



TEST REPORT

Reference No. : WTF23F12259866J

Applicant :: Mid Ocean Brands B.V.

Hong Kong

Manufacturer 118144

Address.....: ---

Product Name.....: USB foldable desk fan

Model No. : MO2123

EN 60335-

1:2012+A11:2014+A13:2017+A1:2019+A14:2019+A2:2019+A15:202

Test specification..... : 1

EN 60335-2-80:2003+A1:2004+A2:2009

EN 62233:2008

Date of Receipt sample : 2023-10-25

Date of Test : 2023-10-26 to 2023-12-14

Date of Issue..... : 2023-12-15

Test Report Form No. : WSH-60335280I-01A

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 approver.

Prepared By:

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Tested by:

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Approved by:

Jerry Mu





Test item description USB foldable desk fan

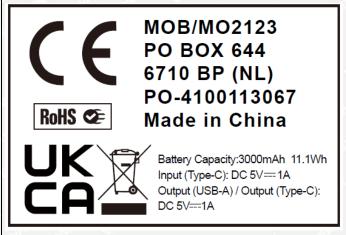
Trade Mark: --

Model/Type reference: MO2123

Ratings Input: 5V = --- , 1A

Output: 5V ---, 1A, Class III, IPX0

Copy of marking plate:



Remark: When the equipment is vended to EU, then name and address of the importer or authorized representative within the EEA shall be added on the equipment.

Summary of testing:

- 1. These samples are tested and complied with the requirements of standards listed in this report.
- 2. Full tests were performed on model MO2123.



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Test item particulars	and the state of the state of
Classification of installation and use:	Portable appliance, household and indoor use
Supply Connection:	DC Inlet
Possible test case verdicts:	ALTER BUTTO ARTE SPORT SPORT SPORT
- test case does not apply to the test object	N
- test object does meet the requirement	P(Pass)
- test object does not meet the requirement:	F(Fail)
General remarks:	The strike which the strike the s
"(See Enclosure #)" refers to additional information apply "(See appended table)" refers to a table appended to the Throughout this report a point is used as the decimal second	e report.
General product information:	
1. The appliances are for household and indoor use	only.
A STATE OF THE SECTION	a state of the state of the
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AND THE MENTER MARKET M	the state of the state and the state of
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IEC 60335-2-80			AND THE
Clause	Requirement + Test	Result - Remark	Verdict
5	GENERAL CONDITIONS FOR THE TESTS	The state of the state of	-
انها ^{خانگرند} اره	Tests performed according to clause 5, e.g. nature of supply, sequence of testing, etc.	NATION ARTICLE ARTICLES	Р
5.7	Fans to be used in tropical climates, the tests of clause 10.11 and 13 are carried out at 40 °C +/- 2 °C (IEC 60335-2-80)	THE STREET STREET STREET	N
	Fans marked with ambient operating temperature, the tests of clause 10, 11 and 13 are carried out at marked value +/- 2 °C (IEC 60335-2-80)	Marities Marities Marities	N
6	CLASSIFICATION	ALTER STATE SPACE OF	1. Th.
6.1	Protection against electric shock: Class 0, 0I, I, II, III:	Class III	P
THE WALL	For a class III construction with a detachable power supply part the appliance is classified according to the detachable power supply part	the state of the state of	N N
6.2	Protection against harmful ingress of water	A A A	N
311	At least IPX2 for Duct fans (IEC 60335-2-80)	THE SHE SHE A	N
6.101	Classification to climatic conditions (IEC 60335-2-80): - fans for temperature climates - fans for tropical climates	Temperature climates	Р
7	MARKING AND INSTRUCTIONS	- 1 Th. 2	
7.1	Rated voltage or voltage range (V):	See page 2	Р
	Symbol for nature of supply, or:	See page 2	Р
J. S.	Rated frequency (Hz):	The State State of	N
	Rated power input (W), or:		N
ans an	Rated current (A):	See page 2	Р
ur ^{iek} uri	Manufacturer's or responsible vendor's name, trademark or identification mark:	See page 2	Р
	Model or type reference:	See page 2	Р
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Symbol IEC 60417-5172, for class II appliances	THE STATE STATE OF	N
24	IP number, other than IPX0:	IPX0	N
3000 1	Symbol IEC 60417-5180, for class III appliances, unless	British Shring Abrilla Ab	N
No Start	the appliance is operated by batteries only	the the star set	Р
	Symbol IEC 60417-5018, for class II and class III appliances incorporating a functional earth	n to the state	N
e sairtinee aartinee	Symbol IEC 60417-5036, for the enclosure of electrically-operated water valves in external hosesets for connection of an appliance to the water mains, if the working voltage exceeds extra-low voltage		N

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IEC 60335-2-80			
Clause	Requirement + Test	Result - Remark	Verdict
and the	Symbol IEC 60417-5180 (2003-02), for class III appliances. This marking is not necessary for appliances operated only by batteries (primary batteries or secondary batteries recharged outside of the appliance) or appliances powered by rechargeable batteries recharged in the appliance.		P
t d	For tropical climates marked with letter T (IEC 60335-2-80)		N
aller i	Fans intended for operation in location where the local temperature exceeds 40 °C shall be marked with the ambient operating temperature. (IEC 60335-2-80)		N September 1
7.2	Warning for stationary appliances for multiple supply	ates and est and est	N
d d	Warning placed in vicinity of terminal cover		d dN
7.3	Range of rated values marked with the lower and upper limits separated by a hyphen	Aller Aller Shr	N
All Par	Different rated values marked with the values separated by an oblique stroke	SHELLER SHELL SHELL	N
7.4	Appliances adjustable for different rated voltages or rated frequencies, the voltage or the frequency setting is clearly discernible	Harrier Starter Starter	N
	Requirement met if frequent changes are not required and the rated voltage or rated frequency to which the appliance is to be adjusted is determined from a wiring diagram		N
7.5	Appliances with more than one rated voltage or one or more rated voltage ranges, marked with rated input or rated current for each rated voltage or range, unless		N ST
ile en	the power input or current are related to the arithmetic mean value of the rated voltage range	Same and the same of	N
	Relation between marking for upper and lower limits of rated power input or rated current and voltage is clear	and the second	N
7.6	Correct symbols used	They are the	Р
41125 E	Symbol for nature of supply placed next to rated voltage		graffe graP
parate and	Symbol for class II appliances placed unlikely to be confused with other marking	the attendant satisfies an	N N
	Units of physical quantities and their symbols according to international standardized system	the state of the	P
7.7	Connection diagram fixed to appliances to be connected to more than two supply conductors and appliances for multiple supply, unless		N
A.	correct mode of connection is obvious		N-

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IEC 60335-2-80			
Clause	Requirement + Test	Result - Remark	Verdic
7.8	Except for type Z attachment, terminals for connection indicated as follows:	on to the supply mains	1 4 <u>-</u>
es de la constante de la const	- marking of terminals exclusively for the neutral conductor (letter N)	Action applicate application applications	N
	- marking of protective earthing terminals (symbol IEC 60417-5019)	The states against about	N
4000	- marking of functional earthing terminals (symbol IEC 60417-5018)	t alter and the antice.	N
35	- marking not placed on removable parts	a st st	N
7.9	Marking or placing of switches which may cause a hazard	altitude danie altitude	Р
7.10	Indications of switches on stationary appliances and controls on all appliances by use of figures, letters or other visual means	By use of symbols	Р
e est	This applies also to switches which are part of a control		Р
- Jh	If figures are used, the off position indicated by the figure 0	Allegan Albert Albert A	N
Mary a	The figure 0 indicates only OFF position, unless no confusion with the OFF position	active states state and	N
7.11	Indication for direction of adjustment of controls	At 1750 S	N
7.12	Instructions for safe use provided		Р
	Details concerning precautions during user maintenance	Abrilla Millian Abrilla	Р
.55	The instructions state that:	at the tite.	(1 ⁶) (4 ²)
	- the appliance is not to be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction		Р
s di	- children being supervised not to play with the appliance		Р
Albert A	For a part of class III construction supplied from a detachable power supply unit, the instructions state that the appliance is only to be used with the unit provided	ANTIFE SPITES SPITES	N
aret uri	Instructions for class III appliances state that it must only be supplied at SELV, unless	the are attending	Р
SEP STEE	it is a battery-operated appliance, the battery being charged outside the appliance	to the set set	N
- 500	For appliances for altitudes exceeding 2000 m, the maximum altitude is stated	A A A	N
A September 1	The instructions for appliances incorporating a functional earth states that the appliance incorporates an earth connection for functional	A of the	N



IEC 60335-2-80			1
Clause	Requirement + Test	Result - Remark	Verdic
211-25	purposes only		100
A+	If the instructions state that the guard has to be remove	ed for cleaning purposes, the	2.4
	instructions shall state the substance of the following: ((IEC 60335-2-80/A1)	
ad- a	Ensure that the fan is switched off from the supply		N
310	mains before removing the guard. (IEC 60335-2-80/A1)	the state state state of	10 AL
	The instructions for ceiling fans shall include the substa	ance of the following warning:	P 0
	WARNING: If unusual oscillating movement is observed, immediately stop using the		N
	ceiling fan and contact the manufacturer, its service agent or suitably qualified persons. (IEC 60335-2-80/A1)		STEEL STEEL
er se St st	The instructions for ceiling fans shall include the substa 60335-2-80/A1)	ance of the following: (IEC	
	the maintenance cycle and method of maintenance; (IEC 60335-2-80/A1)	er attribe Albert Aber de	N
and the	the weight of the appliance in kilograms; (IEC 60335-2-80/A1)	· The with with some	N
aranget s	 that the replacement of parts of the safety suspension system device shall be performed by the manufacturer, its service agent or suitably qualified persons. (IEC 60335-2-80/A1) 	and the second section and the	N
Star Person	The instructions for fans incorporating motors containing substance of the following: (IEC 60335-2-80/A1)	ng brushes shall include the	- J
	If it is necessary to replace the live or neutral brushes to ensure operation of the motor then both brushes and the earth brush shall be replaced at the same time. The brushes shall only be replaced by a suitably qualified person. (IEC 60335-2-80/A1)		N
7.12.1	Sufficient details for installation supplied	The state of the state of	Р
Red Silver	For an appliance intended to be permanently connected to the water mains and not connected by a hose-set, this is stated	and the state of t	N
	The installation instructions for ceiling fans shall inclu following: (IEC 60335-2-80)	de the substance of the	
ar Ser	- the fixing means for attachment to the ceiling such as hooks or other devices shall be fixed with a sufficient strength to withstand 4 times the weight of the ceiling fan; (IEC 60335-2-80)	Tagaille agaille agaille agail	N
Sir ^{est} Str	 that the mounting of the suspension system shall be performed by the manufacturer, its service agent or suitably qualified persons; (IEC 60335-2- 80) 	alitik sakir sakir sakir Kali sakir sakirik sakirik	N
	 that the fan is to be installed so that the blades are more than 2.3 m above the floor; (IEC 60335-2-80) 	the state of the s	N
THE LITTLE STREET	the model or type reference of a luminaire that may be installed in a fan constructed for this purpose. (IEC 60335-2-80)	active arriver secured servi	N
	The instructions for other fans shall include the substa	ance of the following:	A 44

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Clause	Requirement + Test	Result - Remark	Verdic
		A B B	S 5"
4	(IEC 60335-2-80)	The state of the	21.
التي المتكندان	 whether the fan is intended for mounting in outside windows or walls (for partition fans); (IEC 60335-2-80) 	ACTOR SPICES SPICES	N
istar _{sak} si St. 188	 that the fan is to be installed so that the blades are more than 2.3 m above the floor (for fans intended to be mounted at high level); (IEC 60335- 2-80) 	THE SECTION SECTION SECTION	N
ANT THE	- that precautions must be taken to avoid the back- flow of gases into the room from the open flue of gas or other fuel-burning appliances (for duct and partition fans). (IEC 60335-2-80)	STEET STEET STITUTE	N
NET OF AS	If different rated voltages or different rated frequencies are marked, the instructions state what action to be taken to adjust the appliance		N
7.12.2	Stationary appliances not fitted with means for disconnection from the supply mains having a contact separation in all poles that provide full disconnection under overvoltage category III, the instructions state that means for disconnection must be incorporated in the fixed wiring in accordance with the wiring rules		N
7.12.3	Insulation of the fixed wiring in contact with parts exceeding 50 K during clause 11; instructions state that the fixed wiring must be protected		N
7.12.4	Instructions for built-in appliances:		بر ب
71,00	- dimensions of space		N
	- dimensions and position of supporting and fixing	4 4	N
	- minimum distances between parts and surrounding structure	Alleria Alleria Alleria	N
in _{ter} on	- minimum dimensions of ventilating openings and arrangement	State Martin States of	N
Terr gard	- connection to supply mains and interconnection of separate components	tek anistek ahistek ahi	N
	- allow disconnection of the appliance after installation, by accessible plug or a switch in the fixed wiring, unless	STATES STATES STATES	N
15 ⁵	a switch complying with 24.3	15 St 150	N
7.12.5	Replacement cord instructions, type X attachment with a specially prepared cord	de de la	N
	Replacement cord instructions, type Y attachment	in the the the	N
	Replacement cord instructions, type Z attachment	at the total to	N
7.12.6	Caution in the instructions for appliances incorporating a non-self-resetting thermal cut-out that is reset by disconnection of the supply mains, if this cut-out is required to comply with the standard	Marie Marie Marie	N
7.12.7	Instructions for fixed appliances stating how the	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N

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IEC 60335-2-80			
Clause	Requirement + Test	Result - Remark	Verdict
400	appliance is to be fixed		The same
7.12.8	Instructions for appliances connected to the water m	ains:	16th 5th
1/2 30	- max. inlet water pressure (Pa):	RELEASE SHEET SHEET A	N
Kart S	- min. inlet water pressure, if necessary (Pa):	a de de s	N
	Instructions concerning new and old hose-sets for appliances connected to the water mains by detachable hose-sets	e get som sør	N
7.12.9	Instructions specified in 7.12 and from 7.12.1 to 7.12.8 appear together before any other instructions supplied with the appliance	Martine Martines Services	P. A.
patrick ser	These instructions may be supplied with the appliance separately from any functional use booklet	STOR WILLIAM MILITER OF	P
de Mary	They may follow the description of the appliance that identifies parts, or follow the drawings/sketches		Р
A TOTAL PORT	In addition, instructions are also available in an alternative format such as on a website or on request from the user in a format such as a DVD	SALETER SALETER SALETER	Р
	In addition, instructions are also available in an alternative format such as on a website or in a format such as a DVD:	Website	Р
7.14	Marking clearly legible and durable, rubbing test as specified		Р
7200	Signal words WARNING, CAUTION, DANGER in uppercase having a height as specified:	Article Miles Artic	N
and the	Uppercase letter of the text explaining the signal word not smaller than 1.6 mm:	ANTE WITH WILLS	N
William Pil	Moulded in, engraved, or stamped markings either raised above or have a depth below the surface of at least 0.25 mm, unless	ately whitely district of	N
	contrasting colours are used	the state state soil	N
* 350	Markings checked by inspection, measurement and rubbing test as specified	- 10 At At At	P
7.15	Markings on a main part	The Man de	Р
37.50	Marking clearly discernible from the outside, if necessary after removal of a cover	ANTER BRITISH STREET	P
step Av	For portable appliances, cover can be removed or opened without a tool	itis mirst spirite es	N
	For stationary appliances, name, trademark or identification mark and model or type reference visible after installation	MALITY MALITY MALITY	N
Sec. Care	For fixed appliances, name, trademark or identification mark and model or type reference visible after installation according to the instructions	STATES STATES STATES	N

d s	e No.: WTF23F12259866J Page 10 of 82	2 A B 1	F 30 30
Clause		Result - Remark	Verdict
Clause	Requirement + Test	Result - Remark	verdic
all regulations and	Indications for switches and controls placed on or near the components. Marking not on parts which can be positioned or repositioned in such a way that the marking is misleading		Р
	The symbol IEC 60417-5018 placed next to the symbol IEC 60417-5172 or IEC 60417-5180	tet seitet seitet sei	N
7.16	Marking of a possible replaceable thermal link or fuse link clearly visible with regard to replacing the link	Martin Marie Mari	N
8	PROTECTION AGAINST ACCESS TO LIVE PARTS	the state of	150° 150°
8.1	Adequate protection against accidental contact with live parts	No live part	N
8.1.1	Requirement applies for all positions, detachable parts removed		N
r anr e st	Lamps behind a detachable cover not removed, if conditions met	and the source of the	N
No.	Insertion or removal of lamps, protection against contact with live parts of the lamp cap	CONTRA SOUTH SOUTH	N
Marian S	Use of test probe B of IEC 61032, with a force not exceeding 1 N: no contact with live parts	antiek entrek entrek e	N
	Use of test probe B of IEC 61032 through openings, with a force of 20N: no contact with live parts	THE SHAREST AND	N
ian sandin Lagraph	Lamps are not removed. However, during insertion or removal of lamps, no contact with live parts of the lamp cap. (IEC 60335-2-80)		N
8.1.2	Use of test probe 13 of IEC 61032, with a force not exceeding 1 N, through openings in class 0 appliances and class II appliances/constructions: no contact with live parts	affilie affilie spries of	N
	Test probe 13 also applied through openings in earthed metal enclosures having a non-conductive coating: no contact with live parts	top the state of the state of the	N
8.1.3	For appliances other than class II, use of test probe 41 of IEC 61032, with a force not exceeding 1 N: no contact with live parts of visible glowing heating elements or supporting parts	White white white	N
e de la companya de l	For a single switching action obtained by a switching device, requirements as specified	A B St	N
	For appliances with a supply cord and without a switching device, the single switching action may be obtained by the withdrawal of the plug	the state of the s	N
8.1.4	Accessible part not considered live if:		-
Cale San	- safety extra-low a.c. voltage: peak value not exceeding 42.4 V	Abrilia Abrila Abrila	N
.00	- safety extra-low d.c. voltage: not exceeding	A St ST	P



Reference No.: WTF23F12259866J IEC 60335-2-80 Requirement + Test Result - Remark Clause Verdict 42.4 V - or separated from live parts by protective N impedance If protective impedance: d.c. current not exceeding N 2 mA, and a.c. peak value not exceeding 0.7 mA Ν - for peak values over 42.4 V up to and including Ν 450 V, capacitance not exceeding 0.1 μF - for peak values over 450 V up to and including N 15 kV, discharge not exceeding 45 μC - for peak values over 15kV, the energy in the N discharge not exceeding 350 mJ 8.1.5 Live parts protected at least by basic insulation before installation or assembly: - built-in appliances N fixed appliances Ν - appliances delivered in separate units N 8.2 Class II appliances and constructions constructed N so that there is adequate protection against accidental contact with basic insulation and metal parts separated from live parts by basic insulation only Only possible to touch parts separated from live Ν parts by double or reinforced insulation 8.2 After removal of detachable parts for user Ν maintenance purposes, the basic insulation of internal wiring may be touched provided the equivalent insulating of cords complying with IEC 60227 or IEC 60245. (IEC 60335-2-80) STARTING OF MOTOR-OPERATED APPLIANCES Requirements and tests are specified in part 2 Ν when necessary POWER INPUT AND CURRENT 10 10.1 Power input at normal operating temperature, rated (see appended table) Ν voltage and normal operation not deviating from rated power input by more than shown in table 1: If the power input varies throughout the operating Ν cycle and the maximum value of the power input exceeds, by a factor greater than two, the arithmetic mean value of the power input occurring during a representative period, the power input is the maximum value that is exceeded for more than 10 % of the representative period Otherwise the power input is the arithmetic mean N

value



and the same	IEC 60335-2-80		
Clause	Requirement + Test	Result - Remark	Verdic
	Test carried out at upper and lower limits of the ranges for appliances with one or more rated voltage ranges, unless		N
get is	the rated power input is related to the arithmetic mean value	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N
4 1	Appliances are tested with shutters or similar devices in the open position. (IEC 60335-2-80)	A ST AS	N
10.2	Current at normal operating temperature, rated voltage and normal operation not deviating from rated current by more than shown in table 2:	(see appended table)	P
picted sub teld subsicio	If the current varies throughout the operating cycle and the maximum value of the current exceeds, by a factor greater than two, the arithmetic mean value of the current occurring during a representative period, the current is the maximum value that is exceeded for more than 10 % of the representative period		N
1100	Otherwise the current is the arithmetic mean value	the state of	N
Martin a	Test carried out at upper and lower limits of the ranges for appliances with one or more rated voltage ranges, unless	Martine aparticular apparatus appri	N.
Tigh and	the rated current is related to the arithmetic mean value of the range	all and and a	N
ed andre	Appliances are tested with shutters or similar devices in the open position. (IEC 60335-2-80)		N
11	HEATING	4. 4.	
11.1	No excessive temperatures in normal use	State State State of	Р
11.2	The appliance is held, placed or fixed in position as described:	Placed on test corner	Р
11.3	Temperature rises, other than of windings, determined by thermocouples	to the state of	Р
e di	Temperature rises of windings determined by resistance method, unless		N
	the windings are non-uniform or it is difficult to make the necessary connections	Albertan Maria Alberta A	Р
11.4	Heating appliances operated under normal operation at 1.15 times rated power input (W):	SPITES STREET SPITES SP	N
11.5	Motor-operated appliances operated under normal operation at most unfavourable voltage between 0.94 and 1.06 times rated voltage (V)	(see appended table)	Р
11.6	Combined appliances operated under normal operation at most unfavourable voltage between 0.94 and 1.06 times rated voltage (V):		N
11.7	Appliances are operated until steady conditions are established. (IEC 60335-2-80)	They have the of	Р

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	IEC 60335-2-80		The state of the
Clause	Requirement + Test	Result - Remark	Verdict
11.8	Temperature rises monitored continuously and not exceeding the values in table 3:	(see appended table)	Р
	If the temperature rise of a motor winding exceeds the value of table 3, or	France Marie Alberta Above	N
350	if there is doubt with regard to classification of insulation,	THE SHITTER WHITE WAIT	N
250	tests of Annex C are carried out	5 Jr Jr Jr	N
	Sealing compound does not flow out	The The St.	Р
NEED .	Protective devices do not operate, except	the set set of	Р
	components in protective electronic circuits tested for the number of cycles specified in 24.1.4	at the state of	N
	The temperature rise limits for appliances for tropical climates are reduced by 15 K. (IEC 60335-2-80)	the state which with	N
WESTER.	The temperature rise limits for fans marked with an ambient operating temperature are reduced by the difference between the marked value and 25 °C. (IEC 60335-2-80)	September 1980 test 1980 test 198	N
13	LEAKAGE CURRENT AND ELECTRIC STRENGTH TEMPERATURE	AT OPERATING	50° 28'52.
13.1	Leakage current not excessive and electric strength adequate	AND STATE STATE	Р
	Heating appliances operated at 1.15 times the rated power input (W):	The state which	N
	Motor-operated appliances and combined appliances supplied at 1.06 times the rated voltage (V):	(see appended table)	Р
No. of Contrasts	Protective impedance and radio interference filters disconnected before carrying out the tests	State William William State	N
13.2	For class 0, class II and class III appliances, and class II constructions, leakage current measured by means of the circuit described in figure 4 of IEC 60990	er gritter spiriter spiriter	P
415	For class 0I and class I appliances, a low impedance ammeter may be used	Alberta Alberta Aberra A	N
de la	Leakage current measurements:	(see appended table)	Р
13.3	The appliance is disconnected from the supply		Р
0, 0	Electric strength tests according to table 4:	(see appended table)	Р
d d	No breakdown during the tests		Р
14	TRANSIENT OVERVOLTAGES		46° 46°
- All Tark	Appliances withstand the transient over-voltages to which they may be subjected	The state states as	N
and the	Clearances having a value less than specified in table 16 subjected to an impulse voltage test, the	at the set	N

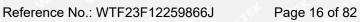


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	1 age 14 61 62		
IEC 60335-2-80			
Clause	Requirement + Test	Result - Remark	Verdict
300	test voltage specified in table 6:		The Assessment
4	No flashover during the test, unless		N
	of functional insulation if the appliance complies with clause 19 with the clearance short-circuited	Victor Albert A	N
15	MOISTURE RESISTANCE	of the state of the state of the	5 94 -48
15.1	Enclosure provides the degree of moisture protection according to classification of the appliance	STATES STATES	N
385 ⁴⁶ 3	Compliance checked as specified in 15.1.1, taking into account 15.1.2, followed by the electric strength test of 16.3	Martine Mariates assures	N
p ^{er} sit Kit S	No trace of water on insulation which can result in a reduction of clearances or creepage distances below values specified in clause 29		N
15.1.1	Appliances, other than IPX0, subjected to tests as specified in IEC 60529:	IPX0	N
A Contraction of the Contraction	Water valves containing live parts in external hoses for connection of an appliance to the water mains tested as specified for IPX7 appliances	A THE THE	N
	The outer part of fans to be installed in the external structure is subjected to subclause 14.2.4(a) of IEC 60529:1989. The part of fans that is not mounted on the outside surface is protected against the spray water from the oscillating tube. (IEC 60335-2-80)		N
Springt.	The test is carried out with the appliance in the rest position and then in operation while supplied at rated voltage, shutters or similar devices being in the open position. (IEC 60335-2-80)	Martin and the services	N
ariter sar Kest sit	Fans marked with the second numeral of the IP system are subjected to the appropriate test of IEC 60529 both at rest and in operation while supplied at rated voltage. (IEC 60335-2-80)	atter souther souther so	N
15.1.2	Hand-held appliance turned continuously through the most unfavourable positions during the test	The state of the state of	N
44	Built-in appliances installed according to the instructions	and the and the server	N
	Appliances placed or used on the floor or table placed on a horizontal unperforated support	drifted and the anith.	N
	Appliances normally fixed to a wall and appliances with pins for insertion into socket-outlets are mounted on a wooden board	atter selection selection sele	N
	For IPX3 appliances, the base of wall mounted appliances is placed at the same level as the pivot axis of the oscillating tube		N
	For IPX4 appliances, the horizontal centre line of the appliance is aligned with the pivot axis of the	They are also	N

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Clause	Deguirement Test	Decult Demont	Mandia
Clause	Requirement + Test	Result - Remark	Verdic
400	oscillating tube, and	and and when	Apr. Apr.
ANGGAR SOM	for appliances normally used on the floor or table, the movement is limited to two times 90° for a period of 5 min, the support being placed at the level of the pivot axis of the oscillating tube		N
e sp St. List	Wall-mounted appliances, take into account the distance to the floor stated in the instructions	Se Mary Mary Mary	N
AND THE S	Appliances normally fixed to a ceiling are mounted underneath a horizontal unperforated support, the pivot axis of the oscillating tube located at the level of the underside of the support, and	SHIFT SHIFT SHIFT	N
particle suff	for IPX4 appliances, the movement of the tube is limited to two times 90° from the vertical for a period of 5 min	STEE MILIES SHITES SH	N
de Santa	Appliances with type X attachment fitted with a flexible cord as described	or antitor antitor and	N
ALI TAP	Detachable parts subjected to the relevant treatment with the main part		N
ARTICLE S	However, if a part has to be removed for user maintenance and a tool is needed, this part is not removed	Martin agriffet agriffet	N
15.2	Spillage of liquid does not affect the electrical insulation	the state of	N
	Spillage solution comprising water containing approximately 1 % NaCl and 0.6 % rinsing agent		N
S.S.O.	Appliances with type X attachment fitted with a flexible cord as described	Set Set state	N.
ariatist sur	Appliances incorporating an appliance inlet tested with or without an connector, whichever is most unfavourable	State State States of	N
je s	Detachable parts are removed		J N
e silve e silve	Overfilling test with additional amount of the solution, over a period of 1 min (I):		N
And	The appliance withstands the electric strength test of 16.3	White March March	N
alester a	No trace of water on insulation that can result in a reduction of clearances or creepage distances below values specified in clause 29	Martin September Martine .	N
15.3	Appliances proof against humid conditions	Star William Paris	Р
	Checked by test Cab: Damp heat steady state in IEC 60068-2-78	the little little mili	Р
· Stab	Detachable parts removed and subjected, if necessary, to the humidity test with the main part	the fit state	Р
	Humidity test for 48 h in a humidity cabinet	25°C, 93% R.H.	Р
STO S	Reassembly of those parts that may have been	18 St 35	Р



	IEC 60335-2-80		
Clause	Requirement + Test	Result - Remark	Verdic
- 1	removed	The state of the s	- 10
- C	The appliance withstands the tests of clause 16		Р
16	LEAKAGE CURRENT AND ELECTRIC STRENGTH	Marie albert Albert Albert	
16.1	Leakage current not excessive and electric strength adequate	the satisfication assisted as	N
# 1500	Protective impedance disconnected from live parts before carrying out the tests	- STEP ASTER BESTER ASTER	N
300	Tests carried out at room temperature and not connected to the supply	the state of	N
16.2	Single-phase appliances: test voltage 1.06 times rated voltage (V)		N
	Three-phase appliances: test voltage 1.06 times rated voltage divided by $\sqrt{3}$ (V):	See March All All A	N
71/1	Leakage current measurements:	(see appended table)	N
t with	Limit values doubled if:		t 6
44	- all controls have an off position in all poles, or	Think the first the	N
unitelle e	- the appliance has no control other than a thermal cut-out, or	STAR RESERVE ARTERS ARTERS	N
STEEL SEE	- all thermostats, temperature limiters and energy regulators do not have an off position, or	The state of	N
	- the appliance has radio interference filters		N
1985	With the radio interference filters disconnected, the leakage current do not exceed limits specified:	Marian Marian Abrillo Abr	N
16.3	Electric strength tests according to table 7:	(see appended table)	N
Negative Ca	Test voltage applied between the supply cord and inlet bushing and cord guard and cord anchorage as specified:	(see appended table)	N
A 1	No breakdown during the tests		N
17	OVERLOAD PROTECTION OF TRANSFORMERS	AND ASSOCIATED CIRCUITS	1
er andred	No excessive temperatures in transformer or associated circuits in event of short-circuits likely to occur in normal use:	- STATES STATES STATES STATES	N
-1878 STEEL -1	Appliance supplied with 1.06 or 0.94 times rated voltage under the most unfavourable short-circuit or overload likely to occur in normal use (V):	States and the ability ability	N
M. All	Basic insulation is not short-circuited	The state with state of	N
	Temperature rise of insulation of the conductors of safety extra-low voltage circuits not exceeding the relevant value specified in table 3 by more than 15 K	A STATE STATES STATES SON	N
2000	Temperature of the winding not exceeding the value specified in table 8	Marite Autor Abrille Autor	N



<i>*</i>	1 age 17 of 02		
IEC 60335-2-80			
Clause	Requirement + Test	Result - Remark	Verdict
e de la companya de l	However, limits do not apply to fail-safe transformers complying with sub-clause 15.5 of IEC 61558-1	and the state	N
18	ENDURANCE	the the the a	-
See Alec	Requirements and tests are specified in part 2 when necessary	the southern southern son	N
19	ABNORMAL OPERATION	s do do si	1 J - 1
19.1	The risk of fire, mechanical damage or electric shock under abnormal or careless operation obviated	State State State	P
. J.	Electronic circuits so designed and applied that a fault will not render the appliance unsafe:	Considered	True P
d s	Appliances incorporating heating elements subjected to the tests of 19.2 and 19.3, and	and the state of	N
s and the	if the appliance also has a control that limit the temperature during clause 11 it is subjected to the test of 19.4, and	The state state	N
A	if applicable, to the test of 19.5	74, 4, 4	N
Alexander	Appliances incorporating PTC heating elements are also subjected to the test of 19.6	Miles Marie Barres	N
المالي المعاناه	Appliances incorporating motors subjected to the tests of 19.7 to 19.10, as applicable	AT SUPPLE OF	Р
	Appliances incorporating electronic circuits subjected to the tests of 19.11 and 19.12, as applicable	The state of the s	Р
28 ° '	Appliances incorporating contactors or relays subjected to the test of 19.14, being carried out before the tests of 19.11	ARLES ARLES ARLES	N
No. On	Appliances incorporating voltage selector switches subjected to the test of 19.15	The Mark State of	N
in the	Unless otherwise specified, the tests are continued until a non-self-resetting thermal cut-out operates, or		N
44,	until steady conditions are established	The first show	Р
28 25 CT 2	If a heating element or intentionally weak part becomes open-circuited, the relevant test is repeated on a second sample	ANTON SERVICE SERVICE	N
palita paka Hari	If the control performs more than one function, only that aspect of the control under consideration is rendered inoperative. Other functions of the control may continue to operate normally.		N
L NEWS	Fans incorporating shutters or similar subjected to the test of cl. 19.101 (IEC 60335-2-80)	All Silv Silv	N
19.2	Test of appliances with heating elements with restricted heat dissipation; test voltage (V), power	A St. St.	N

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IEC 60335-2-80			
Clause	Requirement + Test	Result - Remark	Verdict
- Aller	input of 0.85 times rated power input (W):	Be The State of th	
19.3	Test of 19.2 repeated; test voltage (V), power input of 1.24 times rated power input (W):	The street states whi	N
19.4	Test conditions as in clause 11, any control limiting the temperature during tests of clause 11 short-circuited	The secret sectors sector	N
19.5	Test of 19.4 repeated on Class 0I and I appliances with tubular sheathed or embedded heating elements. No short-circuiting, but one end of the element connected to the sheath		N
	The test repeated with reversed polarity and the other end of the heating element connected to the sheath	and along the second	N
508 ₃₁ 515 31516	The test is not carried out on appliances intended to be permanently connected to fixed wiring and on appliances where an all-pole disconnection occurs during the test of 19.4		N
19.6	Appliances with PTC heating elements tested at rated voltage, establishing steady conditions	Salesting Alberta Aberra	N
	The working voltage of the PTC heating element is increased by 5% and the appliance is operated until steady conditions are re-established. The voltage is then increased in similar steps until 1.5 times working voltage or until the PTC heating element ruptures (V):		N
19.7	Stalling test by locking the rotor if the locked rotor torque is smaller than the full load torque, or	Marine Aller Aller	N
J	locking moving parts of other appliances	The State State of	Р
15 TO SE	Locked rotor, capacitors open-circuited one at a time	the the the	N
	Test repeated with capacitors short-circuited one at a time, unless	ar ar ar ar	N
	the capacitor is of class S2 or S3 of IEC 60252-1	and the same	N
	Appliances with timer or programmer supplied with rated voltage for each of the tests, for a period equal to the maximum period allowed:	SERVICE SERVICE SERVICES	N
Aller A	An electronic timer or programmer that operates to ensure compliance with the test before the maximum period under the conditions of Clause 11 is reached, is a protective electronic circuit		N
th sta	Other appliances supplied with rated voltage for a period as specified:	Until steady	Р
- 550	Winding temperatures not exceeding values specified in table 8:	(see appended table)	Р
47	Mounting of separate control (IEC 60335-2-80)	They have the a	N
160	Approximately 50 % of the area of each ventilating	a de de s	N

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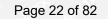
	IEC 60335-2-80		4 A
Clause	Requirement + Test	Result - Remark	Verdic
4	opening is blocked. (IEC 60335-2-80)	The Walter Street	130
1 Jan	Winding temperatures not exceeding values specified in table 8 (IEC 60335-2-80)	The state astate with	N
.4.	The temperature rise of the board not exceed: (IEC	60335-2-80)	, ,
75°	– 50 K, for appliances with T marking; (IEC 60335- 2-80)	See Militer Walter March	N
\$ _5 ⁰	- 65 K, for other appliances. (IEC 60335-2-80)	and the state of	N
19.8	Multi-phase motors operated at rated voltage with one phase disconnected	Aller Aller Aller All	N
19.9	Not applicable. (IEC 60335-2-80)	ALTER STATE SHALL SHALL	N
19.10	Series motor operated at 1.3 times rated voltage for 1 min (V):	the the state with	N
	During the test, parts not being ejected from the appliance	the state of the	N
19.11	Electronic circuits, compliance checked by evaluation of the fault conditions specified in 19.11.2 for all circuits or parts of circuits, unless	The state state so	N
d	they comply with the conditions specified in 19.11.1		Р
urur a Urur a	Appliances incorporating an electronic circuit that relies upon a programmable component to function correctly, subjected to the test of 19.11.4.8, unless		Р
	restarting does not result in a hazard	-1 (A) A)	N
agrice.	Appliances having a device with an off position obtained by electronic disconnection, or a device placing the appliance in a stand-by mode, subjected to the tests of 19.11.4		Р
National Colo	If the safety of the appliance under any of the fault conditions depends on the operation of a miniature fuse-link complying with IEC 60127, the test of 19.12 is carried out	STEEL MALLEY SHILLS SHILLS	N
	During and after each test the following is checked:	A ST ST ST	
e 50	- the temperature of the windings do not exceed the values specified in table 8	- 1 1 d	Р
	- the appliance complies with the conditions specified in 19.13	AND	Р
	- any current flowing through protective impedance not exceeding the limits specified in 8.1.4	State Mark Aller Aller	N
er Service	If a conductor of a printed board becomes open-circle considered to have withstood the particular test, proceedings are met:		14 PT 18
- 14th	- the base material of the printed circuit board withstands the test of Annex E	All the state of	N
	- any loosened conductor does not reduce clearance or creepage distances between live parts and accessible metal parts below the values	White strict strict on	N

Reference No.: WTF23F12259866J Page 20 of 82 IEC 60335-2-80 Requirement + Test Result - Remark Clause Verdict specified in clause 29 19.11.1 Fault conditions a) to g) in 19.11.2 are not applied to circuits or parts of circuits meeting both of the following conditions: - the electronic circuit is a low-power circuit, that is, P the maximum power at low-power points does not exceed 15 W according to the tests specified - the protection against electric shock, fire hazard, Р mechanical hazard or dangerous malfunction of other parts of the appliance does not rely on the correct functioning of the electronic circuit 19.11.2 Fault conditions applied one at a time, the appliance operating under conditions specified in clause 11, but supplied at rated voltage, duration of the tests as specified: a) short circuit of functional insulation if clearances N or creepage distances are less than the values specified in clause 29 b) open circuit at the terminals of any component Ν c) short circuit of capacitors, unless Ν they comply with IEC 60384-14 N d) short circuit of any two terminals of an electronic Ν component, other than integrated circuits This fault condition is not applied between the two Ν circuits of an optocoupler e) failure of triacs in the diode mode N f) failure of microprocessors and integrated circuits Ν g) failure of an electronic power switching device N Each low power circuit is short-circuited by connecting the low-power point to the pole of the supply source from which the measurements were made 19.11.3 If the appliance incorporates a protective electronic N circuit that operates to ensure compliance with clause 19, the appliance is tested as specified 19.11.4 Appliances having a device with an off position Ν obtained by electronic disconnection, or a device that can be placed in the stand-by mode, Р P subjected to the tests of 19.11.4.1 to 19.11.4.7, the device being set in the off position or in the standby mode Appliances incorporating a protective electronic N circuit subjected to the tests of 19.11.4.1 to 19.11.4.7, the tests being carried out after the protective electronic circuit has operated, except that

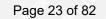
appliances operated for 30 s or 5 min during the



IEC 60335-2-80 Requirement + Test Result - Remark Clause Verdict test of 19.7 are not subjected to the tests for electromagnetic phenomena. Surge protective devices disconnected, unless Ν They incorporate spark gaps Ν 19.11.4.1 The appliance is subjected to electrostatic discharges in accordance with IEC 61000-4-2, test level 4 The appliance is subjected to radiated fields in P 19.11.4.2 accordance with IEC 61000-4-3, at frequency ranges specified Ρ 19.11.4.3 The appliance is subjected to fast transient bursts in accordance with IEC 61000-4-4, test level 3 or 4 as specified 19.11.4.4 The power supply terminals of the appliance Р subjected to voltage surges in accordance with IEC 61000-4-5, test level 3 or 4 as specified An open circuit test voltage of 2 kV is applicable Ρ for the line-to-line coupling mode An open circuit test voltage of 4 kV is applicable for N the line-to-earth coupling Earthed heating elements in class I appliances N disconnected 19.11.4.5 Р The appliance is subjected to injected currents in accordance with IEC 61000-4-6, test level 3 19.11.4.6 Appliances having a rated current not exceeding 16 Ρ A are subjected to the Class 3 voltage dips and interruptions in accordance with IEC 61000-4-11 Appliances having a rated current exceeding 16 A Ν are subjected to the Class 3 voltage dips and interruptions in accordance with IEC 61000-4-34 19.11.4.7 Ρ The appliance is subjected to mains signals in accordance with IEC 61000-4-13, test level class 2 The appliance is supplied at rated voltage and 19.11.4.8 Ρ operated under normal operation. After 60s the power supply is reduced to a level such that the appliance ceases to respond or parts controlled by the programmable component cease to operate The appliance continues to operate normally, or Ν requires a manual operation to restart Р 19.12 If the safety of the appliance for any of the fault N conditions specified in 19.11.2 depends on the operation of a miniature fuse-link complying with IEC 60127, the test is repeated, measuring the current flowing through the fuse-link; measured current (A); rated current of the fuse-link (A): 19.13 During the tests the appliance does not emit



1	IEC 60335-2-80		- 40
Clause	Requirement + Test	Result - Remark	Verdic
- A	flames, molten metal, poisonous or ignitable gas in hazardous amounts	State State State State	
No. 1	Temperature rises not exceeding the values shown in table 9:	(see appended table)	Р
See The	Compliance with clause 8 not impaired	the the the till the	Р
# 50	If the appliance can still be operated it complies with 20.2	1 1 St 3	Р
and the same	Insulation, other than of class III appliances or class contain live parts, withstands the electric strength tesspecified in table 4:		anitrib
-2	- basic insulation (V):	The state of the s	N
10° 10'	- supplementary insulation (V):	Sept they want with	N
A 1	- reinforced insulation (V):		N
e and	After operation or interruption of a control, clearances and creepage distances across the functional insulation withstand the electric strength test of 16.3, the test voltage being twice the working voltage		P
	The appliance does not undergo a dangerous malfunction, and	Miller Striker Striker Striker	Р
Star Star	no failure of protective electronic circuits, if the appliance is still operable	and proper species of	N
al-	Appliances tested with an electronic switch in the off mode:	f position, or in the stand-by	d* 0
d	- do not become operational, or		Р
ages :	- if they become operational, do not result in a dangerous malfunction during or after the tests of 19.11.4	and and and and	N
	If the appliance contains lids or doors that are control one of the interlocks may be released provided that:		_
	- the lid or door does not move automatically to an open position when the interlock is released, and	the Water Pales Alexander	N
400	- the appliance does not start after the cycle in which the interlock was released	Marie Marie Marie Marie	N
19.14	Appliances operated under the conditions of clause 11, any contactor or relay contact operating under the conditions of clause 11 being short-circuited	States and the south	N
	For a relay or contactor with more than one contact, all contacts are short-circuited at the same time	atter applicate application as	N
	A relay or contactor operating only to ensure the appliance is energized for normal use is not short-circuited		N
C. Carlo	If more than one relay or contactor operates in clause 11, they are short-circuited in turn	of the state of	N



