	Protection against internal ignition from external spark sources of lead acid batteries		N/A	
M.8.1	General requirements		N/A	
M.8.2	Test method		N/A	
M.8.2.1	General requirements		N/A	
M.8.2.2	Estimation of hypothetical volume Vz (m³/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 (Determination of compliance: inspection, data review; or abnormal testing):		N/A	

N	ELECTROCHEMICAL POTENTIALS		N/A
	Metal(s) used:	Class III equipment.	_
0	MEASUREMENT OF CREEPAGE DISTANCES AND CLEARANCES		N/A
	Figures O.1 to O.20 of this Annex applied:	Class III equipment.	_
Р	SAFEGUARDS AGAINST ENTRY OF FOREIGN OBJECTS AND SPILLAGE OF INTERNAL LIQUIDS		N/A
P.1	General requirements		N/A
P.2.2	Safeguards against entry of foreign object		N/A
	Location and Dimensions (mm):		_
P.2.3	Safeguard against the consequences of entry of foreign object		N/A
P.2.3.1	Safeguards against the entry of a foreign object		N/A
	Openings in transportable equipment		N/A
	Transportable equipment with metalized plastic parts:		N/A
P.2.3.2	Openings in transportable equipment in relation to metallized parts of a barrier or enclosure (identification of supplementary safeguard):		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
P.3	Safeguards against spillage of internal liquids	No such liquids.	N/A
P.3.1	General requirements		N/A
P.3.2	Determination of spillage consequences		N/A
P.3.3	Spillage safeguards		N/A
P.3.4	Safeguards effectiveness		N/A
P.4	Metallized coatings and adhesive securing parts	No such construction.	N/A
P.4.2 a)	Conditioning testing		N/A
	Tc (°C):		_
	Tr (°C):		_
	Ta (°C):		_
P.4.2 b)	Abrasion testing:		N/A
P.4.2 c)	Mechanical strength testing		N/A

Q	CIRCUITS INTENDED FOR INTERCONNECTION	I WITH BUILDING WIRING	N/A
Q.1	Limited power sources	Equipment not intended for interconnection with building wiring.	N/A
Q.1.1 a)	Inherently limited output		N/A
Q.1.1 b)	Impedance limited output		N/A
	- Regulating network limited output under normal operating and simulated single fault condition		N/A
Q.1.1 c)	Overcurrent protective device limited output		N/A
Q.1.1 d)	IC current limiter complying with G.9		N/A
Q.1.2	Compliance and test method		N/A
Q.2	Test for external circuits – paired conductor cable		N/A
	Maximum output current (A):		_
	Current limiting method		_
R	LIMITED SHORT CIRCUIT TEST		N/A
R.1	General requirements	No such consideration.	N/A
R.2	Determination of the overcurrent protective device and circuit	See above.	N/A
R.3	Test method Supply voltage (V) and short-circuit current (A)):	See above.	N/A



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Clause	Requirement + Test	Result - Remark	Verdict

•	TEGTO FOR REGIOTANOS TO UEAT AND FIRE	N1/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):	_
	Test flame according to IEC 60695-11-5 with conditions as set out	N/A
	Test specimen does not show any additional hole	N/A
S.3	Flammability test for the bottom of a fire enclosure	N/A
	Samples, material:	_
	Wall thickness (mm):	_
	Cheesecloth did not ignite	N/A
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 does not exceed 4 000 W	N/A
	Samples, material:	_
	Wall thickness (mm):	_
	Conditioning (test condition), (°C):	_
	Test flame according to IEC 60695-11-20 with conditions as set out	N/A
	After every test specimen was not consumed completely	N/A
	After fifth flame application, flame extinguished within 1 min	N/A



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Clause	Requirement + Test	Result - Remark	Verdict

Т	MECHANICAL STRENGTH TESTS		
T.1	General requirements		Р
T.2	Steady force test, 10 N	(See appended table T2)	Р
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 T5)	Р
T.6	Enclosure impact test	(See appended table T6)	Р
	Fall test		Р
	Swing test		N/A
T.7	Drop test	(See appended table T7)	Р
T.8	Stress relief test	(See appended table T8)	_
T.9	Impact Test (glass)	No glass used.	N/A
T.9.1	General requirements		N/A
T.9.2	Impact test and compliance		N/A
	Impact energy (J):		_
	Height (m)		_
T.10	Glass fragmentation test		N/A
T.11	Test for telescoping or rod antennas	No such antennas provided within the equipment.	N/A
	Torque value (Nm)	See above.	_

U	MECHANICAL STRENGTH OF CATHODE RAY TUBES (CRT) AND PROTECTION AGAINST THE EFECTS OF IMPLOSION		
U.1	General requirements	No CRT provided within the equipment.	N/A
U.2	Compliance and test method for non-intrinsically protected CRTs	See above.	N/A
U.3	Protective Screen	See above.	N/A

V	DETERMINATION OF ACCESSIBLE PARTS (FINGERS, PROBES AND WEDGES)		
V.1	Accessible parts of equipment	No access with test probes (test probe V.1 used) to any hazardous parts	Р
V.2	Accessible part criterion	See above.	Р



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Clause	Requirement + Test	Result - Remark	Verdict

