

# **TEST REPORT**

Reference No	:	WTF22F09191508J

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

Hong Kong

Manufacturer .....: 103221

Address.....: ---

Product Name.....: Desktop charger fan with light

Model No. ....: MO6810

EN 60335-1:2012+A11:2014+A13:2017+A1:2019+A14:2019+A2:2019

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

EN 62233:2008

Date of Receipt sample .... : 2022-09-22

**Date of Test** ..... : 2022-09-23 to 2022-10-08

Date of Issue..... : 2022-11-03

**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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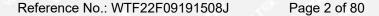
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Tested by:

Approved by:

William He

Jerry Mu





Test item description...... Desktop charger fan with light

Trade Mark .....: --

Model/Type reference .....: MO6810

Ratings ...... DC 9V, 1.5W, Class III, IPX0

### Copy of marking plate:

Desktop charger fan with light

Model: MO6810 9V === , 1.5W

Mid Ocean Brands B.V.

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



#### 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 GER20CMFF.





Test item particulars	the second of the second
Classification of installation and use:	Portable appliance, household and indoor use
Supply Connection:	DC Inlet
Possible test case verdicts:	The state of the s
- 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:

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

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

Throughout this report a point is used as the decimal separator.

## General product information:

Reference No.: WTF22F09191508J

- 1. The appliances are for household and indoor use only.
- 2. Only to be used together with a USB connector or a certified power supply.

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Ø 10	IEC 60335-2-80	a de de de	
			Non-Bat
Clause	Requirement + Test	Result - Remark	Verdic
5	GENERAL CONDITIONS FOR THE TESTS	The first the same	-
ان. <sup>خانکان</sup> ااد	Tests performed according to clause 5, e.g. nature of supply, sequence of testing, etc.	NUTER AND THE ART LEVE AND	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)		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)	Martin Martin States	N
6	CLASSIFICATION	STATE STATE SHALL SH	~
6.1	Protection against electric shock: Class 0, 0I, I, III:	Class III	P
ises amisi	For a class III construction with a detachable power supply part the appliance is classified according to the detachable power supply part		N
6.2	Protection against harmful ingress of water	1 1 1 1	N
411	At least IPX2 for Duct fans (IEC 60335-2-80)	They the the s	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 (2)	-
7.1	Rated voltage or voltage range (V):	See page 2	Р
	Symbol for nature of supply, or:	See page 2	Р
	Rated frequency (Hz):	The State State of	N
	Rated power input (W), or:	See page 2	Р
No. O.	Rated current (A):	Ser mile diffe sail	N
THE SHALL	Manufacturer's or responsible vendor's name, trademark or identification mark:	See page 2	Р
4 4	Model or type reference:	See page 2	Р
	Symbol IEC 60417-5172, for class II appliances	- The The Track	N
nt.	IP number, other than IPX0:	IPX0	N
4000 A	Symbol IEC 60417-5180, for class III appliances, unless	States askitica asiata as	N
	the appliance is operated by batteries only	Although the state set	Р
	Symbol IEC 60417-5018, for class II and class III appliances incorporating a functional earth	a street street	N
	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
	Symbol IEC 60417-5180 (2003-02), for class III	Street Shirt Block Shirt	Р

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gr. Ja	IEC 60335-2-80	s it it is	500
Clause	Requirement + Test	Result - Remark	Verdict
	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.		
Sec. March	For tropical climates marked with letter T (IEC 60335-2-80)	THE WALLES STREET WALL	N
	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
7.2	Warning for stationary appliances for multiple supply	all the set of	N
	Warning placed in vicinity of terminal cover	Co. Charles Stern Stern	N
7.3	Range of rated values marked with the lower and upper limits separated by a hyphen	the sale of the sale of the	N
S. S. L.	Different rated values marked with the values separated by an oblique stroke	ALTER MATER MATER	N.
7.4	Appliances adjustable for different rated voltages or rated frequencies, the voltage or the frequency setting is clearly discernible	ANTER STREET STREET ST	N
NITER SIN Ed. SITT	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	The state of the s	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	SECTION SECTION SECTION	N
in <sub>the</sub> Su	the power input or current are related to the arithmetic mean value of the rated voltage range	ates apprish apprish as	N
it <sup>ide</sup> <sub>M</sub> ai	Relation between marking for upper and lower limits of rated power input or rated current and voltage is clear	the particle solution about	N
7.6	Correct symbols used	- 5th 5th 45th	Р
a Stab	Symbol for nature of supply placed next to rated voltage	15 At 5th	P
	Symbol for class II appliances placed unlikely to be confused with other marking		N
	Units of physical quantities and their symbols according to international standardized system	The state of the state	Р
7.7	Connection diagram fixed to appliances to be connected to more than two supply conductors and appliances for multiple supply, unless		N
12.5	correct mode of connection is obvious	The state of the state of	N
7.8	Except for type Z attachment, terminals for connection indicated as follows:	on to the supply mains	STEET STEET

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IEC 60335-2-80			42 16
Clause	Requirement + Test	Result - Remark	Verdict
	- marking of terminals exclusively for the neutral conductor (letter N)	AND AND AND A	N
11 m	- marking of protective earthing terminals (symbol IEC 60417-5019)	Printer Marie Albert Albert	N
Sec. Alex	- marking of functional earthing terminals (symbol IEC 60417-5018)	Service district white	N
F 350	- marking not placed on removable parts	e street of .	N
7.9	Marking or placing of switches which may cause a hazard	A A A	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
500 25	This applies also to switches which are part of a control	to the set	P
	If figures are used, the off position indicated by the figure 0	and the state of	N
all of	The figure 0 indicates only OFF position, unless no confusion with the OFF position	Shirty Mary Mary All	N
7.11	Indication for direction of adjustment of controls	STATE STATES SALLE STATE	N
7.12	Instructions for safe use provided		Р
	Details concerning precautions during user maintenance	E. Chr. Mr.	Р
A. 17.	The instructions state that:		N
agrande .	- 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	aticificat attribute	FOR SHIPTING
	- children being supervised not to play with the appliance	4 14 14 14	Р
is and the	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		N
471456	Instructions for class III appliances state that it must only be supplied at SELV, unless	states states states about	Р
Night W	it is a battery-operated appliance, the battery being charged outside the appliance	State and activate activate	N
	For appliances for altitudes exceeding 2000 m, the maximum altitude is stated:	the set set	N
. Salaran	The instructions for appliances incorporating a functional earth states that the appliance incorporates an earth connection for functional purposes only	ANTICE ANTICE AND AND	N
100	If the instructions state that the guard has to be remove	ed for cleaning purposes, the	

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IEC 60335-2-80			S. The
Clause	Requirement + Test	Result - Remark	Verdict
41.	instructions shall state the substance of the following:	(IEC 60335-2-80/A1)	100
ARUS (SA) Ala	Ensure that the fan is switched off from the supply mains before removing the guard. (IEC 60335-2-80/A1)	ALTER ANTICE ANTICES ANTICES	N
ar are	The instructions for ceiling fans shall include the subs	tance of the following warning:	100 -91
# 500 B	WARNING: If unusual oscillating movement is observed, immediately stop using the	and the state of	N
	ceiling fan and contact the manufacturer, its service agent or suitably qualified persons. (IEC 60335-2-80/A1)		
	The instructions for ceiling fans shall include the subs 60335-2-80/A1)	tance of the following: (IEC	5500
A .	the maintenance cycle and method of maintenance; (IEC 60335-2-80/A1)	and the same	N
	<ul><li>the weight of the appliance in kilograms; (IEC 60335-2-80/A1)</li></ul>	articles articles are	N
r Strater Str	<ul> <li>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)</li> </ul>	STATE STATES STATES	N
Mary 3	The instructions for fans incorporating motors contain substance of the following: (IEC 60335-2-80/A1)	ing brushes shall include the	
	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 The A	Р
Adapta .	For an appliance intended to be permanently connected to the water mains and not connected by a hose-set, this is stated	ARTICLE ARTICLE ARTICLE ARTICLE	N
in on	The installation instructions for ceiling fans shall incl following: (IEC 60335-2-80)	ude the substance of the	
	<ul> <li>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)</li> </ul>	the state state with the	N
albaran d	that the mounting of the suspension system shall be performed by the manufacturer, its service agent or suitably qualified persons; (IEC 60335-2-80)	STATES AND THE ABOUTED ABOUTED	N
STEEL SOL	<ul> <li>that the fan is to be installed so that the blades are more than 2.3 m above the floor; (IEC 60335-2- 80)</li> </ul>	THE SHIFT SHIFT SHIFT	N
	the model or type reference of a luminaire that may be installed in a fan constructed for this purpose. (IEC 60335-2-80)	A SECTION SECTION SECTION SE	N
and the same	The instructions for other fans shall include the subs (IEC 60335-2-80)	stance of the following:	100
in State of	<ul> <li>whether the fan is intended for mounting in outside windows or walls (for partition fans); (IEC</li> </ul>	Aft Set State State	N