IEC 60335-2-80			
Clause	Requirement + Test	Result - Remark	Verdict
19.15	For appliances with a mains voltage selector switch, the switch is set to the lowest rated voltage position and the highest value of rated voltage is applied		N
19.101	Fans incorporating shutters or similar that are operated automatically are supplied at rated voltage in the closed or open position, whichever is more unfavourable (IEC 60335-2-80)	tet genitet seitet geni	N
20	STABILITY AND MECHANICAL HAZARDS	The state of the s	AL. AL.
20.1	Appliances having adequate stability	1 1 15	Р
and and a	Tilting test through an angle of 10°, appliance placed on an inclined plane/horizontal support, not connected to the supply mains; appliance does not overturn		Р
THE SHITT	Tilting test repeated on appliances with heating elements, angle of inclination increased to 15°	ar anisted arrived and	N N
A MARTERIA	Possible heating test in overturned position; temperature rise does not exceed values shown in table 9	SHATEL SHATEL SHATE	N
	Portable pedestal fans exceeding 1.7 m and exceeding 10 kg tested with a force of 40 N at 1.5 m. (IEC 60335-2-80)	Miller Stiller Stiller	N
	20.101 Fan blades, other than those of fans for mounting at high level, shall be guarded unless their leading edges and tips are rounded with a radius of not less than 0.5 mm and (IEC 60335-2-80)		N
-1,	- they have a hardness less than D 60 Shore, or (IEC 60335-2-80)	They They the	N
34 ⁵ 55	they have a peripheral speed less than 15 m/s when the fan is supplied at rated voltage, or (IEC 60335-2-80)	SELECT SELECTION SERVICES	N
ing, a	 the fan has a power output not exceeding 2 W when supplied at rated voltage. (IEC 60335-2-80) 	STEEL STATES SHITTED SE	N
20.2	Moving parts adequately arranged or enclosed as to provide protection against personal injury	pet and suret soil	Р
et gestelle	Protective enclosures, guards and similar parts are non-detachable, and	- 10 50 450	+ P
	have adequate mechanical strength	The Mr. is	Р
and the same	Enclosures that can be opened by overriding an interlock are considered to be detachable parts	anitest antitest shirter.	N N
	Self-resetting thermal cut-outs and overcurrent protective devices not causing a hazard by unexpected closure	Title all title all title all	N
31/2	Not possible to touch dangerous moving parts with the test probe described	ANTER MITTER SALV	Р
20.101	Fan blades, other than those for mounting at high level, shall be guarded, unless their leading edges and tips are rounded with a radius of not less than 0.5 mm and: (IEC 60335-2-80)	About the second	AND THE

Reference No.: W1F23F12259866J Page 24 of 82			
	IEC 60335-2-80		
Clause	Requirement + Test	Result - Remark	Verdic
	-they have a hardness less than D 60 Shore, or (IEC 60335-2-80)	Salver all March All March	N
allester is A	-they have a peripheral speed less than 15 m/s when the fan is supplied at rated voltage, or (IEC 60335-2-80)	ATTER SHITTER SHITTER SHIT	N
Sec. State	-the fan has a power output not exceeding 2 W when supplied at rated voltage. (IEC 60335-2-80)	the artific appropriate	N
20.102	There shall be no risk of entrapment or injury caused by movement of the oscillating head of pedestal fans or table fans. (IEC 60335-2-80)	· ANTICE MALICE MANAGER	N
	Unless the entrapment point is guarded so that it cannot be touched by test probe 18 of IEC 61032, the appliance is operated at rated voltage and test probe 18 is placed at the entrapment point across the width and height of its opening. (IEC 60335-2-80)	Mariate Arrivat Arrivat Arrivat	N
Sept Miles	If test probe 18 is touched by the moving part, it shall not be subjected to a force exceeding 15 N. (IEC 60335-2-80)		N
21	MECHANICAL STRENGTH	The state of	-
21.1	Appliance has adequate mechanical strength and is constructed as to withstand rough handling	SHATEL SHATE SHATE	Р
andree a	Checked by applying 3 blows to every point of the enclosure like to be weak, in accordance with test Ehb of IEC 60068-2-75, spring hammer test, with an impact energy of 0.5 J	(see appended table)	Р
edit eest	The appliance shows no damage impairing compliance with this standard, and		Р
	compliance with 8.1, 15.1 and clause 29 not impaired	Alexander Alexander	Р
	If doubt, supplementary or reinforced insulation subjected to the electric strength test of 16.3	State Aller Alera	N
ing, in	If necessary, repetition of groups of three blows on a new sample	STEEL MAILTER SPOTTER SPAT	N
21.2	Accessible parts of solid insulation having strength to prevent penetration by sharp implements	the strategy and their services	Р
	Test not applicable if the thickness of supplementary insulation is at least 1 mm and reinforced insulation at least 2 mm	STREET, STREET, STREET, S	N
700000	The insulation is tested as specified, and does withstand the electric strength test of 16.3	STATES SANTAN SANTAN SAN	N
21.101	Fan guards are subjected to a push and pull force of 20 N applied along the axis of the motor. Dangerous moving parts are not accessible with a test probe that is similar to test probe B of IEC 61032, but having a circular stop face with a diameter of 50 mm instead of the non-circular face. (IEC 60335-2-80)		P P
- Carren	The test probe is applied with a force not exceeding 5N. (IEC 60335-2-80)	Military Military Martiner of	Р
21.102	Ceiling fans have adequate strength. Ceiling fans are mounted in accordance with the	All Set with and	N

Reference No.: WTF23F12259866J Page 25 of 82 IEC 60335-2-80 Requirement + Test Result - Remark Clause Verdict installation instructions. A load equal to four times the mass of the fan is suspended from the body of the fan for 1 min. A torque of 1 Nm is then applied to the fixed body of the fan for 1 min. The test is repeated with the torque applied in the reverse direction. The suspension system including any safety suspension system device shall not break and the fan shall not be damaged to such an extent that compliance with 8.1, 16.3 and Clause 29 is impaired. (IEC 60335-2-80) 22 CONSTRUCTION 22.1 IPX0 Appliance marked with the first numeral of the IP Ν system, relevant requirements of IEC 60529 are fulfilled Ν NOTE 101 The enclosure defined in IEC 60529 does not include guards for fan blades. (IEC 60335-2-80) 22.2 Stationary appliance: means to ensure all-pole disconnection from the supply being provided: - a supply cord fitted with a plug, or N - a switch complying with 24.3, or Ν a statement in the instruction sheet that a N disconnection incorporated in the fixed wiring is to be provided, or - an appliance inlet N Singe-pole switches and single-pole protective N devices for the disconnection of heating elements in single-phase, permanently connected class 01 and class I appliances, connected to the phase conductor 22.3 Appliance provided with pins: no undue strain on Ν socket-outlets Applied torque not exceeding 0.25 Nm N N Pull force of 50N to each pin after the appliance has being placed in the heating cabinet; when cooled to room temperature the pins are not displaced by more than 1mm Each pin subjected to a torque of 0.4Nm; the pins Ν are not rotating, unless rotating does not impair compliance with this N 22.4 Appliance for heating liquids and appliance causing N undue vibration not provided with pins for insertion

22.5

into socket-outlets

No risk of electric shock when touching pins, for

appliances having a capacitor with rated

Ν

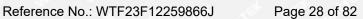
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IEC 60335-2-80			
Clause	Requirement + Test	Result - Remark	Verdict
	capacitance equal to or greater than $0.1\mu F$, the appliance being disconnected from the supply at the instant of voltage peak	and the state	SHALL SHALL
	Voltage not exceeding 34 V (V):	to the my	N
Service Service	If compliance relies on the operation of an electronic circuit, the electromagnetic phenomena tests of 19.11.4.3 and 19.11.4.4 are applied	SERVICE SILIER SIN	N
4100	The discharge test is then repeated three times, voltage not exceeding 34 V (V):	auther mitter dury	N
22.6	Electrical insulation not affected by condensing water or leaking liquid	Martin Martin Martin	N
parties and	Electrical insulation of Class II appliances not affected if a hose ruptures or seal leaks	ates and the Analysis	N
J J	In case of doubt, test as described	a d 15 3	N
22.7	Adequate safeguards against the risk of excessive pressure in appliances containing liquid or gases or having steam-producing devices		N
22.8	Electrical connections not subject to pulling during cleaning of compartments to which access can be gained without the aid of a tool, and that are likely to be cleaned in normal use	BUTTER SHILLING SHILLING	N
22.9	Insulation, internal wiring, windings, commutators and slip rings not exposed to oil, grease or similar substances, unless		Р
4.5	the substance has adequate insulating properties	THE STATE OF THE STATE OF	N
22.10	Not possible to reset voltage-maintained non-self- resetting thermal cut-outs by the operation of an automatic switching device incorporated within the appliance, if:	Stated stated stated	N
	- a non-self-resetting thermal cut-out is required by the standard, and	The state of	N
	- a voltage maintained non-self-resetting thermal cut-out is used to meet it	the State of the State	N
4	Non-self-resetting thermal motor protectors have a trip-free action, unless	Shrift White White	N
135°	they are voltage maintained	the off state	N
alient gar	Reset buttons of non-self-resetting controls so located or protected that accidental resetting is unlikely	The state state as	N
22.11	Reliable fixing of non-detachable parts that provide the necessary degree of protection against electric shock, moisture or contact with moving parts	Antick solices whi	P P
Sept. Land	Obvious locked position of snap-in devices used for fixing such parts	and the agreement agreement	N
NITCH A	No deterioration of the fixing properties of snap-in devices used in parts that are likely to be removed	pt let let	N

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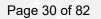
an and	IEC 60335-2-80	d 18 30 5	The sales
Clause	Requirement + Test	Result - Remark	Verdict
	during installation or servicing	AND THE STREET	44.
الق المتكانية	The 50 N force is not applied to clips used to fasten fan guards. (IEC 60335-2-80)	State with and a	Р
ested _{add} est	Instead, a force of 15 N is applied in any direction to the clips in an attempt to release them. (IEC 60335-2-80)	tet site sites sei	SEE AND LIFE PORTS
	Tests as described		P
22.12	Handles, knobs etc. fixed in a reliable manner, if loosening result in a hazard	Marketing Marketing States	Р
garia.	Removing or fixing in wrong position of handles, knobs etc. indicating position of switches or similar components not possible, if resulting in a hazard	Martin Martin Martin.	P
	A choking hazard does not apply to appliances for commercial use		N
er enter	Axial force 15 N applied to parts, the shape being so that an axial pull is unlikely to be applied	ar and the south south	Р
Maria	Axial force 30 N applied to parts, the shape being so that an axial pull is likely to be applied	SHATER SHATER SHATER	Р
STEELER S	If the part is removed and can be contained within the small parts cylinder, it is considered to be a choking hazard	NUTER STRUCKS SPRINGS	N
22.13	Unlikely that handles, when gripped as in normal use, make the operator's hand touch parts having a temperature rise exceeding the value specified for handles which are held for short periods only		N
22.14	No ragged or sharp edges creating a hazard for the user in normal use, or during user maintenance	the set set	P
ellering in	No exposed pointed ends of self-tapping screws or other fasteners, likely to be touched by the user in normal use or during user maintenance	State With Water to	P. Ration of
22.15	Storage hooks and the like for flexible cords smooth and well rounded	est grat wards and	N
22.16	Automatic cord reels cause no undue abrasion or damage to the sheath of the flexible cord, no breakage of conductors strands and no undue wear of contacts	White white white	N WARE
All I	Cord reel tested with 6000 operations, as specified	AND THE RESERVE ASSETTING	N
nit ^{elot} at	Electric strength test of 16.3, voltage of 1000 V applied	the the the	N
22.17	Spacers not removable from the outside by hand or by means of a screwdriver or a spanner		N
22.18	Current-carrying parts and other metal parts resistant to corrosion		Р
22.19	Driving belts not relied upon to provide the required level of insulation, unless	They are along	N



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IEC 60335-2-80			
Clause	Requirement + Test	Result - Remark	Verdict
700	constructed to prevent inappropriate replacement	Shirt Shirt Shirt	N
22.20	Direct contact between live parts and thermal insulation effectively prevented, unless	Service and the american	N N
تكهلق شطحكي	material used is non-corrosive, non-hygroscopic and non-combustible	ted state satisfication	N N
22.21	Wood, cotton, silk, ordinary paper and fibrous or hygroscopic material not used as insulation, unless		P
	impregnated	men the the	N
	This requirement does not apply to magnesium oxide and mineral ceramic fibres used for the electrical insulation of heating elements	Marities Marities Marities	N
22.22	Appliances not containing asbestos	water with the sales	Р
22.23	Oils containing polychlorinated biphenyl (PCB) not used	ar salt salt sal	P P
22.24	Bare heating elements, except in class III appliances or class III constructions that do not contain live parts, adequately supported	STATE STATES STATES	N
aritet	In case of rupture, the heating conductor is unlikely to come in contact with accessible metal parts	the state series	N
22.25	Sagging heating conductors, except in class III appliances or class III constructions that do not contain live parts, cannot come into contact with accessible metal parts		N
22.26	For class III constructions the insulation between parts operating at safety extra-low voltage and other live parts complies with the requirements for double or reinforced insulation	Martin Maria Maria	N N
22.27	Parts connected by protective impedance separated by double or reinforced insulation	State and the states of	N N
22.28	Metal parts of Class II appliances conductively connected to gas pipes or in contact with water, separated from live parts by double or reinforced insulation	tet arrivet arrivet arri	N N
22.29	Class II appliances permanently connected to fixed wiring so constructed that the required degree of access to live parts is maintained after installation	Abrition Parties Abrilled	N
22.30	Parts serving as supplementary or reinforced insulation fixed so that they cannot be removed without being seriously damaged, or		N
iek spicie	so constructed that they cannot be replaced in an incorrect position, and so that if they are omitted, the appliance is rendered inoperable or manifestly incomplete	AND THE SERVICE SHOULD	N
22.31	Neither clearances nor creepage distances over supplementary and reinforced insulation reduced below values specified in clause 29 as a result of	Marities Marities Marities	N

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Clause	Dequirement L Test	Result - Remark	Vardiet
Clause	Requirement + Test	Result - Remark	Verdict
3117	wear		24.
ghas ^{sort} ad desirences	Neither clearances nor creepage distances between live parts and accessible parts reduced below values for supplementary insulation if wires, screws etc. become loose	RETER SHEETED SPECIFED S	N
22.32	Supplementary and reinforced insulation constructed or protected against pollution so that clearances or creepage distances are not reduced below the values in clause 29		N
	Supplementary insulation of natural or synthetic rubber resistant to ageing, or arranged and dimensioned so that creepage distances are not reduced below values specified in 29.2	STATES STATES STATES	N
Sept Minist	Ceramic material not tightly sintered, similar materials or beads alone not used as supplementary or reinforced insulation		N
S. WINTER	Ceramic and similar porous material in which heating conductors are embedded is considered to be basic insulation, not reinforced insulation	the state white	N N
and the	Oxygen bomb test at 70 °C for 96 h and 16 h at room temperature	action and the action of	N. N.
22.33	Conductive liquids that are or may become accessible in normal use and conductive liquids that are in contact with unearthed accessible metal parts are not in direct contact with live parts, or		N
4	unearthed metal parts separated from live parts by basic insulation only	Santa and and	N
	Electrodes not used for heating liquids	See See See	N
entited en	For class II constructions, conductive liquids that are or may become accessible in normal use and conductive liquids that are in contact with unearthed accessible metal parts, not in direct contact with basic or reinforced insulation, unless	parit program program of	N
# 50°	the reinforced insulation consists of at least 3 layers	the state of	N
	For class II constructions, conductive liquids which are in contact with live parts, not in direct contact with reinforced insulation, unless	the state attach	N
STEEL ST	the reinforced insulation consists of at least 3 layers	the state of the	N
ilit _{sell} ati	An air layer not used as basic or supplementary insulation in a double insulation system if likely to be bridged by leaking liquid	et sitet sitet skil	N N
22.34	Shafts of operating knobs, handles, levers etc. not live, unless	The State State	P
	the shaft is not accessible when the part is removed		N



01	Di.	D. Mr. D. M. J.	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Clause	Requirement + Test	Result - Remark	Verdic
22.35	For other than class III constructions, handles, levers and knobs, held or actuated in normal use, not becoming live in the event of a failure of basic insulation		N
	Such parts being of metal, and their shafts or fixings are likely to become live in the event of a failure of basic insulation, are either adequately covered by insulation material or their accessible parts are separated from their shafts or fixings by supplementary insulation	THE SECURE SHELLER SHELL	N
agrico agr gricos agr gricos agr	This requirement does not apply to handles, levers and knobs on stationary appliances and cordless appliances, other than those of electrical components, provided they are reliably connected to an earthing terminal or earthing contact, or separated from live parts by earthed metal		N
S OFFICE	Insulating material covering metal handles, levers and knobs withstand the electric strength test of 16.3 for supplementary insulation		N
22.36	For appliances other than class III, handles continuously held in the hand in normal use so constructed that when gripped as in normal use, the operators hand is not likely to touch metal parts, unless		N
de de	they are separated from live parts by double or reinforced insulation		N
22.37	Capacitors in Class II appliances not connected to accessible metal parts and their casings, if of metal, separated from accessible metal parts by supplementary insulation, unless	Mark Mark Mark	N
500	the capacitors comply with 22.42	1 1 1	N
22.38	Capacitors not connected between the contacts of a thermal cut-out		Р
22.39	Lamp holders used only for the connection of lamps	the Marian States States	N
22.40	Motor-operated appliances and combined appliances intended to be moved while in operation, or having accessible moving parts, fitted with a switch to control the motor. The actuating member of the switch being easily visible and accessible		P
	If the appliance cannot operate continuously, automatically or remotely without giving rise to a hazard, appliances for remote operation being fitted with a switch for stopping the operation. The actuating member of the switch being easily visible and accessible		N
22.41	No components, other than lamps, containing mercury		Р

IEC 60335-2-80			
Clause	Requirement + Test	Result - Remark	Verdic
22.42	Protective impedance consisting of at least two separate components		N
	Values specified in 8.1.4 not exceeded if any one of the components are short-circuited or open-circuited	garden gerir gerir de De de de de	N
e de	Resistors checked by the test of 14.1 a) in IEC 60065		N
45	Capacitors checked by the tests for class Y capacitors in IEC 60384-14	Mary Mary Mary	N
22.43	Appliances adjustable for different voltages, accidental changing of the setting of the voltage unlikely to occur	afriction african agreement	AN N
22.44	Appliances not having an enclosure that is shaped or decorated like a toy		Р
22.45	When air is used as reinforced insulation, clearances not reduced below the values specified in 29.1.3 due to deformation as a result of an external force applied to the enclosure	Marie Marie Marie	N
22.46	For programmable protective electronic circuits used to ensure compliance with the standard, the software contains measures to control the fault/error conditions in table R.1	ALTER SECURE SECURES	N
	Software that contains measures to control the fault/error conditions specified in table R.2 is to be specified in parts 2 for particular constructions or to address specific hazards		N
	These requirements are not applicable to software used for functional purpose or compliance with clause 11	STREET STREET	N
22.47	Appliances connected to the water mains withstand the water pressure expected in normal use	ation was the parties of	N
The Marie	No leakage from any part, including any inlet water hose	et mirt skrift	N N
22.48	Appliances connected to the water mains constructed to prevent backsiphonage of non-potable water	Maritical Maritical Maritical	N
22.49	For remote operation, the duration of operation is to be set before the appliance can be started, unless	arties arties verties i	, N
NIE AU	the appliance switches off automatically or can operate continuously without hazard	tite mitte mitte ur	N
22.50	Controls incorporated in the appliance take priority over controls actuated by remote operation	the state as the south	N
22.51	There is a control on the appliance manually adjusted to the setting for remote operation before the appliance can be operated in this mode	STATES SECTION SERVICES	N
A.	There is a visual indication showing that the	1 4	N

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IEC 60335-2-80			No. Oak
Clause	Requirement + Test	Result - Remark	Verdic
711-02	appliance is adjusted for remote operation	THE THE STATE OF T	
الق المتحليل	These requirements not necessary on appliances the without giving rise to a hazard:	at can operate as follows,	et salar
.d	- continuously, or		N
36	- automatically, or	the water was a	N
d (1)	- remotely	1 1 to the	N
22.52	Socket-outlets on appliances accessible to the user in accordance with the socket-outlet system used in the country in which the appliance is sold	AND AND SEE IS	N
22.53	Class II appliances and class III appliances that incorporate functionally earthed parts have at least double insulation or reinforced insulation between live parts and the functionally earthed parts		N
22.54	Button cells and batteries designated R1 not accessible without the aid of a tool, unless	or and the supplemental supplement	N
S. Martines.	the cover of their compartment can only be opened after at least two independent movements have been applied simultaneously	STATES STATES BUTTER ST	N
22.55	Devices operated to stop the intended function of the appliance, if any, are be distinguished from other manual devices by means of shape, size, surface texture or position:	By mean of position	Р
Or Million	The requirement concerning position does not preclude use of a push on push off switch		N
e de	An indication when the device has been operated is given by:	A A A	Р
	tactile feedback from the actuator or from the appliance, or		N
in, m	- reduction in heat output; or	The Mark Mark Shirt	N
- ()	- audible and visible feedback	2 12 15 A	Р
22.56	Detachable power supply part provided with the part of class III construction	er productive which which	N
22.57	The properties of non-metallic materials do not degrade from exposure to UV-C radiation, as specified in Annex T	aparter aparter again as	N
41 -	This requirement does not apply to glass, ceramics or similar materials	Art Art Art Art	N
22.101	Appliances having provision for attaching a luminaire incorporate appropriate terminals and internal wiring. The internal wiring associated with the luminaire shall have insulation at least equivalent to silicone rubber compound type IE2 complying with IEC 60245-3. This requirement is not applicable to fans incorporating a luminaire that cannot be replaced without breaking the appliance. (IEC 60335-2-80)		N
22.102	The ceiling fan shall be constructed so that a failure	1 1 1 1 1	N

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	IEC 60335-2-80	# 50 S S	
Clause	Requirement + Test	Result - Remark	Verdict
an Car	of the fixing device of the motor to the mounting rod could not give rise to risk of injury to the user or surroundings. (IEC 60335-2-80)		
22.102.1	The ceiling fan shall incorporate a device that disconnects the fan from the supply before the suspension system fails. An example of this construction is shown in Figure 101. (IEC 60335-2-80)		N
22.102.2	The ceiling fan shall be constructed so that the fan motor and blades do not fall more than 300 mm after failure of the suspension system and the fan shall be disconnected from the supply. An example of this construction is shown in Figure 103. (IEC 60335-2-80)	ANGER ANGED ANGED	N
22.102.3	The ceiling fan shall be constructed so that the fan blades and motor are connected to the suspension system via a threaded down rod that is locked by means of one or more setscrews. An example of this construction is shown in Figure 104. (IEC 60335-2-80)		N
22.102.4	The ceiling fan shall be constructed so that an additional through bolt, lock washer and nut, or the like limits the distance of drop by no more than 75 mm in case of the suspension system failure. An example of this construction is shown in Figure 105. (IEC 60335-2-80)		N
22.102.5	The ceiling fan shall be constructed so that all components required to prevent the failure of the suspension system are treated or coated to resist corrosion. Any fixing bolts shall have a minimum diameter of 5 mm and a minimum tensile strength of 200 MPa. Any such bolts shall have provision to prevent them working loose due to vibration. An example of this construction is shown in Figure 106. (IEC 60335-2-80)		N
23	INTERNAL WIRING		n
23.1	Wireways smooth and free from sharp edges	a de de	Р
	Wires protected against contact with burrs, cooling fins etc.	A Party Alex Are.	Р
- 100° - 100°	Wire holes in metal well-rounded or provided with bushings	String String, String,	N
All Section 1	Wiring effectively prevented from coming into contact with moving parts	British Services Abrilled	Р
23.2	Beads etc. on live wires cannot change their position, and are not resting on sharp edges	titet sikitet sikitet sik	N STATE
	Beads inside flexible metal conduits contained within an insulating sleeve	the states and the state	N
23.3	Electrical connections and internal conductors movable relatively to each other not exposed to undue stress		P. C.
10	Flexible metallic tubes not causing damage to		N

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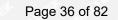
	IEC 60335-2-80		
Clause	Requirement + Test	Result - Remark	Verdic
	insulation of conductors		
.0	Open-coil springs not used		Р
at a	Adequate insulating lining provided inside a coiled spring, the turns of which touch one another	Mary Shirt Shirt Shirt	N
480 450 480 450 480 450	Fans with an oscillating mechanism influencing wiring, the conductors shall show no damage after 100 000 cycles of flexing at rated voltage and operated under normal operation , the angle being the maximum allowed by the construction (IEC 60335-2-80)		Р
	100 flexings for conductors flexed during user maintenance	are are are	N
	Electric strength test of 16.3, 1000 V between live parts and accessible metal parts	The Marie Marie Marie	Р
2 May 2	Not more than 10% of the strands of any conductor broken, and	Control Marian State of	Р
ALIEN .	not more than 30% for wiring supplying circuits that consume no more than 15W	STATES ARVINE ARVINE ARVI	Р
23.4	Bare internal wiring sufficiently rigid and fixed	No bare internal wiring used	N
23.5	The insulation of internal wiring subjected to the supply mains voltage withstanding the electrical stress likely to occur in normal use		Р
	Basic insulation electrically equivalent to the basic insulation of cords complying with IEC 60227 or IEC 60245, or	THE RESERVE AND THE RESERVE AND	N
Ser Ser .	no breakdown when a voltage of 2000 V is applied for 15 min between the conductor and metal foil wrapped around the insulation	SERVICE SERVICE SERVICE	Р
nogo en	For class II construction, the requirements for supplementary insulation and reinforced insulation apply,	STEEL MASTER SHITTER SHITTER	N
	except that the sheath of a cord complying with IEC 60227 or IEC 60245 may provide supplementary insulation.	- At At 5th is	N
	A single layer of internal wiring insulation does not provide reinforced insulation	and the state of	N
23.6	Sleeving used as supplementary insulation on internal wiring retained in position by clamping at both ends, or	AND THE STATE OF	N
	be such that it can only be removed by breaking or cutting	the state of	N
23.7	The colour combination green/yellow only used for earthing conductors	All and the second	N
23.8	Aluminium wires not used for internal wiring	No aluminium wires used	N
23.9	Stranded conductors not consolidated by soldering where they are subjected to contact pressure,	At the set set	Р

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IEC 60335-2-80			J. J. J.
Clause	Requirement + Test	Result - Remark	Verdict
- 100	unless	Market Street Block	
e de la	the contact pressure is provided by spring terminals	a de de o	N
23.10	The insulation and sheath of internal wiring, incorporated in external hoses for the connection of an appliance to the water mains, at least equivalent to that of light polyvinyl chloride sheathed flexible cord (60227 IEC 52)		N
24	COMPONENTS	A MILITA MILITA SALITA .	100 700
24.1	Components comply with safety requirements in relevant IEC standards	STATE STATE OF STATE OF	Р
100	List of components:	(see appended table)	Р
len de	Motors not required to comply with IEC 60034-1, they are tested as part of the appliance	The Military Military Military	Р
5° 55	Relays tested as part of the appliance, or	at the the	N
المراجع الم	alternatively acc. to IEC 60730-1, and meeting the additional requirements in IEC 60335-1	A A A	N
	The requirements of Clause 29 apply between live parts of components and accessible parts of the appliance	The state and a	Р
STEEL SHIP	Components can comply with the requirements for clearances and creepage distances for functional insulation in the relevant component standard	The state of the s	Р
er south	30.2 of this standard apply to parts of non-metallic material in components including parts of non-metallic material supporting current-carrying connections		Р
Mariange on	Components that have not been previously tested to comply with the IEC standard for the relevant component are tested according to the requirements of 30.2		Р
iser yani Baritek	Components that have been previously tested to comply with the resistance to fire requirements in the IEC standard for the relevant component need not be retested provided the specified conditions are met		Р
317 25 COL	If these conditions are not satisfied, the component is tested as part of the appliance.	the state with	Р
National States	Power electronic converter circuits not required to comply with IEC 62477-1, they are tested as part of the appliance		N
	If components have not been tested and found to comply with relevant IEC standard for the number of cycles specified, they are tested in accordance with 24.1.1 to 24.1.9	the state of the s	Р
Sept.	For components mentioned in 24.1.1 to 24.1.9 no additional tests specified in the relevant component standard are necessary other than those specified	att the state of	Р



gir ni	IEC 60335-	-2-80	in it it to	.5° .6°
Clause	Requirement + Test		Result - Remark	Verdict
350	in 24.1.1 to 24.1.9	- 4	Service Service Service	
ANDERE SA	Components not tested and found to comply relevant IEC standard and components not or not used in accordance with its marking, under the conditions occurring in the appliar	marked tested	ACTOR SOUTH SOUTH SOUTH	Р
et skrifte skriftet skriftet	Lampholders and starterholders that have no being tested and found to comply with the relection less than the standard, tested as a part of the appliar additionally according to the gauging and interchangeability requirements of the relevant standard	elevant nce and		N
	No additional tests specified for nationally standardized plugs such as those detailed in IEC/TR 60083 or connectors complying with standard sheets of IEC 60320-1 and IEC 60	n the	The Military Alleges and the	N
24.1.1	Capacitors likely to be permanently subjected the supply voltage and used for radio interfer suppression or for voltage dividing, comply IEC 60384-14	erence		N
and the last	If the capacitors have to be tested, they are according to Annex F	tested	the set set set	N
24.1.2	Transformers in associated switch mode po supplies comply with Annex BB of IEC 6155		To the second	N
al de	Safety isolating transformers comply with IE 61558-2-6	:C		N
7200	If they have to be tested, they are tested acc to Annex G	cording	Maritan Maria Maria di	N
24.1.3	Switches comply with IEC 61058-1, the num cycles of operation being at least 10 000	nber of	SHIP BUTTE BUTTE SHIP	N
nice of	If they have to be tested, they are tested acc to Annex H	cording	ater ander andre shire	N
estate and	If the switch operates a relay or contactor, the complete switching system is subjected to the		et stilt still still	N
5 - 35 T T T T T T T T T T T T T T T T T T	If the switch only operates a motor staring relay complying with IEC 60730-2-10 with the number of cycles of a least 10 000 as specified, the complete switching system need not be tested		Martines asserted asserted as	N
24.1.4	Automatic controls comply with IEC 60730- of cycles of operation being at least:	1 with the	e relevant part 2. The number	- " "- - " " " " " " " " " " " " " " " "
10 30	- thermostats:	10 000	the street with some	N
d d	- temperature limiters:	1 000		N
100	- self-resetting thermal cut-outs:	300	the state with the second	N
- All Friday	- voltage maintained non-self-resetting thermal cut-outs:	1 000	ret of street and	N
	- other non-self-resetting thermal cut-outs:	30	The the the	N



Reference No.: WTF23F12259866J IEC 60335-2-80 Requirement + Test Result - Remark Verdict Clause 3 000 - timers: Ν 10 000 N energy regulators: The number of cycles for controls operating during Ν clause 11 need not be declared, if the appliance meets the requirements of this standard when they are short-circuited Thermal motor protectors are tested in combination Ν with their motor under the conditions specified in Annex D For water valves containing live parts and that are N incorporated in external hoses for connection of an appliance to the water mains, the degree of protection declared for subclause 6.5.2 of IEC 60730-2-8 is IPX7 Thermal cut-outs of the capillary type comply with Ν the requirements for type 2.K controls in IEC 60730-2-9 24.1.5 Appliance couplers comply with IEC 60320-1 Ν However, for class II appliances classified higher N than IPX0, the appliance couplers comply with IEC 60320-2-3 Interconnection couplers comply with IEC 60320-2-Ν 24.1.6 Small lamp holders similar to E10 lampholders Ν comply with IEC 60238, the requirements for E10 lampholders being applicable 24.1.7 For remote operation of the appliance via a N telecommunication network, the relevant standard for the telecommunication interface circuitry in the appliance is IEC 62151 24.1.8 The relevant standard for thermal links is IEC Ν 60691 Thermal links not complying with IEC 60691 are N considered to be an intentionally weak part for the purposes of Clause 19 24.1.9 Contactors and relays, other than motor starting Ν relays, tested as part of the appliance They are also tested in accordance with Clause 17 Ν of IEC 60730-1, the number of cycles of operations in 24.1.4 selected according to the contactor or relay function in the appliance.....: 24.2 Appliances not fitted with: Р - switches, automatic controls or power supplies in flexible cords - devices causing the protective device in the fixed Ρ wiring to operate in the event of a fault in the



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01	Daminamant I Tast	Descrit Demonds	\
Clause	Requirement + Test	Result - Remark	Verdict
340	appliance	THE THE PARTY OF T	211
Notes of	- thermal cut-outs that can be reset by soldering, unless	and all the sales of	P
.4-	the solder has a melding point of at least 230 °C		N
er ser	Switches or automatic controls in flexible cords are allowed for appliances not exceeding 25 W. (IEC 60335-2-80)		N
24.3	Switches intended for all-pole disconnection of stationary appliances are directly connected to the supply terminals and have a contact separation in all poles, providing full disconnection under overvoltage category III conditions	ANTICE ANTICE ANTICE	N
24.4	Plugs and socket-outlets for extra-low voltage circuits and heating elements, not interchangeable with plugs and socket-outlets listed in IEC/TR 60083 or IEC 60906-1 or with connectors and appliance inlets complying with the standard sheets of IEC 60320-1		N
24.5	Capacitors in auxiliary windings of motors marked with their rated voltage and capacitance, and used accordingly	Although Aller Affects	N
 	Voltage across capacitors in series with a motor winding does not exceed 1.1 times rated voltage, when the appliance is supplied at 1.1 times rated voltage under minimum load		N
24.6	Working voltage of motors connected to the supply mains and having basic insulation that is inadequate for the rated voltage of the appliance, not exceeding 42 V		N
	In addition, the motors comply with the requirements of Annex I	all so the state .	N-
24.7	Detachable hose-sets for connection of appliances to the water mains comply with IEC 61770	at the title of	N
- 29	They are supplied with the appliance	the filter the the	N
	Appliances intended to be permanently connected to the water mains not connected by a detachable hose-set	STREETER STREET	N
24.8	Motor running capacitors in appliances for which 30.2.3 is applicable and that are permanently connected in series with a motor winding, not causing a hazard in event of a failure	Alice Series Series	N
d d	One or more of the following conditions are to be me	et:	4 - J
	- the capacitors are of class S2 or S3 according to IEC 60252-1	and the sender serving	N
216.32	- the capacitors are housed within a metallic or ceramic enclosure	SHIFT SHIFT SHIFT	N
.0	- the distance of separation of the outer surface to		N

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1 12 C	IEC 60335-2-80	at the term of a	a and
Clause	Requirement + Test	Result - Remark	Verdict
340	adjacent non-metallic parts exceeds 50 mm	The state of the s	300
الق المتحاكمان	- adjacent non-metallic parts within 50 mm withstand the needle-flame test of Annex E	THE STATE STATES	N
Stop Street	- adjacent non-metallic parts within 50 mm classified as at least V-1 according to IEC 60695-11-10	the springer assisted assisted as	N
24.101	Thermal cut-outs incorporated in duct fans in order to comply with cl. 19 are not self-resetting (IEC 60335-2-80)	Secretary and the secretary and	N
25	SUPPLY CONNECTION AND EXTERNAL FLEXIBL	E CORDS	-1°-
25.1	Appliance not intended for permanent connection to connection to the supply:	fixed wiring, means for	NE COLUMN
SEP MALE	- supply cord fitted with a plug, the current rating and voltage rating of the plug being not less than the corresponding ratings of its associated appliance		N
	 an appliance inlet having at least the same degree of protection against moisture as required for the appliance, or 	DC inlet	N
11 m	- pins for insertion into socket-outlets	The state with state	N
25.2	Appliance not provided with more than one means of connection to the supply mains	at Total	Р
id sprifti	Stationary appliance for multiple supply may be provided with more than one means of connection, provided electric strength test of 1250 V for 1 min between each means of connection causes no breakdown		N
25.3	Appliance intended to be permanently connected to fixed wiring provided with one of the following means for connection to the supply mains:		** <u>-</u> -
iles in	- a set of terminals allowing the connection of a flexible cord	Step Mary Shirt Shirt	N
the state of	- a fitted supply cord	the little with with a	N
the State	- a set of supply leads accommodated in a suitable compartment	- to set set is	N
SPOTE S	- a set of terminals for the connection of cables of fixed wiring, cross-sectional areas specified in 26.6, and the appliance allows the connection of the supply conductors after the appliance has been fixed to its support	ALTER AND THE ARTER AND THE	N
	- a set of terminals and cable entries, conduit entries, knock-outs or glands, allowing connection of appropriate types of cable or conduit, and the appliance allows the connection of the supply conductors after the appliance has been fixed to its support	AND STEEL ST	N
g de	For a fixed appliance constructed so that parts can be removed to facilitate easy installation, this	A A D D	N

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	IEC 60335-2-80		
Clause	Requirement + Test	Result - Remark	Verdic
Sept.	requirement is met if it is possible to connect the fixed wiring without difficulty after a part of the appliance has been fixed to its support	A CONTRACTOR OF THE STATE OF TH	
25.4	Cable and conduit entries, rated current of appliance not exceeding 16 A, dimension according to table 10 (mm):		N
4 347 15 69	Introduction of conduit or cable does not reduce clearances or creepage distances below values specified in clause 29	t and the section section and	N
25.5	Method for assembling the supply cord to the applian	nce:	
3" "	- type X attachment	Mary Star Star Star	N
Section 10	- type Y attachment	it it is the	N
e s	- type Z attachment is allowed for portable fans (IEC 60335-2-80)		N
t installe	Type X attachment, other than those with a specially prepared cord, not used for flat twin tinsel cords	er geter state state seit.	N
garanda a	For multi-phase appliances supplied with a supply cord and that are intended to be permanently connected to fixed wiring, the supply cord is assembled to the appliance by type Y attachment	Martin Martin Martin Martin	N
25.6	Plugs fitted with only one flexible cord	the first star is	N
25.7	Supply cords, other than for class III appliances, bein	ng one of the following types:	d
7/2	- rubber sheathed (at least 60245 IEC 53)		N
. St	- polychloroprene sheathed (at least 60245 IEC 57)		N
	- polyvinyl chloride sheathed. Not used if they are like a temperature rise exceeding 75 K during the test of		-31°
irus eir Kest eir	light polyvinyl chloride sheathed cord (60227 IEC 52), for appliances not exceeding 3 kg	gelek gelek gelek gelek . A A A A A A	N
t di	ordinary polyvinyl chloride sheathed cord (60227 IEC 53), for other appliances		N
A STATE OF THE STA	- heat resistant polyvinyl chloride sheathed. Not used than specially prepared cords	I for type X attachment other	1 <u>1</u>
alage a	heat-resistant light polyvinyl chloride sheathed cord (60227 IEC 56), for appliances not exceeding 3 kg		N
r di State	heat-resistant polyvinyl chloride sheathed cord (60227 IEC 57), for other appliances	STA SHIP SHIP SHIP	N
40	- halogen-free, low smoke, thermoplastic insulated a	nd sheathed	1
- GRATIST	- light duty halogen-free low smoke flexible cable (62821 IEC 101) for circular cable and (62821 IEC 101f) for flat cable	MALTER MALTER SECTION SHOUTH	N
300	Ordinary duty halogen-free low smoke	at the set set	N



	IEC 60335-2-80		- 12 M
Clause	Requirement + Test	Result - Remark	Verdict
- J	flexible cable (62821 IEC 102) for circular cable and (62821 IEC 102f) for flat cable	Shring Shring Shring	
1100 20	Supply cords for class III appliances adequately insulated	Article Military Military of	N
The State	Test with 500 V for 2 min for supply cords of class III appliances that contain live parts	test agricultur agricultur agri	N
25.8	Nominal cross-sectional area of supply cords not less than table 11; rated current (A); cross-sectional area (mm²):	Martine Martine Martin	N
25.9	Supply cords not in contact with sharp points or edges	Million State States	N
25.10	Supply cord of class I appliances have a green/yellow core for earthing	State Military Allice	N
Sept March	In multi-phase appliances, the colour of the neutral conductor of the supply cord is blue.	at a state and a said	N
الحاير الم	Where additional neutral conductors are provided in	the supply cord:	. _A + - &
4100	- other colours may be used for these additional neutral conductors;	SHELLER MARTER SHELL	N
	 all of the neutral conductors and line conductors are identified by marking using the alpha numeric notation specified in IEC 60445 		N
n 116.	- the supply cord is fitted to the appliance	in the second	N
25.11	Conductors of supply cords not consolidated by soldering where they are subject to contact pressure, unless	ANTE STEEL STATE	N
	the contact pressure is provided by spring terminals	A SUP SUP	N
25.12	Insulation of the supply cord not damaged when moulding the cord to part of the enclosure	A A A	N
25.13	Inlet openings so constructed as to prevent damage to the supply cord	a state of	N
e salitet	If it is not evident that the supply cord can be introduced without risk of damage, a nondetachable lining or bushing complying with 29.3 for supplementary insulation provided		N
28 25 EE 2	If unsheathed supply cord, a similar additional bushing or lining is required, unless the appliance is	antres sentres united.	N
J. W.	class 0, or	Alt 5th July 1	N
	a class III appliance not containing live parts		N
25.14	Supply cords moved while in operation adequately protected against excessive flexing	A SHITTER SHITTER SHIT	N
	Flexing test, as described:	the second second	The state of the s
- C	- applied force (N):	The state of	N
STEE S	- number of flexings:	18th 18th 18th	N

