



TEST REPORT

Reference No..... : WTF23D02021976Y

Applicant.....: Mid Ocean Brands B.V.

Hong Kong

Manufacturer..... : 114538

Address....: -

Product.....: 8000mAh wireless power bank

Model(s)..... : MO9238

Total pages.....: 69 pages and 5 pages of photo.

Audio/video, information and communication technology equipment-

Part 1:Safety requirements

Date of Receipt sample....: 2023-02-17

Date of Test..... : 2023-02-17 to 2023-02-28

Date of Issue...... 2023-02-28

Test Result.....: Pass

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

Prepared By:

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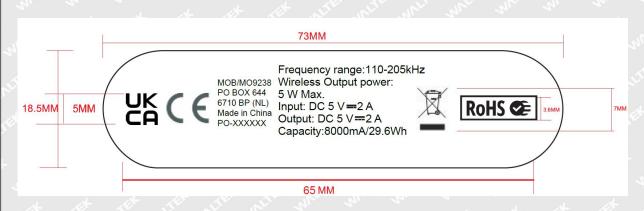
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Test item description	8000mAh wir	reless power bank		
Trademark:	MOB			
Model and/or type reference	MO9238			
Rating(s):	Input: 5Vdc, 2A USB output: 5Vdc, 2A Battery: 3.7Vdc, 8000mAh, 29.6Wh Wireless: 5W			
Remark:				
Whether parts of tests for the product h	nave been sub	contracted to other labs:		
☐ Yes ⊠ No				
If Yes, list the related test items and lat	o information:			
Test items:				
Lab information:	41/2 23.	the state of the state of		
Summary of testing:	LEK JUB	the write write their rate and the		
Tests performed (name of test and to	est clause):	Testing location:		
- EN IEC 62368-1: 2020+A11: 2020 The submitted samples were found to the requirements of above specification		No. 77, Houjie Section, Guantai Road, Houjie Town, Dongguan City, Guangdong, China		
EU Group Differences ☑ The product fulfils the requirements	of EN IEC 62	368-1:2020+A11:2020.		
Use of uncertainty of measurement	for decisions	on conformity (decision rule):		
No decision rule is specified by the applicable limit according to the specified without applying the measurement un "accuracy method").	ne IEC standa cification in th ncertainty ("sir	ard, when comparing the measurement result with the at standard. The decisions on conformity are made mple acceptance" decision rule, previously known as		
requirements apply)	le when requi	red by the standard or client, or if national accreditation		
OD-5014 for test equipment and applic IECEE. IEC Guide 115 provides guidance on the decision rule when reporting test measurement uncertainty for measure	calculated by cation of test m the applicatio st results with	the laboratory based on application of criteria given by nethods, decision sheets and operational procedures of n of measurement uncertainty principles and applying in IECEE scheme, noting that the reporting of the t necessary unless required by the test standard or		
customer. Calculations leading to the reported values are on file with the NCB and testing laboratory that conducted the testing.				









Remark:

- 1. The above markings are the minimum requirements required by the safety standard. For the final production, the additional markings which donot give rise to misunderstanding may be added.
- 2. The CE marking and WEEE symbol should be at least 5.0mm and 7.0mm respectively in height.
- 3. According to the EU directives which have been aligned with EU NLF (new legislative framework), both of manufacturer and importer's name and address shall be affixed on the product or, where that is not possible, on its packaging or in a document accompanying the product before the product is placed on the EU market.



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TEST ITEM PARTICULARS:	
Product group	
Classification of use by:	☑ Ordinary person☐ Instructed person☐ Skilled person
Supply Connection:	☐ AC mains ☐ DC mains ☐ not mains connected: ☐ ES2 ☐ ES3
Supply % Tolerance:	☐ +10%/-10% ☐ +20%/-15% ☐ +%/% ☑ None
Supply Connection – Type:	 □ pluggable equipment type A - □ non-detachable supply cord □ appliance coupler □ direct plug-in □ pluggable equipment type B - □ non-detachable supply cord □ appliance coupler □ permanent connection □ mating connector ⋈ other: not Mains connected
Considered current rating of protective device as part of building or equipment installation:	☐ UK: 13 A; Others: 16 A;Location: ☐ building ☐ equipment☒ N/A
Equipment mobility:	□ movable □ hand-held □ transportable □ direct plug-in □ stationary □ for building-in □ wall/ceiling-mounted □ SRME/rack-mounted □ other:
Over voltage category (OVC):	□ OVC I □ OVC II □ OVC III □ OVC IV ⋈ other: not Mains connected
Class of equipment:	☐ Class I ☐ Class II ☐ Class III ☐ Not classified ☐
Access location	N/A ☐ restricted access area☐ outdoor location ☐
Pollution degree (PD):	□ PD 1⊠ PD 2 □ PD 3
Manufacturer's specified maxium operating ambient : 25°C Outdoor: minimum°C	
IP protection class:	⊠ IPX0 □ IP
Power Systems:	☐ TN ☐ TT ☐ ITV L-L ☐ not AC mains
Altitude during operation (m):	⊠ 2000 m or less □m
Altitude of test laboratory (m):	⊠ 2000 m or less □ m
Mass of equipment (kg):	☑ 0.203kg



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POSSIBLE TEST CASE VERDICTS:	and the same of the same
- test case does not apply to the test object	: N/A
- test object does meet the requirement	P (Pass)
- test object does not meet the requirement	F (Fail)
TESTING:	THE THE THE THE T
Date of receipt of test item	2023-02-17
Date (s) of performance of tests	2023-02-17 to 2023-02-28
GENERAL REMARKS:	LIER RETER METER WALL WALL WALL WALL WALL
"(see appended table)" refers to a table appended to Throughout this report a ☐ comma / ☒ point is u GENERAL PRODUCT INFORMATION:	
	Will war are an are
 Product Description The EUT covered by this report is a Power bank use external power supply or by internal lithium ion Cells The manufacturer specified maximum ambient tempincluding 2000 m above sea level. The all electronic components are mounted on PWE ultrasonic welding, all circuits complied with ES1 and 	s or Micro USB port supply. perature is 25°C. The specified altitude is up to and B and housed in a plastic enclosure which is secured by
Model Differences	itet stret milet unt
Additional application considerations – (Considerations)	rations used to test a component or sub-



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Clause	Possible Hazard				
5	Electrically-caused injury				
Class and Energy Source	Body Part		Safeguards		
(e.g. ES3: Primary circuit)	(e.g. Ordinary)	В	S	R	
ES1: All internal circuit	Ordinary	N/A	N/A	N/A	
ES1: Lithium Cell output	Ordinary	N/A	N/A	N/A	
3	Electrically-caused fire				
Class and Energy Source	Material part		Safeguards		
(e.g. PS2: 100 Watt circuit)	(e.g. Printed board)	В	1 st S	2 nd S	
PS2: >15 Watt circuits	Enclosure	See 6.3	See 6.4.5 and 6.4.8	N/A	
PS1: <15 Watt circuits	PCB	N/A	N/A	N/A	
PS1: <15 Watt circuits	The other components/materials	N/A	N/A	N/A	
7	Injury caused by hazardou	s substances			
Class and Energy Source	Body Part (e.g., Skilled)		Safeguards		
(e.g. Ozone)		В	S	R	
N/A	N/A	N/A	N/A	N/A	
3	Mechanically-caused injury	/			
Class and Energy Source	Body Part		Safeguards		
(e.g. MS3: Plastic fan blades)	(e.g. Ordinary)	В	S	R	
MS1: Edges and corners	Ordinary	N/A	N/A	N/A	
MS1: Mass of the unit	Ordinary	N/A	N/A	N/A	
9	Thermal burn				
Class and Energy Source	Body Part		Safeguards		
(e.g. TS1: Keyboard caps)	(e.g., Ordinary)	В	S	R	
TS1: All accessible parts	Ordinary	N/A	N/A	N/A	
10	Radiation				
Class and Energy Source	Body Part Safeguards				
(e.g. RS1: PMP sound output)	(e.g., Ordinary)	В	S	R	
RS1: LED for indicating	Ordinary	N/A	N/A	N/A	

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ENERGY	SOURCE	DIAGRAM
LINLINGI	SOUNCE	DIAGNAIN

Indicate which energy sources are included in the energy source diagram. Insert diagram below

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

See details in OVERVIEW OF ENERGY SOURCES AND SAFEGUARDS

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Um aller		IEC 62368-1		
Clause	Requirement – Test	MUT, All M	Result – Remark	Verdict

4	GENERAL REQUIREMENTS		P
4.1.1	Acceptance of materials, components and subassemblies	(See appended table 4.1.2)	₩P
4.1.2 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	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	MIT PO
4.1.3	Equipment design and construction	Equipment is adequately designed and constructed.	My P
4.1.4	Specified ambient temperature for outdoor use (°C):	Indoor use only	N/A
4.1.5	Constructions and components not specifically covered	No such constructions and components.	N/A
4.1.8	Liquids and liquid filled components (LFC)	No such parts.	N/A
4.1.15	Markings and instructions	(See Annex F)	Р
4.4.3	Safeguard robustness	See below	J P
4.4.3.1	General	- 1 Eur zu	Р
4.4.3.2	Steady force tests	(See Annex T.2 and T.5).	P
4.4.3.3	Drop tests	(See Annex T.7)	Р
4.4.3.4	Impact tests	(See Annex T.6)	Р
4.4.3.5	Internal accessible safeguard tests	No such parts.	N/A
4.4.3.6	Glass impact tests	No such glass used.	N/A
4.4.3.7	Glass fixation tests	No such parts.	N/A
in and	Glass impact test (1J)	LIER WITE WHILE WHILE	N/A
et et	Push/pull test (10 N)		N/A
4.4.3.8	Thermoplastic material tests	(See Annex T.8)	Р
4.4.3.9	Air comprising a safeguard		N/A
4.4.3.10	Accessibility, glass, safeguard effectiveness	After tests of 4.4.3.2, 4.4.3.3, 4.4.3.4, 4.4.3.8, no safeguard damaged.	WEI EX
4.4.4	Displacement of a safeguard by an insulating liquid	No such liquid.	N/A
4.4.5	Safety interlocks	No such parts.	N/A
4.5	Explosion	at at all all a	P.C
4.5.1	General white white white white white	No explosion occurs during normal/abnormal operation and single fault conditions	P



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Clause	IEC 62368-1	Decult Democile	\/a!:t
Clause	Requirement – Test	Result – Remark	Verdict
4.5.2	No explosion during normal/abnormal operating condition	(See Clause B.2, B.3)	Per
TEX N	No harm by explosion during single fault conditions	(See Clause B.4)	Р
4.6	Fixing of conductors	See below	P
EX NIE	Fix conductors not to defeat a safeguard	at let let let	CE P
20,	Compliance is checked by test	(See Clause T.2)	Р
4.7	Equipment for direct insertion into mains sock	et-outlets	N/A
4.7.2	Mains plug part complies with relevant standard	Not direct plug-in equipment.	N/A
4.7.3	Torque (Nm)	TEX STER SITER ONLTO	N/A
4.8	Equipment containing coin/button cell batteries	solution of the	N/A
4.8.1	General	No coin/button cell batteries used.	N/A
4.8.2	Instructional safeguard	CH TEN STEN STEEL O	N/A
4.8.3	Battery compartment door/cover construction	Mur. Mr. M. M.	N/A
Willer of	Open torque test	THE STEE STEEL STEEL SOLL	N/A
4.8.4.2	Stress relief test	Mr. An.	N/A
4.8.4.3	Battery replacement test	ALL MITE MITE	N/A
4.8.4.4	Drop test	7 1 1 1	N/A
4.8.4.5	Impact test	THE SITE MILE WALTER	N/A
4.8.4.6	Crush test	The second	N/A
4.8.5	Compliance	ed alter white while wh	N/A
A EIL	30N force test with test probe	an at at a	N/A
الماريس المار	20N force test with test hook	miles while while whi	N/A
4.9	Likelihood of fire or shock due to entry of cond	luctive object	P
4.10	Component requirements	INCITE WALTE WALL WALL	N/A
4.10.1	Disconnect Device	of the text text	N/A
4.10.2	Switches and relays	it with more me of	N/A
5	ELECTRICALLY-CAUSED INJURY		P
5.2	Classification and limits of electrical energy sou	irces	Р
5.2.2	ES1, ES2 and ES3 limits	WILL MULL MULL AND	n P
5.2.2.2	Steady-state voltage and current limits	(See appended table 5.2)	Р
5.2.2.3	Capacitance limits	No such capacitors	N/A
5.2.2.4	Single pulse limits	No such single pulses	N/A
5.2.2.5	Limits for repetitive pulses	No such repetitive pulses	N/A

No such ringing signals

N/A

5.2.2.6

Ringing signals



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20,	IEC 62368-1	the way when the	20, 40,
Clause	Requirement – Test	Result – Remark	Verdict
Mr.	an an a the state of	ET WILL MALL MALL M	- m
5.2.2.7	Audio signals		N/A
5.3	Protection against electrical energy sources	CITE WILL WILL MILL	₩ P
5.3.1	General Requirements for accessible parts to ordinary, instructed and skilled persons	TEX TEX STEX STEX	WALTER
5.3.1 a)	Accessible ES1/ES2 derived from ES2/ES3 circuits	he me me	N/A
5.3.1 b)	Skilled persons not unintentional contact ES3 bare conductors	TER WHITER WHITE WHITE W	N/A
5.3.2.1	Accessibility to electrical energy sources and safeguards	Only ES1 circuit and the enclosure (safeguard) are accessed to person.	P
	Accessibility to outdoor equipment bare parts	CLIER MITER MALTE WALL	N/A
5.3.2.2	Contact requirements	n a st st	N/A
r. Aug.	Test with test probe from Annex V	LIER WALLE WALLE	-
5.3.2.2 a)	Air gap – electric strength test potential (V)		N/A
5.3.2.2 b)	Air gap – distance (mm)	et unite white white w	N/A
5.3.2.3	Compliance	A St St A	N/A
5.3.2.4	Terminals for connecting stripped wire No stripped wire used.		N/A
5.4	Insulation materials and requirements		P
5.4.1.2	Properties of insulating material	No insulation as a safeguard.	N/A
5.4.1.3	Material is non-hygroscopic	The Thirt	N/A
5.4.1.4	Maximum operating temperature for insulating materials	(See appended table 5.4.1.4, 9.3, B.1.5, B.2.6, B.3, B.4)	Р
5.4.1.5	Pollution degrees	antit anti me m	N/A
5.4.1.5.2	Test for pollution degree 1 environment and for an insulating compound	SLIER WITER MUTER MALE	N/A
5.4.1.5.3	Thermal cycling test	The state of the	N/A
5.4.1.6	Insulation in transformers with varying dimensions	LITER INLIER WHILE WHILE	N/A
5.4.1.7	Insulation in circuits generating starting pulses	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N/A
5.4.1.8	Determination of working voltage	ied onlie male male of	N/A
5.4.1.9	Insulating surfaces		N/A
5.4.1.10	Thermoplastic parts on which conductive metallic parts are directly mounted	MULL MULL MULL MULL	N/A
5.4.1.10.2	Vicat test	ALTE MITE WALFE WALFE	N/A
5.4.1.10.3	Ball pressure test	The state of the s	N/A
5.4.2	Clearances	ITER INITER WALTER WALTER	N/A
5.4.2.1	General requirements	1 t at at	N/A
The A	Clearances in circuits connected to AC Mains, Alternative method	white mit mit m	N/A
5.4.2.2	Procedure 1 for determining clearance	THE STATE STATE SALE	N/A



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-20.	IEC 62368-1	res we were	20, 20,
Clause	Requirement – Test	Result – Remark	Verdict
2/12 1	Tomporoni ovonjeliogo	the state with the s	14. 14.
5.400	Temporary overvoltage	at the set	-
5.4.2.3	Procedure 2 for determining clearance	White and an	N/A
5.4.2.3.2.2	a.c. mains transient voltage	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<u>* </u>
5.4.2.3.2.3	d.c. mains transient voltage	wry, were and any	_
5.4.2.3.2.4	External circuit transient voltage	at left left light	_
5.4.2.3.2.5	Transient voltage determined by measurement	y mer mer m	
5.4.2.4	Determining the adequacy of a clearance using an electric strength test	t increst writes writes of	N/A
5.4.2.5	Multiplication factors for clearances and test voltages	stiek street untiest was	N/A
5.4.2.6	Clearance measurement	My My	N/A
5.4.3	Creepage distances	LIER OLIER WILLER WILLER	N/A
5.4.3.1	General	10 to the	N/A
5.4.3.3	Material group	EX WITE WALTE WALTE	e _{th} —
5.4.3.4	Creepage distances measurement	a at at	N/A
5.4.4	Solid insulation	Write White White M	N/A
5.4.4.1	General requirements	A ALL A	N/A
5.4.4.2	Minimum distance through insulation	The sur sur	N/A
5.4.4.3	Insulating compound forming solid insulation	THE LIES	N/A
5.4.4.4	Solid insulation in semiconductor devices	in me m	N/A
5.4.4.5	Insulating compound forming cemented joints	* TEX TEX STEE	N/A
5.4.4.6	Thin sheet material	Mr. Mr. M. A	N/A
5.4.4.6.1	General requirements	TEX TEX NITER ON	N/A
5.4.4.6.2	Separable thin sheet material	in in in	N/A
The MULL	Number of layers (pcs)	TER LIER WILLER WILL	N/A
5.4.4.6.3	Non-separable thin sheet material	L M M	N/A
WILL	Number of layers (pcs)	IEF NITER WITE WALTE	N/A
5.4.4.6.4	Standard test procedure for non-separable thin sheet material	- Telt Stelt Street	N/A
5.4.4.6.5	Mandrel test	Mr. M. M. A.	N/A
5.4.4.7	Solid insulation in wound components	TER STER OUTER ON	N/A
5.4.4.9	Solid insulation at frequencies >30 kHz, E_P , K_R , d , V_{PW} (V)	at the the the	N/A
t Tex	Alternative by electric strength test, tested voltage (V), K _R	The state	N/A
5.4.5	Antenna terminal insulation	WHITE WALL WALL	N/A
5.4.5.1	General	a at at	N/A