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IEC 60335-2-80			
Clause	Requirement + Test	Result - Remark	Verdict
	60335-2-80)		71, 12,
allia Seller A	<ul> <li>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)</li> </ul>	ACTUS MATERIAL MATERIAL O	N
	<ul> <li>that precautions must be taken to avoid the backflow 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)</li> </ul>	fich genoral george san and the sand	N
	If different rated voltages or different rated frequencies are marked, the instructions state what action to be taken to adjust the appliance	are are arites	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	SHELL MICE MICE	N N
7.12.4	Instructions for built-in appliances:	They are the	
300 6	- dimensions of space	# 1/ di .	N
	- dimensions and position of supporting and fixing	-4 Eb. a.	N
tes. There's	- minimum distances between parts and surrounding structure		N
SANSTON.	- minimum dimensions of ventilating openings and arrangement	still stille settlet	N
ANISTER SIP	- connection to supply mains and interconnection of separate components	de de de	N N
	- allow disconnection of the appliance after installation, by accessible plug or a switch in the fixed wiring, unless		N AND AND
it Silt	a switch complying with 24.3	a de de	N
7.12.5	Replacement cord instructions, type X attachment with a specially prepared cord	Shrift Shrift Shrift	N
1000	Replacement cord instructions, type Y attachment	ALTER AND STATE	N
d.	Replacement cord instructions, type Z attachment	A	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		N
7.12.7	Instructions for fixed appliances stating how the appliance is to be fixed	atilish satisfied assisted	N
7.12.8	Instructions for appliances connected to the water m	ains:	de de
167 31	- max. inlet water pressure (Pa):	Jan Jan Will "	N

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100	IEC 60335-2-80			
Clause	Requirement + Test	Result - Remark	Verdict	
41.0	- min. inlet water pressure, if necessary (Pa):	and the amount of the	N	
Market Sel	Instructions concerning new and old hose-sets for appliances connected to the water mains by detachable hose-sets	ALTER MATERIAL MATERIAL A	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		Р	
	These instructions may be supplied with the appliance separately from any functional use booklet	Alter Alter Alter	P	
	They may follow the description of the appliance that identifies parts, or follow the drawings/sketches	ales de det	P	
re ga Tak gasi	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	et een een een een een een een een een e	Р	
S WELLER	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	the state street	P. P.	
STEEL SEE	Signal words WARNING, CAUTION, DANGER in uppercase having a height as specified		N	
de St	Uppercase letter of the text explaining the signal word not smaller than 1.6 mm:		N	
. gesteldt	Moulded in, engraved, or stamped markings either raised above or have a depth below the surface of at least 0.25 mm, unless	Although State	N	
	contrasting colours are used	210 20 20	N	
Way of	Markings checked by inspection, measurement and rubbing test as specified	STEEL BUTTER SHITTER S	Р	
7.15	Markings on a main part	it it is to	P	
r ja	Marking clearly discernible from the outside, if necessary after removal of a cover		Р	
25	For portable appliances, cover can be removed or opened without a tool		N	
	For stationary appliances, name, trademark or identification mark and model or type reference visible after installation	ativities agriculty agriculty	N	
	For fixed appliances, name, trademark or identification mark and model or type reference visible after installation according to the instructions		N	
	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	ANTICLE SECTION SECTION	Р	
	The symbol IEC 60417-5018 placed next to the	See See See .	N	

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	c 110 11 11 221 00 10 10000 1 ago 10 01 00		
the state	IEC 60335-2-80	it it it is	ET TO STATE
Clause	Requirement + Test	Result - Remark	Verdict
File Car	symbol IEC 60417-5172 or IEC 60417-5180	The second second	Maria America
7.16	Marking of a possible replaceable thermal link or fuse link clearly visible with regard to replacing the link	NATION AND THE A	N
8	PROTECTION AGAINST ACCESS TO LIVE PARTS		5°
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	The state of the	N
	Lamps behind a detachable cover not removed, if conditions met	Maria Maria Maria	N
gain as	Insertion or removal of lamps, protection against contact with live parts of the lamp cap	They white about a	N
ITET SHEET	Use of test probe B of IEC 61032, with a force not exceeding 1 N: no contact with live parts	er militar autilia aut	N
e gritier	Use of test probe B of IEC 61032 through openings, with a force of 20N: no contact with live parts	STREET STREET STREET	N
Alek (	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		N
September 1	Test probe 13 also applied through openings in earthed metal enclosures having a non-conductive coating: no contact with live parts	Martine Sentine Sentine	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	ates and and a	N
et sold	For a single switching action obtained by a switching device, requirements as specified	- 10th 18th 5th	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 state	N
8.1.4	Accessible part not considered live if:	70. 40. 4	d 6
	- safety extra-low a.c. voltage: peak value not exceeding 42.4 V	The saletime states and	N
The Market	- safety extra-low d.c. voltage: not exceeding 42.4 V		Р
E CONTRACT	- or separated from live parts by protective impedance		N
alter to the	If protective impedance: d.c. current not exceeding 2 mA, and	The street writing	N

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IEC 60335-2-80			15° 21°
Clause	Requirement + Test	Result - Remark	Verdic
- 25	a.c. peak value not exceeding 0.7 mA	The state of the s	N
N. Carlot	- for peak values over 42.4 V up to and including 450 V, capacitance not exceeding 0.1 μF	Citiz Militar Militar Spring	N
Sector Section	- for peak values over 450 V up to and including 15 kV, discharge not exceeding 45 μC	the state section section.	N
# 55°	- for peak values over 15kV, the energy in the discharge not exceeding 350 mJ	- the site site of	N
8.1.5	Live parts protected at least by basic insulation before	re installation or assembly:	- T.M
	- built-in appliances	The state of the state of	N
	- fixed appliances		N
est at	- appliances delivered in separate units	The wife with the	N
8.2	Class II appliances and constructions constructed so that there is adequate protection against accidental contact with basic insulation and metal parts separated from live parts by basic insulation only		N S
	Only possible to touch parts separated from live parts by double or reinforced insulation	the state of	N
8.2	After removal of detachable parts for user 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)		N
9	STARTING OF MOTOR-OPERATED APPLIANCES	The state of the state of	<u>-</u>
September 1	Requirements and tests are specified in part 2 when necessary	the state of the s	N
10	POWER INPUT AND CURRENT	a state of	- 4
10.1	Power input at normal operating temperature, rated voltage and normal operation not deviating from rated power input by more than shown in table 1:	(see appended table)	Р
e general general	If the power input varies throughout the operating 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		N
Page 18 Page	Otherwise the power input is the arithmetic mean value	till shift shift shift	N
	Test carried out at upper and lower limits of the ranges for appliances with one or more rated voltage ranges, unless	ANTER ANTER ANTER A	N
1200	the rated power input is related to the arithmetic mean value	White during August Aug	Р
er.	Appliances are tested with shutters or similar	A 15 15 15	N

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Ø 1	IEO 6033E 3 00	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10 0
	IEC 60335-2-80		41, 41,
Clause	Requirement + Test	Result - Remark	Verdict
31/2	devices in the open position. (IEC 60335-2-80)	الواقعي تتحديل تتحدير	1 4
10.2	Current at normal operating temperature, rated voltage and normal operation not deviating from rated current by more than shown in table 2:	parties admired apparent apparent	N
STO SANC BE SANCED SANCED	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
- 9	Otherwise the current is the arithmetic mean value	The the the said	N
500 - 518 500 - 500	Test carried out at upper and lower limits of the ranges for appliances with one or more rated voltage ranges, unless		N
الله. الحارث الم	the rated current is related to the arithmetic mean value of the range	Alberta Alberta Alberta	N
	Appliances are tested with shutters or similar devices in the open position. (IEC 60335-2-80)	SHITTER WHITTER WHITE &	N
11	HEATING	and the state of the	F .
11.1	No excessive temperatures in normal use	10. 71	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	AND THE SHARE WITH	Р
September 1	Temperature rises of windings determined by resistance method, unless	active active actives as	N
11 <sup>55</sup>	the windings are non-uniform or it is difficult to make the necessary connections	alt out with all	Р
11.4	Heating appliances operated under normal operation at 1.15 times rated power input (W):	st st st st	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)	P
11.6	Combined appliances operated under normal operation at most unfavourable voltage between 0.94 and 1.06 times rated voltage (V):	arite arite arite ar	N
11.7	Appliances are operated until steady conditions are established. (IEC 60335-2-80)	ifter mirrer against again	Р
11.8	Temperature rises monitored continuously and not exceeding the values in table 3:	(see appended table)	Р
- NATO	If the temperature rise of a motor winding exceeds the value of table 3, or	the little little	N
	if there is doubt with regard to classification of insulation,	A Street Street	N