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100	IEC 60335-2-80	# 18 5° 5°	
Clause	Requirement + Test	Result - Remark	Verdict
1100	The test does not result in:		AL. A.T.
- 15	- short-circuit between the conductors, such that		N
	the current exceeds a value of twice the rated current	Action alternation statement at	
45	- breakage of more than 10% of the strands of any conductor	ter surren arritar arri	N
	- separation of the conductor from its terminal	r 15 50 50	N
	- loosening of any cord guard	The the the	N
100	- damage to the cord or the cord guard	the the state	N
Jet .	- broken strands piercing the insulation and becoming accessible	A A SA	N
25.15	For appliances with supply cord and appliances to be permanently connected to fixed wiring by a flexible cord, conductors of the supply cord relieved from strain, twisting and abrasion by use of cord anchorage		N
	The cord cannot be pushed into the appliance to such an extent that the cord or internal parts of the appliance can be damaged	Alberta Alberta Alberta	N
	Pull and torque test of supply cord:	16. The Tay of	· .
Sec. 34	- fixed appliances: pull 100 N; torque (not on automatic cord reel) (Nm):	A GOOD WAS	N
	- other appliances: values shown in table 12: mass (kg); pull (N); torque (not on automatic cord reel) (Nm)	SANTE SANTE SANTE	N
And a	Cord not damaged and max. 2 mm displacement of the cord	Military Military Military	N
25.16	Cord anchorages for type X attachments constructed	d and located so that:	J. J. J. J.
	- replacement of the cord is easily possible	in the the to	N
is and	- it is clear how the relief from strain and the prevention of twisting are obtained	the services and the services	N
	- they are suitable for different types of supply cord	- st st st	N
	- cord cannot touch the clamping screws of cord anchorage if these screws are accessible, unless	The St.	N
	they are separated from accessible metal parts by supplementary insulation	ANTE ARE STORY	N
e. A	- the cord is not clamped by a metal screw which bears directly on the cord	Little Antice Antice And	N
en en	- at least one part of the cord anchorage securely fixed to the appliance, unless		N
100	it is part of a specially prepared cord	at the set	N
4.	- screws which have to be operated when replacing the cord do not fix any other component, unless	The House Have	N

Reference No.: WTF23F12259866J Page 43 of 82 IEC 60335-2-80 Requirement + Test Result - Remark Verdict Clause the appliance becomes inoperative or incomplete Ν or the parts cannot be removed without a tool - if labyrinths can be bypassed the test of 25.15 is Ν nevertheless withstood - for class 0, 0I and I appliances they are of Ν insulating material or are provided with an insulating lining, unless failure of the insulation of the cord does not make N accessible metal parts live - for class II appliances they are of insulating N material, or if of metal, they are insulated from accessible metal Ν parts by supplementary insulation After the test of 25.15, under the conditions Ν specified, the conductors have not moved by more than 1 mm in the terminals 25.17 Adequate cord anchorages for type Y and Z N attachment, test with the cord supplied with the appliance 25.18 Cord anchorages only accessible with the aid of a Ν Constructed so that the cord can only be fitted with Ν the aid of a tool 25.19 Type X attachment, glands not used as cord Ν anchorage in portable appliances Tying the cord into a knot or tying the cord with N string not used 25.20 The conductors of the supply cord for type Y and Z N attachment insulated from accessible metal parts 25.21 Space for supply cord for type X attachment or for connection of fixed wiring constructed: - to permit checking of conductors with respect to Ν correct positioning and connection before fitting any cover - so there is no risk of damage to the conductors or Ν their insulation when fitting the cover - for portable appliances, so that the uninsulated Ν end of a conductor, if it becomes free from the

removal

Appliance inlets:

metal parts

25.22

terminal, prevented from contact with accessible

2 N test to the conductor for portable appliances;

- live parts not accessible during insertion or

no contact with accessible metal parts

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the state	IEC 60335-2-80		
Clause	Requirement + Test	Result - Remark	Verdic
200	Requirement not applicable to appliance inlets complying with IEC 60320-1	AND THE PROPERTY OF THE PARTY.	N
1 4	- connector can be inserted without difficulty	STATE STATE OF	N
d-	- the appliance is not supported by the connector	4 4	J- N
	- not for cold conditions if temp. rise of external metal parts exceeds 75 K during clause 11, unless	See There was any	N
7000	the supply cord is unlikely to touch such metal parts		N
25.23	Interconnection cords comply with the requirements for the supply cord, except that:	A Set Set	N
	- the cross-sectional area of the conductors is determined on the basis of the maximum current during clause 11	ately attriby aftered at	N
d d	- the thickness of the insulation may be reduced		of N
- Aller	- for class I or class II appliance with class III construction, the cross sectional areas of the conductors need not comply with 25.8 if specified conditions are met		N N
- Sept	If necessary, electric strength test of 16.3		N
25.24	Interconnection cords not detachable without the aid of a tool if compliance with this standard is impaired when they are disconnected	The state of the s	N
25.25	Dimensions of pins that are inserted into socket- outlets compatible with the dimensions of the relevant socket-outlet.		N
	Dimensions of pins and engagement face in accordance with the dimensions of the relevant plug in IEC/TR 60083	STATES WHEN BUILD	N
26	TERMINALS FOR EXTERNAL CONDUCTORS	strate strate	350° 150°
26.1	Appliances provided with terminals or equally effective devices for connection of external conductors		Р
of Salatell	Terminals only accessible after removal of a non-detachable cover, except	- gild gild gild	P
_4-	for class III appliances that do not contain live parts	The ship is	N
	Earthing terminals may be accessible if a tool is required to make the connections and means are provided to clamp the wire independently from its connection	ANTON ANTON ANTON	N
26.2	Appliances with type X attachment and appliances for the connection of cables to fixed wiring provided with terminals in which connections are made by means of screws, nuts or similar devices, unless	AND THE WASTER WAST	N
700	the connections are soldered	The state of the	N
Z.Ch	Screws and nuts not used to fix any other component, except	at the set	N-

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Reference	se No.: WTF23F12259866J Page 45 of 82		
ar son	IEC 60335-2-80	the state of the	
Clause	Requirement + Test	Result - Remark	Verdict
AND COMMENT	internal conductors, if so arranged that they are unlikely to be displaced when fitting the supply conductors		N
	If soldered connections used, the conductor so positioned or fixed that reliance is not placed on soldering alone, unless	the writer arriver which	N N
ed sprifer	barriers provided so that neither clearances nor creepage distances between live parts and other metal parts reduced below the values for supplementary insulation if the conductor becomes free at the soldered joint		N
26.3	Terminals for type X attachment and for connection of cables of fixed wiring so constructed that the conductor is clamped between metal surfaces with sufficient contact pressure but without damaging the conductor		N
	Terminals fixed so that when the clamping means is	tightened or loosened:	
	- the terminal does not become loose	the state of the state of	N
- 1	- internal wiring is not subjected to stress	the to a	N
Aller 3	- neither clearances nor creepage distances are reduced below the values in clause 29	Willer Black Alberta	N
patron upsi Kalendra	Compliance checked by inspection and by the test of subclause 9.6 of IEC 60999-1, the torque applied being equal to two-thirds of the torque specified (Nm)		N
	No deep or sharp indentations of the conductors	The The An	N
26.4	Terminals for type X attachment, except those having a specially prepared cord and those for the connection of cables of fixed wiring, no special preparation of conductors such as by soldering, use of cable lugs, eyelets or similar, and		N
ite ^{ler} _{sep} et at at	so constructed or placed that conductors prevented from slipping out when clamping screws or nuts are tightened	the section section section	N
26.5	Terminals for type X attachment so located or shielded that if a wire of a stranded conductor escapes, no risk of accidental connection to other parts that result in a hazard		N
d	Stranded conductor test, 8 mm insulation removed		N
ing the	No contact between live parts and accessible metal parts and,	THE WAITE WATER SHIP	N
t Vest	for class II constructions, between live parts and metal parts separated from accessible metal parts by supplementary insulation only		N
26.6	Terminals for type X attachment and for connection of cables of fixed wiring suitable for connection of conductors with cross-sectional area according to	All the state of	N

Reference No.: WTF23F12259866J Page 46 of 82 IEC 60335-2-80 Requirement + Test Result - Remark Clause Verdict table 13; rated current (A); nominal cross-sectional area (mm²)....: If a specially prepared cord is used, terminals need Ν only be suitable for that cord 26.7 Terminals for type X attachment, except in class III Ν appliances not containing live parts, accessible after removal of a cover or part of the enclosure Terminals for the connection of fixed wiring, 26.8 N including the earthing terminal, located close to each other 26.9 Terminals of the pillar type constructed and located Ν as specified 26.10 Terminals with screw clamping and screwless Ν terminals not used for flat twin tinsel cords, unless conductors ends fitted with means suitable for Ν screw terminals Pull test of 5 N to the connection N 26.11 For type Y and Z attachment, soldered, welded, Ν crimped or similar connections may be used For Class II appliances, the conductor so Ν positioned or fixed that reliance is not placed on soldering, welding or crimping alone If soldering, welding or crimping alone used, Ν barriers provided so that clearances and creepage distances between live parts and other metal parts are not reduced below the values for supplementary insulation if the conductor becomes PROVISION FOR EARTHING 27 27.1 Accessible metal parts of Class 0I and I appliances Ν

permanently and reliably connected to an earthing terminal or earthing contact of the appliance inlet

Class 0, II and III appliances have no provision for

Safety extra-low voltage circuits not earthed, unless

Clamping means of earthing terminals adequately

equipotential bonding conductors allow connection

Class II appliances and class III appliances can

incorporate an earth for functional purposes

Earthing terminals and earthing contacts not

connected to the neutral terminal

protective extra-low voltage circuits

secured against accidental loosening

Terminals for the connection of external

of conductors of 2.5 to 6 mm², and

protective earthing

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27.2

Class III

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Clause	Requirement + Test	Result - Remark	Verdict
	- do not provide earthing continuity between different parts of the appliance, and	State of the state of the state of	N
allo al A	- conductors cannot be loosened without the aid of a tool	Prizes Abrille Abrille Abr	N
	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes		N
27.3	For a detachable part having an earth connection and being plugged into another part of the appliance, the earth connection is made before and separated after current-carrying connections when removing the part		N
anga sala Tangan	For appliances with supply cords, current-carrying conductors become taut before earthing conductor, if the cord slips out of the cord anchorage	ate attach attach attach	N
	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes	attern at the safety	N
Mariting of	The allowed travel of the live and neutral brushes due to wear shall be less than the allowed travel of the earth brush so that the earthing circuit is maintained even after the appliance	Miller Shrift Miller Shr	N
	ceases to operate due to live and neutral brush wear. (IEC 60335-2-80)	and a second	er series en
27.4	No risk of corrosion resulting from contact between parts of the earthing terminal and the copper of the earthing conductor or other metal	Marin Marin Marin	N
. grade Joh	Parts providing earthing continuity, other than parts of a metal frame or enclosure, have adequate resistance to corrosion	alletter and the special of	N
an a	If of steel, these parts provided with an electroplated coating with a thickness at least 5 µm	STE BUTTE SHIP SHIP	N
ster species est stell	Adequate protection against rusting of parts of coated or uncoated steel, only intended to provide or transmit contact pressure		N
STEET .	In the body of the earthing terminal is a part of a frame or enclosure of aluminium or aluminium alloys, precautions taken to avoid risk of corrosion	April April Act	N
and the	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes	and the second section	N
27.5	Low resistance of connection between earthing terminal and earthed metal parts	ge state state state	N N
	This requirement does not apply to connections providing earthing continuity in the protective extralow voltage circuit, provided the clearances of basic insulation are based on the rated voltage of the appliance		N



	IEC 60335-2-80		
Clause	Requirement + Test	Result - Remark	Verdic
THE COLUMN	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes		N
	Resistance not exceeding 0.1 Ω at the specified low-resistance test (Ω)	the state of the	N
27.6	The printed conductors of printed circuit boards not used to provide earthing continuity in hand-held appliances.		N
ggantata .	They may be used to provide earthing continuity in other appliances if at least two tracks are used with independent soldering points and the appliance complies with 27.5 for each circuit	Military States States States	N
ger sign	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes	Star Hill Hill Hill Hill .	N
28	SCREWS AND CONNECTIONS	and the same of	
28.1	Fixings, electrical connections and connections providing earthing continuity withstand mechanical stresses	SHELLER SHOULD SHELL SHOULD	Р
aller a	Screws not of soft metal liable to creep, such as zinc or aluminium	Martin Salaton Strate Strate	Р
	Diameter of screws of insulating material min. 3 mm	ali alian and a	N
	Screws of insulating material not used for any electrical connections or connections providing earthing continuity	White Michael Military Mil	N
Algeria.	Screws used for electrical connections or connections providing earthing continuity screwed into metal	SHILTER SHILTER SHILTER SHILTER	N
	Screws not of insulating material if their replacement by a metal screw can impair supplementary or reinforced insulation	at the sate and	N
st garliet santiet	For type X attachment, screws to be removed for replacement of supply cord or for user maintenance, not of insulating material if their replacement by a metal screw impairs basic insulation	ANTICLE SERVICE SERVICE SERVICE SERVICE	N
40 1	For screws and nuts; torque-test as specified in table 14:	(See appended table)	Р
28.2	Electrical connections and connections providing earthing continuity constructed so that contact pressure is not transmitted through non-ceramic insulating material liable to shrink or distort, unless		N
- GREAT TOP	there is resiliency in the metallic parts to compensate for shrinkage or distortion of the insulating material	ABOUTH AND THE ABOUTH AND TO	N
300	This requirement does not apply to electrical connect	ctions in circuits of appliances	100

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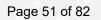
Clause	Requirement + Test Result - Remark	Verdict
2.00	for which:	4
	30.2.2 is applicable and that carry a current not exceeding 0.5 A	N
Sept. Jes	30.2.3 is applicable and that carry a current not exceeding 0.2 A	N
28.3	Space-threaded (sheet metal) screws only used for electrical connections if they clamp the parts together	N
ARRITER S	Thread-cutting (self-tapping) screws and thread rolling screws only used for electrical connections if they generate a full form standard machine screw thread	N
	Thread-cutting (self-tapping) screws not used if they are likely to be operated by the user or installer	N
s andres	Thread-cutting, thread rolling and space threaded screws may be used in connections providing earthing continuity provided it is not necessary to disturb the connection:	t Till
100	- in normal use,	N
Alexander	- during user maintenance,	N
أعملن المتحاكم	- when replacing a supply cord having a type X attachment, or	N
al- a	- during installation	N
41.	At least two screws being used for each connection providing earthing continuity, unless	N
18 Page 1	the screw forms a thread having a length of at least half the diameter of the screw	N
28.4	Screws and nuts that make mechanical connection secured against loosening if they also make electrical connections or connections providing earthing continuity	N
er sel	This requirement does not apply to screws in the earthing circuit if at least two screws are used, or	N
41	if an alternative earthing circuit is provided	N
	Rivets for electrical connections or connections providing earthing continuity secured against loosening if the connections are subjected to torsion	N
29	CLEARANCES, CREEPAGE DISTANCES AND SOLID INSULATION	
Area Arrier	Clearances, creepage distances and solid insulation withstand electrical stress	Р
	For coatings used on printed circuits boards to protect the microenvironment (Type 1) or to provide basic insulation (Type 2), Annex J applies:	N
	The microenvironment is pollution degree 1 under	N

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Clause	Requirement + Test	Result - Remark	Verdict
	type 1 protection	THE STATE OF THE STATE OF	
gh ^{aggar} ad Kab	For type 2 protection, the spacing between the conductors before the protection is applied is not less than the values specified in Table 1 of IEC 60664-3	and the state of	N
r sir A A	These values apply to functional, basic, supplementary and reinforced insulation:	See Mary May May	N
29.1	Clearances not less than the values specified in table 16, taking into account the rated impulse voltage for the overvoltage categories of table 15, unless:	(see appended table)	P
No. Color	for basic insulation and functional insulation they comply with the impulse voltage test of clause 14	Set alles alles alles	N
ised great Sometical	However, if the distances are affected by wear, distortion, movement of the parts or during assembly, the clearances for rated impulse voltages of 1500V and above are increased by 0.5 mm and the impulse voltage test is not applicable		P HILL
	For appliances intended for use at altitudes exceeding 2 000 m, the clearances in Table 16 is increased according to the relevant multiplier values in Table A.2 of IEC 60664-1	AND SECTION SHOULD SHOW	N
	Impulse voltage test is not applicable:		الق- إلى ال
	- when the microenvironment is pollution degree 3, or		P
e Joh	- for basic insulation of class 0 and class 01 appliances, or		N
	- to appliances intended for use at altitudes exceeding 2 000 m	affective affects after the	N
ar ar	Appliances are in overvoltage category II	Step British William Shirt	Р
INTE	A force of 2 N is applied to bare conductors, other than heating elements	at the the state	Р
a d	A force of 30 N is applied to accessible surfaces	40.	Р
29.1.1	Clearances of basic insulation withstand the overvoltages, taking into account the rated impulse voltage	Allected adviction about a	P
	The values of table 16 or the impulse voltage test of clause 14 are applicable:	(see appended table)	Р
er sei	Clearance at the terminals of tubular sheathed heating elements may be reduced to 1.0 mm if the microenvironment is pollution degree 1	the spile spile spile	N
L AND	Lacquered conductors of windings considered to be bare conductors	A STATE OF THE STA	Р
29.1.2	Clearances of supplementary insulation not less than those specified for basic insulation in table 16	(see appended table)	N



31	IEC 60335-2-80		
Clause	Requirement + Test	Result - Remark	Verdic
29.1.3	Clearances of reinforced insulation not less than those specified for basic insulation in table 16, using the next higher step for rated impulse voltage	(see appended table)	N
ister abis er abister	For double insulation, with no intermediate conductive part between basic and supplementary insulation, clearances are measured between live parts and the accessible surface, and the insulation system is treated as reinforced insulation		N
29.1.4	Clearances for functional insulation are the largest v	alues determined from:	- 5
	- table 16 based on the rated impulse voltage :	(see appended table)	Р
galiselle galiselle	- table F.7a in IEC 60664-1, frequency not exceeding 30 kHz	titely stately stately stately a	N
5 ⁶³ 1825	- clause 4 of IEC 60664-4, frequency exceeding 30 kHz	er let lett selle si	N
s Just	If values of table 16 are largest, the impulse voltage test of clause 14 may be applied instead, unless	1 1 1 S	N
	the microenvironment is pollution degree 3, or	The the the the	Р
	the distances can be affected by wear, distortion, movement of the parts or during assembly	Martin appropria	Р
NET TOTAL SANS	However, clearances are not specified if the appliance complies with clause 19 with the functional insulation short-circuited	THE RESERVE AND THE ASSESSMENT OF	N
a shirt	Lacquered conductors of windings considered to be bare conductors	Marie Marie Alvie A	Р
SALZER .	However, clearances at crossover points are not measured	Miles and the section section	Р
are Street	Clearance between surfaces of PTC heating elements may be reduced to 1mm	THE STOR WITH MITTER	N
29.1.5	Appliances having higher working voltages than rate insulation are the largest values determined from:	d voltage, clearances for basic	5 est 5 est
	- table 16 based on the rated impulse voltage :	(see appended table)	N
400	- table F.7a in IEC 60664-1, frequency not exceeding 30 kHz	Whitely Markey Markey Mark	N
	- clause 4 of IEC 60664-4, frequency exceeding 30 kHz	ALTER AND THE MILITER MINISTER	N
patriet yek Sert sekatri	If clearances for basic insulation are selected from Table F.7a of IEC 60664-1 or Clause 4 of IEC 60664-4, the clearances of supplementary insulation are not less than those specified for basic insulation		N
eganistas granistas nristas	If clearances for basic insulation are selected from Table F.7a of IEC 60664-1, the clearances of reinforced insulation dimensioned as specified in Table F.7a are to withstand 160% of the withstand voltage required for basic insulation	ANTICA STATE ANTICAL SALES	N

0 0	e No.: WTF23F12259866J Page 52 of 82 IEC 60335-2-80	a de de de	300
Clause	Requirement + Test	Result - Remark	Verdict
Ciddeo	If clearances for basic insulation are selected from Clause 4 of IEC 60664-4, the clearances of reinforced insulation are twice the value required for basic insulation	Teoria Terriain	N
	If the secondary winding of a step-down transformer is earthed, or if there is an earthed screen between the primary and secondary windings, clearances of basic insulation on the secondary side not less than those specified in table 16, but using the next lower step for rated impulse voltage		N
Record of	Circuits supplied with a voltage lower than rated voltage, clearances of functional insulation are based on the working voltage used as the rated voltage in table 15		N
29.2	Creepage distances not less than those appropriate for the working voltage, taking into account the material group and the pollution degree	(see appended table)	Р
- L	Pollution degree 2 applies, unless	the the to	N
Markey S	- precautions taken to protect the insulation; pollution degree 1	Marie British Starting Start	N
NUTUR SING	- insulation subjected to conductive pollution; pollution degree 3	att for the second	Р
ed sprift	Microenvironment is pollution degree 3 unless insulation is enclosed or located that it is unlikely to be exposed to pollution during normal use. (IEC 60335-2-80)		Р
	A force of 2 N is applied to bare conductors, other than heating elements	alliche green and	Р
an an	A force of 30 N is applied to accessible surfaces	STEEL WATER SHIP SHIP	Р
istate _{sign} is st. _{sign} ist	In a double insulation system, the working voltage for both the basic and supplementary insulation is taken as the working voltage across the complete double insulation system	et sanitet sanitet sanitet	Ν
29.2.1	Creepage distances of basic insulation not less than specified in table 17:	(see appended table)	Р
thritish 18th	However, if the working voltage is periodic and has a frequency exceeding 30 kHz, the creepage distances are also determined from table 2 of IEC 60664-4, these values being used if exceeding the values in table 17		N
	Except for pollution degree 1, corresponding creepage distance not less than the minimum specified for the clearance in table 16, if the clearance has been checked according to the test of clause 14:		N
29.2.2	Creepage distances of supplementary insulation at	(see appended table)	N

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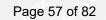
1101010110	e No.: W1F23F12259866J Page 53 of 82		
200	IEC 60335-2-80	A ST ST ST	J. J
Clause	Requirement + Test	Result - Remark	Verdict
400	least those specified for basic insulation in table 17, or:	Shring Burger Burger A	
11 Page 141	Table 2 of IEC 60664-4, as applicable:	The State State State	N
29.2.3	Creepage distances of reinforced insulation at least double those specified for basic insulation in table 17, or:	(see appended table)	N
# _5®	Table 2 of IEC 60664-4, as applicable:	. 10 to 15	N
29.2.4	Creepage distances of functional insulation not less than specified in table 18:	(see appended table)	Р
entrate de September de September de	However, if the working voltage is periodic and has a frequency exceeding 30 kHz, the creepage distances are also determined from table 2 of IEC 60664-4, these values being used if exceeding the values in table 18		N
s gress	Creepage distances may be reduced if the appliance complies with clause 19 with the functional insulation short-circuited	and the same	Р
29.3	Supplementary and reinforced insulation have adequate thickness, or a sufficient number of layers, to withstand the electrical stresses	AND AND AND A	N
	Compliance checked:	The file of	
AND WAR	- by measurement, in accordance with 29.3.1, or	At 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N
al activi	- by an electric strength test in accordance with 29.3.2, or		N
September	- for insulation, other than single layer internal wiring insulation, by an assessment of the thermal quality of the material combined with an electric strength test, in accordance with 29.3.3, and	Marine and white	N
inger in	for accessible parts of reinforced insulation consisting of a single layer, by measurement in accordance with 29.3.4, or	STEEL STATES STATES STATES	N
Services	- by an assessment of the thermal quality of the material according to 29.3.3 combined with an electric strength test in accordance with 23.5, for each single layer internal wiring insulation touching each other, or	White white white	N
ARADA A	- as specified in subclause 6.3 of IEC 60664-4 for insulation that is subjected to any periodic voltage having a frequency exceeding 30 kHz	ANTON APPLICATION APPLICATION AND	N
29.3.1	Supplementary insulation have a thickness of at least 1 mm	The gapter spirit spirit	N
	Reinforced insulation have a thickness of at least 2 mm	Martin Martin Alvin	N
29.3.2	Each layer of material withstand the electric strength test of 16.3 for supplementary insulation	Marian Surface Surface S	N
300	Supplementary insulation consist of at least 2	A 15 15 1	N

The state of	IEC 60335-2-80	to the the time	The same
Clause	Requirement + Test	Result - Remark	Verdict
	layers	A COLUMN TO THE STATE OF THE ST	- Table 1
- C	Reinforced insulation consist of at least 3 layers		N
29.3.3	The insulation is subjected to the dry heat test Bb of IEC 60068-2-2, followed by	William Albert Albert Albert	N
is the	the electric strength test of 16.3	the state of the state of	N
30.550	If the temperature rise during the tests of clause 19 does not exceed the value specified in table 3, the test of IEC 60068-2-2 is not carried out	STATES STATES STATES	N
29.3.4	Thickness of accessible parts of reinforced insulation consisting of a single layer not less than specified in table 19:	Martinet Martinet Statement of	N
30	RESISTANCE TO HEAT AND FIRE	_5 P _ 5 P _ 6 P _	J 4
30.1	External parts of non-metallic material,		Р
100	parts supporting live parts, and	the section return which	N
s artistes	parts of thermoplastic material providing supplementary or reinforced insulation	the little satisfies	N
- A-	sufficiently resistant to heat	The the second	Р
ar in	Ball-pressure test according to IEC 60695-10-2	State State State State	Р
STAN SANS	External parts tested at 40 °C plus the maximum temperature rise determined during the test of clause 11, or at 75 °C, whichever is the higher; temperature (°C)	(see appended table)	Р
and the	Parts supporting live parts tested at 40°C plus the maximum temperature rise determined during the test of clause 11, or at 125 °C, whichever is the higher; temperature (°C):	(see appended table)	N
ineries an	Parts of thermoplastic material providing supplementary or reinforced insulation tested at 25 °C plus the maximum temperature rise determined during clause 19, if higher; temperature (°C):	atile spaties spaties spatie	N
30.2	Parts of non-metallic material resistant to ignition and spread of fire	and the state of	Р
4,	This requirement does not apply to:	All the same of the same of	10. A.
	parts having a mass not exceeding 0.5 g, provided the cumulative effect is unlikely to propagate flames that originate inside the appliance by propagating flames from one part to another, or	states south south se	Р
	decorative trims, knobs and other parts unlikely to be ignited or to propagate flames that originate inside the appliance		Р
	Compliance checked by the test of 30.2.1, and in addition:	the state state	Р
	- for attended appliances, 30.2.2 applies	They have the	N
. J	- for unattended appliances, 30.2.3 applies	por the star is	Р

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	IEC 60335-2-80	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10
Clause	Requirement + Test	Result - Remark	Verdic
411	For appliances for remote operation, 30.2.3 applies	The state of the s	N
الدي المتحاكمة إ	For base material of printed circuit boards, 30.2.4 applies	NATED MATTER STRATES	Р
30.2.1	Parts of non-metallic material subjected to the glow-wire test of IEC 60695-2-11 at 550°C	(see appended table 30.2)	Р
247 J. (2)	However, test not carried out if the material is classified as having a glow-wire flammability index according to IEC 60695-2-12 of at least 550 °C, or	MILITER MILITER MILITER MILITER	N
September 1	the material is classified at least HB40 according to IEC 60695-11-10	attrick artifek artifek sakitek	N
patrick safe	Parts for which the glow-wire test cannot be carried out need to meet the requirements in ISO 9772 for material classified HBF	STOP SHALLING SHELLOR SHALLOR	N
30.2.2	Not applicable. (IEC 60335-2-80)	at the state of the	Р
30.2.3	Appliances operated while unattended, tested as specified in 30.2.3.1 and 30.2.3.2	1 1 1 1 5	N
	The tests are not applicable to conditions as specified:	Low-power circuits described in 19.11.1	Р
30.2.3.1	Parts of non-metallic material supporting connections carrying a current exceeding 0.2 A during normal operation, and		N
e se	parts of non-metallic material, other than small parts, within a distance of 3 mm,		N
12 T	subjected to the glow-wire test of IEC 60695-2-11 with a test severity of 850 °C	(see appended table 30.2)	N
	Glow-wire applied to an interposed shielding material, if relevant	White white white white	N
iriter ur Tek urit	The glow-wire test is not carried out on parts of material classified as having a glow-wire flammability index according to IEC 60695-2-12 of at least 850 °C	STEEL MATTER MATTER MATERIA	N
30.2.3.2	Parts of non-metallic material supporting connections, and	at the state of	N
	parts of non-metallic material within a distance of 3mm,	and the second	N
	subjected to the glow-wire test of IEC 60695-2-11 with appropriate severity level:	State State Augus Augus	N
	- 750 °C, for connections carrying a current exceeding 0.2 A during normal operation	(see appended table 30.2)	N
" and	- 650 °C, for other connections	the other states and and	N
k Santarah Santarah	Glow-wire applied to an interposed shielding material, if relevant	and the state of	N
	However, the glow-wire test of 750 °C or 650 °C as a on parts of material fulfilling both or either of the follows:		7

Reference	e No.: WTF23F12259866J Page 56 of 82		
A. Paris	IEC 60335-2-80	to the the time to	30°
Clause	Requirement + Test	Result - Remark	Verdic
	- a glow-wire ignition temperature according to IEC 60695-2-13 of at least:	aris aris aris aris	N
10 m	775 °C, for connections carrying a current exceeding 0.2 A during normal operation	pure aprile spring spring	N
5° 35°	675 °C, for other connections	the the state with	N
+ 500	- a glow-wire flammability index according to IEC 60695-2-12 of at least:	e de de de de	N
3,3	- 750 °C, for connections carrying a current exceeding 0.2 A during normal operation	the state of	N
	- 650 °C, for other connections	Mary Mary State Com	N
50° 5	The glow-wire test is also not carried out on small pa	arts. These parts are to:	, S
SEP SHOUT	- comprise material having a glow-wire ignition temperature of at least 775 °C or 675 °C as appropriate, or	or silver stated assisted as	N
WILLIAM.	- comprise material having a glow-wire flammability index of at least 750 °C or 650 °C as appropriate, or	STATES STATES STATES STATES	N
J. 1	- comply with the needle-flame test of Annex E, or	not get get green	N
	- comprise material classified as V-0 or V-1 according to IEC 60695-11-10		N
er san er santiti er set	The consequential needle-flame test of Annex E apprender encroach within the vertical cylinder placed above the zone and on top of the non-metallic parts supporting and parts of non-metallic material within a distance of these parts are those:	e centre of the connection current-carrying connections,	- "
agent .	- parts that withstood the glow-wire test of IEC 60695-2-11 of 750 °C or 650 °C as appropriate, but produce a flame that persist longer than 2 s, or	aller aller aller aller	N
	- parts that comprised material having a glow-wire flammability index of at least 750 °C or 650 °C as appropriate, or	per action accept accept and	N
s Jackson	- small parts, that comprised material having a glow-wire flammability index of at least 750 °C or 650 °C as appropriate, or	- ANTICLE MATTER SINGER WAT	N
er Sterre	- small parts for which the needle-flame test of Annex E was applied, or	Market assisted assisted assisted	N
State Mark	- small parts for which a material classification of V- 0 or V-1 was applied	the wind out of the	N
et gree	However, the consequential needle-flame test is no parts, including small parts, within the cylinder that a		eres
	- parts having a glow-wire ignition temperature of at least 775 °C or 675 °C as appropriate, or	and the state of	N
	- parts comprising material classified as V-0 or V-1 according to IEC 60695-11-10, or	A St. St. St.	N



IEC 60335-2-80			
Clause	Requirement + Test	Result - Remark	Verdic
SAPATE SA	- parts shielded by a flame barrier that meets the needle-flame test of Annex E or that comprises material classified as V-0 or V-1 according to IEC 60695-11-10		N
30.2.4	Base material of printed circuit boards subjected to the needle-flame test of Annex E	Sect and the same of	N
# 15 E	Test not applicable to conditions as specified:	Low-power circuits described in 19.11.1	Р
31	RESISTANCE TO RUSTING		-,4
1000	Relevant ferrous parts adequately protected against rusting	Martiner Martiner article Martin	Р
32	RADIATION, TOXICITY AND SIMILAR HAZARDS	est the state state	J
iter and	Appliance does not emit harmful radiation or present a toxic or similar hazard due to their operation in normal use	the state of the second second	P
A	ANNEX A (INFORMATIVE) ROUTINE TESTS	e state astate author and	*
State 1	Description of routine tests to be carried out by the manufacturer	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N
В	ANNEX B (NORMATIVE) APPLIANCES POWERED BY RECHARGEABLE BATTERIES THAT ARE RECHARGED IN THE APPLIANCE		STORY SI
	The following modifications to this standard are applicable for appliances powered by batteries that are recharged in the appliance	Marie Wille Marie and	Р
500	Three forms of construction covered:	. At the site site	100
	a) Appliance supplied directly from the supply mains or a renewable energy source, the battery charging circuitry and other supply unit circuitry incorporated within the appliance	STEET STREET STREET STREET	N
TO HAVI ST HAVITUR HAVITUR	b) The part of the appliance incorporating the battery is supplied from the supply mains or a renewable energy source, via a detachable supply unit. The battery charging circuitry is incorporated within the part of the appliance containing the battery		N
ARRY A	c) The part of the appliance incorporating the battery is supplied from the supply mains or a renewable energy source, via a detachable supply unit. The battery charging circuitry is incorporated within the detachable supply unit	AND SELECT SELECTION SERVICES	Р
3.1.9	Appliance operated under the following conditions:		375
L CARREST	- the appliance, supplied by its fully charged battery, operated as specified in relevant part 2	the fit the sale	Р
	- the battery is charged, the battery being initially discharged to such an extent that the appliance	The first the same	Р

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Y	IEC 60335-2-80	dra dra dra dra dra	11
Clause	Requirement + Test	Result - Remark	Verdict
34	cannot operate	THE STATE SHOW SHOW	400
alekterik sal Serik	-if possible, the appliance is supplied from the supply mains through its battery charger, the battery being initially discharged to such an extent that the appliance cannot operate. The appliance is operated as specified in relevant part 2		Р
et generali Jenerali	- if the appliance incorporates inductive coupling between two parts that are detachable from each other, the appliance is supplied from the supply mains with the detachable part removed	Secretary Secretary Secretary Secretary	N
3.6.2	Part to be removed in order to discard the battery is not considered to be detachable	Martin Marian Sania Sania	P
5.B.101	Appliances supplied from the supply mains tested as specified for motor-operated appliances	STEEL WATER SHEET SHEET	Р
7.1	Battery compartment for batteries intended to be replaced by the user, marked with battery voltage (V) and polarity of the terminals:		N
7 10 to	The positive terminal indicated by symbol IEC 60417-5005 and the negative terminal by symbol IEC 60417-5006		N
ed - 2 Strip Strip	Appliances intending to be supplied from a detachable supply unit marked with symbol IEC 60417-6181 and its type reference along with symbol ISO 7000-0790 (2004-01), or		N
ed andre	use only with <model designation=""> supply unit</model>		Р
7.6	Additional symbols	1 1 1 1 1	Р
7.12	The instructions give information regarding charging	Aller Aller Aller Aller	Р
ger de	Instructions for appliances incorporating batteries intended to be replaced by the user include required information	at the state of the	N
t di	Instructions for appliances containing non-user-repla substance of the following:	aceable batteries state the	
	This appliance contains batteries that are only replaceable by skilled persons	Martin Albert Albert Marin	N
All Sales	Instructions for appliances containing non-replaceab substance of the following:	le batteries shall state the	- P
ing the	This appliance contains batteries that are non-replaceable	THE WILLIAM WHITE WILLIAM A	Р
	For appliances intending to be supplied from a detact purposes of recharging the battery, the type reference is stated along with the following:		1 3 P. S.
T. C. C. C.	WARNING: For the purposes of recharging the battery, only use the detachable supply unit provided with this appliance	White Burges Writes Alex	Р

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reletered	e No.: W1F23F12259866J Page 59 of 82		
See See See	IEC 60335-2-80	to the the state of	
Clause	Requirement + Test	Result - Remark	Verdict
	If the symbol for detachable supply unit is used, its meaning is explained		Р
7.15	Markings placed on the part of the appliance connected to the supply mains	Andrew States States States	Р
18 July	The type reference of the detachable supply unit is placed in close proximity to the symbol		Р
8.2	Appliances having batteries that according to the instruction may be replaced by the user need only have basic insulation between live parts and the inner surface of the battery compartment		Р
	If the appliance can be operated without batteries, double or reinforced insulation required		N
11.7	The battery is charged for the period stated in the instructions or 24 h:	(see appended table)	Р
11.8	Temperature rise of the battery surface does not exceed the limit in the battery manufacturer's specification; measured (K); limit (K):		N
200	If no limit specified, the temperature rise does not exceed 20 K; measured (K):	4.3K	Р
19.1	Appliances subjected to tests of 19.B.101, 19.B.102 and 19.B.103	Harrier State State State	Р
19.10	Not applicable		N
19.B.101	Appliances supplied at rated voltage for 168 h, the battery being continually charged		P
19.B.102	For appliances having batteries that can be removed without the aid of a tool, short-circuit of the terminals of the battery, the battery being fully charged,	Martin Martin Martin	N
19.B.103	Appliances having batteries replaceable by the user supplied at rated voltage under normal operation with the battery removed or in any position allowed by the construction		N
19.13	The battery does not rupture or ignite	The file of	Р
21.B.101	Appliances having pins for insertion into socket- outlets have adequate mechanical strength	SHIPE SHIPE SHIPE	N
20 Sept 20	Part of the appliance incorporating the pins subjected 2, of IEC 60068-2-31, the number of falls being:	I to the free fall test, procedure	ally and
priest servi	- 100, if the mass of the part does not exceed 250 g (g):	the time at the state of	N
A 2	- 50, if the mass of the part exceeds 250 g:		N
37. 138.5	After the test, the requirements of 8.1, 15.1.1, 16.3 and clause 29 are met	Shirter Shirter Shirt All	N
22.3	Appliances having pins for insertion into socket- outlets tested as fully assembled as possible	Martin artifet Artifet Artifet	N
25.13	An additional lining or bushing not required for	a state of	N

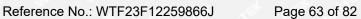
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ft gat	IEC 60335-2-80	ar at 3th 5th s	
Clause	Requirement + Test	Result - Remark	Verdict
Selection of	interconnection cords in class III appliances or class III constructions operating at safety extra-low voltage not containing live parts		
30.2	For parts of the appliance connected to the supply mains during the charging period, 30.2.3 applies		Р
30	For other parts, 30.2.2 applies	the state of the state of	N
С	ANNEX C (NORMATIVE) AGEING TEST ON MOTORS	a de la companya del la companya de	# <u>-</u> 1
ASSECTION .	Tests, as described, carried out when doubt with regard to the temperature classification of the insulation of a motor winding	Martine Marinest Services About	N
. S. C. S.	Test conditions as specified	AN LET SEAT SEAT	N
D	ANNEX D (NORMATIVE) THERMAL MOTOR PROTECTORS	the state of the state of	
g Strateg	Applicable to appliances having motors that incorporate thermal motor protectors necessary for compliance with the standard	The state state soul	N
- 1	Test conditions as specified	the the second	N
E _r	ANNEX E (NORMATIVE) NEEDLE-FLAME TEST	Marine Marine Marine Marine	·
restriction and	Needle-flame test carried out in accordance with IEC modifications:	C 60695-11-5, with the following	eren en
7	Severities		o* - 5
e de	The duration of application of the test flame is 30 s ± 1 s	Aber Aber Aber Aber	N
9	Test procedure	THE STATE STATE STATE	M.
9.1	The specimen so arranged that the flame can be applied to a vertical or horizontal edge as shown in the examples of Figure 1	aret while while while	N
9.2	The first paragraph does not apply	to the till to	N
5 July	If possible, the flame is applied at least 10 mm from a corner		N
9.3	The test is carried out on one specimen	There are shown the	N
ARATER A	If the specimen does not withstand the test, the test may be repeated on two additional specimens, both withstanding the test	States Statist Statist Statist	N
11	Evaluation of test results	the the site of	hg A
. <u>+</u> .	The duration of burning not exceeding 30 s		N
48/10	However, for printed circuit boards, the duration of burning not exceeding 15 s	BRUTE BRUTE BRUTE BRUTE SERV	N
F	ANNEX F (NORMATIVE) CAPACITORS	THE STATE STATE STATE	100
30	Capacitors likely to be permanently subjected to the	supply voltage, and used for	- C

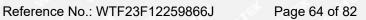
	IEC 60335-2-80			
Clause	Requirement + Test Result - Remark	Verdict		
	radio interference suppression or voltage dividing, comply with the following clauses of IEC 60384-14, with the following modifications:	g		
1.5	Terms and definitions	and and		
1.5.3	Class X capacitors tested according to subclass X2	N		
1.5.4	This subclause is applicable	N. N.		
1.6	Marking	J J - J		
440	Items a) and b) are applicable	N		
3.4	Approval testing	5 A 5		
3.4.3.2	Table 3 is applicable as described	N		
4.1	Visual examination and check of dimensions			
The Ar	This subclause is applicable	N		
4.2	Electrical tests			
4.2.1	This subclause is applicable	N		
4.2.5	This subclause is applicable	N		
4.2.5.2	Only table 11 is applicable	N		
, J	Values for test A apply	N		
and the second	However, for capacitors in heating appliances the values for test B or C apply	N		
4.12	Damp heat, steady state	Sp. 5		
9. J.	This subclause is applicable	N.		
- J.	Only insulation resistance and voltage proof are checked	N		
4.13	Impulse voltage			
. S	This subclause is applicable	N		
4.14	Endurance	th		
iren jari	Subclauses 4.14.1, 4.14.3, 4.14.4 and 4.14.7 are applicable	N		
4.14.7	Only insulation resistance and voltage proof are checked	- N		
24	No visible damage	N		
4.17	Passive flammability test	910 - OIL -		
	This subclause is applicable	N		
4.18	Active flammability test	Jan 19 1		
d d	This subclause is applicable	N		
G	ANNEX G (NORMATIVE) SAFETY ISOLATING TRANSFORMERS			
200	The following modifications to this standard are applicable for safety isolatitransformers:	ng		
7	Marking and instructions	10° 20°		

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	IEC 60335-2-80	<u> </u>	S. The
Clause	Requirement + Test	Result - Remark	Verdict
7.1	Transformers for specific use marked with:		
أللت متحصيل	-name, trademark or identification mark of the manufacturer or responsible vendor:	STEE STITE STATES STATES	N
d d	-model or type reference:		N
17	Overload protection of transformers and associated	circuits	e ₁ - ₇
18 18 18 18 18 18 18 18 18 18 18 18 18 1	Fail-safe transformers comply with subclause 15.5 of IEC 61558-1	· satisf satisfy assisted as	N
22	Construction		d 7
او جموع م	Subclauses 19.1 and 19.1.2 of IEC 61558-2-6 are applicable	Maritin Maritin Strift Africa	N
29	Clearances, creepage distances and solid insulation	the tier with with	9-3
29.1, 29.2, 29.3	The distances specified in items 2a, 2c and 3 in table 13 of IEC 61558-1 apply	to the state state	N
	For insulated winding wires complying with subclause 19.12.3 of IEC 61558-1 there are no requirements for clearances or creepage distances	atter state states and	N
and their sale	For windings providing reinforced insulation, the distance specified in item 2c of table 13 of IEC 61558-1 is not assessed	Miller and the sentites about	N
iteer spiel	For safety isolating transformers subjected to periodic voltages with a frequency exceeding 30 kHz, the clearances, creepage distances and solid insulation values specified in IEC 60664-4 are applicable, if greater than the values specified in items 2a, 2c and 3 in table 13 of IEC 61558-1		N
H	ANNEX H (NORMATIVE) SWITCHES		*15.72
ast Town	Switches comply with the following clauses of IEC 61058-1, as modified below:		, S
after St	The tests of IEC 61058-1 carried out under the conditions occurring in the appliance	n n to to	N
	Before being tested, switches are operated 20 times without load		N
8	Marking and documentation	The state of the s	2.0
10	Switches are not required to be marked	4 4 4	N
	However, a switch that can be tested separately from the appliance marked with the manufacturer's name or trade mark and the type reference	AND AND SING SING	N
13	Mechanism	in the the	
C. William	The tests may be carried out on a separate sample	of the other states.	N
15	Insulation resistance and dielectric strength	The The stands	
15.1	Not applicable	The Life Williams	N
15.2	Not applicable	The the sail of	N

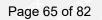


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Clause		esult - Remark	Verdiet
Clause	Requirement + Test Re	esuit - Remark	Verdict
15.3	Applicable for full disconnection and micro-disconnection	The state of the	N
17	Endurance	The state of the state of	- ·
	Compliance is checked on three separate appliances or switches	t is the sisted in the sa	N
gr	For 17.2.4.4, the number of cycles declared according to 7.1.4 is 10 000, unless	at the state of	Z
. John	otherwise specified in 24.1.3 of the relevant part 2 of IEC 60335:	and the state of	N
All Control	Switches for operation under no load and which can be operated only by a tool, and		N
les de	switches operated by hand that are interlocked so that they cannot be operated under load,	er garia garia garia g	N
200	are not subjected to the tests	· John Str. Str.	N
S. WILLIAM	However, switches without this interlock are subjected to the test of 17.2.4.4 for 100 cycles of operation	SECTION ASSECTION ASSECTION ASSECTS	N
SAN TEAR SAN SAN SAN SAN	Subclauses 17.2.2 and 17.2.5.2 not applicable	at the set of	N
	The ambient temperature during the test is that occurring in the appliance during the test of Clause 11 in IEC 60335-1		N
ed and the	The temperature rise of the terminals not more than 30 K above the temperature rise measured in clause 11 of IEC 60335-1 (K):		N
20	Clearances, creepage distances, solid insulation and coatings of rigid printed board assemblies		
. 15 CO . 10	Clause 20 is applicable to clearances across full disconnection and micro-disconnection	at the state state	N
	It is also applicable to creepage distances for functional insulation, across full disconnection and micro-disconnection, as stated in Table 24		N
e services	ANNEX I (NORMATIVE) MOTORS HAVING BASIC INSULATION THAT IS INAURATED VOLTAGE OF THE APPLIANCE	DEQUATE FOR THE	# <u>- 1</u> 156 310156
2005	The following modifications to this standard are applical insulation that is inadequate for the rated voltage of the		ON PARTY.
8	Protection against access to live parts		
8.1	Metal parts of the motor are considered to be bare live parts		
11	Heating	The street of the street of the street	40.0
11.3	The temperature rise of the body of the motor is determined instead of the temperature rise of the windings	RESERVE SHEET SHEET	N
11.8	The temperature rise of the body of the motor,	2 3 5 5	N



IEC 60335-2-80				
Clause	Requirement + Test Result - Remark	Verdic		
	where in contact with insulating material, not exceeding values in table 3 for the relevant insulating material	est Marine		
16	Leakage current and electric strength			
16.3	Insulation between live parts of the motor and its other metal parts is not subjected to the test	N		
19	Abnormal operation	J 37 -J		
19.1	The tests of 19.7 to 19.9 are not carried out	N		
19.I.101	Appliance operated at rated voltage with each of the following fault conditions:	gen galar		
	- short circuit of the terminals of the motor, including any capacitor incorporated in the motor circuit	N		
at a	- short circuit of each diode of the rectifier	N N		
- The	- open circuit of the supply to the motor	N		
* INTEGER	- open circuit of any parallel resistor, the motor being in operation	N		
S. Carlo	Only one fault simulated at a time, the tests carried out consecutively	N		
22	Construction	-		
22.I.101	For class I appliances incorporating a motor supplied by a rectifier circuit, the d.c. circuit being insulated from accessible parts of the appliance by double or reinforced insulation	N		
e git	Compliance checked by the tests specified for double and reinforced insulation	N		
J	ANNEX J (NORMATIVE) COATED PRINTED CIRCUIT BOARDS			
in in	Testing of protective coatings of printed circuit boards carried out in accordance with IEC 60664-3 with the following modifications:	- A - 1		
5.7	Conditioning of the test specimens	J. 11 - 11		
at a graph	When production samples are used, three samples of the printed circuit board are tested	- N		
5.7.1	Cold	-		
11 Jan 12	The test is carried out at -25 °C	N		
5.7.3	Rapid change of temperature	4 35		
he an	Severity 1 is specified			
5.9	Additional tests	z+		
41/2	This subclause is not applicable	N		
K	ANNEX K (NORMATIVE) OVERVOLTAGE CATEGORIES			
50	The information on overvoltage categories is extracted from IEC 60664-1	Р		

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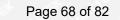
IEC 60335-2-80				
Clause	Requirement + Test	Result - Remark	Verdic	
	Overvoltage category is a numeral defining a transient overvoltage condition	And the second second	Р	
ole al	Equipment of overvoltage category IV is for use at the origin of the installation	Ritter after after after	N	
	Equipment of overvoltage category III is equipment in fixed installations and for cases where the reliability and the availability of the equipment is subject to special requirements		N	
ger ^{afile} a	Equipment of overvoltage category II is energy consuming equipment to be supplied from the fixed installation	Martin Martinet Martinet Mart	Р	
parties ser	If such equipment is subjected to special requirements with regard to reliability and availability, overvoltage category III applies	STEEL SHIFTEEN SHIFTEEN	N	
TEN MAKE	Equipment of overvoltage category I is equipment for connection to circuits in which measures are taken to limit transient overvoltages to an appropriate low level		N	
L ANNEX L (INFORMATIVE) GUIDANCE FOR THE MEASUREMENT OF CLEARANCES AND CREE DISTANCES		RANCES AND CREEPAGE	A CHARLET	
STEEL STEE	Information for the determination of clearances and creepage distances	and the state of t	Р	
М	ANNEX M (NORMATIVE) POLLUTION DEGREE			
e Lite	The information on pollution degrees is extracted from IEC 60664-1	A A A	Р	
4	Pollution			
instant sin	The microenvironment determines the effect of pollution on the insulation, taking into account the macroenvironment	STEEL MATER STATES STATES	Р	
an Man	Means may be provided to reduce pollution at the insulation by effective enclosures or similar	the state state while a	Р	
No. of Street, or other Persons	Minimum clearances specified where pollution may be present in the microenvironment	White Shirter Shrine St.	Р	
300	Degrees of pollution in the microenvironment	at at the st	3 July 1	
	For evaluating creepage distances, the following degrees of pollution in the microenvironment are established:		7 tig.	
ter stre	- pollution degree 1: no pollution or only dry, non- conductive pollution occurs. The pollution has no influence	of the tet state	N	
- garattark	- pollution degree 2: only non-conductive pollution occurs, except that occasionally a temporary conductivity caused by condensation is to be expected		N	
Sec. 1	- pollution degree 3: conductive pollution occurs or	18 St 35 35	Р	

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	IEC 60335-2-80		
Clause	Requirement + Test	Result - Remark	Verdict
	dry non-conductive pollution occurs that becomes conductive due to condensation that is to be expected		
Section and the	- pollution degree 4: the pollution generates persistent conductivity caused by conductive dust or by rain or snow	for sitter stitler waters	N
N	ANNEX N (NORMATIVE) PROOF TRACKING TEST	the set set and	\$ S
gat.	The proof tracking test is carried out in accordance of following modifications:	with IEC 60112 with the	
7	Test apparatus	The state of the state of	
7.3	Test solutions	at the set of	J
	Test solution A is used	and the sail of	Р
10	Determination of proof tracking index (PTI)	at at the total	Se -245
10.1	Procedure		
	The proof voltage is 100V, 175V, 400V or 600V:	175 V	Р
- L	The test is carried out on five specimens	the the second	Р
	In case of doubt, additional test with proof voltage reduced by 25V, the number of drops increased to 100		N
10.2	Report		
ed ariti	The report states if the PTI value was based on a test using 100 drops with a test voltage of (PTI-25) V	Marie Marie Marie Marie	N
0	ANNEX O (INFORMATIVE) SELECTION AND SEQUENCE OF THE TESTS OF CLAUSE 30		
Parity Ol	Description of tests for determination of resistance to heat and fire	STEEL STATES SPATIES SPATIES	Р
Prist was	ANNEX P (INFORMATIVE) GUIDANCE FOR THE APPLICATION OF THIS STAUSED IN WARM DAMP EQUABLE CLIMATES	ANDARD TO APPLIANCES	788 3861
	Modifications applicable for class 0 and 01 appliance exceeding 150V, intended to be used in countries have marked with symbol IEC 60417-6332		387
	Modifications may also be applied to class 1 appliances having a rated voltage exceeding 150V, intended to be used in countries having a tropical climate and that are marked with symbol IEC 60417-6332, if liable to be connected to a supply mains that excludes the protective earthing conductor		
5.7	The ambient temperature for the tests of clauses 11 and 13 is 40 +3/0 °C	the state water water	N
7.1	The appliance marked with symbol IEC 60417-6332	the fit the state	N
7.12	The instructions state that the appliance is to be supplied through a residual current device (RCD)	All the state of	N

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	IEC 60335-2-80	ar Silver		
Clause	Requirement + Test Result - Remark	Verdic		
	having a rated residual operating current not exceeding 30 mA			
	The instructions state that the appliance is considered to be suitable for use in countries having a tropical climate, but may also be used in other countries	N		
er	If symbol IEC 60417-6332 is used, its meaning is explained	N		
11.8	The values of Table 3 are reduced by 15 K	N		
13.2	The leakage current for class I appliances not exceeding 0.5 mA	N		
15.3	The value of t is 37 °C	N		
16.2	The leakage current for class I appliances not exceeding 0.5 mA (mA):	N		
19.13	The leakage current test of 16.2 is applied in addition to the electric strength test of 16.3	N		
Q	ANNEX Q (INFORMATIVE) SEQUENCE OF TESTS FOR THE EVALUATION OF ELECTRONIC CIRCUITS	n de		
are a	Description of tests for appliances incorporating electronic circuits			
R	ANNEX R (NORMATIVE) SOFTWARE EVALUATION			
ed andre	Programmable electronic circuits requiring software incorporating measures to control the fault/error conditions specified in table R.1 or R.2 validated in accordance with the requirements of this annex	N		
R.1	Programmable electronic circuits using software	5° 30°		
grunde gr	Programmable electronic circuits requiring software incorporating measures to control the fault/error conditions specified in table R.1 or R.2 constructed so that the software does not impair compliance with the requirements of this standard	N		
R.2	Requirements for the architecture	-		
ANTON ANTON ANTON	Programmable electronic circuits requiring software incorporating measures to control the fault/error conditions specified in table R.1 or R.2 use measures to control and avoid software-related faults/errors in safety-related data and safety-related segments of the software	N		
R.2.1.1	Programmable electronic circuits requiring software incorporating measures to control the fault/error conditions specified in table R.2 have one of the following structures:	3 P 3		
r Sep	- single channel with periodic self-test and monitoring	N		
2.00	- dual channel (homogenous) with comparison	N		
A.	- dual channel (diverse) with comparison	N		



	IEC 60335-2-80	B B B S	N. W.	
Clause	Requirement + Test	Result - Remark	Verdict	
Market of	Programmable electronic circuits requiring software incorporating measures to control the fault/error conditions specified in table R.1 have one of the following structures:			
	- single channel with functional test	and the same of th	N	
31 Jan	- single channel with periodic self-test		N	
.40)	- dual channel without comparison		N	
R.2.2	Measures to control faults/errors			
R.2.2.1	When redundant memory with comparison is provided on two areas of the same component, the data in one area is stored in a different format from that in the other area	MINISTER MANIFEST MAN	N N	
R.2.2.2	Programmable electronic circuits with functions requiring software incorporating measures to control the fault/error conditions specified in table R.2 and that use dual channel structures with comparison, have additional fault/error detection means for any fault/errors not detected by the comparison			
R.2.2.3	For programmable electronic circuits with functions requiring software incorporating measures to control the fault/error conditions specified in table R.1 or R.2, means are provided for the recognition and control of errors in transmissions to external safety-related data paths		N	
R.2.2.4	For programmable electronic circuits with functions requiring software incorporating measures to control the fault/error conditions specified in table R.1 or R.2, the programmable electronic circuits incorporate measures to address the fault/errors in safety-related segments and data indicated in table R.1 and R.2 as appropriate		N	
R.2.2.5	For programmable electronic circuits with functions requiring software incorporating measures to control the fault/error conditions specified in table R.1 or R.2, detection of a fault/error occur before compliance with clause 19 is impaired		N	
R.2.2.6	The software is referenced to relevant parts of the operating sequence and the associated hardware functions	and the same and	N	
R.2.2.7	Labels used for memory locations are unique		N	
R.2.2.8	The software is protected from user alteration of safety-related segments and data	The software is protected from user alteration of		
R.2.2.9	Software and safety-related hardware under its control is initialized and terminates before compliance with clause 19 is impaired			
R.3	Measures to avoid errors			
R.3.1	General		- 24	

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	IEC 60335-2-80	A A S S S	, and
Clause	Requirement + Test	Result - Remark	Verdic
	For programmable electronic circuits with functions is measures to control the fault/error conditions specifically following measures to avoid systematic fault in the s	ed in table R.1 or R.2, the	NATURE .
::	Software that incorporates measures used to control the fault/error conditions specified in table R.2 is inherently acceptable for software required to control the fault/error conditions specified in table R.1		N
R.3.2	Specification	The the the the	-
R.3.2.1	Software safety requirements:	est of the state	N
	The specification of the software safety requirements includes the descriptions listed	and the state of	N
R.3.2.2	Software architecture	the fitting they take to	
R.3.2.2.1	The specification of the software architecture includes the aspects listed	of the second	N
	- techniques and measures to control software faults/errors (refer to R.2.2);	the the state and	
	- interactions between hardware and software;	The the the car	
	 partitioning into modules and their allocation to the specified safety functions; 	State astalk satisfies satisfies	
	- hierarchy and call structure of the modules (control flow);		
	- interrupt handling;		
	- data flow and restrictions on data access;		
	- architecture and storage of data;	The first the sail of	
1	- time-based dependencies of sequences and data	1 1 1 1 1	1
R.3.2.2.2	The architecture specification is validated against the specification of the software safety requirements by static analysis	All the state of the	N
R.3.2.3	Module design and coding	the the the the	-
R.3.2.3.1	Based on the architecture design, software is suitably refined into modules	the states white states are	N
St. SANSTER	Software module design and coding is implemented in a way that is traceable to the software architecture and requirements	Shring Maries Berney Miles	N
R.3.2.3.2	Software code is structured	the time with anite	N
R.3.2.3.3	Coded software is validated against the module specification by static analysis	the the state state	N
er er	The module specification is validated against the architecture specification by static analysis	a h de de	N
R.3.3.3	Software validation	the state of the	-
L. CONTERNS	The software is validated with reference to the requirements of the software safety requirements specification	Maritish Maritish Maritish Maritish	N

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Referenc	Reference No.: W1F23F12259866J Page 70 of 82			
	IEC 603	335-2-80	THE STATE OF THE STATE OF	
Clause	Requirement + Test	Result - Remark	Verdict	
41142	Compliance is checked by simulation of:	the state south states about	-	
- C-C	- input signals present during normal operation - anticipated occurrences - undesired conditions requiring system action			
3) 3				
Ser S				

Component	Fault/error	Acceptable measures b, c	Definitions	Document reference for applied measure	Document reference for applied test	Ver- dict
1 CPU 1.1 Registers	Stuck at	Functional test, or periodic self-test using either: - static memory test, or - word protection with single bit redundancy	H.2.16.5 H.2.16.6 H.2.19.6 H.2.19.8.2			N
1.2 VOID			A A	d d		N
1.3 Programme counter	Stuck at	Functional test, or Periodic self-test, or Independent time-slot monitoring, or Logical monitoring of the programme sequence	H.2.16.5 H.2.16.6 H.2.18.10.4 H.2.18.10.2			N
2 Interrupt handling and execution	No interrupt or too frequent interrupt	Functional test, or time-slot monitoring	H.2.16.5 H.2.18.10.4	STEEL STATE	e gritter gritter	N
3 Clock	Wrong frequency (for quartz synchroniz ed clock: harmonics/ sub- harmonics only)	Frequency monitoring, or time slot monitoring	H.2.18.10.1 H.2.18.10.4			N
4. Memory 4.1 Invariable memory	All single bit faults	Periodic modified checksum, or multiple checksum, or word protection with single bit redundancy	H.2.19.3.1 H.2.19.3.2 H.2.19.8.2	See Service		N
4.2 Variable memory	DC fault	Periodic static memory test, or word protection with single bit	H.2.19.6 H.2.19.8.2	Top The	- STEPS	N

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		IEC 60335-2-80		
Clause	Requirement + Test	the transfer of the state of the	Result - Remark	Verdict

Clause	Requirement	+ rest	Result - Remark	verdict
		redundancy	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	+ 5	redundancy	to the the to	
4.3 Addressing (relevant to variable and invariable memory)	Stuck at	Word protection with single bit redundancy including the address	H.2.19.8.2	N
5 Internal data path	Stuck at	Word protection with single bit redundancy	H.2.19.8.2	N
5.1 VOID	· &	The The Physics May 1		N
5.2 Addressing	Wrong address	Word protection with single bit redundancy including the address	H.2.19.8.2	N
6 External communicat	Hamming distance 3	Word protection with multi-bit redundancy, or CRC – single work, or	H.2.19.8.1 H.2.19.4.1	N
ion	2 A	Transfer redundancy, or	H.2.18.2.2	
at the said		Protocol test	H.2.18.14	the state of the s
6.1 VOID		d		
6.2 VOID	107 10			N
6.3 Timing 7 Input/output periphery	Wrong point in time Wrong sequence Fault conditions specified in 19.11.2	Time-slot monitoring, or scheduled transmission Time-slot and logical monitoring, or comparison of redundant communication channels by either: - reciprocal comparison - independent hardware comparator Logical monitoring, or time-slot monitoring, or Scheduled transmission Plausibility check	H.2.18.10.4 H.2.18.18 H.2.18.10.3 H.2.18.15 H.2.18.3 H.2.18.10.2 H.2.18.10.4 H.2.18.18 H.2.18.18	N N
7.1 VOID	A. I	the state of the s	The ship of	
7.2 Analog I/O 7.2.1 A/D and D/A- converter	Fault conditions specified in 19.11.2	Plausibility check	H.2.18.13	N

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IEC 60335-2-80								
Clause	Requirement + Test		the state of	Result	Verdict			
7.2.2 Analog multiplexer	Wrong addressing	Plausibility check	H.2	2.18.13		N		
8 VOID		at the time	and and	71,	5	4-		
9 Custom chips ^d e.g. ASIC, GAL, gate array	Any output outside the static and dynamic functional specificatio n	Periodic self-test	H.2	2.16.6		N STATES		

NOTE A Stuck-at fault model denotes a fault model representing an open circuit or a non-varying signal level. A DC fault model denotes a stuck-at fault model incorporating short circuit between signal lines.

e) Table R.1 is applied according to the requirements of R.1 to R.2.2.9 inclusive.

S	ANNEX S (NORMATIVE) BATTERY OPERATED APPLIANCES POWERED E NON-RECHARGEABLE OR NOT RECHARGED IN		2550 - 2 2550 - 2	
	The following modifications to this standard are applicable for battery-operated appliances where the batteries are either non-rechargeable (primary batteries), or		N	
est St.	rechargeable batteries (secondary batteries) that are not recharged in the appliance	After after and the	N	
5.8.1	If the supply terminals for the connection of the battery have no indication of polarity, the more unfavourable polarity is applied		N	
5.S.101	Appliances intended for use with a battery box are tested with the battery box supplied with the appliance or with the battery box recommended in the instructions		N	
5.S.102	Appliances are tested as motor-operated appliances.	and the second	N	
7.1	Appliances marked with the battery voltage (V) and the polarity of the terminals, unless:	ALLE ARE MEN THE	N	
	the polarity is irrelevant	The wife ship of the	N	
	Appliances also marked with:			
	- name, trade mark or identification mark of the manufacturer or responsible vendor: :	Alberta Market States Alberta	N	
	- model or type reference:	The state with the	N	
	- IP number according to degree of protection against ingress of water, other than IPX0: :	the set the set	N	

a) For fault/error assessment, some components are divided into their sub-functions.
b) For each sub-function in the table, the Table R.2 measure will cover the software fault/error.
c) Where more than one measure is given for a sub-function, these are alternatives.

d) To be divided as necessary by the manufacturer into sub-functions.

	IEC 60335-2-80	The Mark
Clause	Requirement + Test Result - Remark	Verdic
400	- type reference of battery or batteries :	N
الدن المتحددان الدن المتحددان	If relevant, the positive terminal is indicated by the symbol IEC 60417-5005 and the negative terminal by the symbol IEC 60417-5006	N
Ser Servi Ser Servi	If appliances use more than one battery, they are marked to indicate correct polarity connection of the batteries	N
7.6	Additional symbols	N
7.12	The instructions contain the following, as applicable:	500 500
	- the types of batteries that may be used:	N
Sept.	- how to remove and insert the batteries	_ N
r si Lite Si	 non-rechargeable batteries are not to be recharged 	N
	rechargeable batteries are to be removed from the appliance before being charged	N
Aller.	different types of batteries or new and used batteries are not to be mixed	N
aller a	batteries are to be inserted with the correct polarity	N
NET COM SHOW	exhausted batteries are to be removed from the appliance and safely disposed of	N
	if the appliance is to be stored unused for a long period, the batteries are removed	N
	- the supply terminals are not to be short-circuited	N
11.5	Appliances are supplied with the most unfavourable supply voltage between	Series Orth
	 0.55 and 1.0 times the battery voltage, if the appliance can be used with non-rechargeable batteries 	N
T ^{err} Jan ^{es} 1	 - 0.75 and 1.0 times battery voltage, if the appliance is designed for use with rechargeable batteries only 	N
area a	The values specified in Table S.101 for the internal resistance per cell of the battery is taken into account	N
19.1	The tests are carried out with the battery fully charged unless otherwise specified	N
19.13	The battery does not rupture or ignite	N
19.S.101	Appliances are supplied with the voltage specified in 11.5. The supply terminals having an indication of polarity are connected to the opposite polarity, unless	N
28.	such a connection is unlikely to occur due to the construction of the appliance	N

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	IEC 60335-2-80	r ar
Clause	Requirement + Test Result - Remark	Verdic
19.S.102	For appliances with provision for multiple batteries, one or more of the batteries are reversed and the appliance is operated, if reversal of batteries is allowed by the construction	N
25.5	The flexible leads or flexible cord used to connect an external battery or battery box in is connected to the appliance by a type X attachment	N
25.13	This requirement is not applicable to the flexible leads or flexible cord connecting external batteries or a battery box with an appliance	N
25.S.101	Appliances have suitable means for connection of the battery. If the type of battery is marked on the appliance, the means of connection is suitable for this type of battery	N
26.5	Terminal devices in an appliance for the connection of the flexible leads or flexible cord connecting an external battery or battery box are so located or shielded that there is no risk of accidental connection between supply terminals	N
30.2.3.2	There is no battery in the area of the vertical cylinder used for the consequential needle flame test, unless	N
NITED STREET	the battery is shielded by a barrier that meets the needle flame test of Annex E, or	N
EST STATES	that comprises material classified as V-0 or V-1 according to IEC 60695-11-10	N
T A	ANNEX T (NORMATIVE) UV-C RADIATION EFFECT ON NON-METALLIC MATERIALS	
	Requirements for non-metallic materials subject to direct or reflected UV-C radiation exposure and whose mechanical and electrical properties are relied upon for compliance with the	N
in the	Does not apply to glass, ceramic and similar materials	N
	Tested as specified in ISO 4892-1 and ISO 4892-2, with the following modifications:	N
-	Modifications to ISO 4892-1:	
5.1.6	The UV-C emitter is a low pressure mercury lamp with a quartz envelope having a continuous spectral irradiance of 10 W/m2 at 254 nm	N
les the	Subclause 5.1.6.1 and Table 1 are not applicable	N
5.2.4	The black-panel temperature shall be 63 °C +/- 3 °C	N
5.3.1	Humidification of the chamber air is specified in part 2 when necessary	N
9	This clause is not applicable	N
400	Modifications to ISO 4892-2:	- V-

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	IEC 60335-2-80		
Clause	Requirement + Test	Result - Remark	Verdict
7.1	At least three test specimens are tested	AND THE SHAPE SHAPE	N
30	Ten samples of internal wiring is tested	st st st	N
7.2	The specimens are attached to the specimen holders such that they are not subject to any stress	the state of	N
7.3	Apparatus prepared as specified	the water and	N
A 35 5 6 10	The test specimens and, if used, the irradiance- measuring instrument are exposed for 1 000 h	· Lift with with	N
7.4	If used, a radiometer is mounted and calibrated such that it measures the irradiance at the exposed surface of the test specimen	Martine agricult agricult	N. S.
7.5	Material properties and test methods for parts providing mechanical support or impact resistance as specified in Table T.1	Company of the sale	N
iter Janui 8 Jah	Material properties and test method for electrical insulation of internal wiring as specified in Table T.2		N
8	This clause is not applicable	- STEEL WITE WITE	N

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10.1 TABLE: Power input deviation					N	
Input deviati	on of/at:	P rated (W)	P measured (W)	ΔΡ	Required Δ P	Remark
-300 10			-	- 3 +	St 35 .	

10.2 TABLE: Current input deviation					Р	
Input deviation of/at:	, di	I rated (A)	I measured (A)	dP	Required Δ P	Remark
DC 5V		1	0.98	-2.0%	+20%	ales - ales

11.8	TABLE: Heating test, thermocoup	ole measurements	LILEON I	NEW STATE SALES	Р
, di	Test voltage (V)	:	1.06 x	DC 5V = DC 5.3V	4
1000	Ambient t ₁ (°C)	:	STE STEE	22.8	c 4.
s ^{ot} s	Ambient t ₂ (°C)			23.1	50 th
Thermod	couple locations	Max. temperatu measured, d		Max. temperature dT (K)	rise limit,
DC inlet		3.2		Ref.	400
PCB sur	face	3.2		Ref.	550
Battery	surface	2.4	area ar	Ref.	40.
Internal	wire	1.5	ast of	T80-25=5	5
Fan mot	or winding 1	18.7		Class 105,	65
Fan mot	or winding 2	19.2		Class 105,	65
Plastic e	enclosure(inside, near fan motor)	7.8	4,	CI.30	4 25
Plastic e	enclosure(outside, near fan motor)	4.5		74	the same
Switch b	outton	2.3	4	60	Self-
Test corner		0.8		65	
Annex B	, test voltage: 254.4V, Ambient t ₁ : 22.	4°C, t ₂ : 22.5°C	J 3	t dit dit i	ster at
Battery	surface	4.3	AL.	20	

11.8	TABLE: Heating test, resistance method					N
March .	Test voltage (V)				- 10 ¹⁰ - 10 ¹⁰	Mary also
	Ambient t ₁ (°C)			:	- 4	de de
h. 4	Ambient t ₂ (°C)			:	September 1	No. 18
Tempera	ture rise of winding	R1 (Ω)	R2 (Ω)	dT (K)	Max. dT (K)	Insulation clas
		A - 15	50° 50°		Section Section	

13.2	TABLE: Leakage current	Р
- 55° 55	Heating appliances: 1.15 x rated input (W):	estale al



	Motor-operated and combined appliances: 1.06 x rated voltage (V):	Same as Cl.11.8		September 1
Leakage c	urrent between:	I (mA)	Max. allowe	ed I (mA)
DC inlet and plastic enclosure / switch button		0.006	0.7 pe	eak

13.3	TABLE: Dielectric strength	· Ster Ster Ster Ster	and the same	Р
Test voltag	e applied between:	Test potential applied (V)	Breakdown / f (Yes/N	
DC inlet and	d plastic enclosure / switch button	500	No	

16.2	TABLE: Leakage current		de de	N
	Single phase appliances: 1.06 x rated voltage (V)	other district Aug		
ST June	Three phase appliances 1.06 x rated voltage divided by √3 (V):	er granter grant	Alega Ale	
Leakage	current between:	I (mA)	Max. allowe	ed I (mA)
	the state of the state of the	72 - 13c	·	

16.3	TABLE: Dielectric strength			N
Test voltag	e applied between:	Test potential applied (V)	Breakdown / f (Yes/N	
				355

19.7	7.7 TABLE: temperature rise measurements					
N. L. T. Liberton	Abnormal conditions:	Supplied at rated voltage DC 5V; U conditions, locking fan motor	SPUT PRE SU			
Temper	ature rise dT of part/at:	dT (K)	Required	d dT (K)		
Fan mo	tor winding 1	32.6	Class 105, 1	50-25=125		
Fan mo	tor winding 2	31.4	Class 105, 1	50-25=125		
Plastic e	enclosure	16.3	Cl.:	30		

19.13 TABLE: Abnormal oper	ration, temperature rises	Р
Thermocouple locations	Max. temperature rise measured, dT (K)	Max.temperature rise limit, dT (K)
Annex B 19.B.101	The state of	
Battery surface	8.4	Ref.
Plastic enclosure	5.9	Ref.
Test floor	1.6	150



24.1 TAB	LE: Critical compone	ents information			Р	
Object / part No.	Manufacturer/ trademark	Type / model Technical data Standard		Standard	Mark(s) of conformity ¹⁾	
DC Inlet	Dongguan Hengdewei plastic Co.,Ltd	Pb-0036	ABS	IEC/EN 60335-1 IEC/EN 60335-2- 80	Tested with appliance	
PCB material	KINGBOARD LAMINATES HOLDINGS LTD	KB-5150, KB- 5152	130°C, V-0	IEC/EN 60335-1 IEC/EN 60335-2- 80	UL E123995 Tested with appliance	
Fan motor	Tronics Motor Co.,ltd	16.8	DC 9V, 230mA, 3W, Class A	IEC/EN 60335-1 IEC/EN 60335-2- 80	Tested with appliance	
Battery	Guangdong Cvasun New Energy Technology Co., Ltd.	103665	3.7Vdc, 3000mAh, 11.1Wh	IEC/EN 62133-2	BCTC221270 3937B	
Plastic enclosure	SABIC INNOVATIVE PLASTICS US L L C		PC, rated V-0, 120°C, HAI=3, HWI=3, Min. thickness 2.0mm.	IEC/EN 60335-1 IEC/EN 60335-2- 80	Tested with appliance	
Internal wire	Various	2468	26AWG, 80°C, 300Vac		UL approved	
Alternative Various		1007	24AWG, 80°C, 300Vac	- 60, 40,	UL approved	

28.1	ΓABLE: Thread	ed part torque test		a at a B
Threaded par identification:		Diameter of thread (mm)	Column number (I, II, or III)	Applied torque (Nm)
Screw for fixir	ng enclosure	2.76		0.4

29.1	TABLE: Clearances	Р
------	-------------------	---

C	vervoltage category			:50th 550th	ني آاکي	er alera
at a	of the things		Type of ir	nsulation:		18 18 18 18 18 18 18 18 18 18 18 18 18 1
Rated impulse voltage (V):	Min. cl (mm)	Basic (mm)	Supplementary (mm)	Reinforced (mm)	Functional (mm)	Verdict / Remark
330	0.2* / 0.5 / 0.8**	ф - 3	A STATE STATE	1965 - Wall	3/2	N
500	0.2* / 0.5 / 0.8**	>1.3			>1.3	Р
800	0.2* / 0.5 / 0.8**	-50	10 Step 10 Step 1	12 - May	4, 4,	N
1 500	0.5 / 0.8** / 1.0***			J - J	A- 5	N
2 500	1.5 / 2.0***	,¢	STORY STREET	22		N
4 000	3.0 / 3.5***			4 4 5	J J. 18	N

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6 000	5.5 / 6.0***	J. 122	Y 2	- 4	.dd	N
8 000	8.0 / 8.5***	. T	ot to	n ^{oo} o	45 -645	N
10 000	11.0 / 11.5***	5° 4'			d 18	N

Supplementary information:

^{*)} For tracks on printed circuit boards if pollution degree 1 and 2
**) For pollution degree 3
***) If the construction is affected by wear, distortion, movement of the parts or during assembly

	Creepa	age dista				ary and	reinforced	insula	tion		Р
Working voltage (V):				eepage di (mm) ollution de				210			
A. A. A.	1		2	الكى خ	- 300	3	1100	Туре	of insu	lation	
A SH SH	100	Ma	aterial g	roup	Ma	aterial g	roup		ď	- 3	e#
74. 2.		L	II	IIIa/IIIb	"de	, ÎÎ	IIIa/IIIb*	B**	S**	R**	Verdic
≤50	0.18	0.6	0.85	1.2	1.5	1.7	1.9	>1.9	4	40	Р
≤50	0.18	0.6	0.85	1.2	1.5	1.7	1.9				N
≤50	0.36	1.2	1.7	2.4	3.0	3.4	3.8	ڊ کي- ^د		300	N
125	0.28	0.75	1.05	1.5	1.9	2.1	2.4	3.		_	N
125	0.28	0.75	1.05	1.5	1.9	2.1	2.4	_	- 425	, —, r	N
125	0.56	1.5	2.1	3.0	3.8	4.2	4.8	_			N
250	0.56	1.25	1.8	2.5	3.2	3.6	4.0		9	7	N
250	0.56	1.25	1.8	2.5	3.2	3.6	4.0	_	t		N
250	1.12	2.5	3.6	5.0	6.4	7.2	8.0		_		N
400	1.0	2.0	2.8	4.0	5.0	5.6	6.3		-	, C ²	N
400	1.0	2.0	2.8	4.0	5.0	5.6	6.3	-		_	Ν
400	2.0	4.0	5.6	8.0	10.0	11.2	12.6	_	-5	,	N
500	1.3	2.5	3.6	5.0	6.3	7.1	8.0				Ν
500	1.3	2.5	3.6	5.0	6.3	7.1	8.0	s ⁴ .	3	J-200	N
500	2.6	5.0	7.2	10.0	12.6	14.2	16.0	_	_		N
>630 and ≤800	1.8	3.2	4.5	6.3	8.0	9.0	10.0	15		<u> </u>	N
>630 and ≤800	1.8	3.2	4.5	6.3	8.0	9.0	10.0			_	N
>630 and ≤800	3.6	6.4	9.0	12.6	16.0	18.0	20.0		400	3.5	Ν
>800 and ≤1000	2.4	4.0	5.6	8.0	10.0	11.0	12.5	-4-	-6		N
>800 and ≤1000	2.4	4.0	5.6	8.0	10.0	11.0	12.5		Ber	422	Ν
>800 and ≤1000	4.8	8.0	11.2	16.0	20.0	22.0	25.0	¢	1	1550	N
>1000 and ≤1250	3.2	5.0	7.1	10.0	12.5	14.0	16.0	-4,	_	-	Ν
>1000 and ≤1250	3.2	5.0	7.1	10.0	12.5	14.0	16.0	3	, T	54	N



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>1000 and ≤1250	6.4	10.0	14.2	20.0	25.0	28.0	32.0	<u>-</u>	-	40	N
>1250 and ≤1600	4.2	6.3	9.0	12.5	16.0	18.0	20.0			V	N
>1250 and ≤1600	4.2	6.3	9.0	12.5	16.0	18.0	20.0			3 ⁴²	N
>1250 and ≤1600	8.4	12.6	18.0	25.0	32.0	36.0	40.0	777	-3	lba.	N
>1600 and ≤2000	5.6	8.0	11.0	16.0	20.0	22.0	25.0	300	-5		N
>1600 and ≤2000	5.6	8.0	11.0	16.0	20.0	22.0	25.0	_		_	N
>1600 and ≤2000	11.2	16.0	22.0	32.0	40.0	44.0	50.0	5 [©] .	,5	1/20	N
>2000 and ≤2500	7.5	10.0	14.0	20.0	25.0	28.0	32.0		.=	70	N
>2000 and ≤2500	7.5	10.0	14.0	20.0	25.0	28.0	32.0	-		×	Ν
>2000 and ≤2500	15.0	20.0	28.0	40.0	50.0	56.0	64.0			e de	N
>2500 and ≤3200	10.0	12.5	18.0	25.0	32.0	36.0	40.0	4112	70,	-3,	N
>2500 and ≤3200	10.0	12.5	18.0	25.0	32.0	36.0	40.0				N
>2500 and ≤3200	20.0	25.0	36.0	50.0	64.0	72.0	80.0	1			N
>3200 and ≤4000	12.5	16.0	22.0	32.0	40.0	45.0	50.0	<i>.</i>	500		N
>3200 and ≤4000	12.5	16.0	22.0	32.0	40.0	45.0	50.0	_3		_	N
>3200 and ≤4000	25.0	32.0	44.0	64.0	80.0	90.0	100.0		·,	J* _	N
>4000 and ≤5000	16.0	20.0	28.0	40.0	50.0	56.0	63.0	7.	_	d	N
>4000 and ≤5000	16.0	20.0	28.0	40.0	50.0	56.0	63.0	<u>, </u>	AL.	-3	N
>4000 and ≤5000	32.0	40.0	56.0	80.0	100.0	112.0	126.0	_		-4	N
>5000 and ≤6300	20.0	25.0	36.0	50.0	63.0	71.0	80.0	Y .	10,7	400	N
>5000 and ≤6300	20.0	25.0	36.0	50.0	63.0	71.0	80.0	<i>y</i> -	A.	-	N
>5000 and ≤6300	40.0	50.0	72.0	100.0	126.0	142.0	160.0				N
>6300 and ≤8000	25.0	32.0	45.0	63.0	80.0	90.0	100.0	- 3	÷	5°	N
>6300 and ≤8000	25.0	32.0	45.0	63.0	80.0	90.0	100.0	<u> </u>		_	N
>6300 and ≤8000	50.0	64.0	90.0	126.0	160.0	180.0	200.0	-	. E-5		N
>8000 and ≤10000	32.0	40.0	56.0	80.0	100.0	110.0	125.0	, r.	_		N
>8000 and ≤10000	32.0	40.0	56.0	80.0	100.0	110.0	125.0	×— ,	.5	<u>, ~~</u>	N
>8000 and ≤10000	64.0	80.0	112.0	160.0	200.0	220.0	250.0	4		.0	N
>10000 and ≤12500	40.0	50.0	71.0	100.0	125.0	140.0	160.0	with the	· —3		Ν
>10000 and ≤12500	40.0	50.0	71.0	100.0	125.0	140.0	160.0			gl-	N
>10000 and ≤12500	80.0	100.0	142.0	200.0	250.0	280.0	320.0	342		12,	N
				-24							

Supplementary information:

^{*)} Material group IIIb is allowed if the working voltage does not exceed 50 V **) B = Basic insulation, S = Supplementary insulation, R = Reinforced insulation

29.2	TABLE: Creepage distances, functional insulation	Р
20.2	17 IDEE. Oroopago diotarrooo, fariotional irrodiation	



Working voltage (V):		priese s Lest		eepage di (mm) ollution de			ITE SHIE	t salarret salarret sala
Barrier Street Street	1		2			3	j. 30	The state of the
a st st	- 4	Ma	aterial g	roup	Ma	aterial g	roup	
The state of the	450	e e	II	IIIa/IIIb	Lot	II	IIIa/IIIb*	Verdict / Remark
≤10	0.08	0.4	0.4	0.4	1.0	1.0	1.0	of got Party
50	0.16	0.56	0.8	1.1	1.4	1.6	1.8	N
125	0.25	0.71	1.0	1.4	1.8	2.0	2.2	N
250	0.42	1.0	1.4	2.0	2.5	2.8	3.2	N
400	0.75	1.6	2.2	3.2	4.0	4.5	5.0	N
500	1.0	2.0	2.8	4.0	5.0	5.6	6.3	N
>630 and ≤800	1.8	3.2	4.5	6.3	8.0	9.0	10.0	N
>800 and ≤1000	2.4	4.0	5.6	8.0	10.0	11.0	12.5	N of
>1000 and ≤1250	3.2	5.0	7.1	10.0	12.5	14.0	16.0	N
>1250 and ≤1600	4.2	6.3	9.0	12.5	16.0	18.0	20.0	N
>1600 and ≤2000	5.6	8.0	11.0	16.0	20.0	22.0	25.0	N
>2000 and ≤2500	7.5	10.0	14.0	20.0	25.0	28.0	32.0	N S
>2500 and ≤3200	10.0	12.5	18.0	25.0	32.0	36.0	40.0	N
>3200 and ≤4000	12.5	16.0	22.0	32.0	40.0	45.0	50.0	N
>4000 and ≤5000	16.0	20.0	28.0	40.0	50.0	56.0	63.0	N
>5000 and ≤6300	20.0	25.0	36.0	50.0	63.0	71.0	80.0	N
>6300 and ≤8000	25.0	32.0	45.0	63.0	80.0	90.0	100.0	N
>8000 and ≤10000	32.0	40.0	56.0	80.0	100.0	110.0	125.0	N N
>10000 and ≤12500	40.0	50.0	71.0	100.0	125.0	140.0	160.0	N

30.1 TABLE: Ball pres	sure	a de de .	P
Part	Test temperature (°C)	Impression diameter (mm)	Allowed impression diameter (mm)
Plastic enclosure	75	1.2	2.0

30.2	TABLE: Glow-	wire test							Р
Part	gerra stran si	550	te(s)	ti(s)	te(s)	ti(s)	850	Needle- flame test (NFT)	verdict

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IEC 6	30335-2	2-80
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Plastic enclosure	х	-47	-	-	-	, #	ن الله الله الله الله الله الله الله الل	Р
DC inlet	х	L - 0	, T-350	11/20	and a	len The	71,	Р
PCB material	х	715	-	-		d - 3	t -50°	Р
DC motor bobbin	Х	3-0	50	10 - Th		2		Р

Remark: Ti = the time between glow wire touched the material and the material ignite

Te = the time between glow wire touched the material and the flame extinguished;

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

Reference No.: WTF23F12259866J Page 1 of 15

The State	String String Street	EN 60335-2-80 – Attachm	nent	er andre and
Clause	Requirement + Test	The The Park Aug	Result - Remark	Verdict

ATTACHMENT TO TEST REPORT IEC 60335-1 EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES

Household and similar electrical appliances – Safety –

Part 1: GENERAL REQUIREMENTS

EN 60335-1:2012 + AC:2014 + A11:2014 + A13:2017 + A1:2019 +

Differences according to A14:2019 + A2:2019

EN 62233:2008 + AC:2008

Attachment Form No..... EU_GD_IEC60335_1X

Attachment Originator: Nemko AS

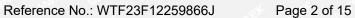
Master Attachment 2019-09-24

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	CENELEC COMMON MODIFICATIONS (EN)	e star star star star	
6.1	Delete "class 0" and "class 01"	The The M. A.	Р
7.1	Single-phase appliances to be connected to the supply mains: 230 V covered	Military Addition Addition of	N
riter skri	Multi-phase appliances to be connected to the supply mains: 400 V covered	all fight state a	N
7.12	The instructions include the substance of the followi	ng:	Р
	- this appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved		P
£ 5	- children shall not play with the appliance	is the state of	Р
at Lit	- cleaning and user maintenance shall not be made by children without supervision	A STATE OF THE STA	Р
8.1.1	Also test probe 18 of EN 61032 is applied	The state with the state of the	Ñ
11125 CH	The appliance being in every possible position during the test, except that	the the state and a	N
STEEL SE	appliances normally used on the floor and having a mass exceeding 40 kg are not tilted	the state of	N
	The force on the probe in the straight position is increased to 10 N when probe 18 is used		N
	When using test probe 18 the appliance is fully assembled as in normal use without any parts removed, and		N
Set .	parts intended to be removed for user maintenance are also not removed	the state of	N

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	EN 60335-2-80 – Attachr	nent	
Clause	Requirement + Test	Result - Remark	Verdict
8.1.3	Instead of test probe B, test probe 18 and test probe 13, for appliances other than those of class II, test probe 41 of IEC 61032 is applied with a force not exceeding 1 N to live parts of visibly glowing heating elements, all poles of which can be disconnected by a single switching action		N
8.2	Compliance is checked by inspection and by applying the test probes of EN 61032 in accordance with the conditions specified in 8.1.1	the state of the s	N
ASSECTION .	Test probe B and probe 18 of EN 61032 are applied to built-in appliances and fixed appliances only after installation	SHIFTE SETTER SHIFTE	N
15.1.2	Appliances with an automatic cord reel tested with the cord in the most unfavourable position so that the reeling of the wet cord may affect electrical insulation during operation, the cord not being dried before reeling		N
20.2	For appliances having dangerous moving parts, due to their working function, e.g. the needle of a sewing machine, tools of kitchen machines or the blade of an electrical knife, full protection is not possible for performing their intended use		N N
	When using a test probe similar to test probe B of EN 61032, having a circular stop face and applied with a force of 5N, the accessories and detachable covers are removed		Р
The state of	When using test probe 18 it is applied with a force of 2,5N on the appliance fully assembled	Marita Akir Akir	P P
22.12	Other parts intended to be detached during use, maintenance or cleaning (e.g. batteries, battery covers, lids, attachments, steam nozzles) are not considered as parts providing a similar function as handles, knobs, grips, levers		P
22.17	The requirement is not applicable to built-in appliances	Set with a print was	N
24.1	Components comply with the safety requirements specified in the relevant EN standards as far as they reasonably apply	the secretary services	P
48.55° 4	Motors are not required to comply with EN 60034- 1, but tested as part of the appliance according to this standard	Maritist Maritist Maritists	Р
in the	Relays are tested as part of the appliance according to this standard	ALTER MATERIA MATERIA SAN	N
	Relays may be alternatively tested to EN 60730-1 and the additional requirements in EN 60335-1	the southern southern which	N
- STATES	The requirements of Clause 29 of this standard apply between live parts of components and accessible parts of the appliance	STATES STATES	Р



Page 3 of 15 Reference No.: WTF23F12259866J

	EN 60335-2-80 – Attachment	
Clause	Requirement + Test Result - Remark	Verdict
	Components may comply with the requirements for clearances and creepage distances for functional insulation as specified in the relevant component standard	Р
1,500 1,500	The requirements of 30.2 of this standard apply to parts of non-metallic material in components including parts of non-metallic material supporting current-carrying connections inside components	Р
ANGELIE .	Components that have not been tested and shown to comply with the EN standard for the relevant component are tested according to the requirements of 30.2 of this standard	Р
Paliticisk July July	Components that have been tested and shown to comply with the resistance requirements in the EN standard for the relevant component need not be rete provided that:	
	- the severity specified in the component standard is not less than the severity specified in 30.2, and	Р
JAN LINE	- the test report for the component states the values of t _e and t _i acc. to EN 60695-2-11	Р
aritet a	If the above two conditions are not satisfied, the component is tested as part of the appliance	P P
STEEL STAY	Power electronic converter circuits are not required to comply with EN 62477-1, but tested as part of the appliance according to this standard	N N
ar sarah	Unless components have been tested and found to comply with the relevant EN standard for the number of cycles specified, they are tested in accordance with 24.1.1 to 24.1.9	Р
n Steel	For components mentioned in 24.1.1 to 24.1.9, no additional tests specified in the relevant EN standard for the component are necessary other than those specified in 24.1.1 to 24.1.9	Р
	Components that have not been tested and found to comply with the relevant EN standard, and	Р
r gridd	components that are not marked or not used in accordance with their marking,	P
STANGER 1	are tested in accordance with the conditions occurring in the appliance, the number of samples being that required by the relevant standard	P.
	Lamp-holders and starter-holders that have not been tested and found to comply with the relevant EN standard are tested as a part of the appliance and additionally comply with the gauging and interchangeability requirements of the relevant EN standard under the conditions occurring in the appliance	N

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Clause	Requirement + Test	Result - Remark	Verdict
Clause	Requirement + rest	Result - Remark	verdict
agrande at	Where the relevant EN standard specifies these gauging and interchangeability requirements at elevated temperatures, the temperatures measured during the tests of Clause 11 are used	STATE STATES STATES	P
STON SANS	There are no additional tests specified for nationally standardized plugs such as those detailed in IEC/TR 60083 or connectors complying with the standard sheets of EN 60320-1 and EN 60309, unless they are specifically mentioned in the text of this standard		Р
	Plugs and socket-outlets and other connecting devices of interconnection cords are not interchangeable with plugs and socket-outlets listed in IEC/TR 60083 or IEC 60906-1, or	STUTE STUTE STUTE	STATE OF BELLEVIEW
isted and	with connectors and appliance inlets complying with the standard sheets of EN 60320-1, if	ar sar sar sa	N N
d Cold	direct supply to these parts from the supply mains gives rise to a hazard	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N
	For plugs used in CENELEC countries Annex ZH applies	A A A	N
24.1.7	When the remote operation of the appliance is via a telecommunication network, the relevant standard for the telecommunication interface circuitry in the appliance is EN 41003	The state of the s	N
ted samti	Compliance with Clause 8 of this standard is not impaired by connecting the appliance to a device covered by EN 41003	SANTIN SANTIN SANTI	N
24.Z1	Type S2 and S3 capacitors according to EN 60252-1 are not required to undergo the testing as required by 30.2.2 and 30.2.3.1	SHIFT WITH WHITE	N
25.1	Plugs and pins for insertion into socket outlets follow the relevant standards sheets in Annex ZH	British Abritish Abriton d	N
25.7	Rubber sheathed cords (60245 IEC 53) are not suitable for appliances intended to be used outdoors, or	THE MARTINE SHATTER MAN	N
400	when they are liable to be exposed to significant amount of ultraviolet radiation	Shirte Shring Shring	N
25.25	Instead of IEC/TR 60083, dimensions of the pins and engagement face of plugs of appliances that are inserted into socket-outlets are in accordance with the dimensions of the relevant plug standard Common plugs and socket-outlets types in		N
	CENELEC countries as shown in Annex ZH		N
26.11	Conductors connected by soldering are not considered to be positioned or fixed so that reliance is not placed upon the soldering alone to maintain them in position,		P

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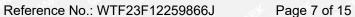
	EN 60335-2-80 – Attachi	ment	
Clause	Requirement + Test	Result - Remark	Verdict
	unless they are held in place near the terminals independently of the solder		N
29.3.Z1	Appliance constructed so that if there is a possibility of damaging the insulation during installation, the insulation withstands the scratch and penetration test of 21.2		N
32	Compliance regarding electromagnetic fields is checked according to EN 62233	s active market specific	P
Annex I, 19.I.101	The appliance is supplied at rated voltage and operated under normal operation with each of the fault conditions specified	A SHALLER ARRIVED ARRIVED	N
printer seri	The duration of any of the tests is as specified in 19.7	NETER STATES SHEETERS OF	N
ZA	ANNEX ZA (NORMATIVE) SPECIAL NATIONAL CONDITIONS (EN)	gar star attar sat	P
4 3	Denmark, Sweden, Norway and Finland		Р
7.12.8	The maximum inlet water pressure is at least 1,0 MPa	S. Martin Shripe Mir.	N
11. The sale	Norway	St. St. St.	Р
19.5	The test is also applicable to appliances intended to be permanently connected to fixed wiring	- 107 de 1	N N
	Norway	4 26 4	Р
22.2	The second paragraph of this subclause, dealing with single-phase, permanently connected class I appliances having heating elements, is not applicable due to the supply system		N
	Denmark	200	Р
22.47	The maximum inlet water pressure is at least 1,0 MPa	A STATE STATE STATE OF	N
The Marie	Ireland and United Kingdom	the state state st	Р
25.8	In the table, the line >10 A and ≤16 A is replaced w	vith:	N
100	> 10 and ≤ 13 1,25 (1,0) ^b	of the state of	N
24	> 13 and ≤ 16 1,5 (1,0) ^b	4 4	N
ZB	ANNEX ZB (INFORMATIVE) A-DEVIATIONS	Author Shring Auri.	un P
Mile Jak	Ireland	the the star is	P
25.1 and 25.25	These regulations apply to all plugs for domestic use at a voltage of not less than 200 V and in general allow only plugs complying with I.S. 401:1997, or equivalent, to be fitted to domestic appliances		N
30	United Kingdom	The the the	Р



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	EN 60335-2-80 – Attachment	12 11
Clause	Requirement + Test Result - Remark	Verdict
25.1 and 25.25	These regulations apply to all plugs for domestic use at a voltage of not less than 200 V and in general allow only plugs to BS 1363 to be fitted to domestic appliances.	N
STORE STORE	It also allows plugs to BS 4573 and EN 50075 to be fitted to shavers and toothbrushes	N
ZC	ANNEX ZC (NORMATIVE) NORMATIVE REFERENCES TO INTERNATIONAL PUBLICATIONS WITH THEI CORRESPONDING EUROPEAN PUBLICATIONS	R N
Septitor 1	A list of documents referred to in the text of this standard in such a way that some or all of their content constitutes requirements of this document	N
ZD	ANNEX ZD (INFORMATIVE) IEC and CENELEC CODE DESIGNATIONS FOR FLEXIBLE CORDS	Р
Q. Alega	List of IEC and CENELEC code designations for flexible cords	Р
ZE	ANNEX ZE (INFORMATIVE) SPECIFIC ADDITIONAL REQUIREMENTS FOR APPLIANCES AND MACHINE INTENDED FOR COMMERCIAL USE	S N
7.1	Business name and full address of the manufacturer and, where applicable, his authorized representative:	N
. A.	Model or type reference:	N
ar Ja	Serial number, if any	N
	Production year	N
350	Designation of the appliance:	N
7.12	Instructions provided with the appliance so that the appliance can be used safely	N
ille in	The instructions contain at least the following information:	N
ister sprist in sin	- the business name and full address of the manufacturer and, where applicable, his authorized representative	N
- 35°C	- model or type reference of the appliance as marked on the appliance itself, except for the serial number	N
are a	the designation of the appliance together with its explanation in case it is given by a combination of letters and/or numbers	N
	- the general description of the appliance, when needed due to the complexity of the appliance	N
e gar	- specific precautions required during installation, operation, adjusting, user maintenance, cleaning, repairing or moving	N



	EN 60335-2-80 – Attachm	nent	
Clause	Requirement + Test	Result - Remark	Verdic
	- when needed drawings, diagrams, descriptions and explanations necessary for the safe use and user maintenance of the appliance		N
ard _{arti}	- the possible reasonably foreseeable misuse and, whenever relevant, a warning against the effects it may have on the safe use of the appliance	The section section is	N
40,000	The words "Original instructions" appear on the language version(s) verified by the manufacturer or by the authorized representative	A STATES SERVICES SERVICES SER	N
ggriff si ggiftet sigi	When a translation of the original instructions has been provided by a person introducing the appliance on the market; the meaning of the sentence "Translation of the original instructions" appear in the relevant instructions delivered with the appliance		N
S WARE	The instructions for maintenance/service to be done by specialized personnel, mandated by the manufacturer or the authorized representative may be supplied in only one Community language which the specialized personnel understand	Service Street Street Street	N
alanin al	The instructions indicate the type and frequency of inspections and maintenance required for safe operation including the preventive maintenance measures	AND	N
7.12.ZE1	If needed for specific appliances, the following inform	mation to be given:	, N
	- on use, transportation, assembly, dismantling when out of service, testing or foreseeable breakdowns, if these operations have consequences on stability of the appliance in order to avoid overturning, falling or uncontrolled movements of the appliance or of its component parts		N
	- on how to maintain adequate mechanical stability when in use, during transportation, assembly, dismantling, scrapping and any other action involving the appliance	SAN ARVITAN ARVITAN ARVITAN A	N
AND	- on the protective measures to be taken by the user, including, where appropriate, the personal protective equipment to be provided	all the state of the	N
	- on the operating method to be followed in the event of accident or breakdown; if a blockage is likely to occur the operating method to safely unblock the appliance	STOR SHITTER SHITTER SHITTER	N
	- on the specifications on the spare parts to be used, when these affect the health and safety of the operator	and the second	N
Table 1	- on airborne noise emissions, determined and declarelevant Part 2, which includes:	ared in accordance with the	N

	EN 60335-2-80 – Attachm	nent	
Clause	Requirement + Test	Result - Remark	Verdict
	- the A-weighted emission sound pressure level at workstations, where this exceeds 70 dB(A);		N
	- where this level does not exceed 70 dB(A), this fact is indicated	a to the state	N
4 35 TH	- the peak C-weighted instantaneous sound pressure value at workstations, where this exceeds 63 Pa (130 dB in relation to 20 μPa)		N
garian gi	the A-weighted sound power level emitted by the machinery, where the A-weighted emission sound pressure level at workstations exceeds 80 dB(A):	STATES STATE STATE STATES	N
7.12.ZE2	The instructions include a warning to disconnect the appliance from its power source during service and when replacing parts	or action assisted assisted a	N
St.	If the removal of the plug is foreseen, it is clearly indicated that the removal of the plug is such that an operator can check from any of the points to which he has access that the plug remains removed	STATE STORE STATES STATES	N
NITED SPECT	If this is not possible, due to the construction of the appliance or its installation, a disconnection with a locking system in the isolated position is provided	A STATE STATES	N
19.11.4.8	The appliance continues to operate, without causing any hazard to the user, from the same point in its operating cycle at which the voltage fluctuation occurred, or		N
74, 14	a manual operation is required to restart it	They have the the	N
20.1	Appliances and their components and fittings have adequate mechanical stability during transportation, assembly, dismantling and any other action involving the appliance		N
20.2	Dangerous moving transmission parts safeguarded either by design or guards	the state of	N
	When guards are used, they are fixed guards, interlocking movable guards or protective devices	They have the	N
May H	Moving parts directly involved in the function of the	appliance which cannot be	N

	causing any hazard to the user, from the same point in its operating cycle at which the voltage fluctuation occurred, or		
- 47	a manual operation is required to restart it	They have the said	N
20.1	Appliances and their components and fittings have adequate mechanical stability during transportation, assembly, dismantling and any other action involving the appliance	arith arith arith arith arith	N
20.2	Dangerous moving transmission parts safeguarded either by design or guards		N
	When guards are used, they are fixed guards, interlocking movable guards or protective devices	Alberta alberta alberta alberta	N
All P	Moving parts directly involved in the function of the a made completely inaccessible fitted with:	ppliance which cannot be	N
ing. A	- fixed guards or interlocking movable guards preventing access to those sections of the parts that are not used in the work, and	atter _{se} ntine sentre sentine .	N
	- adjustable guards restricting access to those sections of the moving parts where access is necessary	o _{de} ligio de la compania del compania de la compania deligió de la compania deligió deligió de la compania deligió deligió de la compania deligió deligió de la compania deligió de la compania deligió de la compania deligió	N
7.0+	Interlocking movable guards used where frequent access is required	and the state of	N
	esting Group (Foshan) Co., Ltd. w.waltek.com.cn	WT-5 ²	10-201-12-

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300	EN 60335-2-80 – Attachment			
Clause	Requirement + Test	Result - Remark	Verdict	
21.1	Appliances and their components and fittings have adequate mechanical strength and is constructed to withstand such rough handling that may be expected in normal use, during transportation, assembly, dismantling, scrapping and any other action involving the appliance		N	
22.ZE.1	For appliances provided with a seat, the seat gives adequate stability	y de de si	, N	
34	The distance between the seat and the control devices capable of being adapted to the operator	A A A	N	
22.ZE.2	For appliances provided with separate devices for the start and the stop functions, the stop function is unambiguously identifiable and does always override the start function	STEET STATES STATES OF	N	
	For appliances provided with one device performing the start and the stop function, the stop function is unambiguously identifiable and does always override the start function		N	
22.ZE.3	Appliances designed in such a way that incorrect mounting is avoided, if this can lead to an unsafe situation	the other sectors	N	
NETTON SPAN	If this is not possible, information on the correct mounting is given directly on the part and/or the enclosure	The state of	N	
22.ZE.4	Where the weight, size or shape prevents appliances from being moved manually, they are fitted with attachments for lifting gear, or	Martin Martin	N	
25	so designed that they can be fitted with such attachments, or	Miles will be with	N	
ing _{er} in	be shaped in such a way that standard lifting gear can easily be used		N	
	Appliances to be moved manually are constructed or equipped so that they can be moved easily and safely	seek genissek genissek genis	N	
22.ZE.5	The fixing systems of fixed guards which prevent access to dangerous moving transmission parts only removable with the use of tools	The state of the s	N	
Maries And	If such guards have to be removed by the user for routine cleaning or maintenance their fixing systems remain attached to the fixed guards or to the machine after removal	aticide agricult agricult.	N	
SEA MARKE	Where possible, guards are incapable of remaining in place without their fixings	at the state with	N	
- AND THE	This does not apply if, after removal of the screws, or if the component is incorrectly repositioned, the appliance becomes inoperative	SECTION SECTION	N	
	Movable guards are interlocked		N	

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	EN 60335-2-80 – Attachm	ient	
Clause	Requirement + Test	Result - Remark	Verdict
allegates and	The interlocking devices prevent the start of hazardous appliance functions until the guards are fixed in their position, and give a stop command whenever they are no longer closed	STREET SHIFTS SHIFTS SHIFTS	N
Silver _{Silv} si de di	Where it is possible for an operator to reach the dar hazardous appliance functions has ceased, movable guard locking device in addition to an interlocking device.	e guards associated with a	N
780	- prevents the start of hazardous appliance functions until the guard is closed and locked, and	White Mile Shir Mile	N
ARTICLE A	 keeps the guard closed and locked until the risk of injury from the hazardous appliance functions has ceased 	STREET STREET STREET STREET	N
gen ge	Interlocking movable guards remain attached to the appliance when open, and	NATE WILL SHIP WAS	N
er end Ferense	they are designed and constructed in such a way that they can be adjusted only by means of an intentional action		N
22.ZE.6	Interlocking movable guards designed in such a way that the absence or failure of one of their components prevents starting or stops the hazardous appliance functions	AND AND AND AND THE	N
nited jani Gli jiti	The guard is opened to the extent needed to cause the interlocking to operate and is then closed, the number of operations being defined in the specific Part 2	The state of the s	N
- September	After this test any defect that may be expected in normal use is applied to the interlock system, including interruption of the supply, only one defect being simulated at a time	Maritical Maritical Maritical Maritical	N
Participan Pla	After these tests the interlock system is fit for further use	STEEL MILITAL MITTER MILITARY	N
22.ZE.7	Adjustable guards restricting access to areas of the for the work are:	moving parts strictly necessary	N
et and	- adjustable manually or automatically, depending on the type of work involved, and	the state state state	N
	- readily adjustable without the use of tools	The The State of	N
22.ZE.8	In case of interruption, re-establishment after an interruption or fluctuation in whatever manner of the power supply, the appliance does not restart		N
	However, automatic restarting of the operation is allowed if the appliance may continue to operate, without causing any hazard to the user, from the same point in its operating cycle at which the voltage interruption or fluctuation occurred		N
22.ZE.9	Appliances fitted with means to isolate them from all energy sources	SHARE HELLE SHALL SHEET	N

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	EN 60335-2-80 – Attachm	T	
Clause	Requirement + Test	Result - Remark	Verdict
30	Such isolators are clearly identified, and	Shring the state of the state o	N
elle agentica	they are capable of being locked if reconnection endanger persons	Butter aprilies aprilies aprilies	N
iste ^{ak} _{jäh} sti ek 1508	After the energy source is disconnected, it is possible to dissipate any energy remaining or stored in the circuits of the appliance without risk to persons		N
ZF	ANNEX ZF (INFORMATIVE) CRITERIA APPLIED FOR THE ALLOCATION OF STANDARDS IN THE EN 60335 SERIES UNDER I		Р
and the	List of standards under CENELEC/TC61 with the allocation under the LVD (Low Voltage Directive) or the MD (Machinery Directive)	LVD	Р
ZG	ANNEX ZG (NORMATIVE) UV APPLIANCES	et i til stille skille skille	N
# STAN	The following modifications to this standard apply to appliances having UV emitters	- At the the	N
Maria de la compansión de	This annex is not applicable to appliances covered by the scopes of IEC 60335-2-27, IEC 60335-2-59 or IEC 60335-2-109	The state with some	N
7.12.ZG	The instructions for appliances incorporating UVC emitters include the substance of the following: WARNING — This appliance contains a UV emitter. Do not stare at the light source	The second secon	N
32	For appliances incorporating UV emitters the manufacturer delivers a declaration providing evidence that the plastic material exposed to the radiation is UV resistant	STEET STITE SPITES SPITES	N
ZH	ANNEX ZH (INFORMATIVE) Common plug and socket-outlet types in CENEL	EC countries	N
Telefor Marci	In general, supply cords of single-phase appliances exceeding 16 A are fitted with a plug complying with		N
ar and the	- for class I appliances or class II appliances with functional earth, standard sheet EU2, EU3 or EU4		N
18255	- for class II appliances, standard sheet EU5, EU6 or EU7	the state state south	N
Step 18	There are exemptions or differences in certain CENELEC countries	the state of	N
ZI	ANNEX ZI (INFORMATIVE) Information on the application of A11:2014 to ENCENELEC CLC/TC 61(SEC)2096A	I 60335-1:2012	N
L. S. L. Tark	Clarification of the application of parts 2 in conjunction with the 2002 or 2012 version of EN 60335-1		N



	EN 60335-2-80 – Attach	ment	7
Clause	Requirement + Test	Result - Remark	Verdic
ZZA	ANNEX ZZA (INFORMATIVE) RELATIONSHIP BETWEEN THIS EUROPEAN S OBJECTIVES OF DIRECTIVE 2014/35/EU [2014 COVERED		Р
STATE STATE	This standard provides one means of conforming to safety objectives of Directive 2014/35/EU	a titak antitak antitak antitak a	Р
ide spille spilled spilled	When cited in the Official Journal under that Directive, compliance with the normative clauses of this standard given in Table ZZA.1 confers a presumption of conformity with the safety objectives of that Directive and associated EFTA regulations		Р
الود المتحددة كان المتحددة	Compliance with this Part 1 when used together with the relevant Part 2 provides one means of conformity with the safety objectives	STATES STATES STATES STATES	Р
ZZB	ANNEX ZZB (INFORMATIVE) RELATIONSHIP BETWEEN THIS EUROPEAN S ESSENTIAL REQUIREMENTS OF DIRECTIVE 20 COVERED		N
and the	This standard provides one means of conforming to essential requirements of EU Directive 2006/42/EC	Martin and the secretary and the	N
Paris Series Series Series Series Series	When cited in the Official Journal under that Directive, compliance with the normative clauses of this standard given in Table ZZB.1 confers a presumption of conformity with the essential requirements of that Directive and associated EFTA regulations		N
agreed agreed all accept agreed	Compliance with this Part 1 when used together with the relevant Part 2 provides one means of conformity with the essential health and safety requirements	STATE STATE STATES	N
	ANNEX EN 62233:2008 + AC:2008 EMF- ELECTROMAGNETICS FIELDS	ister assert misser and a	Р
st st	The tested product also complies with the requirer	nents of EN 62233:2008	+ P
- 1 P	Limit100%	Measured max. : 1.138%	Р

Variations to EN 60335-1:2012/A15:2021		
20.2	Replace "dangerous" with "hazardous" (twice).	N
22.44	An appliance is child-appealing if one of the following criteria is present	N
The species	— appliance decorated using faces, cartoon like characters, or similar images;	N
t and the	— appliance using shapes representing animals, characters, persons or scale models.	N
<i>A</i>	An appliance is child-appealing if more than one of the following criteria are present:	N

	EN 60335-2-80 – Attachn	nent	
Clause	Requirement + Test	Result - Remark	Verdict
	— using non-functional light (functional light is e.g. illumination of an object or area, signal indicating status of an appliance);		N
31	— using non-functional sound (e.g. music);	the the the	N
See W	— using non-functional movement.	A A A ST.	N
# 18 X 12	If the appliance is child-appealing, has a mass less normally intended for use at a height less than 850 shall be met:		N
ASSECTION .	— No surface (both functional surfaces and non-functional surfaces) and non-functional surfaces and non-functional surfaces.		N
-c ⁴ -	Temperature rise	a se st st	N
b. A	- of bare metal 38K	RELEASED AND SHEET SHEET	N
<i>\$</i>	- of coated metal 42K	a A A A	N
711	– of glass and ceramic 51K	by the the the the	N
- Grander	 of plastic having a thickness exceeding 0,4 mm 58K 	the street south south south	N
anarah Sa	— Hazardous moving parts shall not be accessible by means of test probe 19 of IEC 61032 under the conditions specified for test probe 18 in Clause 20.2.	Martine Martine Martine Martine	N
at the	— Live parts shall not be accessible by means of test probe 19 of IEC 61032 under the conditions specified for test probe 18 in Clause 8.1.1.		N
ARTICLES A	— Liquid in the appliance shall not exceed 38 °C in normal use when it is accessible by means of test probe 19 under the conditions specified for test probe 18 in Clause 20.2 or can get out of the appliance when positioned in different positions.	STREET STREET, STREET, STREET, STREET,	N
Negro St	Vessels in which two independent and sequential actions are needed to access the liquid are considered to meet the requirement.	BLITTE BETTER SETTEMENT SETTEMENT	N
	The requirement of 22.12 is applicable for all accessible parts of the appliance.	THE SERVICE SHALLER SHALLER AS	N
300	The requirement is not applicable to appliances where there is a toy shaped like the appliance.	the state of the s	N
STATES A	Compliance is checked by inspection and appropriate tests.	and white water assured	N
24.1.7	If the remote operation of the appliance is via a telecommunication network, the relevant standard for the telecommunication interface circuitry in the appliance is IEC 62151.	atter southern statement statement	N

A	ANNEX ZA (NORMATIVE) SPECIAL NATIONAL CONDITIONS (EN)	at a second	Р
	Modify the reference for Clause 25.8 by adding Cyprus to the countries listed	alternative to the state of the	Р

15

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Clause	Requirement + Test	Result - Remark	Verdict
Olause	requirement i rest	result - remain	Voluio
	Annex ZB A-deviations	The same of the	Р
all regress. Si	Delete the second paragraph, including the note, starting with: "This European Standard/Harmonization Document"	British African Abritish Abritish	Р
ZC	ANNEX ZC (NORMATIVE) NORMATIVE REFERENCES TO INTERNATIONAL CORRESPONDING EUROPEAN PUBLICATIONS	PUBLICATIONS WITH THEIR	Р
ABOUT AB	The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.		Р
ZF	ANNEX ZF (INFORMATIVE) CRITERIA APPLIED FOR THE ALLOCATION OF STANDARDS IN THE EN 60335 SERIES UNDER I		Р
416	Modify the elements of the Table ZF.1	The Man Man Alberta	Р
	and the latter with the latter		
ZH	ANNEX ZH (INFORMATIVE) Common plug and socket-outlet types in CENEL	.EC countries	N
1 J. J.	ZH.1 General	All Carrier and a	N
tek _{adh} atis	NOTE: The dimensions of the plugs are purely for information. The exact dimensions of the plugs can be found in the relevant national standards.	The second section who	N
- 25th	ZH.3.2 Cyprus	1 4 4 6	N
4	Only plugs according to standard sheets GB1, GB6 and GB7 of IEC/TR 60083 are allowed.	aller aller der aller	N
an ^{ester} et	They correspond with plug designations: EU9, EU6 and EU10.	Sign with the section section.	N
	ZH.3.4 Finland		, N
	Plugs according to Publications SFS 5610 and SFS-EN 50075 are allowed.	The Burning States Autor A	N
	Plugs according to Publications SFS 5215 and SFS-EN 60309 are allowed.	SHELLER SHELLER SHELLER SHELL	N
500	ZH.3.9 Netherlands	14 14 5th 5th	N
	Only plugs according to NEN 1020:2019 are allowed, standard sheets:		N
	— IV or IVa 16 A 250 V class I plug (L+N+PE) with side earthing [= TR IEC 60083 - NL 2 / EU2]	The filter filter filter of	N
, jer	— VII or VIIa 16 A 250 V class I plug (L+N+PE) with dual (side and pin) earthing [= TR IEC 60083 - NL 2 / EU4]	SHIFT WITH SHIFT SHIFT	N
200	— XVI 2,5 A 250 V class II plug (L+N): [= TR IEC 60083 - NL 3 / EU5]	The first start start start	N

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	EN 60335-2-80 – Attachr	ment	
Clause	Requirement + Test	Result - Remark	Verdict
		+ st 55 50	10 m
	— XVII or XVIIa 16 A 250 V class II plug (L+N) [= TR IEC 60083 - NL 4 / EU7]	California California California	N
gl ^{ego} si	— IX (Perilex) 16 A 400/230 V class I plug (L1+L2+L3+N+PE) [= EU8]	NUTUR ABUTUR ABUTUR	N
	Or plug according EN 50075 is allowed, standard sheet:	grate section section was	N N
et sale	— 1 2,5 A 250 V class II plug (L+N) [= TR IEC 60083 - NL 5 / EU6]	ar street street	, N
. Joh	These plugs are shown in IEC/TR 60083 as NL2, NL3, NL4, NL5 and DE4.	and the state	N
	They correspond with plug designations: EU 2, EU4, EU5, EU6, EU7 and EU8.		N
er er Let s	ZH.3.14 Switzerland		N
s silv s silvitish silvitish resp	Supply cords of portable household and similar electrical appliances having a rated current not exceeding 16 A shall be provided with a plug complying with SN 441011-1:2019. The Table A is applicable for Plug with IP20 and Table B is applicable for plug with IP55:		N

===== End of Attachment ======

W

Photo Documentation

Model: MO2123



Photo 1



Photo 2





Photo 3



Photo 4





Photo 5



Photo 6

W



Photo 7



Photo 8



Photo 9



Photo 10



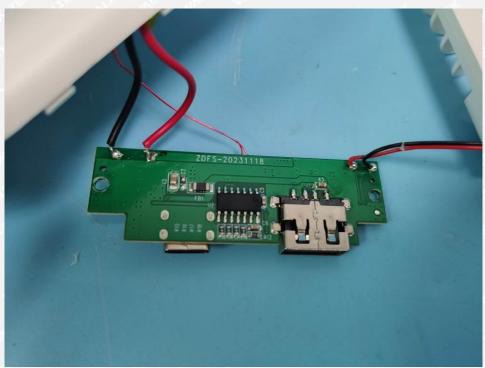


Photo 11



Photo 12



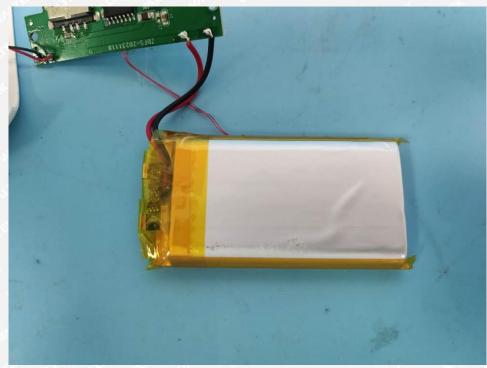


Photo 13

===== End of Photo ======





TEST REPORT

Reference No	 WTF23D10227616Y

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

Address...... 7/F., Kings Tower, 111 King Lam Street, Cheung Sha Wan, Kowloon,

Hong Kong

Manufacturer.....: 118144

Address..... : --

Product.....: USB foldable desk fan

Model(s)..... : MO2123

Total pages: 68 pages and 4 pages of photo.

Audio/video, information and communication technology equipment-

Part 1:Safety requirements

Date of Receipt sample....: 2023-10-26

Date of Test..... : 2023-10-26 to 2023-12-12

Date of Issue...... 2023-12-15

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:

Waltek Testing Group Co., Ltd.

Address: No. 77, Houjie Section, Guantai Road, Houjie Town, Dongguan City, Guangdong, China
Tel:+86-769-2267 6998
Fax:+86-769-2267 6828

Compiled by:

Jason . Huany

Jason Huang / Project Engineer

Approved by:

Almon Zhao / Designated Reviewer



Reference No.: WTF23D10227616Y Page 2 of 68

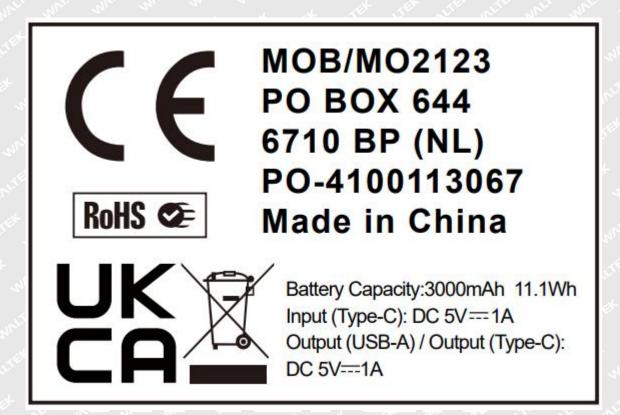
Test item description	USB foldable desk fan				
Trademark:	MOB THE THE THE MITTER WHITE WHITE				
Model and/or type reference	MO2123				
Rating(s):	Battery Capacity:3000mAh 11.1Wh				
Remark:	et let	STILL WITH MY MY MY MY			
Whether parts of tests for the product h	nave been subo	contracted to other labs:			
☐ Yes					
If Yes, list the related test items and lat	o information:				
Test items:					
Lab information:	LIFER MAI	in my my my the			
Summary of testing:	20,	t let let liet liter niter niter inite and			
Tests performed (name of test and to	est clause):	Testing location:			
- EN IEC 62368-1:2020+A11:2020 All a The submitted samples were found to the requirements of above specification	comply with	No. 77, Houjie Section, Guantai Road, Houjie Town, Dongguan City, Guangdong, China			
Summary of compliance with Nation	al Differences	(List of countries addressed):			
EU Group Differences ☑ The product fulfils the requirements 1:2020+A11:2020.	of EN IEC 623	368-1:2020+A11:2020 and BS EN IEC 62368-			
Use of uncertainty of measurement	for decisions	on conformity (decision rule) :			
No decision rule is specified by the applicable limit according to the specified by the spe	ne IEC standar	rd, when comparing the measurement result with the at standard. The decisions on conformity are made apple acceptance" decision rule, previously known as			
☐ Other: (to be specified, for examp requirements apply)	ole when requir	ed by the standard or client, or if national accreditation			
	calculated by	the laboratory based on application of criteria given by ethods, decision sheets and operational procedures of			
IEC Guide 115 provides guidance on the decision rule when reporting tes	st results with	n of measurement uncertainty principles and applying in IECEE scheme, noting that the reporting of the necessary unless required by the test standard or			
Calculations leading to the reported value the testing.	alues are on fil	e with the NCB and testing laboratory that conducted			





Copy of marking plate:

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



Remark:

- 1. The above markings are the minimum requirements required by the safety standard. For the final production, the additional markings which do not give rise to misunderstanding may be added.
- 2. The CE, UKCA 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: ☐ ES1 ☐ ES2 ☐ ES3		
Supply % Tolerance	☐ +10%/-10% ☐ +20%/-15% ☐ +%/% ☑ None		
Supply Connection – Type	 □ pluggable equipment type A - □ non-detachable supply cord □ appliance coupler □ direct plug-in □ pluggable equipment type B - □ non-detachable supply cord □ appliance coupler □ permanent connection □ mating connector ⋈ other: not Mains connected 		
Considered current rating of protective device as part of building or equipment installation:	□ Location: □ building □ equipment □ N/A		
Equipment mobility:	 ⊠ movable		
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:	35°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):			
Mass of equipment (kg)	⊠ 0.122kg		



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POSSIBLE TEST CASE VERDICTS:	THE ME ME IN THE
- test case does not apply to the test object	: N/A / 1/2 / 1/2 / 1/2 / Mill Mark
- test object does meet the requirement	: P (Pass)
- test object does not meet the requirement	: F (Fail)
TESTING:	ALL THE THE THE
Date of receipt of test item	: See the cover
Date (s) of performance of tests	: See the cover
GENERAL REMARKS:	LIFE MITE MILL WALL WALL WALL WALL
Throughout this report a ☐ comma / ☒ point GENERAL PRODUCT INFORMATION:	is used as the decimal separator.
including 2000 m above sea level.	temperature is 35°C. The specified altitude is up to and proved internal lithium-ion battery or USB type-C which
Model Differences N/A	outile write write write write write write
Additional application considerations – (Cons N/A	iderations used to test a component or sub-assembl



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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 circuits	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: Battery	Enclosure	Equipment safeguard (clause 6.3.1 complied)	Equipment safeguard (clause 6.3.1 complied)	N/A
PS1:<15Watt circuit	Combustible materials within equipment	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
Battery (See Annex M)	Ordinary	N/A	N/A	N/A
3	Mechanically-caused injury	, <u> </u>		
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					
Indicate which e	nergy sources are inc	luded in the	e energy sou	ırce diagran	n. Insert diagram	n below
A St	LET SET N	IEE MITE	ans. 1	no m	20 2	a de de
unlik malik	□ ES	☐ PS	☐ MS	☐ TS	☐ RS	
	See details in OVER	RVIEW OF	ENERGY S	OURCES A	ND SAFEGUARI	DS



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<u> </u>					
in m	EN IEC 62368-1				
Clause	Requirement – Test	Result – Remark	Verdict		

4	GENERAL REQUIREMENTS		P
4.1.1	Acceptance of materials, components and subassemblies	(See appended table 4.1.2)	JIP P
4.1.2 united	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	TEX WATE
4.1.3	Equipment design and construction	Equipment is adequately designed and constructed.	VIII. B
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	TP.
4.4.3.1	General	2 24 24	Р
4.4.3.2	Steady force tests	(See Clause T.4)	Pol
4.4.3.3	Drop tests	(See Annex T.7)	Р
4.4.3.4	Impact tests	the life stiet while and	N/A
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
rr. Mrr	Glass impact test (1J)	LIER MITER WHITE WHITE OF	N/A
et est	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	a de de de	N/A
4.4.3.10	Accessibility, glass, safeguard effectiveness	After tests, no safeguard damaged.	WP W
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	The The The	Р
4.5.1	General	et lift aliet with any	Р
4.5.2	No explosion during normal/abnormal operating condition	(See Clause B.2, B.3)	P



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Clause	Requirement – Test	Result – Remark	Verdict
NITEX N	No harm by explosion during single fault conditions	(See Clause B.4)	P
4.6	Fixing of conductors	See below	Р
NITE WAY	Fix conductors not to defeat a safeguard	THE THE NITE OF THE	NET P
- L	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)	et alter white white wh	N/A
4.8	Equipment containing coin/button cell batteries	S The state of the	N/A
4.8.1	General	No coin/button cell batteries used.	N/A
4.8.2	Instructional safeguard	THE LITER NITER MITTER	N/A
4.8.3	Battery compartment door/cover construction	10 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N/A
WILL	Open torque test	EX NITER WITE WAITE W	N/A
4.8.4.2	Stress relief test	The state of	N/A
4.8.4.3	Battery replacement test	CHIEF WITE WHILE WAL	N/A
4.8.4.4	Drop test		N/A
4.8.4.5	Impact test	White whi	N/A
4.8.4.6	Crush test	J+ 1H+	N/A
4.8.5	Compliance	The Will Mar Mar .	N/A
t TEX	30N force test with test probe	L IN THE TEN	N/A
2/11	20N force test with test hook	Wei Mer Me M	N/A
4.9	Likelihood of fire or shock due to entry of cond	luctive object	P
4.10	Component requirements	AUT. AUT. MUT. AUT.	N/A
4.10.1	Disconnect Device	TEX TEX STEX	N/A
4.10.2	Switches and relays	VII AND AND AND	N/A

5	ELECTRICALLY-CAUSED INJURY		Р
5.2	Classification and limits of electrical energy sou	irces 4 4	Р
5.2.2	ES1, ES2 and ES3 limits	All internal circuits are considered to be ES1	Р
5.2.2.2	Steady-state voltage and current limits	(See appended table 5.2)	7/12 P 7/1
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
5.2.2.6	Ringing signals	No such ringing signals	N/A
5.2.2.7	Audio signals	at let tet i	N/A



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

<u> </u>	Troquilottion: Tool	Troodic Tromain	Voluiot
5.3	Protection against electrical energy sources	the marine was the	N/A
5.3.1	General Requirements for accessible parts to	TEX ITEX NITEX MIT	N/A
	ordinary, instructed and skilled persons	m, m, m, m	- A-
5.3.1 a)	Accessible ES1/ES2 derived from ES2/ES3 circuits	TEX LIEK NITER WITE	N/A
5.3.1 b)	Skilled persons not unintentional contact ES3 bare conductors	int out to the	N/A
5.3.2.1	Accessibility to electrical energy sources and safeguards	Only ES1 circuit	N/A
21/2 2	Accessibility to outdoor equipment bare parts	MULLE MULL MULL AND	N/A
5.3.2.2	Contact requirements	at at at the	N/A
12 14	Test with test probe from Annex V	will mi me m	_
5.3.2.2 a)	Air gap – electric strength test potential (V)	at let let liter	N/A
5.3.2.2 b)	Air gap – distance (mm)	The Mer Mer Miles	N/A
5.3.2.3	Compliance	et tet tet tiet itet o	N/A
5.3.2.4	Terminals for connecting stripped wire	No stripped wire used.	N/A
5.4	Insulation materials and requirements	t itel liter alies al	Р
5.4.1.2	Properties of insulating material	No insulation as a safeguard.	N/A
5.4.1.3	Material is non-hygroscopic	LAST OF SILITE SPATE	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)	P
5.4.1.5	Pollution degrees	in the the the	N/A
5.4.1.5.2	Test for pollution degree 1 environment and for an insulating compound	MULTER WALTER WHITER WA	N/A
5.4.1.5.3	Thermal cycling test	at at the co	N/A
5.4.1.6	Insulation in transformers with varying dimensions	MULL MULL MULL MILL	N/A
5.4.1.7	Insulation in circuits generating starting pulses	et let let liet	N/A
5.4.1.8	Determination of working voltage	VII AUG AUG AUG	N/A
5.4.1.9	Insulating surfaces	Et TEX STEX STEELS	N/A
5.4.1.10	Thermoplastic parts on which conductive metallic parts are directly mounted	THE THE	N/A
5.4.1.10.2	Vicat test	Wer are are	N/A
5.4.1.10.3	Ball pressure test	THE THE STATE	N/A
- 10	Clearances	Mure Mure and an	N/A
5.4.2			20
-t- 2	General requirements	TEX TEX ITEX SITES	N/A
5.4.2 5.4.2.1	General requirements Clearances in circuits connected to AC Mains, Alternative method	t it let telt	N/A N/A



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01	EN IEC 62368-	7 77 77	N/ P. 4
Clause	Requirement – Test	Result – Remark	Verdict
5.4.2.3	Procedure 2 for determining clearance	Mer were me	N/A
5.4.2.3.2.2	a.c. mains transient voltage	TEX TEX STEX	11511 -
5.4.2.3.2.3	d.c. mains transient voltage	mer mer m	
5.4.2.3.2.4	External circuit transient voltage	LIFE ALLEY MALES	INTE
5.4.2.3.2.5	Transient voltage determined by measurement	16, 11, 12, 2	<u> </u>
5.4.2.4	Determining the adequacy of a clearance using an electric strength test	THE WILL MY	N/A
5.4.2.5	Multiplication factors for clearances and test voltages	MUNITER MULTINE WALLE	N/A
5.4.2.6	Clearance measurement	TER STER STER	N/A
5.4.3	Creepage distances	me me m	N/A
5.4.3.1	General	LIER NITER WITER	N/A
5.4.3.3	Material group		
5.4.3.4	Creepage distances measurement	er with which whi	N/A
5.4.4	Solid insulation		N/A
5.4.4.1	General requirements	WILL MULL MULL	N/A
5.4.4.2	Minimum distance through insulation		N/A
5.4.4.3	Insulating compound forming solid insulation	The same	N/A
5.4.4.4	Solid insulation in semiconductor devices		N/A
5.4.4.5	Insulating compound forming cemented joints	is we me m	N/A
5.4.4.6	Thin sheet material	* TEK TEK LIT	N/A
5.4.4.6.1	General requirements	Mr. Mr. M.	N/A
5.4.4.6.2	Separable thin sheet material	THE LIER SLIER	N/A
· · · ·	Number of layers (pcs)	m, m, m	N/A
5.4.4.6.3	Non-separable thin sheet material	TEX TEX STEELS	N/A
st st	Number of layers (pcs)	14 14 14 14 14 14 14 14 14 14 14 14 14 1	N/A
5.4.4.6.4	Standard test procedure for non-separable thin sheet material	EX WALTER WALTER WAS	N/A
5.4.4.6.5	Mandrel test	- TEK CTEK CTE	N/A
5.4.4.7	Solid insulation in wound components	me me m	N/A
5.4.4.9	Solid insulation at frequencies >30 kHz, <i>E</i> _P , <i>K</i> _R , <i>d</i> , <i>V</i> _{PW} (V)	Whitek Whitek Whitek	N/A
TEK WALTER	Alternative by electric strength test, tested voltage (V), K _R	LIEF WILEY WILEY W	N/A
5.4.5	Antenna terminal insulation	a a at a	/ N/A
5.4.5.1	General	WALL MALL WALL	N/A
5.4.5.2	Voltage surge test	1 1	N/A



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01	EN IEC 62368-	5 41 42 3	\/1: -4
Clause	Requirement – Test	Result – Remark	Verdict
5.4.5.3	Insulation resistance (MΩ)	And And And	N/A
Mrs. M	Electric strength test	ALTER MATE MALTE	N/A
5.4.6	Insulation of internal wire as part of supplementary safeguard	TEX TEX STEX	N/A
5.4.7	Tests for semiconductor components and for cemented joints	of the top of	N/A
5.4.8	Humidity conditioning	s me me m	N/A
WALTER W	Relative humidity (%), temperature (°C), duration (h)	ANLIER WALTER WALTE	wit -
5.4.9	Electric strength test	at at at	N/A
5.4.9.1	Test procedure for type test of solid insulation	West with the	N/A
5.4.9.2	Test procedure for routine test	at let let	N/A
5.4.10	Safeguards against transient voltages from external circuits	is any one of	N/A
5.4.10.1	Parts and circuits separated from external circuits	e with mer and	N/A
5.4.10.2	Test methods	A A A	N/A
5.4.10.2.1	General	MULL MULL MULL	N/A
5.4.10.2.2	Impulse test	at the	N/A
5.4.10.2.3	Steady-state test	- 2 July 1	N/A
5.4.10.3	Verification for insulation breakdown for impulse test	TE WITE WITH W	N/A
5.4.11	Separation between external circuits and earth	e at at a	N/A
5.4.11.1	Exceptions to separation between external circuits and earth	Murr Murr Murr	N/A
5.4.11.2	Requirements	WILL MULL MULL	N/A
LIFEK WALTE	SPDs bridge separation between external circuit and earth	TEX STEX STEX S	N/A
	Rated operating voltage U _{op} (V)		
MULL	Nominal voltage U _{peak} (V)	IEK WITER WITE MUTE	- 1 ¹ 1
TEK	Max increase due to variation U _{sp}	L AL A	_
21/20 21	Max increase due to ageing U _{sa}	WILL WILL MILL	They
5.4.11.3	Test method and compliance	A ct ct	N/A
5.4.12	Insulating liquid	WILL MULL MULL	N/A
5.4.12.1	General requirements	at all all	N/A
5.4.12.2	Electric strength of an insulating liquid	rie mer mer m	N/A
5.4.12.3	Compatibility of an insulating liquid	at let let let	N/A
5.4.12.4	Container for insulating liquid	Mer Me M	N/A
5.5	Components as safeguards	. It let the	N/A



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Clause	Paguiroment Toot	Result – Remark	Verdict
Ciause	Requirement – Test	IVeant - Ivelliant	verdict
5.5.1	General at the matter white white white	No such components as safeguards.	N/A
5.5.2	Capacitors and RC units	Mur Mu An In	N/A
5.5.2.1	General requirement	TER LIER NITER MIT	N/A
5.5.2.2	Safeguards against capacitor discharge after disconnection of a connector	at let tet itel	N/A
5.5.3	Transformers	in mur mur mi	N/A
5.5.4	Optocouplers	t let the little	N/A
5.5.5	Relays	me me m. 2	N/A
5.5.6	Resistors	TEX LIEX OLITER AND	N/A
5.5.7	SPDs	me me m	N/A
5.5.8	Insulation between the mains and an external circuit consisting of a coaxial cable	LIER WHITE WALTER WALTE	N/A
5.5.9	Safeguards for socket-outlets in outdoor equipment	EX WILLER WILLER	N/A
TEX	RCD rated residual operating current (mA)		<u> </u>
5.6	Protective conductor	White Mury Mury Miles	N/A
5.6.2	Requirement for protective conductors	at the st	N/A
5.6.2.1	General requirements	Class III equipment	N/A
5.6.2.2	Colour of insulation	The Life Stiff	N/A
5.6.3	Requirement for protective earthing conductors	in my my	N/A
	Protective earthing conductor size (mm²)	I THE LITER OLITER.	
SLITER II	Protective earthing conductor serving as a reinforced safeguard	The tip tip	N/A
464 Q	Protective earthing conductor serving as a double safeguard	must me my m	N/A
5.6.4	Requirements for protective bonding conductors	ALTE WALTE WALT WALT	N/A
5.6.4.1	Protective bonding conductors	at the set set	N/A
211.	Protective bonding conductor size (mm²)	The Mary Mary	an
5.6.4.2	Protective current rating (A)	- OF THE THE	N/A
5.6.5	Terminals for protective conductors	MULT MULT MULT IN	N/A
5.6.5.1	Terminal size for connecting protective earthing conductors (mm)	MILIER WALTER WALTER WAL	N/A
TEX WALTE	Terminal size for connecting protective bonding conductors (mm)	THE NIET WIFE WATER	N/A
5.6.5.2	Corrosion	The state of	N/A
5.6.6	Resistance of the protective bonding system	CER WILL SWILL SAULIST	N/A
5.6.6.1	Requirements	The state of	N/A
5.6.6.2	Test Method	NITE INITE MILITANI	N/A



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Clause	Requirement – Test	Result – Remark	Verdict	
- mr	THE THE THE THE THE	EL WILL MULL MILL MI	700	
5.6.6.3	Resistance (Ω) or voltage drop		N/A	
5.6.7	Reliable connection of a protective earthing conductor	White Mill Mail Mail	N/A	
5.6.8	Functional earthing	THE STEEL WITER WITER	N/A	
A	Conductor size (mm²)	The state of the s	N/A	
in white	Class II with functional earthing marking	TEX SLIER WITER WALTER OF	N/A	
- 10	Appliance inlet cl &cr (mm)	7, 7,	N/A	
5.7	Prospective touch voltage, touch current and p	rotective conductor current	N/A	
5.7.2	Measuring devices and networks	100 A 15 A	N/A	
5.7.2.1	Measurement of touch current	OLITE WALL WALL WALL	N/A	
5.7.2.2	Measurement of voltage	at at at alt	N/A	
5.7.3	Equipment set-up, supply connections and earth connections	Life While Mail Mile	N/A	
5.7.4	Unearthed accessible parts	EX WITE WITE WITE M	N/A	
5.7.5	Earthed accessible conductive parts	The second second	N/A	
5.7.6	Requirements when touch current exceeds ES2 limits	White White White whi	N/A	
Vile MV	Protective conductor current (mA)	At MITE MITE	N/A	
st st	Instructional Safeguard	7 7 7	N/A	
5.7.7	Prospective touch voltage and touch current associated with external circuits	TE WHITE WHITE WHITE	N/A	
5.7.7.1	Touch current from coaxial cables	A TEX STEE SLITER OF	N/A	
5.7.7.2	Prospective touch voltage and touch current associated with paired conductor cables	the top the the	N/A	
5.7.8	Summation of touch currents from external circuits	White Aut Aug And	N/A	
14 - 134 20 - 21/10	a) Equipment connected to earthed external circuits, current (mA)	NITE WALL WALL WALL	N/A	
MULL	b) Equipment connected to unearthed external circuits, current (mA)	THE WALTER WALTER WALTER	N/A	
5.8	Backfeed safeguard in battery backed up supplies		N/A	
	Mains terminal ES	No battery used	N/A	
all in	Air gap (mm)	LET TEX TEX LIFE	N/A	

6	ELECTRICALLY- CAUSED FIRE		
6.2	Classification of PS and PIS		Р
6.2.2	Power source circuit classifications	All internal and output circuits are considered to be PS1 circuits.	P
6.2.3	Classification of potential ignition sources	ITEX RIFE WITE WITE	N/A



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20,	EN IEC 62368-	12 we was a	20. 20
Clause	Requirement – Test	Result – Remark	Verdict
Me		The Wall Mary Mr.	- m
6.2.3.1	Arcing PIS	All internal circuits are not considered as arcing PIS.	+ 18
	The state of the sail	They are supplied by external	N/A
	F STEE WITE MALL MALL WALL ON	power supply whose open	J. E.K.
0000	D. I. W. DIO	voltage is less than 50V.	11/2 -
6.2.3.2	Resistive PIS	1	P
6.3	Safeguards against fire under normal operating conditions	and abnormal operating	Р
6.3.1	No ignition and attainable temperature value less	(See appended table 5.4.1.5,	Р
	than 90 % defined by ISO 871 or less than 300 °C for unknown materials	6.3.2, 9.0, B.2.6)	
INCTER OF	Combustible materials outside fire enclosure	TET JET NIET NIET	Р
6.4	Safeguards against fire under single fault condi	tions	P
6.4.1		Method by control of fire	Р
U.4. I	Safeguard method	spread applied	
6.4.2	Reduction of the likelihood of ignition under single fault conditions in PS1 circuits	EX WHITE WHITE WHITE W	N/A
6.4.3	Reduction of the likelihood of ignition under single fault conditions in PS2 and PS3 circuits	Whitek whitek white white	N/A
6.4.3.1	Supplementary safeguards	at the state	N/A
6.4.3.2	Single Fault Conditions	A Sule In	N/A
TEK MITE	Special conditions for temperature limited by fuse	and the little	N/A
6.4.4	Control of fire spread in PS1 circuits	PS1 circuits inside.	Р
6.4.5	Control of fire spread in PS2 circuits	ex tex tex atter at	Р
6.4.5.2	Supplementary safeguards	Mr. M. M.	Р
6.4.6	Control of fire spread in PS3 circuits	TEN TEN STEE STEE	N/A
6.4.7	Separation of combustible materials from a PIS	THE THE THE	N/A
6.4.7.2	Separation by distance	THE LIFE NITE MITTER	N/A
6.4.7.3	Separation by a fire barrier	The substitute of the substitu	N/A
6.4.8	Fire enclosures and fire barriers	V-0 fire enclosure used	Р
6.4.8.2	Fire enclosure and fire barrier material properties	V-0 fire enclosure used	⊱ P≪
6.4.8.2.1	Requirements for a fire barrier	CLIEF WHICH WHILE WHI	N/A
6.4.8.2.2	Requirements for a fire enclosure	and the set of	N/A
6.4.8.3	Constructional requirements for a fire enclosure and a fire barrier	MULTER MALLE MALL MALL	N/A
6.4.8.3.1	Fire enclosure and fire barrier openings	TEK SITE MITER WALLEY	N/A
6.4.8.3.2	Fire barrier dimensions	70. 70.	→ N/A
6.4.8.3.3	Top openings and properties	EX SLIE WILL MILITED AND	N/A
1	Openings dimensions (mm)	74 X	N/A
6.4.8.3.4	Bottom openings and properties	LIET CLIER MILE MILE	N/A



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20,	EN IEC 62368	-12 inti we will	20, 20
Clause	Requirement – Test	Result – Remark	Verdict
in.	All All State of the State of	TER WITE WILL MAY W	er an
	Openings dimensions (mm)		N/A
mr. m	Flammability tests for the bottom of a fire enclosure	MUTTER MUTTER MUTTER AND	N/A
THE WILL	Instructional Safeguard	TEK LIFEK MITER MITE	N/A
6.4.8.3.5	Side openings and properties	2 1/2 My 21/2 My	N/A
in with	Openings dimensions (mm)	TER STER OUTER WALTER	N/A
6.4.8.3.6	Integrity of a fire enclosure, condition met: a), b) or c)	t tet tret after	N/A
6.4.8.4	Separation of a PIS from a fire enclosure and a fire barrier distance (mm) or flammability rating	the state of	N/A
6.4.9	Flammability of insulating liquid	Merry Mer Mer Mer	N/A
6.5	Internal and external wiring	et set set stet	THE P
6.5.1	General requirements	Mary Mury Mury Mury	Р
6.5.2	Requirements for interconnection to building wiring	LEK WILLER MULTER WILLER	N/A
6.5.3	Internal wiring size (mm2) for socket-outlets	a at at at	N/A
6.6	Safeguards against fire due to the connection to a	additional equipment	Р
de s			t Tet
7	INJURY CAUSED BY HAZARDOUS SUBSTAN	CES	on P
7.2	Reduction of exposure to hazardous substant	es	N/A
7.3	Ozone exposure	Write Murr Murr Murr	N/A
7.4	Use of personal safeguards or personal protection	ctive equipment (PPE)	N/A
	Personal safeguards and instructions	The water water was all	_
7.5	Use of instructional safeguards and instruction	ns of the co	N/A
24, 24,	Instructional safeguard (ISO 7010)	MULL MAY MAY MAY	_
7.6	Batteries and their protection circuits	TEN TEN LIEN NITE	P
0	, a st set lite with	we we we	P
8	MECHANICALLY-CAUSED INJURY	J	11 11
8.2	Mechanical energy source classifications	2 M. M. A. A.	P
8.3	Safeguards against mechanical energy sources		P.
8.4	Safeguards against parts with sharp edges and	d corners	P
8.4.1	Safeguards	THE RITER DITER NOTE	T OP
TEK SIFE	Instructional Safeguard	MS1: Edges and corners of enclosure	P
8.4.2	Sharp edges or corners	Edges and corners of the	P

enclosure are rounded.

No moving parts.

N/A

N/A

MS2 or MS3 parts

Safeguards against moving parts

Fingers, jewellery, clothing, hair, etc., contact with

8.5

8.5.1



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Clause	Requirement – Test	Result – Remark	Verdict	
Chr. 1	MS2 or MS2 part required to be accessible for the	See above.	N/A	
	MS2 or MS3 part required to be accessible for the function of the equipment	See above.	IN/A	
40, — 4.	Moving MS3 parts only accessible to skilled person	They have the ton	N/A	
8.5.2	Instructional safeguard	TEX LIER OLIER MLTER	N/A	
8.5.4	Special categories of equipment containing moving parts	of the let let liet.	N/A	
8.5.4.1	General	in my my	N/A	
8.5.4.2	Equipment containing work cells with MS3 parts	t tet tet stet stet mi	N/A	
8.5.4.2.1	Protection of persons in the work cell	Mr. M. M.	N/A	
8.5.4.2.2	Access protection override	TEX STEX NITER INTE	N/A	
8.5.4.2.2.1	Override system	Mr. Mr. 20	N/A	
8.5.4.2.2.2	Visual indicator	LIER OLITER WITE WALLE	N/A	
8.5.4.2.3	Emergency stop system	and the set	N/A	
nu.	Maximum stopping distance from the point of activation (m)	EL MULLE MULLE MULLE M	N/A	
Mrtin M	Space between end point and nearest fixed mechanical part (mm)	NATE WALTER WALTER WALL	N/A	
8.5.4.2.4	Endurance requirements	the little wife	N/A	
SEK STEK	Mechanical system subjected to 100 000 cycles of operation	To the late	N/A	
40,	- Mechanical function check and visual inspection	The Maria and a	N/A	
SLIER.	- Cable assembly	t the the the	N/A	
8.5.4.3	Equipment having electromechanical device for destruction of media	me and an one	N/A	
8.5.4.3.1	Equipment safeguards	WHITE WHITE WALL WALL WALL	N/A	
8.5.4.3.2	Instructional safeguards against moving parts:	at at the take	N/A	
8.5.4.3.3	Disconnection from the supply	HIL ME ME ME	N/A	
8.5.4.3.4	Cut type and test force (N):	CH TEN TEN STEEL	N/A	
8.5.4.3.5	Compliance	They are an a	N/A	
8.5.5	High pressure lamps	No high pressure lamps used.	N/A	
, t	Explosion test	The Thy An In	N/A	
8.5.5.3	Glass particles dimensions (mm):	LIFE CLIER WILLIAMS	N/A	
8.6	Stability of equipment	July 1 1 th at	N/A	
8.6.1	General	MS1: Mass of the unit	N/A	
t set	Instructional safeguard:	1 1 1 1	N/A	
8.6.2	Static stability	antic wate mail w	N/A	
8.6.2.2	Static stability test		N/A	



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20	EN IEC 62368-	the war with	20. 0.
Clause	Requirement – Test	Result – Remark	Verdict
8.6.2.3	Downward force test	C. Mr. Mr. M. M.	N/A
8.6.3	Relocation stability	TEX STEX STEX NO	N/A
<u>`</u> ,	Wheels diameter (mm):	The the to the	L 2
rece whi	Tilt test	NITE MITE WHITE WHITE	N/A
8.6.4	Glass slide test	e of all	N/A
8.6.5	Horizontal force test:	LE MULLE MULLE MULLE	N/A
8.7	Equipment mounted to wall, ceiling or other stru	ucture	N/A
8.7.1	Mount means type:	No wall or ceiling	N/A
8.7.2	Test methods	Let Let Liet wil	N/A
	Test 1, additional downwards force (N):	mer me me m	N/A
LITE WALT	Test 2, number of attachment points and test force (N)	LITER WHITER WHITER WHITE	N/A
WILLER	Test 3 Nominal diameter (mm) and applied torque (Nm):	EX MITES MITES MITES	N/A
8.8	Handles strength	A ST SET .	N/A
8.8.1	General	No handles	N/A
8.8.2	Handle strength test	THE STEEL STEEL	N/A
1. 20	Number of handles:	and the man	10, -
SEX WILL	Force applied (N):	The The Little	NITER OF
8.9	Wheels or casters attachment requirements	to me me m	N/A
8.9.2	Pull test	No such parts	N/A
8.10	Carts, stands and similar carriers	The My M. M.	N/A
8.10.1	General	No carts, stands or similar carriers	N/A
8.10.2	Marking and instructions:	LEK TEK LIEK KITEK	N/A
8.10.3	Cart, stand or carrier loading test	ives must me mi	N/A
er antie	Loading force applied (N)	Et TEX LIEX NITER	N/A
8.10.4	Cart, stand or carrier impact test	in my	N/A
8.10.5	Mechanical stability	TIET NUTET INCHE	N/A
- A-	Force applied (N):	111 111	* *
8.10.6	Thermoplastic temperature stability	WILL WILL MALL MALL	N/A
8.11	Mounting means for slide-rail mounted equipme	ent (SRME)	N/A
8.11.1	General	No such parts	N/A
8.11.2	Requirements for slide rails	a state of the	N/A
21/2	Instructional Safeguard:	Committee Auto Auto Auto Auto	N/A
8.11.3	Mechanical strength test	a at at	N/A



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	EN IEC 62368-1				
Clause	Requirement – Test	Result – Remark	Verdict		
Tiller.	M. M. J.	ER WILL MILL MILL MI	an.		
8.11.3.1	Downward force test, force (N) applied:		N/A		
8.11.3.2	Lateral push force test	CITER INLIE WALLE WALL	N/A		
8.11.3.3	Integrity of slide rail end stops	The table	N/A		
8.11.4	Compliance	ALTER WALTER WALL WALL	N/A		
8.12	Telescoping or rod antennas		N/A		
The.	Button/ball diameter (mm)	No such parts	_		

9	THERMAL BURN INJURY Thermal energy source classifications		√P
9.2			P
9.3	Touch temperature limits	LIFE OLIFE WALLE WALL WALL	AL P
9.3.1	Touch temperatures of accessible parts	: (See appended table 5.4.1.4, 9.3, B.1.5, B.2.6)	NITE P
9.3.2	Test method and compliance	See B.1.6 & B.2.3	J P
9.4	Safeguards against thermal energy source	es the street with which who	Р
9.5	Requirements for safeguards		- Pot
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.	WP MITEK
9.5.2	Instructional safeguard	: Instructional safeguard is not required.	N/A
9.6	Requirements for wireless power transmit	ters of the term	N/A
9.6.1	General	my my my my	N/A
9.6.2	Specification of the foreign objects	TEX TEX STEE NUTER WITE	N/A
9.6.3	Test method and compliance	: (See appended table 9.6)	N/A

10	RADIATION Radiation energy source classification		P P
10.2			
10.2.1	General classification	See below	Р
MALTE	Lasers	- TEX STEX STEE SINT	" WELL
LITEK I	Lamps and lamp systems	RS1: LED (exempt group), See IEC/EN 62471 test report.	NLIE
1 2	Image projectors:	mer mer me m	
TER SALT	X-Ray:	TEX TEX STEX OUTEN	nite ni
L 3	Personal music player:	n m m	× - ×
10.3	Safeguards against laser radiation		N/A
CLIEK	The standard(s) equipment containing laser(s) comply:	No laser radiation	N/A



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Wife migh	EN IEC 62368-1				
Clause	Requirement – Test	in the man	Result – Remark	Verdict	

10.4	Safeguards against optical radiation from lamp (including LED types)	s and lamp systems	P
10.4.1	General requirements	LED indication light: Classed as RS1 (Exempt Group)	P
Et LEY	Instructional safeguard provided for accessible radiation level needs to exceed	Will Must Aug And	N/A
an	Risk group marking and location:	JER WILL MULL MALL M	N/A
- JEK	Information for safe operation and installation	is at at at a	N/A
10.4.2	Requirements for enclosures	WILL MULL AND AND	N/A
TEX.	UV radiation exposure:	A A A A	N/A
10.4.3	Instructional safeguard	write wir au au	N/A
10.5	Safeguards against X-radiation	at the tit the	N/A
10.5.1	Requirements	No X-radiation	N/A
y CLIER	Instructional safeguard for skilled persons	of let let let o	_
10.5.3	Maximum radiation (pA/kg)	Mus Me Me	_
10.6	Safeguards against acoustic energy sources		N/A
10.6.1	General	No such equipment	N/A
10.6.2	Classification	atter mile	N/A
	Acoustic output L _{Aeq,T} , dB(A):	7 7 7 7	N/A
WILL	Unweighted RMS output voltage (mV):	The Alie Min Male W	N/A
- 15	Digital output signal (dBFS)	Z11	N/A
10.6.3	Requirements for dose-based systems	A CHIEF WHITE WALT WAL	N/A
10.6.3.1	General requirements	The set of	N/A
10.6.3.2	Dose-based warning and automatic decrease	WILL MULL MULL AND	N/A
10.6.3.3	Exposure-based warning and requirements	a state of	N/A
1/1	30 s integrated exposure level (MEL30)	reter with min min .	N/A
Et JEET	Warning for MEL ≥ 100 dB(A)	at at all the	N/A
10.6.4	Measurement methods	in mure mure me me	N/A
10.6.5	Protection of persons	- of let set is	N/A
20, 2	Instructional safeguards	mr. mr. m. m.	N/A
10.6.6	Requirements for listening devices (headphones, earphones, etc.)	MILIER MILIER WHITER WHITE	N/A
10.6.6.1	Corded listening devices with analogue input	at the left	N/A
140	Listening device input voltage (mV)	The Marin Marin And A	N/A
10.6.6.2	Corded listening devices with digital input	at at at all	N/A
10,0	Max. acoustic output L _{Aeq,T} , dB(A):	min my my my	N/A
10.6.6.3	Cordless listening devices	at at at a	N/A



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EN IEC 62368-1					
Clause	Requirement – Test	Result – Remark	Verdict		
- A	Max. acoustic output L _{Aeq,T} , dB(A):	The The Author Man	N/A		

В	NORMAL OPERATING CONDITION TESTS, ABI CONDITION TESTS AND SINGLE FAULT COND	NORMAL OPERATING ITION TESTS	P
B.1	General Company of the first many of the first m		
B.1.5	Temperature measurement conditions	(See appended table B.1.5)	P
B.2	Normal operating conditions	in me me me	Р
B.2.1	General requirements:	(See Test Item Particulars and appended test tables)	P
WEIEK W	Audio Amplifiers and equipment with audio amplifiers	DUTER INLIER WALTER	N/A
B.2.3	Supply voltage and tolerances	Rated input 5Vdc	P
B.2.5	Input test	(See appended table B.2.5)	Р
B.3	Simulated abnormal operating conditions	a state of the	P.
B.3.1	General	(See appended table B.3, B.4)	Р
B.3.2	Covering of ventilation openings	No ventilation openings.	N/A
11/2 1	Instructional safeguard	mer mer me me	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
B.3.5	Maximum load at output terminals	The lift	N/A
B.3.6	Reverse battery polarity	No such battery	N/A
B.3.7	Audio amplifier abnormal operating conditions	No such audio amplifier	N/A
B.3.8	Safeguards functional during and after abnormal operating conditions	All safeguards remained effective	P
B.4	Simulated single fault conditions	white white me me	Р
B.4.1	General	et tet tet stet stet	TEP.
B.4.2	Temperature controlling device	(See appended table B.3, B.4)	Р
B.4.3	Blocked motor test	(See appended table B.3, B.4)	P
B.4.4	Functional insulation	See below.	Р
B.4.4.1	Short circuit of clearances for functional insulation	(See appended table B.3, B.4)	, P
B.4.4.2	Short circuit of creepage distances for functional insulation	(See appended table B.3, B.4)	P
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.3, B.4)	P
B.4.6	Short circuit or disconnection of passive components	(See appended table B.3, B.4)	P



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0.	EN IEC 6236		
Clause	Requirement – Test	Result – Remark	Verdict
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	(See appended table B.3, B.4)	P
B.4.9	Battery charging and discharging under single fault conditions	See annex M	P
С	UV RADIATION		N/A
C.1	Protection of materials in equipment from UV	radiation	N/A
C.1.2	Requirements	No such UV generated from the equipment.	N/A
C.1.3	Test method	LIES WILL WILL A	N/A
C.2	UV light conditioning test	in the state of	N/A
C.2.1	Test apparatus	it the mile while will we	N/A
C.2.2	Mounting of test samples	A ST ST ST	N/A
C.2.3	Carbon-arc light-exposure test	E WHITE WILL MILL MULT	N/A
C.2.4	Xenon-arc light-exposure test	at the think	N/A
D "	TEST GENERATORS	and any	N/A
D.1	Impulse test generators	THE THE	N/A
D.2	Antenna interface test generator	ari, ar, ar, ar, a	N/A
D.3	Electronic pulse generator	et the item with	N/A
E	TEST CONDITIONS FOR EQUIPMENT CONTA	INING AUDIO AMPLIFIERS	N/A
E.1	Electrical energy source classification for aud	dio signals	N/A
	Maximum non-clipped output power (W)	: my m m	J-
ries Allen	Rated load impedance (Ω)	I THE STEE WITE WHITE	¹ 11/ ₁₂ _3
et et	Open-circuit output voltage (V)	3 3	76t -
Ang	Instructional safeguard	I Et WILL WILL MILL MILL M	n a n
E.2	Audio amplifier normal operating conditions	and the state of	N/A
41/2 4	Audio signal source type		27/2
LIEK C	Audio output power (W)	the set of the	C.C.C.
10.	Audio output voltage (V)	MULL MULL MULL MULL	101 -
JEK NIF	Rated load impedance (Ω)	the text text atter	NITE N
. ".	Requirements for temperature measurement	mr mr mr m	N/A
E.3	Audio amplifier abnormal operating conditions	of the total	N/A



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Unite Maria	Aller Ages Aller	EN IEC 62368-	Life's Wife's Whife	MUTE MULL MITTER
Clause	Requirement – Test	it, Mir, Mir, Mir	Result – Remark	Verdict

F	EQUIPMENT MARKINGS, INSTRUCTIONS, AND SAFEGUARDS	INSTRUCTIONAL	PEX
F.1	General	The Mr. Mr. M.	Р
Liter Wil	Language	English	_
F.2	Letter symbols and graphical symbols	he she she	P
F.2.1	Letter symbols according to IEC60027-1	Letter symbols for quantities and units are complied with IEC 60027-1.	P _I
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.	WP WALTER
F.3	Equipment markings	at let let liet.	Р
F.3.1	Equipment marking locations	The required marking is located on the enclosure of the equipment and is easily visible.	PW
F.3.2	Equipment identification markings	See below for details.	Р
F.3.2.1	Manufacturer identification	See copy of marking plate	Р
F.3.2.2	Model identification	See copy of marking plate	P
F.3.3	Equipment rating markings	See below for details.	Р
F.3.3.1	Equipment with direct connection to mains	TEN ITE STITE ONLY	N/A
F.3.3.2	Equipment without direct connection to mains	Rated input 5Vdc	Р
F.3.3.3	Nature of the supply voltage:	See copy of marking plate.	Р
F.3.3.4	Rated voltage:	See copy of marking plate.	P+
F.3.3.5	Rated frequency	DC supply	N/A
F.3.3.6	Rated current or rated power:	See copy of marking plate.	Р
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	THE MILL WALL WALL ON	N/A
F.3.5.1	Mains appliance outlet and socket-outlet markings	- NITER MITER MAILER MAILER	N/A
F.3.5.2	Switch position identification marking	The state of	N/A
F.3.5.3	Replacement fuse identification and rating markings	White white white white	N/A
The WALL	Instructional safeguards for neutral fuse	TEX SITER RITER MITER OF	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	24 24 25	N/A



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01	EN IEC 62368-	2, 0, 0, 0, 0	N/ P. 4
Clause	Requirement – Test	Result – Remark	Verdict
F.3.6	Equipment markings related to equipment classification	Class III equipment	N/A
F.3.6.1	Class I equipment	me me me	N/A
F.3.6.1.1	Protective earthing conductor terminal	THE LIFE STEE WITE	N/A
F.3.6.1.2	Protective bonding conductor terminals	in my my	N/A
F.3.6.2	Equipment class marking:	TEX SLIEK WILLER WALLER W	N/A
F.3.6.3	Functional earthing terminal marking:	24 24	N/A
F.3.7	Equipment IP rating marking	This equipment is classified as IPX0.	71 <u>171</u>
F.3.8	External power supply output marking:	No such parts.	N/A
F.3.9	Durability, legibility and permanence of marking	Marking is considered to be legible and easily discernible. See also the following details.	Р
F.3.10	Test for permanence of markings	The label was subjected to the permanence of marking test. The label was rubbed with cloth soaked with water for 15 sec. And then again for 15 sec, with the cloth soaked with petroleum spirit. After this test there was no damage to the label. The marking on the label did not fade. There was no curling and lifting of the label edge. After each test, the marking remained legible.	TEK P JUNE JUNE
F.4	Instructions	E WHILL MULL MULL MU	Р
STEK O	a) Information prior to installation and initial use	See user manual	Р
267 - 20. 1911 - 20.	b) Equipment for use in locations where children not likely to be present	must mer mer my	N/A
10. 200	c) Instructions for installation and interconnection	Wife white many water	N/A
ek walter	d) Equipment intended for use only in restricted access area	Et LIER RUET METER	N/A
,et	e) Equipment intended to be fastened in place	'n 'n 't 'st	N/A
Mur a	f) Instructions for audio equipment terminals	" WITER WITE WILL MUIT WHE	N/A
All .	g) Protective earthing used as a safeguard	The state of the s	N/A
	h) Protective conductor current exceeding ES2 limits	MULLE MULL MULL MULL	N/A
The MALL	i) Graphic symbols used on equipment	TEX STEE STEE SOUTH	N/A
* INLIEK	j) Permanently connected equipment not provided with all-pole mains switch	et tet tet stet stet	N/A
, et	k) Replaceable components or modules providing safeguard function	me me me	N/A



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Claure	EN IEC 62368-	1, 20, 20, 2	\/:!: 1
Clause	Requirement – Test	Result – Remark	Verdict
-7.	Equipment containing insulating liquid	The Aut of the A	N/A
Writer al	m) Installation instructions for outdoor equipment	TEK LIEK NITEK IN	N/A
F.5	Instructional safeguards	14/17, 144, 141, 144,	N/A
G	COMPONENTS		P I
G.1	Switches	r	N/A
G.1.1	General	No switch used	N/A
G.1.2	Ratings, endurance, spacing, maximum load		N/A
G.1.3	Test method and compliance	A STILL SUSTEEN STEEN STEEN	N/A
G.2	Relays	1 1 1 1	N/A
G.2.1	Requirements	No relay used.	N/A
G.2.2	Overload test	the state of	N/A
G.2.3	Relay controlling connectors supplying power to	TIE WILL MILL	N/A
TEN	other equipment	at the first	Clerk No.
G.2.4	Test method and compliance	white me we will	N/A
G.3	Protective devices	L of the test of	N/A
G.3.1	Thermal cut-offs	No such component	N/A
nlife vint	Thermal cut-outs separately approved according to IEC 60730 with conditions indicated in a) & b)	MILIER WALL	N/A
IEK WALTE	Thermal cut-outs tested as part of the equipment as indicated in c)	The life will write	N/A
G.3.1.2	Test method and compliance	711 711 41 4	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	THE STATE OF THE	N/A
<i>3.</i>	b) Thermal links tested as part of the equipment	Mir Mr. Mr. Mr.	N/A
G.3.2.2	Test method and compliance	TEX STEX NUTER MUTER	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	- Tet Tet Tet	N/A
G.3.5.1	Non-resettable devices suitably rated and marking provided	THE THE THE	N/A
G.3.5.2	Single faults conditions:	MUTIC MUTICALITY AND AND	N/A
G.4	Connectors	et let let let	N/A
G.4.1	Spacings	No such component	N/A
G.4.2	Mains connector configuration	et let let liet	N/A
G.4.3	Plug is shaped that insertion into mains socket- outlets or appliance coupler is unlikely	Mur. Mr. Mr.	N/A



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Clause	Requirement – Test	Result – Remark	Verdict

	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		
G.5	Wound components	the many many	N/A
G.5.1	Wire insulation in wound components	No such component	N/A
G.5.1.2	Protection against mechanical stress	111, 11, 12, 1	N/A
G.5.2	Endurance test	SITE OLITE UNLIE WALL	N/A
G.5.2.1	General test requirements		N/A
G.5.2.2	Heat run test	ALL WALLE WALLE	N/A
- Kit	Test time (days per cycle):	L A At	_
11/2 1	Test temperature (°C):	WHITE WALL MALL A	n
G.5.2.3	Wound components supplied from the mains	at at att.	N/A
G.5.2.4	No insulation breakdown	MUTTE MET MET AN	N/A
G.5.3	Transformers	at all the sile	N/A
G.5.3.1	Compliance method:	hrit mer my	N/A
" INLIE	Position:	et let let liet liet	N/A
.L	Method of protection:	m m m	N/A
G.5.3.2	Insulation	t tex liter plies	N/A
, t	Protection from displacement of windings:	Mr. Mr. an	A -
G.5.3.3	Transformer overload tests	All Military	N/A
G.5.3.3.1	Test conditions		N/A
G.5.3.3.2	Winding temperatures	THE MITTER WALLE	N/A
G.5.3.3.3	Winding temperatures - alternative test method	L At At	N/A
G.5.3.4	Transformers using FIW	WILLE WILL WALL	N/A
G.5.3.4.1	General	a st st	N/A
ne in	FIW wire nominal diameter:	WEITER WHITE WALL WE	_
G.5.3.4.2	Transformers with basic insulation only	at at tet of	N/A
G.5.3.4.3	Transformers with double insulation or reinforced insulation:	int me in the	N/A
G.5.3.4.4	Transformers with FIW wound on metal or ferrite core	LEE MULTE MULTE WILL	N/A
G.5.3.4.5	Thermal cycling test and compliance	LIE RUET OFFICE	N/A
G.5.3.4.6	Partial discharge test	10 20 30	N/A
G.5.3.4.7	Routine test	ALTER MITE MALTE WAL	N/A
G.5.4	Motors	No motors used.	N/A
G.5.4.1	General requirements	CIET WALL WALL WALL	N/A
G.5.4.2	Motor overload test conditions	1 1 1 1 1	N/A
G.5.4.3	Running overload test	Santie met met	N/A
G.5.4.4.2	Locked-rotor overload test	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N/A

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Clause	Requirement – Test	Result – Remark	Verdict
Ciddoc	Toganomont Tost	TOOUT TOTAL	Voluiot
	Test duration (days):	M. M. M.	
G.5.4.5	Running overload test for DC motors	CALIFE MALTE MALTE	N/A
G.5.4.5.2	Tested in the unit	Ju 14 .4	N/A
G.5.4.5.3	Alternative method	nite unit was un	N/A
G.5.4.6	Locked-rotor overload test for DC motors	s state	N/A
G.5.4.6.2	Tested in the unit	TE WILL MULL AND	N/A
. JEK	Maximum Temperature	L St St St	N/A
G.5.4.6.3	Alternative method	White Mar Aut	N/A
G.5.4.7	Motors with capacitors	et set set	N/A
G.5.4.8	Three-phase motors	MILL MULL MAN A	N/A
G.5.4.9	Series motors	THE THE THE	N/A
1 1	Operating voltage	or we we me	
G.6	Wire Insulation	THE THE WIFE OUT	N/A
G.6.1	General	Only ES1 existed	N/A
G.6.2	Enamelled winding wire insulation	LIEF STEE WITE	N/A
G.7	Mains supply cords	11 21 21	N/A
G.7.1	General requirements	No such component	N/A
et let	Type:		<i>s</i> –
G.7.2	Cross sectional area (mm² or AWG)	LIE MILL WILL WILL	N/A
G.7.3	Cord anchorages and strain relief for non- detachable power supply cords	A LIFEK OLITEK MOLITER	N/A
G.7.3.2	Cord strain relief	111 101	N/A
G.7.3.2.1	Requirements	LIFE OLIFE MILE	N/A
et de	Strain relief test force (N)	711 23	N/A
G.7.3.2.2	Strain relief mechanism failure	ALTER INLIE WALL WA	N/A
G.7.3.2.3	Cord sheath or jacket position, distance (mm):	, , , , , , , , , , , , , , , , , , ,	N/A
G.7.3.2.4	Strain relief and cord anchorage material	TER MALL MALL MALL	N/A
G.7.4	Cord Entry	a de de	N/A
G.7.5	Non-detachable cord bend protection	White while while	N/A
G.7.5.1	Requirements	at at at	N/A
G.7.5.2	Test method and compliance	WHILE MULL MULL M	N/A
TEX WALTER	Overall diameter or minor overall dimension, <i>D</i> (mm)	LIEK WHIEK WHIEK WHI	- I
t Jet	Radius of curvature after test (mm)	1 1 1 1 1	_
G.7.6	Supply wiring space	WALL WALL WALL	N/A
G.7.6.1	General requirements	1 1	N/A



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- "	EN IEC 62368-	2 41 - 12 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	- 2
Clause	Requirement – Test	Result – Remark	Verdict
0700		Er Weite White Whi	1/2 1/11
G.7.6.2	Stranded wire	A A A	N/A
G.7.6.2.1	Requirements	WILL MILL MILL	N/A
G.7.6.2.2	Test with 8 mm strand		N/A
G.8	Varistors	Wille Mary Mary Mu	N/A
G.8.1	General requirements	No such component	N/A
G.8.2	Safeguards against fire	ite mury mury mury	N/A
G.8.2.1	General	e at at at	N/A
G.8.2.2	Varistor overload test	MULT MILL MAR	N/A
G.8.2.3	Temporary overvoltage test	at at 1st	N/A
G.9	Integrated circuit (IC) current limiters	Murr Aur M	N/A
G.9.1	Requirements	No such component	N/A
10.	IC limiter output current (max. 5A)	The Man Man Man	, 1 _
NLIE	Manufacturers' defined drift:	Et TEX TEX STE	- n
G.9.2	Test Program	m, m, m	N/A
G.9.3	Compliance	THE THE STATE	N/A
G.10	Resistors	West And And	N/A
G.10.1	General	No such component	N/A
G.10.2	Conditioning		N/A
G.10.3	Resistor test	The ALTE MILL WALL	N/A
G.10.4	Voltage surge test	711 12 13	⇒ N/A
G.10.5	Impulse test	A STEE WITTE WALLE	N/A
G.10.6	Overload test		N/A
G.11	Capacitors and RC units	Will Will M	N/A
G.11.1	General requirements	No such component	N/A
G.11.2	Conditioning of capacitors and RC units	ALTE WALTE WALTE WAS	N/A
G.11.3	Rules for selecting capacitors	a at at a	N/A
G.12	Optocouplers	The way with	N/A
WALTER W	Optocouplers comply with IEC 60747-5-5 with specifics	No such component	N/A
CENT C	Type test voltage V _{ini,a} :	4 4 4	78th
11, 14,	Routine test voltage, V _{ini, b} :	WILL MUTTE MUTTE M	_
G.13	Printed boards		O O P
G.13.1	General requirements	TIE MUTE MUTE MUTE	Р
G.13.2	Uncoated printed boards	at the state of	. P.
G.13.3	Coated printed boards	C. C	N/A



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10,	EN IEC 62368-	ite and me and	20, 20,
Clause	Requirement – Test	Result – Remark	Verdict
- ale-	M. M. Teller	if while will are	The An
G.13.4	Insulation between conductors on the same inner surface	TEX TEX STEX	N/A
G.13.5	Insulation between conductors on different surfaces	Mar Mr Mr Mr	N/A
20	Distance through insulation:	WILL MULL MULL MI	N/A
THE NITER	Number of insulation layers (pcs)	at at at a	<i>*</i>
G.13.6	Tests on coated printed boards	in me me me	N/A
G.13.6.1	Sample preparation and preliminary inspection	t get get trek	N/A
G.13.6.2	Test method and compliance	Mus Me Me	N/A
G.14	Coating on components terminals	THE LIER SLIFE	N/A
G.14.1	Requirements ::	214 211 241 2	N/A
G.15	Pressurized liquid filled components	TEX SITER OUTER AND	N/A
G.15.1	Requirements	No such component	N/A
G.15.2	Test methods and compliance	EX NITER INTERNALLE	N/A
G.15.2.1	Hydrostatic pressure test	70 77 74	N/A
G.15.2.2	Creep resistance test	CITER INLIER WALLE	N/A
G.15.2.3	Tubing and fittings compatibility test		N/A
G.15.2.4	Vibration test	MALE W	N/A
G.15.2.5	Thermal cycling test	- L	N/A
G.15.2.6	Force test	The WALL MALL MAN	N/A
G.15.3	Compliance	t of the	N/A
G.16	IC including capacitor discharge function (ICX)	MULL MULL MULL	N/A
G.16.1	Condition for fault tested is not required	No such component	N/A
20, 0,	ICX with associated circuitry tested in equipment	mer me me	N/A
LIE MIT	ICX tested separately	TEX TEX STEX ON	N/A
G.16.2	Tests	in my my	N/A
E. WILLE	Smallest capacitance and smallest resistance specified by ICX manufacturer for impulse test:	TEK WALTER WHITER WHITE	_ n
WALTER	Mains voltage that impulses to be superimposed on	NUTER MILIER MINITER	wnif —
INLIEK WIN	Largest capacitance and smallest resistance for ICX tested by itself for 10000 cycles test	THE STIEF WITH	NLTEK -
G.16.3	Capacitor discharge test:	The In the In	N/A
Н	CRITERIA FOR TELEPHONE RINGING SIGNAL	S	N/A
H.1	General Control of the Control of th	1. 70. A. A.	N/A
H.2	Method A	TER MITE MALTE MALTE	N/A
H.3	Method B	20.	N/A



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20.	EN IEC 62368-	1 The man was well	24 24
Clause	Requirement – Test	Result – Remark	Verdict
H.3.1	Ringing signal	No telephone ringing signal generated within the equipment.	N/A
H.3.1.1	Frequency (Hz)	at at the test	_
H.3.1.2	Voltage (V)	WILL MULL AND AND	_
H.3.1.3	Cadence; time (s) and voltage (V):	Et JEK JEK STER	-
H.3.1.4	Single fault current (mA):	" " " " " " " " " " " " " " " " " " "	_
H.3.2	Tripping device and monitoring voltage	t ster ster when	N/A
H.3.2.1	Conditions for use of a tripping device or a monitoring voltage	the let the state of	N/A
H.3.2.2	Tripping device	mer mer me m	N/A
H.3.2.3	Monitoring voltage (V):	LEK TEK ITEK NITER	N/A
J	INSULATED WINDING WIRES FOR USE WITHO INSULATION	UT INTERLEAVED	N/A
J.1	General	ic must more must a	N/A
CLITER .	Winding wire insulation:	the text the st	<u> </u>
120	Solid round winding wire, diameter (mm):	mur mr m	N/A
NITER WIN	Solid square and rectangular (flatwise bending) winding wire, cross-sectional area (mm²):	Whitek white	N/A
J.2/J.3	Tests and Manufacturing	THE THE	11EH-10
K	SAFETY INTERLOCKS		N/A
K.1	General requirements		N/A
TEK.	Instructional safeguard:	No safety interlock provided within the equipment.	N/A
K.2	Components of safety interlock safeguard med	hanism	N/A
K.3	Inadvertent change of operating mode	at at let the	N/A
K.4	Interlock safeguard override	intite mustra where must	N/A
K.5	Fail-safe Fail-safe	of let tet tet	N/A
K.5.1	Under single fault condition	mr mr m	N/A
K.6	Mechanically operated safety interlocks	t get get with m	N/A
K.6.1	Endurance requirement	The The M. A.	N/A
K.6.2	Test method and compliance:	TER LIER ALTER MATE	N/A
K.7	Interlock circuit isolation	Mr. Mr. W. A.	N/A
K.7.1	Separation distance for contact gaps & interlock circuit elements	LIER MULTER MULTER MULTER.	N/A
MULTER	In circuit connected to mains, separation distance for contact gaps (mm):	THE WALTER WALTER OF	N/A
	In circuit isolated from mains, separation distance for contact gaps (mm)	LIER SLIER WILLER WATER	N/A



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01	EN IEC 62368-		V/- P
Clause	Requirement – Test	Result – Remark	Verdict
NI CLIER	Electric strength test before and after the test of K.7.2	the text text of	N/A
K.7.2	Overload test, Current (A):	mer me me my	N/A
K.7.3	Endurance test	tet tet stet wite	N/A
K.7.4	Electric strength test	her mer me m	N/A
L	DISCONNECT DEVICES		N/A
L.1	General requirements	y 24	N/A
L.2	Permanently connected equipment	t like with with whi	N/A
L.3	Parts that remain energized	40 20 At 24	N/A
L.4	Single-phase equipment	ALTER MITE WALTE WALTE	N/A
L.5	Three-phase equipment		N/A
L.6	Switches as disconnect devices	LIFE WILLE WILL MALL	N/A
L.7	Plugs as disconnect devices	e to the state	N/A
L.8	Multiple power sources	the autic autic autic au	N/A
Stell	Instructional safeguard	at at all di	N/A
М	EQUIPMENT CONTAINING BATTERIES AND TH	HEIR PROTECTION CIRCUITS	Р
M.1	General requirements		
M.2	Safety of batteries and their cells		
M.2.1	Batteries and their cells comply with relevant IEC standards:	IEC 62133-2:2017 considered. See test report.	P.I
M.3	Protection circuits for batteries provided within the equipment	* STEE WIFE WAITER WA	EK P.
M.3.1	Requirements	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Р
M.3.2	Test method	CHIEF WALTER WALLE WALLE	√ ₁₀ P
all s	Overcharging of a rechargeable battery	and the state of the	P
n 241.	Excessive discharging	ALTER WALL WALL WALL	P
EK WALTER	Unintentional charging of a non-rechargeable battery	Rechargeable Li-ion battery used.	N/A
WALTER	Reverse charging of a rechargeable battery	The design of the connector prevents reverse polarity connections.	N/A
M.3.3	Compliance	(See appended table M.3)	P
M.4	Additional safeguards for equipment containing a portable secondary lithium battery		
M.4.1	General	LIE WILL MULL MULL A	Р
M.4.2	Charging safeguards	1	P.O
M.4.2.1	Requirements	WHILE MULL MULL AND	Р
M.4.2.2	Compliance:	(See appended table M.4.2)	Р



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Clause	Requirement – Test	Result – Remark	Verdict
an.	All the state of	EL WILL WILL MUT. MU	-un-
M.4.3	Fire enclosure	PS2 battery, fire enclosures or barriers required	L PE
M.4.4	Drop test of equipment containing a secondary lithium battery	(See appended table M.4.4)	P
M.4.4.2	Preparation and procedure for the drop test	rett were one on	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%.	LIER PU
M.4.4.4	Check of the charge/discharge function	, it is not in	of Po
M.4.4.5	Charge / discharge cycle test	WILL WILL ME AND	√ ⁰ P
M.4.4.6	Compliance	at at let let	Р
M.5	Risk of burn due to short-circuit during carrying	gurit with our win	40 P
M.5.1	Requirement	No bare conductive terminal used	INLIE P
M.5.2	Test method and compliance	e of the	N/A
M.6	Safeguards against short-circuits	the with mill mill me	Р
M.6.1	External and internal faults	at at all 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.	WP P
M.7	Risk of explosion from lead acid and NiCd batte	eries	N/A
M.7.1	Ventilation preventing explosive gas concentration	t alifet miret miret war	N/A
14	Calculated hydrogen generation rate:	74 10 10 10 10 10 10 10 10 10 10 10 10 10	N/A
M.7.2	Test method and compliance	SITER WITER WITE WALL	N/A
et i	Minimum air flow rate, Q (m³/h)	an a take at	N/A
M.7.3	Ventilation tests	RITER INITES WALL WALL	N/A
M.7.3.1	General	a de de	N/A
M.7.3.2	Ventilation test – alternative 1	itt until mati unti w	N/A
SIEK	Hydrogen gas concentration (%)		N/A
M.7.3.3	Ventilation test – alternative 2	aver mer wer we	N/A
JEK N	Obtained hydrogen generation rate:	at alt alt all	N/A
M.7.3.4	Ventilation test – alternative 3	MULL MULL MULL MULL	N/A
IFE RITE	Hydrogen gas concentration (%)	it the the the	N/A
M.7.4	Marking:	The me and a	N/A
М.8	Protection against internal ignition from extern with aqueous electrolyte	al spark sources of batteries	N/A
M.8.1	General	1 1 1	N/A



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01	EN IEC 62368-	L 41. 70. 3.	N/ 11 /
Clause	Requirement – Test	Result – Remark	Verdict
M.8.2	Test method	The the man	N/A
M.8.2.1	General	ALTER MITE WALTE WI	N/A
M.8.2.2	Estimation of hypothetical volume V_Z (m³/s):	J	et let
M.8.2.3	Correction factors	OCITE WALL WALL WALL WALL	1/2 -1
M.8.2.4	Calculation of distance d (mm):	a state of	- 1E*-
M.9	Preventing electrolyte spillage	THE WALL WALL MALL	N/A
M.9.1	Protection from electrolyte spillage	L at all the	N/A
M.9.2	Tray for preventing electrolyte spillage	MILL MAN MAN A	N/A
M.10	Instructions to prevent reasonably foreseeable misuse	MILER WALTER WALTER WA	N/A
TEX I	Instructional safeguard	a state of	N/A
N	ELECTROCHEMICAL POTENTIALS	WILL MULL MULL MAN	N/A
IF STEE	Material(s) used	at alt left left	TEN TO
0	MEASUREMENT OF CREEPAGE DISTANCES A	AND CLEARANCES	N/A
CLIEB.	Value of X (mm)	t tek itek itek	176 10 10 10 10 10 10 10 10 10 10 10 10 10
Р	SAFEGUARDS AGAINST CONDUCTIVE OBJECT	CTS W SW	N/A
P.1	General	Et Julie Mi	N/A
P.2	Safeguards against entry or consequences of	entry of a foreign object	N/A
P.2.1	General	The Life William Wife	N/A
P.2.2	Safeguards against entry of a foreign object	70 20	N/A
Miller	Location and Dimensions (mm)	MITEL MITEL WALLE	inch and
P.2.3	Safeguards against the consequences of entry of a foreign object	TER STEEL STEEL SE	N/A
P.2.3.1	Safeguard requirements	m m m	N/A
TILL MUL	The ES3 and PS3 keep-out volume in Figure P.3 not applicable to transportable equipment	ALTER WALTER WALTER WALT	N/A
EK WALTER	Transportable equipment with metalized plastic parts	Est anifest whilest whilest	N/A
P.2.3.2	Consequence of entry test:	at the fift	N/A
P.3	Safeguards against spillage of internal liquids	WALL MALL WALL A	N/A
P.3.1	General	No such liquids.	N/A
P.3.2	Determination of spillage consequences	with the the the	N/A
P.3.3	Spillage safeguards	Let get get all	N/A
P.3.4	Compliance	in me me m	N/A
P.4	Metallized coatings and adhesives securing pa	irts at the	N/A
P.4.1	General	No such construction.	N/A
P.4.2	Tests	TEN JEN JIE .	N/A



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	EN IEC 62368-	8. "16. "11. "21. "21. "	
Clause	Requirement – Test	Result – Remark	Verdict
- Chr.	Conditioning, T _C (°C)	The rain on the man	100
WITER SI			- OUTER
<u> </u>	Duration (weeks) CIRCUITS INTENDED FOR INTERCONNECTION		- n
Q		WITH BUILDING WIKING	Р
Q.1	Limited power sources	ing the same	Р
Q.1.1	Requirements	CEL TEL TEL WITER	P
7.	a) Inherently limited output	in in in	P
W. Lite	b) Impedance limited output	t till still still still	N/A
	c) Regulating network limited output	Mr. M. M.	N/A
الدين المالي	d) Overcurrent protective device limited output	Let let with with	N/A
· ·	e) IC current limiter complying with G.9	Mr. M. R.	N/A
Q.1.2	Test method and compliance	(See appended table Q.1)	P O
	Current rating of overcurrent protective device (A)	10 10 t	N/A
Q.2	Test for external circuits – paired conductor	CH WILL OUTE MILE	N/A
. Let	cable	To the state of	IN/A
11/1/2 1	Maximum output current (A)	WILL MULL MULL MULL	N/A
TEX .	Current limiting method	The set set	J. J. Carlo
R	LIMITED SHORT CIRCUIT TEST	THE MENT WATER	N/A
R.1	General	No such consideration.	N/A
R.2	Test setup	it with the above a	N/A
LITER	Overcurrent protective device for test:	t let let liet of	16th 100 15
R.3	Test method	They have the son	N/A
WITE N	Cord/cable used for test	THE THE LIER WITE	10/10
R.4	Compliance	Mer Mer Mer And And	N/A
S John	TESTS FOR RESISTANCE TO HEAT AND FIRE	TEX SEX WIFE WIFE	N/A
S.1	Flammability test for fire enclosures and fire bawhere the steady state power does not exceed		N/A
2,	Samples, material	. Mr. Mr. M. M.	
MITE	Wall thickness (mm)	- TEX LIEX SLIER INC	in white
.4.	Conditioning (°C)	me me me	
incites an	Test flame according to IEC 60695-11-5 with conditions as set out	WALTER WALTER WALTER	N/A
ITER WITE	- Material not consumed completely	THE THE STEE	N/A
, ,	- Material extinguishes within 30s	in the suit	N/A
MUTER	- No burning of layer or wrapping tissue	Et TEX TEX STEE	N/A
S.2	Flammability test for fire enclosure and fire bar	rier integrity	N/A
CLIFE L	Samples, material	TEN TEN TEN LI	10/16



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Clause	Requirement – Test	Result – Remark	Verdict
ale.	Well thickness (mm)	the river mark only w	70
. CLEEK	Wall thickness (mm)	at 18th 18th N	et ret
$\frac{2}{2}$	Conditioning (°C)	10, 0, 0	70.—
S.3	Flammability test for the bottom of a fire enclos	sure	N/A
S.3.1	Mounting of samples	ur, aur au au	N/A
S.3.2	Test method and compliance	the tell tell tells	N/A
	Mounting of samples	y mer mer m	
WALTER.	Wall thickness (mm):	t lift lift william	Open March
S.4	Flammability classification of materials	m, m, m	N/A
S.5	Flammability test for fire enclosure materials of equipment with a steady state power exceeding 4 000 W	MUTTER MUTTER MUTTER MUTT	N/A
is whi	Samples, material	LIER WHILE WALLE	mc -n
y TEX	Wall thickness (mm):	the state of the s	18t - 1
m	Conditioning (°C)	EL WILL MULT MULT A	1 712
T JE	MECHANICAL STRENGTH TESTS	at the Att of	e Per
T.1	General	White Mure and any	Р
T.2	Steady force test, 10 N:	(See appended table T.2)	P
T.3	Steady force test, 30 N:	2 (41) 411	N/A
T.4	Steady force test, 100 N:	The Little	N/A
T.5	Steady force test, 250 N:	(See appended table T.5)	Р
T.6	Enclosure impact test	(See appended table T.6)	N/A
	Fall test	Mr. Mr. M.	N/A
الا يبيرين	Swing test	ITEL SLIER MITE WAL	N/A
T.7	Drop test:	(See appended table T.7)	Р
T.8	Stress relief test:	(See appended table T.8)	n Pul
T.9	Glass Impact Test:	No such glass	N/A
T.10	Glass fragmentation test	The Marie Wall Wall of	N/A
CIER	Number of particles counted:	No such glass	N/A
T.11	Test for telescoping or rod antennas	must mis mis in	N/A
nlies w	Torque value (Nm):	No such antennas provided within the equipment.	N/A
UEK WALT	MECHANICAL STRENGTH OF CATHODE RAY T PROTECTION AGAINST THE EFFECTS OF IMPL		N/A
U.1	General		N/A
MUT	Instructional safeguard:	No CRT provided within the equipment.	N/A
U.2	Test method and compliance for non-intrinsical	y protected CRTs	N/A



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20,	EN IEC 62368-	The way was	25, 25,
Clause	Requirement – Test	Result – Remark	Verdict
in.	an an a state of the state of	the write while one we	in an
U.3	Protective screen		N/A
Ar m	DETERMINATION OF ACCESSIBLE PARTS		N/A
V.1	Accessible parts of equipment	The state of	N/A
V.1.1	General	WILL MILL MULL MULL	N/A
V.1.2	Surfaces and openings tested with jointed test probes	fet stret sufet soutet	N/A
V.1.3	Openings tested with straight unjointed test probes	711 21	N/A
V.1.4	Plugs, jacks, connectors tested with blunt probe	ALTER MITE WALLE WAS	N/A
V.1.5	Slot openings tested with wedge probe	20 x x x	N/A
V.1.6	Terminals tested with rigid test wire	ALIER WITE WALL MALL	N/A
V.2	Accessible part criterion	an at at at	N/A
X water	ALTERNATIVE METHOD FOR DETERMINING CLINSULATION IN CIRCUITS CONNECTED TO AN 420 V PEAK (300 V RMS)		N/A
20	Clearance:	my my m	N/A
Yate	CONSTRUCTION REQUIREMENTS FOR OUTDO	OR ENCLOSURES	N/A
Y.1	General	Indoor equipment	N/A
Y.2	Resistance to UV radiation	At Julie Mile	N/A
Y.3	Resistance to corrosion	7 1 1	N/A
Y.3	Resistance to corrosion	THE LIFE WITH WITH	N/A
Y.3.1	Metallic parts of outdoor enclosures are resistant to effects of water-borne contaminants by	* TEX STEX SUITER ON	N/A
Y.3.2	Test apparatus	Mr. Mr. M. M.	N/A
Y.3.3	Water – saturated sulphur dioxide atmosphere	TEN STEP STEEL WILL	N/A
Y.3.4	Test procedure	Mr. Mr. Mr.	N/A
Y.3.5	Compliance	TEN LIER NITE MITE	N/A
Y.4	Gaskets	in the an an	N/A
Y.4.1	General	IER STEE WITE MITTER	N/A
Y.4.2	Gasket tests	24, 24, 24	N/A
Y.4.3	Tensile strength and elongation tests	TITE WITE SINIE SINIE	N/A
, et	Alternative test methods:	77 7 7 0	N/A
Y.4.4	Compression test	WILL WILL MULL MULL	N/A
Y.4.5	Oil resistance		N/A
Y.4.6	Securing means	LIET WILL WILL WILL	N/A
Y.5	Protection of equipment within an outdoor enclo	osure	N/A
Y.5.1	General	Charles Mary Mary M	N/A
Y.5.2	Protection from moisture	a at at a	N/A



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EN IEC 62368-1				
Clause	Requirement – Test	Result – Remark	Verdict	
alle.	and the contract of the contra	TER LIFE WITH WALL	The Me	
	Relevant tests of IEC 60529 or Y.5.3:	70, 20,	N/A	
Y.5.3	Water spray test	LIER WITE WILL	N/A	
Y.5.4	Protection from plants and vermin	24	N/A	
Y.5.5	Protection from excessive dust	RUTER WITE WALL W	N/A	
Y.5.5.1	General		N/A	
Y.5.5.2	IP5X equipment	THE WALL WALL AND	N/A	
Y.5.5.3	IP6X equipment		N/A	
Y.6	Mechanical strength of enclosures	White will with	N/A	
Y.6.1	General	at at at	N/A	
Y.6.2	Impact test:	White Whi whi	N/A	





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Unite Maria	My My My M	EN IEC 62368-1	TEX WITE WATER W	المالي المالية	1117.
Clause	Requirement – Test	The The The	Result – Remark	et d	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
WALTER W	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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EN IEC 62368-1				
Clause	Requirement – Test	Result – Remark	Verdict	
2 3 10 4	sound exposure level SEI	RITER WITE WITE WITE WITE	N/A	

Clause	Trequirement – rest	Result – Remark	verdict
00404	1 1	The transfer of the sale	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 WALTER WALL	N/A
	Note 1 to entry: SEL is measured as A-weighted levels in dB.	Liter water water water	The P
	$SEL = 10 \lg \left(\frac{E}{E_0}\right) dB$	et united united united w	not whi se mise
	Note 2 to entry: See B.4 of EN 50332-3:2017 for additional information.	and whi who are	L NUTEK
3.3.19.5	digital signal level relative to full scale, dBFS	inter the the the	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	TEK WHITEK WHITEK WHITEK	on the on
MALTER W	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.	MULTER MULTER MULTER MULT	EK WALTER
2	Modification to Clause 10		
10.6	Safeguards against acoustic energy sources		N/A
'm'	Replace 10.6 of IEC 62368-1 with the following:		10 24
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:	until unit untilet untilet untilet	y whitek
	 is designed to allow the user to listen to audio or audiovisual content / material; and uses a listening device, such as headphones or earphones that can be worn in or on or around the ears; and has a player that can be body worn (of a size suitable to be carried in a clothing pocket) and is 	Whitek whitek whitek whitek	EX WILLEY
	intended for the user to walk around with while in continuous use (for example, on a street, in a subway, at an airport, etc.).	TEK WALTER WALTER	in in
	continuous use (for example, on a street, in a	TEK WALTER WALTER WALTER	irik muti



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EN IEC 62368-1			
Clause	Requirement – Test	Result – Remark	Verdict
Alex.	NOTE 1 Protection against acoustic energy sources from	C WILL MILL MILL	Mr. Au.
	telecom applications is referenced to ITU-T P.360.	1 1	LET LET
	NOTE 2 It is the intention of the Committee to allow the	SLIEB MLIE MALIE	aver aver
	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 THE	LIEN WITE OF
	possible.	Arra Mar. Mr. M.	2
	Listening devices sold separately shall comply	a st st s	et det s
	with the requirements of 10.6.6.	The mile unit was	and an
	These requirements are valid for music or video	100	
	mode only.	TEX LIFE SLIP	white white
	The requirements do not apply to:	Mr. Mr. M.	2,
	- professional equipment;	at at at	TEK TEK
	NOTE 3Professional equipment is equipment sold through	WILL WILL MULL A	he sur
	special sales channels. All products sold through normal electronics stores are considered not to be professional	10. 4.	et et
	equipment.	TEX ITEX STIES ON	in and
	A CH TEN TEN WITH MILL ON	2 Mr. Mr. M.	
	 hearing aid equipment and other devices for assistive listening; 	t at at a	
	the following type of analogue personal music	in with white white	24.
	players:	1 1 x	LIK TEK
	long distance radio receiver (for example, a	TER STEEL WITE	WILL WILL
	multiband radio receiver or world band radio	"Nu nu nu	
	receiver, an AM radio receiver), and	et TEX	LIET SLIE .
	cassette player/recorder;	and an	1
	NOTE 4 This exemption has been allowed because this	# J	et let .
	technology is falling out of use and it is expected that within a few years it will no longer exist. This exemption will not be	THE LIP WILL WALL	The M
	extended to other technologies.	24. 20. 2	
	– a player while connected to an external amplifier	TEN TEN LIE	WITE WILL
	that does not allow the user to walk around while	The Me Me	20.
	in use.	the state of	TEX TEX
	For equipment that is alcorly designed or intended	CALIFE MALTE MALTE	ne ne
	For equipment that is clearly designed or intended primarily for use by children, the limits of the	20 20 1	et let
	relevant toy standards may apply.	TER LIER LIER W	17 W 17 W
	At at the the mile will will an	he we we we	
	The relevant requirements are given in	at at at a	The City
	EN 71-1:2011, 4.20 and the related tests methods and measurement distances apply.	with mer mer	20,
10.6.1.2	Non-ionizing radiation from radio frequencies	1 to the set	N/A
21/20 2	in the range 0 to 300 GHz	" INLIE MILLE MALL	Mr. Mr.
	The amount of non-ionizing radiation is regulated	20, 7, 1	et et
	by European Council Recommendation	TER LIER SLIER	reit inti
	1999/519/EC of 12 July 1999 on the limitation of	the the the to	
	exposure of the general public to electromagnetic fields (0 Hz to 300 GHz).	at at at	TEN TEN
	For intentional radiators, ICNIRP guidelines should	The MULL WALL AND	2/1, 2/1,
	be taken into account for Limiting Exposure to		+ 1 1
	Time-Varying Electric, Magnetic, and	Et LIER SLIER CLIE	WILL WELL
	Electromagnetic Fields (up to 300 GHz). For hand-	11, 11, 11,	
	held and body mounted devices, attention is	1 1 1	16 16 16 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1



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Unite Milit	Mrs. Mer. Alexander	EN IEC 62368-1	Villa Alleria
Clause	Requirement – Test	Result – Remark	Verdict

Classification of devices without the capacity to	estimate sound dose	N/A
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 acquistic output Leep T.	Not such equipment	N/A
measurements are based on the A-weighted equivalent sound pressure level over a 30 s period.	White while while while	ex martex
For music where the average sound pressure (long term $L_{Aeq,T}$) 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, T becomes the duration of the song.	TEK WILLER WILLER WILLER	TEK TEE
NOTE Classical music, acoustic music and broadcast typically has an average sound pressure (long term $L_{Aeq,7}$) 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 acknowledgement as long as the average sound level of the song is not above the basic limit of 85 dB.	White	White we
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 <i>L</i> Aeq, <i>τ</i> acoustic output shall be ≤ 85 dB when playing the fixed "programme simulation noise" described in EN 50332-1. — for equipment provided with a standardized connector (for example, a 3,5 phone jack) that allows connection to a listening device for general use, the unweighted r.m.s. output voltage shall be ≤ 27 mV (analogue interface) or -25 dBFS (digital interface) when playing the fixed "programme simulation noise" described in EN 50332-1.	JUNITER WHITER W	IN NA
	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 ∠Aeq, 7, 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 ∠Aeq, 7) 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 ∠Aeq, 7) 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 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 ∠Aeq, 7 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 unw	This standard is transitioning from short-term based (30 s) 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> _{ARQ,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> _{ARQ,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 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> _{ARQ,T}) which is much lower than the average programme simulation noise. Therefore, if the player is capable to analyse the content and compare is with the programme simulation noise. Therefore, if the player is capable to analyse the content and compare to with the programme simulation noise. Therefore, if the player is set with the programme simulation noise, to the song does not exceed the required limit. For example, if the player is set with the programme simulation noise to 86 db, but the average music level of the song is only 65 dB, there is no need to give a warning or ask an acknowledgement as long as the average sound level of the song is not above the basic limit of 85 dB. 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 is known by other means such as setting or automatic detection, the <i>L</i> Aeq, <i>T</i> acoustic output shall be ≤ 85 dB when playing the fixed "programme simulation noise" described in EN 50332-1. — for equipment provided with a standardized connector (for example, a 3,5 phone jack) that allows connection to a listening device for general use, the unwe



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Clause	Requirement – Test	Result – Remark	Verdict
10.6.2.3	RS2 limits (to be superseded, see 10.6.3.3)	THE THE THE	N/A
	RS2 is a class 2 acoustic energy source that does not exceed the following: — for equipment provided as a package (player with its listening device), and with a proprietary connector between the player and its listening device, or when the combination of player and listening device is known by other means such as setting or automatic 130 detection, the <i>L</i> Aeq, <i>τ</i> acoustic output shall be ≤ 100 dB(A) when playing the fixed "programme simulation noise" as described in EN 50332-1. — for equipment provided with a standardized connector (for example, a 3,5 phone jack) that allows connection to a listening device for general use, the unweighted r.m.s. output voltage shall be ≤ 150 mV (analogue interface) or -10 dBFS (digital interface) when playing the fixed "programme simulation noise" as described in EN 50332-1.	until whitek whi	EX WALTER WALT WALTER W
0.6.2.4	RS3 limits RS3 is a class 3 acoustic energy source that exceeds RS2 limits.	MILES MILES WAITES	N/A
0.6.3	Classification of devices (new)		N/A
10.6.3.1	General Previous limits (10.6.2) created abundant false negative and false positive PMP sound level warnings. New limits, compliant with The Commission Decision of 23 June 2009, are given below.	Not such equipment	N/A
	RS1 limits (new) RS1 is a class 1 acoustic energy source that does not exceed the following: — for equipment provided as a package (player with its listening device), and with a proprietary connector between the player and its listening device, or where the combination of player and listening device is known by other means such as setting or automatic detection, the <i>L</i> Aeq, <i>τ</i> acoustic output shall be ≤ 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 voltage shall be ≤ 15 mV (analogue interface) or -30 dBFS (digital interface) when playing the fixed "programme simulation noise" described in EN 50332-1.	INCIENT WALTER W	N/A STEEL MALES MILES MILES
10.6.3.3	RS2 limits (new)	MILE WALLER	N/A
	RS2 is a class 2 acoustic energy source that does not exceed the following: – for equipment provided as a package (player	NITER WITER WHITER AN	WILLER WATER

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	EN IEC 62368-1		
Clause	Requirement – Test	Result – Remark	Verdict
The s	M M TEN TO	the wife with aller	we we
	with its listening device), and with a proprietary	200	J. J. J.
	connector between the player and its listening	LEK TEN TEN	Wille Wille
	device, or where the combination of player and	Will all all a	20
	listening device is known by other means such as	20.	at at
	setting or automatic detection, the weekly sound	Let LET JET J	The State of
	exposure level, as described in EN 50332-3, shall	the super when the	20, 2
	be ≤ 80 dB when playing the fixed "programme		L St.
	simulation noise" described in EN 50332-1.	at the state state	1000
	- for equipment provided with a standardized	The Me The	20,
	connector (for example, a 3,5 phone jack) that	1 1	11 12
	allows connection to a listening device for general	LEF SEE SEE	Will William
	use, the unweighted r.m.s. output level, integrated	The way we	24 2
	over one week, as described in EN50332-3, shall	1	J+ J+
	be ≤ 15 mV (analogue interface) or -30 dBFS	LEK TER LITER O	Little Marie
	(digital interface) when playing the fixed	With My My My	
	"programme simulation noise" described in EN		et let
10.6.4	50332-1.	THE STATE WITH MIT	NI/A
L 24	Requirements for maximum sound exposure	, 'n, 'n 's 's 's	N/A
10.6.4.1	Measurement methods	Not such equipment	N/A
	All volume controls shall be turned to maximum	21/2 21/2 22	
	during tests.	L A A	184 CH
	Measurements shall be made in accordance with	STEEL STEEL STATE OF	Vr. ZIV.
		4 4	
10.6.4.2	EN 50332-1 or EN 50332-2 as applicable.	at the same	N/A
10.6.4.2	Protection of persons	" " " "	IN/A
	Except as given below, protection requirements for		L St.
	parts accessible to ordinary persons,	and the state of the	1912 M
	instructed persons and skilled persons are	in the the the	20.
	given in 4.3.	the state of	.00
	NOTE 1 Volume control is not considered a safeguard .	MITER WALTER WALTER	Murice Church
	Between RS2 and an ordinary person , the basic	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Et Et
	safeguard may be replaced by an instructional	THE LIFE SLIPE OF	Mr. William
	safeguard in accordance with Clause F.5, except	We will all a	
	that the instructional safeguard shall be placed	1 1	EX TEX
	on the equipment, or on the packaging, or in the	THE LITE OUT OUT	1912 191
	instruction manual.	1 24 24 20	
	Alternatively, the instructional safeguard may be	1 1 1	- 18th 3
	given through the equipment display during use.	the still out to with	me me
	A LEK TEK TEK MIT MILL MILL	211, 21, 20,	
	The elements of the instructional safeguard	the state of	TE TE
	shall be as follows:	NITE WILL WALL	11/2
	the the the the	20, 20, 20	
	- element 1a: the symbol , IEC 60417-	at at at	THE LITE.
	6044 (2011-01)	alife mile and and	100
	– element 2: "High sound pressure" or equivalent	20, 20	el el
	wording	A ST ST ST	TE IS
		The Will Mary Mark	211 211
	element 3: "Hearing damage risk" or equivalent wording	70 20	
	wording	L A B B	of of
	- element 1: "Do not listen at high volume lovels		
	- element 4: "Do not listen at high volume levels	intite and white	21/2
	element 4: "Do not listen at high volume levels for long periods." or equivalent wording	MULLE MULL MULL	Mr. M.



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	EN IEC 62368-1			
Clause	Requirement – Test	Result – Remark	Verdict	
WALTER WALTER	of an ordinary person to an RS2 source without intentional physical action from the ordinary person and shall automatically return to an output level not exceeding what is specified for an RS1 source when the power is switched off. The equipment shall provide a means to actively inform the user of the increased sound level when the equipment is operated with an output exceeding RS1. Any means used shall be acknowledged by the user before activating a mode of operation which allows for an output exceeding RS1. The acknowledgement does not need to be repeated more than once every 20 h of cumulative listening time. NOTE 2 Examples of means include visual or audible signals. Action from the user is always needed. NOTE 3 The 20 h listening time is the accumulative listening time, independent of how often and how long the personal music player has been switched off.	JUNITER WHITER W	INLIER WALTER JUNETER JU	
NUTTE A	A skilled person shall not be unintentionally exposed to RS3.	WILLER WHITEK WHITEK	Write Mury	
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 N/A N/A N/A N/A N/A N/A N/A	
NITEK WIN FEK WINTE L EK	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.	TEK WHITEK WHITEK WHITE	EK MULEK A	
10.6.5.2	Dose-based warning and requirements	WITE WALTE 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	street outer sources	NITEK WAITEK	



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01	EN IEC 62368-1	40. 22.	57 P. 1
Clause	Requirement – Test	Result – Remark	Verdict
The.	The state of the s	e with any	21/2 211
	acknowledgement. In case the user does not acknowledge, the output level shall automatically	1 4	at at
	decrease to compliance with class RS1.	TER LIER LIE	VIII. WILL
	decrease to compliance with class RST.	are are a	, 2
	The warning shall at least clearly indicate that	1 1 1 1	Et JEK
	listening above 100 % <i>CSD</i> leads to the risk of	LIER SLIE MINE WALL	. " " ?
	hearing damage or loss.	in the tree of	
10.6.5.3	Exposure-based requirements	of the title	N/A
201	With only dose-based requirements, cause and	in with which	24.
	effect could be far separated in time, defying the		0- 16
	purpose of educating users about safe listening	A TEX TEX TIES	Will Were
	practice. In addition to dose-based requirements,	The The The	2,
	a PMP shall therefore also put a limit to the short-	1 1 1	THE THE
	term sound level a user can listen at.	LIER SLIE WITH W	r. Aug.
	A BY BY THE THE WALL WALL	114. 14. 14. 14.	
	The exposure-based limiter (EL) shall	at at at a	The Thirt
	automatically reduce the sound level not to exceed	LIE WILL WALL WALL	211, 21
	100 dB(A) or 150 mV integrated over the past 180	10. 0.	*
	s, based on methodology defined in EN 50332-3.	A THE THE LITTER	CALL TO THE
	The EL settling time (time from starting level reduction to reaching target output) shall be 10 s	with white with	20, 20,
	or faster.	1 1	
	or ractor.	TEN LIER OLIVE	ULL MILL
	Test of EL functionality is conducted according to	The The The	
	EN 50332-3, using the limits from this clause. For	and the same of th	THE SERVE
	equipment provided as a package (player with its	Will Miles	100
	listening device), the level integrated over 180 s	3 2	
	shall be 100 dB or lower. For equipment provided	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	- N. C.
	with a standardized connector, the unweighted	in mer was and	20, 20,
	level integrated over 180 s shall be no more than	1 1	at a
	150 mV for an analogue interface and no more than -10 dBFS for a digital interface.	TEN TEN WITE	Will Will
	than - 10 dbi o for a digital interface.	The Me in .	3.
	NOTE In case the source is known not to be music (or test	at let let	TEN TIEN
10.6.6	signal), the EL may be disabled. Requirements for listening devices (headphone	es earnhones etc.)	N/A
- the - 1			A 4
10.6.6.1	Corded listening devices with analogue input	Not such equipment	N/A
	With 94 dB LAeq acoustic pressure output of the	121 20	.6.
	listening device, and with the volume and sound	IN THE THE LITER	N. Carrie
	settings in the listening device (for example, built- in volume level control, additional sound features	With Mile Man	20, 20,
	like equalization, etc.) set to the combination of	1 1	10 10
	positions that maximize the measured acoustic	the state of the state of	White where
	output, the input voltage of the listening device	The shirt in	
	when playing the fixed "programme simulation	1 1 1	THE STATE
	noise" as described in EN 50332-1 shall be ≥ 75	aliter out to south on	in.
	mV.	3 14. 24. 25. 2.	4
		at let let it	1 TEX 1
211.	NOTE The values of 94 dB and 75 mV correspond with 85 dB and 27 mV or 100 dB and 150 mV.	in mur, mur, mur,	24, 24
10.6.6.2	Corded listening devices with digital input	L A A A	N/A
	With any playing device playing the fixed	e out will wall	21/2
	"programme simulation noise" described in EN	24, 25, 2	A C
	50332-1, and with the volume and sound settings	LET LET LET	LITE BLIE
	in the listening device (for example, built-in volume	15 W 15 W	70,



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	EN IEC 62368-	it with white and	
Clause	Requirement – Test	Result – Remark	Verdict
alle	THE THE ST	ALTE MET MALE	The Me
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.	antitek mitek antitek.	AND TEX WATER
10.6.6.3	Cordless listening devices		N/A
WILLER WILLIER WILLER W	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 WHITE WHITE	JUNE WILLER JUNESE WILLER JEK WILLER JUNESE JU
10.6.6.4	Measurement method	White while while	N/A
NITEK AND	Measurements shall be made in accordance with EN 50332-2 as applicable.	At THE	LIEK NIEK
3	Modification to the whole document		N/A



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				4	J
211		EN IEC 62368-1			100
Clause	Requirement – Test	MUT, MI, M.	Result – Remark	* <	Verdict

lote 5.4 lote 2 5.4 lote 2 5.4 lote 5.4	4.1.15 5.4.2.3.2.2 Γable 12 5.4.2.5 5.4.10.2.2 5.5.6	Note c Note 2 Note Note Note	4.7.3 5.4.2.3.2.4 5.4.5.1 5.4.10.2.3 5.6.4.2.1	Note 1 and 2 Note 1 and 3 Note Note Note Note Note 2 and 3 and 4
Ta Iote 2	Table 12 5.4.2.5 5.4.10.2.2 5.5.6	Note 2	5.4.5.1	Note Note Note Note 2 and 3
lote 5.	5.4.10.2.2	Note	5.4,10.2.3	Note Note 2 and 3
lote 5.	5.5.6			Note 2 and 3
lote 5.	5.5.6			Note 2 and 3
		Note	5.6.4.2.1	production of the second production of the second
lote 2 5.	5 7 8			
	2.7.0	Note	5.7.7.1	Note 1 and Note 2
Diake.	10.2.1 Γable 39	Note 3 and 4 and 5	10.5.3	Note 2
lote 3 F.	F.3.3.6	Note 3	Y.4.1	Note
lote	93			3
		AT AV		V .0V .N
Clause 1				
g note: f certain substance t is restricted withir			MULTER WAL	EL WHITE WHI
Clause 1 g note:			white whi	



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Letter Marite	The first till to	EN IEC 62368-1	TIEK WITEK WALTER	THE MUTTER MITTER
Clause	Requirement – Test	in Miles Miles In	Result – Remark	Verdict

4.Z1	Add the following new subclause after 4.9:	Not directly connected to the	N/A
ANTER WILLER WIL	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	MALTER WALTER MALTER MA
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:	No connection to external	N/A
JEH N	The requirement for interconnection with external circuit is in addition given in EN 50491-3:2009.	circuit.	alife#
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



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EN IEC 62368-1			
Clause	Requirement – Test	Result – Remark	Verdict
alle	THE THE THE THE	the wife with a series	The Me
10.5.1	Add the following after the first paragraph: For RS 1 compliance is checked by measurement under the following conditions: In addition to the normal operating conditions, all controls adjustable from the outside by hand, by any object such as a tool or a coin, and those internal adjustments or pre-sets which are not locked in a reliable manner, are adjusted so as to give maximum radiation whilst maintaining an intelligible picture for 1 h, at the end of which the measurement is made. NOTE Z1 Soldered joints and paint lockings are examples of adequate locking. The dose-rate is determined by means of a radiation monitor with an effective area of 10 cm², at any point 10 cm from the outer surface of the apparatus.	antitek antite	MA WALLEY
	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 WALTER
iek whire k airek	For RS1, the dose-rate shall not exceed 1 μSv/h taking account of the background level.	TE OUT WILL WALL	EX MULTER MULT
	NOTE Z2 These values appear in Directive 96/29/Euratom of 13 May 1996.	The set set	- JE - JE
9	Modification to G.7.1		N/A
G.7.1	Add the following note: NOTE Z1 The harmonized code designations corresponding to the IEC cord types are given in Annex ZD.	UNITER ANTIER ANTIER	N/A
10	Modification to Bibliography		N/A



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The same	Mer March	EN IEC 62368-1	IET WILLER W	Mr. Mr. M. M.
Clause	Requirement – Test	Net were my man	Result – Remark	Verdict

e.	Add the following notes for the standards indicated:	N/A
	IEC 60130-9 NOTE Harmonized as EN 60130-9. IEC 60269-2 NOTE Harmonized as HD 60269-2. IEC 60309-1 NOTE Harmonized as EN 60309-1. IEC 60364 NOTE some parts harmonized in HD 384/HD 60364 series. IEC 60601-2-4 NOTE Harmonized as EN 60601-2-4. IEC 60664-5 NOTE Harmonized as EN 60664-5. IEC 61032:1997 NOTE Harmonized as EN 61032:1998 (not modified). IEC 61508-1 NOTE Harmonized as EN 61508-1. IEC 61558-2-1 NOTE Harmonized as EN 61558-2-1. IEC 61558-2-4 NOTE Harmonized as EN 61558-2-4. IEC 61643-1 NOTE Harmonized as EN 61558-2-6. IEC 61643-1 NOTE Harmonized as EN 61643-1. IEC 61643-311 NOTE Harmonized as EN 61643-311. IEC 61643-321 NOTE Harmonized as EN 61643-321. IEC 61643-331 NOTE Harmonized as EN 61643-331.	JANUTE VINITE VI
	ADDITION OF ANNEXES	N/A
В 👉	ANNEX ZB, SPECIAL NATIONAL CONDITIONS (EN)	N/A
1.15 STEEL SURVEY	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"	N/A
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	N/A



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neter unit	Mr. Mur. Mur. M.	EN IEC 62368-1	in Anton
Clause	Requirement – Test	Result – Remark	Verdict

5.2.2.2	Denmark	No high touch current	N/A
	After the 2nd paragraph add the following:	measured.	MALTE
	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.	sires while whiles whiles	WALTEK W
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:	ed unite white whit w	
	For separation of the telecommunication network from earth the following is applicable:	multer mult mult me	K TEK
	If this insulation is solid, including insulation forming part of a component, it shall at least consist of either	Miter White White White	JUNE V
	two layers of thin sheet material, each of which shall pass the electric strength test below, or	the main main was .	11 Et . 211
	one layer having a distance through insulation of at least 0,4 mm, which shall pass the electric strength test below.	attex with mit with	EX MULTEX
	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	MILITER WHITE	SEX S
	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	MULLER MULLER MULLER AND	ing mark
	 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 WALTER WALTER WALTER	WEITER ON
	and white white white white white	A LEK LIER LIFER	NITEK MILI
	is subject to routine testing for electric strength during manufacturing, using a test voltage of 1,5 kV.	WILL MULTER WILLIAM	TEX WALTER
	It is permitted to bridge this insulation with a capacitor complying with EN 60384-14:2005, subclass Y2.	NITER WALLER WALLER	LANGER O
	A capacitor classified Y3 according to EN 60384-14:2005, may bridge this insulation under the following conditions:	THE WALTER WALTER	on it on
	the insulation requirements are satisfied by having a capacitor classified Y3 as defined by EN 60384-14, which in addition to the Y3	STEET STEET STEET SOLL	EK WILLEK



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	EN IEC 62368-1	iter white white whi	
Clause	Requirement – Test	Result – Remark	Verdict
whitek whi	testing, is tested with an impulse test of 2,5 kV defined in 5.4.11; • the additional testing shall be performed on all the test specimens as described in EN 60384-14;	SUNLIER WHITER WHITER WAS	nites whites
ie mite	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	Whi whi
5.5.2.1	Norway After the 3rd paragraph the following is added: Due to the IT power system used, capacitors are required to be rated for the applicable line-to-line voltage (230 V).	Whitek whitek whitek	AND N/A
5.5.6 on the same of the same	Finland, Norway and Sweden To the end of the subclause the following is added: Resistors used as basic safeguard or bridging basic insulation in class I pluggable equipment type A shall comply with G.10.1 and the test of G.10.2.	No such resistors.	N/A
5.6.1 M	Denmark Add to the end of the subclause Due to many existing installations where the socket-outlets can be protected with fuses with higher rating than the rating of the socket-outlets the protection for pluggable equipment type A shall be an integral part of the equipment. Justification: In Denmark an existing 13 A socket outlet can be protected by a 20 A fuse.	No such equipment.	N/A
5.6.4.2.1	Ireland and United Kingdom After the indent for pluggable equipment type A, the following is added: — the protective current rating is taken to be 13 A, this being the largest rating of fuse used in the mains plug.	STEK WALTER WALTER WALTER	N/A
5.6.4.2.1	France 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.	MULTER MULTER WHITER	N/A
5.6.5.1	To the second paragraph the following is added: The range of conductor sizes of flexible cords to be accepted by terminals for equipment with a rated current over 10 A and up to and including 13 A is: 1,25 mm² to 1,5 mm² in cross-sectional area.	TO WHITE WHITE WAITER	N/A



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Unite Mail	Mir hur Aug W.	EN IEC 62368-1	All Contractions
Clause	Requirement – Test	Result – Remark	Verdict

5.6.8	Norway	21/2 21/2 20	N/A
WALTER WAS	To the end of the subclause the following is added: Equipment connected with an earthed mains plug is classified as class I equipment . See the Norway marking requirement in 4.1.15. The symbol IEC 60417-6092, as specified in F.3.6.2, is accepted.	untick untick untick with	
5.7.6	Denmark	1112 111 21	N/A
untilek wi	To the end of the subclause the following is added: The installation instruction shall be affixed to the equipment if the protective conductor current exceeds the limits of 3,5 mA a.c. or 10 mA d.c.	Whitek whitek whitek wh	unch white
5.7.6.2	Denmark	TEX SLIER WILL MILL	N/A
ik whitek	To the end of the subclause the following is added: The warning (marking safeguard) for high touch current is required if the touch current or the protective current exceed the limits of 3,5 mA.	antiet writet writer	MILITER MILIT
5.7.7.1	Norway and Sweden	Not such system.	N/A
	To the end of the subclause the following is added: The screen of the television distribution system is normally not earthed at the entrance of the building and there is normally no equipotential bonding system within the building. Therefore the protective earthing of the building installation needs to be isolated from the screen of a cable distribution system. It is however accepted to provide the insulation external to the equipment by an adapter or an	THE WILLER WHITE W	TE A ALTE WAS
	interconnection cable with galvanic isolator, which may be provided by a retailer, for example. The user manual shall then have the following or	LIER WHITER WHITER WHI	ek witek wi
	similar information in Norwegian and Swedish language respectively, depending on in what country the equipment is intended to be used in:	TEX NIEK WHITE	white whites
	"Apparatus connected to the protective earthing of the building installation through the mains connection or through other apparatus with a connection to protective earthing –	WILER MUTTER MUTER AND	TEK MITEK 1
	and to a television distribution system using coaxial cable, may in some circumstances create a fire hazard. Connection to a television distribution system therefore has to be provided through a device providing electrical isolation below a certain frequency range (galvanic isolator, see EN 60728-11)"	TEK WALTER WALTER WALTER	WALTER WALTER
			(A)



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20,	EN IEC 62368-1	in we was any	100
Clause	Requirement – Test	Result – Remark	Verdict
-1100 -	Mr. All The The The	الله المال المالي المال الم	11/2
MULTER ON	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.	WITH WITH WATER WHITE	MALTER
	Translation to Norwegian (the Swedish text will also be accepted in Norway):	SITES INTER WATER WHITES	MALTEK W
	"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	EX WHITEX WHITEX WHITEX WH	E WALTE
MLIEK WAI IEK WAITE WALTEK	isolator mellom apparatet og kabel-TV nettet." Translation to Swedish: "Apparater som är kopplad till skyddsjord via jordat vägguttag och/eller via annan utrustning och samtidigt är kopplad till kabel-TV nät kan i vissa fall medföra risk för brand. För att undvika detta skall vid anslutning av apparaten till kabel-TV nät galvanisk isolator finnas mellan apparaten och kabel-TV nätet."	INTEX WALTER WALTER WALTER	WELLER ON
3.5.4.2.3	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.	the articles whites	WIEK NU
B.3.1 and		Not directly connected to the	N/A
B.4 th min	Ireland and United Kingdom The following is applicable: To protect against excessive currents and short-circuits in the primary circuit of direct plug-in equipment, tests according to Annexes B.3.1 and B.4 shall be conducted using an external miniature circuit breaker complying with EN 60898-1, Type B, rated 32A. If the equipment does not pass these tests, suitable protective devices shall be included as an integral part of the direct plug-in equipment, until the requirements of Annexes B.3.1 and B.4 are met	Not directly connected to the mains	t whitet out the white
G.4.2	Denmark	Not directly connected to the	N/A
	To the end of the subclause the following is added: Supply cords of single phase appliances having a	mains	MILIE V
	rated current not exceeding 13 A shall be provided with a plug according to DS 60884-2-D1:2011.	t it lit will will a	7157 - 171 ₆ 11. — (A))
WHITEK W	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	TEX TEX DIEX WITH	MULTER



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200	EN IEC 62368-1	is the the all a	200
Clause	Requirement – Test	Result – Remark	Verdict
april	The the the the	the city with only who	11/1
	rules shall be provided with a plug in accordance with standard sheet DK 2-1a or DK 2-5a.	at the set of	X NIEY
	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.	JUNETE WALTER WALTER WALTER	WATER ON
	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 whi	E WILLEY
	Other current rating socket outlets shall be in compliance with Standard Sheet DKA 1-3a or DKA 1-1c.	TEX MUTER MUTER MUTER	un liek wh
	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	ATTER WHITER WHITER WHITE	ir ik walifik
	Justification: Heavy Current Regulations, Section 6c	Why will the writer	MITEK
G.4.2	United Kingdom	Not directly connected to the	N/A
WALTE	To the end of the subclause the following is added:	mains	N. Er WI
MILITER 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 white whitek outstek
G.7.1	United Kingdom	e at at at	N/A
	To the first paragraph the following is added:	MULL MULL MULL MULL	71/1
	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.	MALIER WALTER WALTER WALTER	er whitek
	NOTE "Standard plug" is defined in SI 1768:1994 and essentially means an approved plug conforming to BS 1363 or an approved conversion plug.	et whitet whitet whitet	TIEST WALTE



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Clause	Requirement – Test	Result – Remark	Verdict
alle.	The The The	the wife with while while	1/1/2
G.7.1	To the first paragraph the following is added:	White white white	N/A
rifek wri fek wrifek - fek	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	LITER WALTER WALTER WALTER	Waltest White
G.7.2	Ireland and United Kingdom	White white white whi	N/A
unliek an	To the first paragraph the following is added: A power supply cord with a conductor of 1,25 mm ² is allowed for equipment which is rated over 10 A and up to and including 13 A.	Miter whiter whiter whiter	MITER W
ZC	ANNEX ZC, NATIONAL DEVIATIONS (EN)		N/A
10.5.2	Germany The following requirement applies: For the operation of any cathode ray tube intended for the display of visual images operating at an acceleration voltage exceeding 40 kV, authorization is required, or application of type approval (Bauartzulassung) and marking.	No CRT within the equipment.	N/A
	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,	SE WHITE WALTER WHITER WHITER WHITER WHITER WHITER WHITER WHITER WHITER	JEE WALTER
ZD	Tel.: Int+49-531-592-6320, Internet: http://www.ptb.de IEC and CENELEC CODE DESIGNATIONS FOR I	ELEXIBLE CODOS (EN)	Р



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The mail	All The All	EN IEC 62368-1	ITE WITE WHITE	Murit Murit and
Clause	Requirement – Test	ALTE ALE ALE ALE	Result – Remark	Verdict

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>
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-
Ordinary halogen-free thermoplastic insulated and sheathed flexible cords		H05Z1Z1-F H05Z1Z1H2-



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Clause	Requirement – Test	Mur. Mr. m.	Result – Remark	Verdict			

5.2	TABLE: Classificat	ion of electrical er	nergy sourc	es		ال ا	P⊢
Supply	Location (e.g.	Test conditions		ES Class			
Voltage	designation)		U (V)	I (mA)	Type ¹⁾	Additional Info ²⁾	Class
5.0Vdc	The EUT is	Normal	<60Vdc	in	SS	DC	ES1
	designed to be supplied by USB	Abnormal	Jack 1	LIER WILLER	untile a	Mr. Aller	(declare
	type-C port	Single fault – SC/OC	10k 1	it Clit	SLIFE TOLE	EK LIEK	MALTER
niter white	The EUT is	Normal	<60Vdc	1/12 1/1	SS	DC	ES1
	designed to be supplied by Internal Li-ion battery	Abnormal	CENT - CENT	alifett mi	The State of the S	WILL M	(declare
		Single fault – SC/OC	(ATL)	THE JE	- LIEX	mite ll	EK NINL
3.7Vdc	USB-A Output	Normal	5.08Vdc	Vr. "116.	SS	DC	ES1
	in in mir mir	Abnormal	5.08Vdc	CENT TENT	SS	DC	WHITE
	itist maitest maitest	Single fault – SC Q2	0 111	- 70 <u>1.</u> - 70 <u>1.</u> .	SS	DC	
		Single fault – SC Q3	0,00	WY W	SS	DC	JEX .
3.7Vdc	Type-C Output	Normal	5.07Vdc		SS	DC O	ES1
		Abnormal	5.07Vdc		SS	DC	WALTER WALTER
	TEX NITEX WITE	Single fault – SC Q2	un O w	Lir Wale	SS	DC	
	e- tex tex	Single fault – SC Q3	mir 0 mr	MATE V	SS	DC	n.

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

N/A	J+ J+ J		ement	voltage measur	TABLE: Working	5.4.1.8
	Comments	Frequency (Hz)	Peak voltage (V)	RMS voltage (V)		Location
- an	MITE WALTE-WALL	JEK - JIEK	A - A	- *	Mr. Mr.	Tr whin
+ <	1 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	70	r. 44, 4	THE WALL W	TEK TEK O	F JEF
					ntary information:	Supplemer
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	300	An an	er with whi	ntary information:	Supplemer



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and the	The same of the sa	EN IEC 62368-1	They are
Clause	Requirement – Test	Result – Remark	Verdict

5.4.1.10.2 TABLE: Vicat so	ftening temperature of thermople	astics	N/A
Method	:	ISO 306 / B50	The marks —
Object/ Part No./Material	Manufacturer/trademark	Thickness (mm)	T softening (°C)
F. M. M. M.	1 1 1 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	RITE WALL	Mur. Thr. M
Supplementary information:			
2012 211 211 2	· * A A A A	The Call College	The she sh

5.4.1.10.3 TABLE: Ball	pressure test of thermopla	stics				N/A	
Allowed impression diame	eter (mm)	:	≤ 2 m	m ,	, at	_	
Object/Part No./Material Manufacturer/trademark Thickness				Test temperature (°C)		ression eter (mm)	
The me me	- " + #	JEK -J		NITER WAITE WA	7. 211	in m	
Supplementary information:							
The Mr. M.		TEK JE		it with white	WILL	200	

5.4.2, 5.4.3 TABLE: Minimum	Clearan	ces/Cre	epage o	distance	J ^{EFF}	ille anti	" WITE	N/A
Clearance (cl) and creepage distance (cr) at/of/between: $ \begin{array}{c ccccc} U_p & U_{rms} & Freq^{1)} & Required & cl & E.S.^{2)} & Required & cl & (kHz) & cl & (mm) & (wm) & $						cr (mm)		
-, ,,,	64 <u>-</u>	ζ ^ε √	.LT	e	-2-	En.	20	A - 1

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: Minimun	at at	16th	N/A		
Distance through insulation (DTI) at/of		Peak voltage (V)	Insulation*	Required DTI (mm)		sured DTI (mm)
The Mark	The This.	T THE	TEK NEEK WITE	NALTE WALL	99	r- m
Suppleme	ntary information:				•	
*See also	sub-clause 5.4.4.9	1 A B C	IER LIER MILE	White when	M	2h

5.4.4.9 TABLE: Solid in	nsulation at	frequencies	>30 kHz	JEK JE	WEIE W	N/A
Insulation material	E P	Frequency (kHz)	K _R	Thickness d (mm)	Insulation	V _{PW} (Vpk)
at at at	- TEK ON	CE MILIE	and and	- 210- 1	- 4	' ,6
Supplementary information:						
and the set	TEX MET	W. This	h m	20, 20,		.L 3

5.4.9	TABLE: Electric strength tests	N/A
		1,27,24, 1,27



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	Clause	Requirement – Test	C. Mr. M. M.	Result – Remark	jt . 1	Verdict

Test voltage applied between:	Voltage shape (Surge, Impulse, AC, DC, etc.)	Test voltage (V)	Breakdown Yes / No
Functional:	Mur Aur A	at at a	Et LIEK .
	TEX SEX MITTER WITTER	the Mer Me	111, - 111,
Basic/supplementary:	The state of	LEK JEK JEK	CLIEB ML
	H LIF - WILL WHILL MI	- m m	40, -
Reinforced:	THE ST ST	ek isek isek	WITE WITE
- I st set set set	TITLE TINLE WALL WILL	- 4/1.	- *
Routine Tests:	The set set set	LIER NITER IN	TE WITE
- at the fift state.	ALTER VIALL WALL WALL	71. 20. 20.	. A
Supplementary information:			
a de de sole sole s	the wife my 1	11. 22. 1	A 16

5.5.2.2	5.5.2.2 TABLE: Stored discharge on capacitors						
Location		Supply voltage (V)	Operating and fault condition 1)	Switch position	Measured voltage (Vpk)	ES Class	
me our		Y /- A \	Normal		Write - Whi	Mrs - M	
TEX WALTER	m.	, ° L	Single fault: SC/ OC		STILL MILITER	WALTER WALTE	

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	of protective conduc	ctors and terminati	ons	24	N/A
Location		Test current (A)	Duration (min)	Voltage drop (V)	Re	sistance (Ω)
<u>LEF</u>	TER STEE WITE	With any	42 22.	- J.	18.K	1EX
Suppleme	entary information:					
A EN	TEK SLIER WITE SIN	in me m	20. 1.	. de .	et .	TEN.

5.7.4	TABLE: U	nearthed acces	ssible parts	m. m	70	.+	N/A
Location		perating and	Supply	F	Parameters		ES class
	fa	ult conditions	Voltage (V)	Voltage (V _{rms} or V _{pk})	Current (A _{rms} or A _{pk})	Freq. (Hz)	
-10, 1	٠, ١	Normal	y n gta	in with an	11/2 11/2	20,	
Whitek Wh	TIEN WY CI	Abnormal: overload	5EF 55	or with anite	t white	WALTER	White M



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Clause	Requir	Requirement – Test			Result – Remark			y 3	Verdict
WITEK N	VILLEK ZAL	Single fault: SC/OC	TUNITE UN	<u>(1) </u>	ET LI	VINLLY TER	JANE LIE	NATE Y	White A
Suppleme	entary info	rmation:							
SC= shor	t circuit; O	C= open circuit	20, 20	-4	<i></i>	7.E.F	TEX-	J. F.	CLIFE IN

5.7.5	TABLE: Earthed acces	ssible conductive part		t set se	N/A
Supply volta	ige (V):	The life site of	" WILL WILL	Mur. Mr.	_
Phase(s)		[] Single Phase; [] Three Phase: [] Delta [] Wye			
Power Distri	bution System:	[]TN []TT []IT	CLIE MILL	Write Aug.	
Location		Fault Condition No in IEC 60990 clause 6.2.2	Touch current (mA)	Commen	t
	at the set	TEK INITE WALL W	L. 711 1	2	1
Supplement	ary Information:				

5.8 TABLE: Backfeed safeguard in battery backed up supplies						N/A	
Location		Supply voltage (V)	Operating and fault condition	Time (s)	Open-circuit voltage (V)	Touch current (A)	ES Class
₁₈	6 4	ا څنۍ د	The Transfer of the Party of th	-112-01		7 J J	- , et ,
Supplementary information:							
et let	1	1 1 / / ;	11 10		-1 \	A 15	LET JE

6.2.2 TA	BLE: Power source	e circuit classif	ications	10, 10,		P
Location	Operating and fault condition	Voltage (V)	Current (A)	Max. Power ¹⁾ (W)	Time (S)	PS class
Type-C Input	Normal	5.02	0.88	4.41	3s	PS1
Battery Output	Normal / Abnormal	3.0	5.8	17.4	5s 5s	PS2
Battery Output	Single fault – SC U1 pin 10-15	MUTTER O WILL	Mun O Mu	0	3s	PS1
Battery Output	Single fault – SC U1 pin 16-15	LIFET OUTE	0	We O My	3s	PS1
Type-C output	normal	4.97	1.3	6.5	3s	PS1
Type-C output	Single fault – SC Q2	0_	0-	et 0,0t	3s 3s	PS1
Type-C output	Single fault – SC Q3	o w	0	0	3s (***	PS1
USB-A output	normal	4.97	1.3	6.5	3s	PS1
USB-A output	Single fault – SC Q2	THE OUTER	LIET OLIER	miret O mail	3s	PS1



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			EN I	EC 62368-	1. The water was		
Clause	Rec	uirement – Test	it. Mur.	211 20	Result – Remarl	k at	Verdict
USB-A o	utput	Single fault – SC Q3	et motilet w	0	0	3s	PS1
Suppleme	ntary ir	nformation:					
1) Measure	ed afte	er 3 s for PS1 and mea	asured after 5	s for PS2 a	and PS3.	16th 15th	THE IS

6.2.3.1 TABLE: Determ	ination of Arcing PIS	411 411 4	A A 18	N/A
Location	Open circuit voltage after 3 s (Vpk)	Measured r.m.s current (A)	Calculated value	Arcing PIS? Yes / No
- with mill me me	20, -2,	at the de	NITE - NITE	meric war.
Supplementary information:				
The Table Aug Au	70, 70	H TEH CTER	ALTER WITE W	rie mer m

6.2.3.2	TABLE: Determ	ination of resistive PIS		ET PINET
Location		Operating and fault condition	Dissipate power (W)	Arcing PIS? Yes / No
- 1/1	24, 24, 2	a state of the said	er with our in white	Mrs -Mr
Supplomo	ntary information:			

Supplementary information:

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.

All conductors and devices are considered as PIS.

8.5.5	TABLE: High pi	essure lamp	hur mur a	10. 20. 2	4	N/A
Lamp manu	ufacturer	Lamp type	Explosion method	Longest axis of glass particle (mm)		ticle found nd 1 m Yes / No
- 1/1	24, 24	The state of the s	TITEL MITTER MILIT	Mury Mur.	Mr.	-2/1
Supplemen	tary information:					
111. 11	, ,	e de det	TER LIFE MITE	WE WILL	in.	20 1



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	Clause	Requirement – Test	C. Mr. M. M.	Result – Remark	jt . 1	Verdict

9.6	IABL	E: Tempe	rature mea	surem	ent	s for wire	ess power	transmitte	ers	N/A
Supply volt	age (V)			:					The Mul	_
Max. transr	nit pow	er of transr	nitter (W)	:	14.5	20	-20		at de	_
11,01001101 0110					eiver and contact		ver and at of 2 mm	with receiver and at distance of 5 mm		
Foreign ol	ojects	Object (°C)	Ambient (°C)	Obje (°C		Ambient (°C)	Object (°C)	Ambient (°C)	Object (°C)	Ambient (°C)
Steel d	isc	100 M	- 2/1	-20			et de	1564	STEE IN	IE WILLE
Aluminiun	n ring	at A	1- JEF	-17EE	٠,	View and	1110	711. 1	,	<i>=</i>
Aluminiur	n foil	m	-2011-	20,		J- 18	Jet	-15EH C	The mile	11/12
Supplemen	tary info	rmation:								

5.4.1.4, 9.3, B.1.5, B.2.6	emperature m	neasurem	ents	MALTEK WAL	TER WALTE	WALTER V	INI PIT
Supply voltage (V)		:	5Vdc (1)	3.7Vdc (2)	CLIET .	and the way	_
Ambient temperature d	uring test T _{amb}	(°C):	See below	See below	·	Ž., ,	_
Maximum measured te			Allowed T _{max} (°C)				
PCB near U1			95.9	96.3	300	THE STATE OF THE S	105.0
PCB near U2	89.2	84.5	-77	2, 2	105.0		
L1 ₀ v v	82.0	98.5	E- CEE	NITE - 11	130.0		
Battery Body	47.2	59.9	-2n,		Ref.		
Enclosure inside Top n	47.1	47.1	MITE.	W. 100 - 100 C	60.0		
Enclosure inside Bottor	n near Battery	MILIT	45.3	45.3		اد عار	60.0
Battery Wire	12. 25.		57.4	57.4	nite -n	The Contract of the Contract o	70.0
Enclosure inside near r	notor	Write a	44.2	44.2		+ -+	60.0
Ambient	, 4	A	40.0	40.0	7 . N-12	The -	1. "in
Button	IN LIFE WA	11, 11,	44.4	44.4	<u></u> +	/LI-	48
Enclosure Outside Top	near Battery	y de	31.1	31.1	WILL.	ang an	48
Enclosure Outside Bott	om near Batte	ry	29.3	29.3		16th 15	48
Ambient	* *	STER	25.0	25.0	11/2 - W	77/1	10, 10,
Temperature T of winding:	t ₁ (°C)	R ₁ (Ω)	t ₂ (°C)	R ₂ (Ω)	T (°C)	Allowed T_{max} (°C)	Insulation class
+ 11 11	E STE	no m	, 7/1,	40,-			16th 16th

Supplementary information:

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



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	Clause	Requirement – Test	CANE AND AND	Result – Remark	jt . 1	Verdict

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

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

- (1) means condition 1: Charging condition with empty battery, fan normal operation.
- (2) means condition 2: Discharging condition with fully charged battery, fan normal operation, USB-A normal 5Vdc 1A.

B.2.5	Ţ	TABLE: In	put test					L A P
U (V)	Hz	I (A)	I rated (A)	P (W)	P rated (W)	Fuse No	I fuse (A)	Condition/status
5.0Vdc	V.	0.88	1 "	4.42	- TEN	- <u>- </u>	- INLITER	Normal operation. Charging condition with empty battery.

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

B.3, B.4	TABLE: Abnor	mal operatin	g and fau	It condit	ion te	sts	MULL MILL MA	P
Ambient ter	mperature T _{amb} (°C)		210	:	See b	elow	_
Power sour	ce for EUT: Man	ufacturer, mo	del/type, d	outputrati	ng:	1-11	Write Will Will	_
Componer No.	nt Condition	Supply voltage (V)	Test time	Fuse no.	-	use ent (A)	Observation	
U1 pin 10-1	15 s-c	5VDC	10mins	NALTEX	MALIF	Whi	Unit shut down immedia damage, no hazards. Input current: 0A.	ately, No
U1 pin 16-1	15 s-c	5VDC	10mins	unlifer w	LIEK WALTER		Unit shut down immediately damage, no hazards. Input current: 0A.	
Q3 (T	S-C WALLER	5VDC	10mins	TEK VINI	EK UI	et .	Unit shut down immediadamage, no hazards. Input current: 0A.	ately, No
Q4	S-C	5VDC	10mins	0.17	are	, m	Unit shut down immedia	ately, No

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.

damage, no hazards. Input current: 0A.

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

M.3	TABLE: Protection circuits for batteries provided within the equipment	W. B W
-----	--	--------

¹⁾ Supply by external DC source,



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Clause	Requirement – Test	Result – Remark	Verdict					

Is it possible	to install the	battery in a re	everse	e polarity	oosition?			1	No.	, —	
					C	Charg	ing				
Equipment S	pecification		Vol	tage (V)					Current (A)		
			.+	5	TITES.	NITE.	11	The Coll	1	an an	
			Battery specification								
		Non-recharge	batteries	Rechargeable batteries							
		Discharging	~		Charging				Discharging	Reverse	
Manufacturer/type		current (A)		rent (A)	Voltage	(V)	V) Current (A)		current (A)	charging current (A)	
UFX 105050		10, -70,	70, -		3.379	3.379 0		.914	1.615	. Will M	
Note: The tes	sts of M.3.2 a	re applicable o	only w	hen abov	e appropr	iate c	lata i	s not ava	ilable.		
Specified bat	tery tempera	ature (°C)				4		TEN N	0-50	e)	
Component No.	Fault condition	Charge/ discharge mo	ode	Test time	Temp. (°C)		rent A)	Voltage (V)	Obse	ervation	
U1 pin 10- 15	SC	Charge mod	de	7hours	ir - u nc	() · · ·	ni.	NL, NS, NE	, NF	
U1 pin 16- 15	SC	Discharge mo	ode	7hours	ANTICE AND A	-01)	Mr.	NL, NS, NE	, NF	
Supplementa	ry informatio	n:									

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

M.4.2	TABLE battery		feguards for	equipment co	ontaining a	secondary lithium	, III P	
Maximum	specified (charging voltag	je (V)	7, , , ,	: 3.7	THE THE THE	_	
Maximum	specified o	charging currer	nt (A)		: 2	2		
Highest sp	ecified ch	arging tempera	ature (°C)		: 50	H TEK TEK		
Lowest spe	ecified cha	arging tempera	ture (°C)		: 0 🐠	m. m. n		
Battery manufacturer/type		Operating		Measurement		Observatio	n	
		and fault condition	Charging voltage (V)	Charging current (A)	Temp. (°C)			
Lowest spe	ecified cha	rging temperat	ure:	WILL WILL	Wer. M	ur mr m	20.	
UFX 10505	50 Marie	Normal	3.7	0.914	unite o	The charging voltage not exceed 3.7V and charging current does exceed 1A.	the S	
UFX 10505	on treet	Single fault – (U1 pin 10-15 SC)	TEX SLIP	0.817	o whitek	The charging voltage doe not exceed 3.7V and the charging current does not exceed 1A.		



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UFX 105050	Normal	3.7	10 0 m	45	Stop charging.
UFX 105050	Single fault – (U1 pin 16-15 SC)	3.7	NITER O WITE	45	Stop charging.

Supplementary information:

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

Q.1	TABLE: Circuits intended for interconnection with building wiring (LPS) N/A									
Output Circuit	Condition		Time a (a)	I _{sc}	(A)	S (VA)				
	Condition	U _{oc} (V)	Time (s)	Meas.	Limit	Meas.	Limit			
Life White	Aller Aller Aller	2,	, - , et	J.	LIEN OLIF	الم. ^{مناكل} ما	ille - uni			
st let	TEX STEX STEX	mite mi	-11/2	2/15_ 20	- 4	, 	et et			

Supplementary Information:

SC = short circuit, OC = open circuit

T.2, T.3, T.4, T.5						LIEF RIFER RUEEP MIN
Location / Part	Material	Thickness (mm)	Probe	Force (N)	Test Duration (s)	Observation
Enclosure (T.4)	Plastics*	1.5	1712 11/12 17	100	5	Enclosure remained intact, no crack/ opening developed

Supplementary information:

*See table 4.1.2 enclosure materials. Test was performed for all sources of enclosure material.

T.6, T.9 T	ABLE: Impac	ct test		N/A			
Location/Part Material Thickness (mm) Height Observation (mm)							
711 - 22	<u>, </u>	1 - 1 th	NITER MITE	- White Must all all and			
Supplementary information:							
70, 7,		cet let mi	TER SILIE	anti uni ani un an			

T.7	TABLE: Drop	test		WILLER WILL MULL MULL MINE MINE BOWN
Location/Part	t Material	Thickness (mm)	Height (mm)	Observation
Enclosure Plastics* 1.5 1000 Enclosure remained intact, no crac developed. No hazards.		Enclosure remained intact, no crack/ opening developed. No hazards.		

*See table 4.1.2 enclosure materials. Test was performed for all sources of enclosure material.



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	Clause	Requirement – Test	is any any	Result – Remark	Verdict	

T.8 T.4	ABLE: Stres	s relief test			The sure was all b		
Location/Part	Material	Thickness (mm)	Oven Temperatur e (°C)	Duration (h)	Observation		
Enclosure	Enclosure Plastic* See table 4.1.2		70°C 7h		Enclosure remained intact, no cracking/opening developed in the enclosure joint. No hazards.		
Supplementary	information:						
*See table 4.1.	2 enclosure	materials. Test wa	s performed t	or all sourc	es of enclosure material.		

X	TABLE: Alterna	tive method for determin	ing minimum clearances	s distances	V/A
Clearance distanced between:		Peak of working voltage (V)	Required cl (mm)	Measured cl (mm)	
- while	Mr. Mr. M		of the later of	MITE WATE	N. C.
Supplement	ary information:				
and an	5 m m	Tr. Tr.	TEX LIER LIFE	WITE WALL WA	Y 3



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Clause	Requirement – Test	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		
Plastic enclosure	SABIC INNOVATIVE PLASTICS US L L C	945(GG)	V-0, 120°C, Min. thickness 1.6mm	UL 94	UL E121562		
PCB	KINGBOARD LAMINATES HOLDINGS LTD	KB-5150, KB- 5152	V-0, 130°C	UL 94, UL 796	UL E123995		
Internal wire	Various	2468	Min. 30V, Min. 80°C, Min. 26AWG, VW-1	UL 758	UL		
Battery lead wire	Various	1007	Min. 30V, Min. 80°C, Min. 26AWG, VW-1	UL 758	UL WEEK WE		
Li-ion Battery	Guangdong Cvasun New Energy Technology Co., Ltd.	103665	3.7Vd.c., 3000mAh, 11.1Wh	IEC/EN 62133- 2:2017+A1:202 1	UL CB Report BCTC22127 03937B		

Supplementary information:

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



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Figure 1 Overall view



Figure 2 Overall view



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Reference No.: WTF23D10227616Y



Figure 3 Overall view



Figure 4 Internal view



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Photo Documentation

Reference No.: WTF23D10227616Y

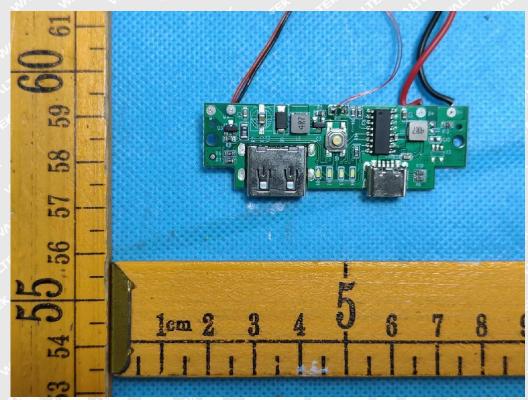


Figure 5 PCB trace view

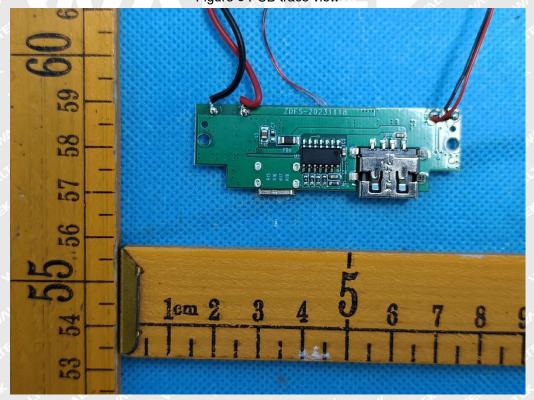


Figure 6 PCB trace view



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Photo Documentation

Reference No.: WTF23D10227616Y

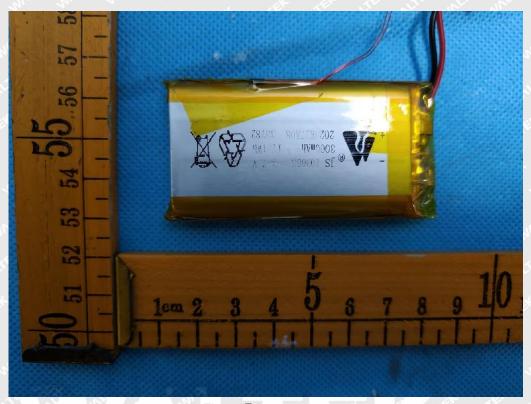


Figure 7 Battery view

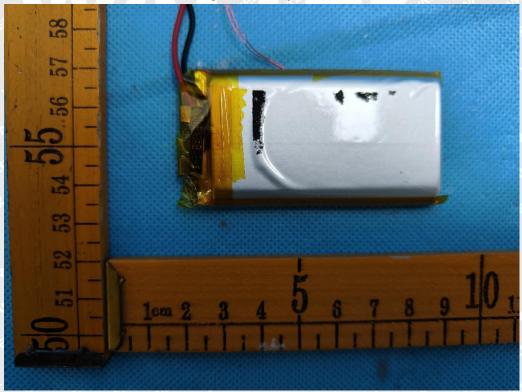


Figure 8 Battery view

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