

TRF No.: GRGJL.WI-SZJC-07-001

TEST REPORT

Report No...... S2022081804600101

Applicant's name...... Lumi United Technology Co., Ltd

Room 801-804, Building 1, Chongwen Park, Nanshan iPark, No.

Applicant's address............ 3370, Liuxian Avenue, Fuguang Community, Taoyuan Residential District,

Nanshan District, Shenzhen, China

Sample description.....: Smart Video Doorbell G4, Chime Repeater

Model..... SVD-C01, SVD-C02

Date of receipt of test item: 2022.09.01

Test location....: Guangzhou GRG Metrology & Test Co., Ltd.

No.1301 Guanguang Road Xinlan Community, Guanlan Street, Longhua District

Shenzhen, 518110, People's Republic of China

Test standard..... EN 62368-1:2014/A11:2017

Audio/video, information and communication technology equipment

Part 1: Safety requirements

Test date(s)....: 2022.09.01 to 2022.11.10

Test result..... **Pass**

Date of issue....: 2022.12.08

Total number of pages....: 74

Tested by:

Li Jie

Reviewed By:

Nie Wengi

Li Jie

næwengi

Approved By:



Other Aspects: N/A

Abbreviations: P = passed; F = failed; N/A = not applicable

The test result in this test report refers exclusively to the presented test sample. This report shall not be reproduced, except in full, without the written approval of GRGT.

In China, this test report is only used for scientific research, teaching or internal quality control if there is no China Metrology Accreditation (CMA) mark.

Guangzhou GRG Metrology & Test Co., Ltd.

Address: No.1301 Guanguang Road Xinlan Community, Guanlan Street, Longhua District Shenzhen, 518110, People's Republic of China Email: gdjl@grgtest.com



Report No.: S2022081804600101

Application No.: S20220818046001

Test Item description Smart Video Doorbell G4, Chime Repeater

Trade Mark : Agara

Manufacturer: Same as applicant

Ratings See the model difference table on page 5 for details

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

- Attachment 1: EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES (12 pages)
- Attachment 2: Photo of the product (11 pages)

Summary of testing:

Tests performed (name of test and test clause):

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

4.1.15 (F.3.10)	Permanence Of Marking Test						
5.2	Classification of electrical energy sources (5.2.2.2, 5.2.2.3, 5.2.2.4, -5.2.2.5)						
5.4.1.4, 6.3.2, 9.0, B.2.6	Maximum operating temperatures for materials, components and systems						
6.2.2	Power source circuit classifications						
6.2.3.2	Determination of Potential Ignition Sources (Resistive PIS)						
B.2.5	Input test						
B.3	Abnormal operating condition tests						
B.4	Simulated single fault conditions						
T.4	Steady force test, 100 N						
T.6	Impact test						
T.7	Drop test						
T.8	Stress relief test						

Testing location:

Guangzhou GRG Metrology & Test Co., Ltd.

No.1301 Guanguang Road Xinlan Community, Guanlan Street, Longhua District Shenzhen, 518110, People's Republic of China

Summary of compliance with National Differences:

For National Differences see end attachment for details.

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



Application No.: S20220818046001 Report No.: S2022081804600101

Copy of marking plate(s):

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





Notes:

- 1). The above markings are the minimum requirements required by the safety standard. For the final productionsamples, the additional markings which do not give rise to misunderstanding may be added.
- 2). As declared by the applicant, the importer (and manufacturer, if it is different)'s name, registered trade name ormark and the postal address will be marked on the products before being place on the market.
- 3) The CE marking and WEEE symbol (if any) should be at least 5.0 mm and 7.0 mm respectively in height.



Application No.: S20220818046001 Report No.: S2022081804600101

TEST ITEM PARTICULARS:						
Classification of use by:	☑ Ordinary person☐ Instructed person☐ Skilled person☑ Children likely to be present					
Supply Connection:	□AC Mains □DC Mains □ External Circuit - not Mains connected □ES1 □ES2 □ES3					
Supply % Tolerance:	☐ +10%/-10% ☐ +20%/-15% ☐+%/% ☑ None: Not mains connected					
Supply Connection – Type:	□ pluggable equipment type A - □ non-detachable supply cord □ appliance coupler □ direct plug-in □ mating connector □ pluggable equipment type B - □ non-detachable supply cord □ appliance coupler □ permanent connection □ mating connector ☑ other: not directly connected to the mains					
Considered current rating of protective device as part of building or equipment installation	N/A Installation location: ☐building;☐equipment					
Equipment mobility:	☐ movable ☐ hand-held ☐transportable ☐ stationary ☐ for building-in☐ direct plug-in ☐ rack-mounting ☐ wall-mounted					
Over voltage category (OVC):	☐ OVC I ☐ OVC II ☐ OVC III ☐ OVC IV ☐ Other: not directly connected to the mains					
Class of equipment:	☐ Class II ☐ Class III					
Access location:	☐ restricted access location ☐ N/A					
Pollution degree (PD):	□PD1 □ PD2 □ PD3					
Manufacturer's specified maximum operating ambient	40 ℃					
IP protection class:	☑ IPX0 ☐ IP					
Power Systems ::	□ TN □ TT□ IT V L-L ☑ N/A					
Altitude during operation (m):						
Altitude of test laboratory (m):						
Mass of equipment (kg):	Approx. Smart Video Doorbell G4:0.160kg; Chime Repeater:0.065kg					





Application No.: S20220818046001 Report No.: S2022081804600101

P	OSSIBLE TEST CASE VERDICTS:					
-						
	test case does not apply to the test object					
	test object does meet the requirement					
	test object does not meet the requirement	F (Fail)				
TE	ESTING:					
Da	ate of receipt of test item	2022.09.01				
Da	ate (s) of performance of tests	2022.09.01 to 2022.11.10				
GI	ENERAL REMARKS:					
Th	See Enclosure #)" refers to additional information See appended table)" refers to a table appended to a table appended to a comma / point is under the comma /	o the report. used as the decimal separator.				
	anufacturer's Declaration per sub-clause 4.2.5 of I	ECEE 02:				
de sai rep	ne application for obtaining a CB Test Certificate cludes more than one factory location and a eclaration from the Manufacturer stating that the imple(s) submitted for evaluation is (are) presentative of the products from each factory has seen provided	☐ Yes ⊠Not applicable				
GE	ENERAL PRODUCT INFORMATION:					
1.	The product is named "Smart Video Doorbell G4, C	Chime Repeater", model is "SVD-C01, SVD-C02" is				
	Class III equipment which is designed as audio/vide	eo, information and communication technology				
	equipment.					
2.	This test was done on models SVD-C01 and SVD-C02, which can be representative of the rest of the models					
3.	The product can be powered by AC-AC converter of	or AC-DC converter or battery.				
4.	Approved power supplies which complies with ES1					
5.		d the ambient temperature is 40°C and operated up to				
	2000m above sea level as declared by manufacture					
6.	The test sample no. is S20220818046001-0001.					



Application No.: S20220818046001

Report No.: S2022081804600101

Model Differences:

For Smart Video Doorbell G4:

The models are identical to each other except for model name and enclosure color

For Chime Repeater:

The models are identical to each other except for model name and enclosure color

See table below

Product named	Model	Ratings	Enclosure color
Smart Video	SVD-C01,	12V-24V AC 0.2A 50/60Hz or 8V-24V DC 0.5A	black
Doorbell G4	SVD-C03		brown
Chime Repeater	SVD-C02,	5V DC 1A	black
	SVD-C04		brown

Additional application considerations (Considerations used to test a component or sub-assembly): N/A



Application No.: S20220818046001 Report No.: S2022081804600101

ENERGY SOURCE IDENTIFICATION AND CLASSIFICATION TABLE:

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

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

Electrically-caused injury (Clause 5):

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

Example: +5 V dc input

ES1

Source of electrical energy	Corresponding classification (ES)				
All circuits	ES1				

Electrically-caused fire (Clause 6):

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

Example: Battery pack (maximum 85 watts):

Source of power or PIS	Corresponding classification (PS)				
Input terminal	PS1				
Supplied by AC Mains	PS2				
Supplied by DC Mains	PS2				
Supplied by alkaline batteries (less than 100W)	PS2				

Injury caused by hazardous substances (Clause 7)

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

Example: Liquid in filled component

Glycol

TS1

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

Mechanically-caused injury (Clause 8)

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

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

Thermal burn injury (Clause 9)

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

Example: Hand-held scanner – thermoplastic enclosure

Source of thermal energy	Corresponding classification (TS)				
Accessible plastic enclosure	TS1				
Internal components	TS3				

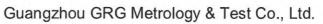
Radiation (Clause 10)

(Note: List the types of radiation present in the product and the corresponding energy source classification.)

Example: DVD - Class 1 Laser Product

RS1

Type of radiation	Corresponding classification (RS)			
LED light	RS1			





Application No.: S20220818046001 Report No.: S2022081804600101

			ENEF	RGY SO	URCE	DIAG	RAM				
ndicate which e	nergy sources	are inclu	uded in	the ener	gy sou	rce di	agran	n. Inse	ert diagra	m below	
	⊠ ES	\boxtimes	PS	\boxtimes	MS		\boxtimes	TS	\boxtimes	RS	
	SEE ENERG	Y SOUR	CE IDE	NTIFIC	ATION	AND	CLA	SSIFIC	ATION	TABLE	
	SEE ENERG	Y SOUR	ICE IDE	NTIFIC	ATION	I AND	CLA	SSIFIC	ATION	TABLE	





Application No.: S20220818046001

Clause	Possible Hazard							
5.1	Electrically-caused injury							
Body Part								
(e.g. Ordinary)	(ES3: Primary Filter circuit)	Safeguards						
		Basic	Supplementary	Reinforced (Enclosure				
Ordinary	ES1: Input terminal	N/A	N/A	N/A				
6.1	Electrically-caused fire							
Material part	Energy Source		Safeguards					
(e.g. mouse enclosure)		Basic	Supplementary	Reinforced				
PCB	PS2 circuit	See 6.3	V-1 or better	N/A				
Internal wiring	PS2 circuit	N/A	N/A	See 6.5				
Enclosure	PS2 circuit	V-1 or better	N/A					
7.1	Injury caused by hazardous sub	stances						
Body Part	Energy Source	Safeguards						
(e.g., skilled)	(hazardous material)	Basic	Supplementary	Reinforced				
N/A	N/A	N/A	N/A	N/A				
8.1	Mechanically-caused injury							
Body Part	Energy Source	Safeguards						
(e.g. Ordinary)	(MS3:High Pressure Lamp)	Basic	Supplementary	Reinforced (Enclosure)				
Ordinary	MS1: Edges and corners	N/A	N/A N/A					
Ordinary	MS1: Mass of the unit	N/A	N/A	N/A				
9.1	Thermal Burn –							
Body Part	Energy Source		Safeguards					
(e.g., Ordinary)	(TS2)	Basic	Supplementary	Reinforced				
Ordinary	TS1: Accessible surfaces	N/A	N/A	N/A				
Ordinary	TS3: Internal components	N/A	N/A	Plastic Enclosure				
10.1	Radiation							
Body Part	Energy Source	Safeguards						
(e.g., Ordinary)	(Output from audio port)	Basic	Supplementary	Reinforced				
V/A	N/A	N/A	N/A	N/A				

⁽¹⁾ See attached energy source diagram for additional details. (2) "N" - Normal Condition; "A" - Abnormal Condition; "S" Single Fault



N/A

Guangzhou GRG Metrology & Test Co., Ltd.

Application No.: S20220818046001 Report No.: S2022081804600101 IEC 62368-1 Requirement + Test Result - Remark Verdict Clause 4 P **GENERAL REQUIREMENTS** 4.1.1 Acceptance of materials, components and See appended table 4.1.2 P subassemblies P 4.1.2 Use of components Components which are certified to IEC and/or national standards are used correctly within their ratings. Components not covered by IEC standards are tested under the conditions present in the equipment. See also Annex G P 4.1.3 Equipment design and construction Evaluation of safeguards regarding limiting the outputs to fulfill ES1 and protection in regard to risk of spread of fire, mechanical and thermal burn injury considered. 4.1.15 P Markings and instructions: (See Annex F) 4.4.4 Safeguard robustness 4.4.4.2 Steady force tests..... P (See Annex T.4) 4.4.4.3 (See Annex T.7) Drop tests....: 4.4.4.4 Impact tests: (See Annex T.6) P Not applicable 4.4.4.5 Internal accessible safeguard enclosure and N/A barrier tests: 4.4.4.6 N/A Glass Impact tests 4.4.4.7 Thermoplastic material tests..... (See Annex T.8) P 4.4.4.8 N/A Air comprising a safeguard: 4.4.4.9 All safeguards remain effective Accessibility and safeguard effectiveness 4.5 No explosion occurs during Explosion normal/abnormal operation and single fault conditions 4.6 Fixing of conductors N/A 4.6.1 Fix conductors not to defeat a safeguard N/A 4.6.2 N/A 10 N force test applied to: 4.7 Equipment for direct insertion into mains socket -N/A outlets 4.7.2 Mains plug part complies with the relevant N/A

standard:

Torque (Nm).....

4.7.3



	IEC 62368-1				
Clause	Requirement + Test	Result - Remark	Verdict		
4.8	Products containing coin/button cell batteries	No coin/button cell batteries used.	N/A		
4.8.2	Instructional safeguard		N/A		
4.8.3	Battery Compartment Construction		N/A		
	Means to reduce the possibility of children removing the battery:		-		
4.8.4	Battery Compartment Mechanical Tests:		N/A		
4.8.5	Battery Accessibility		N/A		
4.9	Likelihood of fire or shock due to entry of conductive object	No opening	N/A		

5	ELECTRICALLY-CAUSED INJURY		Р
5.2.1	Electrical energy source classifications:	Class III equipment and all electrical circuits of EUT are ES1. (See appended table 5.2)	Р
5.2.2	ES1, ES2 and ES3 limits	Comply with ES1	Р
5.2.2.2	Steady-state voltage and current:	(See appended table 5.2)	N/A
5.2.2.3	Capacitance limits		N/A
5.2.2.4	Single pulse limits		N/A
5.2.2.5	Limits for repetitive pulses		N/A
5.2.2.6	Ringing signals		N/A
5.2.2.7	Audio signals		N/A
5.3	Protection against electrical energy sources		N/A
5.3.1	General Requirements for accessible parts to ordinary, instructed and skilled persons		N/A
5.3.2.1	Accessibility to electrical energy sources and safeguards		N/A
5.3.2.2	Contact requirements		N/A
	a) Test with test probe from Annex V:		N/A
	b) Electric strength test potential (V):		N/A
	c) Air gap (mm)		N/A
5.3.2.4	Terminals for connecting stripped wire	No such terminals.	N/A
5.4	Insulation materials and requirements		N/A
5.4.1.2	Properties of insulating material		N/A



Report No.: S2022081804600101

Guangzhou GRG Metrology & Test Co., Ltd.

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
5.4.1.3	Humidity conditioning:	No hygroscopic material used.	N/A
5.4.1.4	Maximum operating temperature for insulating materials	(See appended table 5.4.1.4)	N/A
5.4.1.5	Pollution degree	2	_
5.4.1.5.2	Test for pollution degree 1 environment and for an insulating compound		N/A
5.4.1.5.3	Thermal cycling		N/A
5.4.1.6	Insulation in transformers with varying dimensions	No such transformer within the EUT	N/A
5.4.1.7	Insulation in circuits generating starting pulses	No such starting pulses within the EUT	N/A
5.4.1.8	Determination of working voltage	The equipment is not directly connected to the mains	N/A
5.4.1.9	Insulating surfaces		N/A
5.4.1.10	Thermoplastic parts on which conductive metallic parts are directly mounted		N/A
5.4.1.10.2	Vicat softening temperature:		N/A
5.4.1.10.3	Ball pressure		N/A
5.4.2	Clearances	ES1 electrical energy source used, only the functional insulation inside the EUT	N/A
5.4.2.2	Determining clearance using peak working voltage		N/A
5.4.2.3	Determining clearance using required withstand voltage		N/A
	a) a.c. mains transient voltage:		
	b) d.c. mains transient voltage:		19 <u>19</u> 1
	c) external circuit transient voltage:		
	d) transient voltage determined by measurement :		
5.4.2.4	Determining the adequacy of a clearance using an electric strength test		N/A
5.4.2.5	Multiplication factors for clearances and test voltages		N/A
5.4.3	Creepage distances:		N/A
5.4.3.1	General		N/A
5.4.3.3	Material Group:		



Application No.: S20220818046001

IEC 62368-1				
Clause	Requirement + Test	Result - Remark	Verdic	
5.4.4	Solid insulation	Class III equipment and all electrical circuits of EUT are ES1, and there is no critical insulation.	N/A	
5.4.4.2	Minimum distance through insulation:		N/A	
5.4.4.3	Insulation compound forming solid insulation		N/A	
5.4.4.4	Solid insulation in semiconductor devices		N/A	
5.4.4.5	Cemented joints		N/A	
5.4.4.6	Thin sheet material		N/A	
5.4.4.6.1	General requirements		N/A	
5.4.4.6.2	Separable thin sheet material		N/A	
	Number of layers (pcs)		N/A	
5.4.4.6.3	Non-separable thin sheet material		N/A	
5.4.4.6.4	Standard test procedure for non-separable thin sheet material		N/A	
5.4.4.6.5	Mandrel test		N/A	
5.4.4.7	Solid insulation in wound components		N/A	
5.4.4.9	Solid insulation at frequencies >30 kHz:		N/A	
5.4.5	Antenna terminal insulation		N/A	
5.4.5.1	General		N/A	
5.4.5.2	Voltage surge test		N/A	
	Insulation resistance (MΩ)		N/A	
5.4.6	Insulation of internal wire as part of supplementary safeguard		N/A	
5.4.7	Tests for semiconductor components and for cemented joints		N/A	
.4.8	Humidity conditioning		N/A	
	Relative humidity (%)			
	Temperature (℃):			
	Duration (h)			
.4.9	Electric strength test:		N/A	
.4.9.1	Test procedure for a solid insulation type test		N/A	
.4.9.2	Test procedure for routine tests		N/A	
.4.10	Protection against transient voltages between external circuit		N/A	
.4.10.1	Parts and circuits separated from external circuits		N/A	



Report No.: S2022081804600101

Guangzhou GRG Metrology & Test Co., Ltd.

	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
5.4.10.2	Test methods		N/A
5.4.10.2.1	General		N/A
5.4.10.2.2	Impulse test:		N/A
5.4.10.2.3	Steady-state test:		N/A
5.4.11	Insulation between external circuits and earthed circuitry		N/A
5.4.11.1	Exceptions to separation between external circuits and earth		N/A
5.4.11.2	Requirements		N/A
	Rated operating voltage U _{op} (V)		
	Nominal voltage U _{peak} (V)		
	Max increase due to variation U _{sp} :		_
	Max increase due to ageing $\times U_{sa}$:		
	$U_{op} = U_{peak} + \times U_{sp} + \times U_{sa}$.		_
5.5	Components as safeguards		
5.5.1	General		N/A
5.5.2	Capacitors and RC units		N/A
5.5.2.1	General requirement		N/A
5.5.2.2	Safeguards against capacitor discharge after disconnection of a connector:		N/A
5.5.3	Transformers		N/A
5.5.4	Optocouplers		N/A
5.5.5	Relays		N/A
5.5.6	Resistors		N/A
5.5.7	SPD's		N/A
5.5.7.1	Use of an SPD connected to reliable earthing		N/A
5.5.7.2	Use of an SPD between mains and protective earth		N/A
5.5.8	Insulation between the mains and external circuit consisting of a coaxial cable:		N/A
5.6	Protective conductor		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



Application No.: S20220818046001

Olavia	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdic
5.6.3	Requirement for protective earthing conductors		N/A
	Protective earthing conductor size (mm2):		
5.6.4	Requirement for protective bonding conductors		N/A
5.6.4.1	Protective bonding conductors		N/A
	Protective bonding conductor size (mm²):		_
	Protective current rating (A):		
5.6.4.3	Current limiting and overcurrent protective devices		N/A
5.6.5	Terminals for protective conductors		N/A
5.6.5.1	Requirement		N/A
	Conductor size (mm²), nominal thread diameter (mm)		N/A
5.6.5.2	Corrosion		N/A
5.6.6	Resistance of the protective system		N/A
5.6.6.1	Requirements		N/A
5.6.6.2	Test Method Resistance		N/A
5.6.7	Reliable earthing		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:		N/A
5.7.2.2	Measurement of prospective touch voltage		N/A
5.7.3	Equipment set-up, supply connections and earth connections		N/A
	System of interconnected equipment (separate connections/single connection)		-
	Multiple connections to mains (one connection at a time/simultaneous connections):		_
5.7.4	Earthed conductive accessible parts:		N/A
.7.5	Protective conductor current		N/A
	Supply Voltage (V):		
	Measured current (mA):		
	Instructional Safeguard:		N/A
.7.6	Prospective touch voltage and touch current due to external circuits		N/A



Application No.: S20220818046001

Application	on No.: S20220818046001	Report No.: S2022081	804600101
Y) - 5 (1 2 2	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
5.7.6.1	Touch current from coaxial cables		N/A
5.7.6.2	Prospective touch voltage and touch current from external circuits		N/A
5.7.7	Summation of touch currents from external circuits		N/A
	a) Equipment with earthed external circuits Measured current (mA):		N/A
	b) Equipment whose external circuits are not referenced to earth. Measured current (mA):		N/A
6	ELECTRICALLY- CAUSED FIRE		Р
6.2	Classification of power sources (PS) and potential is	gnition sources (PIS)	Р
6.2.2	Power source circuit classifications		Р
6.2.2.1	General		Р
6.2.2.2	Power measurement for worst-case load fault:	(See appended table 6.2.2)	Р
6.2.2.3	Power measurement for worst-case power source fault:	(See appended table 6.2.2)	Р
6.2.2.4	PS1:	(See appended table 6.2.2)	Р
6.2.2.5	PS2:	(See appended table 6.2.2)	Р
6.2.2.6	PS3:		N/A
6.2.3	Classification of potential ignition sources	See below	Р
6.2.3.1	Arcing PIS:	No arcing PIS due to no part with voltage 50V in the equipment.	N/A
6.2.3.2	Resistive PIS:	All circuits are considered as Resistive PIS	Р
6.3	Safeguards against fire under normal operating and	abnormal operating conditions	Р
6.3.1 (a)	No ignition and attainable temperature value less than 90 % defined by ISO 871 or less than 300 degree C for unknown materials:	No ignition and no such temperature attained within the equipment. (See appended table 5.4.1.4, 6.3.2, 9.0, B.2.6)	Р
6.3.1 (b)	Combustible materials outside fire enclosure		Р
6.4	Safeguards against fire under single fault conditions	5	Р
6.4.1	Safeguard Method		Р
6.4.2	Reduction of the likelihood of ignition under single fault conditions in PS1 circuits		N/A
6.4.3	Reduction of the likelihood of ignition under single fault conditions in PS2 and PS3 circuits		N/A
	•		



Application No.: S20220818046001

	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
6.4.3.1	General		N/A
6.4.3.2	Supplementary Safeguards		N/A
	Special conditions if conductors on printed boards are opened or peeled		N/A
6.4.3.3	Single Fault Conditions:		N/A
	Special conditions for temperature limited by fuse		N/A
6.4.4	Control of fire spread in PS1 circuits		N/A
6.4.5	Control of fire spread in PS2 circuits		Р
6.4.5.2	Supplementary safeguards:	Components other than PCB and wires are: - mounted on PCB rated V-1 or better. (See appended tables 4.1.2 and Annex G)	Р
6.4.6	Control of fire spread in PS3 circuit	No PS3 circuit within in the equipment.	N/A
6.4.7	Separation of combustible materials from a PIS		N/A
6.4.7.1	General		N/A
6.4.7.2	Separation by distance		N/A
5.4.7.3	Separation by a fire barrier		N/A
6.4.8	Fire enclosures and fire barriers		N/A
6.4.8.1	Fire enclosure and fire barrier material properties		N/A
5.4.8.2.1	Requirements for a fire barrier		N/A
6.4.8.2.2	Requirements for a fire enclosure		N/A
5.4.8.3	Constructional requirements for a fire enclosure and a fire barrier		N/A
5.4.8.3.1	Fire enclosure and fire barrier openings		N/A
5.4.8.3.2	Fire barrier dimensions		N/A
.4.8.3.3	Top Openings in Fire Enclosure: dimensions(mm):	No opening	N/A
	Needle Flame test		N/A
.4.8.3.4	Bottom Openings in Fire Enclosure, condition met a), b) and/or c) dimensions (mm):	No opening	N/A
	Flammability tests for the bottom of a fire enclosure		N/A



11	on No.: S20220818046001	Report No.: S20220818	
	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
6.4.8.3.5	Integrity of the fire enclosure, condition met: a), b) or c):		N/A
6.4.8.4	Separation of PIS from fire enclosure and fire barrier distance (mm) or flammability rating:		N/A
6.5	Internal and external wiring		Р
6.5.1	Requirements	The internal or external wiring with PVC, TFE, PTFE, FEP, polychloroprene or polyimide are considered complied with the requirement without additional tests.	Р
6.5.2	Cross-sectional area (mm²):	See 6.5.1.	_
6.5.3	Requirements for interconnection to building wiring	No such connection	N/A
6.6	Safeguards against fire due to connection to additional equipment	Equipment no connection with other device.	N/A
	External port limited to PS2 or complies with Clause Q.1		N/A

7	INJURY CAUSED BY HAZARDOUS SUBSTANCES		Р
7.2	Reduction of exposure to hazardous substances	No hazardous substances exposure.	N/A
7.3	Ozone exposure	No ozone production within the equipment.	N/A
7.4	Use of personal safeguards (PPE)		N/A
	Personal safeguards and instructions:		
7.5	Use of instructional safeguards and instructions		N/A
	Instructional safeguard (ISO 7010):		-
7.6	Batteries	See Annex M	Р

8	MECHANICALLY-CAUSED INJURY		P P
8.1	General		
8.2	Mechanical energy source classifications	classified as MS1	Р
8.3	Safeguards against mechanical energy sources		N/A
8.4	Safeguards against parts with sharp edges and corners	Edges and corners of the enclosure are rounded and classification as MS1	N/A
8.4.1	Safeguards		N/A



Application No.: S20220818046001

IEC 62368-1				
Clause	Requirement + Test	Result - Remark	Verdict	
8.5	Safeguards against moving parts	No moving parts.	N/A	
8.5.1	MS2 or MS3 part required to be accessible for the function of the equipment		N/A	
8.5.2	Instructional Safeguard:		_	
8.5.4	Special categories of equipment comprising moving parts		N/A	
8.5.4.1	Large data storage equipment		N/A	
8.5.4.2	Equipment having electromechanical device for destruction of media		N/A	
8.5.4.2.1	Safeguards and Safety Interlocks		N/A	
8.5.4.2.2	Instructional safeguards against moving parts		N/A	
	Instructional Safeguard:			
8.5.4.2.3	Disconnection from the supply		N/A	
8.5.4.2.4	Probe type and force (N):		N/A	
8.5.5	High Pressure Lamps		N/A	
8.5.5.1	Energy Source Classification		N/A	
8.5.5.2	High Pressure Lamp Explosion Test:		N/A	
8.6	Stability		N/A	
8.6.1	Product classification	MS1	N/A	
	Instructional Safeguard:			
8.6.2	Static stability		N/A	
8.6.2.2	Static stability test		N/A	
	Applied Force			
8.6.2.3	Downward Force Test		N/A	
8.6.3	Relocation stability test		N/A	
	Unit configuration during 10° tilt:			
3.6.4	Glass slide test		N/A	
3.6.5	Horizontal force test (Applied Force):		N/A	
	Position of feet or movable parts:			
3.7	Equipment mounted to wall or ceiling	Product classified as MS1	N/A	
3.7.1	Mounting Means (Length of screws (mm) and mounting surface):		N/A	
3.7.2	Direction and applied force:		N/A	
8.8	Handles strength	No such handles.	N/A	
.8.1	Classification		N/A	
.8.2	Applied Force ::		N/A	
3.9	Wheels or casters attachment requirements	No such construction.	N/A	

GRGTEST

Guangzhou GRG Metrology & Test Co., Ltd.

Application No.: S20220818046001		Report No.: S20220	0 1004000 10 1
	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
8.9.1	Classification		N/A
8.9.2	Applied force:		
8.10	Carts, stands and similar carriers	No such construction.	N/A
8.10.1	General		N/A
8.10.2	Marking and instructions		N/A
	Instructional Safeguard:		
8.10.3	Cart, stand or carrier loading test and compliance		N/A
	Applied force:		
8.10.4	Cart, stand or carrier impact test		N/A
8.10.5	Mechanical stability		N/A
	Applied horizontal force (N):		_
8.10.6	Thermoplastic temperature stability (°C):		N/A
8.11	Mounting means for rack mounted equipment	Not such equipment.	N/A
8.11.1	General		N/A
8.11.2	Product Classification		N/A
8.11.3	Mechanical strength test, variable N:		N/A
8.11.4	Mechanical strength test 250N, including end stops		N/A
8.12	Telescoping or rod antennas	No such parts.	N/A
	Button/Ball diameter (mm):		_

9	THERMAL BURN INJURY		Р
9.2	Thermal energy source classifications	External surfaces classified as TS1	Р
9.3	Safeguard against thermal energy sources	Enclosure is used as safeguard.	Р
9.4	Requirements for safeguards		
9.4.1	Equipment safeguard		Р
9.4.2	Instructional safeguard:		N/A

10	RADIATION		Р
10.2	Radiation energy source classification		Р
10.2.1	General classification	LED indicating light considered as RS1	Р
10.3	Protection against laser radiation	No laser.	N/A
	Laser radiation that exists equipment:		_
	Normal, abnormal, single-fault:		N/A
	Instructional safeguard:		



Application No.: S20220818046001

	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdic
	Tool		
10.4	Protection against visible, infrared, and UV radiation	No such radiation energy source	N/A
10.4.1	General		N/A
10.4.1.a)	RS3 for Ordinary and instructed persons:		N/A
10.4.1.b)	RS3 accessible to a skilled person:		N/A
	Personal safeguard (PPE) instructional safeguard		-
10.4.1.c)	Equipment visible, IR, UV does not exceed RS1 .:	LED indicating light considered as RS1	Р
10.4.1.d)	Normal, abnormal, single-fault conditions:		N/A
10.4.1.e)	Enclosure material employed as safeguard is opaque		N/A
10.4.1.f)	UV attenuation:		N/A
10.4.1.g)	Materials resistant to degradation UV:		N/A
10.4.1.h)	Enclosure containment of optical radiation:		N/A
10.4.1.i)	Exempt Group under normal operating conditions		N/A
10.4.2	Instructional safeguard:		N/A
10.5	Protection against x-radiation	No such x-radiation generated from the equipment	N/A
10.5.1	X- radiation energy source that exists equipment:		N/A
	Normal, abnormal, single fault conditions		N/A
	Equipment safeguards:		N/A
	Instructional safeguard for skilled person:		N/A
10.5.3	Most unfavourable supply voltage to give maximum radiation		_
	Abnormal and single-fault condition:		N/A
	Maximum radiation (pA/kg):		N/A
10.6	Protection against acoustic energy sources		N/A
10.6.1	General		N/A
10.6.2	Classification		N/A
	Acoustic output, dB(A):		N/A
	Output voltage, unweighted r.m.s. ::		N/A
0.6.4	Protection of persons		N/A
	Instructional safeguards:		N/A
	Equipment safeguard prevent ordinary person to RS2		-



Application No.: S20220818046001		Report No.: S20220	081804600101
	IEC 62368-	1	1250500
Clause	Requirement + Test	Result - Remark	Verdict

Clause	Requirement + Test Result - Remark		Verdic	
	Means to actively inform user of increase sound pressure		_	
	Equipment safeguard prevent ordinary person to RS2			
10.6.5	Requirements for listening devices (headphones, earphones, etc.)		N/A	
10.6.5.1	Corded passive listening devices with analog input		N/A	
	Input voltage with 94 dB(A) L _{Aeq} acoustic pressure output:			
10.6.5.2	Corded listening devices with digital input		N/A	
	Maximum dB(A)		_	
10.6.5.3	Cordless listening device		N/A	
	Maximum dB(A):			

В	NORMAL OPERATING CONDITION TESTS, ABNORMAL OPERATING CONDITION TESTS AND SINGLE FAULT CONDITION TESTS		Р	
B.2	Normal Operating Conditions	See the following details.	Р	
B.2.1	General requirements:	Maximum rated output applied (See appended table B.2.5)	Р	
	Audio Amplifiers and equipment with audio amplifiers:	Not such equipment.	N/A	
B.2.3	Supply voltage and tolerances	(See appended table B.2.5)	N/A	
B.2.5	Input test: (See appended table B.2.5)			
B.3	Simulated abnormal operating conditions			
B.3.1	General requirements:		Р	
B.3.2	Covering of ventilation openings		N/A	
B.3.3	D.C. mains polarity test	The EUT is not connected to a D.C. mains	N/A	
B.3.4	Setting of voltage selector:	No setting of voltage selector within the EUT	N/A	
B.3.5	Maximum load at output terminals:		N/A	
B.3.6	Reverse battery polarity	(See appended table B.3)	Р	
B.3.7	Abnormal operating conditions as specified in Clause E.2.		Р	
B.3.8	Safeguards functional during and after abnormal (See appended table B.3) operating conditions		Р	
B.4	Simulated single fault conditions		Р	
B.4.2	Temperature controlling device open or short-circuited:	No such device used.	N/A	



Application No.: S20220818046001

	IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdic	
B.4.3	Motor tests		N/A	
B.4.3.1	Motor blocked or rotor locked increasing the internal ambient temperature:		N/A	
B.4.4	Short circuit of functional insulation	(See appended table B.4)	Р	
B.4.4.1	Short circuit of clearances for functional insulation	(See appended table B.4)	Р	
B.4.4.2	Short circuit of creepage distances for functional insulation	(See appended table B.4)	Р	
B.4.4.3	Short circuit of functional insulation on coated printed boards		N/A	
B.4.5	Short circuit and interruption of electrodes in tubes and semiconductors		N/A	
B.4.6	Short circuit or disconnect of passive components		N/A	
B.4.7	Continuous operation of components		N/A	
B.4.8	Class 1 and Class 2 energy sources within limits during and after single fault conditions			
B.4.9	Battery charging under single fault conditions:		N/A	
C	UV RADIATION			
C.1			N/A	
	Protection of materials in equipment from UV radiation	No such UV generated from the equipment.	N/A	
C.1.2	Requirements	See above.	N/A	
C.1.3	Test method	See above.	N/A	
C.2	UV light conditioning test	See above.	N/A	
0.2.1	Test apparatus	See above.	N/A	
0.2.2	Mounting of test samples	See above.	N/A	
0.2.3	Carbon-arc light-exposure apparatus	See above.	N/A	
C.2.4	Xenon-arc light exposure apparatus	See above.	N/A	
)	TEST GENERATORS		N/A	
0.1	Impulse test generators	No such consideration.	N/A	
0.2	Antenna interface test generator	See above.	N/A	
0.3	Electronic pulse generator	See above.	N/A	
	TEST CONDITIONS FOR EQUIPMENT CONTAIN	NG AUDIO AMPLIEIEDO	N1/2	
E.1	Audio amplifier normal operating conditions	NO AUDIO AWIPLIPIERS	N/A	
	Audio signal voltage (V):			
	Rated load impedance (Ω):			



Application No.: S20220818046001

	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdic
	Audio amplifier abnormal operating conditions		N/A

F	EQUIPMENT MARKINGS, INSTRUCTIONS, AND	INSTRUCTIONAL SAFEGUARDS	Р
F.1	General requirements		Р
	Instructions – Language:	Evaluated the user manual in English version. The manufacturer commits to provide them in the language of the countries where the product will be distributed.	
F.2	Letter symbols and graphical symbols	See blow.	Р
F.2.1	Letter symbols according to IEC60027-1	Letter symbols for quantities and units are complied with IEC 60027-1.	Р
F.2.2	Graphic symbols IEC, ISO or manufacturer specific	Graphical symbols are complied with IEC 60417, ISO 3864-2, ISO 7000 or ISO 7010.	Р
F.3	Equipment markings		Р
F.3.1	Equipment marking locations	Equipment marking is located on the enclosure surface and is easily visible.	Р
F.3.2	Equipment identification markings	See the following details.	Р
F.3.2.1	Manufacturer identification	See copy of marking plates	_
F.3.2.2	Model identification	See copy of marking plates	_
F.3.3	Equipment rating markings	See the following details.	Р
F.3.3.1	Equipment with direct connection to mains	The equipment is not directly connected to the mains supply.	N/A
F.3.3.2	Equipment without direct connection to mains		Р
F.3.3.3	Nature of supply voltage	See copy of marking plates	-
F.3.3.4	Rated voltage	See copy of marking plates	_
F.3.3.4	Rated frequency	See copy of marking plates	_
F.3.3.6	Rated current or rated power	See copy of marking plates	
F.3.3.7	Equipment with multiple supply connections	Only one supply connection.	N/A
F.3.4	Voltage setting device	No voltage selector provide within the equipment.	N/A
F.3.5	Terminals and operating devices		N/A
F.3.5.1	Mains appliance outlet and socket-outlet markings:	No such devices on the equipment.	N/A
F.3.5.2	Switch position identification marking:	No such switch on the equipment.	N/A



Application No.: S20220818046001

	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
F.3.5.3	Replacement fuse identification and rating markings	No such fuse used	N/A
F.3.5.4	Replacement battery identification marking:	No such battery	N/A
F.3.5.5	Terminal marking location		N/A
F.3.6	Equipment markings related to equipment classification		N/A
F.3.6.1	Class I Equipment		N/A
F.3.6.1.1	Protective earthing conductor terminal		N/A
F.3.6.1.2	Neutral conductor terminal		N/A
F.3.6.1.3	Protective bonding conductor terminals		N/A
F.3.6.2	Class II equipment (IEC60417-5172)	Class III equipment	N/A
F.3.6.2.1	Class II equipment with or without functional earth	See above	N/A
F.3.6.2.2	Class II equipment with functional earth terminal marking		N/A
F.3.7	Equipment IP rating marking:	IPX0.	
F.3.8	External power supply output marking		N/A
F.3.9	Durability, legibility and permanence of marking	Marking is considered to be legible and easily discernible. See also the following details.	Р
F.3.10	Test for permanence of markings	The label was subjected to the permanence of marking test. The label was rubbed with cloth soaked with water for 15 sec. And then again for 15 sec, with the cloth soaked with petroleum spirit. After this test there was no damage to the label. The marking on the label did not fade. There was no curling and lifting of the label edge. After each test, the marking remained legible.	P
.4	Instructions		Р
	a) Equipment for use in locations where children not likely to be present - marking		N/A
		Relevant safety caution texts and installation instruction are available.	Р
	c) Equipment intended to be fastened in place		N/A
	d) Equipment intended for use only in restricted access area	No such equipment	N/A
	e) Audio equipment terminals classified as ES3 and other equipment with terminals marked in accordance F.3.6.1	No such terminals provided.	N/A



Report	No .	S2022081804600101
Leboil	INO	32022001004000101

	IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict	
	f) Protective earthing employed as safeguard		N/A	
	g) Protective earthing conductor current exceeding ES2 limits		N/A	
	h) Symbols used on equipment		N/A	
	i) Permanently connected equipment not provided with all-pole mains switch		N/A	
	j) Replaceable components or modules providing safeguard function	No such component or modules	N/A	
F.5	Instructional safeguards	No such safeguard required.	N/A	
	Where "instructional safeguard" is referenced in the test report it specifies the required elements, location of marking and/or instruction		N/A	

G	COMPONENTS		Р
G.1	Switches		N/A
G.1.1	General requirements	No switch used.	N/A
G.1.2	Ratings, endurance, spacing, maximum load		N/A
G.2	Relays		N/A
G.2.1	General requirements	No such relay provided within the equipment.	N/A
G.2.2	Overload test	See above.	N/A
G.2.3	Relay controlling connectors supply power	See above.	N/A
G.2.4	Mains relay, modified as stated in G.2	See above.	N/A
G.3	Protection Devices		N/A
G.3.1	Thermal cut-offs	No thermal cut-offs	N/A
G.3.1.1a) &b)	Thermal cut-outs separately approved according to IEC 60730 with conditions indicated in a) & b)		N/A
G.3.1.1c)	Thermal cut-outs tested as part of the equipment as indicated in c)		N/A
G.3.1.2	Thermal cut-off connections maintained and secure		N/A
G.3.2	Thermal links		N/A
G.3.2.1a)	Thermal links separately tested with IEC 60691	No thermal links	N/A
G.3.2.1b)	Thermal links tested as part of the equipment		N/A
	Aging hours (H)		
	Single Fault Condition:		_
	Test Voltage (V) and Insulation Resistance (Ω). :		
G.3.3	PTC Thermistors	No PTC thermistors	N/A
G.3.4	Overcurrent protection devices		N/A



Application No.: S20220818046001

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
G.3.5	Safeguards components not mentioned in G.3.1	to G.3.5	N/A
G.3.5.1	Non-resettable devices suitably rated and marking provided		N/A
G.3.5.2	Single faults conditions:		N/A
G.4	Connectors		Р
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		Р
G.5	Wound Components		N/A
G.5.1	Wire insulation in wound components		N/A
G.5.1.2 a)	Two wires in contact inside wound component, angle between 45 ° and 90 °		N/A
G.5.1.2 b)	Construction subject to routine testing		N/A
G.5.2	Endurance test on wound components		N/A
G.5.2.1	General test requirements		N/A
G.5.2.2	Heat run test		N/A
	Time (s)		_
	Temperature (°C)		
G.5.2.3	Wound Components supplied by mains		N/A
G.5.3	Transformers		N/A
G.5.3.1	Requirements applied (IEC61204-7, IEC61558-1/-2, and/or IEC62368-1)		N/A
	Position		
	Method of protection		
G.5.3.2	Insulation		N/A
	Protection from displacement of windings:		
G.5.3.3	Overload test:		N/A
G.5.3.3.1	Test conditions		N/A
G.5.3.3.2	Winding Temperatures testing in the unit		N/A
3.5.3.3.3	Winding Temperatures - Alternative test method		N/A
3.5.4	Motors		N/A
9.5.4.1	General requirements	No motors used.	N/A
	Position:		
9.5.4.2	Test conditions		N/A
3.5.4.3	Running overload test		N/A
3.5.4.4	Locked-rotor overload test		N/A



Application No.: S20220818046001

IEC 62368-1				
Clause	Requirement + Test	Result - Remark	Verdict	
	Test duration (days)			
G.5.4.5	Running overload test for d.c. motors in secondary circuits		N/A	
G.5.4.5.2	Tested in the unit		N/A	
	Electric strength test (V)		4	
G.5.4.5.3	Tested on the Bench - Alternative test method; test time (h)		N/A	
	Electric strength test (V)			
G.5.4.6	Locked-rotor overload test for d.c. motors in secondary circuits		N/A	
G.5.4.6.2	Tested in the unit		N/A	
	Maximum Temperature		N/A	
	Electric strength test (V)		N/A	
G.5.4.6.3	Tested on the bench - Alternative test method; test time (h)		N/A	
	Electric strength test (V)		N/A	
G.5.4.7	Motors with capacitors		N/A	
G.5.4.8	Three-phase motors		N/A	
G.5.4.9	Series motors		N/A	
	Operating voltage			
G.6	Wire Insulation		N/A	
G.6.1	General		N/A	
G.6.2	Solvent-based enamel wiring insulation		N/A	
G.7	Mains supply cords		N/A	
G.7.1	General requirements		N/A	
	Туре		_	
	Rated current (A)		_	
	Cross-sectional area (mm²), (AWG):		_	
G.7.2	Compliance and test method		N/A	
G.7.3	Cord anchorages and strain relief for non- detachable power supply cords	No such devices or power cords	N/A	
G.7.3.2	Cord strain relief		N/A	
G.7.3.2.1	Requirements		N/A	
	Strain relief test force (N)		-	
G.7.3.2.2	Strain relief mechanism failure		N/A	
G.7.3.2.3	Cord sheath or jacket position, distance (mm):		-	
G.7.3.2.4	Strain relief comprised of polymeric material		N/A	



	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdic
G.7.4	Cord Entry		N/A
G.7.5	Non-detachable cord bend protection		N/A
G.7.5.1	Requirements		N/A
G.7.5.2	Mass (g)		IVA
	Diameter (m)		
	Temperature (°C)		
G.7.6	Supply wiring space		N/A
G.7.6.2	Stranded wire		N/A
G.7.6.2.1	Test with 8 mm strand		N/A
G.8	Varistors		N/A
G.8.1	General requirements	No such component used	N/A
G.8.2	Safeguard against shock		N/A
G.8.3	Safeguard against fire		N/A
G.8.3.2	Varistor overload test		N/A
G.8.3.3	Temporary overvoltage		N/A
G.9	Integrated Circuit (IC) Current Limiters		N/A
G.9.1 a)	Manufacturer defines limit at max. 5A.	No IC current limiter provided within the equipment.	N/A
G.9.1 b)	Limiters do not have manual operator or reset		N/A
G.9.1 c)	Supply source does not exceed 250 VA:		
3.9.1 d)	IC limiter output current (max. 5A)		
3.9.1 e)	Manufacturers' defined drift		
3.9.2	Test Program 1		N/A
3.9.3	Test Program 2		N/A
3.9.4	Test Program 3		N/A
S.10	Resistors		N/A
S.10.1	General requirements		N/A
6.10.2	Resistor test		N/A
3.10.3	Test for resistors serving as safeguards between the mains and an external circuit consisting of a coaxial cable		N/A
5.10.3.1	General requirements		N/A
5.10.3.2	Voltage surge test		N/A
.10.3.3	Impulse test		N/A
.11	Capacitor and RC units		N/A
.11.1	General requirements		N/A
.11.2	Conditioning of capacitors and RC units		N/A



Report No.: S2022081804600101 Application No.: S20220818046001 IEC 62368-1 Clause Requirement + Test Result - Remark Verdict G.11.3 Rules for selecting capacitors N/A G.12 **Optocouplers** N/A Optocouplers comply with IEC 60747-5-5:2007 N/A Spacing or Electric Strength Test (specify option and test results)..... Type test voltage Vini, a: Routine test voltage, Vini,b..... G.13 **Printed boards** G.13.1 P General requirements See the following details. G.13.2 P Uncoated printed boards Approved printed board is used. G.13.3 Coated printed boards N/A G.13.4 Insulation between conductors on the same inner N/A surface Compliance with cemented joint requirements (Specify construction)..... G.13.5 Insulation between conductors on different N/A surfaces Distance through insulation: N/A Number of insulation layers (pcs) G.13.6 Tests on coated printed boards N/A G.13.6.1 Sample preparation and preliminary inspection N/A N/A G.13.6.2a) Thermal conditioning G.13.6.2b) Electric strength test N/A G.13.6.2c) N/A Abrasion resistance test G.14 Coating on components terminals N/A No coating on component G.14.1 N/A Requirements: terminals considered to affect creepage or clearances. G.15 Liquid filled components N/A G.15.1 General requirements No such device provided within the N/A equipment. G.15.2 Requirements N/A N/A G.15.3 Compliance and test methods G.15.3.1 N/A Hydrostatic pressure test G.15.3.2 N/A Creep resistance test G.15.3.3 Tubing and fittings compatibility test N/A G.15.3.4 Vibration test N/A G.15.3.5 Thermal cycling test N/A G.15.3.6 N/A Force test



Application No.: S20220818046001		Report No.: S2022081	804600101
	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
G.15.4	Compliance		N/A
G.16	IC including capacitor discharge function (ICX		N/A
a)	Humidity treatment in accordance with sc5.4.8 – 120 hours	No such ICX provided within the equipment.	N/A
b)	Impulse test using circuit 2 with Uc = to transient voltage		N/A
C1)	Application of ac voltage at 110% of rated voltage for 2.5 minutes		N/A
C2)	Test voltage		_
D1)	10,000 cycles on and off using capacitor with smallest capacitance resistor with largest resistance specified by manufacturer		N/A
D2)	Capacitance		
D3)	Resistance		
Н	CRITERIA FOR TELEPHONE RINGING SIGNAL	3	N/A
H.1	General	No telephone ringing signal generated within the equipment.	N/A
H.2	Method A		N/A
1 2	Mathed D		

Н	CRITERIA FOR TELEPHONE RINGING SIGNALS		N/A
H.1	General	No telephone ringing signal generated within the equipment.	N/A
H.2	Method A		N/A
H.3	Method B		N/A
H.3.1	Ringing signal		N/A
H.3.1.1	Frequency (Hz)		
H.3.1.2	Voltage (V)		
H.3.1.3	Cadence; time (s) and voltage (V)		
H.3.1.4	Single fault current (mA):		
H.3.2	Tripping device and monitoring voltage		N/A
H.3.2.1	Conditions for use of a tripping device or a monitoring voltage complied with		N/A
H.3.2.2	Tripping device		N/A
H.3.2.3	Monitoring voltage (V)		

J	INSULATED WINDING WIRES FOR USE WITHOUT INTERLEAVED INSULATION	
	General requirements	N/A

K	SAFETY INTERLOCKS		N/A
K.1	General requirements	No safety interlock provided within the equipment.	N/A
K.2	Components of safety interlock safeguard mechanism		N/A



Application No.: S20220818046001

	IEC 62368-1				
Clause	Requirement + Test	Result - Remark	Verdic		
K.3	Inadvertent change of operating mode		N/A		
K.4	Interlock safeguard override		N/A		
K.5	Fail-safe		N/A		
	Compliance		N/A		
K.6	Mechanically operated safety interlocks		N/A		
K.6.1	Endurance requirement		N/A		
K.6.2	Compliance and Test method		N/A		
K.7	Interlock circuit isolation		N/A		
K.7.1	Separation distance for contact gaps & interlock circuit elements (type and circuit location):		N/A		
K.7.2	Overload test, Current (A)		N/A		
K.7.3	Endurance test		N/A		
K.7.4	Electric strength test:		N/A		
L	DISCONNECT DEVICES		N/A		
L.1	General requirements		N/A		
L.2	Permanently connected equipment		N/A		
L.3	Parts that remain energized		N/A		
L.4	Single phase equipment		N/A		
L.5	Three-phase equipment		N/A		
L.6	Switches as disconnect devices		N/A		
L.7	Plugs as disconnect devices		N/A		
L.8	Multiple power sources		N/A		
M	EQUIPMENT CONTAINING BATTERIES AND THEIR PRO	OTECTION CIRCUITS	N/A		
M.1	General requirements		N/A		
M.2	Safety of batteries and their cells		N/A		
	Statistics and their solls		N/A		



N/A

N/A

Application No.: S20220818046001 Report No.: S2022081804600101 IEC 62368-1 Clause Requirement + Test Result - Remark Verdict - Reverse charging of a rechargeable battery N/A Non-removable battery - Excessive discharging rate for any battery N/A M 3 3 Compliance Consumer level N/A M.4 Additional safeguards for equipment containing N/A secondary lithium battery M.4.1 General N/A M.4.2 Charging safeguards N/A M.4.2.1 Charging operating limits N/A M.4.2.2a) Charging voltage, current and temperature: M.4.2.2 b) Single faults in charging circuitry..... M.4.3 Fire Enclosure N/A Endurance of equipment containing a secondary M.4.4 N/A lithium battery M.4.4.2 N/A Preparation M.4.4.3 Drop and charge/discharge function tests N/A N/A Drop Charge N/A Discharge N/A M.4.4.4 N/A Charge-discharge cycle test M.4.4.5 Result of charge-discharge cycle test N/A M.5 Risk of burn due to short circuit during carrying N/A M.5.1 Requirement N/A M.5.2 N/A Compliance and Test Method (Test of P.2.3) M.6 Prevention of short circuits and protection from N/A other effects of electric current M.6.1 Short circuits N/A M.6.1.1 General requirements N/A M.6.1.2 Test method to simulate an internal fault N/A M.6.1.3 Compliance (Specify M.6.1.2 or alternative N/A method)

Leakage current (mA):

Risk of explosion from lead acid and NiCd

M.6.2

batteries

M.7



Application No.: S20220818046001

Report No.: S2022081804600101

	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdic
M.7.1	Ventilation preventing explosive gas concentration		N/A
M.7.2	Compliance and test method		N/A
M.8	Protection against internal ignition from external spark sources of lead acid batteries		N/A
M.8.1	General requirements		N/A
M.8.2	Test method		N/A
M.8.2.1	General requirements		N/A
M.8.2.2	Estimation of hypothetical volume Vz (m³/s):		-
M.8.2.3	Correction factors:		-
M.8.2.4	Calculation of distance d (mm):		-
M.9	Preventing electrolyte spillage		N/A
M.9.1	Protection from electrolyte spillage		N/A
M.9.2	Tray for preventing electrolyte spillage		N/A
M.10	Instructions to prevent reasonably foreseeable misuse (Determination of compliance: inspection, data review; or abnormal testing)	Complied	Р
N	ELECTROCHEMICAL POTENTIALS		N/A
	Metal(s) used:		_
0	MEASUREMENT OF CREEPAGE DISTANCES A	ND CLEARANCES	N/A
	Figures O.1 to O.20 of this Annex applied:		_
P	SAFEGUARDS AGAINST ENTRY OF FOREIGN INTERNAL LIQUIDS	OBJECTS AND SPILLAGE OF	N/A
P.1	General requirements	See the following details.	N/A
P.2.2	Safeguards against entry of foreign object	No ES3 or PS3 circuit within in the equipment.	N/A
	Location and Dimensions (mm)		
P.2.3	Safeguard against the consequences of entry of foreign object		N/A
P.2.3.1	Safeguards against the entry of a foreign object	No ES3 or PS3 circuit within in the	N/A

Openings in transportable equipment

Transportable equipment with metalized plastic

parts....:

equipment.

Not such equipment

N/A

N/A



Application No.: S20220818046001

IEC 62368-1				
Clause	Requirement + Test	Result - Remark	Verdict	
P.2.3.2	Openings in transportable equipment in relation to metallized parts of a barrier or enclosure (identification of supplementary safeguard):		N/A	
P.3	Safeguards against spillage of internal liquids	No such liquids.	N/A	
P.3.1	General requirements		N/A	
P.3.2	Determination of spillage consequences		N/A	
P.3.3	Spillage safeguards		N/A	
P.3.4	Safeguards effectiveness		N/A	
P.4	Metallized coatings and adhesive securing parts	No such construction.	N/A	
P.4.2 a)	Conditioning testing		N/A	
	Tc (℃)			
	Tr (℃)		_	
	Ta (℃)		_	
P.4.2 b)	Abrasion testing		N/A	
P.4.2 c)	Mechanical strength testing:		N/A	
			14//	
Q	CIRCUITS INTENDED FOR INTERCONNECTION	WITH BUILDING WIRING	N/A	
Q.1	Limited power sources		N/A	
Q.1.1 a)	Inherently limited output		N/A	
Q.1.1 b)	Impedance limited output		N/A	
	- Regulating network limited output under normal operating and simulated single fault condition		N/A	
Q.1.1 c)	Overcurrent protective device limited output		N/A	
Q.1.1 d)	IC current limiter complying with G.9		N/A	
2.1.2	Compliance and test method		N/A	
2.2	Test for external circuits – paired conductor cable		N/A	
	Maximum output current (A)		_	
	Current limiting method		_	
	LIMITED SHORT CIRCUIT TEST			
R.1	General requirements	No such consideration.	N/A	
R.2	Determination of the overcurrent protective		N/A	
	device and circuit	See above.	N/A	
2.3	Test method Supply voltage (V) and short-circuit current (A)).	See above.	N/A	



Application No.: S20220818046001

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
S	TESTS FOR RESISTANCE TO HEAT AND FIRE		N/A
S.1	Flammability test for fire enclosures and fire barrier materials of equipment where the steady state power does not exceed 4 000 W		N/A
	Samples, material		
	Wall thickness (mm):		_
	Conditioning (°C):		_
	Test flame according to IEC 60695-11-5 with conditions as set out		N/A
	- Material not consumed completely		N/A
	- Material extinguishes within 30s		N/A
	- No burning of layer or wrapping tissue		N/A
S.2	Flammability test for fire enclosure and fire barrier integrity		N/A
	Samples, material		
	Wall thickness (mm)		
	Conditioning (°C):		
	Test flame according to IEC 60695-11-5 with conditions as set out		N/A
	Test specimen does not show any additional hole		N/A
S.3	Flammability test for the bottom of a fire enclosure		N/A
	Samples, material		_
	Wall thickness (mm)		_
	Cheesecloth did not ignite		N/A
S.4	Flammability classification of materials		N/A
S.5	Flammability test for fire enclosures and fire barrier materials of equipment where the steady state power does not exceed 4 000 W		N/A
	Samples, material		_
	Wall thickness (mm)		
	Conditioning (test condition), (°C)		
	Test flame according to IEC 60695-11-20 with conditions as set out		N/A
	After every test specimen was not consumed completely		N/A
	After fifth flame application, flame extinguished within 1 min		N/A



N/A

Application No.: S20220818046001

U.3

Report No.: S2022081804600101

	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdic
T	MECHANICAL STRENGTH TESTS		Р
T.1	General requirements		Р
T.2	Steady force test, 10 N	Class III equipment	N/A
T.3	Steady force test, 30 N		N/A
T.4	Steady force test, 100 N	(See appended table T.4)	Р
T.5	Steady force test, 250 N		N/A
T.6	Enclosure impact test		Р
	Fall test		N/A
	Swing test	(See appended table T.6)	Р
T.7	Drop test	(See appended table T.7)	Р
T.8	Stress relief test	(See appended table T.8)	Р
T.9	Impact Test (glass)		N/A
T.9.1	General requirements		N/A
T.9.2	Impact test and compliance		N/A
	Impact energy (J):		
	Height (m)		
T.10	Glass fragmentation test	No glass used.	N/A
T.11	Test for telescoping or rod antennas	No such antenSnas provided within the equipment.	N/A
	Torque value (Nm)		_
U	MECHANICAL STRENGTH OF CATHODE RAY T AGAINST THE EFECTS OF IMPLOSION	UBES (CRT) AND PROTECTION	N/A
J.1	General requirements	No CRT provided within the equipment.	N/A
J.2	Compliance and test method for non-intrinsically protected CRTs	See above.	N/A

٧	DETERMINATION OF ACCESSIBLE PARTS (FINGERS, PROBES AND WEDGES)				
V.1	Accessible parts of equipment	N/A			
V.2	Accessible part criterion	N/A			

Protective Screen:

See above.



Application No.: S20220818046001

4.1.2	TABLE: List of criti	cal components			P	
Object/part Manufacturer/ No. trademark		Type/model Technical data		Standard (Edition / year)	Mark(s) of conformity ¹)	
For Smart Vide	eo Doorbell G4					
Plastic enclosure	LG CHEMICAL LTD	LUPOY EF- 1006F(m)	V-0, 115 ℃ Thickness min. 1.8 mm	UL 94	E67171	
PCB	Jixangxi Union Gain Electronics Technology Co.,Ltd	ML3	V-0, 130 ℃	UL 796	UL E464601	
Alternative	Interchangeable	Interchangeable	V-1 or better., min. 130°C.	UL 796	UL	
Dry Battery (Six provided) (Optional)	Interchangeable	Interchangeable	LR6HP, 1.5Vdc, non- rechargeable Carbon-Zinc or alkaline battery.	-	-	
For Chime Re	peater					
Plastic enclosure	LG CHEMICAL LTD	LUPOY GN- 5001RF(T)	V-0, 80 ℃ Thickness min. 2.2 mm	UL 94	E67171	
PCB	Jixangxi Union Gain Electronics Technology Co.,Ltd	ZLHSL004	V-0, 130 °C	UL 796	UL E467745	
Alternative	Interchangeable	Interchangeable	V-1 or better., min. 130°C.	UL 796	ULs	

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



4.8.4, 4.8.5	TABLE:	Lithium coin/	button cell batter	ies mechanical tests		N/A
(The foll	owing mecha	nical tests are	conducted in the	sequence noted.)		
4.8.4.2	TABLE: S	Stress Relief te	st			
	Part	N	/laterial	Oven Temperature (℃)	Co	mments
4.8.4.3		Battery replace				_
			:			-
Battery Ir	stallation/with	drawal		Battery Installation/Removal Cycle	Coi	mments
.8.4.4	TABLE: Dr	on test				
mpact Are		Drop Distance	е	Drop No.	Observa	ations
				1 and the state of	Observa	ations
				2		
1.8.4.5	TABLE: Im	nact		3		
	per surface		ace tested	Impact energy (Nm)	Con	nments
				impact energy (idin)	Con	illients
.8.4.6	TABLE: Cr	ush test				
Test	position	Surfa	ice tested	Crushing Force (N)	Duration force applied (s)	
Supplemer	ntary information	on:				
.8.5	TABLE: Lit	hium coin/but	ton cell batteries	mechanical test result		N/A
Test	position		ce tested	Force (N)		ion force lied (s)
upplemer	ntary information	on:				
.2	Table: Class	sification of ele	ectrical energy so	ources	T	P
.2.2.2 -St		Itage and Curre				
-						



Application No.: S20220818046001

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

0,0			ione - rost		result - remark				
	Voltage	circuit designation)		U (Vrms or Vpk)	I (Apk or Arm	ns) Hz			
For m	odel: SVD-C01								
1	12V-24Vac	Input	Normal	24Vac	-	-	ES1		
		connector	Abnormal	-		-			
			Single fault – SC/OC	_	-	-			
2	8V-24Vdc	Input	Normal	24Vdc		-	ES1		
		connector	Abnormal	rmal					
			Single fault – SC/OC			-	_	-	
3	9Vdc	Battery "+" and	Normal	9Vdc	-		ES1		
	(supply by	u_"	Abnormal	_		-			
	6 x dry battery)		Single fault – SC/OC	-	-	-			
For m	odel: SVD-C02	<u> </u>							
1	-	Input connector	Normal	5Vdc	7 9 9 1 - 11	-	ES1		
			Abnormal		-	-			
			Single fault – SC/OC	-	-	-			
Suppl	ementary inforr	mation:				diam'r.			
5.2.2.	3 - Capacitance	e Limits							
	Supply	Location (e.g.			Parameters		ES		
No.	Voltage	circuit designation)	Test conditions	Capacitance	, nF	Upk (V)	Class		
-	-	-	Normal	-		-	_		
			Abnormal	-		<u>-</u>	-		
			Single fault – SC/OC	-	-		-		
5.2.2.	4 - Single Pulse	es							
	Supply	Location (e.g.			Parameters		ES		
No.	Voltage	circuit designation)	Test conditions	Duration (ms)	Upk (V)	lpk (mA)	Class		
-	-	-	Normal		717 - 216				
			Abnormal	-	<u>-</u> -111.	-	_		
			Single fault – SC/OC	-	_	-			



Application No.: S20220818046001

Report No.: S2022081804600101

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

	Supply	Location (e.g.	Toot conditions		Parameters		
	Voltage	designation)	Test conditions	Off time (ms)	Upk (V)	lpk (mA)	ES Class
-	-	-	Normal	-	_	-	
		Abnormal	-	-	-		
			Single fault – SC/OC	-	-		-

Test Conditions:

Normal - Full load and no load.

Abnormal - Overload output

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

5.4.1.4, 6.3.2, 9.0, B.2.6	T	TABLE: Temperature measurements						
		Supply voltage (V):	24Vac 24		1Vdc	_		
		Ambient T _{min} (°C):	-	_	-	_	_	
		Ambient T _{max} (°C):	-	-	_	_	_	
Maximum n	nea	sured temperature T of part/at:		Т (°C)		Allowed T _{max}	
For model:	SVI	D-C01						
Ambient			24.8	Adjust to 40	24.8	Adjust to 40	-	
Camera surface		34.4	49.6	34.1	49.3	Ref.		
PCB near U13		49.7	64.9	45.9	61.1	130		
PCB near l	J9		49.8	65.0	45.8	61.0	130	
C122 body			46.1	61.3	42.5	57.7	105	
PCB near U	J8		49.9	65.1	46.2	61.4	130	
PCB near D	03		49.5	64.7	45.6	60.8	130	
PCB near L	J7		50.7	65.9	46.4	61.6	130	
Enclosure in	nsi	de surface	42.9	58.1	37.9	53.1	115	
Below part a	dju	st to 25°C						
Enclosure o	outs	side surface	32.7	-	28.4		77	
		Supply voltage (V):	12	Vac		-	_	
		Ambient T _{min} (°C):	-		_	_	<u> </u>	



Application No.: S20220818046001

		EC 62368-	1			
Clause	Requirement + Test			Result - R	emark	Verdict
	Ambient T _{max} (°C):	-	_	-	-	
Maximum me	Maximum measured temperature T of part/at:		Т (°C)		Allowed T _{max} (°C)
For model: S	VD-C01					
Ambient		25.0	Adjust to 40	-	-	
Camera surf	face	30.2	45.2			Ref.
PCB near U	43.8	58.8			130	
PCB near U	9	42.9	57.9			130
C122 body		40.8	55.8			105
PCB near U	8	46.5	61.5			130
PCB near D	46.6	61.6			130	
PCB near U	7	45.7	60.7			130
Enclosure in	side surface	36.3	51.3			115
Below part	adjust to 25℃					
Enclosure o	outside surface	27.0	- 1	-		77
	Supply voltage (V):	5'	/ac		-	
	Ambient T _{min} (°C):	-	-	-	-	
1989-169	Ambient T _{max} (°C):	-			-	
Maximum mo	easured temperature T of part/at:	T (°C)				Allowed T _{max} (°C)
For model: S	VD-C02					
Ambient		24.8	Adjust to 40	- 1		-
PCB near U	12	48.4	63.6	-	- ·	130
PCB near U	6	44.9	60.1			130
J1 input port		31.7	46.9	-		70
PCB near U	7	46.2	61.4	-	-	130
Enclosure in	side surface	37.3	52.5	-		80
Below part	adjust to 25℃					
Enclosure of	utside surface	34.3	-	-	-	77



Application No.: S20220818046001

Report No.: S2022081804600101

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

Supplementary information:

Note 1: The apparatus was submitted and evaluated for maximum manufacturer's recommended ambient (Tma) of 40° C.

Note 2: Temperature limit for TS1 of accessible enclosure outside according to Table 38. (Outside surface that can be contacted for a long time (>1 min), so temperature limit 48°C for Plastic enclosure.)

Temperature T of winding:	t₁ (°C)	R ₁ (Ω)	t ₂ (℃)	R ₂ (Ω)	T (°C)	Allowed T _{max} (°C)	Insulation class
-	-	-	-		14-3	- 7	

Supplementary information:

Note 1: Tma should be considered as directed by appliable requirement

Note 2: Tma is not included in assessment of Touch Temperatures (Clause 9)

5.4.1.10.2	TABLE: Vicatsoftening temperature of thermoplastics			N/A
Penetration	(mm)			
Object/ Par	t No./Material	Manufacturer/trademark	T softening (℃)	
-			-	
supplement	ary information:			

5.4.1.10.3	TABLE: Ball pressure test of thermoplastics				
Allowed impression diameter (mm):			≤ 2 mm		
Object/Part No./Material		Manufacturer/trademark	Test temperature (°C)	Impression diameter (mm	
-		-		_	
	tary informatio materials of to	on: ransformer are phenolic, no test is	needed.No other parts ap	plied.	

5.4.2.2, 5.4.2.4 and 5.4.3	TABLE: Minir	TABLE: Minimum Clearances/Creepage distance						N/A
Clearance (cl) an distance (cr) at/or	d creepage f/between:	Up (V)	U r.m.s. (V)	Frequency (kHz)	Required cl (mm)	cl (mm) ²	Required cr (mm)	cr (mm)
-		-	-	- 7	_	-		_
Supplementary in	formation:							

5.4.2.3	TABLE: Minimum Clearances distances using required withstand voltage Overvoltage Category (OV): Pollution Degree:				



Supplementary information:

Application	No.: S20220818046001		Report No.: S202208180460010			
		IEC 62368-1				
Clause	Requireme	nt + Test	Result - Re	emark	Verdict	
5.4.2.3	TABLE: Minimum Cleara	oltage	N/A			
	Overvoltage Category (C		11			
	Pollution Degree:				2	
Clearance distanced between:		Required withstand voltage	Required cl (mm)	Measur	red cl (mm)	

5.4.2.4	TABLE: Clearances ba	ased on electric strength test				
Test volta	ge applied between:	Required cl (mm)	Test voltage (kV) peak/ r.m.s. / d.c.	Breakdown Yes / No		
Suppleme	entary information:					

5.4.4.2, 5.4.4.5 c) 5.4.4.9	TABLE: Distance t	E: Distance through insulation measurements					
Distance th at/of:	rough insulation di	Peak voltage (V)	Frequency (Hz)	Material	Required DTI (mm)	DTI (mm)	
-		-	-				
	tary information: ended table 4.1.2.						

5.4.9	TABLE: Electric strength to	ests		N/A
Test volta	age applied between:	Voltage shape (AC, DC)	Test voltage (Vpeak)	Breakdown Yes / No
Basic/su	pplementary:			W-5
_		-		-
Reinforce	ed:			
-		<u>-</u>		<u> </u>
Supplem	entary information:			Section 1

5.5.2.2	TABLE: Sto	TABLE: Stored discharge on capacitors					
Supply Vo	ltage (V), Hz	Test Location	Operating Condition (N, S)	Switch position On or off	Measured Voltage (after 2 seconds)	ES Clas	sification
	-	_	<u>-</u>	-			



Application No.: S20220818046001

Report No.: S2022081804600101

	IEC 62368-	1	
Clause	Requirement + Test	Result - Remark	Verdict
Supplementary inf			
X-capacitors insta	led for testing are:		
bleeding res	istor rating:		
☐ ICX:			
Notes:			
A. Test Location:			
Phase to Neutral;	Phase to Earth; and/or Neutral to Earth		
B. Operating con	dition abbreviations:		
N – Norm	al operating condition (e.g., normal operation	on, or open fuse); S –Single fault co	ondition

5.6.6.2	TABLE: Resistance of protective conductors and terminations				
	Accessible part	Test current (A)	Duration (min)	Voltage drop (V)	Resistance (Ω)
-			_	<u>-</u>	-

5.7.2.2, 5.7.4	TABLE: Earthed accessible conductive part		
Supply vol	tage:	264Vac/60Hz	-
Location		Test conditions specified in 6.1 of IEC 60990 or Fault Condition No in IEC 60990 clause 6.2.2.1 through 6.2.2.8, except for 6.2.2.7	Touch current (mA)
		Fault conditions:	
		6.2.2.1 (Earth open)	N/A
		* 6.2.2.2 (Neutral open)	N/A
		6.2.2.3 (phase conductor faulted to earth, for IT system)	N/A
		6.2.2.4 (each phase conductor open, for three-phase equipment)	N/A
		6.2.2.5 (each phase faulted to earth or each phase conductor open, for single-phase equipment for use on IT system or on three-phase delta system)	N/A
		6.2.2.6 (each delta-leg centre- earthed, for three-phase equipment for use on centre- earthed delta supply system)	N/A
Notes:			

Page 45 of 74



Application No.: S20220818046001

Report No.: S2022081804600101

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

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

6.2.2	Table: Electrica	Р				
Source	Description	Measurement		Max Power after 3 s	Max Power after 5 s	PS Classification
See below.		Power (W)	:	-	_	
	six non- rechargeable	V _A (V)	:			
	carbon-zinc or alkaline batteries in series	I _A (A)	:	-	-	PS2(declared)

Supplementary Information: SC = Short circuit

(*) Measurement taken only when limits at 3 seconds exceed PS1 limits

6.2.3.1	Table: Determination of Potential Ignition Sources (Arcing PIS)							
	Location	Open circuit voltage After 3 s (Vp)	Measured r.m.s current (Irms)	Calculated value (V _p x I _{rms})	Arcing PIS? Yes / No			
_			_	<u>-</u>				

Supplementary information:

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: Det	e: Determination of Potential Ignition Sources (Resistive PIS)							
Circuit L	ocation (x-y)	Operating Condition (Normal / Describe Single Fault)	Measured wattage or VA During first 30 s (W / VA)	Measured wattage or VA After 30 s (W / VA)	Protective Circuit, Regulator, or PTC Operated? Yes / No (Comment)	Resistive PIS? Yes/No			
All internal -		-	_	_	Yes (declarat on)				



Application No.: S20220818046001

Report No.: S2022081804600101

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

Supplementary Information:

1) 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.

2) A Resistive PIS: (a) dissipates more than 15 W, measured after 30 s of normal operation, or (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			N/A	
Description	n	Values	Energy Source Cl	assification	
Lamp type	·:				
Manufactu	ırer:				
Cat no			_		
Pressure ((cold) (MPa)		MS		
Pressure (operating) (MPa)		MS		
Operating	time (minutes):	***			
Explosion	method:				
Max partic	le length escaping enclosure (mm).:		MS		
Max partic	le length beyond 1 m (mm):		MS		
Overall res	sult:				
Suppleme	ntary information:				

B.2.5	B.2.5 TABLE: Input test							
U (V)	I (A)	I rated (A)	P (W)	P rated (W)	Fuse No	I fuse (A)	Condition/status	
For model:	SVD-C01							
12Vac	0.023	0.2	0.13	-	-		Normally working,	
24Vac	0.086	0.2	1.09	-	_		Normally working,	
8Vdc	0.017	0.5	0.11		_	-	Normally working, Supplied by DC source	
24Vdc	0.049	0.5	0.78	_	-	-	Normally working Supplied by DC source	

B.3 TABLE: Abnormal operating condition tests	P
---	---



Application No.: S20220818046001

					IEC 6236	8-1			
Clause		Red	quirement	Re	Result - Remark				
Ambient tem	perature (°	°C)				:	-		
Power source	e for EUT:	Manufac	turer, mod	del/type,	output rat	ing .:	-		
Component No.	Abnorm al Conditio n	Supply voltage , (V)	Test time (ms)	Fuse no.	Fuse current, (A)	T-couple	Temp. (°C)	Obs	ervation
Battery polarity	Reverse d	9Vdc	30mins	-	-	-	-	Unit shut down immediately, no hazards.	

B.4 T	ABLE: Fa	ult conditi	on tests						Р
Ambient temp	erature (°C	5)				:	25 °C		_
Power source	for EUT: I	Manufactur	er, model/	type, out	tput ratin	ng .:	-		
Component No.	Abnorm al Conditi on	Supply voltage, (V)	Test time (ms)	Fuse no.	Fuse curre nt, (A)	T-couple	Temp. (°C)	Obse	rvation
For model: S\	/D-C01								
C69	sc	24Vac	10mins	_	_	_		Input curre 0.086A - (Unit unde operation, damage, r	0.086A r normal no
C105	SC	24Vac	10mins	1	_	-	_	Input curre 0.086A→(Unit unde operation, damage, r	0.086A r normal no
For model: S\	/D-C02								
C99	sc	5Vdc	10mins	-	_	<u>-</u>	-	Input curre 0.013A→0 Unit under operation, damage, r	0.013A normal



Application No.: S20220818046001

Report No.: S2022081804600101

				IEC	62368-1						
Clause	lause Requirement + Test				Requirement + Test Resu				Result - Rem	sult - Remark	
C14	SC	5Vdc	10mins	-	_	_	-	Input cur 0.013A→ Unit under operation damage,	0.013A er normal		

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

1) SC: Short-circuited; OC: Open-circuited; ol: Overloaded.

Annex M	TABLE: Ba	tteries							N/A	
The tests of Ar	nex M are a	pplicable o	nly when appr	opriate ba	ttery data	is not avai	lable			
Is it possible to	install the b	attery in a	reverse polarit	y position?	·	:	No		-	
	Non-re	chargeable	e batteries		R	techargeat	le batterie	es		
	Discharging		Un- intentional	Cha	Charging Disch		arging	1	versed arging	
	Meas. current	Manuf. Specs.	charging	Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.	Meas. current	Manuf Specs	
Max. current during normal condition	-	-	-	-	-	-	-		-	
Max. current during fault condition	-	-	-	-	-	-	-	-	-	
Test results:									Verdict	
- Chemical leal	ks						11127		-	
- Explosion of t	he battery						-	-	_	
- Emission of fl	ame or expu	Ision of mo	olten metal				_		-	
- Electric streng	gth tests of e	quipment a	after completio	n of tests					-	
Supplementary	information:	Battery pa	ack complies v	vith IEC 60	086.See a	appended	table 4.1.2			

Annex M.4	Table: Adbatteries	lditional safeguards for eq	uipment cont	aining second	dary lithium	N/A	
Battery/Cell		Test conditions	Measurements			Observation	
N	lo.		U	I (A)	Temp (C)	C D G C I VALIO	



Application No.: S20220818046001

		IEC 62368	-1	
Clause	ause Requirement + Test		Result - Re	emark Verdic
Supplementary Ir	nformation: See app	pended table 4.1.2		
Battery identification	Charging at T _{lowest} (°C)	Observation	Charging at Thighest (°C)	Observation
	-		-	

Annex Q.1	TABLE: Circuits int	ended for interconnectionwith building wiring (LPS)				
Note: Mea	sured UOC (V) with all lo	ad circuits disco	nnected:			
Output Circuit	Components	U _{oc} (V)	I _{sc} (A)		S (VA)	
			Meas.	Limit	Meas.	Limit
-	_	_		_		_

T.4	TABLE	E: Steady force	test				Р
Part/Lo	cation	Material	Thickness (mm)	Force (N)	Test Duration (sec)	Observ	ation
Тор		Plastic	See table 4.1.2	100	5s	After test, r	o hazard.
Bottom		Plastic	See table 4.1.2	100	5s	After test, r	o hazard.
Side		Plastic	See table 4.1.2	100	5s	After test, r	o hazard.
Suppleme	entary infor	mation:					

Т.6	TABL	E: Impact tests				N/A
Part/Locat	ion	Material	Thickness (mm)	Vertical distance (mm)	Observation	
Тор		Plastic	See table 4.1.2	1300	No damaged	
Bottom		Plastic	See table 4.1.2	1300	No damaged	
Side		Plastic	See table 4.1.2	1300	No damaged	

T.7	TABLE: Drop tests					Р
Part/Loca	ation	Material	Thickness (mm)	Drop Height (mm)	Observation	
Top enclos	ure	Plastic	See table 4.1.2	1000	No damaged	



Application No.: S20220818046001

		IEC (62368-1		
Clause	Requ	uirement + Test		Result - Remark	Verdict
Bottom enclosure	Plastic	See table 4.1.2	1000	No damaged	
Side enclosure	Plastic	See table 4.1.2	1000	No damaged	
Supplementary info	ormation:				

Т.8	TABL	E: Stress relie	f test				Р
Part/Locat	tion	Material	Thickness (mm)	Oven Temperature (°C)	Duration (h)	Observa	tion
Enclosu	re	Plastic	See table 4.1.2	70	7	No deformat crack, No h	



Application No.: S20220818046001

Report No.: S2022081804600101

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

Attachment 1:

ATTACHMENT TO TEST REPORT

IEC 62368-1

EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES

(Audio/video, Information And Communication Technology Equipment - Part 1: Safety Requirements)

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

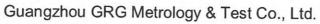
Attachment Form No. EU_GD_IEC62368_1D_II

Attachment Originator Nemko AS

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

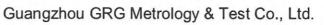
Copyright © 2017 IEC System for Conformity Testing and Certification of Electrical Equipment (IECEE), Geneva, Switzerland. All rights reserved.

CENELEC COMMON MODIFICATIONS (EN)									
Clauses, subclauses, notes, tables, figures and annexes which are additional to those in IEC 62368-1:2014 are prefixed "Z".									
Add the following annexes:									
Annex ZA (normative) Normative references to international publications with their corresponding European publications Annex ZB (normative) Special national conditions A-deviations A-deviations IEC and CENELEC code designations for flexible cords									
		es in the ref	erence documen	t (IEC 62368-	1:2014) according	Р			
0.2.1	Note	1	Note 3	4.1.15	Note				
4.7.3	Note 1 and 2	5.2.2.2	Note	5.4.2.3.2.2 Table 13	Note c				
5.4.2.3.2.4	Note 1 and 3	5.4.2.5	Note 2	5.4.5.1	Note				
5.5.2.1	Note	5.5.6	Note	5.6.4.2.1	Note 2 and 3				
5.7.5	Note	5.7.6.1	Note 1 and 2	10.2.1 Table 39	Note 2, 3 and 4				
	Clauses, sub IEC 62368-1 Add the following Annex ZA (not Annex ZB (not	Clauses, subclauses, notes IEC 62368-1:2014 are prefix Add the following annexes: Annex ZA (normative) Annex ZB (normative) Annex ZC (informative) Annex ZD (informative) Delete all the "country" note to the following list: 0.2.1 Note 4.7.3 Note 1 and 2 5.4.2.3.2.4 Note 1 and 3 5.5.2.1 Note	Clauses, subclauses, notes, tables, figure IEC 62368-1:2014 are prefixed "Z". Add the following annexes: Annex ZA (normative) Normouth with the Annex ZB (normative) Special Annex ZC (informative) A-devent Annex ZD (informative) IEC and Delete all the "country" notes in the refet to the following list: Delete 1	Clauses, subclauses, notes, tables, figures and annexed IEC 62368-1:2014 are prefixed "Z". Add the following annexes: Annex ZA (normative) Annex ZB (normative) Annex ZC (informative) Annex ZD (informative) Annex ZD (informative) Annex ZD (informative) Delete all the "country" notes in the reference document to the following list: 0.2.1	Clauses, subclauses, notes, tables, figures and annexes which are at IEC 62368-1:2014 are prefixed "Z". Add the following annexes: Annex ZA (normative) Annex ZB (normative) Annex ZC (informative) Annex ZC (informative) Annex ZD (informative) Annex ZD (informative) Annex ZD (informative) Annex ZD (informative) Are deviations IEC and CENELEC code designation cords Delete all the "country" notes in the reference document (IEC 62368-to the following list: 0.2.1 Note 1 Note 3 4.1.15 4.7.3 Note 1 and 2 5.2.2.2 Note 5.4.2.3.2.2 Table 13 5.4.2.3.2.4 Note 1 and 3 5.4.2.5 Note 2 5.4.5.1 5.5.2.1 Note 5.5.6 Note 5.6.4.2.1 5.7.5 Note 5.7.6.1 Note 1 and 2 10.2.1	Clauses, subclauses, notes, tables, figures and annexes which are additional to those in IEC 62368-1:2014 are prefixed "Z". Add the following annexes: Annex ZA (normative) Normative references to international publications with their corresponding European publications Annex ZB (normative) Annex ZC (informative) Annex ZD (informative) Annex ZD (informative) EC and CENELEC code designations for flexible cords Delete all the "country" notes in the reference document (IEC 62368-1:2014) according to the following list: 0.2.1			





	IEC 62368-1			_
Clause	Requirement + Test		Result - Remark	Verdict
1	Add the following note: NOTE Z1 The use of certain substances in electrical and electronic equipment is restricted within the EU: see Directive 2011/65/EU.	Con	sidered.	Р
4.Z1	Add the following new subclause after 4.9: To protect against excessive current, short-circuits and earth faults in circuits connected to an a.c. mains, protective devices shall be included either as integral parts of the equipment or as parts of the building installation, subject to the following, a), b) and c): a) except as detailed in b) and c), protective devices necessary to comply with the requirements of B.3.1 and B.4 shall be included as			N/A
	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.			
5.4.2.3.2.4	Add the following to the end of this subclause: The requirement for interconnection with external circuit is in addition given in EN 50491-3:2009.			N/A
0.2.1	Add the following to ^{c)} and ^{d)} in table 39: For additional requirements, see 10.5.1.	No a	ny radiation within the EUT.	N/A





Report	No.:	S2022081804600101
--------	------	-------------------

	IEC 62368-1		
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:		N/A
	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 presets which are not locked in a reliable manner, are adjusted so as to give maximum radiation whilst maintaining an intelligible picture for 1 h, at the end of which the measurement is made.		
	NOTE Z1 Soldered joints and paint lockings are examples of adequate locking.		
	The dose-rate is determined by means of a radiation monitor with an effective area of 10 cm ² , at any point 10 cm from the outer surface of the apparatus.		
	Moreover, the measurement shall be made under fault conditions causing an increase of the high-voltage, provided an intelligible picture is maintained for 1 h, at the end of which the measurement is made.		
	For RS1, the dose-rate shall not exceed 1 µSv/h taking account of the background level. NOTE Z2 These values appear in Directive 96/29/Euratom of 13 May 1996.		
10.6.1	Add the following paragraph to the end of the subclause: EN 71-1:2011, 4.20 and the related tests methods and measurement distances apply.		N/A
10.Z1	Add the following new subclause after 10.6.5. 10.Z1 Non-ionizing radiation from radio frequencies in the range 0 to 300 GHz		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 to EN 50360 and EN 50566		





		IEC 62368-1			
Clause	R	equirement + Test		Result - Remark	Verdict
G.7.1	Add the following r	note:	No n	nains supply cord used.	N/A
		nonized code designations ne IEC cord types are given in			
Bibliography	Add the following s	standards:			Р
	Add the following r	notes for the standards indicated:			
	IEC 60130-9	NOTE Harmonized as EN	N 6013	80-9.	
	IEC 60269-2	NOTE Harmonized as HD	6026	69-2.	
	IEC 60309-1	NOTE Harmonized as EN	030	9-1.	
	IEC 60364	NOTE some parts harm	onized	in HD 384/HD 60364 series.	
	IEC 60601-2-4	NOTE Harmonized as EN 6	0601-	2-4.	
	IEC 60664-5	NOTE Harmonized as EN	60664	I-5.	
	IEC 61032:1997	NOTE Harmonized as EN 610	032:19	998 (not modified).	
	IEC 61508-1	NOTE Harmonized as EN	61508	3-1.	
	IEC 61558-2-1	NOTE Harmonized as EN 6	1558-	2-1.	
	IEC 61558-2-4	NOTE Harmonized as EN 6	1558-	2-4.	
	IEC 61558-2-6	NOTE Harmonized as EN 6	1558-	2-6.	
	IEC 61643-1	NOTE Harmonized as EN	61643	I-1.	
	IEC 61643-21	NOTE Harmonized as EN 6	1643-	21.	
	IEC 61643-311	NOTE Harmonized as EN 61	1643-3	311.	
	IEC 61643-321	NOTE Harmonized as EN 61	1643-3	321.	
	IEC 61643-331	NOTE Harmonized as EN 61	1643-3	331.	
ZB	ANNEX ZB, SPEC	IAL NATIONAL CONDITIONS	(EN)		Р

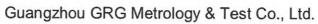




	IEC 62368-1			
Clause	Requirement + Test		Result - Remark	Verdict
4.1.15	Denmark, Finland, Norway and Sweden	Not	a class I equipment.	N/A
	To the end of the subclause the following is added:			
	Class I pluggable equipment type A intended for			
	connection to other equipment or a network shall,	137		
	if safety relies on connection to reliable earthing or if surge suppressors are connected between the			
	network terminals and accessible parts, have a			
	marking stating that the equipment shall be			
	connected to an earthed mains socket-outlet.			
	The marking text in the applicable countries shall be as follows:			
	In Denmark : "Apparatets stikprop skal tilsluttes en stikkontakt med jord som giver forbindelse til stikproppens jord."			
	In Finland : "Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan"			
	In Norway: "Apparatet må tilkoples jordet stikkontakt"			
	In Sweden : "Apparaten skall anslutas till jordat uttag"			
4.7.3	United Kingdom	No s	such plug used	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 assessed to the relevant clauses of BS 1363. Also see Annex G.4.2 of this annex			
5.2.2.2	Denmark			N/A
	After the 2nd paragraph add the following:			
	A warning (marking safeguard) for high touch current is required if the touch current exceeds the limits of 3,5 mA a.c. or 10 mA d.c.			



Clause	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
5.4.11.1 and	Finland and Sweden		N/A
Annex G	To the end of the subclause the following is added:		
	For separation of the telecommunication network from earth the following is applicable:		
	If this insulation is solid, including insulation forming part of a component, it shall at least consist of either		
	two layers of thin sheet material, each of which shall pass the electric strength test below, or		
	one layer having a distance through insulation of at least 0,4 mm, which shall pass the electric strength test below.		
	If this insulation forms part of a semiconductor component (e.g. an optocoupler), there is no distance through insulation requirement for the insulation consisting of an insulating compound completely filling the casing, so that clearances and creepage distances do not exist, if the component passes the electric strength test in accordance with the compliance clause below and in addition		
	• passes the tests and inspection criteria of 5.4.8 with an electric strength test of 1,5 kV multiplied by 1,6 (the electric strength test of 5.4.9 shall be performed using 1,5 kV), and		
	• is subject to routine testing for electric strength during manufacturing, using a test voltage of 1,5kV.		
	It is permitted to bridge this insulation with a capacitor complying with EN 60384-14:2005, subclass Y2.		
	A capacitor classified Y3 according to EN 60384-14:2005, may bridge this insulation under the following conditions:		
	the insulation requirements are satisfied by having a capacitor classified Y3 as defined by EN 60384-14, which in addition to the Y3 testing, is tested with an impulse test of 2,5 kV defined in 5.4.11;		
	the additional testing shall be performed on all the test specimens as described in EN 60384-14;		
	the impulse test of 2,5 kV is to be performed before the endurance test in EN 60384-14, in the sequence of tests as described in EN 60384-14.		





01	IEC 62368-1			\/ " ·	
Clause	Requirement + Test		Result - Remark	Verdic	
5.5.2.1	Norway After the 3rd paragraph the following is added: Due to the IT power system used, capacitors are required to be rated for the applicable line-to-line voltage (230 V).	No o	connect to mains	N/A	
5.5.6	Finland, Norway and Sweden To the end of the subclause the following is added: Resistors used as basic safeguard or bridging basic insulation in class I pluggable equipment type A shall comply with G.10.1 and the test of G.10.2.	No s	such resistor used	N/A	
5.6.1	Denmark Add to the end of the subclause Due to many existing installations where the socket-outlets can be protected with fuses with higher rating than the rating of the socket-outlets the protection for pluggable equipment type A shall be an integral part of the equipment. Justification: In Denmark an existing 13 A socket outlet can be protected by a 20 A fuse.		ss III equipment, no protective ductor used.	N/A	
5.6.4.2.1	Ireland and United Kingdom After the indent for pluggable equipment type A, the following is added: - the protective current rating is taken to be 13 A, this being the largest rating of fuse used in the mains plug.		ss III equipment, no protective ductor used.	N/A	
5.6.5.1	To the second paragraph the following is added: The range of conductor sizes of flexible cords to be accepted by terminals for equipment with a rated current over 10 A and up to and including 13 A is: 1,25 mm² to 1,5 mm² in cross-sectional area.		ss III equipment, no protective ductor used.	N/A	
5.7.5	Denmark To the end of the subclause the following is added: The installation instruction shall be affixed to the equipment if the protective conductor current exceeds the limits of 3,5 mA a.c. or 10 mA d.c.			N/A	
5.7.6.1	Norway and Sweden To the end of the subclause the following is added: The screen of the television distribution system is normally not earthed at the entrance of the building			N/A	



	IEC 62368-1	-	
Clause	Requirement + Test	Result - Remark	Verdict
	and there is normally no equipotential bonding system within the building. Therefore the protective earthing of the building installation needs to be isolated from the screen of a cable distribution system. It is however accepted to provide the insulation external to the equipment by an adapter or an interconnection cable with galvanic isolator, which may be provided by a retailer, for example.		
	The user manual shall then have the following or similar information in Norwegian and Swedish language respectively, depending on in what country the equipment is intended to be used in:		
	"Apparatus connected to the protective earthing of the building installation through the mains connection or through other apparatus with a connection to protective earthing – and to a television distribution system using coaxial cable, may in some circumstances create a fire hazard. Connection to a television distribution system therefore has to be provided through a device providing electrical isolation below a certain frequency range (galvanic isolator, see EN 60728-11)"		
	NOTE In Norway, due to regulation for CATV-installations, 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		





Clause	Requirement + Test	Result - Remark	Verdict
--------	--------------------	-----------------	---------

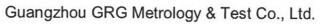
	kabel-TV nätet.".	
5.7.6.2	Denmark To the end of the subclause the following is added: The warning (marking safeguard) for high touch current is required if the touch current or the protective current exceed the limits of 3,5 mA.	N/A
B.3.1 and B.4	Ireland and United Kingdom The following is applicable: To protect against excessive currents and short-circuits in the primary circuit of direct plug-in equipment, tests according to Annexes B.3.1 and B.4 shall be conducted using an external miniature circuit breaker complying with EN 60898-1, Type B, rated 32A. If the equipment does not pass these tests, suitable protective devices shall be included as an integral part of the direct plug-in equipment, until the requirements of Annexes B.3.1 and B.4 are met	N/A



. ippliodilol	No.: S20220818046001 IEC 62368-1	Report No.: S2022081	1004000101
Clause	Requirement + Test	Result - Remark	Verdict
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 poly-phase equipment is provided with a supply cord with a plug, this plug shall be in accordance with the standard sheets DK 6-1a in DS 60884-2-D1 or EN 60309-2.		
	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		
	Justification: Heavy Current Regulations, Section 6c		
3.4.2	United Kingdom		N/A
	To the end of the subclause the following is added:		
	The same of the control of the contr		1

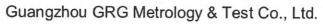
The plug part of direct plug-in equipment shall be assessed to BS 1363: Part 1, 12.1, 12.2, 12.3, 12.9, 12.11, 12.12, 12.13, 12.16, and 12.17, except that the test of 12.17 is performed at not less than 125 ℃. Where the metal earth pin is replaced by an Insulated Shutter Opening Device (ISOD), the requirements of clauses 22.2 and 23

also apply.





	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
G.7.1	United Kingdom To the first paragraph the following is added: Equipment which is fitted with a flexible cable or cord and is designed to be connected to a mains socket conforming to BS 1363 by means of that flexible cable or cord shall be fitted with a 'standard plug' in accordance with the Plugs and Sockets etc (Safety) Regulations 1994, Statutory Instrument 1994 No. 1768, unless exempted by those regulations. NOTE "Standard plug" is defined in SI 1768:1994 and essentially means an approved plug conforming to BS 1363 or an approved conversion plug.		N/A
G.7.1	Ireland To the first paragraph the following is added: Apparatus which is fitted with a flexible cable or cord shall be provided with a plug in accordance with Statutory Instrument 525: 1997, "13 A Plugs and Conversion Adapters for Domestic Use Regulations: 1997. S.I. 525 provides for the recognition of a standard of another Member State which is equivalent to the relevant Irish Standard		N/A
G.7.2	Ireland and United Kingdom To the first paragraph the following is added: A power supply cord with a conductor of 1,25 mm² is allowed for equipment which is rated over 10 A and up to and including 13 A.		N/A





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

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



Attachment 2

Photo of the product:



Figure 1 The whole product view (For model:SVD-C01)

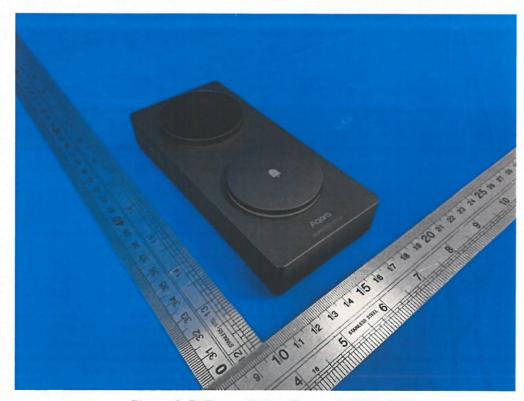


Figure 2 EUT overall view (For model:SVD-C01)



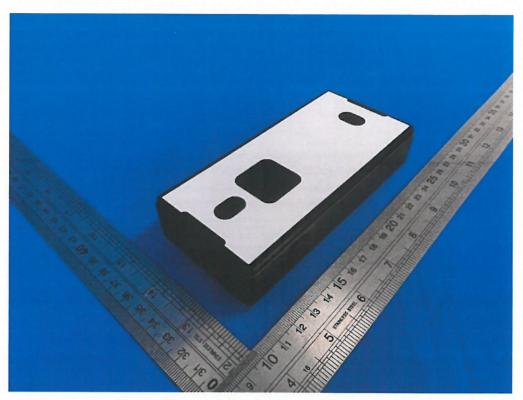


Figure 3 EUT overall view (For model:SVD-C01)

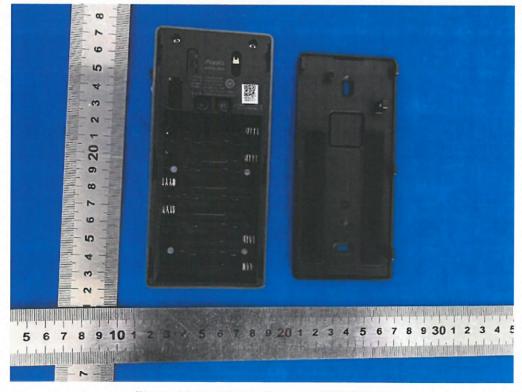


Figure 4 Internal view (For model:SVD-C01)



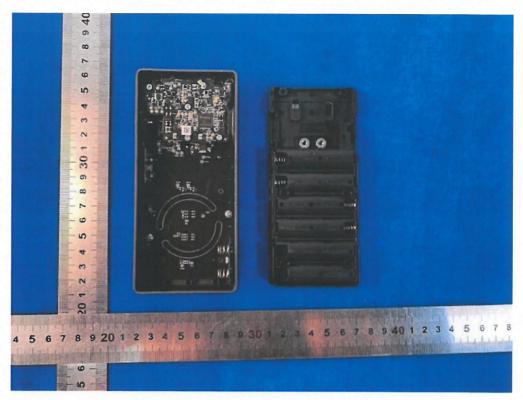


Figure 5 Internal view (For model:SVD-C01)

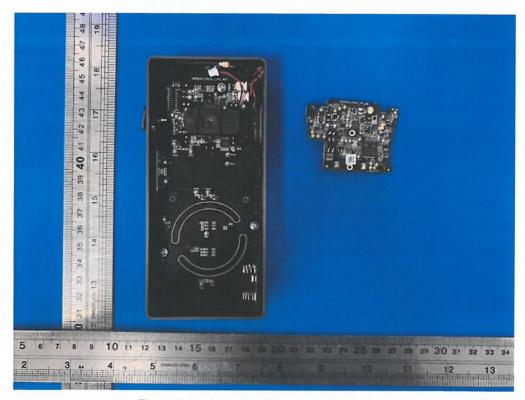


Figure 6 Internal view (For model:SVD-C01)



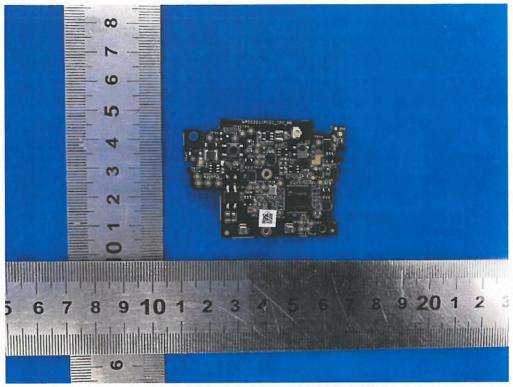


Fig.7- PCB view (For model:SVD-C01)

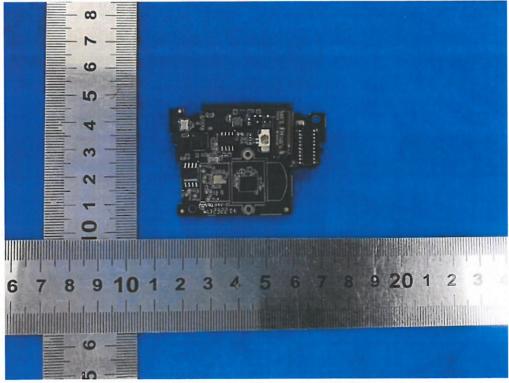


Fig.8- PCB view (For model:SVD-C01)



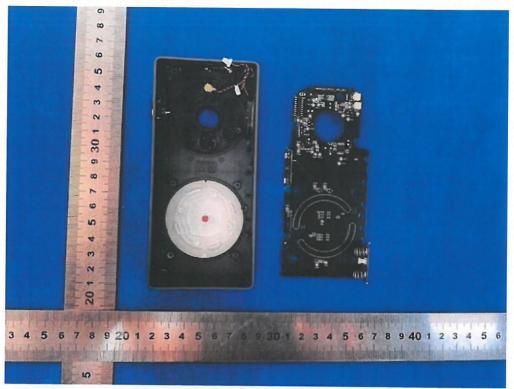


Fig.9- Internal view (For model:SVD-C01)

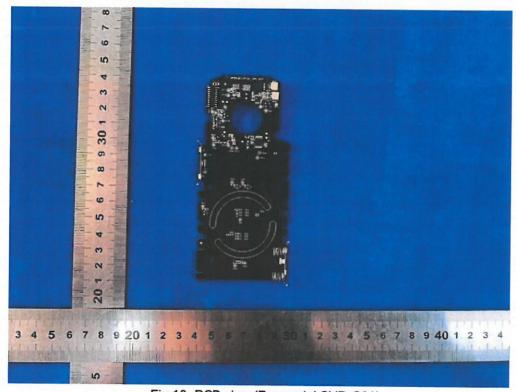


Fig.10- PCB view (For model:SVD-C01)



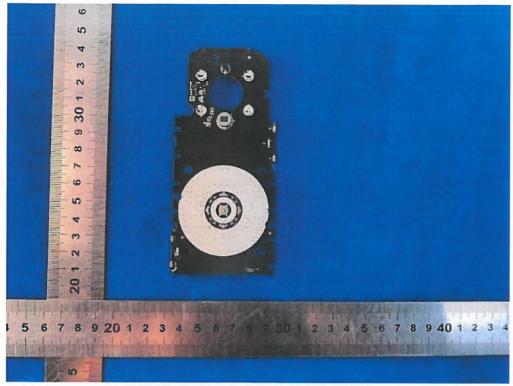


Fig.11- PCB view (For model:SVD-C01)

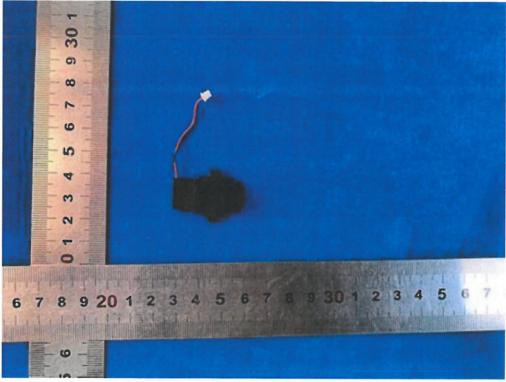


Fig.12- Camera view (For model:SVD-C01)



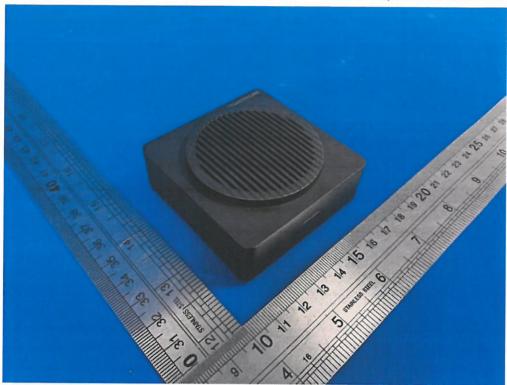


Fig.13- overall view (For model:SVD-C02)

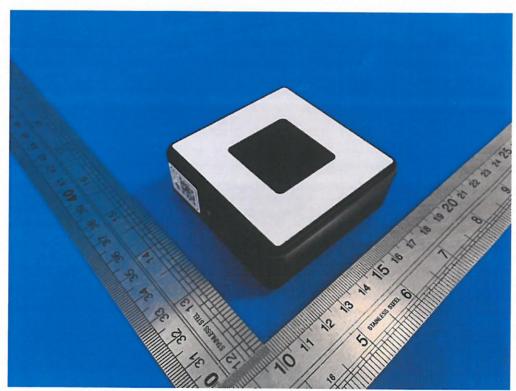


Fig.14- overall view (For model:SVD-C02)



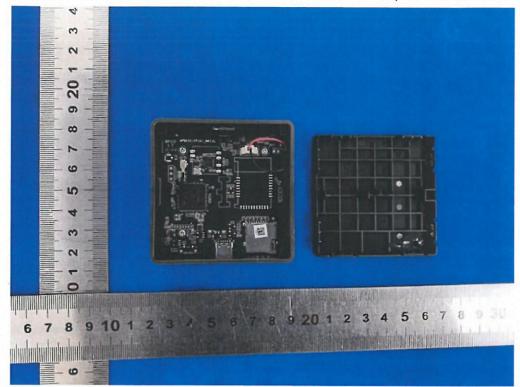


Fig.15- Internal view (For model:SVD-C02)

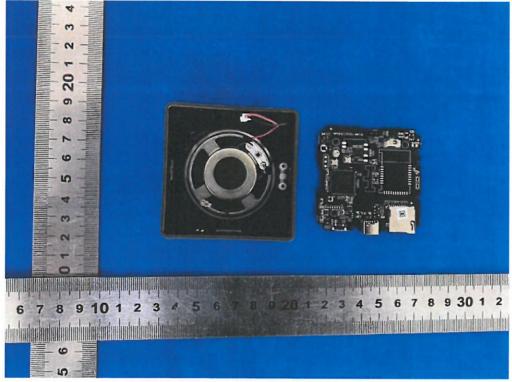


Fig.16- Internal view (For model:SVD-C02)



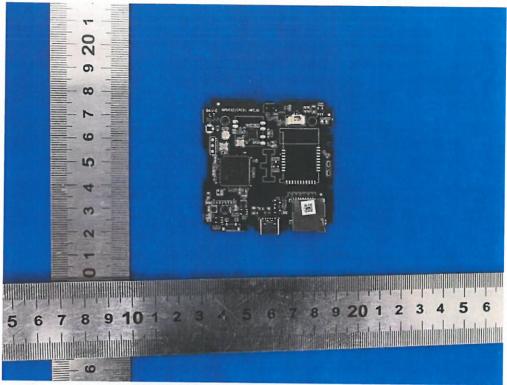


Fig.17- PCB view (For model:SVD-C02)

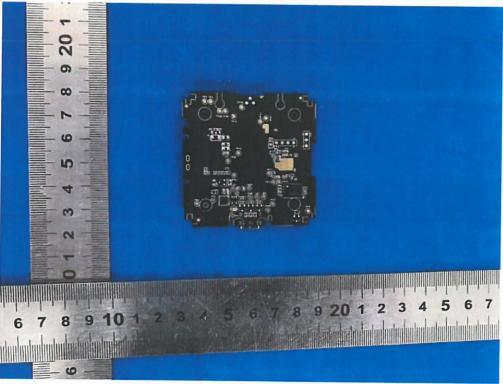


Fig.18- PCB view (For model:SVD-C02)



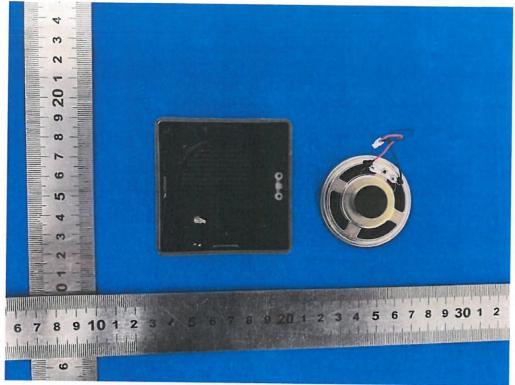


Fig.19- Internal view (For model:SVD-C02)



Fig.20- horn view (For model:SVD-C02)





Fig.21- Comparison photo of Model SVD-C01(right) and Model SVD-C03(left)

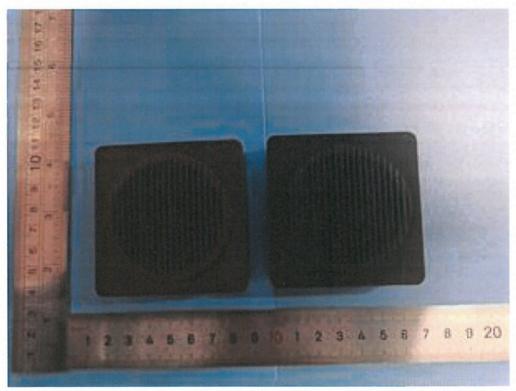


Fig.22- Comparison photo of Model SVD-C02(right) and Model SVD-C04(left)

-- End of test report --