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Clause	Requirement – Test	Result – Remark	Verdict
Clause	Requirement – Test	Result – Remark	verdict
5.4.5.2	Voltage surge test	Any Any	N/A
5.4.5.3	Insulation resistance (MΩ)	CLIER WITE WALTE	N/A
at s	Electric strength test	The state of the	N/A
5.4.6	Insulation of internal wire as part of supplementary safeguard	NLIE WHILE WHILE W	N/A
5.4.7	Tests for semiconductor components and for cemented joints	TEK WILLER MULTER MU	N/A
5.4.8	Humidity conditioning	t tet tet te	N/A
STEEL ON	Relative humidity (%), temperature (°C), duration (h)	Mr. Mr. Will	
5.4.9	Electric strength test	White Mrs. Mrs.	N/A
5.4.9.1	Test procedure for type test of solid insulation	at let let	N/A
5.4.9.2	Test procedure for routine test	in me me m	N/A
5.4.10	Safeguards against transient voltages from external circuits	EX MITEL MILIER WILL	N/A
5.4.10.1	Parts and circuits separated from external circuits	A A A	N/A
5.4.10.2	Test methods		N/A
5.4.10.2.1	General	at the	N/A
5.4.10.2.2	Impulse test	- 1 m	N/A
5.4.10.2.3	Steady-state test		N/A
5.4.10.3	Verification for insulation breakdown for impulse test	t of the th	N/A
5.4.11	Separation between external circuits and earth	white mir me	N/A
5.4.11.1	Exceptions to separation between external circuits and earth	MITEL MITEL WALTER	N/A
5.4.11.2	Requirements	The state of the	N/A
it the	SPDs bridge separation between external circuit and earth	NITE WALL WALL W	N/A
MILL	Rated operating voltage U _{op} (V)	IEF SLIEF MITE WAY	_ n ₂ _
CE*	Nominal voltage U _{peak} (V)		_
211/2 21	Max increase due to variation ΔU _{sp}	WHITE WALTER WALTER	mr -
JEK J	Max increase due to ageing ΔU _{sa}	* at at	70° —
5.4.11.3	Test method and compliance	WILL MULL MULL	N/A
5.4.12	Insulating liquid	at at at	N/A
5.4.12.1	General requirements	rice mer mer m	N/A
5.4.12.2	Electric strength of an insulating liquid	at at all a	N/A
5.4.12.3	Compatibility of an insulating liquid	Mr. Mr. M.	N/A
5.4.12.4	Container for insulating liquid	it it it	N/A



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Clause	Requirement – Test	The Maria Maria	Result – Remark	Verdict

5.5	.5 Components as safeguards		N/A	
5.5.1	General	No such components as safeguards.	N/A	
5.5.2	Capacitors and RC units	TEX TEX LIFE WITE	N/A	
5.5.2.1	General requirement	The Man My My	N/A	
5.5.2.2	Safeguards against capacitor discharge after disconnection of a connector	TEX WILLER WHITE WHITE	N/A	
5.5.3	Transformers	t get get gret of	N/A	
5.5.4	Optocouplers	me me m	N/A	
5.5.5	Relays	TEK JEK STER RITE	N/A	
5.5.6	Resistors	are are an	N/A	
5.5.7	SPDs	TEX TEX STER WITE	N/A	
5.5.8	Insulation between the mains and an external circuit consisting of a coaxial cable	at at all state	N/A	
5.5.9	Safeguards for socket-outlets in outdoor equipment	and an an	N/A	
1/2 1	RCD rated residual operating current (mA)	white mit me me	_	
5.6	Protective conductor	at the state	N/A	
5.6.2	Requirement for protective conductors	The fact that	N/A	
5.6.2.1	General requirements	Class III equipment	N/A	
5.6.2.2	Colour of insulation	and the suit	N/A	
5.6.3	Requirement for protective earthing conductors	A THE STEEL STEEL OF	N/A	
	Protective earthing conductor size (mm²)	Mr. M. M.	_	
Write W	Protective earthing conductor serving as a reinforced safeguard	MULTER WHITE WALTER WALT	N/A	
LIFER WAY	Protective earthing conductor serving as a double safeguard	LIET MILIER WHITE	N/A	
5.6.4	Requirements for protective bonding conductors	I St St SET	N/A	
5.6.4.1	Protective bonding conductors	in with the area	N/A	
CIER	Protective bonding conductor size (mm²)	- at let let	s —	
5.6.4.2	Protective current rating (A)	mure mure my my	N/A	
5.6.5	Terminals for protective conductors	THE THE THE STE	N/A	
5.6.5.1	Terminal size for connecting protective earthing conductors (mm)	ing ing ing ing	N/A	
F 7614	Terminal size for connecting protective bonding conductors (mm)	The mill mill on	N/A	
5.6.5.2	Corrosion	ex write antie muit w	N/A	
5.6.6	Resistance of the protective bonding system		N/A	
5.6.6.1	Requirements	NITE WITE WITE WILL	N/A	



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IEC 62368-1			
Clause	Requirement – Test	Result – Remark	Verdict
5000		E WILL MULL MULL M	N1/0
5.6.6.2	Test Method		N/A
5.6.6.3	Resistance (Ω) or voltage drop	while mir mer mer	N/A
5.6.7	Reliable connection of a protective earthing conductor	TEL STEEL STEEL SMITES	N/A
5.6.8	Functional earthing	15. M. 20.	N/A
White	Conductor size (mm²)	TEX SLIER WITER WALTER	N/A
- 11%	Class II with functional earthing marking	w v	N/A
MUE.	Appliance inlet cl &cr (mm)	ALTER MITE MAIL WA	N/A
5.7	Prospective touch voltage, touch current and p	rotective conductor current	N/A
5.7.2	Measuring devices and networks	Willy Will Mill Mill	N/A
5.7.2.1	Measurement of touch current	in the set set	N/A
5.7.2.2	Measurement of voltage	LIFE WALL WALL WALL	N/A
5.7.3	Equipment set-up, supply connections and earth connections	EX SITEX NUTEX MILES AN	N/A
5.7.4	Unearthed accessible parts	711 711	N/A
5.7.5	Earthed accessible conductive parts	WITE WILL MALL MALL	N/A
5.7.6	Requirements when touch current exceeds ES2 limits	at Juliet Mile	N/A
A 10	Protective conductor current (mA)	7 7 1	N/A
NOUT .	Instructional Safeguard	THE LIFE MITTER SPATE	N/A
5.7.7	Prospective touch voltage and touch current associated with external circuits	t tet tet stet s	N/A
5.7.7.1	Touch current from coaxial cables	Mr. Mr. Mr. M.	N/A
5.7.7.2	Prospective touch voltage and touch current associated with paired conductor cables	MALIER WALTER WALTER WALT	N/A
5.7.8	Summation of touch currents from external circuits	Sifet milet while while	N/A
ek whitek	a) Equipment connected to earthed external circuits, current (mA)	EX SLIER SLIER SUSTERN	N/A
MALTER	b) Equipment connected to unearthed external circuits, current (mA)	- Tel Tel Tel O	N/A
5.8	Backfeed safeguard in battery backed up suppl	ies	N/A
NETE OF	Mains terminal ES	No battery used	N/A
	Air gap (mm)	716 All All 211, 31,	N/A

6	ELECTRICALLY- CAUSED FIRE	Р
6.2	Classification of PS and PIS	P



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Clause	Paguirament Teet	Popult Pamark	Vardint
Clause	Requirement – Test	Result – Remark	Verdict
6.2.2	Power source circuit classifications	PS (power source) classification determined by measuring the maximum power in Figures 34 and 35 for load and power source circuits. (See appended table 6.2.2)	P
6.2.3	Classification of potential ignition sources	See the following details.	TE P
6.2.3.1	Arcing PIS	No Arcing PIS exist in the equipment	N/A
6.2.3.2	Resistive PIS	(See appended table 6.2.3.2)	√P
6.3	Safeguards against fire under normal operating conditions	and abnormal operating	MILIPE
6.3.1	No ignition and attainable temperature value less than 90 % defined by ISO 871 or less than 300 °C for unknown materials	No ignition and no such temperature attained within the equipment. (See appended table B.1.5 & B.3)	P NIFE N
, t	Combustible materials outside fire enclosure	No such parts	N/A
6.4	Safeguards against fire under single fault condit	tions	Р
6.4.1	Safeguard method	Control fire spread	Р
6.4.2	Reduction of the likelihood of ignition under single fault conditions in PS1 circuits	white white	white P
6.4.3	Reduction of the likelihood of ignition under single fault conditions in PS2 and PS3 circuits	TE MILTE WILLES WILLES	ALTE PUR
6.4.3.1	Supplementary safeguards	a sit sit sit si	N/A
6.4.3.2	Single Fault Conditions	MULL MULL MULL MILL	N/A
CLIEBE	Special conditions for temperature limited by fuse	LEK TEK TEK ATTE	N/A
6.4.4	Control of fire spread in PS1 circuits	Mr. Mr. Mr. M.	Р
6.4.5	Control of fire spread in PS2 circuits	THE THE LIER NITER	Р
	Supplementary safeguards	Compliance detailed as follows: 1) Printed board: rated V-0 2) Internal wires: complying with UL 758 standard, which test method and testing condition equal to IEC/EN 60695-11-21. 3) All other components: at least V-2 except for parts mounted on min. V-1 material or small parts of combustible material (with mass less than 4g) or components complying with relevant IEC standard. 4) V-0 plastic enclosure used	P TEEL WAS JUNETE MATERIA TEEL WAS TEEL W



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Clause	Requirement – Test	Result – Remark	Verdict
6.4.6	Control of fine annual in DC2 singuity	the wife wine we	NI/A
6.4.6	Control of fire spread in PS3 circuits	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N/A
6.4.7	Separation of combustible materials from a PIS	MULL MALL MALL MARK	N/A
6.4.7.2	Separation by distance		N/A
6.4.7.3	Separation by a fire barrier	No fire barrier used.	N/A
6.4.8	Fire enclosures and fire barriers	See below.	N/A
6.4.8.2	Fire enclosure and fire barrier material properties	V-0 plastic enclosure used	N/A
6.4.8.2.1	Requirements for a fire barrier	No fire barrier used.	N/A
6.4.8.2.2	Requirements for a fire enclosure	V-0 plastic enclosure used	N/A
6.4.8.3	Constructional requirements for a fire enclosure and a fire barrier	See below	N/A
6.4.8.3.1	Fire enclosure and fire barrier openings	No openings	N/A
6.4.8.3.2	Fire barrier dimensions	No specific barrier provided.	N/A
6.4.8.3.3	Top openings and properties	No top opening	N/A
Apr.	Openings dimensions (mm)	the write with any all	N/A
6.4.8.3.4	Bottom openings and properties	No bottom opening	N/A
21/2 21	Openings dimensions (mm)	MULL MULL MULL MILL	N/A
NITER WIL	Flammability tests for the bottom of a fire enclosure	of Whitek white	N/A
Et 18	Instructional Safeguard	- 1 t 1 t	N/A
6.4.8.3.5	Side openings and properties	No side openings	N/A
t JEN	Openings dimensions (mm)	e of at at.	N/A
6.4.8.3.6	Integrity of a fire enclosure, condition met: a), b) or c)	No enclosure can be opened by an ordinary person	N/A
6.4.8.4	Separation of a PIS from a fire enclosure and a fire barrier distance (mm) or flammability rating	V-0 plastic enclosure used	N/A
6.4.9	Flammability of insulating liquid	TEX TIES NITES INTE	N/A
6.5	Internal and external wiring	Mr. Mr. Mr.	J P
6.5.1	General requirements	The internal wires are complied with UL standard, of which the test method and testing condition are equal to IEC/EN 60695-11-21.	P. P.
6.5.2	Requirements for interconnection to building wiring	See 6.5.1.	Р
6.5.3	Internal wiring size (mm2) for socket-outlets	No such wire used	N/A
6.6	Safeguards against fire due to the connection to ac	dditional equipment	Р

7	INJURY CAUSED BY HAZARDOUS SUBSTANCES	Р
7.2	Reduction of exposure to hazardous substances	N/A



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Clause	Requirement – Test	Result – Remark	Verdict

7.3	Ozone exposure	N/A
7.4	Use of personal safeguards or personal protective equipment (PPE)	N/A
, et	Personal safeguards and instructions	_
7.5	Use of instructional safeguards and instructions	N/A
CENT C	Instructional safeguard (ISO 7010)	_
7.6	Batteries and their protection circuits	P

8	MECHANICALLY-CAUSED INJURY		√P P
8.2	Mechanical energy source classifications	1 1 1 1 1	P ⁺
8.3	Safeguards against mechanical energy sources	Write Will Mill Mill Will	An P
8.4	Safeguards against parts with sharp edges and	corners	P
8.4.1	Safeguards	LIFE WALL WALL WALL	b _z
y whitek	Instructional Safeguard:	MS1: Edges and corners of enclosure	P
8.4.2	Sharp edges or corners	Edges and corners of the enclosure are rounded.	F P
8.5	Safeguards against moving parts	all All All	N/A
8.5.1	Fingers, jewellery, clothing, hair, etc., contact with MS2 or MS3 parts	No moving parts.	N/A
IEE WALTER	MS2 or MS3 part required to be accessible for the function of the equipment	See above.	N/A
LIEN	Moving MS3 parts only accessible to skilled person	L St. St. St.	N/A
8.5.2	Instructional safeguard:	Mer and Me in	N/A
8.5.4	Special categories of equipment containing moving parts	OUTER WHITER WHITER WHITE	N/A
8.5.4.1	General	a at at at	N/A
8.5.4.2	Equipment containing work cells with MS3 parts	HILL MILL MILL MILL	N/A
8.5.4.2.1	Protection of persons in the work cell	A LEK TEK TEK	N/A
8.5.4.2.2	Access protection override	They were my m	N/A
8.5.4.2.2.1	Override system	- TEX TEX LITER OU	N/A
8.5.4.2.2.2	Visual indicator	Mr. Mr. Mr. M.	N/A
8.5.4.2.3	Emergency stop system	TEX TIEK WITE WITE	N/A
TEK NITER	Maximum stopping distance from the point of activation (m)	at the the title	N/A
t liet	Space between end point and nearest fixed mechanical part (mm):	t it lit it	N/A
8.5.4.2.4	Endurance requirements	WHILE MUTI MUTI AN	N/A
WALTER WA	Mechanical system subjected to 100 000 cycles of operation	still nifet milet whi	N/A



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-2,	IEC 62368-1	KEEL WEEL WALL WINE !	in a
Clause	Requirement – Test	Result – Remark	Verdict
mr.		the tip with our wi	21/0
- SEP .	- Mechanical function check and visual inspection	the state of the	N/A
1112 211	- Cable assembly	while our mer me	N/A
8.5.4.3	Equipment having electromechanical device for destruction of media	TEX STEX MITEX MITEX	N/A
8.5.4.3.1	Equipment safeguards	the state of the s	N/A
8.5.4.3.2	Instructional safeguards against moving parts:	TEX WITE WITE MUTTE	N/A
8.5.4.3.3	Disconnection from the supply	, , , , , , , , , , , , , , , , , , ,	N/A
8.5.4.3.4	Cut type and test force (N)	wite with mit with	N/A
8.5.4.3.5	Compliance	a at at a	N/A
8.5.5	High pressure lamps	No high pressure lamps used.	N/A
CLES TE	Explosion test:	at let let let	N/A
8.5.5.3	Glass particles dimensions (mm):	The Mr. Mr. M.	N/A
8.6	Stability of equipment	et set set set seet o	N/A
8.6.1	General	MS1: Mass of the unit	N/A
INLIE N	Instructional safeguard	TEN TEN STEEL OUT	N/A
8.6.2	Static stability	Mu Au Au	N/A
8.6.2.2	Static stability test:	LEE MITE WALLES	N/A
8.6.2.3	Downward force test	- L	N/A
8.6.3	Relocation stability	ITE WITE WALL WILL O	N/A
t get	Wheels diameter (mm):	i state of the	_
Alle 1	Tilt test	" WILL MULL MU MU	N/A
8.6.4	Glass slide test	at all the off	N/A
8.6.5	Horizontal force test:	were mer me me	N/A
8.7	Equipment mounted to wall, ceiling or other stru	icture	N/A
8.7.1	Mount means type	No wall or ceiling	N/A
8.7.2	Test methods	Et ITEK WITER WITER	N/A
16	Test 1, additional downwards force (N)	Mr. My M. M.	N/A
MULTE M	Test 2, number of attachment points and test force (N)	WALTER WALTER WALTER WALTER	N/A
INLIER WILL	Test 3 Nominal diameter (mm) and applied torque (Nm)	MITER WRITER WHITER	N/A
8.8	Handles strength	at the life tills	N/A
8.8.1	General	No handles	N/A
8.8.2	Handle strength test	at the lite lite	N/A
20,	Number of handles:	Mure Mure Mure My	_
JE.	Force applied (N):	at at the st	- JV



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Clause	Requirement – Test	Result – Remark	Verdict

8.9	Wheels or casters attachment requirements		N/A
8.9.2	Pull test	No such parts	N/A
8.10	Carts, stands and similar carriers	The state of the	N/A
8.10.1	General	No carts, stands or similar carriers	N/A
8.10.2	Marking and instructions:	THE SITES OUTER MITTER IN	N/A
8.10.3	Cart, stand or carrier loading test	4, 4	N/A
WILL !	Loading force applied (N):	the relief with while whi	N/A
8.10.4	Cart, stand or carrier impact test	The state of the	N/A
8.10.5	Mechanical stability	INLIER MILLE WALLE WALL	N/A
LEF ST	Force applied (N)	L St. St. St.	det .
8.10.6	Thermoplastic temperature stability	THE MULL MULL MULL	N/A
8.11	Mounting means for slide-rail mounted equipment (SRME)		N/A
8.11.1	General	No such parts	N/A
8.11.2	Requirements for slide rails	t test test street out	N/A
70. 1	Instructional Safeguard:	mur mr m	N/A
8.11.3	Mechanical strength test	At MITE MITE	N/A
8.11.3.1	Downward force test, force (N) applied:	_1 1, 1, 1, 1	N/A
8.11.3.2	Lateral push force test	TEN LIE RITAR MITE	N/A
8.11.3.3	Integrity of slide rail end stops	20, 20, 2	N/A
8.11.4	Compliance	ex rifer writer while whi	N/A
8.12	Telescoping or rod antennas	W 4" 1	N/A
ane, an	Button/ball diameter (mm):	No such parts	_

9	THERMAL BURN INJURY		mer Pane
9.2	Thermal energy source classifications		A P A
9.3	Touch temperature limits	t iter alier alies wait an	Р
9.3.1	Touch temperatures of accessible parts	: (See appended table 5.4.1.4, 9.3, B.1.5, B.2.6)	ANTER V
9.3.2	Test method and compliance	See B.1.6 & B.2.3	Р
9.4	Safeguards against thermal energy source	SET TET THE NATE OF THE	and P and
9.5	Requirements for safeguards	Requirements for safeguards	
9.5.1	Equipment safeguard	Enclosure provided to limit the transfer of thermal energy of internal parts under normal operating conditions and abnormal operating conditions.	NE PURE