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	1 age 10 01 00		
fill graft	IEC 60335-2-80	it set set set	September 1982
Clause	Requirement + Test	Result - Remark	Verdict
Jan San	tests of Annex C are carried out	No Part of the State of the Sta	N
	Sealing compound does not flow out		P
,	Protective devices do not operate, except		P
A 3	components in protective electronic circuits tested	2 1 1 1 1	N
s, 40,	for the number of cycles specified in 24.1.4	The state of the state	
	The temperature rise limits for appliances for tropical climates are reduced by 15 K. (IEC 60335-2-80)	Martin Miller Marine	N
Sakita .	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)		N
13	LEAKAGE CURRENT AND ELECTRIC STRENGTH TEMPERATURE	I AT OPERATING	-
13.1	Leakage current not excessive and electric strength adequate	Albertan Albertan Albertan	Р
ALCO .	Heating appliances operated at 1.15 times the rated power input (W):	Allerter Allerter Military	N
	Motor-operated appliances and combined appliances supplied at 1.06 times the rated voltage (V):	(see appended table)	Р
	Protective impedance and radio interference filters disconnected before carrying out the tests		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		Р
1.55 COP . 18	For class 0I and class I appliances, a low impedance ammeter may be used	the the site of	N
	Leakage current measurements:	(see appended table)	Р
13.3	The appliance is disconnected from the supply	the set set set	Р
. A	Electric strength tests according to table 4:	(see appended table)	Р
	No breakdown during the tests	- John John John J	Р
14	TRANSIENT OVERVOLTAGES		at set
all or	Appliances withstand the transient over-voltages to which they may be subjected	STATES STATES STATES STA	N
	Clearances having a value less than specified in table 16 subjected to an impulse voltage test, the test voltage specified in table 6:		N
347	No flashover during the test, unless	The state of the s	N
L. C. L. T. C. S.	of functional insulation if the appliance complies with clause 19 with the clearance short-circuited	STEP SSTEP SETTER	N
15	MOISTURE RESISTANCE	The state of	st st
15.1	Enclosure provides the degree of moisture	The Step William Step	N



	IEC 60335-2-80		
Clause	Requirement + Test	Result - Remark	Verdic
40°	protection according to classification of the appliance	AND SHOULD SHOULD	
ilinea San San San San	Compliance checked as specified in 15.1.1, taking into account 15.1.2, followed by the electric strength test of 16.3	ALTER AND AND AND A	N
# 35500	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
	Water valves containing live parts in external hoses for connection of an appliance to the water mains tested as specified for IPX7 appliances	ately ately ately in	N
SEE SHEETS SHEETSEE	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
ATTICES OF	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)	ALTER SHIPP SHIPP	N
	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)		N
15.1.2	Hand-held appliance turned continuously through the most unfavourable positions during the test	A A ST	N
	Built-in appliances installed according to the instructions		N
e e	Appliances placed or used on the floor or table placed on a horizontal unperforated support	The Aller Aller of	N
e gett	Appliances normally fixed to a wall and appliances with pins for insertion into socket-outlets are mounted on a wooden board		N
gister s	For IPX3 appliances, the base of wall mounted appliances is placed at the same level as the pivot axis of the oscillating tube	State State State	N
STEEL SEL	For IPX4 appliances, the horizontal centre line of the appliance is aligned with the pivot axis of the oscillating tube, and		N
est sakute sakute strest	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	general general general	N
	Wall-mounted appliances, take into account the distance to the floor stated in the instructions		N
1600 31	Appliances normally fixed to a ceiling are mounted	ALLES WATER SHIPE IS	N

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	IEC 60335-2-80	it it is so	
Clause	Requirement + Test	Result - Remark	Verdict
Talah (	underneath a horizontal unperforated support, the pivot axis of the oscillating tube located at the level of the underside of the support, and	and the set	ALTER STEEL
get get	for IPX4 appliances, the movement of the tube is limited to two times 90° from the vertical for a period of 5 min	for all the state of	N
* 35EF	Appliances with type X attachment fitted with a flexible cord as described	e for street	* N
	Detachable parts subjected to the relevant treatment with the main part	the state of	N
	However, if a part has to be removed for user maintenance and a tool is needed, this part is not removed	aller state action in	N
5.2	Spillage of liquid does not affect the electrical insulation	ar dir dir d	N N
	Spillage solution comprising water containing approximately 1 % NaCl and 0.6 % rinsing agent		N N
4	Appliances with type X attachment fitted with a flexible cord as described	The state of	N
ge <sup>gle</sup> s	Appliances incorporating an appliance inlet tested with or without an connector, whichever is most unfavourable		N
	Detachable parts are removed	-1 Sh. a.	N
	Overfilling test with additional amount of the solution, over a period of 1 min (I):		N
35 ST	The appliance withstands the electric strength test of 16.3	series series	N. N. C.
NICHT SI	No trace of water on insulation that can result in a reduction of clearances or creepage distances below values specified in clause 29	STEEL MATERIAL SHALLOW AS	N N
5.3	Appliances proof against humid conditions	it it it is	Р
اد اداری	Checked by test Cab: Damp heat steady state in IEC 60068-2-78		Р
	Detachable parts removed and subjected, if necessary, to the humidity test with the main part	and and	Р
er i	Humidity test for 48 h in a humidity cabinet	25°C, 93% R.H.	Р
STEEL SEE	Reassembly of those parts that may have been removed	At the state of	P I I I I I
4	The appliance withstands the tests of clause 16		Р
6	LEAKAGE CURRENT AND ELECTRIC STRENGTH	the state of the state	
6.1	Leakage current not excessive and electric strength adequate	The State	N
	Protective impedance disconnected from live parts before carrying out the tests	The American	N



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300	IEC 60335-2-80		
Clause	Requirement + Test	Result - Remark	Verdic
	Tests carried out at room temperature and not connected to the supply		N
16.2	Single-phase appliances: test voltage 1.06 times rated voltage (V):	Martin Martin Albania Albania	N
in the	Three-phase appliances: test voltage 1.06 times rated voltage divided by √3 (V):	THE SHOUTH WATER MATERIAL AND	N
F 350	Leakage current measurements:	(see appended table)	N
	Limit values doubled if:	The the to the	
100	- all controls have an off position in all poles, or	the the state with	N
	- the appliance has no control other than a thermal cut-out, or	the state of	N
e e	- all thermostats, temperature limiters and energy regulators do not have an off position, or	and the state of	N
140	- the appliance has radio interference filters	and the same of the same of the	N
F WILLIAM	With the radio interference filters disconnected, the leakage current do not exceed limits specified:	THE RESERVE SPECIES ASSESSED.	N
16.3	Electric strength tests according to table 7:	(see appended table)	Ν
aller d	Test voltage applied between the supply cord and inlet bushing and cord guard and cord anchorage as specified:	(see appended table)	N
	No breakdown during the tests	The state of	N
17	OVERLOAD PROTECTION OF TRANSFORMERS	AND ASSOCIATED CIRCUITS	-
and the	No excessive temperatures in transformer or associated circuits in event of short-circuits likely to occur in normal use:	and the same and the	N
ALTERNATION COM	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):	THE MUTHER SPITES SPITES	N
giller gill	Basic insulation is not short-circuited	st St St St S	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	STREET, STREET, STREET, STREET, STREET,	N
Sugger 1	Temperature of the winding not exceeding the value specified in table 8	Military Statistics Statistics Statistics	N
nited year	However, limits do not apply to fail-safe transformers complying with sub-clause 15.5 of IEC 61558-1	THE WATER SHOTEL SHITTER W	N
18	ENDURANCE	the often state with	<del>, ,</del>
- State	Requirements and tests are specified in part 2 when necessary	at the state of	N
19	ABNORMAL OPERATION	They have the the	
19.1	The risk of fire, mechanical damage or electric shock under abnormal or careless operation	The little series and	Р

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IEC 60335-2-80			
Clause	Requirement + Test	Result - Remark	Verdic
100	obviated		11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	Electronic circuits so designed and applied that a fault will not render the appliance unsafe:	Considered	Р
N <sup>ob</sup> est	Appliances incorporating heating elements subjected to the tests of 19.2 and 19.3, and	at the state of	N
et 3050	if the appliance also has a control that limit the temperature during clause 11 it is subjected to the test of 19.4, and	- NATER STATES ASSETS	N
J.	if applicable, to the test of 19.5	4 4	N
	Appliances incorporating PTC heating elements are also subjected to the test of 19.6		N
	Appliances incorporating motors subjected to the tests of 19.7 to 19.10, as applicable	ates altrines altrines al	Р
	Appliances incorporating electronic circuits subjected to the tests of 19.11 and 19.12, as applicable	er skriver skriver skriv	P
All Services	Appliances incorporating contactors or relays subjected to the test of 19.14, being carried out before the tests of 19.11	And the feet	N
	Appliances incorporating voltage selector switches subjected to the test of 19.15		N
	Unless otherwise specified, the tests are continued until a non-self-resetting thermal cut-out operates, or		N
-	until steady conditions are established	the the to	Р
	If a heating element or intentionally weak part becomes open-circuited, the relevant test is repeated on a second sample	STATES STATES STATES	N
ires uni	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
e grade	Fans incorporating shutters or similar subjected to the test of cl. 19.101 (IEC 60335-2-80)	- STEP BITTER SPITE	N
19.2	Test of appliances with heating elements with restricted heat dissipation; test voltage (V), power input of 0.85 times rated power input (W):	States and the second	N
19.3	Test of 19.2 repeated; test voltage (V), power input of 1.24 times rated power input (W):	State active active sa	N
19.4	Test conditions as in clause 11, any control limiting the temperature during tests of clause 11 short-circuited	of antitude specified specified	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	ANTER STATE	N

	IEC 60335-2-80			
Clause	Requirement + Test	Result - Remark	Verdict	
	The test repeated with reversed polarity and the other end of the heating element connected to the sheath		N	
	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	ter service service service	N	
19.6	Appliances with PTC heating elements tested at rated voltage, establishing steady conditions	STUTE MUTE SHUTE	N	
String of	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)	STEEL STUTIES STUTIES STUTIES SE	N	
19.7	Stalling test by locking the rotor if the locked rotor torque is smaller than the full load torque, or	the Marine Autor Autor	N	
1000	locking moving parts of other appliances	THE STATE OF	Р	
g dit	Locked rotor, capacitors open-circuited one at a time	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N	
and the	Test repeated with capacitors short-circuited one at a time, unless		N	
L. 74.	the capacitor is of class S2 or S3 of IEC 60252-1	The Carry of the Carry	N	
	Appliances with timer or programmer supplied with rated voltage for each of the tests, for a period equal to the maximum period allowed:	SANTE SHEET SALES	N	
ANTER AN	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	ANTE ANTE ANTE ANT	N	
The st	Other appliances supplied with rated voltage for a period as specified	Until steady	Р	
et get	Winding temperatures not exceeding values specified in table 8	(see appended table)	Р	
917	Mounting of separate control (IEC 60335-2-80)	STATE STATE OF	N	
A 25 CO .	Approximately 50 % of the area of each ventilating opening is blocked. (IEC 60335-2-80)	the the state of	N	
	Winding temperatures not exceeding values specified in table 8 (IEC 60335-2-80)	at the star st	N	
7.5	The temperature rise of the board not exceed: (IEC	60335-2-80)		
	- 50 K, for appliances with T marking; (IEC 60335-2-80)	the state water water	N	
- 3	- 65 K, for other appliances. (IEC 60335-2-80)		N	
19.8	Multi-phase motors operated at rated voltage with one phase disconnected	AUTHORITIES AUTHORITIES	N	
			V	

Not applicable. (IEC 60335-2-80)

19.9

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the state of	IEC 60335-2-80	A ST ST ST	
Clause	Requirement + Test	Result - Remark	Verdict
19.10	Series motor operated at 1.3 times rated voltage for 1 min (V):		N
11 11	During the test, parts not being ejected from the appliance	Hiller Mill Hall Hall	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		N
45	they comply with the conditions specified in 19.11.1	The state of the s	Р
	Appliances incorporating an electronic circuit that relies upon a programmable component to function correctly, subjected to the test of 19.11.4.8, unless	Martin article articles articles	N
ar The	restarting does not result in a hazard	the the state with	Р
rest Marit	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	the section agreement agreement a	Р
	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	Secretary Secretary Secretary Secretary	N
J.	During and after each test the following is checked:		- J-
7 2. 7kz	- the temperature of the windings do not exceed the values specified in table 8	The same of the same of	Р
250	- the appliance complies with the conditions specified in 19.13	Martin Miller Miller	Р
	- any current flowing through protective impedance not exceeding the limits specified in 8.1.4	active active activities select	N
	If a conductor of a printed board becomes open-circle considered to have withstood the particular test, proceedings are met:		- ARVITAN I
ile surit	- the base material of the printed circuit board withstands the test of Annex E	tek untilek sahirek sahirek s	N
SANGTER SANGTER	- any loosened conductor does not reduce clearance or creepage distances between live parts and accessible metal parts below the values specified in clause 29	THE THE WALLES WITH THE	N
19.11.1	Fault conditions a) to g) in 19.11.2 are not applied to meeting both of the following conditions:	circuits or parts of circuits	
er in	- the electronic circuit is a low-power circuit, that is, the maximum power at low-power points does not exceed 15 W according to the tests specified	the test of the	Р
all little	- the protection against electric shock, fire hazard, mechanical hazard or dangerous malfunction of other parts of the appliance does not rely on the correct functioning of the electronic circuit	STREET STREET STREET STREET	Р
19.11.2	Fault conditions applied one at a time, the appliance specified in clause 11, but supplied at rated voltage,		100



Reference No.: WTF22F09191508J IEC 60335-2-80 Requirement + Test Result - Remark Clause Verdict 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 Ν c) short circuit of capacitors, unless they comply with IEC 60384-14 Ν Ν d) short circuit of any two terminals of an electronic 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 Ν 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 N 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 Ν 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, Ρ Ρ 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 Ν 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 N test of 19.7 are not subjected to the tests for electromagnetic phenomena. Surge protective devices disconnected, unless Ν N They incorporate spark gaps The appliance is subjected to electrostatic Р 19.11.4.1 discharges in accordance with IEC 61000-4-2, test level 4 19.11.4.2 Р The appliance is subjected to radiated fields in accordance with IEC 61000-4-3, at frequency ranges specified 19.11.4.3 The appliance is subjected to fast transient bursts P in accordance with IEC 61000-4-4, test level 3 or 4



	IEC 60335-2-80	d d d d d d	
Clause	Requirement + Test	Result - Remark	Verdict
ALCON T	as specified		130
19.11.4.4	The power supply terminals of the appliance subjected to voltage surges in accordance with IEC 61000-4-5, test level 3 or 4 as specified	ALTER ANTITED SHIFTED SHIFTED	Р
The Alvan	An open circuit test voltage of 2 kV is applicable for the line-to-line coupling mode	tot general approve assure a	Р
28.00	An open circuit test voltage of 4 kV is applicable for the line-to-earth coupling	· STATES STATES STATES SHI	N
SKITE S	Earthed heating elements in class I appliances disconnected	State State William William	N
19.11.4.5	The appliance is subjected to injected currents in accordance with IEC 61000-4-6, test level 3	at the state of	Р
19.11.4.6	Appliances having a rated current not exceeding 16 A are subjected to the Class 3 voltage dips and interruptions in accordance with IEC 61000-4-11		Р
FIRETER.	Appliances having a rated current exceeding 16 A are subjected to the Class 3 voltage dips and interruptions in accordance with IEC 61000-4-34	STATES AND THE MANEEL WAY	N
19.11.4.7	The appliance is subjected to mains signals in accordance with IEC 61000-4-13, test level class 2	ation aritem articles aritem	Р
19.11.4.8	The appliance is supplied at rated voltage and 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		N
	The appliance continues to operate normally, or		N
A 1	requires a manual operation to restart	and the second second	N
19.12	If the safety of the appliance for any of the fault 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):		N
19.13	During the tests the appliance does not emit flames, molten metal, poisonous or ignitable gas in hazardous amounts	SPRITTER SERVICES SPRITTER SERVI	Р
31.5	Temperature rises not exceeding the values shown in table 9:	(see appended table)	Р
كبرور أتحتري	Compliance with clause 8 not impaired	Alt Shir Shir Shire	Р
et Set	If the appliance can still be operated it complies with 20.2	a state of	Р
- ANDERSON	Insulation, other than of class III appliances or class contain live parts, withstands the electric strength tesspecified in table 4:		2.5 64 Maria
. A.	- basic insulation (V):	The state of the s	N
1677	- supplementary insulation (V):	April Other Str. Str.	N

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Referenc	e No.: WTF22F09191508J Page 22 of 80	All All A	W
	IEC 60335-2-80	and the state of the said	
Clause	Requirement + Test Re	esult - Remark	Verdict
711-7	- reinforced insulation (V):	HITCH WITH WITH	N
akurur Luga	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	ret sprint sprint sprint t sprint sprint sprint	Р
	The appliance does not undergo a dangerous malfunction, and	author author author and	Р
John.	no failure of protective electronic circuits, if the appliance is still operable	A ST ST	N
	Appliances tested with an electronic switch in the off po mode:	sition, or in the stand-by	Jest
L. At	- do not become operational, or	The open in	Р
i de de la comoción d La comoción de la co	- if they become operational, do not result in a dangerous malfunction during or after the tests of 19.11.4	AND THE METERS AND THE SE	N
ale de	If the appliance contains lids or doors that are controlled one of the interlocks may be released provided that:	d by one or more interlocks,	4.2
alle Steel	- the lid or door does not move automatically to an open position when the interlock is released, and	THE SHIPE SHIPE SHIPE	N
STANK SPA	- the appliance does not start after the cycle in which the interlock was released	E STATES AND EST.	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	Martin Martin Martin	N
Tage State .	For a relay or contactor with more than one contact, all contacts are short-circuited at the same time	THE SECTION SECTION SERVICES	N
ing an	A relay or contactor operating only to ensure the appliance is energized for normal use is not short-circuited		N
	If more than one relay or contactor operates in clause 11, they are short-circuited in turn	All and the same	N
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)	at anticol attitude anticol a	N
20	STABILITY AND MECHANICAL HAZARDS	The star south serious	200
20.1	Appliances having adequate stability		Р
SERVE SERVER	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	pliter sprift sprift sprift	Р

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IEC 60335-2-80			
Clause	Requirement + Test	Result - Remark	Verdict
e de la companya de l	Tilting test repeated on appliances with heating elements, angle of inclination increased to 15°	aria aria aria	N
gli <sup>ne</sup> sel Selek sel	Possible heating test in overturned position; temperature rise does not exceed values shown in table 9	parties april april a	N
# 35 B	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)	e str str st	N
ASSELLED TO	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)	while whe white	N
No. of St.	<ul> <li>they have a hardness less than D 60 Shore, or (IEC 60335-2-80)</li> <li>they have a peripheral speed less than 15 m/s</li> </ul>	A CONTRACTOR	N
get and	when the fan is supplied at rated voltage, or (IEC 60335-2-80)	ar gar gar ga	SEA SEA SEA
الله ا	<ul> <li>the fan has a power output not exceeding 2 W when supplied at rated voltage. (IEC 60335-2-80)</li> </ul>		N
20.2	Moving parts adequately arranged or enclosed as to provide protection against personal injury		Р
	Protective enclosures, guards and similar parts are non-detachable, and	Contraction of the Contraction of	Р
5° 50	have adequate mechanical strength	75 × 10 × 10 × 10 × 10 × 10 × 10 × 10 × 1	Р
de Si	Enclosures that can be opened by overriding an interlock are considered to be detachable parts		N
	Self-resetting thermal cut-outs and overcurrent protective devices not causing a hazard by unexpected closure	agent and said	N
	Not possible to touch dangerous moving parts with the test probe described	all the state	P.
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)		P
\$ 35°	-they have a hardness less than D 60 Shore, or (IEC 60335-2-80)	- "Little Little St	N
and the same	-they have a peripheral speed less than 15 m/s when the fan is supplied at rated voltage, or (IEC 60335-2-80)	at the state	N
d	-the fan has a power output not exceeding 2 W when supplied at rated voltage. (IEC 60335-2-80)		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)		N
SANTETES.	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)		N
	If test probe 18 is touched by the moving part, it shall not be subjected to a force exceeding 15 N. (IEC	THE MATER SPECT .	N



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IEC 60335-2-80			
Clause	Requirement + Test	Result - Remark	Verdict
AL ST	60335-2-80)	1 July 10 July	40
21	MECHANICAL STRENGTH		at at
21.1	Appliance has adequate mechanical strength and is constructed as to withstand rough handling	March Marian Albert Albert	Р
	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
	The appliance shows no damage impairing compliance with this standard, and	All Sale State	Р
Sept.	compliance with 8.1, 15.1 and clause 29 not impaired	A St. St.	Р
e e	If doubt, supplementary or reinforced insulation subjected to the electric strength test of 16.3	So the state of	N
	If necessary, repetition of groups of three blows on a new sample	Albrica Albrica Albrica	N
21.2	Accessible parts of solid insulation having strength to prevent penetration by sharp implements	STATES ASSETS STATES	Р
	Test not applicable if the thickness of supplementary insulation is at least 1 mm and reinforced insulation at least 2 mm	SELECTION ASSESSMENT A	N
y Jr	The insulation is tested as specified, and does withstand the electric strength test of 16.3	The state of the s	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
the state	The test probe is applied with a force not exceeding 5N. (IEC 60335-2-80)	STEEL BUILDING SHITTER SHIT	Р
21.102	Ceiling fans have adequate strength. Ceiling fans are mounted in accordance with the 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)		N
22	CONSTRUCTION		4
22.1	Appliance marked with the first numeral of the IP system, relevant requirements of IEC 60529 are fulfilled	IPX0	N
(L) (L)	NOTE 101 The enclosure defined in IEC 60529	The term the life	N

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IEC 60335-2-80			
Clause	Requirement + Test	Result - Remark	Verdict
	does not include guards for fan blades. (IEC 60335-2-80)		
22.2	Stationary appliance: means to ensure all-pole disco	nnection from the supply being	) } }
15°C	- a supply cord fitted with a plug, or	of the star star s	N
	- a switch complying with 24.3, or		N
	- a statement in the instruction sheet that a disconnection incorporated in the fixed wiring is to be provided, or	Author Marine Marine Mari	N
1000 1	- an appliance inlet	Write Will Ship Ship	N
griffer sur Tild surif	Singe-pole switches and single-pole protective devices for the disconnection of heating elements in single-phase, permanently connected class 01 and class I appliances, connected to the phase conductor		N
22.3	Appliance provided with pins: no undue strain on socket-outlets	the state attention	N
	Applied torque not exceeding 0.25 Nm	the the same	N
arrir - 2 Rifts ari	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		Ν
tel state	Each pin subjected to a torque of 0.4Nm; the pins are not rotating, unless		N
e get	rotating does not impair compliance with this standard	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N
22.4	Appliance for heating liquids and appliance causing undue vibration not provided with pins for insertion into socket-outlets	The the title with	N
22.5	No risk of electric shock when touching pins, for appliances having a capacitor with rated capacitance equal to or greater than 0.1μF, the appliance being disconnected from the supply at the instant of voltage peak	et state skille skille skille sk	N Sign
	Voltage not exceeding 34 V (V):	They are the are	N
411 STEEL 4	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		N
in in	The discharge test is then repeated three times, voltage not exceeding 34 V (V):	The strike strike strike	N
22.6	Electrical insulation not affected by condensing water or leaking liquid	A MATTER MATTER MATTER SON	N
Section .	Electrical insulation of Class II appliances not affected if a hose ruptures or seal leaks	STATES STATES STATES STATES	N
, dr	In case of doubt, test as described	1 1 1 1	N

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35.00	IEC 60335-2-80				
Clause	Requirement + Test	Result - Remark	Verdict		
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	Sept and the above the	N		
22.9	Insulation, internal wiring, windings, commutators and slip rings not exposed to oil, grease or similar substances, unless	Aller Aller Aller	Р		
7200 1	the substance has adequate insulating properties	Think Park The	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:	ister <sub>All</sub> inger Alester al	N		
e gw Feigh	- a non-self-resetting thermal cut-out is required by the standard, and		N		
911 T	- a voltage maintained non-self-resetting thermal cut-out is used to meet it	Alexander Alexander Alexander	N		
estrum a	Non-self-resetting thermal motor protectors have a trip-free action, unless	atter setter sette .	N		
Section 1	they are voltage maintained		N		
ed and the	Reset buttons of non-self-resetting controls so located or protected that accidental resetting is unlikely		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	SHILTER SHILTER SERVICE	P		
With the	Obvious locked position of snap-in devices used for fixing such parts	Stell States States of	N		
	No deterioration of the fixing properties of snap-in devices used in parts that are likely to be removed during installation or servicing	tek protest protest pro	N		
and the	The 50 N force is not applied to clips used to fasten fan guards. (IEC 60335-2-80)	- Albertage Martine Strate	Р		
40 N. S. C.	Instead, a force of 15 N is applied in any direction to the clips in an attempt to release them. (IEC 60335-2-80)	ANTES ANTES ANTES	Р		
Note of	Tests as described	at at the	Р		
22.12	Handles, knobs etc. fixed in a reliable manner, if loosening result in a hazard		Р		
- Market	Removing or fixing in wrong position of handles, knobs etc. indicating position of switches or similar components not possible, if resulting in a hazard		P		
1	A choking hazard does not apply to appliances for commercial use	The state of	N		

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	IEC 60335-2-80	1 1 S S	
Clause	Requirement + Test	Result - Remark	Verdict
	Axial force 15 N applied to parts, the shape being so that an axial pull is unlikely to be applied	and the second	N
all of the	Axial force 30 N applied to parts, the shape being so that an axial pull is likely to be applied	Willey Willy Stury 4	Р
er er	If the part is removed and can be contained within the small parts cylinder, it is considered to be a choking hazard		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	AND AND AND	P
22.14	No ragged or sharp edges creating a hazard for the user in normal use, or during user maintenance	Test within white	STEEL ST.P
564 alleri	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	or and the second	est per P
22.15	Storage hooks and the like for flexible cords smooth and well rounded	· ALTER SHIPS	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	Miller and the section of	N
J. 31.	Cord reel tested with 6000 operations, as specified		N
tegy "Threete	Electric strength test of 16.3, voltage of 1000 V applied		N
22.17	Spacers not removable from the outside by hand or by means of a screwdriver or a spanner	the the state	N
22.18	Current-carrying parts and other metal parts resistant to corrosion	and the state of	P.
22.19	Driving belts not relied upon to provide the required level of insulation, unless		N
. %.	constructed to prevent inappropriate replacement	the state of the state	N
22.20	Direct contact between live parts and thermal insulation effectively prevented, unless	- STON STON SPECE	N
and the same	material used is non-corrosive, non-hygroscopic and non-combustible	det Set steet	No-
22.21	Wood, cotton, silk, ordinary paper and fibrous or hygroscopic material not used as insulation, unless	ar ar ar	P
	impregnated	or the the	N
	This requirement does not apply to magnesium oxide and mineral ceramic fibres used for the electrical insulation of heating elements		N
22.22	Appliances not containing asbestos	STATE STATE	Р
22.23	Oils containing polychlorinated biphenyl (PCB) not used	the title title	NITTER BY

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IEC 60335-2-80			
Clause	Requirement + Test	Result - Remark	Verdict
22.24	Bare heating elements, except in class III appliances or class III constructions that do not contain live parts, adequately supported		N
gat g	In case of rupture, the heating conductor is unlikely to come in contact with accessible metal parts		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	Service Services Services	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	anite anite anite	N
22.27	Parts connected by protective impedance separated by double or reinforced insulation	a state of	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		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	STITE SHIFTER SHIFTER	N
22.30	Parts serving as supplementary or reinforced insulation fixed so that they cannot be removed without being seriously damaged, or		N
Salar State	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	Martin Martin Martin	N
22.31	Neither clearances nor creepage distances over supplementary and reinforced insulation reduced below values specified in clause 29 as a result of wear	ates assisted assisted as	N
# MANUTER	Neither clearances nor creepage distances between live parts and accessible parts reduced below values for supplementary insulation if wires, screws etc. become loose	STREET, STREET, STREET,	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	State Section States	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	A SHILLER SERVICE SHILL	N
	Ceramic material not tightly sintered, similar materials or beads alone not used as supplementary or reinforced insulation	ABUTTER MINITED ABUTTER	N
160 21	Ceramic and similar porous material in which	RELEASE SHEET IN	N

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	IEC 60335-2-80	A A ST. S	The state of the s
Clause	Requirement + Test	Result - Remark	Verdict
	heating conductors are embedded is considered to be basic insulation, not reinforced insulation	Salver of the control of the control	
10 3	Oxygen bomb test at 70 °C for 96 h and 16 h at room temperature	Article Military Abstract of	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
500	unearthed metal parts separated from live parts by basic insulation only	The the that	N
	Electrodes not used for heating liquids	Mary Free The	N
RETER SE	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		N
st and the	the reinforced insulation consists of at least 3 layers	- STAR BUTTER SHIFTED	N
all little a	For class II constructions, conductive liquids which are in contact with live parts, not in direct contact with reinforced insulation, unless	ALTER SHALLER SHALLER	N N
nite and	the reinforced insulation consists of at least 3 layers	the South of	N
	An air layer not used as basic or supplementary insulation in a double insulation system if likely to be bridged by leaking liquid	ANTIC MICH MICH	N
22.34	Shafts of operating knobs, handles, levers etc. not live, unless	Shift white white	Р
instant sin	the shaft is not accessible when the part is removed	strik skirik skritik s	N N
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	tek sanirisk sanirisk sani Al- de de	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		N
	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
State 1	Insulating material covering metal handles, levers and knobs withstand the electric strength test of	not not not	N <sup>+</sup>

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the street which when when whe	IEC 60335-2-80	J.

Clause	Requirement + Test	Result - Remark	Verdict
	16.3 for supplementary insulation	The state of the s	44.
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
	they are separated from live parts by double or reinforced insulation	the state state	, 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	Militate Mariates Mariates	N
المو أأثناء	the capacitors comply with 22.42	State Title Willer II	N
22.38	Capacitors not connected between the contacts of a thermal cut-out	or solve solve sol	Р
22.39	Lamp holders used only for the connection of lamps	18 18 20 A B B	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		Р
TER SERVICES	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 N
22.41	No components, other than lamps, containing mercury	Self assert assert as	P P
22.42	Protective impedance consisting of at least two separate components	at sat sate si	N
er greet	Values specified in 8.1.4 not exceeded if any one of the components are short-circuited or open-circuited	- with still strift	N
3835 C	Resistors checked by the test of 14.1 a) in IEC 60065	the title state	N
STATE OF	Capacitors checked by the tests for class Y capacitors in IEC 60384-14	At At At	, N
22.43	Appliances adjustable for different voltages, accidental changing of the setting of the voltage unlikely to occur		N
22.44	Appliances not having an enclosure that is shaped or decorated like a toy	the state state	P
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	All The State	N

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100	IEC 60335-2-80	all all
Clause	Requirement + Test Result - Remark	Verdict
100	external force applied to the enclosure	-
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	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
ASSECTION S	These requirements are not applicable to software used for functional purpose or compliance with clause 11	N
22.47	Appliances connected to the water mains withstand the water pressure expected in normal use	N
ign. Mag.	No leakage from any part, including any inlet water hose	N
22.48	Appliances connected to the water mains constructed to prevent backsiphonage of non-potable water	N
22.49	For remote operation, the duration of operation is to be set before the appliance can be started, unless	N
STEEL SANS	the appliance switches off automatically or can operate continuously without hazard	N
22.50	Controls incorporated in the appliance take priority over controls actuated by remote operation	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	N at
No. of Contract	There is a visual indication showing that the appliance is adjusted for remote operation	N
Telegraphy and the	These requirements not necessary on appliances that can operate as follows, without giving rise to a hazard:	
	- continuously, or	N
	- automatically, or	N
25	- remotely	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	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	N
ariteith at	the cover of their compartment can only be opened after at least two independent movements have	N

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	IEC 60335-2-80	A ST ST ST	
Clause	Requirement + Test	Result - Remark	Verdict
-	been applied simultaneously		All the Contract of the Contra
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:	STEEL SOUTH SOUTH	Р
t st	The requirement concerning position does not preclude use of a push on push off switch		N
400	An indication when the device has been operated is given by:	WHITE MILLS SHIP	Р
Sec. 1	tactile feedback from the actuator or from the appliance, or	Million State of Stat	N
. J. C.	- reduction in heat output; or	at at at	N
	- audible and visible feedback	or the the or	Р
22.56	Detachable power supply part provided with the part of class III construction	it incited ancies and	N
22.57	The properties of non-metallic materials do not degrade from exposure to UV-C radiation, as specified in Annex T	STATES SALLES WHILE	N
all the sale	This requirement does not apply to glass, ceramics or similar materials	William Striker Strike.	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 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)	STEEL MALLEY SHALLEY OF	N
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)	est general government	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)		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)	A SECTION SECTION SECTION	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	ation with antick	N

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	IEC 60335-2-80	1	
Clause	Requirement + Test	Result - Remark	Verdict
and a	mm in case of the suspension system failure. An example of this construction is shown in Figure 105. (IEC 60335-2-80)		35°04
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	April 1971	J
23.1	Wireways smooth and free from sharp edges	Sept. Sept. Sept.	Р
£ 5°	Wires protected against contact with burrs, cooling fins etc.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Р
+ 2.5°	Wire holes in metal well-rounded or provided with bushings		N
all of	Wiring effectively prevented from coming into contact with moving parts	STATE STATE STATE	Р
23.2	Beads etc. on live wires cannot change their position, and are not resting on sharp edges	BUTTER SHELLER SHELLER SHELLER	N
NITED SHIP	Beads inside flexible metal conduits contained within an insulating sleeve	all project south	N
23.3	Electrical connections and internal conductors movable relatively to each other not exposed to undue stress	White while and	Р
September 1	Flexible metallic tubes not causing damage to insulation of conductors	SHILLER WHILLER BELLEVE WHILL	N
-51 P	Open-coil springs not used	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Р
	Adequate insulating lining provided inside a coiled spring, the turns of which touch one another	a property	N
er Mariter Mariter	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)	THE SEPTEMBER OF STREET	P
	100 flexings for conductors flexed during user maintenance	a to the state	N
	Electric strength test of 16.3, 1000 V between live parts and accessible metal parts		Р
4/2	Not more than 10% of the strands of any conductor broken, and	The state of the s	Р
2000	not more than 30% for wiring supplying circuits that consume no more than 15W	Marine Alberta Marine Alberta	Р
23.4	Bare internal wiring sufficiently rigid and fixed	No bare internal wiring used	N

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d d	JEO 20205 2 22		10
IEC 60335-2-80			42, 74,
Clause	Requirement + Test	Result - Remark	Verdict
23.5	The insulation of internal wiring subjected to the supply mains voltage withstanding the electrical stress likely to occur in normal use		Р
Steph Solver	Basic insulation electrically equivalent to the basic insulation of cords complying with IEC 60227 or IEC 60245, or	The state and the	N
	no breakdown when a voltage of 2000 V is applied for 15 min between the conductor and metal foil wrapped around the insulation	THE THE MALTER SHITTER OF	P
Series :	For class II construction, the requirements for supplementary insulation and reinforced insulation apply,	Martine article article arti	N
grid gill Start gill	except that the sheath of a cord complying with IEC 60227 or IEC 60245 may provide supplementary insulation.		N
e en Se est	A single layer of internal wiring insulation does not provide reinforced insulation		N
23.6	Sleeving used as supplementary insulation on internal wiring retained in position by clamping at both ends, or	SANCTER SANCTE SANCTE SAN	N
All I	be such that it can only be removed by breaking or cutting		N
23.7	The colour combination green/yellow only used for earthing conductors		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, unless	SHIFT WHITE BRITISH WAS	P
15 TO 10	the contact pressure is provided by spring terminals	18 18 18 18 18 18 18 18 18 18 18 18 18 1	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)	et series series series.	N
24	COMPONENTS		<u> </u>
24.1	Components comply with safety requirements in relevant IEC standards	ALTER ANTICK ANTICK	Р
, et-	List of components:	(see appended table)	Р
in in	Motors not required to comply with IEC 60034-1, they are tested as part of the appliance	The state of the state of	Р
3 340	Relays tested as part of the appliance, or	the side sails of	N
t great	alternatively acc. to IEC 60730-1, and meeting the additional requirements in IEC 60335-1	the set set as	N
ghtirek si	The requirements of Clause 29 apply between live parts of components and accessible parts of the appliance	STORE WITHER SHITTER SHITTE	P

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IEC 60335-2-80			
Clause	Requirement + Test	Result - Remark	Verdict
and the sale	Components can comply with the requirements for clearances and creepage distances for functional insulation in the relevant component standard		Р
tek yeri	30.2 of this standard apply to parts of non-metallic material in components including parts of non-metallic material supporting current-carrying connections	The services arrives and	Р
ABRITIS A	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	SHIP STEEL SHIP	P
	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		P
	If these conditions are not satisfied, the component is tested as part of the appliance.	A A	P
SAP SPATER	Power electronic converter circuits not required to comply with IEC 62477-1, they are tested as part of the appliance	The The William	N
Strike Shirt Shirt And	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		Tree P
agratical.	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 in 24.1.1 to 24.1.9	ABUTE AUTO SELECT	P SALTER
nur <sup>es</sup> ur	Components not tested and found to comply with relevant IEC standard and components not marked or not used in accordance with its marking, tested under the conditions occurring in the appliance	STEEL MATERIAL SPATISTS OF	Р
S STATES	Lampholders and starterholders that have not being tested and found to comply with the relevant IEC standard, tested as a part of the appliance and additionally according to the gauging and interchangeability requirements of the relevant IEC standard	Particle Street State	N
STORE AND	No additional tests specified for nationally standardized plugs such as those detailed in IEC/TR 60083 or connectors complying with the standard sheets of IEC 60320-1 and IEC 60309	and agricult and	N
24.1.1	Capacitors likely to be permanently subjected to the supply voltage and used for radio interference suppression or for voltage dividing, comply with IEC 60384-14	A SECTION SECTION SECTION	N
- A	If the capacitors have to be tested, they are tested according to Annex F	The the the	N

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y and	IEC 60335	-2-80		y 11
Clause	Requirement + Test	342	Result - Remark	Verdict
24.1.2	Transformers in associated switch mode power supplies comply with Annex BB of IEC 61558-2-16			N
11 11	Safety isolating transformers comply with IE 61558-2-6	EC	Hiller Aftick Aftick Have	N
ALC:	If they have to be tested, they are tested ac to Annex G	cording	THE STREET STREET STREET	N
24.1.3	Switches comply with IEC 61058-1, the number of cycles of operation being at least 10 000		· COLUMN SECTION SECTION SECTION	N
SNITTED S	If they have to be tested, they are tested ac to Annex H	cording	atrice street spirite spirite	N
State St	If the switch operates a relay or contactor, t complete switching system is subjected to t		THE STATE STATE STATES	N
	If the switch only operates a motor staring recomplying with IEC 60730-2-10 with the nurcycles of a least 10 000 as specified, the conswitching system need not be tested	mber of	the specified appropriate specified and	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	414
No.	- thermostats:	10 000	Not the Set Set	N
	- temperature limiters:	1 000	the file of the same	N
	- self-resetting thermal cut-outs:	300	# 1/50 50°.	N
4 55	- voltage maintained non-self-resetting thermal cut-outs:	1 000		N
	- other non-self-resetting thermal cut-outs:	30	They They the the	N
550	- timers:	3 000	A 15 50 50	N
	- energy regulators:	10 000	They have not been	N
	The number of cycles for controls operating during clause 11 need not be declared, if the appliance meets the requirements of this standard when they are short-circuited			N
e greet	Thermal motor protectors are tested in combination with their motor under the conditions specified in Annex D		N	
SPALICE A	For water valves containing live parts and that are 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			N
	Thermal cut-outs of the capillary type comp the requirements for type 2.K controls in IEG 60730-2-9		de andrede andrede andrede and	N
24.1.5	Appliance couplers comply with IEC 60320-	-1	in the left of	N
STOP I	However, for class II appliances classified higher than IPX0, the appliance couplers comply with IEC 60320-2-3		the tip tip tip	N

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IEC 60335-2-80				
Clause	Requirement + Test	Result - Remark	Verdict	
	Interconnection couplers comply with IEC 60320-2-2	String String String	N	
24.1.6	Small lamp holders similar to E10 lampholders comply with IEC 60238, the requirements for E10 lampholders being applicable	Article Strict Strict of	N	
24.1.7	For remote operation of the appliance via a telecommunication network, the relevant standard for the telecommunication interface circuitry in the appliance is IEC 62151	Service Services Services	N	
24.1.8	The relevant standard for thermal links is IEC 60691	ANTITÉ SELLES SENTES	N N	
hrizege 141	Thermal links not complying with IEC 60691 are considered to be an intentionally weak part for the purposes of Clause 19	The Allerian Allerian of	N A	
24.1.9	Contactors and relays, other than motor starting relays, tested as part of the appliance	er militer andress and	N	
e santara Santara	They are also tested in accordance with Clause 17 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	THE THE WHITE	N. S.	
24.2	Appliances not fitted with:	The first of the second		
NITED SING	- switches, automatic controls or power supplies in flexible cords	att of parties are	P	
	- devices causing the protective device in the fixed wiring to operate in the event of a fault in the appliance	Maritin Shrink Mariti	* P.5	
Stage .	- thermal cut-outs that can be reset by soldering, unless	Marie Andrew Antire	Р	
15 m	the solder has a melding point of at least 230 °C	10 10 10th	N	
en er Gelde seld	Switches or automatic controls in flexible cords are allowed for appliances not exceeding 25 W. (IEC 60335-2-80)	ar str str s	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	SANTER SANTER SANTER	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	AND THE STREET	N	
arijidh si	Voltage across capacitors in series with a motor winding does not exceed 1.1 times rated voltage,	Lat the the	N N	



	IEC 60335-2-80		
Clause	Requirement + Test	Result - Remark	Verdic
	when the appliance is supplied at 1.1 times rated voltage under minimum load	And the state of the state of	
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	garan garan garan gara	N
et salah	In addition, the motors comply with the requirements of Annex I	the set with	N
24.7	Detachable hose-sets for connection of appliances to the water mains comply with IEC 61770	and the same	N
1000	They are supplied with the appliance	Mary Mary The Style	N
NOTE SIL	Appliances intended to be permanently connected to the water mains not connected by a detachable hose-set	STOR SHILLING SHILLING SHILL	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	er sprice sprice sprice	N N
d	One or more of the following conditions are to be me	et:	de de
AL S	- the capacitors are of class S2 or S3 according to IEC 60252-1	HELLE SHIP SHIP SHIP	N
history selection	- the capacitors are housed within a metallic or ceramic enclosure	all finish and	N
	- the distance of separation of the outer surface to adjacent non-metallic parts exceeds 50 mm	Marine Militar Marine	N
September 1	- adjacent non-metallic parts within 50 mm withstand the needle-flame test of Annex E	still still spites a	N
andrest of	- adjacent non-metallic parts within 50 mm classified as at least V-1 according to IEC 60695-11-10	inter antitle antitle and	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)	the state of the state of the	N
25	SUPPLY CONNECTION AND EXTERNAL FLEXIBL	E CORDS	n in
25.1	Appliance not intended for permanent connection to connection to the supply:	fixed wiring, means for	LTER SINSTER
nited and	- 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
1000	- pins for insertion into socket-outlets	The state of the state of	N
25.2	Appliance not provided with more than one means of connection to the supply mains	A 14 15 1	Р

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in The	IEC 60335-2-80			
Clause	Requirement + Test	Result - Remark	Verdict	
	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	Service Services Services Services	N	
25.3	Appliance intended to be permanently connected to of the following means for connection to the supply n			
310	- a set of terminals allowing the connection of a flexible cord	SHILLS MILLS MILLS AND	N	
N. S. S. S.	- a fitted supply cord	and the state of the	N	
	- a set of supply leads accommodated in a suitable compartment		N	
r v T <sup>eft</sup> aprili Left	- 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	er santrer santrer santrer se	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		N	
et sartifi sartifi	For a fixed appliance constructed so that parts can be removed to facilitate easy installation, this 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		N	
25.4	Cable and conduit entries, rated current of appliance not exceeding 16 A, dimension according to table 10 (mm):	After After After After	N	
	Introduction of conduit or cable does not reduce clearances or creepage distances below values specified in clause 29	the states white shirts and	N September 1	
25.5	Method for assembling the supply cord to the appliar	nce:	# E	
41	- type X attachment	There was the August August	N	
S	- type Y attachment	a p p d	N	
	- type Z attachment is allowed for portable fans (IEC 60335-2-80)	AND THE SECOND	N	
Sir yar Gir yar	Type X attachment, other than those with a specially prepared cord, not used for flat twin tinsel cords		N	
Secretary of the second	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	STATE STATES STATES STATES	N	
25.6	Plugs fitted with only one flexible cord	At the time the	N	



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	IEC 60335-2-80	* # # # 1	50 13
Clause	Requirement + Test	Result - Remark	Verdict
05.7		64.64	
25.7	Supply cords, other than for class III appliances, being	ng one of the following types:	-
, Jan	- rubber sheathed (at least 60245 IEC 53)		N
	- polychloroprene sheathed (at least 60245 IEC 57)		N
Ster Ster	<ul> <li>polyvinyl chloride sheathed. Not used if they are lik a temperature rise exceeding 75 K during the test of</li> </ul>		12.
28 25 18 28 25 18	<ul> <li>light polyvinyl chloride sheathed cord (60227 IEC 52), for appliances not exceeding 3 kg</li> </ul>	the second section and the second	N
	<ul> <li>ordinary polyvinyl chloride sheathed cord (60227 IEC 53), for other appliances</li> </ul>	Martie Berlief Shrief Abrile	N
	- heat resistant polyvinyl chloride sheathed. Not used than specially prepared cords	d for type X attachment other	nut <u>e.</u> 4
TES UNIVE	heat-resistant light polyvinyl chloride sheathed cord (60227 IEC 56), for appliances not exceeding 3 kg	or market about the about the	N
	<ul> <li>heat-resistant polyvinyl chloride sheathed cord (60227 IEC 57), for other appliances</li> </ul>	STATES STATES SALLES STATES	N
3500	- halogen-free, low smoke, thermoplastic insulated a	and sheathed	52
	<ul> <li>- light duty halogen-free low smoke flexible cable (62821 IEC 101) for circular cable and (62821 IEC 101f) for flat cable</li> </ul>	The state of the state of	N
	<ul> <li>Ordinary duty halogen-free low smoke flexible cable (62821 IEC 102) for circular cable and (62821 IEC 102f) for flat cable</li> </ul>	THE WALL SHOW THE SHOW	N
September 1	Supply cords for class III appliances adequately insulated	stret stilled stricted stricts	N
SPECTED SP	Test with 500 V for 2 min for supply cords of class III appliances that contain live parts	The state with the second	N
25.8	Nominal cross-sectional area of supply cords not less than table 11; rated current (A); cross-sectional area (mm²):	pet stratect stratect stratect as	N
25.9	Supply cords not in contact with sharp points or edges	- street section section section	N
25.10	Supply cord of class I appliances have a green/yellow core for earthing	the side asset mixed	N
get b	In multi-phase appliances, the colour of the neutral conductor of the supply cord is blue.	a a state	N
	Where additional neutral conductors are provided in	the supply cord:	
in the same	- other colours may be used for these additional neutral conductors;	A MILITER MEDITER MEDITER MA	N
A STATE OF	- all of the neutral conductors and line conductors are identified by marking using the alpha numeric notation specified in IEC 60445	AND THE MANTER WALLEST AND TO	N
1500	- the supply cord is fitted to the appliance	A St. St. St.	N



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	IEC 60335-2-80			
Clause	Requirement + Test	Result - Remark	Verdic	
25.11	Conductors of supply cords not consolidated by soldering where they are subject to contact pressure, unless		N	
4	the contact pressure is provided by spring terminals		N	
25.12	Insulation of the supply cord not damaged when moulding the cord to part of the enclosure	tor militar shirts wh	N	
25.13	Inlet openings so constructed as to prevent damage to the supply cord	t and the artists artists	N	
ggarden :	If it is not evident that the supply cord can be introduced without risk of damage, a non-detachable lining or bushing complying with 29.3 for supplementary insulation provided	Militate partiest partition	N	
er ser State service	If unsheathed supply cord, a similar additional bushing or lining is required, unless the appliance is	is gath star si	N	
	class 0, or	30 30 1	N	
4150	a class III appliance not containing live parts	· John Star Star	N	
25.14	Supply cords moved while in operation adequately protected against excessive flexing		N	
	Flexing test, as described:			
See The	- applied force (N):		N	
	- number of flexings		N	
. Lot	The test does not result in:	1 1 1	A 50	
-3800 - 1 125 <sup>128</sup> - 18	- short-circuit between the conductors, such that the current exceeds a value of twice the rated current	Aller Aller Aller	N	
	- breakage of more than 10% of the strands of any conductor	of the state of	N	
20	- separation of the conductor from its terminal		N	
* 350	- loosening of any cord guard	- 10 Let 50	N	
-21	- damage to the cord or the cord guard	They allow the	N	
and the a	- broken strands piercing the insulation and becoming accessible	atitish antitish sitiitish.	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	
- Secretary	The cord cannot be pushed into the appliance to such an extent that the cord or internal parts of the appliance can be damaged	ARTICLE RESERVE ARTICLES	N	
50	Pull and torque test of supply cord:	A ST	5 T	

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IEC 60335-2-80			
Clause	Requirement + Test	Result - Remark	Verdict
200	- fixed appliances: pull 100 N; torque (not on automatic cord reel) (Nm):	and any and	N
per si Side sid	- other appliances: values shown in table 12: mass (kg); pull (N); torque (not on automatic cord reel) (Nm):	gitter spritt spritt spri	N
+ 10	Cord not damaged and max. 2 mm displacement of the cord		N
25.16	Cord anchorages for type X attachments constructed	d and located so that:	41c. m.
100	- replacement of the cord is easily possible	4 A A	N
	- it is clear how the relief from strain and the prevention of twisting are obtained		N
N 4	- they are suitable for different types of supply cord	The Willer Miles out	N
edd <sub>am</sub> id	- cord cannot touch the clamping screws of cord anchorage if these screws are accessible, unless	et total state state	N
. STEP	they are separated from accessible metal parts by supplementary insulation		N
	- the cord is not clamped by a metal screw which bears directly on the cord		N
n s	- at least one part of the cord anchorage securely fixed to the appliance, unless	The state of the state	N
y 40°	it is part of a specially prepared cord		N
al and the	- screws which have to be operated when replacing the cord do not fix any other component, unless		N
SS ST	the appliance becomes inoperative or incomplete or the parts cannot be removed without a tool	at the state	N
	- if labyrinths can be bypassed the test of 25.15 is nevertheless withstood		N
ar ya K <sup>eb</sup> yasii	- for class 0, 0I and I appliances they are of insulating material or are provided with an insulating lining, unless	ath of the state at	N
الله و	failure of the insulation of the cord does not make accessible metal parts live	- p & st	N
A. S.	- for class II appliances they are of insulating material, or	all the same	N
et d	if of metal, they are insulated from accessible metal parts by supplementary insulation	alater again your sa	N
er yn St	After the test of 25.15, under the conditions specified, the conductors have not moved by more than 1 mm in the terminals	atter gentre gent gent	N
25.17	Adequate cord anchorages for type Y and Z attachment, test with the cord supplied with the appliance	The State State	N
25.18	Cord anchorages only accessible with the aid of a tool, or		N_



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	IEC 60335-2-80	to the the terms of the terms o	100
Clause	Requirement + Test	Result - Remark	Verdict
	Constructed so that the cord can only be fitted with the aid of a tool	STATE STATE OF STATE OF	N
25.19	Type X attachment, glands not used as cord anchorage in portable appliances	Witness William States States	N
Sec. Sec.	Tying the cord into a knot or tying the cord with string not used	Sept Sept. The Sept. