

TEST REPORT IEC 62368-1

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

Report Number...... GTS2023120038S01

Date of issue.....: 2023-12-21

Total number of pages.....: 79

Name of Testing Laboratory

preparing the Report...... : Global United Technology Services Co., Ltd.

Applicant's name...... Arashi Vision Inc.

Address...... 11th Floor, Building 2, Jinlitong Financial Center, Bao'an District,

Shenzhen, Guangdong, China.

Test specification:

Standard.....: EN IEC 62368-1:2020+A11:2020;

Test procedure.....: Test report

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

TRF template used.....: IECEE OD-2020-F1:2020, Ed.1.4

Test Report Form No.....: IEC62368_1E

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

Master TRF.....: Dated 2022-04-14

General disclaimer:

The test results presented in this report relate only to the object tested.

This report shall not be reproduced, except in full, without the written approval of Global United Technology Services Co., Ltd. The authenticity of this Test Report and its contents can be verified by contacting the Global United Technology Services Co., Ltd., responsible for this Test Report.

Test item description..... Insta360 X4

Trade Mark(s) : Insta360

Manufacturer....: Same as applicant

Model/Type reference....: CINSABMA, CINSABMY (where Y would be any English letters

or blank, different packing method, model designations on the

marking plate for different commercial purpose)

Ratings...... Input: 5Vdc --- 3A,9Vdc

John Wen Project Engineer

John Wen

Robinson Luo Technical Director Safety Laboratory



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

Attachment 1: EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES

Attachment 2: Photo-documentation

Summary of testing:

Tests performed (name of test and test clause):

The submitted samples were tested and found to comply with the requirements of:

- EN IEC 62368-1:2020+A11:2020;

Testing location:

Global United Technology Services Co., Ltd.

No. 123-128, Tower A, Jinyuan Business Building, No. 2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China

Summary of compliance with National Differences (List of countries addressed):

List of countries addressed: See the attachment No. 1 of National and Group Differences for details.

☐ The product fulfils the requirements of EN IEC 62368-1:2020+A11:2020.

Statement concerning the uncertainty of the measurement systems used for the tests

☐ Internal procedure used for type testing through which traceability of the measuring uncertainty has been established:

Procedure number, issue date and title:

Calculations leading to the reported values are on file with the NCB and testing laboratory that conducted the testing.

Information on uncertainty of measurement:

The uncertainties of measurement are calculated by the laboratory based on application of criteria given by OD-5014 for test equipment and application of test methods, decision sheets and operational procedures of IECEE.

IEC Guide 115 provides guidance on the application of measurement uncertainty principles and applying the decision rule when reporting test results within IECEE scheme, noting that the reporting of the measurement uncertainty for measurements is not necessary unless required by the test standard or customer.

Calculations leading to the reported values are on file with the NCB and testing laboratory that conducted the testing.



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Copy of marking plate:

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



Remark:

- 1. The height dimension of CE mark should not be less than 5mm, the height dimension of WEEE symbol should not be less than 7mm.
- 2. According to the EU directives which have been aligned with EU NLF (new legislative framework), both of manufacturer and importer's name and address shall be affixed on the product or, where that is not possible, on its packaging or in a document accompanying the product before the product is placed on the EU market.
- 3. The marking plates of the other models are of the same.

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Test item particulars:	
Product group:	
Classification of use by:	
	☐ Instructed person
	☐ Skilled person ☐ DC mains
Supply connection:	☐ AC mains ☐ DC mains ☐ DC mains
	⊠ ES1 □ ES2 □ ES3
Supply tolerance:	☐ +10%/-10%
	+20%/-15%
	☐ + %/- %
Supply connection – type:	☑ None☐ pluggable equipment type A -
ouppiy connection – type	non-detachable supply cord
	☐ appliance coupler
	☐ direct plug-in
	pluggable equipment type B -
	☐ non-detachable supply cord☐ appliance coupler
	permanent connection
	☐ mating connector other: Not directly connected to
	the mains
Considered current rating of protective device:	☐ 16 A Location: ☐ building ☐ equipment
	N/A (Not directly connected to mains)
Equipment mobility::	☐ movable ☐ hand-held ☐ transportable
	☐ direct plug-in ☐ stationary ☐ for building-in
	☐ wall/ceiling-mounted ☐ SRME/rack-mounted
	other:
Overvoltage category (OVC):	☐ OVC I ☐ OVC II ☐ OVC III ☐ OVC IV ☐ other:
Class of equipment:	☐ Class I ☐ Class II ☐ Class III
	□ Not classified □
Special installation location:	
	outdoor location
Pollution degree (PD)	□ PD 1 □ PD 2 □ PD 3
Manufacturer's specified T _{ma} :	40 °C Outdoor: minimum °C
IP protection class:	☐ IP
Power systems:	☐ TN ☐ TT ☐ IT - V L-L
Altitude during operation (m):	☐ not AC mains ☐ 2000 m or less ☐ m
The state of the s	
Altitude of test laboratory (m):	
Mass of equipment (kg):	U.ZUOKY



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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:	2023-12-05
Date (s) of performance of tests	2023-12-05 to 2023-12-17
4	
General remarks:	

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

"(See appended table)" refers to a table appended to the report.

Throughout this report a \square comma $l \boxtimes point$ is used as the decimal separator.

Name and address of factory (ies)...... Same as applicant

General product information and other remarks:

Product Description:

- 1. The equipment is a Camera powered by one internal rechargeable Li-ion battery and charged by external power supply.
- 2. The external DC source was considered as ES1/PS2.
- 3. The maximum operating temperature is 40°C.

Model Differences:

All models are identical except for model No. After comparison, tests carried out on model CINSABMA were considered representative.

Additional application considerations – (Considerations used to test a component or sub-assembly) –

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OVERVIEW OF ENERGY SOURCES AND SAFEGUARDS Possible Hazard Clause Electrically-caused injury Safeguards Class and Energy Source **Body Part** (e.g. ES3: Primary circuit) (e.g. Ordinary) S R В N/A ES1: All circuits Ordinary N/A N/A N/A Ordinary N/A ES1: Battery N/A Electrically-caused fire Safeguards Class and Energy Source Material part (e.g. PS2: 100 Watt circuit) (e.g. Printed board) 1st S 2nd S В PS2: All circuits All combustible materials No ignition Control fire N/A around all circuit within and spread (min. equipment attainable V-1 PCB high used), temperature approved internal wire value. used. Control fire PS2: Internal battery All combustible materials No ignition N/A around all circuit within and spread (min. equipment attainable V-1 PCB high used). temperature approved value. internal wire used. V-0 enclosure Injury caused by hazardous substances Safeguards Class and Energy Source **Body Part** (e.g. Ozone) (e.g., Skilled) S В R **Battery** Electrolyte N/A N/A Ordinary provide suitable casing material 8 Mechanically-caused injury Safeguards Class and Energy Source **Body Part** (e.g. MS3: Plastic fan blades) (e.g. Ordinary) В S R MS1: Equipment mass N/A N/A N/A Ordinary MS1: Sharp edges and corners N/A N/A N/A Ordinary Thermal burn Safeguards Class and Energy Source **Body Part** (e.g. TS1: Keyboard caps) (e.g., Ordinary) S В R N/A TS1: Accessible parts N/A N/A Ordinary 10 Radiation



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	S C C C C C C C C C C C C C C C C C C C	18 18 018 018 18 1	The Care Care Care Care Care Care Care Car	Grand
Class and Energy Source	Body Part		Safeguards	
(e.g. RS1: PMP sound output)	(e.g., Ordinary)	В	S	R
RS1: LED indicator lights	Ordinary	N/A	N/A	N/A
Supplementary Information:				
"B" – Basic Safeguard; "S" – Supplementary Safeguard; "R" – Reinforced Safeguard				



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ENERGY SOURCE DIAGRAM

Optional. Manufacturers are to provide the energy sources diagram identify declared energy sources and identifying the demarcations are between power sources. Recommend diagram be provided included in power supply and multipart systems.

Insert diagram below. Example diagram designs are; Block diagrams; image(s) with layered data; mechanical drawings

 $oxed{oxed}$ ES $oxed{oxed}$ PS $oxed{oxed}$ MS $oxed{oxed}$ TS $oxed{oxed}$ RS

Remark: Refer to ENERGY SOURCE INDENTIFICATION AND CLASSIFICATION TABLE for DETAIL.



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Clause	Requirement + Test	Result - Remark	Verdict
(1) (1) (1) (1) (1) (1)		the state of the s	618 618 618 618 618 618 618 618 618 618
4	GENERAL REQUIREMENTS		P 1 P 1 P 1 P 1 P 1 P 1 P 1 P 1 P 1 P 1
4.1.1	Acceptance of materials, components and subassemblies	See appended table 4.1.2.	18 018 178 018 018 18 018 018 018 018 18 018 018 018 018
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.	
4.1.3	Equipment design and construction	No accessible part which could cause injury	
4.1.4	Specified ambient temperature for outdoor use (°C)		N/A
4.1.5	Constructions and components not specifically covered		N/A
4.1.8	Liquids and liquid filled components (LFC)	(See G.15)	N/A
4.1.15	Markings and instructions	(See Annex F)	P
4.4.3	Safeguard robustness		13 C13 C13 C13 C13 C13 C13 C13 C13 C13 C
4.4.3.1	General		ors
4.4.3.2	Steady force tests	(See Annex T.4)	ors ors P or to ors
4.4.3.3	Drop tests	(See Annex T.7)	ors ors ors
4.4.3.4	Impact tests		N/A
4.4.3.5	Internal accessible safeguard tests		N/A
4.4.3.6	Glass impact tests	(See Clause T.9, Annex U)	N/A
4.4.3.7	Glass fixation tests		N/A
	Glass impact test (1J)		N/A
18 CL8 CL8 CL8 CL8 CL8 CL8 CL8 CL8 CL8 CL	Push/pull test (10 N)		N/A
4.4.3.8	Thermoplastic material tests	(See Annex T.8)	
4.4.3.9	Air comprising a safeguard	Only ES1 exist within the equipment, no safeguards required	N/A
4.4.3.10	Accessibility, glass, safeguard effectiveness	All safeguards remain effective.	
4.4.4	Displacement of a safeguard by an insulating liquid		N/A
4.4.5	Safety interlocks	(See Annex K)	N/A
4.5	Explosion		
4.5.1	General		On OP. 75 OF.
4.5.2	No explosion during normal/abnormal operating	(See Annex M for batteries)	



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CLR	IEC 62368-1		ell
Clause	Requirement + Test	Result - Remark	Verdict
ors ors ors ors	condition		old
	No harm by explosion during single fault conditions	(See Clause B.2, B.3)	075 775 075 075 075 075
4.6	Fixing of conductors	(000 010000 01.2, 01.0)	N/A
s case case case case case case case cas	Fix conductors not to defeat a safeguard		N/A
0.12 0.13 0.13 0.13 0.13 0.13 0.13 0.13 0.13	Compliance is checked by test:	(See Clause T.2)	N/A
4.7	Equipment for direct insertion into mains socket	18 18 18 18 18 18 18 18 18 18 18 18 18 1	N/A
4.7.2	Mains plug part complies with relevant standard:		N/A
4.7.3	Torque (Nm):		N/A
4.8	Equipment containing coin/button cell batteries		N/A
4.8.1	General	No lithium coin/button batteries are used.	N/A
4.8.2	Instructional safeguard:		N/A
4.8.3	Battery compartment door/cover construction		N/A
CAS CAS CAS CAS CAS	Open torque test		N/A
4.8.4.2	Stress relief test		N/A
4.8.4.3	Battery replacement test		N/A
4.8.4.4	Drop test		N/A
4.8.4.5	Impact test		N/A
4.8.4.6	Crush test		N/A
4.8.5	Compliance		N/A
Le out out out out out out	30N force test with test probe		N/A
28 020 028 028 028 028 028 028 028 028 0	20N force test with test hook		N/A
4.9	Likelihood of fire or shock due to entry of condu	ctive object	N/A
4.10	Component requirements		N/A
4.10.1	Disconnect Device	(See Annex L)	N/A
4.10.2	Switches and relays	(See Annex G)	N/A

5	ELECTRICALLY-CAUSED INJURY		P.
5.2	Classification and limits of electrical energy sou	rces	P
5.2.2	ES1, ES2 and ES3 limits	ES1, ES2 and ES3 limits See below.	
5.2.2.2	Steady-state voltage and current limits:	(See appended table 5.2)	3 en en P en en
5.2.2.3	Capacitance limits	No such capacitance used.	N/A
5.2.2.4	Single pulse limits:	No such single pulse generated.	N/A
5.2.2.5	Limits for repetitive pulses:	No such repetitive pulse generated.	N/A



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IEC 62368-1 Result - Remark Clause Requirement + Test Verdict 5.2.2.6 Ringing signals (See Annex H) N/A 5.2.2.7 N/A Audio signals 5.3 N/A Protection against electrical energy sources 5.3.1 General Requirements for accessible parts to N/A ordinary, instructed and skilled persons Accessible ES1/ES2 derived from ES2/ES3 circuits N/A 5.3.1 a) 5.3.1 b) Skilled persons not unintentional contact ES3 bare N/A conductors 5.3.2.1 Accessibility to electrical energy sources and N/A safeguards Accessibility to outdoor equipment bare parts N/A 5.3.2.2 Contact requirements N/A Test with test probe from Annex V 5.3.2.2 a) Air gap – electric strength test potential (V).....: (See appended table 5.4.9) N/A 5.3.2.2 b) N/A Air gap – distance (mm): 5.3.2.3 Compliance N/A 5.3.2.4 N/A Terminals for connecting stripped wire 5.4 Insulation materials and requirements N/A 5.4.1.2 Properties of insulating material All circuits of the equipment N/A are classified as ES1. N/A 5.4.1.3 Material is non-hygroscopic 5.4.1.4 Maximum operating temperature for insulating No electrical insulation system N/A materials....: (EIS) used. See appended table 5.4.1.4. 5.4.1.5 Pollution degrees :: Pollution degree 2 considered N/A 5.4.1.5.2 Test for pollution degree 1 environment and for an Pollution degree 2 is applied. N/A insulating compound 5.4.1.5.3 Thermal cycling test N/A 5.4.1.6 Insulation in transformers with varying dimensions N/A 5.4.1.7 Insulation in circuits generating starting pulses N/A 5.4.1.8 Determination of working voltage....: All circuits of the equipment N/A are classified as ES1. 5.4.1.9 Insulating surfaces No such construction. N/A 5.4.1.10 Thermoplastic parts on which conductive metallic No such part used. N/A parts are directly mounted 5.4.1.10.2 N/A Vicat test. 5.4.1.10.3 Ball pressure test....: N/A 5.4.2 Clearances N/A



Page 12 of 79 Report No.: GTS2023120038S01 IEC 62368-1 Result - Remark Clause Requirement + Test Verdict 5.4.2.1 General requirements N/A Clearances in circuits connected to AC Mains, N/A Alternative method 5.4.2.2 Procedure 1 for determining clearance N/A Temporary overvoltage 5.4.2.3 Procedure 2 for determining clearance N/A 5.4.2.3.2.2 a.c. mains transient voltage....: 5.4.2.3.2.3 d.c. mains transient voltage: 5.4.2.3.2.4 External circuit transient voltage..... 5.4.2.3.2.5 Transient voltage determined by measurement.....: 5.4.2.4 Determining the adequacy of a clearance using an N/A electric strength test 5.4.2.5 Multiplication factors for clearances and test voltages N/A 5.4.2.6 Clearance measurement. : N/A 5.4.3 Creepage distances N/A 5.4.3.1 N/A General 5.4.3.3 Material group.....: 5.4.3.4 Creepage distances measurement....: N/A 5.4.4 Solid insulation N/A 5.4.4.1 General requirements N/A 5.4.4.2 Minimum distance through insulation: N/A 5.4.4.3 N/A Insulating compound forming solid insulation 5.4.4.4 Solid insulation in semiconductor devices N/A 5.4.4.5 N/A Insulating compound forming cemented joints 5.4.4.6 Thin sheet material N/A 5.4.4.6.1 N/A General requirements 5.4.4.6.2 N/A Separable thin sheet material Number of layers (pcs): N/A 5.4.4.6.3 Non-separable thin sheet material N/A N/A Number of layers (pcs): 5.4.4.6.4 Standard test procedure for non-separable thin (See appended table 5.4.9) N/A sheet material: 5.4.4.6.5 Mandrel test N/A

N/A

Solid insulation in wound components

5.4.4.7



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IEC 62368-1 Result - Remark Clause Requirement + Test Verdict N/A 5.4.4.9 Solid insulation at frequencies >30 kHz, E_P , K_R , d, (See appended Table 5.4.4.9) $V_{PW}(V)$...: N/A Alternative by electric strength test, tested voltage (See appended Tables 5.4.4.9 (V), K_R.....: and 5.4.9) 5.4.5 Antenna terminal insulation N/A 5.4.5.1 General N/A 5.4.5.2 Voltage surge test N/A 5.4.5.3 Insulation resistance (M Ω)....: N/A Electric strength test..... N/A 5.4.6 Insulation of internal wire as part of supplementary N/A safeguard 5.4.7 Tests for semiconductor components and for N/A cemented joints Humidity conditioning 5.4.8 N/A Relative humidity (%), temperature (°C), duration (h).....: 5.4.9 Electric strength test N/A 5.4.9.1 Test procedure for type test of solid insulation.....: N/A 5.4.9.2 Test procedure for routine test N/A Safeguards against transient voltages from external No such external circuits 5.4.10 N/A circuits 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 N/A Impulse test....: 5.4.10.2.3 N/A Steady-state test..... 5.4.10.3 N/A Verification for insulation breakdown for impulse test : 5.4.11 N/A Separation between external circuits and earth No such external circuits 5.4.11.1 Exceptions to separation between external circuits N/A and earth 5.4.11.2 Requirements N/A SPDs bridge separation between external circuit N/A and earth Rated operating voltage U_{op} (V).....: Nominal voltage U_{peak} (V)....: Max increase due to variation ΔU_{sp} Max increase due to ageing ΔU_{sa}



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Clause	Requirement + Test	Result - Remark	Verdict
5.4.11.3	Test method and compliance:	(See appended table 5.4.9)	N/A
5.4.12	Insulating liquid		N/A
5.4.12.1	General requirements		N/A
5.4.12.2	Electric strength of an insulating liquid:	(See appended table 5.4.9)	N/A
5.4.12.3	Compatibility of an insulating liquid:	(See appended table 5.4.9)	N/A
5.4.12.4	Container for insulating liquid:		N/A
5.5	Components as safeguards		N/A
5.5.1	General	No such components.	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	No such component provided	N/A
5.5.4	Optocouplers	No such component provided	N/A
5.5.5	Relays	No such component provided	N/A
5.5.6	Resistors	No such component provided	N/A
5.5.7	SPD's	No such component provided	N/A
5.5.8	Insulation between the mains and an external circuit consisting of a coaxial cable		N/A
5.5.9	Safeguards for socket-outlets in outdoor equipment		N/A
To one one one one	RCD rated residual operating current (mA)		
5.6	Protective conductor	Class III equipment	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		N/A
ors ors ors ors ors	Protective earthing conductor size (mm²)		
	Protective earthing conductor serving as a reinforced safeguard		N/A
	Protective earthing conductor serving as a double safeguard		N/A
5.6.4	Requirements for protective bonding conductors		N/A
5.6.4.1	Protective bonding conductors		N/A
els els els els els els els	Protective bonding conductor size (mm²):	one	_
5.6.4.2	Protective current rating (A)		N/A
5.6.5	Terminals for protective conductors		N/A



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Report No.: GTS2023120038S01 IEC 62368-1 Result - Remark Clause Requirement + Test Verdict 5.6.5.1 Terminal size for connecting protective earthing N/A conductors (mm)....: Terminal size for connecting protective bonding N/A conductors (mm)....: 5.6.5.2 N/A Corrosion 5.6.6 Resistance of the protective bonding system N/A 5.6.6.1 Requirements N/A 5.6.6.2 Test Method....: N/A 5.6.6.3 Resistance (Ω) or voltage drop..... N/A 5.6.7 Reliable connection of a protective earthing N/A conductor 5.6.8 Functional earthing N/A Conductor size (mm²)....: N/A N/A Class II with functional earthing marking: Appliance inlet cl & cr (mm).....: N/A 5.7 Prospective touch voltage, touch current and protective conductor current N/A 5.7.2 Measuring devices and networks N/A 5.7.2.1 Measurement of touch current Class III equipment. N/A 5.7.2.2 N/A Measurement of voltage 5.7.3 Equipment set-up, supply connections and earth N/A connections Unearthed accessible parts.....: 5.7.4 N/A 5.7.5 Earthed accessible conductive parts....: (See appended table 5.7.5) N/A 5.7.6 Requirements when touch current exceeds ES2 No such device. N/A limits Protective conductor current (mA).....: N/A Instructional Safeguard.....: N/A 5.7.7 Prospective touch voltage and touch current No such device. N/A associated with external circuits 5.7.7.1 Touch current from coaxial cables N/A N/A 5.7.7.2 Prospective touch voltage and touch current associated with paired conductor cables 5.7.8 Summation of touch currents from external circuits N/A a) Equipment connected to earthed external N/A circuits, current (mA)....: b) Equipment connected to unearthed external N/A circuits, current (mA)....: 5.8 Backfeed safeguard in battery backed up supplies N/A



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Clause	Requirement + Test	Result - Remark	Verdict
6 (18 (18 (18 (18 (18 (18 (18 (18 (18 (18			ore ore or
	Mains terminal ES:	(See appended table 5.8)	N/A
S CIN CIN CIN CIN CIN	Air gap (mm)	The state of the s	N/A
6	ELECTRICALLY- CAUSED FIRE	or and as	or P 75
6.2	Classification of PS and PIS		P
6.2.2	Power source circuit classifications	(See appended table 6.2.2)	018 018 P18 018
6.2.3	Classification of potential ignition sources		P
6.2.3.1	Arcing PIS:	No voltage exceeds 50V within equipment, no Arcing PIS.	N/A
6.2.3.2	Resistive PIS	(See appended table 6.2.3.2)	Par Para
6.3	Safeguards against fire under normal operating a conditions	nd abnormal operating	ers ers ers ers ers
6.3.1	No ignition and attainable temperature value less than 90 % defined by ISO 871 or less than 300 °C for unknown materials	No ignition and attainable such temperature value .(See appended table 5.4.1.4, 6.3.2, 9.0, B.2.6)	
	Combustible materials outside fire enclosure:	No such materials used outside fire enclosure.	N/A
6.4	Safeguards against fire under single fault condition	ons	S C18 C18 P18 C18 C18
6.4.1	Safeguard method	Control fire spread considered	ers ers P ers ers
6.4.2	Reduction of the likelihood of ignition under single fault conditions in PS1 circuits		N/A
6.4.3	Reduction of the likelihood of ignition under single fault conditions in PS2 and PS3 circuits	See above	N/A
6.4.3.1	Supplementary safeguards	Control fire spread (V-0 PCB used), approved internal wire used.	
6.4.3.2	Single Fault Conditions:	(See appended table B.4)	Tr cr Por cr
Se cus	Special conditions for temperature limited by fuse		N/A
6.4.4	Control of fire spread in PS1 circuits		18 CTS CTS CTS CTS
6.4.5	Control of fire spread in PS2 circuits		3 cm on P 3 cm
6.4.5.2	Supplementary safeguards	Supplementary safeguards: Rated V-1 or better PCB material; All other components: at least V-2 except for components mounted on min. V-1 material or small parts of combustible material;	

No such circuits within the

equipment.

N/A

6.4.6

Control of fire spread in PS3 circuits



The Control of the Co	Page 17 of 79	Report No.: GTS2023	120038S0
cas	IEC 62368-1		ole ole ole ole ole ole
Clause	Requirement + Test	Result - Remark	Verdict
	O PIO		ors ors ors
6.4.7	Separation of combustible materials from a PIS		N/A
6.4.7.2	Separation by distance		N/A
6.4.7.3	Separation by a fire barrier		N/A
6.4.8	Fire enclosures and fire barriers	See the below	
6.4.8.2	Fire enclosure and fire barrier material properties	V-0 plastic enclosure used	S OTE OTE OTE OTE
6.4.8.2.1	Requirements for a fire barrier	No fire barrier used.	N/A
6.4.8.2.2	Requirements for a fire enclosure	V-0 plastic enclosure used	P
6.4.8.3	Constructional requirements for a fire enclosure and a fire barrier	See below	* 078
6.4.8.3.1	Fire enclosure and fire barrier openings	No PS3 circuit.	N/A
6.4.8.3.2	Fire barrier dimensions		N/A
6.4.8.3.3	Top openings and properties		N/A
als out off out of out of	Openings dimensions (mm):		N/A
6.4.8.3.4	Bottom openings and properties		N/A
S of one of one of	Openings dimensions (mm):		N/A
one one one one	Flammability tests for the bottom of a fire enclosure	(See Clause S.3)	N/A
ers ers ers ers ers	Instructional Safeguard:		N/A
6.4.8.3.5	Side openings and properties		N/A
its one	Openings dimensions (mm):		N/A
6.4.8.3.6	Integrity of a fire enclosure, condition met: a), b) or c)	No such door or cover can be opened by ordinary persons.	N/A
6.4.8.4	Separation of a PIS from a fire enclosure and a fire barrier distance (mm) or flammability rating:	V-0 plastic enclosure used	N/A
6.4.9	Flammability of insulating liquid:		N/A
6.5	Internal and external wiring		175 Pon 175
6.5.1	General requirements	(See appended table 4.1.2)	P. 1
6.5.2	Requirements for interconnection to building wiring	No such interconnection to building wiring.	N/A
6.5.3	Internal wiring size (mm²) for socket-outlets:	No such interconnection to building wiring.	N/A
6.6	Safeguards against fire due to the connection to	additional equipment	N/A

7	INJURY CAUSED BY HAZARDOUS SUBSTANCES	C75 C75 P C75 C75
7.2	Reduction of exposure to hazardous substances	078 P 078 078
7.3	Ozone exposure	N/A
7.4	Use of personal safeguards or personal protective equipment (PPE)	N/A

GTS Report No.: GTS2023120038S01 Page 18 of 79 IEC 62368-1 Clause Requirement + Test Result - Remark Verdict Personal safeguards and instructions.....: 7.5 Use of instructional safeguards and instructions N/A (See Annex F) Instructional safeguard (ISO 7010)..... 7.6 Р Batteries and their protection circuits

8	MECHANICALLY-CAUSED INJURY		ors ors established
8.2	Mechanical energy source classifications		
3.3	Safeguards against mechanical energy sources		18 CIS PS CIS CIS
8.4	Safeguards against parts with sharp edges and co	orners	ors ors P
3.4.1	Safeguards	No safeguards required	N/A
	Instructional Safeguard:		N/A
3.4.2	Sharp edges or corners	No sharp edges and corners in accessible area.	
8.5	Safeguards against moving parts		N/A
3.5.1	Fingers, jewellery, clothing, hair, etc., contact with MS2 or MS3 parts		N/A
	MS2 or MS3 part required to be accessible for the function of the equipment		N/A
als old old old old old	Moving MS3 parts only accessible to skilled person		N/A
3.5.2	Instructional safeguard:		N/A
3.5.4	Special categories of equipment containing moving parts		N/A
3.5.4.1	General		N/A
3.5.4.2	Equipment containing work cells with MS3 parts		N/A
3.5.4.2.1	Protection of persons in the work cell		N/A
3.5.4.2.2	Access protection override		N/A
3.5.4.2.2.1	Override system		N/A
3.5.4.2.2.2	Visual indicator		N/A
3.5.4.2.3	Emergency stop system		N/A
	Maximum stopping distance from the point of activation (m)		N/A
	Space between end point and nearest fixed mechanical part (mm)		N/A
3.5.4.2.4	Endurance requirements		N/A
	Mechanical system subjected to 100 000 cycles of operation		N/A
CAS CAS CAS CAS CAS	- Mechanical function check and visual inspection		N/A
ers ers ers ers	- Cable assembly:	A cle	N/A



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# The state of the		
Clause	Requirement + Test Result -	- Remark Verdict
8.5.4.3	Equipment having electromechanical device for destruction of media	N/A
8.5.4.3.1	Equipment safeguards	N/A
8.5.4.3.2	Instructional safeguards against moving parts:	N/A
8.5.4.3.3	Disconnection from the supply	N/A
8.5.4.3.4	Cut type and test force (N)	N/A
8.5.4.3.5	Compliance	N/A
8.5.5	High pressure lamps	N/A
elle elle elle elle elle	Explosion test	N/A
8.5.5.3	Glass particles dimensions (mm)	N/A
8.6	Stability of equipment	N/A
8.6.1	General	N/A
all the case of the case	Instructional safeguard:	N/A
8.6.2	Static stability	N/A
8.6.2.2	Static stability test	N/A
8.6.2.3	Downward force test	N/A
8.6.3	Relocation stability	N/A
ors ors ors ors ors	Wheels diameter (mm):	
	Tilt test	N/A
8.6.4	Glass slide test	N/A
8.6.5	Horizontal force test:	N/A
8.7	Equipment mounted to wall, ceiling or other structure	N/A
8.7.1	Mounted means type:	N/A
8.7.2	Test methods	N/A
cls cls cls cls cls cl	Test 1, additional downwards force (N):	on the state of th
	Test 2, number of attachment points and test force (N)	N/A
	Test 3 Nominal diameter (mm) and applied torque (Nm):	N/A
8.8	Handles strength	N/A
8.8.1	General	On the Control of the
8.8.2	Handle strength test	N/A
as old	Number of handles :	13
18 C18 C18 C18 C18 C1	Force applied (N)	
8.9	Wheels or casters attachment requirements	N/A



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A CAS CAS CAS CAS CAS CAS CAS CAS CAS CA	quirement + Test	Result - Remark	Verdict
3.9.2 Pull	Il test		970. 7 10
8.9.2 Pull	li test		ors or ors ors
The state of the s			N/A
Green Charles Charles	rts, stands and similar carriers		N/A
old the contract of the contra	neral and a second seco		N/A
8.10.2 Mar	rking and instructions		N/A
8.10.3 Car	rt, stand or carrier loading test		N/A
Loa	ading force applied (N):		N/A
8.10.4 Car	rt, stand or carrier impact test		N/A
8.10.5 Med	chanical stability		N/A
For	rce applied (N):		618 618 62 618 618 618 618 618 618 618 618 618 618
8.10.6 The	ermoplastic temperature stability		N/A
8.11 Moi	unting means for slide-rail mounted equipment	(SRME)	N/A
8.11.1 Ger	neral and a second of the seco		N/A
8.11.2 Red	quirements for slide rails		N/A
Inst	tructional Safeguard:		N/A
8.11.3 Med	chanical strength test		N/A
8.11.3.1 Dov	wnward force test, force (N) applied:		N/A
8.11.3.2 Late	eral push force test		N/A
8.11.3.3 Inte	egrity of slide rail end stops		N/A
8.11.4 Con	mpliance		N/A
8.12 Tele	lescoping or rod antennas		N/A
But	tton/ball diameter (mm):	No antennas	

9	THERMAL BURN INJURY	on Paragraph
9.2	Thermal energy source classifications	
9.3	Touch temperature limits	P = 75 075
9.3.1	Touch temperatures of accessible parts: (See appended table 9.3.1)	95 c75 P75 F c75
9.3.2	Test method and compliance	N/A
9.4	Safeguards against thermal energy sources	N/A
9.5	Requirements for safeguards	N/A
9.5.1	Equipment safeguard	N/A
9.5.2	Instructional safeguard:	N/A
9.6	Requirements for wireless power transmitters	N/A
9.6.1	General	N/A
9.6.2	Specification of the foreign objects	N/A



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CAS	IEC 62368-1		eds ods ods das od
Clause	Requirement + Test	Result - Remark	Verdict
9.6.3	Test method and compliance:		N/A
18 CT			cis cis cis cis cis
10	RADIATION	The second secon	P
10.2	Radiation energy source classification		To the Paris
10.2.1	General classification	LED light used within this equipment is considered as RS1.	
ts ors ors ors ors	Lasers:		
3 erg erg erg erg erg	Lamps and lamp systems:		_
	Image projectors:		_
	X-Ray:		_
s cre ere ere ere	Personal music player:		_
10.3	Safeguards against laser radiation		N/A
	The standard(s) equipment containing laser(s) comply		N/A
10.4	Safeguards against optical radiation from lamps LED types)	and lamp systems (including	N/A
10.4.1	General requirements		N/A
	Instructional safeguard provided for accessible radiation level needs to exceed		N/A
ers ers ers ers ers	Risk group marking and location:		N/A
The one of the one of the	Information for safe operation and installation		N/A
10.4.2	Requirements for enclosures		N/A
cus cus cus cus cus cus	UV radiation exposure ::		N/A
10.4.3	Instructional safeguard:		N/A
10.5	Safeguards against X-radiation		N/A
10.5.1	Requirements		N/A
CLE CLE CLE CLE	Instructional safeguard for skilled persons:		_
10.5.3	Maximum radiation (pA/kg):		
10.6	Safeguards against acoustic energy sources		N/A
10.6.1	General		N/A
10.6.2	Classification		N/A
CLS	Acoustic output L _{Aeq,T} , dB(A):		N/A
ors ors ors ors ors	Unweighted RMS output voltage (mV):		N/A
ers ers ers ers ers	Digital output signal (dBFS):		N/A
10.6.3	Requirements for dose-based systems		N/A



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IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
S CAR CAR CAR CAR CAR CAR			A CLE CLE C CLE CLE
10.6.3.1	General requirements		N/A
10.6.3.2	Dose-based warning and automatic decrease		N/A
10.6.3.3	Exposure-based warning and requirements		N/A
	30 s integrated exposure level (MEL30):		N/A
ole	Warning for MEL ≥ 100 dB(A):		N/A
10.6.4	Measurement methods		N/A
10.6.5	Protection of persons		N/A
	Instructional safeguards:		N/A
10.6.6	Requirements for listening devices (headphones, earphones, etc.)		N/A
10.6.6.1	Corded listening devices with analogue input		N/A
ors ors ors ors ors	Listening device input voltage (mV)		N/A
10.6.6.2	Corded listening devices with digital input		N/A
or or or or or	Max. acoustic output L _{Aeq,T} , dB(A)		N/A
10.6.6.3	Cordless listening devices		N/A
of city of cit	Max. acoustic output L _{Aeq,T} , dB(A):		N/A

В	NORMAL OPERATING CONDITION TESTS, ABNORMAL OPERATING CONDITION TESTS AND SINGLE FAULT CONDITION TESTS	
B.1	General	To come or a proper or and a company of the company
B.1.5	Temperature measurement conditions (See appended table B.1.5)	P. 75
B.2	Normal operating conditions	13 18 18 19 P 18 18 18
B.2.1	General requirements: (See Test Item Particulars and appended test tables)	
	Audio Amplifiers and equipment with audio amplifiers:	N/A
B.2.3	Supply voltage and tolerances	N/A
B.2.5	Input test: (See appended table B.2.5)	078 078 078 P 3 078 0
B.3	Simulated abnormal operating conditions	N/A
B.3.1	General	N/A
B.3.2	Covering of ventilation openings	N/A
	Instructional safeguard:	N/A
B.3.3	DC mains polarity test	N/A
B.3.4	Setting of voltage selector	N/A
B.3.5	Maximum load at output terminals	N/A
B.3.6	Reverse battery polarity	N/A



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IEC 62368-1 Result - Remark Clause Requirement + Test Verdict B.3.7 Audio amplifier abnormal operating conditions N/A B.3.8 Safeguards functional during and after abnormal (See appended table B.3) N/A operating conditions....: Р **B.4** Simulated single fault conditions错误!未指定书签。 B.4.1 General Р B.4.2 No such devices. Temperature controlling device N/A B.4.3 Blocked motor test N/A B.4.4 **Functional insulation** (See appended table B.4) Р B.4.4.1 Short circuit of clearances for functional insulation Р (See appended table B.4) B.4.4.2 Short circuit of creepage distances for functional (See appended table B.4) Ρ insulation Short circuit of functional insulation on coated B.4.4.3 N/A printed boards B.4.5 Short-circuit and interruption of electrodes in tubes N/A No such components used. and semiconductors B.4.6 Short circuit or disconnection of passive (See appended table B.4) Ρ components The EUT is continuous B.4.7 Continuous operation of components N/A operating type and no such components intended for short time operation or intermittent operation B.4.8 (See appended table B.4) Ρ Compliance during and after single fault conditions B.4.9 Battery charging and discharging under single fault Р conditions C **UV RADIATION** N/A **C.1** Protection of materials in equipment from UV radiation N/A C.1.2Requirements N/A C.1.3 Test method N/A C.2 **UV** light conditioning test N/A C.2.1 N/A Test apparatus....: C.2.2 Mounting of test samples N/A C.2.3 Carbon-arc light-exposure test N/A C.2.4 N/A Xenon-arc light-exposure test N/A D **TEST GENERATORS D.1** N/A Impulse test generators **D.2** Antenna interface test generator N/A **D.3** N/A Electronic pulse generator



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IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
E	TEST CONDITIONS FOR EQUIPMENT CONTAINII	NG AUDIO AMPLIFIERS	N/A
E.1	Electrical energy source classification for audio	18 18 0 0n 0n 18 10 0n 0n	N/A
ors ors ors ors	Maximum non-clipped output power (W):		
CAR	Rated load impedance (Ω):		
612 612 612 613 613 613 613 613 613 613 613 613 613	Open-circuit output voltage (V):		
ers ers ers ers ers	Instructional safeguard		
E.2	Audio amplifier normal operating conditions		N/A
S CIS CIS CIS CIS CIS CIS CIS CIS CIS CI	Audio signal source type:		
1 CL	Audio output power (W):		
118 618 618 618 618 618 618 618 618 618	Audio output voltage (V):		_
TS CTS CTS CTS CTS CTS	Rated load impedance (Ω):		_
CIS CIS CIS CIS CIS	Requirements for temperature measurement		N/A
E.3	Audio amplifier abnormal operating conditions		N/A
F	EQUIPMENT MARKINGS, INSTRUCTIONS, AND I	NSTRUCTIONAL	or P on
•	SAFEGUARDS		eds eds eds eds ed
F.1. 18 018 018 018	General		**
	Language:	English. The other languages will be provided during the national approval.	_
F.2	Letter symbols and graphical symbols		Ors ors Pros ors
F.2.1	Letter symbols according to IEC60027-1	Complied	2. P. 3.
F.2.2	Graphic symbols according to IEC, ISO or manufacturer specific	Complied	
F.3	Equipment markings		S ers ers P ers ers
F.3.1	Equipment marking locations	Equipment marking is located on the exterior surface and is easily visible.	
F.3.2	Equipment identification markings	See the following details.	018 C18 C18 C18 C18
F.3.2.1	Manufacturer identification:	See copy of marking plate.	78 078 078 PS 8 078 1
F.3.2.2	Model identification:	See copy of marking plate.	ers ers Per ers e
F.3.3	Equipment rating markings	See below	ors ors ors or
F.3.3.1	Equipment with direct connection to mains		N/A
F.3.3.2	Equipment without direct connection to mains		13 C75 C75 P C 75 C75
F.3.3.3	Nature of the supply voltage:	DC symbol used.	s ors ors Ports ors
F.3.3.4	Rated voltage ::	See copy of marking plate.	ors ors ors
F.3.3.5	Rated frequency:	Class III equipment.	675 P15 475 67



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els	IEC 62368-1		elle elle elle elle elle elle
Clause	Requirement + Test	Result - Remark	Verdict
F.3.3.6	Dated ourrent or rated power	Coo conv. of marking plate	NI/A
75 078 078 078 079 0	Rated current or rated power	See copy of marking plate.	N/A
F.3.3.7	Equipment with multiple supply connections	Only one supply connection.	N/A
F.3.4	Voltage setting device	No such devices within the equipment.	N/A
F.3.5	Terminals and operating devices	See below.	N/A
F.3.5.1	Mains appliance outlet and socket-outlet markings	No such devices within the equipment.	N/A
F.3.5.2	Switch position identification marking:	No such part used.	N/A
F.3.5.3	Replacement fuse identification and rating markings	No such part used.	N/A
618 618 618 618 618 618 618 618 618	Instructional safeguards for neutral fuse:		N/A
F.3.5.4	Replacement battery identification marking:	See user manual	ers ers Pers ers ers
F.3.5.5	Neutral conductor terminal	No permanently connected equipment	N/A
F.3.5.6	Terminal marking location	No such terminal.	N/A
F.3.6	Equipment markings related to equipment classification		N/A
F.3.6.1	Class I equipment	Class III equipment.	N/A
F.3.6.1.1	Protective earthing conductor terminal:		N/A
F.3.6.1.2	Protective bonding conductor terminals:		N/A
F.3.6.2	Equipment class marking:		N/A
F.3.6.3	Functional earthing terminal marking::		N/A
F.3.7	Equipment IP rating marking:	IPX0	P (78 078 078
F.3.8	External power supply output marking::		N/A
F.3.9	Durability, legibility and permanence of marking	The marking is durable and legible, and can be easily discernible under normal lighting conditions.	
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 rubbing test by water and petroleum spirit, the label still easily discernible, indelible and legible.	
F.4	Instructions		ers ers Pers ers



Page 26 of 79 Report No.: GTS2023120038S01 IEC 62368-1 Result - Remark Clause Requirement + Test Verdict Relevant safety caution texts Ρ a) Information prior to installation and initial use and installation instruction are available. b) Equipment for use in locations where children N/A Not such equipment not likely to be present P c) Instructions for installation and interconnection N/A d) Equipment intended for use only in restricted Not such equipment. access area e) Equipment intended to be fastened in place Not such equipment. N/A f) Instructions for audio equipment terminals Not such equipment. N/A g) Protective earthing used as a safeguard Not such equipment. N/A h) Protective conductor current exceeding ES2 N/A Graphic symbols used on equipment Ρ i) Explained in the user manual Permanently connected equipment not provided Not such equipment. N/A

Р

N/A

N/A

P

Ρ

N/A

See user manual

Not such equipment.

Not such equipment.

with all-pole mains switch

I) Equipment containing insulating liquid

Ratings, endurance, spacing, maximum load

Relay controlling connectors supplying power to

Thermal cut-outs separately approved according to

Thermal cut-outs tested as part of the equipment as

IEC 60730 with conditions indicated in a) & b)

safeguard function

Test method and compliance

Test method and compliance

Instructional safeguards

COMPONENTS

Switches

General

Relays

Requirements

Overload test

other equipment

Thermal cut-offs

indicated in c)

Protective devices

k) Replaceable components or modules providing

m) Installation instructions for outdoor equipment

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TRF	No.	IEC6	2368	~ 1₁E
TINE	INU.		2000	

F.5

G

G.1

G.1.1

G.1.2

G.1.3

G.2.1

G.2.2

G.2.3

G.2.4

G.3

G.3.1

G.2



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Clause	IEC 62368-1 Requirement + Test	Result - Remark	Verdict
Organization of the Control of the C	Trought of the state of the sta	Troon Trondin	TROPE OF STREET
G.3.1.2	Test method and compliance		N/A
G.3.2	Thermal links		N/A
G.3.2.1	a) Thermal links tested separately according to IEC 60691 with specifics		N/A
ers ers ers ers ers er	b) Thermal links tested as part of the equipment		N/A
G.3.2.2	Test method and compliance		N/A
G.3.3	PTC thermistors		N/A
G.3.4	Overcurrent protection devices		N/A
G.3.5	Safeguards components not mentioned in G.3.1 to G.3.4		N/A
G.3.5.1	Non-resettable devices suitably rated and marking provided		N/A
G.3.5.2	Single faults conditions ::	(See appended table B.4)	N/A
G.4	Connectors		N/A
G.4.1	Spacings		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		N/A
G.5.1.2	Protection against mechanical stress		N/A
G.5.2	Endurance test		N/A
G.5.2.1	General test requirements		N/A
G.5.2.2	Heat run test		N/A
ols ols ols ols ols ols ol	Test time (days per cycle):		<u> </u>
18 c18 c18 c18 c18 c18 c18 c18 c18 c18 c	Test temperature (°C):		-
G.5.2.3	Wound components supplied from the mains		N/A
G.5.2.4	No insulation breakdown		N/A
G.5.3	Transformers		N/A
G.5.3.1	Compliance method:		N/A
s or ors ors ors ors	Position:		N/A
ors ors ors ors	Method of protection:	12 012 013 013 013 013 013 013 013 013 013 013	N/A
G.5.3.2	Insulation		N/A
AR CAR CAR CAR CAR CAR CAR CAR CAR CAR C	Protection from displacement of windings		90
G.5.3.3	Transformer overload tests		N/A
G.5.3.3.1	Test conditions	the site of the si	N/A



Page 28 of 79 Report No.: GTS2023120038S01 IEC 62368-1 Result - Remark Verdict Clause Requirement + Test G.5.3.3.2 Winding temperatures N/A G.5.3.3.3Winding temperatures - alternative test method N/A N/A G.5.3.4 Transformers using FIW G.5.3.4.1 General N/A FIW wire nominal diameter....: G.5.3.4.2 Transformers with basic insulation only N/A G.5.3.4.3 Transformers with double insulation or reinforced N/A insulation....: G.5.3.4.4 Transformers with FIW wound on metal or ferrite N/A core N/A G.5.3.4.5 Thermal cycling test and compliance G.5.3.4.6 Partial discharge test N/A G.5.3.4.7 Routine test N/A G.5.4 Motors N/A G.5.4.1 General requirements N/A G.5.4.2 Motor overload test conditions N/A G.5.4.3 Running overload test N/A G.5.4.4.2 Locked-rotor overload test N/A Test duration (days): G.5.4.5 Running overload test for DC motors N/A G.5.4.5.2 Tested in the unit N/A G.5.4.5.3 Alternative method N/A G.5.4.6 Locked-rotor overload test for DC motors N/A G.5.4.6.2 Tested in the unit N/A Maximum Temperature: N/A G.5.4.6.3 Alternative method N/A G.5.4.7 Motors with capacitors N/A G.5.4.8 N/A Three-phase motors G.5.4.9 Series motors N/A Operating voltage: **G.6** Wire Insulation N/A G.6.1 General N/A G.6.2 Enamelled winding wire insulation N/A **G.7** Mains supply cords N/A

N/A

General requirements

G.7.1



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Clarica on one	IEC 62368-1	Docult Department of the control of	Vanali -
Clause	Requirement + Test	Result - Remark	Verdict
	Type:		
G.7.2	Cross sectional area (mm² or AWG):	The case case case case case case case cas	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):		N/A
G.7.3.2.2	Strain relief mechanism failure		N/A
G.7.3.2.3	Cord sheath or jacket position, distance (mm):		N/A
G.7.3.2.4	Strain relief and cord anchorage material		N/A
G.7.4	Cord Entry		N/A
G.7.5	Non-detachable cord bend protection	Not such equipment.	N/A
G.7.5.1	Requirements		N/A
G.7.5.2	Test method and compliance		N/A
	Overall diameter or minor overall dimension, D (mm)		_
	Radius of curvature after test (mm):		_
G.7.6	Supply wiring space		N/A
G.7.6.1	General requirements		N/A
G.7.6.2	Stranded wire		N/A
G.7.6.2.1	Requirements		N/A
G.7.6.2.2	Test with 8 mm strand		N/A
G.8	Varistors		N/A
G.8.1	General requirements		N/A
G.8.2	Safeguards against fire		N/A
G.8.2.1	General		N/A
G.8.2.2	Varistor overload test		N/A
G.8.2.3	Temporary overvoltage test		N/A
G.9	Integrated circuit (IC) current limiters		N/A
G.9.1	Requirements	No IC current limiter provided within the equipment.	N/A
cas cas cas cas cas	IC limiter output current (max. 5A):		
old old old old old old old old	Manufacturers' defined drift:		
G.9.2	Test Program		N/A
G.9.3	Compliance		N/A



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G.10 R	Requirement + Test	Result - Remark	Verdict
17			or Grand
17			ers ers ers
G 10 1 G	Resistors		N/A
9 CT CTS CTS CTS	General		N/A
18 018 0 03 Cm 078 078	Conditioning		N/A
G.10.3 R	Resistor test		N/A
G.10.4 Vo	oltage surge test		N/A
G.10.5 Im	npulse test		N/A
G.10.6 O	Overload test		N/A
G.11 Ca	apacitors and RC units		N/A
G.11.1 G	General requirements		N/A
G.11.2 Co	Conditioning of capacitors and RC units		N/A
G.11.3 R	Rules for selecting capacitors		N/A
G.12 O	Optocouplers		N/A
	Optocouplers comply with IEC 60747-5-5 with pecifics		N/A
73 073 073 073 073 075 075 075 075	ype test voltage V _{ini,a} :	See above.	_
R	Routine test voltage, V _{ini, b} :	See above.	_
G.13 Pi	rinted boards		P (7)
G.13.1 G	General requirements	See below.	7 CT P
G.13.2 U	Incoated printed boards	(see appended table 5.4.2.2, 5.4.2.4 and 5.4.3)	
G.13.3 Co	Coated printed boards		N/A
L T 1978 T 107 A 676	nsulation between conductors on the same inner urface		N/A
G.13.5 In	nsulation between conductors on different surfaces		N/A
Di	Distance through insulation		N/A
The case of the ca	lumber of insulation layers (pcs):		_
G.13.6 Te	ests on coated printed boards		N/A
G.13.6.1 Sa	sample preparation and preliminary inspection		N/A
G.13.6.2 Te	est method and compliance		N/A
G.14 C	coating on components terminals		N/A
G.14.1 R	Requirements:		N/A
G.15 Pi	ressurized liquid filled components		N/A
G.15.1 R	Requirements		N/A
G.15.2 Te	est methods and compliance		N/A
G.15.2.1 H	lydrostatic pressure test		N/A
G.15.2.2 Ci	Creep resistance test		N/A



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IEC 62368-1 Result - Remark Clause Requirement + Test Verdict G.15.2.3 Tubing and fittings compatibility test N/A G.15.2.4 Vibration test N/A G.15.2.5 N/A Thermal cycling test G.15.2.6 Force test N/A G.15.3 N/A Compliance G.16 IC including capacitor discharge function (ICX) N/A G.16.1 Condition for fault tested is not required No such discharge IC used. N/A N/A ICX with associated circuitry tested in equipment ICX tested separately N/A G.16.2 Tests N/A Smallest capacitance and smallest resistance specified by ICX manufacturer for impulse test.....: Mains voltage that impulses to be superimposed on Largest capacitance and smallest resistance for ICX tested by itself for 10000 cycles test..... G.16.3 N/A Capacitor discharge test..... н CRITERIA FOR TELEPHONE RINGING SIGNALS N/A H.1 General N/A H.2 **Method A** N/A **H.3** Method B N/A H.3.1 N/A Ringing signal H.3.1.1 Frequency (Hz): H.3.1.2 Voltage (V): H.3.1.3 Cadence; time (s) and voltage (V): H.3.1.4 Single fault current (mA):.... H.3.2 Tripping device and monitoring voltage N/A H.3.2.1 Conditions for use of a tripping device or a N/A monitoring voltage H.3.2.2 N/A Tripping device H.3.2.3 Monitoring voltage (V)..... N/A **INSULATED WINDING WIRES FOR USE WITHOUT INTERLEAVED** N/A **INSULATION J.1** General N/A Winding wire insulation....: Solid round winding wire, diameter (mm).....: N/A



Page 32 of 79 Report No.: GTS2023120038S01 IEC 62368-1 Result - Remark Clause Requirement + Test Verdict Solid square and rectangular (flatwise bending) N/A winding wire, cross-sectional area (mm²).....: J.2/J.3 Tests and Manufacturing Κ SAFETY INTERLOCKS N/A **K.1** N/A **General requirements** Instructional safeguard....: N/A **K.2** Components of safety interlock safeguard mechanism N/A **K.3** Inadvertent change of operating mode N/A **K.4** Interlock safeguard override N/A **K.5** Fail-safe N/A K.5.1 Under single fault condition N/A **K.6** Mechanically operated safety interlocks N/A K.6.1 **Endurance requirement** N/A K.6.2 Test method and compliance....: N/A **K.7** Interlock circuit isolation N/A K.7.1 Separation distance for contact gaps & interlock N/A circuit elements In circuit connected to mains, separation distance N/A for contact gaps (mm)....: In circuit isolated from mains, separation distance N/A for contact gaps (mm)....: Electric strength test before and after the test of (See appended table 5.4.9) N/A K.7.2. K.7.2 Overload test, Current (A)..... N/A

N/A

N/A

N/A

N/A

N/A

N/A N/A

N/A

N/A

N/A

N/A

N/A

The EUT is not directly

connected to mains.

K.7.3

K.7.4

L

L.1

L.2

L.3

L.4

L.5

L.6 L.7

L.8

Endurance test

Electric strength test

DISCONNECT DEVICES

Permanently connected equipment

Parts that remain energized

Switches as disconnect devices

Instructional safeguard....:

Plugs as disconnect devices

Single-phase equipment

Three-phase equipment

Multiple power sources

General requirements



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IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
M	FOURPMENT CONTAINING BATTERIES AND THE	IR PROTECTION CIRCUITS	ens ens D en sas
M.1	General requirements	EQUIPMENT CONTAINING BATTERIES AND THEIR PROTECTION CIRCUITS Concret requirements	
M.2	Safety of batteries and their cells		**
M.2.1	Batteries and their cells comply with relevant IEC standards	The battery complied with IEC 62133	
M.3	Protection circuits for batteries provided within the equipment	The battery complied with IEC 62133	
M.3.1	Requirements	See below	ers - Prs - ers
M.3.2	Test method	See below	18 Gr. 618 P. 518 GR.
	Overcharging of a rechargeable battery	See below	13 CTS CTS P CTS CTS
	Excessive discharging	See appended table Annex M	N/A
	Unintentional charging of a non-rechargeable battery	No non-rechargeable battery used	N/A
	Reverse charging of a rechargeable battery	Impossible to reverse charging	N/A
M.3.3	Compliance	(See appended table M.3)	N/A
M.4	Additional safeguards for equipment containing a portable secondary lithium battery		
M.4.1	General	See below	75 c75 P5 c75 c75
M.4.2	Charging safeguards	See below	s ers Ps ers ers
M.4.2.1	Requirements		Green Chennell
M.4.2.2	Compliance ::	(See appended table M.4.2)	9 P 1 0 0
M.4.3	Fire enclosure:	V-0 plastic enclosure used, see clause 6.4.8	
M.4.4	Drop test of equipment containing a secondary lithium battery	See below	
M.4.4.2	Preparation and procedure for the drop test		s ers ers Pers ers e
M.4.4.3	Drop, Voltage on reference and dropped batteries (V); voltage difference during 24 h period (%):	Three impacts at the height of 1000mm. The voltage difference did not exceed 5% after test.	
M.4.4.4	Check of the charge/discharge function		ors ors o
M.4.4.5	Charge / discharge cycle test		
M.4.4.6	Compliance		ers ers Ps ers es
M.5	Risk of burn due to short-circuit during carrying		re ore Period
M.5.1	Requirement	Complied	Por or



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Report No.: GTS2023120038S01 IEC 62368-1 Result - Remark Clause Requirement + Test Verdict M.5.2 Test method and compliance No chemical leaks or Ρ explosion, no emission of flame or expulsion of molten metal during test M.6 Safeguards against short-circuits Р M.6.1 External and internal faults The fault testing has been P evaluated in the battery's test report M.6.2 P Compliance M.7 Risk of explosion from lead acid and NiCd batteries N/A M.7.1 Ventilation preventing explosive gas concentration N/A Calculated hydrogen generation rate.....: N/A M.7.2 Test method and compliance N/A Minimum air flow rate, Q (m³/h)....: N/A M.7.3Ventilation tests N/A M.7.3.1 General N/A M.7.3.2 Ventilation test – alternative 1 N/A Hydrogen gas concentration (%).....: N/A M.7.3.3 Ventilation test – alternative 2 N/A Obtained hydrogen generation rate.....: N/A M.7.3.4 N/A Ventilation test – alternative 3 Hydrogen gas concentration (%)..... N/A M.7.4 N/A Marking....: **M.8** Protection against internal ignition from external spark sources of batteries N/A with aqueous electrolyte M.8.1 General N/A M.8.2 N/A Test method M.8.2.1 General N/A M.8.2.2 Estimation of hypothetical volume V_Z (m³/s).....: M.8.2.3 Correction factors : M.8.2.4 Calculation of distance d (mm): M.9 Preventing electrolyte spillage Р M.9.1 Protection from electrolyte spillage See below Р M.9.2 Tray for preventing electrolyte spillage Р M.10 Ρ Instructions to prevent reasonably foreseeable misuse Instructional safeguards Instructional safeguard.....: P

provided in the user manual



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eds eds eds eds eds eds	IEC 62368-1		e cas cas cas cas cas cas cas
Clause	Requirement + Test	Result - Remark	Verdict
CAS CAS CAS CAS CAS CAS			18 CT CTS CTS CTS CTS CTS CTS CTS CTS CTS
N	ELECTROCHEMICAL POTENTIALS		N/A
	Material(s) used:		903
0	MEASUREMENT OF CREEPAGE DISTANCES AND CLEARANCES		N/A
cas cas cas cas cas cas	Value of X (mm):	012 013 014 014 014 014 014 015 014 015 015 015 015 015 015 015 015 015 015	98
Р	SAFEGUARDS AGAINST CONDUCTIVE OBJECTS		N/A
P.1	General		N/A
P.2	Safeguards against entry or consequences of en	try of a foreign object	N/A
P.2.1	General		N/A
P.2.2	Safeguards against entry of a foreign object		N/A
ens ens ens ens ens ens	Location and Dimensions (mm):		78 o
P.2.3	Safeguards against the consequences of entry of a foreign object		N/A
P.2.3.1	Safeguard requirements		N/A
	The ES3 and PS3 keep-out volume in Figure P.3 not applicable to transportable equipment.		N/A
	Transportable equipment with metalized plastic parts		N/A
P.2.3.2	Consequence of entry test		N/A
P.3	Safeguards against spillage of internal liquids		N/A
P.3.1	General	No such consideration.	N/A
P.3.2	Determination of spillage consequences		N/A
P.3.3	Spillage safeguards		N/A
P.3.4	Compliance		N/A
P.4	Metallized coatings and adhesives securing parts		N/A
P.4.1	General	No such construction.	N/A
P.4.2	Tests		N/A
012 012 012 012 013 013 013 013	Conditioning, T _C (°C):		* o _{7s}
618 618 618 618 618 618	Duration (weeks)		G 78
Q	CIRCUITS INTENDED FOR INTERCONNECTION	WITH BUILDING WIRING	N/A
Q.1	Limited power sources		N/A
Q.1.1	Requirements		N/A
old old old old old old	a) Inherently limited output		N/A
els	b) Impedance limited output		N/A
	c) Regulating network limited output		N/A
To one one one	d) Overcurrent protective device limited output		N/A



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Clause		IEC 62368-1			
The State of the S	Requirement + Test	Result - Remark	Verdict		
			OR OR OR OR OR		
70 - 18 - 18 CB - GB	e) IC current limiter complying with G.9		N/A		
S CO STE STE STE	Test method and compliance:		N/A		
	Current rating of overcurrent protective device (A)		N/A		
62. 48	Test for external circuits – paired conductor cable		N/A		
TS OTS OTS OTS OTS OTS	Maximum output current (A):		N/A		
618 618 618 618 618 61 618 618 618 618 618 61	Current limiting method:				
R	LIMITED SHORT CIRCUIT TEST		N/A		
R.1	General		N/A		
R.2	Test setup		N/A		
GLS	Overcurrent protective device for test:		_		
R.3	Test method		N/A		
118 018 018 018 018 018 018	Cord/cable used for test:				
R.4	Compliance		N/A		
S	TESTS FOR RESISTANCE TO HEAT AND FIRE		N/A		
	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 :	Approved V-0 of fire enclosure used.			
18	Wall thickness (mm):		2 2		
	Conditioning (°C):				
	Test flame according to IEC 60695-11-5 with conditions as set out		N/A		
	- Material not consumed completely		N/A		
is ors ors ors ors	- Material extinguishes within 30s		N/A		
	- No burning of layer or wrapping tissue		N/A		
S.2	Flammability test for fire enclosure and fire barrie	er integrity	N/A		
	Samples, material:				
	Wall thickness (mm):				
	Conditioning (°C):		<u> </u>		
S.3	Flammability test for the bottom of a fire enclosu	re	N/A		
S.3.1	Mounting of samples		N/A		
S.3.2	Test method and compliance		N/A		
IS ORS ORS ORS ORS ORS	Mounting of samples:		2		
old old old old old old	Wall thickness (mm):		<u> </u>		



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CLR	IEC 62368-1		S old old old old old old	
Clause	Requirement + Test	Result - Remark	Verdict	
CIS CIS CIS CIS CIS			618 618 618 6 618	
S.4	Flammability classification of materials		N/A	
S.5 03 03 03 03	Flammability test for fire enclosure materials of a state power exceeding 4 000 W	equipment with a steady	N/A	
old old old old old old	Samples, material:		_	
	Wall thickness (mm):		_	
As cas cas cas cas cas cas cas cas cas ca	Conditioning (°C):		_	
Т	MECHANICAL STRENGTH TESTS		C18 P 18 C18 C18 C18 C18 C18 C18 C18 C18 C18	
T.1	General		P. 7.	
T.2	Steady force test, 10 N:		N/A	
T.3	Steady force test, 30 N:		N/A	
T.4	Steady force test, 100 N:	(See appended table T.4)	Por Por	
T.5	Steady force test, 250 N:		N/A	
T.6	Enclosure impact test		N/A	
OS CIS CIS CIS CIS CIS	Fall test		N/A	
S or on one or	Swing test		N/A	
T.7	Drop test:	(See appended table T.7)	ors ors or P ors ors	
T.8	Stress relief test:	(See appended table T.8)	78 678 678 E78 678 6	
T.9	Glass Impact Test::	(See appended table T.9)	N/A	
T.10	Glass fragmentation test		N/A	
The oracle of th	Number of particles counted:		N/A	
T.11	Test for telescoping or rod antennas		N/A	
els els els els els	Torque value (Nm):	See above.	N/A	
U	MECHANICAL STRENGTH OF CATHODE RAY TU PROTECTION AGAINST THE EFFECTS OF IMPLO		N/A	
U.1	General		N/A	
els	Instructional safeguard :		N/A	
U.2	Test method and compliance for non-intrinsically	protected CRTs	N/A	
U.3	Protective screen		N/A	
v	DETERMINATION OF ACCESSIBLE PARTS			
V.1	Accessible parts of equipment		N/A	
V.1.1	General	Class III equipment and all circuits of EUT are classified as ES1.	N/A	
V.1.2	Surfaces and openings tested with jointed test probes	Class III equipment and all circuits of EUT are classified as ES1.	N/A	



Page 38 of 79 Report No.: GTS2023120038S01 IEC 62368-1 Result - Remark Clause Requirement + Test Verdict V.1.3 Openings tested with straight unjointed test probes N/A V.1.4 Plugs, jacks, connectors tested with blunt probe N/A V.1.5 N/A Slot openings tested with wedge probe V.1.6 Terminals tested with rigid test wire N/A **V.2** N/A Accessible part criterion X ALTERNATIVE METHOD FOR DETERMINING CLEARANCES FOR INSULATION N/A IN CIRCUITS CONNECTED TO AN AC MAINS NOT EXCEEDING 420 V PEAK (300 V RMS) (See appended table X) N/A Clearance : Υ CONSTRUCTION REQUIREMENTS FOR OUTDOOR ENCLOSURES N/A Y.1 General N/A Y.2 Resistance to UV radiation N/A Y.3 Resistance to corrosion N/A Y.3 Resistance to corrosion N/A Y.3.1 Metallic parts of outdoor enclosures are resistant to N/A effects of water-borne contaminants by.....: Y.3.2 N/A Test apparatus Y.3.3 Water - saturated sulphur dioxide atmosphere N/A Y.3.4 Test procedure....: N/A Y.3.5 N/A Compliance Y.4 Gaskets N/A Y.4.1 General N/A Y.4.2 N/A Gasket tests Y.4.3 Tensile strength and elongation tests N/A Alternative test methods....: N/A Y.4.4 Compression test N/A Y.4.5 N/A Oil resistance Y.4.6 N/A Securing means (See Annex P.4) Y.5 Protection of equipment within an outdoor enclosure N/A Y.5.1 General N/A Y.5.2 Protection from moisture N/A

Relevant tests of IEC 60529 or Y.5.3....:

N/A

N/A

N/A

N/A

N/A

Water spray test

General

Protection from plants and vermin

Protection from excessive dust

Y.5.3

Y.5.4

Y.5.5

Y.5.5.1



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ers construction		Page 39 of 79	Report No.: GTS202312003	
		IEC 62368-1		2 c12 c12 c12 c12 c13
Clause	Requirement + Test		Result - Remark	Verdict
S CTS CTS CTS CTS CTS		State of the case	of the state of th	ols cls cls cls cls
Y.5.5.2	IP5X equipment			N/A
Y.5.5.3	IP6X equipment			N/A
Y.6	Mechanical strength of enc	losures		N/A
Y.6.1	General			N/A
Y.6.2	Impact test		(See Table T.6)	N/A



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62	ors ors ors ors ors	IEC 62368-1		12 c13 c12 c13
975 975	Clause	Requirement + Test	Result - Remark	Verdict

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Services of the services of th	or or or or or or or	S CIS CIS CIS CIS CIS CIS	S Grand Gran	The Constant of the Constant o	the case of the ca		
4.1.2	TABLE: List of criti	ical components	018 018 018 018 018 018 018 018 018 018		ors ors ors Procession		
Object/part No.	Manufacturer/ trademark	Type/model	Technical data	Standard	Mark(s) of conformity ¹)		
PCB	ZHUHAI FOUNDER TECH HIGH DENSITY ELECTRONIC CO LTD	10M	V-0,130°C	UL796	UL E315850		
Plastic enclosure	LG Chem	PC+10%GF ER2109FD	V-0, 118°C min. thickness: 0.8mm	UL94	UL E248280		
Rechargeable Li-ion Battery	Dongguan Amperex Technology Limited	CINSBBMA	3.85V,2290mAh ,8.82Wh	IEC62133- 2:2017/AMD1:2 021	CB report CN23S2GB 001		
Supplementary in	Supplementary information:						
1) Provided evid) Provided evidence ensures the agreed level of compliance. See OD-CB2039.						

62	3 C7 C78 C78 C78 C78	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	CAS	R CAS	elle car care care care	The Control of the Co	ers ors or or or	8 018 02 028 028 028 028 028 028 028 028 028	~28 62%
G23	5.2	TABLE: Classification	on of electrical er	nergy sou	ırces	As cas cas cas cas cas cas	old of the old	GIS GIS GIS	78
623	Supply	Location (e.g.	Test conditions		F	Parameters		ES	75
78	Voltage	circuit						Class	3 6
78		designation)		U (V)	I (mA)	Type ¹⁾	Additional Info ²⁾		73 73 ~7



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		IEC 62368-1		518 618 618 518 618 518 618 618 618 618 618 618 618 618 618 6
Clause	Requirement + Test		Result - Remark	Verdict

9.0VDC	All internal circuits	Normal:	9.0Vd.c	018 018 018 018 018	SS	
		Abnormal	els ols ols ols ols	618 618 618 618 618 618 618	12 c12 c12 c12 c12 c12 c12 c12 c12 c12 c	
		Single fault	eds eds ================================			
4.4VDC	Internal battery	Normal:	4.4Vd.c		SS	ES1.,
		Abnormal		6 CAS		
		Single fault	18 c18 c18 c18 c18 c18 c18	e18 13 - 618 61 e18 618 18 618 618 6		

Supplementary information:

- 1) Type: Steady state (SS), Capacitance (CP), Single pulse (SP), Repetitive pulses (RP), etc.
- 2) Additional Info: Frequency, Pulse duration, Pulse off time, Capacitance value, etc.

all the case als care als case case case case case case case cas	Ts GTS GTS GTS GTS	S CT STO CTS STS CTS	612 613 618	the GIS TS CO. GIVE GIS GIS GIS		
5.4.1.8 TABLE: Working volta	age measureme	nt		N/A		
Location	RMS voltage (V)	Peak voltage (V)	Frequency (Hz)	Comments		
		018 018 0 2 018 0	1 018 018 018 018 018 018 018 018 018 01			
		0.18 0.18 0.18 0.18 0.18 0.18 0.18 0.18				
Supplementary information:						
	612 612 612 612 613 613 613 613 613 613		CLE CLE CLE CLE CLE CLE CLE CLE CLE			

5.4.1.10.2	TABLE: Vicat soft	ening temperature of thermo	pla	stics	els els els els els els els	N/A
Method			:	ISO 306 / B50		
Object/ Part	: No./Material	Manufacturer/trademark		Thickness (mm)	T softenii	ng (°C)
			TS GTS S	18 018 018 018 018 018 018 018 018 018 0	S GIS GIS GIS GIS GIS	TS ON OTE STS OTE
				3 c18 c18 c19	ole ole ole ole ole ole ole	s cus cus cus cus cus cus cus cus cus cu
Supplement	ary information:					
01			ers ers			eds eds eds eds eds

the state of the s	The one of the other one on the	The 28 on 18	478	Gre Gre ors or s	on the 18 on 18	22 18
5.4.1.10.3 TABLE: Ball pressure test of thermoplastics						/A
Allowed impression diameter	(mm)		2 mi	m ,	078 078 078 078 <u></u>	
Object/Part No./Material	Manufacturer/trademark	Thickness (n	nm)	Test temperature (°C)	Impressio diameter (m	
- 12		8 618 618 618 618 618 618 618 618	78 G78 G78			S G GTS
		618 618 618 620 61 138 618	s ere ers e			er ors
Supplementary information:						



QID		Page 42 of 79	Report No.: GTS2023120038S01
is one case one case one case one	and the case of th	IFC 62368-1	

ed cas cas cas cas cas cas cas	IEC 62368-1	Le CLE CLE CLE CLE
Clause	Requirement + Test Result - Remark	Verdict
THE COLUMN COLUM		cas cas cas

or or or	G TS Com Crown	Grand Grand Co.	GTS TS	Grand Grand	ON GROWING GT	678 Gr.	GT8 178 C 18 G	r. " Gr. G. " 18 Gr.
5.4.2, 5.4.3 TABLE: N	/linimum Cl	earances/	Creepag	e distance		ors ors ors	ors ors ors ors ors or	N/A
Clearance (cl) and creepage distance (cr) at/of/between:	U _p (V)	U _{rms} (V)	Freq 1) (Hz)	Required cl (mm)	cl (mm)	E.S. ²⁾ (V)	Required cr (mm)	cr (mm)
	els els els els els els e	2 018 018 018 018 018 018	78 crs	2 C18 618 C= C18 C18 C1 18	618 618 618 618 6	s cus cus cus cus cus s cus cus cus cus s cus cus cus cus	618 618 618 618 618 618 6	18 618 618 625 61 18 618 6
Supplementary information:								
18 els	As che che che che che	che che che che che che	S CT CTS CTS CTS CTS	ole cle cle cle cle	elle elle elle elle elle	GLE GLE GLE GLE GLE	eds eds eds eds eds	S C. CLE CLE CLE CLE CLE CLE

5.4.4.2 TABLE: Minimun	n distance through insul	lation	LR CLR CLR CLR CLR CLR CLR CLR CLR CLR C	N/A		
Distance through insulation (DTI) at/of	Peak voltage (V)	Insulation	Required DTI (mm)	Measured DTI (mm)		
			18 018 018 018 018 018 018 018 018 018 0	618 618 618 618 618 618 618 618		
Supplementary information:						
			ors ors ors ors ors ors ors	12 c12 c12 c12 c12 c13		

5.4.4.9 TABLE: Solid insulation at frequencies >30 kHz N/A						
Insulation material	E P	Frequency (kHz)	K _R	Thickness d (mm)	Insulation	V _{PW} (Vpk)
	12 02 018 018 018 018 0	2 618 618 618 618 618 618 618 618	ell ell = ell ill ell ell ell ell ell ell ell ell	618 618 618 618 618 618 618 618 618	12 018 018 018 018 018 018 018 018 018 018	8 C18 C18 C18 C18 C18 C18 C18 C18 C
Supplementary information:						

0	5.4.9	TABLE: Electric strength tests			N/A		
S S S S	Test voltage	applied between:	Voltage shape (Surge, Impulse, AC, DC, etc.)	Test voltage (V)	Breakdown Yes / No		
28			0.12 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15	618 618 618 618 618 618 618 618 618 618			
67	Supplementary information:						
\$730 0			12 C14		12 CL2 CL2 CL2 CL2 CL2 CL2 CL2 CL2 CL2 CL		

9	5.5.2.2 TABLE:	Stored discharge o	n capacitors			N/A
5.25 5.25 5.30 5.30 5.30 5.30 5.30 5.30 5.30 5.3	Location	Supply voltage (V)	Operating and fault condition 1)	Switch position	Measured voltage (Vpk)	ES Class
78	0.75 - 0.18 0.18 0.18 0.18 0.18 0.18 0.18 0.18			CL C	A 018 018 018 018 018 018 018 018 018	018 018 028 018 018 018 0
78	Supplementary information:					
63	X-capacitors installed for testing:					

GI	S			Page 43 of 7	9 or or or or or or		Report	No.: G	ГЅ2023	120038S01
els els els els els els els els	As old old old old	18 ch ch ch ch ch ch ch ch	ens ens	IEC 623	68-1	els	Is one or one or	els els els el	le elle elle elle elle	612 612 612 518 618 618 618 618 618 618 618 618 618 6
Clause	Require	ment + Test	75 GTS GTS	or else or or or or or	675 C78 C78 C78 C78	Result	- Remark	of the second	crs crs crs crs	Verdict
[] ICX:	g resisto		., no	rmal operation, o	or open fus	e), SC	= short cir	cuit, O	C= ope	n circuit
	ens ens ens ens	and the contract of the contra	SAS CAS CAS			ers ers er	As one one one one one	eds eds eds eds	els els els	
5.6.6	TABLE:	Resistance	of pr	otective conduc	ctors and to	ermina	ations	ors ors	elle elle elle elle	N/A
Location				Test current (A)	Durati (min			ge drop (V)	Re	esistance (Ω)
18 CT CTS CTS CTS CTS CTS CTS CTS CTS CTS	is one one one of	as old old old old old old	cls de ci		2 c2 c22 c22 c22 c22 c22 c22	S CTS CTS CTS	618 618 618 618 618	618 618 618 61	S CAS THE CASE	ole ole ole ole ole
Supplementary information:										
eas eas eas eas eas eas										
of the state of th										
					N/A					
Location Operating and fault conditions		Supply Voltage (V)	Voltage	Parameters Oltage Current Freq.		Erog	ES class			
			(V _{rms} or V		(A _{rms} or A		(Hz)			
the case of the ca	The Case of the Ca	18	ens ens	18 0.18 0.18 0.18 0.18 0.18 0.18 0.18 0.	is our oils oils oils oil is oils oils oils oil	S Gr. CIS			s cls com cls cl	48 618 61 <u>8 618 618 61</u>
Supplement	tary infor	mation:		70 70 7 - 60	97c - 5 7	65. 970		475 48	6× 970	'5 o ' / Gn
Abbreviation	n;	S CLR CLR CLR CLR CLR CLR CLR CLR CLR	GIS GIS GI	ole ole ole ole ole ole ole ole ole	cla cla cla cla cla	ers ers er	The oracle of the oracle	ers ers ers	ers ers ers	618 618 618 618 618 618 618
cas cas cas cas cas cas	12 012 013 013 013 013 013 013 013 013 013 013	or o	els els	or or or or or or	CAR CAR CAR CAR CAR	ole ole ole ole	a cue	ors ors ors		
5.7.5	67 978 -18	678 678 678 678 678 678 678 678 678 678	(8 Oz.	ble conductive	part	els els els	ens one one one	18 C18 C18 C18	13 CF	N/A
Gr. Try 18	Gra Gra		To 18 0			e18 e18 e1	2 cls cls cls cls cl	a cla cla cla c	the case of the ca	_
Gra Gra Gra Gra	S On Ste Ste		13	[] Single Phase	2 Cl	Pnase	: [] Delta	[] vvye	ess ess ess	
18 A CO CO	ibution S	ystem		[] TN []TT	075 [] [] [] [] (75 075 075 075 075 075 075 075 075 075 0	ells ells e	the case case case case	c18 c18 c18 c18	case case case case case case case case	
Location				Fault Condition 60990 clause 6			h current (mA)		Comm	ent
12 cls cls cls cls cls cls	els els els els els	els els els els els els els els els	ers ers	18 c ¹⁸ c ¹	As cas cas cas cas cas cas cas cas cas ca	GTS GTS GTS G	128 -018 018 018 018 0	8 GVe GL8 GL8	118 c18 c18 c18 c1	and the cut of the cut
Supplement	tary Infor	mation:		1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		-3	270 270 1		4/0	
elle elle elle elle elle elle elle ell	s cls cls cls cls	s ors ors s ors ors ors ors	To GIS GIS	ore the cut of the cut	3 c18 c18 c18 c18 c18 is	elle elle elle	S CAS CAS CAS CAS CAS	12 612 613 612 613 613	S CIS CIS CIS	618 618 618 18 618 6
18 cts cts cts cts cts										
5.8	IABLE	Ch. Ch. Ch.	678	uard in battery	Gr. Gr.		Gr. Gr. 78	S CTS CTS C	218 C18 C1	N/A
Location		Supply voltage (V)	Оре	erating and fault condition	Time (s)		en-circuit tage (V)	Tou currer		ES Class
618 618 618 618 618 618 618 618 618	en els els els els	8 C18 C18 C18 C19 C18	ors creek	6.18 6.18 6.18 6.18 6.18 6.18 6.18 6.18	618 618 618 618 618 618 618 618 618 618		12 CLR	ers ers ers	The Care of the	128 CL8 CL8 CL8 CL8 CL8 CL8 CL8 CL8 CL8 CL
Supplement	tary infor	mation:								

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TABLE: Power source circuit classifications

Abbreviation:

6.2.2



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44 01 79	s ste ors ors	Keport	140 G 1 3	2023120	1030301
EC 62369 1	ols els els els	S CTS CTS CTS	GTS GTS GTS	GIS GR. GIS GIS	S CLE ST. CLE LE

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673	cas		IEC 62368-1		ole ole ole ole ole ole
475 78	Clause	Requirement + Test		Result - Remark	Verdict

Location	Operating and fault condition	Voltage (V)	Current (A)	Max. Power ¹⁾ (W)	Time (S)	PS class
All internal circuits						PS2 # (declared by manufacturer)
Internal	Normal	2.14	4.11	8.8	3 m m	
battery	Abnormal: B- to P- SC	2.28	4.27	9.74	078 078 078 078 078 078 078 078 078 078	PS2

Supplementary information:

- 1) Measured after 3 s for PS1 and measured after 5 s for PS2 and PS3.
- 2) # The external DC source was considered as PS2

6.2.3.1	TABLE: Determin	nation of Arcing PIS			N/A
Location		Open circuit voltage after 3 s (Vpk)	Measured r.m.s current (A)	Calculated value	Arcing PIS? Yes / No
	s old old old old old old old old old				

Supplementary information:

All primary circuit/components were considered as artcing PIS, The open circuit of all secondary components/circuit were not exceeded 50V.

An Arcing PIS requires a minimum of 50 V (peak) a.c. or d.c. An Arcing PIS is established when the product of the open circuit voltage (V_p) and normal operating condition rms current (I_{rms}) is greater than 15.

6.2.3.2 TABLE: Determine	nation of resistive PIS		or or or or or or
Location	Operating and fault condition	Dissipate power (W)	Arcing PIS? Yes / No
All circuits within the equipment			Yes

Supplementary information:

Abbreviation: SC= short circuit; OC= open circuit

All power dissipating components in primary and secondary circuit are considered as resistive PIS due to the available power as declared by manufacturer.

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.

8.5.5	TABLE: High pressure lamp	ens ens ens ens ens	ors ors	elle elle elle elle elle	ess ess ess es	The one one	ers ers ers ers	678 678 678 67	N/A
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)	or 79				18 98 C	Repor	t No.:	G.	5202	31200	JJ85	U,I
Ξ	13 Cz.	G25 67	78 02	678	38 00	Gre Gre	678	678 0-	18 676	678 678	028	678

on or or or or or		IEC 62368-1		512 612 612 113 612 12 612 613 113 613
Clause	Requirement + Test		Result - Remark	Verdict
75 - 673 - 67		The state of the s	of the state of th	3 - 478 0- 1 - 97

60	Lamp manufacturer	Lamp type	Explosion method	Longest axis of glass particle (mm)	Particle found beyond 1 m Yes / No
87g					2 0.18 0.18 0.18 0.18 0.18 0.18 0.18 0.18
78	Supplementary information:				
8		3 018 018 018 018 018 018 018 018 018 018		0.12 0.13 0.13 0.13 0.13 0.13 0.13 0.13 0.13	ors ors ors ors ors ors

che cle cle con che che cle cle	018 18 Gr 18 GIS	GTS TS GTS G	y GIS Co. Sec.	GIS GIS CTS	78 Gr. 18 GTS GTS	The Glories Glasses	rs co rs cre cre	618 C 218 18 CM
9.6 TABLE	: Tempera	ture meas	urements	for wireles	ss power t	ransmitter	S ₁₅ or or or	N/A
Supply voltage (V)			s ors ors o	12 0.12 0.13 0.13 0.13 0.13 0.13 0.13 0.13 0.13		cas	elle elle elle elle elle elle elle ell	_
Max. transmit power	of transmit	ter (W)	ers ers	6 018 018 018 018 018 018 018 018 018 018	of organization			
6	w/o rece			eiver and contact		ver and at of 2 mm		iver and at of 5 mm
Foreign objects	Object (°C)	Ambient (°C)	Object (°C)	Ambient (°C)	Object (°C)	Ambient (°C)	Object (°C)	Ambient (°C)
	els els cals els els els els els els els els els e	78 078 078 078 078	The Grand Gr	18 C18 C1 C18 C18 C18 C18	6 618 618 618 618 618	18 618 618 618 618	78 678 678 678 678	cls
Supplementary inforr	nation:							
	2 C12 C13 C13 C13 C14 C15 C17		s cis cis cis cis cis		S GAR GAR GAR GAR GAR		s els els els els els els els els els el	2 012 012 012 013 014 015 015 015 015 015 015 015 015 015 015

5.4.1.4, TABLE: Temperature measure 9.3, B.1.5, B.2.6	urements			
Supply voltage (V)	9.0Vdc	4.4Vdc		
	(Condition 1)	(Condition 2)		
Ambient temperature during test T_{amb} (°C):	See below	See below		_
Maximum measured temperature T of part/at:		T (°C)		Allowed T _{max} (°C)
DC inlet	46.3	0.18 0.18 0.18 0.18 0.18 0.18 0.18 0.18	618 618 618 618 618 618 618 618 618	Ref
PCB near U29A (main board)	53.2	60.8		130
PCB near U28 A(main board)	51.0	57.8	The Color Co	130
PCB near U1A (main board)	49.6	56.5	1 018 018 018 018 018 018 018 018 018 01	130
PCB near U1B(main board)	48.5	55.7		130
Battery body	52.8	53.2	0.18 0.18 0.18 0.18 0.18 0.18 0.18 0.18	Tr
Battery body	18 018 018 018 018 018 018 018 018 018 0	53.6	18 018 018 018 018 018 018 018 018	60
Plastioc enclosure inside near PCB	47.2	50.1	a cue	Ref.
Ambient	40.0	40.0	3 c18	
Accessible part temperature of clause 9.0	ors ors ors ors ors ors ors	18 02 018 018 018 018 018 018 018 018 018 018	s cls cls cls cls cls cls cls cls cls cl	cas cas cas as cas as cas cas cas cas ca
Enclosure outside near PCB	37.4	39.0		48



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9		Re	port No	o.: GTS	2023	12003	38S01	
		18 0- 10 0	c 62.					

62)		The ore ore ore ore	de cas	IEC 62368-	1 crs crs '78 crs crs	and the contract of the contra	S case case case case case case case case	out out out out out out out
78 78	Clause Requirement	+ Test	18 c18 c18 c18 c18 c18 c18	S OF OLS OLS OLS OLS OLS	Re	sult - Rema	nrk	Verdict
	Display screen			27.3		29.8		71
	Button	618 618 618 618 618		26.0	12	28.4	12 cls cls cls cls cls cls cls cls	48
	Ambient	elle elle elle elle elle elle		25.0	3 078 076 078 078 078 0	25.0	2 0.12 0.12 0.12 0.12 0.12 0.12 0.12 0.1	128 628 628 628 628 628 628 628 628 628 6
	Temperature T of winding:	t ₁ (°C)	R ₁ (Ω)	t ₂ (°C)	$R_2\left(\Omega\right)$	T (°C)	Allowed T _{max} (°C)	Insulation class
	2 - 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	18 018 018 018 018 018 018 018 018 018 0	618 618 618 618 618 618 618 618	618 678 678 678	618 CL 61	6 018 018 018 018 018 018 018 018 018 018	12 018 018 018 018 018 018 018 018 018 018	
	Supplementary information	n.						

Supplementary information:

Supplementary information:

- 1. The maximum operating temperature is 40°C.
- *Temperature limit for TS1 of accessible enclosure outside according to Table 38. (External surfaces of enclosure will be touched occasionally for very short periods (>1mins and <8h).
 Condition 1: Charging mode: Normal operation.
- Condition 2: Discharging mode: Normal operation

B.2.5	T/	ABLE: Ir	nput test	ons one one one	ors ors ors ors ors ors or	28 0.28 0.28 0.28 0.28 0.28 0.28 0.28 0.	ols ols ols ols ols ols			
U (V)	Hz	I (A)	I rated (A)	P (W)	P rated (W)	Fuse No	I fuse (A)	Condition/status		
5VDC		2.51	3.0	11.05				Charging mode: Normal operation Battery current: 2.23 A		
9VDC		0.93		8.37				Charging mode: Normal operation Battery current: 0.77 A		
4.4 VDC	18 618 618 618 18 618 618 618							Discharging mode: Normal operation Battery current: 1.46A		
Supplem	Supplementary information:									
St. Chr. Chr. Chr. Chr. Chr. Chr. Chr. Chr	GTS GTS	TS GTS GTS GT	ell all cls cls cls cls	on one one one	a cus cas cas cas cas	CI. 618 618 618 618 618	CIS GIV GIV GIV GIVE GIVE	13 018 07 018 018 018 018 018 018 018 018 018 018		

B.3, B.4 TA	ABLE: Abr	ormal op	erating a	nd fault	condition	tests						
Ambient tem	perature (°	C)	6 18 6 18 6 18 6 18 6 18 6 18 6 18 6 18			25 °C, if not specified —						
Power source	Power source for EUT: Manufacturer, model/type, output rating											
Component No.	Conditio n	Supply voltage, (V)	Test time (s)	Fuse No.	Fuse current, (A)	Observation						
Charging with	n empty ba	ttery	S che che che che	ers or ors or ors	The CLE CLE CLE CLE							
B- to P-	SC	9VDC	7h			After test, unit operated under normal condition, no fire, no explosion, no damage, no hazard.						
C6(on battery board)	SC	9VDC	10mins			Unit shut down, recoverable, no damage, no hazards.						
R2	SC	9VDC	10mins	018 619 629 618 618 6	18 618 618 618 618 618 618 618 618 618 6	Unit shut down, recoverable, no damage,						



678	175 Tis en		Page 47 of 79	Report No.: GTS20231	20038S01
97 GTS	is cus cus cus cus cus cus cus cus cus cu		IEC 62368-1		12 c12 c12 c12 c13
C	Clause	Requirement + Test		Result - Remark	Verdict

Discharging	with full cha	arged hatt	Orv	Con The Cree Cons	CLE CLE CLE CLE	no hazards.
B- to P-(on battery board)	SC SC	4.4V DC	7h			After test, unit operated under normal condition, no fire, no explosion, no damage, no hazard.
C10(on battery board)	SC	4.4V DC	10mins			Unit shut down, recoverable, no damage, no hazards.
C13 (on battery board)	SC	4.4V DC	10mins			Unit shut down, recoverable, no damage, no hazards.

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.

SC: Short-circuited

M.3	M.3 TABLE: Protection circuits for batteries provided within the equipment									
Is it possible t	ole to install the battery in a reverse polarity position?: No —						o78			
0	V //- V	V/2.			Ch	nargin	ying			
Equipment S	pecification	Voltage (V)				Current (A)				
3		618 618 618 618 618 618 618 618 618 618	5.	0V/9.0V	els els els els els els els	78 078 079 0	AS CAS CAS	CLS CLS CLS CLS	2.0A/3.0A	As one one one one one one
) 					Battery	specif	icatio	on		,
		Non-recharge	able	batteries		F	Rech	argeabl	e batteries	
<u>.</u>		Discharging		ntentional	C	Chargi	ing		Discharging	Reverse
Manufacturer/type		current (A)		harging rrent (A)	Voltage	(V) (Current (A)		current (A)	charging current (A)
Dongguan Amperex Technology Limited/CINSBBMA				4.4			5A	3.435A		
Note: The tes	ts of M.3.2 a	re applicable o	nly w	vhen above	e appropri	ate da	ıta is	not ava	ilable.	6
Specified batt	tery tempera	ture (°C)	S 078 - 18	018 C16 C18 C16 C18 C	18 02 018 018 018 018	13 ON ON O	TS GTS GTS	cas cas cas cas cas cas cas	and the contract of the contra	678 6
Component No.	Fault condition	Charge/ discharge mo	ode	Test time	Temp. (°C)	Curr (A		Voltag (V)	e Obse	rvation
Battery pin B- to P-		Charge mode		7h	Battery body: 53.2°C; Ambient : 40.0°C	1.6	66	4.4	After test, operated unormal condamage, n	nder ndition, no
Battery pin B- to P-		Discharge mo	ode	7h 7h	Battery body: 53.2°C; Ambient : 40.0°C	1.4	l8	4.4	Unit working normal, no no hazarda leakage, no electrolyte	damage, s, no o



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	IEC 62368-1		618 618 618 518 618
Clause	Requirement + Test	Result - Remark	Verdict

Supplementary information:

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

M.4.2	TABLE: battery	Charging sat	feguards for	equipment c	ontaining a s	secondary lithium	
Maximum sp	Maximum specified charging voltage (V) : 4.4						_
Maximum specified charging current (A)							_
Highest spec	Highest specified charging temperature (°C) 55						
Lowest specified charging temperature (°C)							
Battery Operati				Measurement		Observation	n
manufacture	er/type	and fault condition	Charging voltage (V)	Charging current (A)	Temp. (°C)		
Dongguan A Technology Limited/CINS	A CLE CLE CLE CLE	Normal	4.4	1.40	Battery body: 53.2°C; Ambient: 40.0°C	The charging voltage current didn't exceed MSCV, MSCC, HS LSCT.	ed the
Dongguan A Technology Limited/CINS	eds eds eds eds	Battery pin B- to P- SC	4.4	1,66	Battery body: 53.2°C; Ambient: 40.0°C	The charging voltage current didn't exceed MSCV, MSCC, HS LSCT.	ed the

Supplementary information:

Abbreviation: SC= short circuit; OC= open circuit; MSCV= maximum specified charging voltage; MSCC= maximum specified charging current; HSCT= highest specified charging temperature; LSCT= lowest specified charging temperature

GTS TS CT GTO GTS TS	on one of the control	the one of the state of the other of the oth	The contract of the contract o	The control of the co
Battery identification	Charging at T _{lowest} (°C)	Observation	Charging at T _{highest} (°C)	Observation
Dongguan Amperex Technology Limited		Charging current not more than max. charging current: 0.458A	55	The battery stopped charging and battery charging current: 0 A
Supplementary In	formation:		of ors ors ors ors ors ors ors	



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		Re	oort	No.:	G١	S20	2312	2003	850	1,1
0.4	Ga.	8	•		G/a	- CX	5.0	6'5.	70 DA	\neg

ed eds one eds eds eds	IEC 62368-1		128 CLR CLR (128 CLR)
Clause	Requirement + Test	Result - Remark	Verdict

Annex Q.1	TABLE: Circu	ABLE: Circuits intended for interconnection with building wiring (LPS)					
Note: Measure	Note: Measured UOC (V) with all load circuits disconnected:						
Output Circuit	Components	U _{oc} (V)	U _{oc} (V)			'A)	
76 76			Meas.	Limit	Meas.	Limit	
28 CLE CLR	2- 018 018 018 018 018 018 018 018 018	12 012 013 013 013 013 013 013 013 013 013 013	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)		22 - 018 02 018 018 018 018 018 018 018 018 018 018	CAS	
Supplementary	Information:						

678 78 678 678 778 778 678 678 678 678 6	One on one one one one	18 Cay 67 Cay 678	The Grand Grands	0.18 0.18 0.18 0.18	Green	Ch. Ch. Ch. Ch. Ch.
T.2, T.3, T.4, T.5	E: Steady force test					
Location/Part	Material	Thickness (mm)	Probe	Force (N)	Test Duration (s)	Observation
Top of enclosure	Plastic	See table 4.1.2	018 018 018 018 018 118 018 118 018 118	100	618 618 618 618 618 618 618 618	No damaged, no hazard
Bottom of enclosure	Plastic	See table 4.1.2	12 c12 c13 c13 c13 c13 c 13 c12 c13 c13 c13 c 14 c13 c13 c13 c 15 c13 c13 c 16 c13 c13 c 17 c 18	100	015 015 015 015 015 015 015 015 015 015	No damaged, no hazard
Side of enclosure	Plastic	See table 4.1.2	618 618 618 618 618 618 618 618 618 618	100	5 m m	No damaged, no hazard
Supplementary info	rmation:					
	one	AS CAS CAS CAS CAS CAS CAS CAS CAS CAS C	ols ols ols ols ols ols	ers ers ers ers	THE OTHER OTHER OTHER OTHER	

The state of the s	The state of the s	The state of the s	13 Cm 578	The state of the s				
T.7 TABLE: Dro	p test		is one one one one one one					
Location/Part	Material	Thickness (mm)	Height (mm)	Observation				
Top of enclosure	Plastic	See table 4.1.2	1000	No damage, no hazard.				
Bottom of enclosure	Plastic	See table 4.1.2	1000	No damage, no hazard.				
Side of enclosure	Plastic	See table 4.1.2	1000	No damage, no hazard.				
Supplementary information:								

Street St	18 62 636 438 438 438	Grand State of the Control of the Co	73 78 78 78 78 78 78	Cr. 178	67 678 18 Ca 18 Ca 18	
T.8 TABLE	: Stress relief to	est		is our cas our our		
Location/Part	Material	Thickness (mm)	Oven Temperature (°C)	Duration (h)	Observation	
Enclosure	Plastic	See table 4.1.2			No damage, no hazard.	
Supplementary inform	mation:	- /2 // 0	100 100 100 100 100 100 100 100 100 100	72 72		



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IEC 62368-1		

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478 78	Clause	Requirement + Test		Result - Remark	Verdict

X TABLE: Alternative method for determining minimum clearances distances N/A						
Clearance distanced between:	Peak of working voltage (V)	Required cl (mm)	Measured cl (mm)			
	2 012 012 013 013 014 015 015 015 015 015 015 015 015 015 015					
Supplementary information:						



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		Attachment 1		18 ors ors ors ors or
		IEC 62368_1E ATTACHME		
Clause	Requirement + Test		Result - Remark	Verdict

ATTACHMENT TO TEST REPORT

IEC 62368-1

EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES

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

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

Attachment Form No...... EU_GD_IEC62368_1E

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

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

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els els els els els els els	CENELEC COMMON MO	DIFICATIONS (EN)	P
	Clause numbers in the cells that are shaded light grey are clause references in EN IEC 62368-1:2020+A11:2020. All other clause numbers in that column, except for those in the paragraph below, refers to IEC 62368-1:2018.		
	Clauses, subclauses, note those in IEC 62368-1:201	es, tables, figures and annexes which are additional to 8 are prefixed "Z".	
	Add the following annexes		
	Annex ZA (normative) with their co	Normative references to international publications orresponding European publications	
The other ot	Annex ZB (normative)	Special national conditions	a chi chi ali chi
	Annex ZC (informative)	A-deviations	618 618 618 618 618 618 618
	Annex ZD (informative)	IEC and CENELEC code designations for flexible cords	12 613 015 016 018 018 018 018 018 018 018 018 018 018
1	Modification to Clause 3		
3.3.19	Sound exposure		N/A
or or or or or or	Replace 3.3.19 of IEC 623	368-1 with the following definitions:	els cla cla cla

Introduction

Safeguard requirements for protection against

10.6.1.1

THE PROPERTY OF THE PARTY OF TH	Page 52 of 79	Report No.: GTS20231200	038S01
A cus	Attachment 1		12 c12 c13 c12 c12 c12 c12 c13
	IEC 62368_1E ATTACHME		S CAS CAS CAS CAS CAS CAS
Clause	Requirement + Test	Result - Remark	Verdict
7 C78 C78 C78 C78 C78 C78 C78 C78 C78 C7			618 C18 C 618 C18 C18 C18 C18 C18 C18 C18 C18 C18 C
3.3.19.1	momentary exposure level, MEL		N/A
	metric for estimating 1 s sound exposure level from the HD 483-1 S2 test signal applied to both channels, based on EN 50332-1:2013, 4.2.		
	Note 1 to entry: MEL is measured as A-weighted levels in dB.		A che che che che che
	Note 2 to entry: See B.3 of EN 50332-3:2017 for additional information.		
3.3.19.3	sound exposure, E		N/A
	A-weighted sound pressure (p) squared and integrated over a stated period of time, T Note 1 to entry: The SI unit is Pa² s. $E = \int_{0}^{T} p(t)^2 \mathrm{d}t$		
3.3.19.4	sound exposure level, SEL		N/A
	logarithmic measure of sound exposure relative to a reference value, E_0 , typically the 1 kHz threshold of hearing in humans. Note 1 to entry: SEL is measured as A-weighted levels in dB. $SEL = 10 \lg \left(\frac{E}{E_0}\right) \text{dB}$		
	Note 2 to entry: See B.4 of EN 50332-3:2017 for additional information.		
3.3.19.5	digital signal level relative to full scale, dBFS		N/A
	levels reported in dBFS are always r.m.s. Full scale level, 0 dBFS, is the level of a dc-free 997-Hz sine wave whose undithered positive peak value is positive digital full scale, leaving the code corresponding to negative digital full scale unused Note 1 to entry: It is invalid to use dBFS for non-r.m.s. levels. Because the definition of full scale is based on a sine wave, the		
	level of signals with a crest factor lower than that of a sine wave may exceed 0 dBFS. In particular, square wave signals may reach +3,01 dBFS.		
2	Modification to Clause 10		S Gran OR Gra
10.6	Safeguards against acoustic energy sources		N/A
CAS	Replace 10.6 of IEC 62368-1 with the following:		one one one one one one one one one

N/A



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	IEC 62368_1E ATTACHME		
Clause	Requirement + Test	Result - Remark	Verdict
1	long-term exposure to excessive sound pressure		ole ole ole ole ole
	levels from personal music players closely coupled to the ear are specified below. Requirements for earphones and headphones intended for use with personal music players are also covered. A personal music player is a portable equipment intended for use by an ordinary person , that:		
	 is designed to allow the user to listen to audio or audiovisual content / material; and uses a listening device, such as headphones or earphones that can be worn in or on or around the ears; and 		
	 has a player that can be body worn (of a size suitable to be carried in a clothing pocket) and is intended for the user to walk around with while in continuous use (for example, on a street, in a subway, at an airport, etc.). 		
	EXAMPLES Portable CD players, MP3 audio players, mobile phones with MP3 type features, PDAs or similar equipment.		
	Personal music players shall comply with the requirements of either 10.6.2 or 10.6.3.		
	NOTE 1 Protection against acoustic energy sources from telecom applications is referenced to ITU-T P.360.		
	NOTE 2 It is the intention of the Committee to allow the alternative methods for now, but to only use the dose measurement method as given in 10.6.5 in future. Therefore, manufacturers are encouraged to implement 10.6.5 as soon as possible.		
	Listening devices sold separately shall comply with the requirements of 10.6.6. These requirements are valid for music or video		
	mode only. The requirements do not apply to: – professional equipment;		
	NOTE 3 Professional equipment is equipment sold through special sales channels. All products sold through normal electronics stores are considered not to be professional equipment.		
	 hearing aid equipment and other devices for assistive listening; the following type of analogue personal music 		
	players: • long distance radio receiver (for example, a multiband radio receiver or world band radio receiver, an AM radio receiver), and • cassette player/recorder;		
	NOTE 4 This exemption has been allowed because this technology is falling out of use and it is expected that within a few years it will no longer exist. This exemption will not be extended to other technologies.		



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	IEC 62368_1E ATTACHME		18 618 118 618 18 618 118 618 618
Clause	Requirement + Test	Result - Remark V	'erdict
			ors ors
	 a player while connected to an external amplifier that does not allow the user to walk around while in use. For equipment that is clearly designed or intended 		
	primarily for use by children, the limits of the relevant toy standards may apply.		
	The relevant requirements are given in EN 71-1:2011, 4.20 and the related tests methods and measurement distances apply.		
10.6.1.2	Non-ionizing radiation from radio frequencies in the range 0 to 300 GHz		N/A
	The amount of non-ionizing radiation is regulated by European Council Recommendation 1999/519/EC of 12 July 1999 on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz).		
	For intentional radiators, ICNIRP guidelines should be taken into account for Limiting Exposure to Time-Varying Electric, Magnetic, and Electromagnetic Fields (up to 300 GHz). For hand- held and body mounted devices, attention is drawn		
10.6.2	to EN 50360 and EN 50566. Classification of devices without the capacity to	estimate sound dose	N/A
10.6.2.1	General		N/A
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0			
	This standard is transitioning from short-term based (30 s) requirements to long-term based (40 hour) requirements. These clauses remain in effect only for devices that do not comply with sound dose estimation as stipulated in EN 50332-3.		
	For classifying the acoustic output $L_{\text{Aeq},\mathcal{T}}$, measurements are based on the A-weighted		
	equivalent sound pressure level over a 30 s period.		18 618 18 618 619 18 618 18 618 619
	For music where the average sound pressure (long term $LAeq, \tau$) measured over the duration of the		
	song is lower than the average produced by the		678 67 678 678 77
	programme simulation noise, measurements may be done over the duration of the complete song. In this case, <i>T</i> becomes the duration of the song.		
	NOTE Classical music, acoustic music and broadcast typically has an average sound pressure (long term L_{Aeq} , τ) which is much lower than the average programme simulation noise. Therefore, if the player is capable to analyse the content and compare it with the programme simulation noise, the warning		
	does not need to be given as long as the average sound pressure of the song does not exceed the required limit. For example, if the player is set with the programme simulation noise to 85 dB, but the average music level of the song is only		



10.6.3

10.6.3.1

Classification of devices (new)

Previous limits (10.6.2) created abundant false

General

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	Attachment 1		
	IEC 62368_1E ATTACHME		s ors ors ors ors or
Clause	Requirement + Test	Result - Remark	Verdict
	65 dB, there is no need to give a warning or ask an acknowledgement as long as the average sound level of the song is not above the basic limit of 85 dB.		
10.6.2.2	RS1 limits (to be superseded, see 10.6.3.2)		N/A
	RS1 is a class 1 acoustic energy source that does not exceed the following: — for equipment provided as a package (player with its listening device), and with a proprietary connector between the player and its listening device, or where the combination of player and listening device is known by other means such as setting or automatic detection, the <i>L</i> Aeq, <i>τ</i> acoustic output shall be ≤ 85 dB when playing the fixed "programme simulation noise" described in EN 50332-1. — for equipment provided with a standardized connector (for example, a 3,5 phone jack) that allows connection to a listening device for general use, the unweighted r.m.s. output voltage shall be ≤ 27 mV (analogue interface) or -25 dBFS (digital interface) when playing the fixed "programme simulation noise" described in EN 50332-1. — The RS1 limits will be updated for all devices as per 10.6.3.2.		
10.6.2.3	RS2 limits (to be superseded, see 10.6.3.3) RS2 is a class 2 acoustic energy source that does not exceed the following: — for equipment provided as a package (player with its listening device), and with a proprietary connector between the player and its listening device, or when the combination of player and listening device is known by other means such as setting or automatic 130 detection, the <i>L</i> Aeq, <i>τ</i> acoustic output shall be ≤ 100 dB(A) when playing the fixed "programme simulation noise" as described in EN 50332-1. — for equipment provided with a standardized connector (for example, a 3,5 phone jack) that allows connection to a listening device for general use, the unweighted r.m.s. output voltage shall be ≤ 150 mV (analogue interface) or -10 dBFS (digital interface) when playing the fixed "programme simulation poine" as described in EN 50322 1.		
10.6.2.4	simulation noise" as described in EN 50332-1. RS3 limits RS3 is a class 3 acoustic energy source that exceeds RS2 limits.		N/A

N/A

N/A



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Clause	Requirement + Test	Result - Remark	Verdict
	negative and false positive PMP sound level warnings. New limits, compliant with The		18 018 01 018 019 018 018 018 018 018
	Commission Decision of 23 June 2009, are given		3 cls cls cls cls cls cls cls cls
	below.	0.13 0.13 0.14 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15	Con
10.6.3.2	RS1 limits (new)		N/A
	RS1 is a class 1 acoustic energy source that does		cas cas cas cas cas cas cas
	not exceed the following:		
	 for equipment provided as a package (player with its listening device), and with a proprietary 		is cas cas cas cas cas cas
	connector between the player and its listening		2 CAP
	device, or where the combination of player and		ore one ore ore ore ore
	listening device is known by other means such as		old old old old old old old
	setting or automatic detection, the $L_{Aeq,\tau}$ acoustic output shall be \leq 80 dB when playing the fixed		eds of the eds of the co
	"programme simulation noise" described in EN		ers ers ers ers ers
	50332-1.		
	– for equipment provided with a standardized		is cas cas cas cas cas cas
	connector (for example, a 3,5 phone jack) that allows connection to a listening device for general	12 CL	and the case of th
	use, the unweighted r.m.s. output voltage shall be		6.18 6.18 6.18 6.18 6.18 6.18 6.18 6.18
	≤ 15 mV (analogue interface) or -30 dBFS (digital		The Case of Ca
	interface) when playing the fixed "programme simulation noise" described in EN 50332-1.		a case call case case case case case case case case
10.6.3.3	RS2 limits (new)		N/A
	RS2 is a class 2 acoustic energy source that does		old old old old old old
	not exceed the following: – for equipment provided as a package (player with	13 CL	cas cas cas cas cas cas cas
	its listening device), and with a proprietary		
	connector between the player and its listening		18 018 018 018 018 018 018 018 018 018 0
	device, or where the combination of player and listening device is known by other means such as		and the case of th
	setting or automatic detection, the weekly sound		0.18 0.18 0.18 0.18 0.18 0.19 0.19 0.19 0.19 0.19 0.19 0.19 0.19
	exposure level, as described in EN 50332-3, shall		cas cas cas cas cas cas
	be ≤ 80 dB when playing the fixed "programme		ers ers ers ers ers ers
	simulation noise" described in EN 50332-1. – for equipment provided with a standardized		
	connector (for example, a 3,5 phone jack) that		A CAS CALL CAS
	allows connection to a listening device for general		2 c- c12 c12 c12 c12 c12 c12 c12
	use, the unweighted r.m.s. output level, integrated over one week, as described in EN50332-3, shall		old old old old old old old
	be ≤ 15 mV (analogue interface) or -30 dBFS		ers ers ers ers ers
	(digital interface) when playing the fixed		As als als als als als als als als als al
	"programme simulation noise" described in EN 50332-1.		2 c18
10.6.4	Requirements for maximum sound exposure	2 C12 C12 C12 C12 C12 C12 C12 C12 C12 C1	N/A
10.6.4.1	Measurement methods	12 c13	N/A
		12 ch	CAS
	All volume controls shall be turned to maximum	618 618 618 618 618 618 618 618 618 618	
	during tests.	the cut of	
	Measurements shall be made in accordance with	of the case of the	2 c12 c12 c12 c13
S CHE CHE CHE CHE CHE	EN 50332-1 or EN 50332-2 as applicable.	one are the one one one one one one one one	8 078 078 078 078 078 078



exposed to RS3.

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Attachment 1					
	IEC 62368_1E ATTACHMENT				
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10.6.4.2 Protection of persons N/A Except as given below, protection requirements for parts accessible to ordinary persons, instructed persons and skilled persons are given in 4.3. NOTE 1 Volume control is not considered a safeguard. Between RS2 and an ordinary person, the basic safeguard may be replaced by an instructional safeguard in accordance with Clause F.5, except that the instructional safeguard shall be placed on the equipment, or on the packaging, or in the instruction manual. Alternatively, the instructional safeguard may be given through the equipment display during use. The elements of the instructional safeguard shall be as follows: – element 1a: the symbol 4 L, IEC 60417-6044 (2011-01)- element 2: "High sound pressure" or equivalent wording - element 3: "Hearing damage risk" or equivalent wording - element 4: "Do not listen at high volume levels for long periods." or equivalent wording An equipment safeguard shall prevent exposure of an **ordinary person** to an RS2 source without intentional physical action from the ordinary person and shall automatically return to an output level not exceeding what is specified for an RS1 source when the power is switched off. The equipment shall provide a means to actively inform the user of the increased sound level when the equipment is operated with an output exceeding RS1. Any means used shall be acknowledged by the user before activating a mode of operation which allows for an output exceeding RS1. The acknowledgement does not need to be repeated more than once every 20 h of cumulative listening time. NOTE 2 Examples of means include visual or audible signals. Action from the user is always needed. NOTE 3 The 20 h listening time is the accumulative listening time, independent of how often and how long the personal music player has been switched off. A **skilled person** shall not be unintentionally



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CTS CTS CTS CTS CTS CTS			old class of class of
10.6.5	Requirements for dose-based systems		N/A
10.6.5.1	General requirements	at the state of th	N/A
c12 c12 c12 c12 c13 c13			cas
The state of the s	Personal music players shall give the warnings as	case case case case case case case case	ors ors ors ors
is care and the case case case case case case case cas	provided below when tested according to EN		18 e18 e18 e18 e1
is one one one one one	50332-3, using the limits from this clause.		As one of one of
eas eas eas eas eas eas	The manufacturer may offer entired eattings to	0.12 0.12 0.12 0.12 0.12 0.12 0.12 0.12	2 612 613 613 612
els els els els els els els	The manufacturer may offer optional settings to allow the users to modify when and how they wish		els els als els els
The case of the case of	to receive the notifications and warnings to		Els els als els
elle elle elle elle elle elle	promote a better user experience without defeating		ers ers ers ers
the cuts of the cu	the safeguards. This allows the users to be	as as a second of the contract	618 618 618 618 618 618 618 618 618 618
	informed in a method that best meets their physical		All call all all all all
and the case of the case of	capabilities and device usage needs. If such	The case of the ca	as care cas cas cas
2 618 618 618 618 618 618	optional settings are offered, an administrator (for		A cle cle cle cle cle
ers ers ers ers ers ers	example, parental restrictions,	at the state of th	s cas cas cas cas
The CLE CLE CLE CLE CLE	business/educational administrators, etc.) shall be	THE OFFICE OF THE OFFICE OFFI	elle cla cla cla cla
18 GIR GIR GIR GIR	able to lock any optional settings into a specific	112 012 012 012 012 013 013 013 013 013 013 013 013 013 013	elle elle generale elle elle
2 618 612 612 612 612 613 61	configuration.		618 618 6 618 618
8 C78 C78 C78 C78 C78 C78	The personal music player shall be supplied with		CLR CLR C CLR CLR
613 613 613 613 613 613	easy to understand explanation to the user of the		ele cle creation
eas eas eas eas eas eas	dose management system, the risks involved, and		cas cas cas cas
ers ers ers ers ers	how to use the system safely. The user shall be		618 618 618 618 618
ous ous ous ous ous ous	made aware that other sources may significantly		cas cas cas cas cas cas
As case and case case case case case case case case	contribute to their sound exposure, for example		18 C18 C18 C18 C18 C18 C18 C18 C18 C18 C
is cas cas cas cas cas cas	work, transportation, concerts, clubs, cinema, car	the one one one one one one one one one on	IR CLR CL. IN CLR CL
40.05.0	races, etc.	13 OF OR	S - CIS CIT CIS CIT
10.6.5.2	Dose-based warning and requirements		N/A
The contract of the contract o	When a dose of 100 % CSD is reached, and at		Els 18 ell
ole cle cle cle cle cle	least at every 100 % further increase of CSD, the	all	ors ors ors ors
ols cls cls cls cls cls	device shall warn the user and require an		cas cas cas cas cas
	acknowledgement. In case the user does not		cas cas car as cas cas
a cas cas cas cas cas cas cas cas cas ca	acknowledge, the output level shall automatically		The CITS CO. CITS CO.
2 0.12 0.12 0.13 0.13 0.13 0.13 0.13 0.13 0.13 0.13	decrease to compliance with class RS1.	and the same of th	ons one on one
ors ors ors ors ors			S CIN CIS CIS CIN
old cla cla cla cla cla	The warning shall at least clearly indicate that		618 618 618 618 6
As cas cas cas cas cas cas	listening above 100 % CSD leads to the risk of		C12 C12 C12 C13
10.6.5.3	hearing damage or loss. Exposure-based requirements	A CAS CAS CAS CAS CAS CAS CAS CAS CAS CA	975 975 975 975 975
10.0.3.3	Exposure-based requirements		N/A
613 614 615 613 613 613 613 613	With only dose-based requirements, cause and		s cls cl cl cls cl
eds eds eds eds eds	effect could be far separated in time, defying the	on the state of th	ell ell ell ell ell
612 612 612 612 612 612 612 612 612 612	purpose of educating users about safe listening	one	ers ers er ers
OR CLE CLE CLE CLE CLE	practice. In addition to dose-based requirements,	018 018 018 018 018 018 018 018 018 018	che che che che che
128 C18 C18 C18 C18 C18 C	a PMP shall therefore also put a limit to the short-		els
is one one off one of one	term sound level a user can listen at.	OR OF OR	cas cas cal cas cas
is old old old old old old	The expecting based limites (EL) about and the	12 of 12 of 13 of 14 of 14 of 15 of	as one one on one one
CLS CLS CLS CLS CLS CLS	The exposure-based limiter (EL) shall automatically	or	s cus cus cus cus cus cus cus cus cus cu
ene che che che che	reduce the sound level not to exceed 100 dB(A) or 150 mV integrated over the past 180 s, based on	12 (12 (13 (13 (13 (13 (13 (13 (13 (13 (13 (13	elle elle alle elle
one of the one one one	methodology defined in EN 50332-3.	all	ell elle elle elle elle elle
cas	The EL settling time (time from starting level		ors ors ors ors
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CT CTS CTS CTS CTS CTS CTS			The Grant Control of the Grant			
	reduction to reaching target output) shall be 10 s or faster.					
	Test of EL functionality is conducted according to EN 50332-3, using the limits from this clause. For equipment provided as a package (player with its					
	listening device), the level integrated over 180 s shall be 100 dB or lower. For equipment provided with a standardized connector, the unweighted					
	level integrated over 180 s shall be no more than 150 mV for an analogue interface and no more					
	than -10 dBFS for a digital interface.					
	NOTE In case the source is known not to be music (or test signal), the EL may be disabled.		18 ore of ore ore			

10.6.6	Requirements for listening devices (headphones, earphones, etc.)	N/A
10.6.6.1	Corded listening devices with analogue input	N/A
	With 94 dB LAeq acoustic pressure output of the listening device, and with the volume and sound settings in the listening device (for example, built-in volume level control, additional sound features like equalization, etc.) set to the combination of positions that maximize the measured acoustic output, the input voltage of the listening device when playing the fixed "programme simulation noise" as described in EN 50332-1 shall be ≥ 75 mV.	
	NOTE The values of 94 dB and 75 mV correspond with 85 dB and 27 mV or 100 dB and 150 mV.	
10.6.6.2	Corded listening devices with digital input With any playing device playing the fixed "programme simulation noise" described in EN 50332-1, and with the volume and sound settings in the listening device (for example, built-in volume level control, additional sound features like equalization, etc.) set to the combination of positions that maximize the measured acoustic output, the L Aeq, τ acoustic output of the listening device shall be \leq 100 dB with an input signal of -10 dBFS.	
10.6.6.3	In cordless mode, — with any playing and transmitting device playing the fixed programme simulation noise described in EN 50332-1; and — respecting the cordless transmission standards, where an air interface standard exists that specifies the equivalent acoustic level; and — with volume and sound settings in the receiving device (for example, built-in volume level control,	



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10.6.6.4	to m pr or ar	the combine leasured according to the combine of the combine of the combine of the least the lea	nd features lik ation of position bustic output for mulation noise istening devicual of -10 dBFS. t method	ons that may or the above e, the $LAeq, \tau$ e shall be \leq	kimize the ementioned acoustic			N/A
	100		s shall be mad s applicable.	de in accord	lance with			
3	M	odification	to the whole	document				
	Dis		"country" note	es in the refe	erence docum	nent according	to the following	N/A
	8 GT8 GT8	0.2.1	Note 1 and 2	1	Note 4 and 5	3.3.8.1	Note 2	
	678 18 678	3.3.8.3	Note 1	4.1.15	Note	4.7.3	Note 1 and 2	0.18 0.18 0.18 0.18 0.18 0.18 0.18 0.18
		5.2.2.2	Note	5.4.2.3.2.2 Table 12	Note c	5.4.2.3.2.4	Note 1 and 3	
		5.4.2.3.2.4 Table 13	Note 2	5.4.2.5	Note 2	5.4.5.1	Note	
12 cl2 cl2 cl2 cl2 cl2 cl2 cl2 cl2 cl2 cl	18 CH C	5.4.10.2.1	Note	5.4.10.2.2	Note	5.4.10.2.3	Note	
		5.5.2.1	Note	5.5.6	Note	5.6.4.2.1	Note 2 and 3 and 4	
		5.6.8	Note 2	5.7.6	Note	5.7.7.1	Note 1 and Note 2	
		8.5.4.2.3	Note	10.2.1 Table 39	Note 3 and 4 and 5	10.5.3	Note 2	
	8 618 618	10.6.1	Note 3	F.3.3.6	Note 3	Y.4.1	Note	
	678 78 678 78	Y.4.5	Note	7				
4	M	odification	to Clause 1		670 978 18 10 %	18 0 0 070	578 - 5 m - 670 - 670	033 03 03
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TS OF OF OF OF OF)11/65/EU.	ieni is resincieu v	vitriiri trie EU. S	see Directive	elle elle elle elle elle elle elle		3 crs crs crs crs c

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all cas cas cas cas cas cas	Attachm	ient 1	
	IEC 62368_1E A	TTACHMENT	
Clause	Requirement + Test	Result - Remark	Verdict
4.Z1	Add the following new subclause after 4. To protect against excessive current, sho and earth faults in circuits connected to a	ort-circuits	N/A

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):	
	a) except as detailed in b) and c), protective devices necessary to comply with the requirements of B.3.1 and B.4 shall be included as parts of the	
	equipment; b) for components in series with the mains input to the equipment such as the supply cord, appliance	
	coupler, r.f.i. filter and switch, short-circuit and earth fault protection may be provided by protective devices in the building installation;	
	c) it is permitted for pluggable equipment type B or permanently connected equipment, to rely on dedicated overcurrent and short-circuit protection	
	in the building installation, provided that the means of protection, e.g. fuses or circuit breakers, is fully specified in the installation instructions.	
	If reliance is placed on protection in the building installation, the installation instructions shall so state, except that for pluggable equipment type A the building installation shall be regarded as providing protection in accordance with the rating of the wall socket outlet.	
6	Modification to 5.4.2.3.2.4	Gr. Gr.
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.	12 CL2 CL2 CL2 CL2 CL2 CL2 CL2 CL2 CL2 CL
7	Modification to 10.2.1	
10.2.1	Add the following to c) and d) in table 39:	N/A
8	For additional requirements, see 10.5.1. Modification to 10.5.1	Ca Charle



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	Attachment 1					
	IEC 62368_1E ATTACHMENT					
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 internal adjustments or pre-sets which are not locked in a reliable manner, are adjusted so as to give maximum radiation whilst maintaining an intelligible picture for 1 h, at the end of which the measurement is made. NOTE Z1 Soldered joints and paint lockings are examples of adequate locking. The dose-rate is determined by means of a radiation monitor with an effective area of 10 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.					
9	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. Modification to G.7.1					
G.7.1	Add the following note:	Addod	NI/A			
	NOTE Z1 The harmonized code designations corresponding to the IEC cord types are given in Annex ZD.	Added.	N/A			

ir ir	10	Modification to Bibliography	



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12 018 018 018 018 018 018 018 018 018 018		Attachment 1		3 c18
		IEC 62368_1E ATTACHME		618 618 618 618 618 618 618 618
Clause	Requirement + Test		Result - Remark	Verdict

The Control of the Control	Add the following notes for the standards indicated:	's creek on	N/A
		e18 e18 e18	on 618 610 61
	IEC 60130-9 NOTE Harmonized as EN 60130-9.	S Grange	
	IEC 60269-2 NOTE Harmonized as HD 60269-2.	GTS C-	
	IEC 60309-1 NOTE Harmonized as EN 60309-1.	GIS GTO	
	IEC 60364 NOTE some parts harmonized in HD 384/HD 60364 series.	Grs Grs Gr	
	IEC 60601-2-4 NOTE Harmonized as EN 60601-2-4.	CAS CAS CO	
	IEC 60664-5 NOTE Harmonized as EN 60664-5.	ers ers ers	
	IEC 61032:1997 NOTE Harmonized as EN 61032:1998 (not modified).	TS - GTS	
	IEC 61508-1 NOTE Harmonized as EN 61508-1.	S 678 678	
	IEC 61558-2-1 NOTE Harmonized as EN 61558-2-1.	S Gra Gra	
	IEC 61558-2-4 NOTE Harmonized as EN 61558-2-4.	GTS CTS	
	IEC 61558-2-6 NOTE Harmonized as EN 61558-2-6.	GTS GTO	
	IEC 61643-1 NOTE Harmonized as EN 61643-1.	678 G78 G	
	IEC 81843-21 NOTE Harmonized as EN 61643-21.	org org	
	IEC 61643-311 NOTE Harmonized as EN 61643-311.	75 678 678	
	IEC 61643-321 NOTE Harmonized as EN 61643-321.	18 678 673	
	IEC 61643-331 NOTE Harmonized as EN 61643-331.	3 c75 c78 c	
elle elle elle elle		Gra Gra	78 678 8
0 2 2 0 0 0	ADDITION OF ANNEXES		(a) (a)
	ANNEX ZB, SPECIAL NATIONAL CONDITIONS (EN)	8 Gr. "18 GTS	P
67 76		978 62	Grand Strategy
15	Denmark, Finland, Norway and Sweden	618 618 618 6	N/A
15	Denmark, Finland, Norway and Sweden		Gro Gro G
15 or	Denmark, Finland, Norway and Sweden To the end of the subclause the following is		Grand Grand
15 or	Denmark, Finland, Norway and Sweden To the end of the subclause the following is added:		or Gro G
	Denmark, Finland, Norway and Sweden To the end of the subclause the following is added: Class I pluggable equipment type A intended		Grand Grand
	Denmark, Finland, Norway and Sweden To the end of the subclause the following is added: Class I pluggable equipment type A intended for connection to other equipment or a		Grand Grand
	Denmark, Finland, Norway and Sweden To the end of the subclause the following is added: Class I pluggable equipment type A intended for connection to other equipment or a network shall, if safety relies on connection to		Grand Grand
15	Denmark, Finland, Norway and Sweden To the end of the subclause the following is added: Class I pluggable equipment type A intended for connection to other equipment or a network shall, if safety relies on connection to reliable earthing or if surge suppressors		or Gro G
	Denmark, Finland, Norway and Sweden To the end of the subclause the following is added: Class I pluggable equipment type A intended for connection to other equipment or a network shall, if safety relies on connection to reliable earthing or if surge suppressors are connected between the network terminals		Grand Grand
	Denmark, Finland, Norway and Sweden To the end of the subclause the following is added: Class I pluggable equipment type A intended for connection to other equipment or a network shall, if safety relies on connection to reliable earthing or if surge suppressors are connected between the network terminals and accessible parts, have a marking stating		Grand Grand
	Denmark, Finland, Norway and Sweden To the end of the subclause the following is added: Class I pluggable equipment type A intended for connection to other equipment or a network shall, if safety relies on connection to reliable earthing or if surge suppressors are connected between the network terminals		Grand Grand
15	Denmark, Finland, Norway and Sweden To the end of the subclause the following is added: Class I pluggable equipment type A intended for connection to other equipment or a network shall, if safety relies on connection to reliable earthing or if surge suppressors are connected between the network terminals and accessible parts, have a marking stating that the equipment shall be connected to an earthed mains socket-outlet.		or Gro G
15	Denmark, Finland, Norway and Sweden To the end of the subclause the following is added: Class I pluggable equipment type A intended for connection to other equipment or a network shall, if safety relies on connection to reliable earthing or if surge suppressors are connected between the network terminals and accessible parts, have a marking stating that the equipment shall be connected to an		Grand Grand
	Denmark, Finland, Norway and Sweden To the end of the subclause the following is added: Class I pluggable equipment type A intended for connection to other equipment or a network shall, if safety relies on connection to reliable earthing or if surge suppressors are connected between the network terminals and accessible parts, have a marking stating that the equipment shall be connected to an earthed mains socket-outlet.		or or
	Denmark, Finland, Norway and Sweden To the end of the subclause the following is added: Class I pluggable equipment type A intended for connection to other equipment or a network shall, if safety relies on connection to reliable earthing or if surge suppressors are connected between the network terminals and accessible parts, have a marking stating that the equipment shall be connected to an earthed mains socket-outlet. The marking text in the applicable countries shall be as follows:		Grand Grand
	Denmark, Finland, Norway and Sweden To the end of the subclause the following is added: Class I pluggable equipment type A intended for connection to other equipment or a network shall, if safety relies on connection to reliable earthing or if surge suppressors are connected between the network terminals and accessible parts, have a marking stating that the equipment shall be connected to an earthed mains socket-outlet. The marking text in the applicable countries shall be as follows: In Denmark: "Apparatets stikprop skal tilsluttes		Grand Grand
15	Denmark, Finland, Norway and Sweden To the end of the subclause the following is added: Class I pluggable equipment type A intended for connection to other equipment or a network shall, if safety relies on connection to reliable earthing or if surge suppressors are connected between the network terminals and accessible parts, have a marking stating that the equipment shall be connected to an earthed mains socket-outlet. The marking text in the applicable countries shall be as follows: In Denmark: "Apparatets stikprop skal tilsluttes en stikkontakt med jord som giver forbindelse til		Gro Gro G
	Denmark, Finland, Norway and Sweden To the end of the subclause the following is added: Class I pluggable equipment type A intended for connection to other equipment or a network shall, if safety relies on connection to reliable earthing or if surge suppressors are connected between the network terminals and accessible parts, have a marking stating that the equipment shall be connected to an earthed mains socket-outlet. The marking text in the applicable countries shall be as follows: In Denmark: "Apparatets stikprop skal tilsluttes en stikkontakt med jord som giver forbindelse til stikproppens jord."		Grand Grand
	Denmark, Finland, Norway and Sweden To the end of the subclause the following is added: Class I pluggable equipment type A intended for connection to other equipment or a network shall, if safety relies on connection to reliable earthing or if surge suppressors are connected between the network terminals and accessible parts, have a marking stating that the equipment shall be connected to an earthed mains socket-outlet. The marking text in the applicable countries shall be as follows: In Denmark: "Apparatets stikprop skal tilsluttes en stikkontakt med jord som giver forbindelse til stikproppens jord." In Finland: "Laite on liitettävä suojakoskettimilla		or Gro G
	Denmark, Finland, Norway and Sweden To the end of the subclause the following is added: Class I pluggable equipment type A intended for connection to other equipment or a network shall, if safety relies on connection to reliable earthing or if surge suppressors are connected between the network terminals and accessible parts, have a marking stating that the equipment shall be connected to an earthed mains socket-outlet. The marking text in the applicable countries shall be as follows: In Denmark: "Apparatets stikprop skal tilsluttes en stikkontakt med jord som giver forbindelse til stikproppens jord." In Finland: "Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan"		Gro Gro G
	Denmark, Finland, Norway and Sweden To the end of the subclause the following is added: Class I pluggable equipment type A intended for connection to other equipment or a network shall, if safety relies on connection to reliable earthing or if surge suppressors are connected between the network terminals and accessible parts, have a marking stating that the equipment shall be connected to an earthed mains socket-outlet. The marking text in the applicable countries shall be as follows: In Denmark: "Apparatets stikprop skal tilsluttes en stikkontakt med jord som giver forbindelse til stikproppens jord." In Finland: "Laite on liitettävä suojakoskettimilla		Gro Gro G
15	Denmark, Finland, Norway and Sweden To the end of the subclause the following is added: Class I pluggable equipment type A intended for connection to other equipment or a network shall, if safety relies on connection to reliable earthing or if surge suppressors are connected between the network terminals and accessible parts, have a marking stating that the equipment shall be connected to an earthed mains socket-outlet. The marking text in the applicable countries shall be as follows: In Denmark: "Apparatets stikprop skal tilsluttes en stikkontakt med jord som giver forbindelse til stikproppens jord." In Finland: "Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan" In Norway: "Apparatet må tilkoples jordet		Gro Gro G

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	Attachment 1		
	IEC 62368_1E ATTACHME		618 618 618 618 618 518 61 618 618 618 618 618 518 61
Clause	Requirement + Test	Result - Remark	Verdic
4.7.3	United Kingdom		N/A
	To the end of the subclause the following is added:		
	The torque test is performed using a socket-outlet		
	complying with BS 1363, and the plug part shall be		cas
	assessed to the relevant clauses of BS 1363. Also		cas cas cas cas cas cas cas
5.2.2.2	see Annex G.4.2 of this annex Denmark	The case of the ca	N/A
Se cus cus cus cus cus cus			
	After the 2nd paragraph add the following:		is one of the one of t
	A warning (marking safeguard) for high touch		0.18 CA
	current is required if the touch current exceeds the		
5.4.11.1	limits of 3,5 mA a.c. or 10 mA d.c. Finland and Sweden		N/A
and			
Annex G	To the end of the subclause the following is added:		118 e18 e19 e18 e18 e18 e18
	For separation of the telecommunication network		is out out out out a
	from earth the following is applicable:		
	If this insulation is solid, including insulation forming		els els els els els els
	part of a component, it shall at least		18 018 018 018 018 018 018 018 018
	consist of eithertwo layers of thin sheet material, each of which		3 cls cls cls cls cls cls
	shall pass the electric strength test below, or		3 c13 c13 c13 c13 c13 c13
	one layer having a distance through insulation of		cus
	at least 0,4 mm, which shall pass the electric		
	strength test below.		
	If this insulation forms part of a semiconductor		18 018 018 018 018 018 018 018
	component (e.g. an optocoupler), there is no		8 018 018 118 018 018 018 018 018 018 01
	distance through insulation requirement for the		2 618 618 618 618 618 618
	insulation consisting of an insulating compound completely filling the casing, so that clearances and		618 618 618 618 618 618 618
	creepage distances do not exist, if the component		one one one one one one one
	passes the electric strength test in accordance with the compliance clause below and in addition	a cas cas cas cas cas cas cas cas cas ca	118 618 618 618 618 618 618 618 618 618
	the compliance clause below and in addition		12 0.18 0.18 0.18 0.18 0.18 12
	• passes the tests and inspection criteria of 5.4.8		ors ors ors ors
	with an electric strength test of 1,5 kV multiplied		eds eds eds ed ed

by 1,6 (the electric strength test of 5.4.9 shall be

• is subject to routine testing for electric strength during manufacturing, using a test voltage of 1,5

It is permitted to bridge this insulation with a capacitor complying with EN 60384-14:2005,

performed using 1,5 kV),

and

kV.



GI	Dogo 65 of 70	Report No.: GTS20231	120038501
As old	Page 65 of 79 Attachment 1	Report No.: G1320231	12003030 I
012 013 014 015 015 015 015 015 015 015 015 015 015	IEC 62368_1E ATTACHMEN		in the tile that the tile the
Clause	Requirement + Test	Result - Remark	Verdict
17 C78 C78 C78 C78 C78 C78 C78 C78 C78 C7	subclass Y2.		2 cr. c13 c13 c c1
	A capacitor classified Y3 according to EN 60384- 14:2005, may bridge this insulation under the following conditions:		
	 the insulation requirements are satisfied by having a capacitor classified Y3 as defined by EN 60384-14, which in addition to the Y3 testing, is tested with an impulse test of 2,5 kV defined in 5.4.11; 		
	the additional testing shall be performed on all the test specimens as described in EN 60384- 14;		
	the impulse test of 2,5 kV is to be performed before the endurance test in EN 60384-14, in the sequence of tests as described in EN 60384-14.		
5.5.2.1	Norway		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).		
5.5.6	Finland, Norway and Sweden		N/A
	To the end of the subclause the following is added:		
	Resistors used as basic safeguard or bridging basic insulation in class I pluggable equipment type A shall comply with G.10.1 and the test of G.10.2.		
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.		0.18 0.18 0.18 0.18 0.18 0.18 0.18 0.18
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.		

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	IEC 62368_1E ATTACHME		
Clause	Requirement + Test	Result - Remark	Verdict
5.6.4.2.1	France		N/A
	After the indent for pluggable equipment type A,		28 c128 c128 c128 c128 c128 c128 c128 c1
	the following is added:		3 c12 12 c12 c12 c13
	- in certain cases, the protective current rating of		CIS OF CIS OF CIS OF
	the circuit supplied from the mains is taken as 20 A instead of 16 A.		ols ols ols ols ol
5.6.5.1	To the second paragraph the following is added:		N/A
els els els els els els e			
	The range of conductor sizes of flexible cords to be accepted by terminals for equipment with a rated		Is one one one one
	current over 10 A and up to and including 13 A is:		18 CT CTS CTS CTS CTS C
a cas cas cas cas cas	1,25 mm ² to 1,5 mm ² in cross-sectional area.		GIS TS GIS GIS G
5.6.8	Norway		N/A
	To the end of the subclause the following is added:		chi chi chi chi chi
	Equipment connected with an earthed mains plug is		18 ch ch ch ch ch ch
	classified as class I equipment . See the Norway marking requirement in 4.1.15. The symbol IEC		18 cm c18 c18 c18 18 c
	60417-6092, as specified in F.3.6.2, is accepted.		
5.7.6	Denmark	The state of the s	N/A
	To the end of the subclause the following is added:		18 ch ch ch ch ch
	To the end of the subclause the following is added.		2 ch
	The installation instruction shall be affixed to the		3 c12 the c12 c13 c13
	equipment if the protective conductor current exceeds the limits of 3,5 mA a.c. or 10 mA d.c.		018 018 018 018 018 0
5.7.6.2	Denmark		N/A
0.7.0.2			elle elle elle elle elle elle elle ell
	To the end of the subclause the following is added:		
	The warning (marking safeguard) for high touch current is required if the touch current or the		To one one one one
	protective current exceed the limits of 3,5 mA.		2 0.18 1.18 0.18 0.18 5.18 C
5.7.7.1	Norway and Sweden		N/A
	To the end of the subclause the following is added:		cas cas cas cas cas cas
	The screen of the television distribution system is		Che che che che che che
	normally not earthed at the entrance of the building	a cas cas cas cas cas cas cas cas cas ca	els
	and there is normally no equipotential bonding system within the building.	of the cut	is one of the ore in the case of the case
	Therefore the protective earthing of the building		28 C12 C12 C12 C12 2 C
	installation needs to be isolated from the screen of		18 78 978 6 67 670
	a cable distribution system.		12 c12 c12 c12 c1
	The state of the s		Ga. 976 (2)

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:

OR COLUMN	Page 67 of 79	Report No.: GTS2023120038	S01
A 018 018 018 018 018 018 018 018 018 018	Attachment 1		
	IEC 62368_1E ATTACHME		3 e18 518 e18 e18 e19
Clause	Requirement + Test	Result - Remark V	erdict
To the state of th			TS G GTS GTS
	"Apparatus connected to the protective earthing of the building installation through the mains connection or through other apparatus with a connection to protective earthing – and to a television distribution system using coaxial cable, may in some circumstances create a fire hazard. Connection to a television distribution system therefore has to be provided through a device providing electrical isolation below a certain frequency range (galvanic isolator, see EN 60728-		
	11)" NOTE In Norway, due to regulation for CATV-installations, and in Sweden, a galvanic isolator shall provide electrical insulation below 5 MHz. The insulation shall withstand a dielectric strength		
	of 1,5 kV r.m.s., 50 Hz or 60 Hz, for 1 min. Translation to Norwegian (the Swedish text will also be accepted in Norway):		
	"Apparater som er koplet til beskyttelsesjord via nettplugg og/eller via annet jordtilkoplet utstyr – og er tilkoplet et koaksialbasert kabel-TV nett, kan forårsake brannfare. For å unngå dette skal det ved tilkopling av apparater til kabel-TV nett installeres en galvanisk isolator mellom apparatet og kabel-TV nettet."		
	Translation to Swedish: "Apparater som är kopplad till skyddsjord via jordat vägguttag och/eller via annan utrustning och samtidigt är kopplad till kabel-TV nät kan i vissa fall medföra risk för brand. För att undvika detta skall vid anslutning av apparaten till kabel-TV nät galvanisk isolator finnas mellan apparaten och kabel-TV nätet."		
8.5.4.2.3	United Kingdom Add the following after the 2 nd dash bullet in 3 rd paragraph:		N/A
	An emergency stop system complying with the requirements of IEC 60204-1 and ISO 13850 is required where there is a risk of personal injury.		



Justification:

Heavy Current Regulations, Section 6c

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	Attachment 1		
	IEC 62368_1E ATTACHME		612 612 612 112 612 612 612 612 612 612
Clause	Requirement + Test	Result - Remark	Verdict
B.3.1 and B.4	Ireland and United Kingdom		N/A
	The following is applicable: To protect against excessive currents and short-circuits in the primary circuit of direct plug-in equipment, tests according to Annexes B.3.1 and B.4 shall be conducted using an external miniature circuit breaker complying with EN 60898-1, Type B, rated 32A. If the equipment does not pass these tests, suitable protective devices shall be included as an integral part of the direct plug-in equipment, until the requirements of Annexes B.3.1 and B.4 are met		
G.4.2	Denmark		N/A
	To the end of the subclause the following is added: Supply cords of single phase appliances having a rated current not exceeding 13 A shall be provided with a plug according to DS 60884-2-D1:2011. CLASS I EQUIPMENT provided with socket-outlets with earth contacts or which are intended to be used in locations where protection against indirect contact is required according to the wiring rules shall be provided with a plug in accordance with standard sheet DK 2-1a or DK 2-5a. If a single-phase equipment having a RATED CURRENT exceeding 13 A or if a polyphase equipment is provided with a supply cord with a plug, this plug shall be in accordance with the standard sheets DK 6-1a in DS 60884-2-D1 or EN 60309-2.		
	Mains socket outlets intended for providing power to Class II apparatus with a rated current of 2,5 A shall be in accordance DS 60884-2-D1:2011 standard sheet DKA 1-4a. Other current rating socket outlets shall be in compliance with Standard Sheet DKA 1-3a or DKA 1-1c. Mains socket-outlets with earth shall be in compliance with DS 60884-2-D1:2011 Standard Sheet DK 1-3a, DK 1-1c, DK1-1d, DK 1-5a or DK 1-7a		



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Attachment 1		

618 CL 61	IEC 62368_1E ATTACHMEN		2 CL ²		
Clause	Requirement + Test	Result - Remark	Verdict		
The Control of the Control of Con			ers ers ers		
G.4.2	United Kingdom		N/A		
	To the end of the subclause the following is added:		618 618 618 618 618		
13 cls cls cls cls cls cls cls cls	The value most of disease live in continuous chall be		618 618 618 618 618 618 618 618 618 618		
ON CAR CAR CAR CAR CAR CAR CAR	The plug part of direct plug-in equipment shall be assessed to BS 1363: Part 1, 12.1, 12.2, 12.3, 12.9,		AR CAR CAR CAR CAR CAR CAR CAR CAR CAR C		
OR OR OR OR OR OR OR	12.11, 12.12, 12.13, 12.16, and 12.17, except that		s che che che che che		
	the test of 12.17 is performed at not less than		18 CLR		
the case of the ca	125 °C. Where the metal earth pin is replaced by an		clk clk clk clk ch		
S CAS CAS CAS CAS CAS CAS CAS CAS CAS CA	Insulated Shutter Opening Device (ISOD), the requirements of clauses 22.2 and 23 also apply.		ens ens ens ens		
G.7.1	United Kingdom		N/A		
13 cls cls cls cls cls cls cls			12 cl2 cl2 cl2 cl2 cl2 cl2 cl2 cl2 cl2 cl		
	To the first paragraph the following is added:		as one on one on		
or or or or or	Equipment which is fitted with a flexible cable or		A 013 013 013 013 013		
0.18 0.18 0.18 0.18 0.18 0.18 0.18 0.18	cord and is designed to be connected to a mains		618 618 618 618 618 6		
old old old old old old old	socket conforming to BS 1363 by means of that		els els els els els els els els		
CAR CAR CAR CAR CAR CAR	flexible cable or cord shall be fitted with a 'standard		eds eds eds eds eds		
	plug' in accordance with the Plugs and Sockets etc. (Safety) Regulations 1994, Statutory Instrument		018 018 018 018 018		
To the control of the control of	1994 No. 1768, unless exempted by those		ens ens en ens en		
	regulations.		eas eas eas eas		
	NOTE "Standard plug" is defined in SI 1768:1994 and		618 618 618 618 618 618 618 618		
12 012 012 013 013 013 015 015	essentially means an approved plug conforming to BS 1363 or				
G.7.1	an approved conversion plug. Ireland		N/A		
G. A. Tors ors ors			and the state of		
	To the first paragraph the following is added:				
	Apparatus which is fitted with a flexible cable or				
ale ale ale ale ale ale ale	cord shall be provided with a plug in accordance		618 618 618 618 618 618 618 618 618 618		
78 618 618 618 618 618 618	with Statutory Instrument 525: 1997, "13 A Plugs		The Case of Ca		
12 012 013 013 013 013 013 013 013 013 013 013	and Conversion Adapters for Domestic Use		ors ors ors ors		
	Regulations: 1997. S.I. 525 provides for the recognition of a standard of another Member State		State of the cut		
018 018 018 018 018 018 0	which is equivalent to the relevant Irish Standard		els els es els els els e		
G.7.2	Ireland and United Kingdom		N/A		
as als als als als als als als	To the first paragraph the following is added:		CLR		
	To the first paragraph the following is added.		618 618 618 618 618		
0.18 0.18 0.18 0.18 0.18 0.18 0.	A power supply cord with a conductor of 1,25 mm ²		OR CAR CAR CAR CAR		
The oracle of th	is allowed for equipment which is rated over 10 A		est est est est		
S CIS CIS CIS CIS CIS CIS	and up to and including 13 A.	As als als als als als als als als als al	018 GT8 GT8		



The second secon		Page 70 of 79	Report No.: GTS20231200	38S01
		Attachment 1		e ore ore ore ore ore
		IEC 62368_1E ATTACHMEN		618 618 518 618 618 618 618 618
Clause	Requirement + Test		Result - Remark	Verdict

ZC	ANNEX ZC, NATIONAL DEVIATIONS (EN)	9
10.5.2	Germany	9
	The following requirement applies:	0)
		ens ens
	For the operation of any cathode ray tube intended for the display of visual images operating at an	78
	acceleration voltage exceeding 40 kV,	78
	authorization is required, or application of type	is on
	approval (Bauartzulassung) and marking.	on.
	Justification:	678
	German ministerial decree against ionizing	G78 (
	radiation (Röntgenverordnung), in force since 2002-07-01, implementing the European Directive	78 c
	96/29/EURATOM.	78 G
	NOTE Contact address:	8 G7
	Physikalisch-Technische Bundesanstalt, Bundesallee 100, D-	678
	38116 Braunschweig, Tel.: Int+49-531-592-6320, Internet: http://www.ptb.de	GT_S



Clause

Requirement + Test

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Attachment 1		els
IEC 62368_1E ATTACHME		
	Result - Remark	Verdict

Type of flexible cord	Code de	Code designations	
	IEC	CENELEC	
PVC insulated cords	L		
Flat twin tinsel cord	60227 IEC 41	H03VH-Y	
Light polyvinyl chloride sheathed flexible cord	60227 IEC 52	H03VV-F H03VVH2-F	
Ordinary polyvinyl chloride sheathed flexible cord	60227 IEC 53	H05VV-F H05VVH2-F	
Rubber insulated cords			
Braided cord	60245 IEC 51	H03RT-F	
Ordinary tough rubber sheathed flexible cord	60245 IEC 53	H05RR-F	
Ordinary polychloroprene sheathed flexible cord	60245 IEC 57	H05RN-F	
Heavy polychloroprene sheathed flexible cord	60245 IEC 66	H07RN-F	
Cords having high flexibility	Š.	1/2	
Rubber insulated and sheathed cord	60245 IEC 86	H03RR-H	
Rubber insulated, crosslinked PVC sheathed cord	d 60245 IEC 87	H03 RV4-H	
Crosslinked PVC insulated and sheathed cord	60245 IEC 88	H03V4V4-H	
Cords insulated and sheathed with halogen- free thermoplastic compounds			
Light halogen-free thermoplastic insulated and sheathed flexible cords		H03Z1Z1-F H03Z1Z1H2-	
Ordinary halogen-free thermoplastic insulated and sheathed flexible cords	d	H05Z1Z1-F H05Z1Z1H2-	



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Figure 1





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Figure 2



Figure 3



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Figure 4



Figure 5



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Figure 6

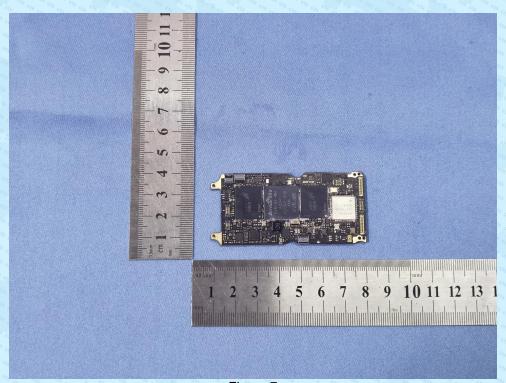


Figure 7



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Attachment 2– Photo Documentation

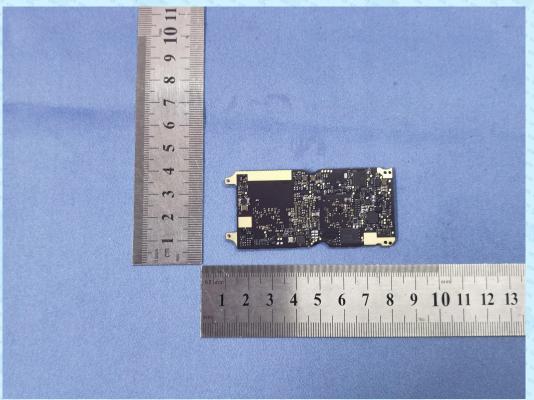


Figure 8

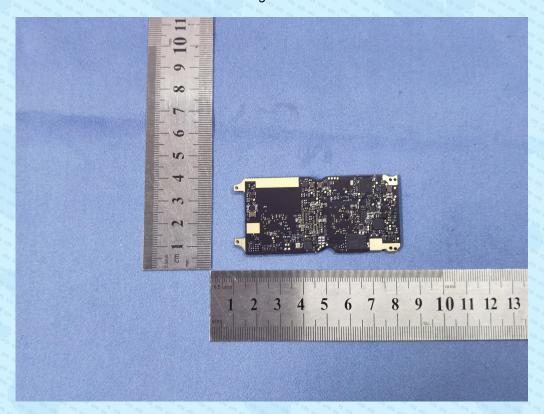


Figure 9



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Attachment 2– Photo Documentation



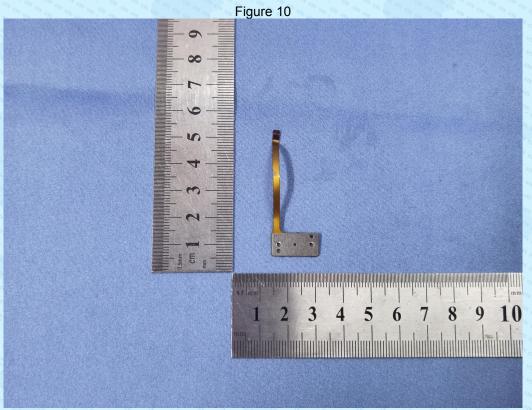


Figure 11



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Attachment 2– Photo Documentation

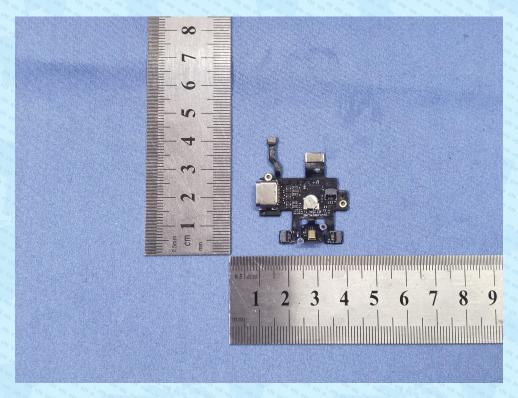


Figure 12

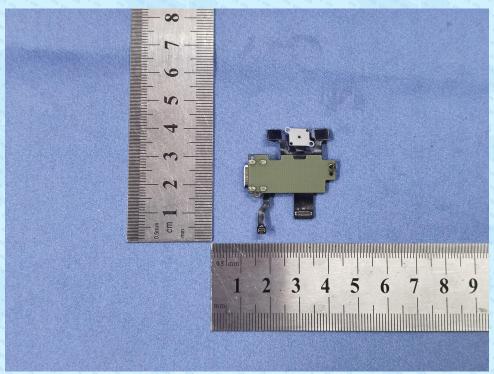


Figure 13



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Attachment 2– Photo Documentation

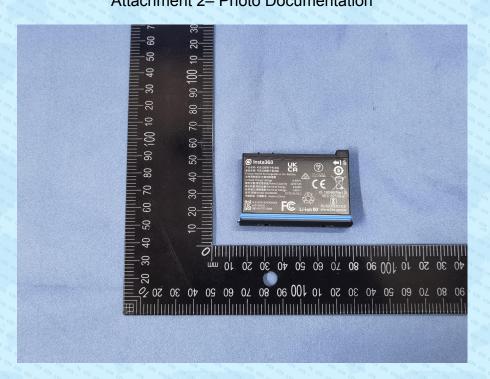


Figure 14

- - - End of Report - - -