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

9.5.2	Instructional safeguard:	Instructional safeguard is not required.	N/A
9.6	Requirements for wireless power transmitters	Mr. Mr. M. m.	Р
9.6.1	General	TEX STEX SUFER MUTER	MET P. W
9.6.2	Specification of the foreign objects	in my my my	Р
9.6.3	Test method and compliance:	CER STER STER WITE OU	P

10	RADIATION		Р
10.2	Radiation energy source classification		Р
10.2.1	General classification	See below	n P
. L . D	Lasers	Mr. Mr. Mr.	_
it when	Lamps and lamp systems:	RS1: LED only for indicating use which is considered as low power application.	_
70.	Image projectors	The Maria Maria	
all like in	X-Ray	it the the	_
20, 20,	Personal music player	mi mi	
10.3	Safeguards against laser radiation	the life wife	N/A
EK LIEK	The standard(s) equipment containing laser(s) comply	No laser radiation	N/A
10.4	Safeguards against optical radiation from lamps and lamp systems (including LED types)		P
10.4.1	General requirements	LED indication light: Classed as RS1 (Exempt Group)	Р
MULLE MY	Instructional safeguard provided for accessible radiation level needs to exceed	MILITER WALTER WALTER WALTER	N/A
LIET MIT	Risk group marking and location:	TER TER TER STEE	N/A
	Information for safe operation and installation	LE ME AND AND	N/A
10.4.2	Requirements for enclosures	Et JET JIET MITER	N/A
*	UV radiation exposure:	24. 24. 2.	N/A
10.4.3	Instructional safeguard	- LIER NLIER WILLE WILL	N/A
10.5	Safeguards against X-radiation	Mr. Ch. A. St.	N/A
10.5.1	Requirements	No X-radiation	N/A
LEY LEY	Instructional safeguard for skilled persons	in the	_
10.5.3	Maximum radiation (pA/kg)	LIEF MILE WALL WALLY	_
10.6	Safeguards against acoustic energy sources		N/A
10.6.1	General	No such equipment	N/A
10.6.2	Classification	1 4 3 6	N/A



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Clause	Requirement – Test	Result – Remark	Verdict
Me	W W THE STATES	THE STATE WITE SUPER	The Angel
et	Acoustic output L _{Aeq,T} , dB(A):	10, 0,	N/A
	Unweighted RMS output voltage (mV):	NITER MITE MALIE	N/A
at a	Digital output signal (dBFS)	Zu z z	N/A
10.6.3	Requirements for dose-based systems	CITE WITE WALL W	N/A
10.6.3.1	General requirements	1 1 15	N/A
10.6.3.2	Dose-based warning and automatic decrease	I'E WILL WILL AND	N/A
10.6.3.3	Exposure-based warning and requirements		N/A
1/1 /	30 s integrated exposure level (MEL30)	White Whit whi	N/A
TEK N	Warning for MEL ≥ 100 dB(A)	at at 18th	N/A
10.6.4	Measurement methods	White Mrs. Whi.	N/A
10.6.5	Protection of persons	at let set .	N/A
70	Instructional safeguards	to me me m	N/A
10.6.6	Requirements for listening devices (headphones, earphones, etc.)	EX WITE MILIER WILL	N/A
10.6.6.1	Corded listening devices with analogue input	A AN AN	N/A
41, 4	Listening device input voltage (mV)	MULL MULL MULL	N/A
10.6.6.2	Corded listening devices with digital input	it of the	N/A
, 2,	Max. acoustic output L _{Aeq,T} , dB(A):	- 2 July 1	N/A
10.6.6.3	Cordless listening devices	The state of	N/A
- 200	Max. acoustic output L _{Aeq,T} , dB(A):	is the the the	N/A

В	NORMAL OPERATING CONDITION TESTS, ABI CONDITION TESTS AND SINGLE FAULT COND		P
B.1	General	CHIEF WALTE WALL WAL	√IN P
B.1.5	Temperature measurement conditions	(See appended table B.1.5)	Р
B.2	Normal operating conditions		P
B.2.1	General requirements:	(See Test Item Particulars and appended test tables)	CIER PULL
MALTER	Audio Amplifiers and equipment with audio amplifiers	the state outlier with	N/A
B.2.3	Supply voltage and tolerances	Rated input 5Vdc	P
B.2.5	Input test	(See appended table B.2.5)	and P al
B.3	Simulated abnormal operating conditions	The The The	Р
B.3.1	General	(See appended table B.3)	NI PAR
B.3.2	Covering of ventilation openings	No ventilation openings.	N/A
and	Instructional safeguard	LEK OLITER WALTER WALTER WAS	N/A
B.3.3	DC mains polarity test	Not supplied by D.C. mains	N/A
B.3.4	Setting of voltage selector	No such selector	N/A



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Clause	Requirement – Test	Result – Remark	Verdict
" In	which the state of the state of	EL WILL MILL AND MY	-21/2
B.3.5	Maximum load at output terminals	(See appended table B.3)	P
B.3.6	Reverse battery polarity	No such battery	N/A
B.3.7	Audio amplifier abnormal operating conditions	(See appended table B.3)	Р
B.3.8	Safeguards functional during and after abnormal operating conditions	All safeguards remained effective	W P
B.4	Simulated single fault conditions		P
B.4.1	General	141 141 1	Р
B.4.2	Temperature controlling device	NTC used on battery protective board. The test is carried out for three times, no failure. See appended table B.4 for details	WP
B.4.3	Blocked motor test	No motors	N/A
B.4.4	Functional insulation	See below.	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)	PE PE
B.4.4.3	Short circuit of functional insulation on coated printed boards	No coated printed boards within the EUT	N/A
B.4.5	Short-circuit and interruption of electrodes in tubes and semiconductors	(See appended table B.4)	P
B.4.6	Short circuit or disconnection of passive components	(See appended table B.4)	Р
B.4.7	Continuous operation of components	The EUT is continuous operating type and no such components intended for short time operation or intermittent operation	N/A
B.4.8	Compliance during and after single fault conditions	No change to circuits classified in 5.3	MALTER
B.4.9	Battery charging and discharging under single fault conditions	See annex M	TEK P
С	UV RADIATION		N/A
C.1 4	Protection of materials in equipment from UV ra	adiation	N/A
C.1.2	Requirements	No such UV generated from the equipment.	N/A
C.1.3	Test method	the the to the	N/A
C.2	UV light conditioning test	TEX LIET SLIET WITE	N/A
C.2.1	Test apparatus	24, 24, 20,	N/A
C.2.2	Mounting of test samples	et itel alieb outer in	N/A
C.2.3	Carbon-arc light-exposure test	24. 21. 22. 2	N/A
C.2.4	Xenon-arc light-exposure test	The second second	N/A



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Clause	Requirement – Test	Result – Remark	Verdict

Clause	requirement – rest	Itesuit – Itemark	Verdict
D D	TEST GENERATORS		N/A
D.1 SI	Impulse test generators	THE RITE MIT WALL	N/A
D.2	Antenna interface test generator		N/A
D.3	Electronic pulse generator		N/A
E	TEST CONDITIONS FOR EQUIPMENT CONTAINING AUDIO AMPLIFIERS		N/A
E.1	Electrical energy source classification for audio	o signals	N/A
- Kill	Maximum non-clipped output power (W)		_
2112 1	Rated load impedance (Ω):	WALLE MALL MALL MALL	
CIEK C	Open-circuit output voltage (V)	at at let let	
(V)	Instructional safeguard	Write Mury Mary Mur	_
E.2	Audio amplifier normal operating conditions	at the the the	N/A
	Audio signal source type	ing mer and any	
NILLER.	Audio output power (W)	Et TEL TEL STEE	_
7	Audio output voltage (V)	Any Any on an	_
White a	Rated load impedance (Ω)	LIET STEE WITE WALF	_
<u>* </u>	Requirements for temperature measurement		N/A
E.3	Audio amplifier abnormal operating conditions	THE MALLE WALLE	N/A
F	EQUIPMENT MARKINGS, INSTRUCTIONS, AND SAFEGUARDS	INSTRUCTIONAL	LITEK P
F.1	General (1997)	- Th	P.
Mrc.	Language	English	_
F.2	Letter symbols and graphical symbols	and the set of	P
F.2.1	Letter symbols according to IEC60027-1	Letter symbols for quantities and units are complied with IEC 60027-1.	WP P
F.2.2	Graphic symbols according to IEC, ISO or manufacturer specific	Graphical symbols are complied with IEC 60417, ISO 3864-2, ISO 7000 or ISO 7010.	P
F.3	Equipment markings	t tet tet stet stet mi	Р
F.3.1	Equipment marking locations	The required marking is located on the enclosure of the equipment and is easily visible.	P. WALTER
F.3.2	Equipment identification markings	See below for details.	P
F.3.2.1	Manufacturer identification	See copy of marking plate	P
F.3.2.2	Model identification	See copy of marking plate	Р
F.3.3	Equipment rating markings	See below for details.	P
F.3.3.1	Equipment with direct connection to mains	Supplying by 5Vdc	N/A



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IEC 62368-1			
Clause	Requirement – Test	Result – Remark	Verdict
F000		Carling Maring Maring	20
F.3.3.2	Equipment without direct connection to mains	See above.	P
F.3.3.3	Nature of the supply voltage:	See copy of marking plate.	Jul P
F.3.3.4	Rated voltage:	See copy of marking plate.	Р
F.3.3.5	Rated frequency	DC supply	P
F.3.3.6	Rated current or rated power:	See copy of marking plate.	P
F.3.3.7	Equipment with multiple supply connections	Single supply connection.	N/A
F.3.4	Voltage setting device	No voltage setting device.	N/A
F.3.5	Terminals and operating devices	MULLING WILL WA	N/A
F.3.5.1	Mains appliance outlet and socket-outlet markings	NITER MILER WALTER WALTE	N/A
F.3.5.2	Switch position identification marking	and the set set	N/A
F.3.5.3	Replacement fuse identification and rating markings	Life While While Whi	N/A
MULL	Instructional safeguards for neutral fuse:	EX WITEX WITE WHITE W	N/A
F.3.5.4	Replacement battery identification marking:	No such battery.	N/A
F.3.5.5	Neutral conductor terminal	No such parts.	N/A
F.3.5.6	Terminal marking location		N/A
F.3.6	Equipment markings related to equipment classification	Class III equipment	N/A
F.3.6.1	Class I equipment	THE LIFE OUT WITE	N/A
F.3.6.1.1	Protective earthing conductor terminal	24, 25,	N/A
F.3.6.1.2	Protective bonding conductor terminals	A THE WILL MULTER WALLE WAS	N/A
F.3.6.2	Equipment class marking:	70, 23	N/A
F.3.6.3	Functional earthing terminal marking:	WILL WILL MULL MULL	N/A
F.3.7	Equipment IP rating marking	This equipment is classified as IPX0.	MITEK
F.3.8	External power supply output marking:	See copy of marking plate.	Р
F.3.9	Durability, legibility and permanence of marking	Marking is considered to be legible and easily discernible. See also the following details.	P



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Clause	Requirement – Test	Result – Remark	Verdict
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.	PEK WILLEK WILLEK WILLEK WILLEK
F.4	Instructions	MITER WALL WALL WALL	JII P
LET S	a) Information prior to installation and initial use	See user manual	Р
ik lek	b) Equipment for use in locations where children not likely to be present	rite mure mark must	N/A
w.r.	c) Instructions for installation and interconnection	ex outer outer while wh	N/A
MITER	d) Equipment intended for use only in restricted access area	Tet lifet slifet mil	N/A
- A-	e) Equipment intended to be fastened in place	Mr. M. M.	N/A
VELLE LINE	f) Instructions for audio equipment terminals	ALTER MALTER	N/A
st se	g) Protective earthing used as a safeguard		N/A
in white	h) Protective conductor current exceeding ES2 limits	THE WILLIAM WHITE W	N/A
MITE	i) Graphic symbols used on equipment	t Tex Text Willer Wi	N/A
LIEK "	j) Permanently connected equipment not provided with all-pole mains switch	and and the life	N/A
	k) Replaceable components or modules providing safeguard function	mer and were an	N/A
o an	Equipment containing insulating liquid	NITE MITE WALL WALL	N/A
EX JEX	m) Installation instructions for outdoor equipment	a state of the	N/A
F.5	Instructional safeguards	the white man me m	N/A
G	COMPONENTS		P
G.1	Switches	mure mure mure and	N/A
G.1.1	General	No switch used	N/A
G.1.2	Ratings, endurance, spacing, maximum load	me me me m	N/A
G.1.3	Test method and compliance	THE THE STEEL STEEL	N/A
G.2	Relays	To the Me the	N/A
G.2.1	Requirements	No relay used.	N/A
G.2.2	Overload test	Mr. 24 24	N/A



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20,	IEC 62368-1	The way who	20, 20,
Clause	Requirement – Test	Result – Remark	Verdict
The.	W W THE STATE OF	EL WILL MULL WALL	The and
G.2.3	Relay controlling connectors supplying power to other equipment	cet cret cret	N/A
G.2.4	Test method and compliance	me me m.	N/A
G.3	Protective devices	TEX LIEK NUTER ON	N/A
G.3.1	Thermal cut-offs	No such component	N/A
MULL	Thermal cut-outs separately approved according to IEC 60730 with conditions indicated in a) & b)	TER MUTER AUTER MUT.	N/A
WALTER	Thermal cut-outs tested as part of the equipment as indicated in c)	t united mater water	N/A
G.3.1.2	Test method and compliance	at at let	N/A
G.3.2	Thermal links	No such component	N/A
G.3.2.1	a) Thermal links tested separately according to IEC 60691 with specifics	LIEK WILEK WILEK WI	N/A
the Test	b) Thermal links tested as part of the equipment	1 1 0 0	N/A
G.3.2.2	Test method and compliance	Er antie whit white	N/A
G.3.3	PTC thermistors	No such component	N/A
G.3.4	Overcurrent protection devices	No such component	N/A
G.3.5	Safeguards components not mentioned in G.3.1 to G.3.4	antiet w	N/A
G.3.5.1	Non-resettable devices suitably rated and marking provided	The life out of	N/A
G.3.5.2	Single faults conditions	14. 14. 1	N/A
G.4	Connectors	EX STER STER SOLIE	N/A
G.4.1	Spacings	No such component	N/A
G.4.2	Mains connector configuration	aliek mile spile s	N/A
G.4.3	Plug is shaped that insertion into mains socket- outlets or appliance coupler is unlikely	TEX TEX STEEL IN	N/A
G.5	Wound components	in my my	N/A
G.5.1	Wire insulation in wound components	No such component	N/A
G.5.1.2	Protection against mechanical stress	14 14 14	N/A
G.5.2	Endurance test	STEP WITE WITE	N/A
G.5.2.1	General test requirements	20, 20, 2	N/A
G.5.2.2	Heat run test	MITER MITE WAITE W	N/A
at a	Test time (days per cycle)		e* -
1015	Test temperature (°C)	LIE WILL MALL WAS	۷ _
G.5.2.3	Wound components supplied from the mains		N/A
G.5.2.4	No insulation breakdown	White Mail Mail	N/A
G.5.3	Transformers	1 1 1	N/A



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Clause	Requirement – Test	Result – Remark	Verdict
JiddoG	Todallolloll Tool	TOOGIC TOTALIN	Verdict
G.5.3.1	Compliance method:	21/2 21/2	N/A
White M	Position:	LIER NITER MITTER	N/A
	Method of protection:	411 411	N/A
G.5.3.2	Insulation	ALTER MITER WALTER IN	N/A
et et	Protection from displacement of windings:		,st -
G.5.3.3	Transformer overload tests	TEX INTIET MUTTE MU	N/A
G.5.3.3.1	Test conditions		N/A
G.5.3.3.2	Winding temperatures	UNLIE WALL WALL	N/A
G.5.3.3.3	Winding temperatures - alternative test method	at at 1th	N/A
G.5.3.4	Transformers using FIW	White Mri Mri	N/A
G.5.3.4.1	General	et let let	N/A
20	FIW wire nominal diameter:	ing mer mer in	_
G.5.3.4.2	Transformers with basic insulation only	et let let li	N/A
G.5.3.4.3	Transformers with double insulation or reinforced insulation	May my my	N/A
G.5.3.4.4	Transformers with FIW wound on metal or ferrite core	White mil mil	N/A
G.5.3.4.5	Thermal cycling test and compliance	TE MILIT O	N/A
G.5.3.4.6	Partial discharge test		N/A
G.5.3.4.7	Routine test	LIE WILL MULT MY	N/A
G.5.4	Motors	No motors used.	N/A
G.5.4.1	General requirements	MULL MULL MULL	N/A
G.5.4.2	Motor overload test conditions	ER TER STER	N/A
G.5.4.3	Running overload test	Mr. Mr. Mr.	N/A
G.5.4.4.2	Locked-rotor overload test	THE THE LIER .	N/A
4 4	Test duration (days):	y my my	_
G.5.4.5	Running overload test for DC motors	EK JEK SJEK NI	N/A
G.5.4.5.2	Tested in the unit	24 24 2	N/A
G.5.4.5.3	Alternative method	- LIER NITER MITE	N/A
G.5.4.6	Locked-rotor overload test for DC motors	40, 40, 20,	N/A
G.5.4.6.2	Tested in the unit	ALTER WALTER WALTER	N/A
At A	Maximum Temperature	21. 12. 14. 14.	N/A
G.5.4.6.3	Alternative method	LIER WILLE WHILE WA	N/A
G.5.4.7	Motors with capacitors	t at at a	- N/A
G.5.4.8	Three-phase motors	WALTE WALL WALL	N/A
G.5.4.9	Series motors	the state of	N/A



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Clause	Requirement – Test	Result – Remark	Verdict
-are		The Will Will Mr.	11/2 11/1
- Lill s	Operating voltage:	at the set	
G.6 🐠	Wire Insulation	WALLE WALL MALL	N/A
G.6.1	General	Only ES1 existed	N/A
G.6.2	Enamelled winding wire insulation	with mure mure me	N/A
G.7	Mains supply cords		N/A
G.7.1	General requirements	No such component	N/A
THE STATE OF THE S	Type:	L of the the	
G.7.2	Cross sectional area (mm² or AWG):	Mer Mer Mer	N/A
G.7.3	Cord anchorages and strain relief for non- detachable power supply cords	MITEL MATER MATER W	N/A
G.7.3.2	Cord strain relief	L st st	N/A
G.7.3.2.1	Requirements	RIFE WALL WALL WAS	N/A
the wifeth	Strain relief test force (N)	at at at a	N/A
G.7.3.2.2	Strain relief mechanism failure	MULL MUT MUT	N/A
G.7.3.2.3	Cord sheath or jacket position, distance (mm):	et det det	N/A
G.7.3.2.4	Strain relief and cord anchorage material	Wer Mer Miles	N/A
G.7.4	Cord Entry	At The	N/A
G.7.5	Non-detachable cord bend protection	2 11 11 11	N/A
G.7.5.1	Requirements	the to the ti	N/A
G.7.5.2	Test method and compliance	Mr. Mr. Mr.	N/A
MULTE	Overall diameter or minor overall dimension, <i>D</i> (mm)	White white white	mi –
CLIFE OF	Radius of curvature after test (mm)	LEK TEK TEK	NITE -
G.7.6	Supply wiring space	Mrs. Mrs. Mrs. 1	N/A
G.7.6.1	General requirements	TEX TEX STEP OF	N/A
G.7.6.2	Stranded wire	his me me m	N/A
G.7.6.2.1	Requirements	Et JEK JEK WITE	N/A
G.7.6.2.2	Test with 8 mm strand	211, 211, 21,	N/A
G.8	Varistors	H THE NUTER WITE	N/A
G.8.1	General requirements	No such component	N/A
G.8.2	Safeguards against fire	ALTER MITER MALTER	N/A
G.8.2.1	General	20, 21,	A N/A
G.8.2.2	Varistor overload test	LIEN WITE WALLES WAL	N/A
G.8.2.3	Temporary overvoltage test		N/A
G.9	Integrated circuit (IC) current limiters	TET WITTE WALTE WALTE	N/A
G.9.1	Requirements	No such component	N/A



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01	IEC 62368-1		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Clause	Requirement – Test	Result – Remark	Verdict
<u> </u>	IC limiter output current (max. 5A)	the me me	
Write M	Manufacturers' defined drift	The street minest smith	_
G.9.2	Test Program	24 14 14 15	N/A
G.9.3	Compliance	ALTER MITER WALTER WALTER	N/A
G.10	Resistors	the state of the s	N/A
G.10.1	General	No such component	N/A
G.10.2	Conditioning	L A A A A	N/A
G.10.3	Resistor test	"ALT, ALT, ALT, AL	N/A
G.10.4	Voltage surge test	at at get of	N/A
G.10.5	Impulse test	Were and any any	N/A
G.10.6	Overload test	TEX TEX STEX SITES	N/A
G.11	Capacitors and RC units	Vr. Mr. Mr. M.	N/A
G.11.1	General requirements	No such component	N/A
G.11.2	Conditioning of capacitors and RC units	24, 24, 24,	N/A
G.11.3	Rules for selecting capacitors	TIEN STEEL WITE WITE	N/A
G.12	.12 Optocouplers		N/A
ner whi	Optocouplers comply with IEC 60747-5-5 with specifics	No such component	N/A
IE WALTE	Type test voltage V _{ini,a} :	TEN ITE NITE BLIEF	_
L 25	Routine test voltage, V _{ini, b}	AL AL A	_
G.13	Printed boards	* TER WILL MULL MAN	N/A
G.13.1	General requirements	Only need to comply with functional insulation, see only B.4.4.	N/A
G.13.2	Uncoated printed boards	at at let the	N/A
G.13.3	Coated printed boards	beet me me me	N/A
G.13.4	Insulation between conductors on the same inner surface	ist united whitek whitek w	N/A
G.13.5	Insulation between conductors on different surfaces	- Tiek Stiek Wilek Wil	N/A
	Distance through insulation:	20 21 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N/A
un au	Number of insulation layers (pcs)	CHIEF WILL WALLE WALL	
G.13.6	Tests on coated printed boards	n t et et	N/A
G.13.6.1	Sample preparation and preliminary inspection	LIER MALIE MALL MALL	N/A
G.13.6.2	Test method and compliance	s at at at	N/A
G.14	Coating on components terminals	it will man were me	N/A
G.14.1	Requirements:		N/A



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AV		2 2 1		
21/2		IEC 62368-1		
Clause	Requirement – Test	ri, Aur. Au. A.	Result – Remark	Verdict

G.15	Pressurized liquid filled components		N/A
G.15.1	Requirements	No such component	N/A
G.15.2	Test methods and compliance	and the state of t	N/A
G.15.2.1	Hydrostatic pressure test	OLITER WALTER WALTE WALTE	N/A
G.15.2.2	Creep resistance test	a start	N/A
G.15.2.3	Tubing and fittings compatibility test	TEL WALTE WALL WALL W	N/A
G.15.2.4	Vibration test	L St Set Set S	N/A
G.15.2.5	Thermal cycling test	MULL MULL MULL MILL	N/A
G.15.2.6	Force test	at let let ite	N/A
G.15.3	Compliance	MULL AMERICAN AND AND	N/A
G.16	IC including capacitor discharge function (ICX)		N/A
G.16.1	Condition for fault tested is not required	No such component	N/A
IN LITE	ICX with associated circuitry tested in equipment	et tet tiet with a	N/A
ask.	ICX tested separately	Mr. M. M.	N/A
G.16.2	Tests	Y TEX STEX WITE WITE	N/A
SLIER ML	Smallest capacitance and smallest resistance specified by ICX manufacturer for impulse test:	THE THE	_
	Mains voltage that impulses to be superimposed on	The fact that	_
r Sk	Largest capacitance and smallest resistance for ICX tested by itself for 10000 cycles test	LIE WHILE WHILE WHILE W	_
G.16.3	Capacitor discharge test	A CLIEB WILL WALL WALL WALL	N/A
Н	CRITERIA FOR TELEPHONE RINGING SIGNALS		N/A
H.Y 🐠	General	CITE WITH WILL WILL	N/A
H.2	Method A	The state of the	N/A
H.3	Method B	WILL MILE MILE MALE	N/A
H.3.1	Ringing signal	No telephone ringing signal generated within the equipment.	N/A
H.3.1.1	Frequency (Hz)	et jet lijet nijet ini	_
H.3.1.2	Voltage (V)	1/12 1/11 1/21	_
H.3.1.3	Cadence; time (s) and voltage (V):	LIET OLIER WITE WALLE	_
H.3.1.4	Single fault current (mA)::	a a a	_
H.3.2	Tripping device and monitoring voltage	LIER WILL MULL MULL	N/A
H.3.2.1	Conditions for use of a tripping device or a monitoring voltage	Et liet wifet wifet an	N/A
H.3.2.2	Tripping device	111. 211. 21.	N/A
H.3.2.3	Monitoring voltage (V):	TEN JET STE STE WITH	N/A



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IEC 62368-1				Tree Mire Mire
Clause	Requirement – Test	AUTY AUT A	Result – Remark	Verdict

J	INSULATED WINDING WIRES FOR USE WITHO INSULATION	UT INTERLEAVED	N/A
J.1	General	The Mr. M. M.	N/A
liter will	Winding wire insulation	TEX STEX NUTER NUTER	_
A 1	Solid round winding wire, diameter (mm):	in the same	N/A
White of	Solid square and rectangular (flatwise bending) winding wire, cross-sectional area (mm²):	THE WALTER WALTER WALTER OF	N/A
J.2/J.3	Tests and Manufacturing	t let lift allet mi	ET 17
K	SAFETY INTERLOCKS		N/A
K.1	General requirements	TEX LIER NITER INTE	N/A
IFF OU	Instructional safeguard:	No safety interlock provided within the equipment.	N/A
K.2	Components of safety interlock safeguard mec	hanism	N/A
K.3	Inadvertent change of operating mode	ret tet tret with w	N/A
K.4	Interlock safeguard override		N/A
K.5	Fail-safe		N/A
K.5.1	Under single fault condition	We we will	N/A
K.6	Mechanically operated safety interlocks	ALTE MITE MITE	N/A
K.6.1	Endurance requirement	2 1 1 1	N/A
K.6.2	Test method and compliance:	The other mile while w	N/A
K.7	Interlock circuit isolation		N/A
K.7.1	Separation distance for contact gaps & interlock circuit elements	MILL WILL MILL WAS	N/A
Maria M	In circuit connected to mains, separation distance for contact gaps (mm):	MILIER WALTER WALTER WALTER	N/A
LIFE WAL	In circuit isolated from mains, separation distance for contact gaps (mm):	NIFEK WILLER WILLIER WILLER	N/A
ek whileh	Electric strength test before and after the test of K.7.2	(See appended table 5.4.9)	N/A
K.7.2	Overload test, Current (A)		N/A
K.7.3	Endurance test	MITER MALIE WALL WALL WALL	N/A
K.7.4	Electric strength test	L A A A	N/A
L	DISCONNECT DEVICES		N/A
L.1	General requirements	at the title title	N/A
L.2	Permanently connected equipment	The Maria Maria Maria	N/A
L.3	Parts that remain energized	at at let the	N/A
L.4	Single-phase equipment	Muri Mur Mur Mur	N/A
L.5	Three-phase equipment	A A A A	N/A



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	IEC 62368-1	27. "U. "A) 24. 14. 1	× ×
Clause	Requirement – Test	Result – Remark	Verdict
I C	Switches as disconnect devices	is mile mile me me	NI/A
L.6	Switches as disconnect devices	Alt Alt John J.	N/A
<i>a</i>	Plugs as disconnect devices	There were my	N/A
L.8	Multiple power sources	The second second	N/A
L 70,	Instructional safeguard	with the man	N/A
M	EQUIPMENT CONTAINING BATTERIES AND TH	HEIR PROTECTION CIRCUITS	7 P
M.1	General requirements	or any any any	Р
M.2	Safety of batteries and their cells	the set of the set	Р
M.2.1	Batteries and their cells comply with relevant IEC standards	Approved battery pack used	Р
M.3	Protection circuits for batteries provided within the equipment	antifer until muti wat.	W P
M.3.1	Requirements	THE STEEL WITE WHILE S	nui Pu
M.3.2	Test method	2111 1211	A P
MULL	Overcharging of a rechargeable battery	(See appended table Annex M)	Р
White W	Excessive discharging	(See appended table Annex M)	, In P
INLIES WILL	Unintentional charging of a non-rechargeable battery	No such battery used	N/A
IEK WITEK	Reverse charging of a rechargeable battery	Built-in battery used, reverse charging is prevented	N/A
M.3.3	Compliance	No chemical leakage, no spillage of liquid, no explosion of the battery, no emission of flame or expulsion of molten metal	EK P WALT
M.4	Additional safeguards for equipment containing lithium battery	g a portable secondary	Р
M.4.1	General	ALTE WALL WALL WALL	Р
M.4.2	Charging safeguards	Under normal operating conditions, abnormal operating conditions or single fault conditions, the charging voltage, charging current of the battery no exceed the maximum specified charging voltage and maximum specified charging current.	TE PA
M.4.2.1	Requirements	TEX STEE BUTE WALTER	N/A
M.4.2.2	Compliance:	(See appended table M.4.2)	J P J
M.4.3	Fire enclosure	V-0 fire enclosure used	Р
M.4.4	Drop test of equipment containing a secondary lithium battery	at the the the	- Pe

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Clause	Requirement – Test	Result – Remark	Verdict
Clause	Treduitettent – Test	Tresuit - Iremair	Verdict
M.4.4.2	Preparation and procedure for the drop test	THE THE THE	Р
M.4.4.3	Drop, Voltage on reference and dropped batteries (V); voltage difference during 24 h period (%)::	The voltage difference not exceed 5%.	W.B
M.4.4.4	Check of the charge/discharge function	Three complete discharge and charge cycles under normal operating conditions.	unti P
M.4.4.5	Charge / discharge cycle test	No fire, explosion and any electrolyte leakage	Р
M.4.4.6	Compliance	t tiet street mile one	.«IP
M.5	Risk of burn due to short-circuit during carrying	g ^{ull}	P-
M.5.1	Requirement	No bare conductive terminal used	JIN P
M.5.2	Test method and compliance	THE THE LITTER MITTER.	N/A
M.6	Safeguards against short-circuits	VE ME ME ME	Р
M.6.1	External and internal faults	EX LIEX OLIER WITE OF	N/A
M.6.2	Compliance	The battery complied with IEC 62133-2 which considered the internal fault tests. No such explosion or fire likely to result from short circuits.	P P
M.7	Risk of explosion from lead acid and NiCd batte	eries	N/A
M.7.1	Ventilation preventing explosive gas concentration	No such battery used	N/A
t lifet	Calculated hydrogen generation rate:	t let telt steet st	N/A
M.7.2	Test method and compliance	The Art Are My	N/A
OLITER OF	Minimum air flow rate, Q (m³/h)	let the the str	N/A
M.7.3	Ventilation tests	Mr. Mr. M. M.	N/A
M.7.3.1	General	TEX TEX STEX WITH	N/A
M.7.3.2	Ventilation test – alternative 1	Le Me Me Me	N/A
MALTE	Hydrogen gas concentration (%)	Et liet sliet wille so	N/A
M.7.3.3	Ventilation test – alternative 2	74 An	N/A
July 1	Obtained hydrogen generation rate	- TIER WITE MUTE MUSE	N/A
M.7.3.4	Ventilation test – alternative 3	The state of	N/A
we an	Hydrogen gas concentration (%)	CALIFE WALLE WALLE MALLE	N/A
M.7.4	Marking:	a to the second	N/A
M.8	Protection against internal ignition from externation with aqueous electrolyte	al spark sources of batteries	N/A
M.8.1	General	it still nite anticion	N/A
M.8.2	Test method	7/1 7/2 / XL _ C	N/A
M.8.2.1	General	LEK TER TER STE	N/A



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-20,	IEC 62368-1	KIT WE WE WAY	20, 20,
Clause	Requirement – Test	Result – Remark	Verdict
MARRA	Estimation of hypothetical values 1/ (m ³ /s)	the wife wait out	11/2 11/1
M.8.2.2	Estimation of hypothetical volume V_Z (m ³ /s):	The All Sites	150 100 100 100 100 100 100 100 100 100
M.8.2.3	Correction factors:	10, 11, 10, 1,	20,-
M.8.2.4	Calculation of distance d (mm):		th The
M.9	Preventing electrolyte spillage	Arry Mer Mer Mr.	N/A
M.9.1	Protection from electrolyte spillage	the fifth fifth	N/A
M.9.2	Tray for preventing electrolyte spillage	y mr mr m	N/A
M.10	Instructions to prevent reasonably foreseeable misuse	A WILLY WILLIAM ON THE A	N/A
All .	Instructional safeguard	Little St.	N/A
N 4	ELECTROCHEMICAL POTENTIALS	WHILE WHILE MUT, MU	N/A
	Material(s) used:	at at at it	y Jiet .
0 70	MEASUREMENT OF CREEPAGE DISTANCES A	AND CLEARANCES	N/A
A CLIER	Value of X (mm)	at let let let	NIEK TO
Р	SAFEGUARDS AGAINST CONDUCTIVE OBJECT	TS U	Р
P.1	General	See below	JI'S P
P.2	Safeguards against entry or consequences of entry of a foreign object		Р
P.2.1	General	ALTER ONLY	P.
P.2.2	Safeguards against entry of a foreign object	7 12 12	Р
in white	Location and Dimensions (mm)	No opening.	Write Au
P.2.3	Safeguards against the consequences of entry of a foreign object	t fet fet lifet	N/A
P.2.3.1	Safeguard requirements	Mur Mur Mur	N/A
Write M	The ES3 and PS3 keep-out volume in Figure P.3 not applicable to transportable equipment	WHITEK WALTER WALTER WA	N/A
LIEK WAL	Transportable equipment with metalized plastic parts:	NIER WIFEL MILER MALIE	N/A
P.2.3.2	Consequence of entry test:	a at at	N/A
P.3	Safeguards against spillage of internal liquids	TER SINITE WALL WALL	N/A
P.3.1	General	No such liquids.	N/A
P.3.2	Determination of spillage consequences	White Murit Murit A	N/A
P.3.3	Spillage safeguards	at at at	N/A
P.3.4	Compliance	perior mer mer me	N/A
P.4	Metallized coatings and adhesives securing pa	rts A A	N/A
P.4.1	General	No such construction.	N/A
P.4.2	Tests when the same state of t	et get get get	N/A
20,	Conditioning, T _C (°C):	Mur Mr Mg	2,
2516	Duration (weeks)	at let the	المالة المالة



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AV		2 2 1		
21/2		IEC 62368-1		
Clause	Requirement – Test	ri, Aur. Au. A.	Result – Remark	Verdict

Q /	CIRCUITS INTENDED FOR INTERCONNECTION	I WITH BUILDING WIRING	P
Q.1	Limited power sources	See appended table Annex Q.1	JI P
Q.1.1	Requirements	TEX STEX NITER MITER	P
1- 1	a) Inherently limited output	W W W	N/A
I WILL	b) Impedance limited output	THE STIFF OUTER WITE W	P
- 24	c) Regulating network limited output	4, 4,	N/A
MULL	d) Overcurrent protective device limited output	ALIER MITER WALL WALL	N/A
, et	e) IC current limiter complying with G.9	The state of	N/A
Q.1.2	Test method and compliance	See below	√l/ P
LIEK	Current rating of overcurrent protective device (A)	See appended table Annex Q.1	NLTE P
Q.2	Test for external circuits – paired conductor cable	No such circuit for connection to the EUT	N/A
72	Maximum output current (A)	mr. m. m.	N/A
	Current limiting method	TEX TEX STEE STEE	
R	LIMITED SHORT CIRCUIT TEST	Mr. Mr. A.	N/A
R.1	General	No such consideration.	N/A
R.2	Test setup		N/A
in whi	Overcurrent protective device for test:	The outer units white or	71, 41
R.3	Test method		N/A
	Cord/cable used for test	A WILLEY WHILE MUSIC MUSIC	in.
R.4	Compliance	a at at a	N/A
S	TESTS FOR RESISTANCE TO HEAT AND FIRE	WHILE MULL MULL MULL	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
et e	Samples, material		,et
Mer	Wall thickness (mm)	it will will an	<u> </u>
TEK	Conditioning (°C)	at at at a	* 1
My .	Test flame according to IEC 60695-11-5 with conditions as set out	White must write and	N/A
Wer a	- Material not consumed completely	CHIEF WILL MALL WALL	N/A
LEK 1	- Material extinguishes within 30s	the street	N/A
- ans	- No burning of layer or wrapping tissue	LIER WILL WILL AND A	N/A
S.2	Flammability test for fire enclosure and fire bar	rier integrity	N/A
1/1/2	Samples, material	"Write Mrs. Mar. Mr.	- True
All the	Wall thickness (mm):	L A A A	- AE



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Clause	Requirement – Test	Result – Remark	Verdict

15	Conditioning (°C)	a de de	t 18
S.3	Flammability test for the bottom of a fire enclosure		N/A
S.3.1	Mounting of samples	The second second	N/A
S.3.2	Test method and compliance	NITE WALL WALL WALL	N/A
	Mounting of samples		JEK-
	Wall thickness (mm)	ite mili mor mor m	70,
S.4	Flammability classification of materials	t at all all all	N/A
S.5	Flammability test for fire enclosure materials of equipment with a steady state power exceeding 4 000 W	Whit wife whitek whitek	N/A
	Samples, material	Mr. Mr. A.	, LE -
12. 14/4	Wall thickness (mm)	LIEB WITE WILL WALL V	12° -0
y 16	Conditioning (°C)		, et -
L m	MECHANICAL STRENGTH TESTS	TER WILL MULT ME ME	Р
T.1	General		P
T.2	Steady force test, 10 N:	(See appended table T.2)	Р
T.3	Steady force test, 30 N:	TEX TEX	N/A
T.4	Steady force test, 100 N:	The first man	N/A
T.5	Steady force test, 250 N	(See appended table T.5)	ITE P
T.6	Enclosure impact test	(See appended table T.6)	Р
	Fall test	of the life with and	Р
	Swing test	Mr. Mr. Mr.	Р
T.7	Drop test	(See appended table T.7)	NIL P
T.8	Stress relief test:	(See appended table T.8)	P
T.9	Glass Impact Test:	No such glass	N/A
T.10	Glass fragmentation test		
	Number of particles counted:	No such glass	N/A
T.11	Test for telescoping or rod antennas		N/A
	Torque value (Nm):	No such antennas provided within the equipment.	N/A
Ú	MECHANICAL STRENGTH OF CATHODE RAY TUBES (CRT) AND PROTECTION AGAINST THE EFFECTS OF IMPLOSION		N/A
Ù.1 🐠	General		N/A
ik naliek	Instructional safeguard:	No CRT provided within the equipment.	N/A
U.2	Test method and compliance for non-intrinsical	ly protected CRTs	N/A
U.3	Protective screen		N/A



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

Olddoo		Et ITET STILL BUTE WA	To the
V	DETERMINATION OF ACCESSIBLE PARTS	Any Any Any Any	N/A
V.1	Accessible parts of equipment	- LIEF WILL MILE MILE	N/A
V.1.1	General	The state of	N/A
V.1.2	Surfaces and openings tested with jointed test probes	NITER WALTE WALL WALL	N/A
V.1.3	Openings tested with straight unjointed test probes	THE LITER OLITER MOLIES OF	N/A
V.1.4	Plugs, jacks, connectors tested with blunt probe	111 111	N/A
V.1.5	Slot openings tested with wedge probe	A STEEL WITE WITE WHI	N/A
V.1.6	Terminals tested with rigid test wire	Chi A A	N/A
V.2	Accessible part criterion	CLIEB WILL WALL WALL	N/A
Xex once	ALTERNATIVE METHOD FOR DETERMINING CLINSULATION IN CIRCUITS CONNECTED TO AN 420 V PEAK (300 V RMS)		N/A
y CLIE	Clearance	of set set set set	N/A
Y	CONSTRUCTION REQUIREMENTS FOR OUTDO	OR ENCLOSURES	N/A
Y.1	General	Indoor equipment	N/A
Y.2	Resistance to UV radiation	The	N/A
Y.3	Resistance to corrosion	St Chile Mile	N/A
Y.3	Resistance to corrosion	_1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N/A
Y.3.1	Metallic parts of outdoor enclosures are resistant to effects of water-borne contaminants by	THE WALLE WALLE A	N/A
Y.3.2	Test apparatus	of the text of the sail	N/A
Y.3.3	Water – saturated sulphur dioxide atmosphere	Mr. Mr. M. M.	N/A
Y.3.4	Test procedure	TEX LIEX SLIER WITE	N/A
Y.3.5	Compliance	The American	N/A
Y.4	Gaskets	TEX LIER WILL WILL	N/A
Y.4.1	General	L. 24	N/A
Y.4.2	Gasket tests	EX OLIER WITE WITE M	N/A
Y.4.3	Tensile strength and elongation tests	701 1	N/A
ang 1	Alternative test methods	CITER WILL MULL AND	N/A
Y.4.4	Compression test	1 1 1 10 10	N/A
Y.4.5	Oil resistance	WILL MILL MULL MULL	N/A
Y.4.6	Securing means	a state of the	N/A
Y.5	Protection of equipment within an outdoor enclo	osure and an	N/A
Y.5.1	General	at the little	N/A
Y.5.2	Protection from moisture	MULL MULL MULL MI	N/A
(TEX	Relevant tests of IEC 60529 or Y.5.3	at at at a	N/A



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IEC 62368-1				
Clause	Requirement – Test	Result – Remark	Verdict	
alex	all the second	THE SUIT WITH SING	The Aller	
Y.5.3	Water spray test	24. 24. 25.	N/A	
Y.5.4	Protection from plants and vermin	LIER SLIER WITE SMITE	W/A	
Y.5.5	Protection from excessive dust	n 24	N/A	
Y.5.5.1	General	TEX OLIEN WITE WALL OF	N/A	
Y.5.5.2	IP5X equipment		N/A	
Y.5.5.3	IP6X equipment	RITE WALL WALL WAS	N/A	
Y.6	Mechanical strength of enclosures	L A At Al	N/A	
Y.6.1	General	WILL MULL MULL COURT	N/A	
Y.6.2	Impact test	military of the	N/A	

MANAGE E



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IEC 62368-1 LIFE MALE WALL WALL WALL WALL WALL WALL WALL W				
Clause	Requirement – Test	Mur. M. M.	Result – Remark	Verdict

ATTACHMENT TO TEST REPORT

IEC 62368-1

EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES

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

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

Attachment Form No.....: EU_GD_IEC62368_1E

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

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

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in aller	CENELEC COMMON MODIFICATIONS (EN)	The MULL MULL MULL MU	Р
MULIER A	Clause numbers in the cells that are shaded light g IEC 62368-1:2020+A11:2020. All other clause num those in the paragraph below, refers to IEC 62368-Clauses, subclauses, notes, tables, figures and and those in IEC 62368-1:2018 are prefixed "Z".	nbers in that column, except for 1:2018.	P. Wint
NET JUNE	Add the following annexes: Annex ZA (normative)Normative references to interr corresponding European publications	national publications with their	P
	Annex ZB (normative)Special national conditions Annex ZC (informative)A-deviations Annex ZD (informative)IEC and CENELEC code des	signations for flexible cords	
1	Modification to Clause 3.		N/A
3.3.19	Sound exposure Replace 3.3.19 of IEC 62368-1 with the following definitions:		N/A
3.3.19.1	momentary exposure level, MEL metric for estimating 1 s sound exposure level from the HD 483-1 S2 test signal applied to both channels, based on EN 50332-1:2013, 4.2. Note 1 to entry: MEL is measured as A-weighted levels in dB. Note 2 to entry: See B.3 of EN 50332-3:2017 for additional information.	Not such equipment	N/A
3.3.19.3	sound exposure, E A-weighted sound pressure (p) squared and integrated over a stated period of time, T Note 1 to entry: The SI unit is Pa² s. T $E = \int_{0}^{T} p(t)^{2} dt$	onlie while	N/A



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

Clause	Trequirement – rest	Mesuit – Memark	Verdict
00404	1 1	The transition of the state of	N1/A
3.3.19.4	sound exposure level, SEL logarithmic measure of sound exposure relative to a reference value, <i>Eo</i> , typically the 1 kHz threshold of hearing in humans.	MALIER MALIER MALIER MALI	N/A
	Note 1 to entry: SEL is measured as A-weighted levels in dB.	Liter white white white	The Th
	$SEL = 10 \lg \left(\frac{E}{E_0}\right) dB$	ex uniter uniter uniter v	
	Note 2 to entry: See B.4 of EN 50332-3:2017 for additional information.	anti ant and an	A WILER
3.3.19.5	digital signal level relative to full scale, dBFS	nergalize me me	N/A
	levels reported in dBFS are always r.m.s. Full scale level, 0 dBFS, is the level of a dc-free 997-Hz sine wave whose undithered positive peak value is positive digital full scale, leaving the code corresponding to negative digital full scale unused	TEX WHITEX WHITEX WHITEX	NI H WAL
WILLER OF	Note 1 to entry: It is invalid to use dBFS for non-r.m.s. levels. Because the definition of full scale is based on a sine wave, the level of signals with a crest factor lower than that of a sine wave may exceed 0 dBFS. In particular, square wave signals may reach +3,01 dBFS.	Whitek whitek whitek whi	EK WHITEK
2	Modification to Clause 10		N/A
10.6	Safeguards against acoustic energy sources		N/A
. alex	Replace 10.6 of IEC 62368-1 with the following:	iter unite wall wall	the the
10.6.1.1	Introduction	Not such equipment	N/A
	Safeguard requirements for protection against long-term exposure to excessive sound pressure levels from personal music players closely coupled to the ear are specified below. Requirements for earphones and headphones intended for use with personal music players are also covered. A personal music player is a portable equipment intended for use by an ordinary person, that:	United Whitek Whitek Whitek	MILTER W
	 is designed to allow the user to listen to audio or audiovisual content / material; and uses a listening device, such as headphones or earphones that can be worn in or on or 	MATER WALTER WALTER WA	TE WALTER
	around the ears; and - has a player that can be body worn (of a size suitable to be carried in a clothing pocket) and is intended for the user to walk around with while in continuous use (for example, on a street, in a subway, at an airport, etc.).	NATER WALTER WALTER WALTER	our Tex our
	around the ears; and – has a player that can be body worn (of a size suitable to be carried in a clothing pocket) and is intended for the user to walk around with while in continuous use (for example, on a street, in a	INTEK WALTER WALTER WALTER	on liet on



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IEC 62368-1			
Clause	Requirement – Test	Result – Remark	Verdict
alle	NOTE 1 Protection against acoustic energy sources from	WILL WILL MILL	71, 711.
	telecom applications is referenced to ITU-T P.360.	1 1 1	LET LET
	NOTE 2 It is the intention of the Committee to allow the	SLIFE MLIE MALIE	Murr Mur
	alternative methods for now, but to only use the dose	24. 24. 25.	1 1
	measurement method as given in 10.6.5 in future. Therefore, manufacturers are encouraged to implement 10.6.5 as soon as	LET THE LIER OF	LIEN JALIE S
	possible.	here were an	. 2
	Listening devices sold separately shall comply	a state of	et let i
	with the requirements of 10.6.6.	The nite intit with	The The
	These requirements are valid for music or video	1111 111	A- 3
	mode only.	THE THE SHE	" NITE MITE
	The requirements do not apply to:	MULL MAL MAN	2/1.
	- professional equipment;	the state of	LET TEXT
	NOTE 3Professional equipment is equipment sold through	alter white white	iver inver
	special sales channels. All products sold through normal	14. 24. 25. 1	d de
	electronics stores are considered not to be professional equipment.	at all the	TER OUTE OF
	очиринени.	The war war	20, 20,
	- hearing aid equipment and other devices for	1 1 1 1	+ 4 4
	assistive listening;	The stiff of the south	MUT MUT
	- the following type of analogue personal music	24, 20, 20,	1 1
	players: • long distance radio receiver (for example, a	- Let let tell	alien white
	multiband radio receiver or world band radio	anti wat was	21/2 20.
	receiver, an AM radio receiver), and		at let
	cassette player/recorder;	- CIT WITH N	VII. 2 VI. 1
	NOTE 4 This exemption has been allowed because this	2 / 10 / 2	
	technology is falling out of use and it is expected that within a		The way the way
	few years it will no longer exist. This exemption will not be extended to other technologies.	in with the the	20, 20.
	extended to other technologies.	1 1 1	- x6 - x6
	- a player while connected to an external amplifier	THE NUTE WALL	MUT. MET
	that does not allow the user to walk around while	24, 24, 2.	4 *
	in use.	LEK TEK TEK	ALTER ALTER
	For equipment that is clearly designed or intended	aury Mur. Mur.	20. 20.
	primarily for use by children, the limits of the	1 1	et set
	relevant toy standards may apply.	LIER SLIER WILL W	17 M. M. M.
	TIGHT SET THE STEET STATE WILL W	1. M. M. M.	1
	The relevant requirements are given in EN 71-1:2011, 4.20 and the related tests methods	at let let it	
	and measurement distances apply.	when the me	10. 10.
10.6.1.2	Non-ionizing radiation from radio frequencies	1 1 1 1	N/A
21/2 2	in the range 0 to 300 GHz	WITE WILL WALL	Mr. Mr.
	The amount of non-ionizing radiation is regulated	27, 7,	A 14
	by European Council Recommendation	TEN TEN TEN	MIT WILL
	1999/519/EC of 12 July 1999 on the limitation of	ale ale ale a	
	exposure of the general public to electromagnetic	at the st.	CENT TENT
	fields (0 Hz to 300 GHz). For intentional radiators, ICNIRP guidelines should	LIER WITE WILL WA	The The
	be taken into account for Limiting Exposure to	20, 20,	
	Time-Varying Electric, Magnetic, and	of the text the	" INLI" INLI
	Electromagnetic Fields (up to 300 GHz). For hand-	WALL WALL WALL	21, 22,
	held and body mounted devices, attention is	1 4 2	LET LET
	drawn to EN 50360 and EN 50566.	THE TO LIVE	10 10 m



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IEC 62368-1				
Clause	Requirement – Test	Mr. M. M.	Result – Remark	Verdict

10.6.2	Classification of devices without the capacity to estimate sound dose		N/A
10.6.2.1 W LIFEY WILLIES WIL	General This standard is transitioning from short-term based (30 s) requirements to long-term based (40 hour) requirements. These clauses remain in effect only for devices that do not comply with sound dose estimation as stipulated in EN 50332-3. For classifying the acoustic output <i>L</i> _{Aeq, T} , measurements are based on the A-weighted equivalent sound pressure level over a 30 s period. For music where the average sound pressure (long term <i>L</i> _{Aeq, T}) measured over the duration of the song is lower than the average produced by the programme simulation noise, measurements may be done over the duration of the complete song. In this case, <i>T</i> becomes the duration of the song. NOTE Classical music, acoustic music and broadcast typically has an average sound pressure (long term <i>L</i> _{Aeq, T}) which is much lower than the average programme simulation noise. Therefore, if the player is capable to analyse the content and compare it with the programme simulation noise, the warning does not need to be given as long as the average sound pressure of the song does not exceed the required limit. For example, if the player is set with the programme simulation noise to 85 dB, but the average music level of the song is only 65 dB, there is no need to give a warning or ask an	Not such equipment	N/A N/A N/A N/A I I I I I I I I I I I I I I I I I I I
10.6.2.2 JUNETER WALTER MILITER WALTER MILI	acknowledgement as long as the average sound level of the song is not above the basic limit of 85 dB. RS1 limits (to be superseded, see 10.6.3.2) RS1 is a class 1 acoustic energy source that does not exceed the following: — for equipment provided as a package (player with its listening device), and with a proprietary connector between the player and its listening device, or where the combination of player and listening device is known by other means such as setting or automatic detection, the LAeq, r acoustic output shall be ≤ 85 dB when playing the fixed "programme simulation noise" described in EN 50332-1. — for equipment provided with a standardized connector (for example, a 3,5 phone jack) that allows connection to a listening device for general use, the unweighted r.m.s. output voltage shall be ≤ 27 mV (analogue interface) or -25 dBFS (digital interface) when playing the fixed "programme simulation noise" described in EN 50332-1. — The RS1 limits will be updated for all devices as	White	N/A



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IEC 62368-1				
Clause	Requirement – Test	Result – Remark	Verdict	
10.6.2.3	RS2 limits (to be superseded, see 10.6.3.3)	ite mili viet un	N/A	

Clause	Requirement – Test	Result – Remark	Verdict
10.6.2.3	RS2 limits (to be superseded, see 10.6.3.3)	were mer mer	N/A
intitet all	A Maria Maria Andrew Maria	LET SET SET OF	LIEN MITE.
	RS2 is a class 2 acoustic energy source that does	They were the in	20
	not exceed the following:	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	it till .
	 for equipment provided as a package (player with its listening device), and with a proprietary 	LITE MITE WALL WALL	2/2 2/1
	connector between the player and its listening	100	. 1
	device, or when the combination of player and	et tet iter street	The Street
	listening device is known by other means such as	The Mr. M.	4,
	setting or automatic 130 detection, the L Aeq, $ au$	and the state of	THE THE
	acoustic output shall be ≤ 100 dB(A) when playing	Still while while w	16.
	the fixed "programme simulation noise" as described in EN 50332-1.	20, 20	A 15
	– for equipment provided with a standardized	TEX TEX STEEL OF	The Maria
	connector (for example, a 3,5 phone jack) that	We are are a	
	allows connection to a listening device for general	I A At At A	the other of
	use, the unweighted r.m.s. output voltage shall be	TER OLIVE WALL WALL	211 211
	≤ 150 mV (analogue interface) or -10 dBFS (digital interface) when playing the fixed "programme	20, 20	* 4
	simulation noise" as described in EN 50332-1.	ex lex lies with	WILL WILL
10.6.2.4	RS3 limits	Mr. Mr. M.	N/A
	RS3 is a class 3 acoustic energy source that	TEX TEX STEP OF	THE WALL
	exceeds RS2 limits.	Wer Mr. M. M.	
0.6.3	Classification of devices (new)		N/A
0.6.3.1	General	Not such equipment	N/A
	Previous limits (10.6.2) created abundant false	THE LITER	NITE IN
	negative and false positive PMP sound level warnings. New limits, compliant with The	The water was	20,
	Commission Decision of 23 June 2009, are given	1 + 4	46 JE
Why.	below.	- LIFE WITH WALL S	nr. mr.
0.6.3.2	RS1 limits (new)	20 24 St	N/A
	RS1 is a class 1 acoustic energy source that does	LIER OLIES WITE W	THE STATE OF
	not exceed the following: – for equipment provided as a package (player	n in in	
	with its listening device), and with a proprietary	LEK LEK LIEK LIE	Lite of
	connector between the player and its listening	rest with which will	20 10
	device, or where the combination of player and	L A A A	10t S
	listening device is known by other means such as	CAL STEP WITE MINITE	The The
	setting or automatic detection, the LAeq, τ acoustic	The In In	1
	output shall be ≤ 80 dB when playing the fixed "programme simulation noise" described in EN	BEET TEST TEST	ALTE MITE
	50332-1.	with my my m	10
	for equipment provided with a standardized		at all
	connector (for example, a 3,5 phone jack) that	LIER WILL WILL MILL	1000 7
	allows connection to a listening device for general	114 24 25	
	use, the unweighted r.m.s. output voltage shall be ≤ 15 mV (analogue interface) or -30 dBFS (digital	et let let let	IN TE NIN
	interface) when playing the fixed "programme	The Mer Me	21, 20
TEL	simulation noise" described in EN 50332-1.	and the state of	55 JE
10.6.3.3	RS2 limits (new)	White Mulit Wall	N/A
	RS2 is a class 2 acoustic energy source that does	1 4 24	LET JEH
	not exceed the following:	LIER SLIE WITH NO	ir, mir.
	for equipment provided as a package (player)	1. 11. 12. 12.	



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01		D 4 D	1,
Clause	Requirement – Test	Result – Remark	Verdict
UNLIFER WA	with its listening device), and with a proprietary connector between the player and its listening device, or where the combination of player and listening device is known by other means such as setting or automatic detection, the weekly sound exposure level, as described in EN 50332-3, shall be ≤ 80 dB when playing the fixed "programme simulation noise" described in EN 50332-1. — for equipment provided with a standardized connector (for example, a 3,5 phone jack) that allows connection to a listening device for general use, the unweighted r.m.s. output level, integrated over one week, as described in EN50332-3, shall be ≤ 15 mV (analogue interface) or -30 dBFS (digital interface) when playing the fixed "programme simulation noise" described in EN50332-1.	AUNTER WILLER WILLER WILLER WILLER WILLER WILLER WILLER WILLER WILLER WILLER WILLER WILLER WILLER	ALTER WALTER WAL
10.6.4	Requirements for maximum sound exposure	The Mark Mark Miles	N/A
10.6.4.1	Measurement methods All volume controls shall be turned to maximum during tests. Measurements shall be made in accordance with	Not such equipment	N/A
10.6.4.2	EN 50332-1 or EN 50332-2 as applicable. Protection of persons	at the same	N/A
10.0.4.2	Except as given below, protection requirements for parts accessible to ordinary persons, instructed persons and skilled persons are given in 4.3.	in white white white	WA WA
	NOTE 1 Volume control is not considered a safeguard.	WALTER WALTE WALT.	Mur. Mur.
	Between RS2 and an ordinary person , the basic safeguard may be replaced by an instructional safeguard in accordance with Clause F.5, except that the instructional safeguard shall be placed on the equipment, or on the packaging, or in the instruction manual. Alternatively, the instructional safeguard may be given through the equipment display during use.	untitek wattek wattek water	EX WITEX ON
	The elements of the instructional safeguard shall be as follows:	ONLIEK MULIEK MULIEK	UNLIEK WALTER
	- element 1a: the symbol , IEC 60417-6044 (2011-01) - element 2: "High sound pressure" or equivalent wording - element 3: "Hearing damage risk" or equivalent	Miller Whiter Whiter White	TEX MITEX W
	wording – element 4: "Do not listen at high volume levels for long periods." or equivalent wording	Whitek whitek whitek	white white
		1 1	100



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IEC 62368-1					
Clause	Requirement – Test	Result – Remark	Verdict		
all'i	THE THE THE THE	A STEE OUT MILE	The Me		
	of an ordinary person to an RS2 source without intentional physical action from the ordinary person and shall automatically return to an output level not exceeding what is specified for an RS1 source when the power is switched off. The equipment shall provide a means to actively	JUNETER WHITER WHITER	TEK WHITEK		
	inform the user of the increased sound level when the equipment is operated with an output exceeding RS1. Any means used shall be acknowledged by the user before activating a mode of operation which allows for an output exceeding RS1. The acknowledgement does not need to be repeated more than once every 20 h of cumulative listening time.	EX WALTER WALTER WALTER	White white hard		
	NOTE 2 Examples of means include visual or audible signals. Action from the user is always needed. NOTE 3 The 20 h listening time is the accumulative listening	TEX WATER WATER WAT	SER WILLER W		
	time, independent of how often and how long the personal music player has been switched off.	MULTER MULTER WHITE	MULL MULL		
MULITER A	A skilled person shall not be unintentionally exposed to RS3.	MITER WALTER SINITER	MULLE MULLE		
10.6.5	Requirements for dose-based systems		N/A		
10.6.5.1	General requirements Personal music players shall give the warnings as provided below when tested according to EN 50332-3, using the limits from this clause. The manufacturer may offer optional settings to allow the users to modify when and how they wish to receive the notifications and warnings to promote a better user experience without defeating the safeguards. This allows the users to be informed in a method that best meets their physical capabilities and device usage needs. If such optional settings are offered, an administrator (for example, parental restrictions, business/educational administrators, etc.) shall be able to lock any optional settings into a specific configuration. The personal music player shall be supplied with easy to understand explanation to the user of the	Not such equipment	N/A EX UNITE UNITE MILITER MILITER MILITER MILITER MILITER MILITER MILITER MILITER MILITER MILITER MILIT		
Wilek Mille Tex Mulie	easy to understand explanation to the user of the dose management system, the risks involved, and how to use the system safely. The user shall be made aware that other sources may significantly contribute to their sound exposure, for example work, transportation, concerts, clubs, cinema, car races, etc.	TEX WHITEK WHITEK WHI	THE MILES		
10.6.5.2	Dose-based warning and requirements	TO MALTER WALTE	N/A		
	When a dose of 100 % <i>CSD</i> is reached, and at least at every 100 % further increase of <i>CSD</i> , the device shall warn the user and require an	TEX TEX STEX	ALTEK MITEK		



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-21,	IEC 62368-1	LIL WILL WALL WALL	771. 12.
Clause	Requirement – Test	Result – Remark	Verdict
an.	asknowledgement. In each the year door not	White Mary Mary	The An
	acknowledgement. In case the user does not acknowledge, the output level shall automatically	1 4 4	LEY LEY
	decrease to compliance with class RS1.	LIER SLIE WITE	Will Mar
	- ex rex iter with with whi	24/2 24 24 24 1	
	The warning shall at least clearly indicate that	at at the	TER LITE
	listening above 100 % CSD leads to the risk of	KELL MULL MULL MAN	70, 2
!	hearing damage or loss.		. الحال ا
0.6.5.3	Exposure-based requirements	EX LIER ALTER MLTE	N/A
	With only dose-based requirements, cause and	24 24 24 25	
	effect could be far separated in time, defying the	at the text	LIE RLIE
	purpose of educating users about safe listening practice. In addition to dose-based requirements,	intit with with	271,
	a PMP shall therefore also put a limit to the short-	20.	at at
	term sound level a user can listen at.	TEX LIER OLIVE OF	Lite William
	I A LEK TEK TEK MITT MITT	Mr. Mr. Mr. 2011. 201	
	The exposure-based limiter (EL) shall	at it it is	Et JEE .
	automatically reduce the sound level not to exceed	The only with whi	211, 211
	100 dB(A) or 150 mV integrated over the past 180 s, based on methodology defined in EN 50332-3.	1 1	. * .
	The EL settling time (time from starting level	et let lier slier	WILL WALL
	reduction to reaching target output) shall be 10 s	The Me in	70
	or faster.	the state of	TEX TEX
		WITE WILL WILL A	We also
	Test of EL functionality is conducted according to		* st
	EN 50332-3, using the limits from this clause. For equipment provided as a package (player with its	LET STIFF OF	I'm All C
	listening device), the level integrated over 180 s	- 1 2n 2n	
	shall be 100 dB or lower. For equipment provided	* * * * * * * * * * * * * * * * * * *	the State of
	with a standardized connector, the unweighted	TER WILL MULT MULT	210 211
	level integrated over 180 s shall be no more than	20, 2,	11- 18
	150 mV for an analogue interface and no more	- TELL STEP STEP	WILL WILL
	than -10 dBFS for a digital interface.	The Mer Me	10 2
	NOTE In case the source is known not to be music (or test signal), the EL may be disabled.	THE THE STEEL	ALTER MITER
0.6.6	Requirements for listening devices (headphone	s, earphones, etc.)	N/A
0.6.6.1	Corded listening devices with analogue input	Not such equipment	N/A
	With 94 dB LAeq acoustic pressure output of the	in my my m	
	listening device, and with the volume and sound	at the title	To the said
	settings in the listening device (for example, built-	E WILL MULL MULL	21/2
	in volume level control, additional sound features like equalization, etc.) set to the combination of		
	positions that maximize the measured acoustic	TEX LIFE SLIFE	Will White
	output, the input voltage of the listening device	Mr. Mr. M.	
	when playing the fixed "programme simulation	at the left.	TEX LIET
	noise" as described in EN 50332-1 shall be ≥ 75	WITE WILL WALL MY	471
	mV.		,+ .J+
	NOTE The values of 94 dB and 75 mV correspond with 85 dB	TEX STEEL STEEL SINLY	-11 Ju
	and 27 mV or 100 dB and 150 mV.	The Mr. Mr.	
0.6.6.2	Corded listening devices with digital input	t let let liet	N/A
	With any playing device playing the fixed	were also all	20, 1
	"programme simulation noise" described in EN 50332-1, and with the volume and sound settings	at at at	TEX TEX
	in the listening device (for example, built-in volume		4 Th



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	IEC 62368-1		
Clause	Requirement – Test	Result – Remark	Verdict
alle	THE THE THE	alle will and whi	2h
unitek uni	level control, additional sound features like equalization, etc.) set to the combination of positions that maximize the measured acoustic output, the $L_{Aeq,\tau}$ acoustic output of the listening device shall be ≤ 100 dB with an input signal of - 10 dBFS.	antifek antifek antifek antifek	MULEK M
10.6.6.3	Cordless listening devices	1 1 A A	N/A
Whitek white	In cordless mode, — with any playing and transmitting device playing the fixed programme simulation noise described in EN 50332-1; and — respecting the cordless transmission standards, where an air interface standard exists that specifies the equivalent acoustic level; and — with volume and sound settings in the receiving device (for example, built-in volume level control, additional sound features like equalization, etc.) set to the combination of positions that maximize the measured acoustic output for the above mentioned programme simulation noise, the LAeq, 7 acoustic output of the listening device shall be ≤ 100 dB with an input signal of -10 dBFS.	MULTER MULTER WHITE WHITE WHITER	WING WALTER WALTER WALTER WALTER
10.6.6.4	Measurement method	Will will man and	N/A
NITEH WA	Measurements shall be made in accordance with EN 50332-2 as applicable.	At THE RIPE	PLIEK NO
3	Modification to the whole document		Р



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	11. 11. 11. 11.			
20		IEC 62368-1		
Clause	Requirement – Test	The Apr 20	Result – Remark	Verdict

AL CAN	st: W					
. E.	0.2.1	Note 1 and 2	1	Note 4 and 5	3.3.8.1	Note 2
	3.3.8.3	Note 1	4.1.15	Note	4.7.3	Note 1 and 2
- 21	5.2.2.2	Note	5.4.2.3.2.2 Table 12	Note c	5.4.2.3.2.4	Note 1 and 3
_ <	5.4.2.3.2.4	Note 2	5.4.2.5	Note 2	5.4.5.1	Note
	Table 13					
50	5.4.10.2.1	Note	5.4.10.2.2	Note	5.4.10.2.3	Note
٠,	5.5.2.1	Note	5.5.6	Note	5.6.4.2.1	Note 2 and 3 and 4
1,5	5.6.8	Note 2	5.7.6	Note	5.7.7.1	Note 1 and Note 2
	8.5.4.2.3	Note	10.2.1 Table 39	Note 3 and 4 and 5	10.5.3	Note 2
è	10.6.1	Note 3	F.3.3.6	Note 3	Y.4.1	Note
	Y.4.5	Note				
ی				AT AV		Z' 'N' '
ı	Modification	to Clause 1				
1		ving note: e of certain substa ent is restricted w			Mrtek Mrt	EE WALTER WA
_	Modification	to 1 71				



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100		3 1 11			
IEC 62368-1					
Clause	Requirement – Test	All All All	Result – Remark	Verdict	

4.Z1	Add the following new subclause after 4.9:	Not directly connected to the	N/A
dunties und tites untites untites untites untites untites vantites untites vantites untites vantites untites	To protect against excessive current, short-circuits and earth faults in circuits connected to an a.c. mains, protective devices shall be included either as integral parts of the equipment or as parts of the building installation, subject to the following, a), b) and c): a) except as detailed in b) and c), protective devices necessary to comply with the requirements of B.3.1 and B.4 shall be included as parts of the equipment; b) for components in series with the mains input to the equipment such as the supply cord, appliance coupler, r.f.i. filter and switch, short-circuit and earth fault protection may be provided by protective devices in the building installation; c) it is permitted for pluggable equipment type B or permanently connected equipment, to rely on dedicated overcurrent and short-circuit protection in the building installation, provided that the means of protection, e.g. fuses or circuit breakers, is fully specified in the installation instructions. If reliance is placed on protection in the building installation, the installation instructions shall so state, except that for pluggable equipment type A the building installation shall be regarded as providing protection in accordance with the rating of the wall socket outlet.	mains Interest white the property of the prop	WALTER OF STEEL OF ST
6	Modification to 5.4.2.3.2.4		N/A
5.4.2.3.2.4	Add the following to the end of this subclause: The requirement for interconnection with external circuit is in addition given in EN 50491-3:2009.	No connection to external circuit.	N/A
7	Modification to 10.2.1		N/A
10.2.1	Add the following to c) and d) in table 39: For additional requirements, see 10.5.1.	No such radiation from the equipment.	N/A
8	Modification to 10.5.1		N/A



N/A

N/A

Ρ

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For RS1, the dose-rate shall not exceed 1 μ Sv/h

NOTE Z2 These values appear in Directive 96/29/Euratom of

NOTE Z1 The harmonized code designations corresponding to the IEC cord types are given in Annex ZD.

taking account of the background level.

13 May 1996.

G.7.1

10

Modification to G.7.1

Add the following note:

Modification to Bibliography

IEC 62368-1				
Clause	Requirement – Test	Result – Remark	Verdict	
alle	THE THE THE THE	A STATE OF THE STA	The Mark	
10.5.1	Add the following after the first paragraph:	20, 20,	N/A	
	For RS 1 compliance is checked by measurement under the following conditions:	MINITER WALTER WALTER	MULLE MULL	
	In addition to the normal operating conditions, all controls adjustable from the outside by hand, by any object such as a tool or a coin, and those internal adjustments or pre-sets which are not locked in a reliable manner, are adjusted so as to give maximum radiation whilst maintaining an intelligible picture for 1 h, at the end of which the measurement is made.	LITER WHITER WHITER WHITER	EX WHITE WHITE	
	NOTE Z1 Soldered joints and paint lockings are examples of adequate locking.	WILLER WHILER WHILER	Write Murie	
	The dose-rate is determined by means of a radiation monitor with an effective area of 10 cm², at any point 10 cm from the outer surface of the apparatus.	TEX WHITEX WHITEX WH	TEK UNITER UN	
	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.	Whitek whitek whitek	Whitek Whitek	



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in mi	Ang Ang Ang	IEC 62368-1	ITE WITE WALLER W	KLIE WILL WILL
Clause	Requirement – Test	The Maria May an	Result – Remark	Verdict

elle.	The the time time time the time time time time time tim	in the way of the	411.
All the	Add the following notes for the standards indicated:	The state of	P
	IEC 80130-9 NOTE Harmonized as EN 8013 IEC 80269-2 NOTE Harmonized as EN 8023 IEC 80309-1 NOTE Harmonized as EN 8031 IEC 80364 NOTE some parts harmonized IEC 80601-2-4 NOTE Harmonized as EN 8060 IEC 80664-5 NOTE Harmonized as EN 8060 IEC 81032:1997 NOTE Harmonized as EN 8103 IEC 81508-1 NOTE Harmonized as EN 8153 IEC 81558-2-1 NOTE Harmonized as EN 8154 IEC 81558-2-4 NOTE Harmonized as EN 8155 IEC 81658-2-6 NOTE Harmonized as EN 8155 IEC 81643-1 NOTE Harmonized as EN 8164 IEC 81643-311 NOTE Harmonized as EN 8164 IEC 81643-321 NOTE Harmonized as EN 8164 IEC 81643-321 NOTE Harmonized as EN 8164 IEC 81643-331 NOTE Harmonized as EN 8164 IEC 81643-331 NOTE Harmonized as EN 8164	69-2. 09-1. in HD 384/HD 60364 series. 01-2-4. 64-5. 32:1998 (not modified). 08-1. 58-2-1. 58-2-4. 58-2-6. 43-1. 43-311.	WALTER WALTER
11	ADDITION OF ANNEXES		Р
ZB 🏕	ANNEX ZB, SPECIAL NATIONAL CONDITIONS (EN)	Р
4.1.15 S	Denmark, Finland, Norway and Sweden To the end of the subclause the following is added: Class I pluggable equipment type A intended for connection to other equipment or a network shall, if safety relies on connection to reliable earthing or if surge suppressors are connected between the network terminals and accessible parts, have a marking stating that the equipment shall be connected to an earthed mains socket-outlet. The marking text in the applicable countries shall be as follows: In Denmark: "Apparatets stikprop skal tilsluttes en stikkontakt med jord som giver forbindelse til stikproppens jord." In Finland: "Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan" In Norway: "Apparatet må tilkoples jordet stikkontakt" In Sweden: "Apparaten skall anslutas till jordat uttag"	Not directly connected to the mains	N/A SEEL MILITE MILITER MIL
4.7.3	United Kingdom To the end of the subclause the following is added: The torque test is performed using a socket-outlet complying with BS 1363, and the plug part shall be assessed to the relevant clauses of BS 1363. Also see Annex G.4.2 of this annex	TEK WALTER WALTER WALTER WALTER	N/A



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10 0			1 1 10		
IEC 62368-1					
Clause	Requirement – Test	Mary Mr. M.	Result – Remark	Verdict	

5.2.2.2	Denmark	No high touch current	N/A	
	After the 2nd paragraph add the following:	measured.	White	
	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.	street waters waters waters	H WILLEH	
5.4.11.1	Finland and Sweden	No such external circuits.	N/A	
and Annex G	To the end of the subclause the following is added:	es unite unite unit u	ne was	
	For separation of the telecommunication network from earth the following is applicable:	multer mult mult mi	t TEX	
	If this insulation is solid, including insulation forming part of a component, it shall at least consist of either	united white white white	JUNE .	
	two layers of thin sheet material, each of which shall pass the electric strength test below, or	the main main was .	511 EX	
	one layer having a distance through insulation of at least 0,4 mm, which shall pass the electric strength test below.	MITEL WILL MILLER WILL	EK MUTIEK	
	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	MULTER MILIER	Whitek o	
	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	Whitek whitek whitek wh	ing murit	
	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),	UNLIEK WHITEK WHITEK WHITEK	White w	
	and white white white white white	at the the there	NI EK NINI	
	is subject to routine testing for electric strength during manufacturing, using a test voltage of 1,5 kV.	WILL MULES WILLES WAS	IEY WALTER	
	It is permitted to bridge this insulation with a capacitor complying with EN 60384-14:2005, subclass Y2.	WILLER MUTTER MUTTER MUTTER	- JALTEK V	
	A capacitor classified Y3 according to EN 60384-14:2005, may bridge this insulation under the following conditions:	THE WALTER WALTER	un'il un' LIFX unlif	
	the insulation requirements are satisfied by having a capacitor classified Y3 as defined by EN 60384-14, which in addition to the Y3	TELY STEEL STEEL SOLE	EX WILLEX	



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10,	IEC 62368-1	the were much	20, 20,
Clause	Requirement – Test	Result – Remark	Verdict
all's	THE THE THE THE	ALL METERS AND	The The
MALTEK MI	testing, is tested with an impulse test of 2,5 kV defined in 5.4.11;	THE STIER STIER OF	NITEK MALTEK
	 the additional testing shall be performed on all the test specimens as described in EN 60384- 14; 	united whites whites whi	IEK WILLER
iek whiter	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.	EX WHITEK WHITEK WHITE	Auri Ex Mu
5.5.2.1	Norway	t let litt liter	N/A
	After the 3rd paragraph the following is added:	Mur Mur Mr.	it let
ALEX AL	Due to the IT power system used, capacitors are required to be rated for the applicable line-to-line voltage (230 V).	MILLER MILLER WALLER WA	er ler
5.5.6	Finland, Norway and Sweden	No such resistors.	N/A
	To the end of the subclause the following is added:	of street sources sources	WALLEX MAL
	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.	Whitek Myriek Murek A	MITER WAITER
5.6.1	Denmark	No such equipment.	N/A
	Add to the end of the subclause Due to many existing installations where the socket-outlets can be protected with fuses with higher rating than the rating of the socket-outlets the protection for pluggable equipment type A shall be an integral part of the equipment. Justification:	THE WALTER WHITER	unite unit
	In Denmark an existing 13 A socket outlet can be protected by a 20 A fuse.	UNLIEK WHITEK WHITEK W	ALTE MALL
5.6.4.2.1	Ireland and United Kingdom	at at alt a	N/A
	After the indent for pluggable equipment type A , the following is added:	THE MILL WILL MILL	711 71
MULL	 the protective current rating is taken to be 13 this being the largest rating of fuse used in the mains plug. 	MALIER WALTER WALTE	AUT. AUT.
5.6.4.2.1	France	TER STER OUTE	N/A
	After the indent for pluggable equipment type A , the following is added: – in certain cases, the protective current rating of the circuit supplied from the mains is taken as 20 A instead of 16 A.	WILE MULTER MULTER AND	LIEK WITEK
5.6.5.1	To the second paragraph the following is added:	the authority authority	N/A
WALTER	The range of conductor sizes of flexible cords to be accepted by terminals for equipment with a rated current over 10 A and up to and including 13 A is: 1,25 mm ² to 1,5 mm ² in cross-sectional area.	MULTER WHITER WHITER	MITH WAIT



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- Unit	Mr. Are Aller	IEC 62368-1	TET NITE WILLER	in mi
Clause	Requirement – Test	is with my m	Result – Remark	Verdict

Color.	The state of the s	The state of the same of the s	40
5.6.8	Norway	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	P
	To the end of the subclause the following is added:	WALTER WALTER WALTER WALL	aur a
	Equipment connected with an earthed mains plug is classified as class I equipment . See the	TEX TEX SITEX SUTEX	NLTEK MAL
iek untie	Norway marking requirement in 4.1.15. The symbol IEC 60417-6092, as specified in F.3.6.2, is accepted.	et tet ritet mitet int	EK WALTE
5.7.6	Denmark	Mr. In In	Р
	To the end of the subclause the following is added:	Whitee Whitee Whitee White	WALEE.
antitek vil	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.	Miles Maries Maries Maries.	MUTIE M
5.7.6.2	Denmark	TEX SITES SLIFE SINITE SW	- Bur
	To the end of the subclause the following is added:	who are the state of	et Jet
	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.	white white whit will	WA.
5.7.7.1	Norway and Sweden	Not such system.	N/A
unliek vin	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	MILES MALIER OF	NITEK WAI
	building and there is normally no equipotential bonding system within the building. Therefore the protective earthing of the building installation needs to be isolated from the screen of a cable distribution system.	Multer multer multer multer	WALTER.
	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.	unifek unifek unifek unifek	antife au
	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:	at whitet whitet white	ek vintrek Vintrek
	"Apparatus connected to the protective earthing of the building installation through the mains connection or through other apparatus with a	while with while with	NETEK WY
	connection to protective earthing – and to a television distribution system using	it the the title	TEK MIT
	coaxial cable, may in some circumstances create a fire hazard. Connection to a television distribution system therefore has to be provided	ANT WE WE WE	* 16*
	through a device providing electrical isolation below a certain frequency range (galvanic isolator, see EN 60728-11)"	WHILE WHILE MILE MILE	MITER
	NOTE In Norway, due to regulation for CATV-installations, and	are me me me	20, 20,



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20,	IEC 62368-1	in the war and a	2. 12.
Clause	Requirement – Test	Result – Remark	Verdict
ale a	an an an are	The STEE WAS AND WAS	10
unliek vir	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.	WILLER MILES MULTER MULTE	* WALTEX
	Translation to Norwegian (the Swedish text will also be accepted in Norway):	sites mites whites whites	JUNITEK DI
	"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."	MULTER MULTER MULTER MULTER	SE WALTER
ne vin Fex vinite Vinitex	Translation to Swedish: "Apparater som är kopplad till skyddsjord via jordat vägguttag och/eller via annan utrustning och samtidigt är kopplad till kabel-TV nät kan i vissa fall medföra risk för brand. För att undvika detta skall vid anslutning av apparaten till kabel-TV nät galvanisk isolator finnas mellan apparaten och kabel-TV nätet."	TEX WHITE WHITEX WHITEX	un it est out the state of the
8.5.4.2.3	United Kingdom	No external circuits.	N/A
	Add the following after the 2 nd dash bullet in 3 rd paragraph: An emergency stop system complying with the requirements of IEC 60204-1 and ISO 13850 is required where there is a risk of personal injury.	TE MILE WHITE WHITE	watek w
B.3.1 and	Ireland and United Kingdom	Not directly connected to the	N/A
B.4 Neit on the state of the st	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	mains white	t while which will be written and the winds of the winds
G.4.2	Denmark	Not directly connected to the	N/A
	To the end of the subclause the following is added:	mains	VALIER V
	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.	TEX MULTEX MULTEX WALTER	in Tex Juni
	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	White white white wh	* WHILE



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20,	IEC 62368-1	is the Mr. M. a	3. 0.
Clause	Requirement – Test	Result – Remark	Verdict
april	The the the the	the city with one was	411
	rules shall be provided with a plug in accordance with standard sheet DK 2-1a or DK 2-5a.	THE THE LINE NUT	M NATEX
	If a single-phase equipment having a RATED CURRENT exceeding 13 A or if a polyphase equipment is provided with a supply cord with a plug, this plug shall be in accordance with the standard sheets DK 6-1a in DS 60884-2-D1 or EN 60309-2.	SUPER WHITE WHITE WHITE	water w
	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.	Whitek whitek whitek whitek	E WALTER
	Other current rating socket outlets shall be in compliance with Standard Sheet DKA 1-3a or DKA 1-1c.	THE MUTTER MUTTER MUTTER	in the mi
	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	A THE WALTER WALTER WALTER	er en viver
	Justification: Heavy Current Regulations, Section 6c	Why will the writer	MALTEX
G.4.2	United Kingdom	Not directly connected to the	N/A
	To the end of the subclause the following is added:	mains	NITE WA
MALTER OF	The plug part of direct plug-in equipment shall be assessed to BS 1363: Part 1, 12.1, 12.2, 12.3, 12.9, 12.11, 12.12, 12.13, 12.16, and 12.17, except that the test of 12.17 is performed at not less than 125 °C. Where the metal earth pin is replaced by an Insulated Shutter Opening Device (ISOD), the requirements of clauses 22.2 and 23 also apply.	Whitek whitek whitek whitek	SE WALTE
G.7.1	United Kingdom	L at at let	N/A
	To the first paragraph the following is added:	MULL MULL MULL ME	771
	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.	MULTER WHITER WHITER WHITER	WALTER WA
	NOTE "Standard plug" is defined in SI 1768:1994 and essentially means an approved plug conforming to BS 1363 or an approved conversion plug.	Whitek mainek mainek mai	Trit WALTE



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in mi	Ang Ang Ang	IEC 62368-1	ITE WITE WALLER W	KLIE WILL WILL
Clause	Requirement – Test	The Maria May an	Result – Remark	Verdict

Internal of the All of	741, 25,	NI/A
To the first paragraph the following is added: Apparatus which is fitted with a flexible cable or cord shall be provided with a plug in accordance with Statutory Instrument 525: 1997, "13 A Plugs and Conversion Adapters for Domestic Use Regulations: 1997. S.I. 525 provides for the recognition of a standard of another Member State	Whitek wh	N/A
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.	UNITER WHITE WHITE WHITEK	N/A
C ANNEX ZC, NATIONAL DEVIATIONS (EN)		N/A
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.	No CRT within the equipment.	N/A WALTER ALTER WALTE
NOTE Contact address: Physikalisch-Technische Bundesanstalt, Bundesallee 100, D-38116 Braunschweig, Tel.: Int+49-531-592-6320, Internet: http://www.ptb.de	united movies movies movies	P)
	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 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. ANNEX ZC, NATIONAL DEVIATIONS (EN) 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	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 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. ANNEX ZC, NATIONAL DEVIATIONS (EN) 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.



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



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Maria	Mr. 21/2 All	IEC 62368-1	TER WILL MULL MU	int mi
Clause	Requirement – Test	the mer my man	Result – Remark	Verdict

5.2	TABLE: Classificati	on of electrical er	nergy sourc	ces		4	N/A
Supply Voltage	Location (e.g.	Test conditions Par		Location (e.g. Test conditions Parameters			ES Class
	designation)	U (V)	I (mA)	Type ¹⁾	Additional Info ²⁾	Class	
5Vdc	5Vdc The EUT is designed to be supplied by Type -C port	Normal	<60Vdc	2, -2,	SS	DC	ES3
		Abnormal	. Jan	LIER WITE	JOLIAN S	Vice Aller	Mer
		Single fault – SC/OC	- Ch	et out	STEK- NY	EX -TEX	WALTEK.
4.20Vdc	The EUT is	Normal	<60Vdc	1/1, 1,	SS	DC	ES1
	designed to be supplied by	Abnormal	CEH - JEH	JUNE NU	STATE STATE	White M	ry. M
	Internal Li-ion battery cells	Single fault – (D1 SC)*	9T.	764 769	t TEX	INLIE MILI	EK MILI

Supplementary information:

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

 Normal –Full load and no load.

 Abnormal Overload output

SC= short circuit; OC= open circuit

5.4.1.8 TABLE: Wo	rking voltage measu	rement		N/A
Location	RMS voltage (V)	Peak voltage (V)	Frequency (Hz)	Comments
- WILL MULL MULL	m m	* " * *	et tet	LIER MITE JAITE WALL
- 2 15 15	TE NIE WAL	The mer	11/2 11	- + h
Supplementary information	on:			
4 4 4	TEX JET MIT	mr. m.	24. 24.	

5.4.1.10.2	5.4.1.10.2 TABLE: Vicat softening temperature of thermoplastics							
Method			:	ISO 306 / B50	Willey Wil	_		
Object/ Part No./Material Manufacturer/trademark				Thickness (mm)	T soften	ng (°C)		
-112 M	er and an	THE ART .	(Et	- LIFE WIFE NO	LIE MALL	Mile.		
Supplemen	tary information:							
iner wine	24. 14	W at at a	l.	LIER SLIE WAL	WILL S	ne in		

5.4.1.10.3	5.4.1.10.3 TABLE: Ball pressure test of thermoplastics						
Allowed impression diameter (mm) ≤ 2 mm						_	
Object/Part	No./Material	Manufacturer/trademark	Thickness	(mm)	Test temperature (°C)	Impi diame	ression ter (mm)



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		IEC 62368-1		
Clause	Requirement – Test	24, 2,	Result – Remark	Verdict
" ale	The The Table	Set 3	Et SIL SIL	ine was in
- ₁₈ +	TEX ITEX TEXT OUTE MAILE	m m	- 70 2	A - A
Suppleme	entary information:			
, t	the the tier still miles	10 20	24	e st st

5.4.2, 5.4.3 TABLE: Minimum Clearances/Creepage distance							N/A	
Clearance (cl) and creepage U_p U_{rms} V_p U_{rms} V_p					cr (mm)			
- WILL MULL MULL MULL	n.	an.		- J. J.	√c±	(1 ⁶¹⁴ , 1)	er - 10/12/6.	unite.

Supplementary information:

- Only for frequency above 30 kHz
 Complete Electric Strength voltage (E.S. (V) when 5.4.2.4 applied)

5.4.4.2	TABLE: Minimum	ABLE: Minimum distance through insulation						
Distance th (DTI) at/of	rough insulation	Peak voltage (V)	Insulation*	Required DTI (mm)	Measured DTI (mm)			
	SER SER SE	WILL WILL MAN	141 - 251		et - et			
Supplemen	tary information:							
*See also s	ub-clause 5.4.4.9	A JUNE OF			et let i			

5.4.4.9 TABLE: Solid insulation at frequencies >30 kHz								
Insulation material	E _P	Frequency (kHz)	K _R	Thickness d (mm)	Insulation	V _{PW} (Vpk)		
- INLIE WHILL WHILL WE	- 17/V.	- 4	# 11	TEX . JE	- CLIER OF	AE MILIE		
Supplementary information:								
WILL WILL MAY MAY	24	1	et .	CENT OF THE	JUE WIT	I WIN I		

5.4.9	TABLE: Electric strength tests	at it is	TEK TEK STE	N/A
Test voltage	e applied between:	Voltage shape (Surge, Impulse, AC, DC, etc.)	Test voltage (V)	Breakdown Yes / No
Functional:	TEX TEX STEE WITE WAL	211, 211, 211,		LET LET
mr. m	The The Late	- TELL STEE WITE	- unlik walik w	Vr. Mar.
Basic/supple	ementary:	20, 20, 20,	at all a	et det
To M	The state of the s	TEK NITER WITE	MILL MILL MILL	21/2 211
Reinforced:	STEE WITE WALTE WAY V	1. 1h 2	at at all	- CIEN ST
- 7n	A St St.	EL NITER WITE W	Try Mrs. Mus.	1/1 - 1/1
Routine Tes	sts:		et let let	LIEN NUTER
- 21, 2	a se set set site	- WILL MULL MUT	- me m	n
Supplement	ary information:			



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In The	M 24 2.	IEC 62368-1	LIER UNLIER WALLE WAL	Mr. Mr.
Clause	Requirement – Test	with any	Result – Remark	Verdict

5.5.2.2	5.2.2 TABLE: Stored discharge on capacitors						
Location		Supply voltage (V)	Operating and fault condition 1)	Switch position	Measured voltage (Vpk)	ES Class	
700 -	20, 1		Normal	TER METER W	hri M hr.	in -in	
- WALTER -	WILEK M	TET WALLE WALL	Single fault: SC/ OC	y tiet si	iet Tet	LIEK WALTER	

Supplementary information:

X-capacitors installed for testing are:

[] bleeding resistor rating:
[] ICX: 1) Normal operating condition (e.g., normal operation, or open fuse), SC= short circuit, OC= open circuit

5.6.6	TABLE: Resistance of protective conductors and terminations							
Location		Test current (A)	Duration (min)	Voltage drop (V)	Resistance (Ω)			
-in		the sales and	win -wer	2 1/2 1/4 1/4				
Suppleme	ntary information:							
		75 KITY	50 7	201 20				

5.7.4	TABLI	E: Unearthed accessible parts						
Location		Operating and	Supply	F	ES class			
		fault conditions	Voltage (V)	Voltage (V _{rms} or V _{pk})	Current (A _{rms} or A _{pk})	Freq. (Hz)		
L/N to secondary terminals		Normal	JF 10	+ 1781 178	THE MALTE	Mr. C.	21/2 - 21	
		Abnormal: overload	muss - mus	an - an	ITEK TITEK	WITE N	PLIEK-	
		Single fault: SC/ OC	LIER WALLE	nur -nur .	TEX TEX	TEX-	SEK - WITE	

Supplementary information:

SC= short circuit; OC= open circuit

5.7.5	TABLE: Earthed acces	sible conductive part	Di A	at at	N/A
Supply volta	age (V)	- of let let	LIER CLIER OF	NIT WALL W	_
Phase(s)		[] Single Phase; [] Three	Phase: [] Delta	[] Wye	
Power Distr	ibution System	[] TN []TT []IT	El STER OU	it with whi	
Location		Fault Condition No in IEC 60990 clause 6.2.2	Touch current (mA)	Comme	nt
- 12, 1	1 2 2 2	ex alter mile unit	we - me	24. 24.	7.
JEE N	THE WITE WALL WALL	4, 4, 4	at at	TEX TEX	ALTER J
Supplemen	tary Information:				



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AL.	m m m	IEC 62368-1	r. Mr. Mur.
Clause	Requirement – Test	Result – Remark	Verdict

5.8	TABLE: Backfeed safeguard in battery backed up supplies								
Location		Supply voltage (V)	Operating and fault condition	Time (s)	Open-circuit voltage (V)	Touch current (A)	ES Class		
15 JUL	CLIER	MILITE WILL	mrnr.		, , , ,	et -16t	TEN - STE		
Supplementary information:									
- JEE	alter at	The Will	me me		24 26 ^t	THE S	JER WIE		

6.2.2 TAE	BLE: Power sourc	e circuit classifi	cations	e x	. St . K	Р
Location	Operating and fault condition	Voltage (V)	Current (A)	Max. Power ¹⁾ (W)	Time (S)	PS class
Input	Output pin + to -	5.0	0.85	4.25	3S	PS1
Input (U1 pin 1-8 SC	Output pin + to -	0,,,	Tet O get	nitto mit	35	PS1
USB Output	Output pin + to -	4.54	2.3	10.45	3S	PS1
USB Output (U1 pin 1-8 SC	Output pin + to -	o+ 0+	Et OEt N	0,17	3S 41 ⁻¹²	PS1
Wireless charging	Output pin + to -	4.58	1.22	5.59	3S	PS1
Wireless charging (U1 pin 1-8 SC	Output pin + to -	Test O Miles	nitet o	mu O ma	38	PS1
Battery cells	Output pin + to -	3.28	10	32.8	5S	PS2
Battery cells (U1 pin 1-8 SC)	Output pin + to -	TEL MOTER M	0	0,,,,	3S	PS1

Supplementary information:

Abbreviation: SC= short circuit; OC= open circuit

1) Measured after 3 s for PS1 and measured after 5 s for PS2 and PS3. * Unit shutdown immediately, recoverable, no hazard.

6.2.3.1	TABLE: Determination of Arcing PIS								
Location		Open circuit voltage after 3 s (Vpk)	Measured r.m.s current (A)	Calculated value	Arcing PIS? Yes / No				
-20	L 14 18	TEX -NITE ON	in min min	24 - 14 A	<u> </u>				
Supplemen	tary information:								
3.	at at	TEX SLIEN MITE	White water	the the th					

6.2.3.2	P			
Location		Operating and fault condition	Dissipate power (W)	Arcing PIS? Yes / No
All primary circuits/comp	oonents	WALTER WALL WALL WALL	THE THE THE	Yes (declaration)



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Supplementary information:

All circuits are considered as resistive PIS;

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

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

A Resistive PIS: (a) dissipates more than 15 W, measured after 30 s of normal operation, 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 p	ressure lamp			7,	N/A
Lamp manuf	facturer	Lamp type	Explosion method	Longest axis of glass particle (mm)		icle found nd 1 m Yes / No
The Think	21/2 -211	- *	- LIEF SLIEF ON	in with min	211	- m
Supplementa	ary information:					
11/2 1	n. n. n	1 4 1	TER LITER SLIFE	and while	Mer	2/1

307			<u> </u>	(2), (2)		transmitte	- 40	
Supply voltage (\	/)					.///	+ 4	_
Max. transmit po	wer of transi	mitter (W)					in in	_
	1	eiver and contact		eiver and contact		iver and at of 2 mm		eiver and at ce of 5 mm
Foreign objects	Object (°C)	Ambient (°C)	Object (°C)	Ambient (°C)	Object (°C)	Ambient (°C)	Object (°C)	Ambient (°C)
Steel sheet	25.1	24.9	52.7	24.8	51.1	24.8	40.9	24.8
Aluminium foil	25.1	24.9	52.0	24.8	50.8	24.8	39.3	24.8
Aluminium ring	25.1	24.9	52.0	24.8	50.5	24.8	49.5	24.8
Supplementary in	formation:				ı			

5.4.1.4, 9.3, B.1.5, B.2.6	ents	Whit WAL	MITER	unitek unitek	P P
Supply voltage (V):	Condition 1 (5Vdc):	Condition 2 (4.2Vdc):	TEX.	TEH	_
Ambient temperature during test T _{amb} (°C):	25.0	25.0	- m		_
Maximum measured temperature <i>T</i> of part/at:		T (°C))		Allowed T _{max} (°C)
PCB near U1	40.6	57.4	et	Charles .	130
PCB near U2	38.8	55.3	717	ar - a	130
L1 body	38.7	55.9	, Kart	JITET OU	130



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			IEC 6236	8-1				
Clause Requi	rement – Test	mer me	20	Res	ult – Remar	ark Verdict		
The The	6, 2	4	. 15	J.	The Will.	are a	V. 20	
CBB body	LIEN STER W	lifer Milit	36.9	39.1			105	
Surface of battery			31.6	32.5	EF MILE	Write - mi	Ref.	
Internal wire			33.2	33.9		Jr - J	80	
Wireless winding			26.2	50.9	Mr. Tile W	Mr. Carr	130	
Internal enclosure	near battery	anti, an	31.1	31.9	, +	et 764	Ref.	
External wooden e	nclosure near wire	eless	25.2	48.7	Mr. Jarr	7/1/2	77	
External plastic end	losure near batte	ery	30.3	31.2	J4 0	- (4	77.0	
Temperature T of winding:	t ₁ (°C)	R ₁ (Ω)	t ₂ (°C)	R ₂ (Ω)	T (°C)	Allowed T _{max} (°C)	Insulation class	
the me me	10 -		-CV	(C) (C)		Mill - We	211° 21	

Supplementary information:

Note 1: The apparatus was submitted and evaluated for maximum manufacturer's recommended ambient (Tma) of 25°C.

Note 2: The temperatures were measured under the worse case normal mode defined in clause B.2.1.

Condition 1: Only charge with internal empty battery

Condition 2: Only discharge with internal fully battery

B.2.5	TA	ABLE: In	out test					While Aut. Aug. B. M.
U (V)	Hz	I (A)	I rated (A)	P (W)	P rated (W)	Fuse No	I fuse (A)	Condition/status
Condition	1: O	nly charg	e with interr	nal empty	battery	100 2	n. 4	· · · · · · · · · · · · · · · · · · ·
5Vdc ¹⁾	770,	0.85	2	4.25	_EX	et :	5 ⁶¹	it mile while with while
Condition	1 2: O	nly discha	arge with int	ternal full	y battery	211.	20,	at the title title
4.2Vdc ²⁾	0	2.0	72, -	8.4	# JE	JE	<u>, </u>	5W W
4.2Vdc ²⁾	KALL THE	3.4	STEE WILL	14.28	The	1/1	7,-	10W

Supplementary information:

¹⁾ Supply by external DC source, ²⁾ Measured battery cells voltage and current. The maximum measured current under rated voltage did not exceed 110% of the rated current.

B.3, B.4	TABLE: Abnor	mal operating	g and fau	ılt condit	ion tes	sts	LIEN WILL MIL	_{co} rP ∈
Ambient tei	mperature T _{amb} (°	C)		<u>, , , , , , , , , , , , , , , , , , , </u>	: ·	See b	elow	_
Power sour	ce for EUT: Man	ufacturer, mo	del/type, d	outputrati	ng :	72° .	NITER MALTE MALTE	_
Componer No.	nt Condition	Supply voltage (V)	Test time	Fuse no.		use ent (A)	Observation	
USB outpu	ut OL A	4.20Vdc	57min	Mar.	MAL		USB output maximum after 2.3A, EUT Unit show the danger and no dam	ut down,
METER OUT	ites whites wh	JEK WALTER	MULL.	2.k 10.r. 1	E#	JU.	External wooden enclos wireless :25.6°C	sure near

^{*} Temperature limit for TS1 of accessible enclosure according to Table 38 to be measured at normal ambient temperature.



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Lang Maria	All The All	IEC 62368-1	LIET WILL WALLER WE	Tip Music Ang
Clause	Requirement – Test	ALTE ALE ALE ALE	Result – Remark	Verdict

WALTER WALTER	MUTIEK M	AFER WALTER	anlite.		EX WILLER	External plastic enclosure near battery:29.2°C Ambient:25°C
Wireless charging	OL	4.20Vdc	56min	t white	WALTER	Wireless output maximum load 1.22A, after 1.22A, EUT Unit shut down, no danger and no damage
er marie ma		We will	- 18th	NITEK		External wooden enclosure near wireless :27.6°C
WALTER WALTE		Prize Muri	MUT	ZEK .		External plastic enclosure near battery:31.2°C
A 18		JEK LIEK	WITE V	Vr. M		Ambient:25°C
USB output	S-C W	4.20Vdc	7hrs	TEK MALT	WALTER.	Unit normally working. No damage, no hazard. Recoverable.
Wireless charging	S-C	4.20Vdc	7hrs	White EX	MULLE M	Unit normally working. No damage, no hazard. Recoverable.
U1 WALL	s-c	4.20Vdc	7hrs	oner a	iek Wiles	Unit shut down immediately. No damage, no hazard. Recoverable.
NITE LA VINITE	S-C	4.20Vdc	7hrs	011 Est 1116		Unit normally working. No damage, no hazard. Recoverable.
СВВ	s-c	4.20Vdc	7hrs	WALTER	WALTE WA	Unit shut down immediately. No damage, no hazard. Recoverable.

Supplementary information:

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

- 1) s-c: Short-circuited; o-l: Overloaded; BL=Blocked.
- 2) The test result shown all safeguards remained effective and didn't lead to a single fault condition during abnormal operating condition; In addition all safeguards complied with applicable requirements in this standard after restoration of normal operating conditions.
- 3) The test result showed no Class 1 or 2 energy source become Class 3 level during and after single fault condition.
- 4) Limit temperature: Plastic material: 87°C

M.3	TABLE: Pr	Protection circuits for batteries provided within the equipment				
Is it possi	ble to install the	battery in a reverse polarity p	osition?:	Mr. M.	_	
			Chargi	ng		
Equipment Specification		Voltage (V)		Current (A)		
		5Vdc	et jet	2A N		
			Battery spec	cification		
Manufacturer/type N		Non-rechargeable batteries		Rechargeable batteries		

¹⁾ Supply by external DC source, ²⁾ Measured battery cell voltage and current.



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Clause	Requirement – Test	Mur. M. M.	Result – Remark	Verdict

	Discharging	Unintentional	Char	ging	Discharging	Reverse
	current (A)	charging current (A)	Voltage (V)	Current (A)	current (A)	charging current (A)
Guangdong CVATOP N ew Energy Technology Co., Ltd. / 126090	er ver	NA -NATER	4.2	0.891	LIEY WILLEY	WALLES WALL
Note: The tests of M.3.2 a	re applicable o	only when abov	e appropriate	data is not av	ailable.	

Specified bat	tery tempera	ature (°C)			····: <201	10	0-45
Component No.	Fault condition	Charge/ discharge mode	Test time	Temp. (°C)	Current (A)	Voltage (V)	Observation
U1 pin 1-8	SC	Charge	7h	WALTER.	0.001	4.20	Unit shutdown immediately. Recoverable. No damaged, no hazard.

Supplementary information:

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

COLUMN TO THE PROPERTY OF THE	TABLE: pattery	Charging sa	feguards for	equipment c	ont	aining a se	econdary lithium	W P
Maximum spe	ecified o	charging voltag	je (V)		:	4.25	WITE WALTE	_
Maximum spe	ecified o	charging curre	nt (A)			5	L st	_
Highest spec	ified ch	arging tempera	ature (°C)	£	5	45	White White all	
Lowest speci	ified cha	arging tempera	ture (°C)	11, 1	:	10	at at a	
Battery		Operating		Measuremen	ıt		Observa	tion
manufacturer/type		and fault condition	Charging voltage (V)	Charging current (A)		Temp. (°C)		
Lowest specif	fied cha	rging temperat	ure: 10°C	We all	21	. 4	at at	Alt .
Guangdong CVATOP New Energy Technology	Normal	4.20	0.614A	te	Battery temperature: 10°C The battery charactery charactery charactery the battery charactery char		ing curren	
Co., Ltd. / 126	6090	Abnormal-	TEX- OLTE	11/2 11/2		There is an in the		
		Single fault – (R4 SC under condition 1)	4.20	0.614A	Battery temperature: 10°C The battery decreases		The battery charg decreases	ing curren
Highest speci	ified cha	arging tempera	ture: 45°C	urir whis	21/2	71/L	20, 20,	
Guangdong CVATOP New Energy Technology		Normal	4.20	0.001A	te	Battery mperature: 46.2°C	The battery charg stop charging	ing circuit
Co., Ltd. / 126	6090	Abnormal-	_ttb	· July N	(E)	المعاشدين	and my	2/12
		Single fault – (R4 SC	4.20	0.001A	te	Battery mperature:	The battery charging circuit stop charging	



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under	46.2°C	
condition 1)		

Supplementary information:

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

Q.1	TABLE: Circuits inte	nded for inte	ded for interconnection with building wiring (LPS)				Р
Output	Condition	U _{oc} (V)	Time (s)	I _{sc} ((A)	S	(VA)
Circuit	Condition	O _{oc} (V)	111116 (5)	Meas.	Limit	Meas.	Limit
ancie anci	Normal	5.11	58	2.3	8.0	10.45	100
USB output	Single fault - U1 pin 1-8 SC*	0	5S	0	8	0	100

Supplementary Information:

SC = short circuit, OC = open circuit

^{*} Unit shutdown immediately, recoverable, no hazard.

T.2, T.3, T.4, T.5	TABLE: St	teady force te	est			til mit me mb .
Location / Part	Material	Thickness (mm)	Probe	Force (N)	Test Duration (s)	Observation
Internal components (T.2)	itek Mite	t mulity m	Figure V.1 and Figure V.2	10	5. The state of th	No reduction the clearances and creepage distances
Enclosure top(T.5)	Metal*	See table 4.1.2	77	250	5	Enclosure remained intact, no crack/ opening developed
Enclosure side(T.5)	Plastics*	See table 4.1.2	m.	250	5	Enclosure remained intact, no crack/ opening developed
Enclosure bottom (T.5)	Metal*	See table 4.1.2	NITE - OIL	250	5	Enclosure remained intact, no crack/ opening developed

Supplementary information:

*Test was performed on product with each source listed in table 4.1.2.

T.6, T.9 TABLE: Impact test				A A A A A A A A A A A A A A A A A A A		
Location/Part	Material	Thickness (mm)	Height (mm)	Observation		
Enclosure Top	Metal*	See table 4.1.2	1300	Enclosure remained intact, no crack/ opening developed. No hazards.		
Enclosure Side	Plastics*	See table 4.1.2	1300	Enclosure remained intact, no crack/ opening developed. No hazards.		
Enclosure	Metal*	See table 4.1.2	1300	Enclosure remained intact, no crack/ opening		



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Clause	Requirement – Test	Mr. M. M.	Result – Remark	Verdict

Bottom	developed. No hazards.
Supplementary information:	
*Test was performed on product w	rith each source listed in table 4.1.2.

T.7 TA	ABLE: Drop	test	Me The	P P
Location/Part	Material	Thickness (mm)	Height (mm)	Observation
Enclosure Top	Metal*	See table 4.1.2	1000	Enclosure remained intact, no crack/ opening developed. No hazards.
Enclosure Side	Plastics*	See table 4.1.2	1000	Enclosure remained intact, no crack/ opening developed. No hazards.
Enclosure Bottom	Metal*	See table 4.1.2	1000	Enclosure remained intact, no crack/ opening developed. No hazards.
Supplementary	/ information	:	-	

T.8	TABLE: Stres	s relief test	,t	IN THE THE STIPE ON		
Location/Part	t Material	Thickness (mm)	Oven Temperatur e (°C)	Duration (h)	Observation	
Enclosure	Plastic*	See table 4.1.2	70°C	7h	Enclosure remained intact, no cracking/opening developed in the enclosure joint. No hazards.	
Supplementa	ry information:					
*Test was pe	rformed on pro	duct with each sou	urce listed in t	able 4.1.2.	KE, ME ME ME MILL	

X TABLE: Alt	TABLE: Alternative method for determining minimum clearances distances						
Clearance distanced between:	Peak of working voltage (V)	Required cl (mm)	Measured cl (mm)				
7 18 18 to	EX CLIEN WILLE - WAL ON	- m - m - m	4 14 - 11 11 11 11 11 11 11 11 11 11 11 11 1				
Supplementary information	on:						
- THE THE STEE	CLIEF WILL MAY WAY	24 20 3	at the text				



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Clause	Requirement – Test	ALTE ALE ALE ALE	Result – Remark	Verdict

4.1.2	TABLE: Critical components information					
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹	
РСВ	LG CHEM LTD	AF312C	V-0, Min. 70°C, min. thickness: 2.5mm	UL 94	UL E159194	
(Alternative)	Interchangeable	Interchangeabl e	V-0, 130°C	UL 94	UL	
Plastic enclosure	Interchangeable	Interchangeabl e	HB or better, min. 80°C, thickness: 0.4 mm	UL 94	UL VIII	
Metal enclosure	Interchangeable	Interchangeabl e	Min. thickness: 1.0mm	EN IEC 62368-1	Test with equipment	
Battery lead wire	Interchangeable	Interchangeabl e	Min. 30V, min. 80°C, min. 26AWG, VW-1	UL 758	ÜL	
Internal Li- ion Cell	Guangdong CVATOP New Energy Technology Co., Ltd.	126090	3.7V, 8000mAh, 29.6Wh	IEC 62133-2: 2017	Approved by Shenzhen LCS Compliance Testing Laboratory Ltd. report no.: LCS2205270 51AS	

Supplementary information:

¹⁾ License available upon request. Provided evidence ensures the agreed level of compliance. See OD-CB2039.



Photo Documentation

Reference No.: WTF23D02021976Y





Photo 1 external view



Photo 2 external view



Photo Documentation

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Photo 3 external view



Photo 4 external view

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Photo 5 external view



Photo 6 interior view

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Photo Documentation

Reference No.: WTF23D02021976Y



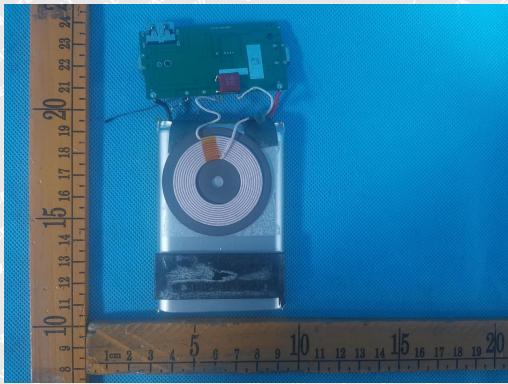


Photo 7 interior view

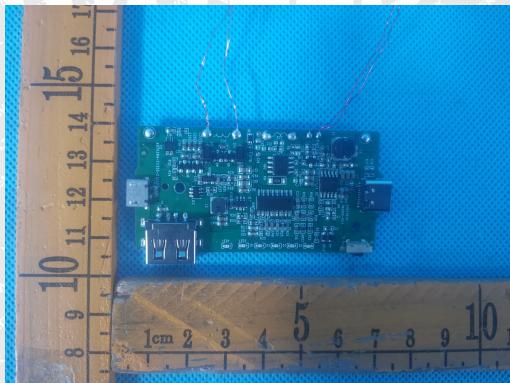


Photo 8 PCB view

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Photo Documentation

Reference No.: WTF23D02021976Y



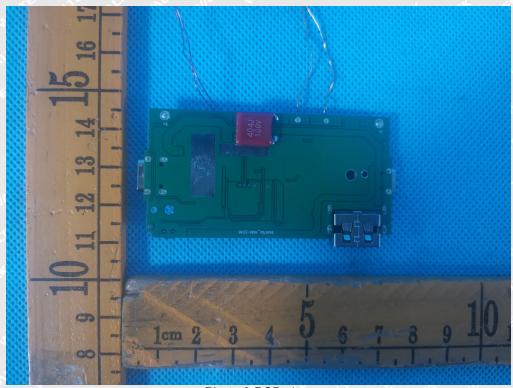


Photo 9 PCB view



Photo 10 battery label

==== End of Report =====