4.1.2	TABLE: List of critical	components			Р
Object / par No.	trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹
Adapter	Chenzhou Frecom Electronics Co., Ltd.	F12W8- 050200SPAV(EU plug) F12W8- 050200SPAB(UK plug)	Input: 100-240V~ 50/60Hz 0.3A Output:5VDC 2A	EN 60950- 1:2006+A11:200 9+A1:2010+A12: 2011+A2:2013	CB certified By TUV SUD (Certif. No. SG PSB-OF- 04035) Report No: 211-700207- 000)
Adapter	Shenzhen Frecom Electronics Co., Ltd.	F12W8- 050200SPAB F12W8- 050200SPAV	Input: 100-240V~ 50/60Hz 0.3A Output:5VDC 2A	EN 60950- 1:2006+A11:200 9+A1:2010+A12: 2011+A2:2013	CB certified By TUV SUD (Certif. No. SG-OF- 12305) Report No: 211-400893- 000)
РСВ	Interchangeable	Interchangeable	V-0,130°C	UL796 (6 ed.): 2013 UL 94(6 ed.): 2013	UL
Plastic enclosure material	CHI MEI CORPORATION	PA-757(+)	HB, 80°C	UL 94	UL E56070
Alternative	Interchangeable	Interchangeable	HB, 80°C	UL 94(6 ed.): 2013	UL

Supplementay information:

¹⁾ Provided evidence ensures the agreed level of compliance. See OD-CB2039.

4.8.4, 4.8.5	TABLE: Lit	thium coin/button cell batteries mechanical tests		
(The follow	ving mechanical	tests are conducted in the sequ	ence noted.)	
4.8.4.2	TABLE: Str	TABLE: Stress Relief test —		
Part Material Oven Temperature (°C) Cor				
4.8.4.3	TABLE: Bat	tery replacement test	•	

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4.8.4, 4.8.5	TABLE: Li	thium coin/button cell batteries	mechanical tests	N/A
(The followi	ng mechanica	I tests are conducted in the seque	nce noted.)	·
Battery par	t no			_
Battery Inst	tallation/withd	Irawal	Battery Installation/Removal Cycle	Comments
	1			
4.8.4.4 TABLE: Drop test		pp test		—
Impact Area Drop Distance		Drop Distance	Drop No.	Observations
4.8.4.5	TABLE: Imp	pact		_
Impacts p	per surface	Surface tested	Impact energy (Nm)	Comments
4.8.4.6	TABLE: Cr	ush test		_
Test p	osition	Surface tested	Crushing Force (N)	Duration force applied (s)
Supplement	tary information	on:	1	I

4.8.5	TABLE: Lithium coin/button cell batteries mechanical test result					
Test po	osition	Surface tested	Force (N)		ation force plied (s)	
-						
-	-					

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Clause	Requirement + Test	Result - Remark	Verdict

Supplementary information:

5.2	Table:	Classification of	electrical energy	SOURCES				
5.2. Table: Classification of electrical energy sources 5.2.2.2 – Steady State Voltage and Current conditions							Г	
J.Z.Z.Z	- Sieauy Siai	le voltage and Cu	Trent conditions	D .				
No.	Supply	Location (e.g. circuit	Test conditions ¹	1)		rameters		ES Class
INO.	Voltage	designation)	Test conditions	U (Vrms or Vp	ok) (Ap	I ok or Arms)	Hz	ES Class
1	5V d.c. or 48V d.c.	Supplied by do power.	Normal	5 Vdc max or 48 Vdc ma			DC	ES1
		POE	Abnormal					
			Single fault					
5.2.2.3	- Capacitance	e Limits						
	Supply	Location (e.g.				eters		
No.	Voltage	circuit designation)	Test conditions	Capacitanc	acitance, nF Upk (V)		(V)	ES Class
			Normal					
			Abnormal					
			Single fault – SC/OC				-	
Overall	capacity: Lim	nit: ES1=60V; ES2	2=120V.					
5.2.2.4	- Single Pulse	es						
	Supply	Location (e.g.			Param	eters		
No.	Voltage	circuit designation)	Test conditions	Duration (ms)	Upk	(V) I	pk (mA)	ES Class
			Normal			=		
			Abnormal			=		
			Single fault – SC/OC			-		
5.2.2.5	- Repetitive P	ulses						
		Location (e.g.	Parameters					
No.	Voltage	circuit designation)	Test conditions	Off time (ms)	Upk ((V) Ip	ok (mA)	ES Class
			Normal					
			Abnormal					

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Clause Requirement + Test Result - Remark Verdic									
	Single fault – SC/OC								

Test Conditions:

Normal - Full load and no load.

Abnormal - Overload output

Supplementary information: SC=Short Circuit, OC=Open Circuit

5.4.1.4, 6.3.2, 9.0, B.2.6	TABLE: Temperature measi	Р	
	Supply voltage (V):	48 VDC	 _
	Ambient T _{min} (°C):	24.4	 _
	Ambient T _{max} (°C):	25.0	 _
	Tma (°C):	25.0	 _
Maximum r of part/at:	measured temperature T	T (°C)	Allowed T _{max} (°C)
PCB(near i	nput port)	54.1	 130
PCB(near h	neat sink)	63.2	 130
PCB(buttor	n board)	48.3	 130
Inner wire		50.7	 70
Speaker		45.4	 Ref.
Enclosure i	nside(above)	45.9	 80
Enclosure i	nside(below)	54.1	 80
Ambient		45.0	
Accessible	part		
Enclosure of	of adapter	29.8	 60*
Input port		43.6	 60*
Button		27.2	 60*
Screen		31.6	 56*
Enclosure of	outside(above)	26.2	 48*
Enclosure of	outside(below)	33.6	48*
Ambient		25.0	

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Clause	Requirement + Test	Result - Remark	Verdict

Supplementary information: * Temperature limit for TS1 of accessible enclosure according to Table 38. Note 1: The apparatus was submitted and evaluated for maximum manufacturer's recommended ambient (Tma) of 45°C. Note 2: The temperatures were measured under the worse case normal mode defined in clause B.2.1. Allowed Insulation t₁ (°C) $R_1(\Omega)$ t₂ (°C) T (°C) $R_2(\Omega)$ Temperature T of winding: class T_{max} (°C) 5.4.1.10.2 **TABLE: Vicat softening temperature of thermoplastics** N/A Penetration (mm) Object/ Part No./Material Manufacturer/trademark T softening (°C) supplementary information:

5.4.1.10.3 TABLE: Ball pressure test of thermoplastics						
Allowed impression diameter (mm):			≤ 2 mm		_	
Object/Part	Object/Part No./Material Manufacturer/trademark		Test temperature (°C)	Impression dia	meter (mm)	
Supplement	Supplementary information:					

5.4.2.2, 5.4.2.4 TABLE: Minimum Clearances/Creepage distance and 5.4.3								N/A
Clearance (cl) and creepage distance (cr) at/of/between:		Up (V)	U r.m.s. (V)	Frequenc y (Hz)	Required cl (mm)	cl (mm) ²	Required ³ cr (mm)	cr (mm)

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	IEC 62368-1										
Clause Requirement + Test Result - Remark Verdic								Verdict			
Supplementa	Supplementary information: BI: Basic insulation; RI: Reinforced insulation.										

5.4.2.3	TABLE: Minimum Clearances	TABLE: Minimum Clearances distances using required withstand voltage						
	Overvoltage Category (OV):	Overvoltage Category (OV):						
	Pollution Degree:							
Clearance distanced between:		Required withstand voltage	Required cl (mm)	Mea	asured cl (mm)			
See table	5.4.2.2, 5.4.2.4 and 5.4.3 above.							
Supplementary information:								

5.4.2.4	TABLE: Clearances based on electric strength test						
Test voltage	e applied between:	Required cl (mm)	Test voltage (kV) peak/ r.m.s. / d.c.	Breakd Yes /			
Supplementary information: Using procedure 2 to determine the clearance.							

5.4.4.2, 5.4.4.5 c) 5.4.4.9	TABLE: Distance through insulation measurements					N/A
Distance through insulation di at/of:		Peak voltage (V)	Frequency (Hz)	Material	Required DTI (mm)	DTI (mm)
Supplementary information:						

5.4.9	TABLE: Electric strength tests					
Test voltage applied between:		Voltage shape (AC, DC)	0 \ 1 /		eakdown Yes / No	
Supplement	Supplementary information:					

5.5.2.2	TABLE: St	ABLE: Stored discharge on capacitors					
Supply Volt	age (V), Hz	Test Location	Operating Condition (N, S)	Switch position On or off	Measured Voltage (after 2 seconds)	ES Clas	ssification

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		IEC	62368-1				
Clause	Require	Requirement + Test		Result - Remark	Verdict		
Supplementary i	nformation:			·			
5.6.6.2 TAE	BLE: Resistance of	protective condu	ictors and ter	minations	N/A		
Accessible part		Test current (A)	Duration (min)	Voltage drop	Resistance (Ω)		
Supplementary I	nformation:	•	•	·	·		

5.7.2.2, 5.7.4	TABLE: Earthed accessible conductive part			
Supply volta	age:	264Vac	_	
Location		Test conditions specified in 6.1 of IEC 60990 or Fault Condition No in IEC 60990 clause 6.2.2.1 through 6.2.2.8, except for 6.2.2.7	Touch current (mA)	
		1 (e closed, normal and reverse polarity p)		
		2* (netural open (switch n), earth intact and normal polarity, again in reverse polarity (switch p)	1	
		3 (for IT system, each phase conductor faulted to earth, one at a time (switch g)		
		4 (for three-phase, each phase conductor open, one at a time switches I)		

Notes

- [1] Supply voltage is the anticipated maximum Touch Voltage
- [2] Earthed neutral conductor [Voltage differences less than 1% or more]
- [3] Specify method used for measurement as described in IEC 60990 sub-clause 4.3
- [4] IEC60990, sub-clause 6.2.2.7, Fault 7 not applicable.
- [5] (*) IEC60990, sub-clause 6.2.2.2 is not applicable if switch or disconnect device (e.g., appliance coupler) provided.
- a) Not considered IT power system.
- b) Not three phase equipment.
- c) Not IT power system or three phase delta system.
- d) Not three-phase for use on centre-earthed dalta supply system.
- e) Not such parts.

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

6.2.2	Table: Electrical power sources (PS) measurements for classification					
Source	Description	Measurement	Max Power after 3 s	s Max Power after 5 s PS Cla		assification
		Power (W) :	1.9			
USB Normal condition	V _A (V) :	4.72			PS1	
		I _A (A) :	0.45			
	Single fault:	Power (W) :	6.3			
USB	U1102 pin 1-	V _A (V) :	4.95			PS1
	6 s-c	I _A (A) :	2.0			

Supplementary Information: --*Unit shut-down immediately.

6.2.3.1	Table: Determination of Potential Ignition Sources (Arcing PIS) N/A					
	Location	Open circuit voltage After 3 s (Vp)	Measured r.m.s current (Irms)	Calculated value (V _p x I _{rms})	Arcing PIS? Yes / No	
See below	I					
Suppleme	ntary information:	1	1	1		

6.2.3.2	Table: Dete	able: Determination of Potential Ignition Sources (Resistive PIS)				
Circuit Loc	cation (x-y)	Operating Condition (Normal / Describe Single Fault)	Measured wattage or VA During first 30 s (W / VA)	Measured wattage or VA After 30 s (W / VA)	Protective Circuit, Regulator, or PTC Operated? Yes / No (Comment)	Resistive PIS? Yes/No
See l	oelow					

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Clause	Requirement + Test	Result - Remark	Verdict		

Supplementary Information:

All power dissipating components in primary and secondary circuit which are supplied by a source exceeding 15W (since the output rating is higher than 15VA) are considerd as resistive PIS.

A combination of voltmeter, VA and ammeter IA may be used instead of a wattmeter.

If a separate voltmeter and ammeter are used, the product of (VA x IA) is used to determine Resistive PIS classification.

A Resistive PIS: (a) dissipates more than 15 W, measured after 30 s of normal operation, <u>or</u> (b) under single fault conditions has either a power exceeding 100 W measured immediately after the introduction of the fault if electronic circuits, regulators or PTC devices are used, or has an available power exceeding 15 W measured 30 s after introduction of the fault.

* A Resistive PIS is considered to exist in primary circuits and secondary circuits.

8.5.5	TABLE: High Pressure Lamp				
Description		Values	Energy Source C	lassification	
Lamp type	·····:		_		
Manufacture	er:		_		
Cat no	······································		_		
Pressure (co	old) (MPa):		MS_		
Pressure (o	perating) (MPa):		MS_		
Operating ti	me (minutes):		_		
Explosion m	nethod:		_		
Max particle	e length escaping enclosure (mm) .:		MS_		
Max particle length beyond 1 m (mm):		MS_			
Overall resu	ılt:				
Supplement	ary information:				

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Clause	Requirement + Test	Result - Remark	Verdict	

B.2.5	TABLE: Inpu	ABLE: Input test								
U (V)	I (A)	I rated (A)	P (W)	P rated (W)	Fuse No	I fuse (A)	Condition	on/status		
5 Vdc	1.2	2	6.0				Maximum load. Supply by power ada	external		
48 Vdc	0.20		9.6				Maximum load. Supply by (POE) cor switch.	Ethernet		

Supplementary information: The maximum measured current under rated voltage did not exceed 110% of the rated current.



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Clause	Requirement + Test	Result - Remark	Verdict					

B.3 & B.4	TABLE: A	onormal	operating	and fa	ult conditi	on tests			Р
Ambient tem	perature (°0	C)				:	25.3°C, if	not specified	_
Power source	e for EUT: I	Manufact			_				
Component No. Abnormal Supply Test Fuse Fuse Condition (No. (No. (No. (No. (No. (No. (No. (No.								Observa	tion
D1501 Pin 2-4	SC	48 Vdc	10 min			Type K		Unit shut down, damaged, No ha	
U1501 Pin 5-16	SC	48 Vdc	10 min			Type K		Unit shut down, damaged, No haz	
Speaker	SC	48Vdc	1h01mi n			Type K		The equipment w normally,no dama no hazards.	•
USB	SC	48 Vdc	10 min			Type K		Unit working norn	

Supplementary information:

Test table is provided to record abnormal and fault conditions for all applicable energy sources including Thermal burn injury. Column "Abnormal/Fault." Specify if test condition by indicating "Abnormal" then the condition for a Clause B.3 test or "Single Fault" then the condition for Clause B.4.

- 1) SC: Short-circuited; OC: Open-circuit; OL: Overloaded.
- 2) The test result shown all safeguards remained effective and didn't lead to a single fault condition during abnormal operating condition; In addition all safeguards complied with applicable requirements in this standard after restoration of normal operating conditions.
- 3) The test result showed no Class 1 or 2 energy source become Class 3 level during and after single fault condition.

Annex M	TAE	BLE: Batte	eries							N/A
The tests of	f Ann	ex M are a	applicable o	only when app	ropriate ba	attery data	is not ava	ilable		
Is it possible	Is it possible to install the battery in a reverse polarity position?:									
		Non-re	chargeable	batteries		R	techargeal	ole batterie	es	
		Disch	arging	Un-	Chai	rging	Disch	arging	Reverse	d charging
		Meas. current	Manuf. Specs.	intentional charging	Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.
Max. currenduring norm										
Max. currenduring fault condition										
						I			1	1

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Clause	Requirement + Test	Result - Remark	Verdict

Annex M	TA	BLE: Batte	eries							N/A
The tests of	f Anı	nex M are a	applicable o	only when app	ropriate b	attery data	is not ava	ilable		
Is it possible	Is it possible to install the battery in a reverse polarity position?:									
	Non-rechargeable batteries Rechargeable batteries									
		Discha	arging	Un-	Cha	rging	Disch	arging	Reverse	d charging
		Meas. current	Manuf. Specs.	intentional charging	Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.
Test results	s:									Verdict
- Chemical	leak	s								
- Explosion	of th	ne battery								
- Emission	- Emission of flame or expulsion of molten metal									
- Electric strength tests of equipment after completion of tests										
Supplementary information:										

	ble: Add tteries	itional safe	eguards for equ	ards for equipment containing secondary lithium N/A						
Battery/C	ell	Test conditions			Measurements	5	OI	oservation		
No.				U	I (A)	Temp (C)				
		Normal								
Abnorm			Abnormal							
S		Single fault –SC/OC								
		Normal								
		Abnormal								
		Single fau	t – SC/OC							
Supplementary	Information	on:		•						
Battery identification Charging at T _{lowest} Observa		ition	Charging at T _{highest} (°C)	Obs	ervat	ion				

Supplementary I	Supplementary Information:									
Annex Q.1	TABLE: Circuits	ABLE: Circuits intended for interconnection with building wiring (LPS) N/A								
Note: Measured UOC (V) with all load circuits disconnected:										
Output Circuit	Components	Components $U_{oc}(V)$ $I_{sc}(A)$ $S(VA)$								
	Meas. Limit Meas. Limit									

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Clause		Requirement + Test Result - Remark Verdict							Verdict		
					-						
					-						
Supplementary Information: *Unit shut-down immediately.											

T.2, T.3, T.4, T.5	TABI	E: Steady force te	: Steady force test							
Part/Location		Material	Thickness (mm)	Force (N)	Test Duration (sec)	Observation				
Internal components				10	5	No damage, no hazards.				
Top enclosure				250	5	No damage, no hazards.				
Side enclos	ure			250	5	No damage, no hazards.				
Bottom enclosure				250	5	No damage, no hazards.				
Supplementary information:										

T.6, T.9	TAB	LE: Impact tests				Р
Part/Locati	ion	Material	Thickness (mm)	Vertical distance (mm)	Observation	
Horizontal surface		Plastic		1300	No damage, no haza	rds.
The vertical surface		Plastic		1300	No damage, no haza	rds.
Supplementa	ary info	ormation:				

T.7	TAB	LE: Drop tests				Р		
Part/Locat	ion	Material	Thickness (mm)	Drop Height (mm)	Observation			
Top enclos	ure	Plastic		750	No damage, no hazar	ds.		
Side enclos	sure	Plastic		750	No damage, no hazar	ds.		
Bottom enclosure		Plastic		750	No damage, no hazar	ds.		
Supplement	Supplementary information:							

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Clause	Requirement + Test	Result - Remark	Verdict

T.8 TAE	ΓABLE: Stress relief test					Р
Part/Location	Material	Thickness (mm)	Oven Temperature (°C)	Duration (h)	Observ	ation
Enclosure	Plastic		70	7	No damage,	no hazard
Supplementary information:						



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IEC62368_1B - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

ATTACHMENT TO TEST REPORT

IEC 62368-1

EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES

(Audio/video, information and communication technology equipment - Part 1: Safety requirements)

Differences according to EN 62368-1:2014+A11:2017

Attachment Form No. EU_GD_IEC62368_1B_II

Attachment Originator.....: Nemko AS

Master Attachment.....: Date 2017-09-22

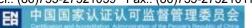
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	CENELEC C	OMMON MO	DIFICATION	IS (EN)			
	Clauses, subclauses, notes, tables, figures and annexes which are additional to those in IEC 62368-1:2014 are prefixed "Z".						
CONTENTS		wing annexes: ormative) ormative) iformative)	Norma with th Specia A-devi	ative references eir correspondin al national condit	ig European բ ions	oublications	Р
		e "country" note the following lis		rence document	t (IEC 62368-	1:2014)	Р
	0.2.1	Note	1	Note 3	4.1.15	Note	
	4.7.3	Note 1 and 2	5.2.2.2	Note	5.4.2.3.2.2 Table 13	Note c	
	5.4.2.3.2.4	Note 1 and 3	5.4.2.5	Note 2	5.4.5.1	Note	
	5.5.2.1	Note	5.5.6	Note	5.6.4.2.1	Note 2 and 3	
	5.7.5	Note	5.7.6.1	Note 1 and 2	10.2.1 Table 39	Note 2, 3 and 4	
	10.5.3	Note 2	10.6.2.1	Note 3	F.3.3.6	Note 3	
	For special r	ational condition	ons, see An	nex ZB.			Р

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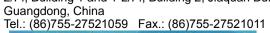
	IEC62368_1B - ATTACHMENT				
Clause	Requirement + Test	Result - Remark	Verdict		
	Larry on the state of the state		Р		
1	Add the following note: NOTE Z1 The use of certain substances in electrical and electronic equipment is restricted within the EU: see Directive 2011/65/EU.				
4.Z1	Add the following new subclause after 4.9:		N/A		
	To protect against excessive current, short-circuits and earth faults in circuits connected to an a.c. mains , protective devices shall be included either as integral parts of the equipment or as parts of the building installation, subject to the following, a), b) and c):	ne			
	a) except as detailed in b) and c), protective devices necessary to comply with the requiremen of B.3.1 and B.4 shall be included as parts of the equipment;	ts			
	b) for components in series with the mains input to the equipment such as the supply cord, appliance coupler, r.f.i. filter and switch, short-circuit and ear fault protection may be provided by protective devices in the building installation;	•			
	c) it is permitted for pluggable equipment type E or permanently connected equipment , to rely of dedicated overcurrent and short-circuit protection the building installation, provided that the means of protection, e.g. fuses or circuit breakers, is fully specified in the installation instructions.	n in			
	If reliance is placed on protection in the building installation, the installation instructions shall so state, except that for pluggable equipment type the building installation shall be regarded as providing protection in accordance with the rating the wall socket outlet.				
5.4.2.3.2.4	Add the following to the end of this subclause:		N/A		
	The requirement for interconnection with external circuit is in addition given in EN 50491-3:2009.	1			
10.2.1	Add the following to c) and d) in table 39: For additional requirements, see 10.5.1.		N/A		



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	IEC62368_1B - ATTACHME	NT	
Clause	Requirement + Test	Result - Remark	Verdict
10.5.1	Add the following after the first paragraph: For RS 1 compliance is checked by measurement under the following conditions: In addition to the normal operating conditions, all controls adjustable from the outside by hand, by any object such as a tool or a coin, and those		N/A
	internal adjustments or presets which are not locked in a reliable manner, are adjusted so as to give maximum radiation whilst maintaining an intelligible picture for 1 h, at the end of which the measurement is made.		
	NOTE Z1 Soldered joints and paint lockings are examples of adequate locking. The dose-rate is determined by means of a radiation monitor with an effective area of 10 cm², at any point 10 cm from the outer surface of the apparatus.		
	Moreover, the measurement shall be made under fault conditions causing an increase of the high-voltage, provided an intelligible picture is maintained for 1 h, at the end of which the measurement is made.		
	For RS1, the dose-rate shall not exceed 1 μSv/h taking account of the background level. NOTE Z2 These values appear in Directive 96/29/Euratom of 13 May 1996.		
10.6.1	Add the following paragraph to the end of the subclause: EN 71-1:2011, 4.20 and the related tests methods and measurement distances apply.		N/A
10.Z1	Add the following new subclause after 10.6.5. 10.Z1 Non-ionizing radiation from radio frequencies in the range 0 to 300 GHz The amount of non-ionizing radiation is regulated by European Council Recommendation 1999/519/EC of 12 July 1999 on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz). For intentional radiators, ICNIRP guidelines should be taken into account for Limiting Exposure to Time-Varying Electric, Magnetic, and Electromagnetic Fields (up to 300 GHz). For handheld and body-mounted devices, attention is drawn		N/A
G.7.1	to EN 50360 and EN 50566 Add the following note: NOTE Z1 The harmonized code designations corresponding to the IEC cord types are given in Annex ZD.		N/A

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	IEC62368_1B - ATTACHMENT				
Clause	Requi	rement + Test	Result - Remark	Verdict	
Bibliography	Add the following Add the following IEC 60130-9 IEC 60269-2 IEC 60309-1 IEC 60364 IEC 60601-2-4 IEC 60664-5 IEC 61032:1997 IEC 61558-2-1 IEC 61558-2-4 IEC 61558-2-6 IEC 61643-1 IEC 61643-311 IEC 61643-321	notes for the standards indica NOTE Harmonized as EN 6 NOTE Harmonized as HD 6 NOTE Harmonized as EN 6	0130-9. 0269-2. 0309-1. ed in HD 384/HD 60364 series. 0601-2-4. 0664-5. 1032:1998 (not modified). 1558-1. 1558-2-1. 1558-2-4. 1558-2-6. 1643-1. 1643-21.	N/A	
ZB	IEC 61643-331	NOTE Harmonized as EN 6		N/A	
4.1.15	Denmark, Finlan To the end of the Class I pluggable connection to othe safety relies on co surge suppressors network terminals marking stating th connected to an e The marking text i as follows: In Denmark: "App stikkontakt med jo stikproppens jord. In Finland: "Laite varustettuun pisto In Norway: "Appa stikkontakt"	d, Norway and Sweden subclause the following is add a equipment type A intended or equipment or a network shap onnection to reliable earthing of a are connected between the and accessible parts, have a at the equipment shall be arthed mains socket-outlet. In the applicable countries shap or a state of the arthed som giver forbindelse till on liitettävä suojakoskettimilla	ed: for II, if r if	N/A	



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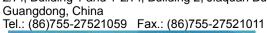
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IEC62368_1B - ATTACHMENT					
Clause	Requirement + Test Result - Remark				
	T				
4.7.3	United Kingdom		N/A		
	To the end of the subclause the following is added	l:			
	The torque test is performed using a socket-outlet complying with BS 1363, and the plug part shall be assessed to the relevant clauses of BS 1363. Also see Annex G.4.2 of this annex	e			
5.2.2.2	Denmark		N/A		
	After the 2nd paragraph add the following:				
	A warning (marking safeguard) for high touch current is required if the touch current exceeds the limits of 3,5 mA a.c. or 10 mA d.c.				



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	IEC62368_1B - ATTACH	MENT	
Clause	Requirement + Test	Result - Remark	Verdict
5.4.11.1 and Annex G	Requirement + Test	Result - Remark d: ng ner f v V.	N/A N/A
	 an impulse test of 2,5 kV defined in 5.4.11; the additional testing shall be performed on all the test specimens as described in EN 60384-14; the impulse test of 2,5 kV is to be performed before 	ne	
	the endurance test in EN 60384-14, in the sequence of tests as described in EN 60384-14.		
5.5.2.1	Norway		N/A
	After the 3rd paragraph the following is added:		
	Due to the IT power system used, capacitors are required to be rated for the applicable line-to-line voltage (230 V).		

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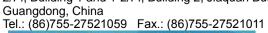
	IEC62368_1B - ATTACHME	ENT	
Clause	Requirement + Test	Result - Remark	Verdict
5.5.6	Finland, Norway and Sweden		N/A
5.5.0	To the end of the subclause the following is added:		IN/A
	Resistors used as basic safeguard or bridging basic insulation in class I pluggable equipment type A shall comply with G.10.1 and the test of G.10.2.		
5.6.1	Denmark		N/A
	Add to the end of the subclause		
	Due to many existing installations where the socket- outlets can be protected with fuses with higher rating than the rating of the socket-outlets the protection for pluggable equipment type A shall be an integral part of the equipment. Justification:		
	In Denmark an existing 13 A socket outlet can be protected by a 20 A fuse.		
5.6.4.2.1	Ireland and United Kingdom		N/A
	After the indent for pluggable equipment type A , the following is added:		
	 the protective current rating is taken to be 13 A, this being the largest rating of fuse used in the mains plug. 		
5.6.5.1	To the second paragraph the following is added:		N/A
	The range of conductor sizes of flexible cords to be accepted by terminals for equipment with a rated current over 10 A and up to and including 13 A is:		
	1,25 mm ² to 1,5 mm ² in cross-sectional area.		
5.7.5	Denmark		N/A
	To the end of the subclause the following is added:		
	The installation instruction shall be affixed to the equipment if the protective conductor current exceeds the limits of 3,5 mA a.c. or 10 mA d.c.		



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Clause	Requirement + Test	Result - Remark	Verdict	
5.7.6.1	Norway and Sweden To the end of the subclause the following is added. The screen of the television distribution system is normally not earthed at the entrance of the building and there is normally no equipotential bonding system within the building. Therefore the protective earthing of the building installation needs to be isolated from the screen of a cable distribution system. It is however accepted to provide the insulation external to the equipment by an adapter or an interconnection cable with galvanic isolator, which may be provided by a retailer, for example. The user manual shall then have the following or similar information in Norwegian and Swedish language respectively, depending on in what country the equipment is intended to be used in: "Apparatus connected to the protective earthing of the building installation through the mains connection or through other apparatus with a connection to protective earthing—and to a television distribution system using coaxial cable, may in some circumstances create a fire hazard. Connection to a television distribution system therefore has to be provided through a device providing electrical isolation below a certain frequency range (galvanic isolator, see EN 60728 11)" NOTE In Norway, due to regulation for CATV-installations, an Sweden, a galvanic isolator shall provide electrical insulation below 5 MHz. The insulation shall withstand a dielectric streng of 1,5 kV r.m.s., 50 Hz or 60 Hz, for 1 min. Translation to Norwegian (the Swedish text will a be accepted in Norway): "Apparater som er koplet til beskyttelsesjord via nettplugg og/eller via annet jordtilkoplet utstyr—of this tilkoplet et koaksialbasert kabel-TV nett installeres en galvanisk isolator mellom apparate og kabel-TV nettet." Translation to Swedish: "Apparater som är kopplad till skyddsjord via jord vägguttag och/eller via annan utrustning och samtidigt är kopplad till kabel-TV nät kan i vissa f medföra risk för brand. För att undvika detta skall vid anslutning av apparaten till kabel-TV nät g	d: ng ye fi din gth so g g tal lal lal	N/A N/A	

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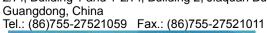




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Clause	Requirement + Test	Result - Remark	Verdict
5.7.6.2	Denmark To the end of the subclause the following is added to the warning (marking safeguard) for high touch current is required if the touch current or the protective current exceed the limits of 3,5 mA.	ed:	N/A
B.3.1 and B.	Ireland and United Kingdom The following is applicable: To protect against excessive currents and short-circuits in the primary circuit of direct plug-in equipment, tests according to Annexes B.3.1 ar B.4 shall be conducted using an external miniatu circuit breaker complying with EN 60898-1, Type rated 32A. If the equipment does not pass these tests, suitable protective devices shall be include as an integral part of the direct plug-in equipment until the requirements of Annexes B.3.1 and B.4 met	re B, d ent,	N/A
G.4.2	Denmark To the end of the subclause the following is added Supply cords of single phase appliances having a rated current not exceeding 13 A shall be provided with a plug according to DS 60884-2-D1:2011. CLASS I EQUIPMENT provided with socket-outlets will earth contacts or which are intended to be used in locations where protection against indirect contact is required according to the wiring rules shall be provided with a plug in accordance with standard sheet DK 2-1a DK 2-5a. If a single-phase equipment having a RATED CURRE exceeding 13 A or if a poly-phase equipment is provid with a supply cord with a plug, this plug shall be in accordance with the standard sheets DK 6-1a in DS 60884-2-D1 or EN 60309-2. Mains socket outlets intended for providing power to Class II apparatus with a rated current of 2,5 A shall be in accordance DS 60884-2-D1:2011 standard sheet DKA 1-4a. Other current rating socket outlets shall be in compliance with Standard Sheet DKA 1-3a or Dr 1-1c. Mains socket-outlets with earth shall be in compliance with DS 60884-2-D1:2011 Standard Sheet DK 1-3a, DK 1-1c, DK1-1d, DK 1-5a or Dr 7a Justification: Heavy Current Regulations, Section 6c	ed ed th da or NT ed CA	N/A

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Clause	Requirement + Test	Result - Remark	Verdict		
G.4.2	United Kingdom		N/A		
	To the end of the subclause the following is adde	d:			
	The plug part of direct plug-in equipment shall be assessed to BS 1363: Part 1, 12.1, 12.2, 12.3, 12 12.11, 12.12, 12.13, 12.16, and 12.17, except that the test of 12.17 is performed at not less than 125 °C. Where the metal earth pin is replaced by Insulated Shutter Opening Device (ISOD), the requirements of clauses 22.2 and 23 also apply.	2.9, t			
G.7.1	United Kingdom		N/A		
	To the first paragraph the following is added:				
	Equipment which is fitted with a flexible cable or cord and is designed to be connected to a mains socket conforming to BS 1363 by means of that flexible cable or cord shall be fitted with a 'standar plug' in accordance with the Plugs and Sockets e (Safety) Regulations 1994, Statutory Instrument 1994 No. 1768, unless exempted by those regulations.	tc			
	NOTE "Standard plug" is defined in SI 1768:1994 and essentimeans an approved plug conforming to BS 1363 or an approven conversion plug.	ally ed			
G.7.1	Ireland		N/A		
	To the first paragraph the following is added:				
	Apparatus which is fitted with a flexible cable or cord shall be provided with a plug in accordance with Statutory Instrument 525: 1997, "13 A Plugs and Conversion Adapters for Domestic Use Regulations: 1997. S.I. 525 provides for the recognition of a standard of another Member Stat which is equivalent to the relevant Irish Standard	е			



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IEC62368_1B - ATTACHMENT					
Clause	Requirement + Test	Result - Remark	Verdict		
G.7.2	Ireland and United Kingdom		N/A		
	To the first paragraph the following is added:				
	A power supply cord with a conductor of 1,25 m is allowed for equipment which is rated over 10 and up to and including 13 A.				
ZC	ANNEX ZC, NATIONAL DEVIATIONS (EN)		N/A		
10.5.2	Germany		N/A		
	The following requirement applies:				
	For the operation of any cathode ray tube intended for the display of visual images operating at an acceleration voltage exceeding 40 kV, authorization required, or application of type approval (Bauartzulassung) and marking.				
	Justification: German ministerial decree against ionizing radia (Röntgenverordnung), in force since 2002-07-07 implementing the European Directive 96/29/EURATOM.				
	NOTE Contact address: Physikalisch-Technische Bundesanstalt, Bundesallee 100, D-38116 Braunschweig, Tel.: Int +49-531-592-6320, Internet: http://www.ptb.de				



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Attachment 2: Photo Documentation

Product: IP Phone Type Designation: XT-40G



Figure 1 Overall view



Figure 2. Overall view

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Product: IP Phone Type Designation: XT-40G



Figure 3. Overall view



Figure 4. Terminal view

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Attachment 2: Photo Documentation

Product: IP Phone Type Designation: XT-40G



Figure 5. Terminal view



Figure 6. Overall view

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Attachment 2: Photo Documentation

Product: IP Phone Type Designation: XT-40G



Figure 7. Overall view

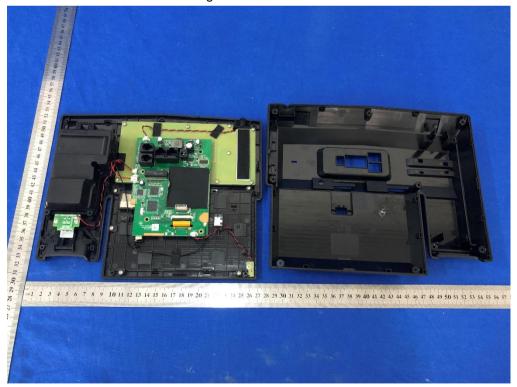


Figure 8. Internal view

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Attachment 2: Photo Documentation

Product: IP Phone Type Designation: XT-40G

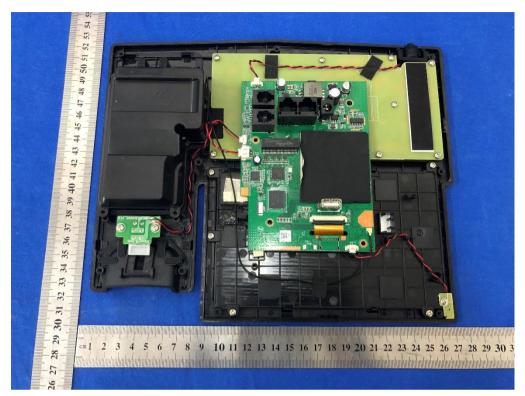


Figure 9. Internal view

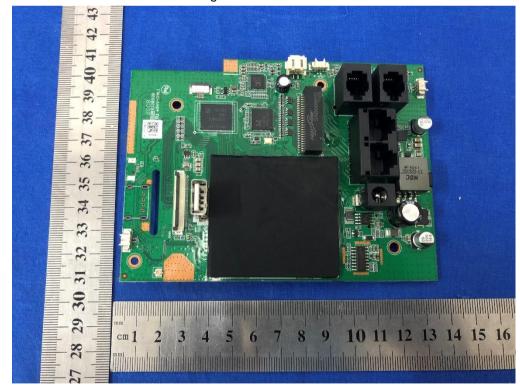


Figure 10. Main board view

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Attachment 2: Photo Documentation

Product: IP Phone Type Designation: XT-40G



Figure 11. Main board view

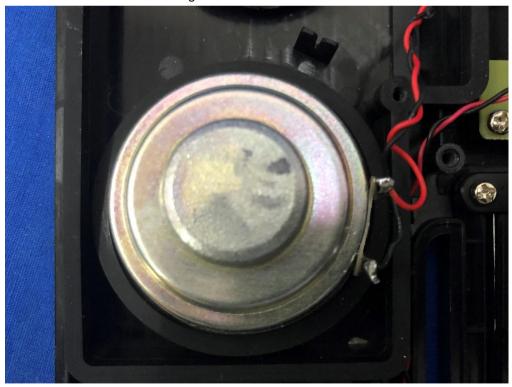


Figure 12. View of speaker

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<u>Product:</u> IP Phone <u>Type Designation:</u> XT-40G



Figure 13. View of adapter



Figure 14. View of adapter

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<u>Product:</u> IP Phone <u>Type Designation:</u> XT-40G



Figure 15. View of adapter



Figure 16. View of adapter

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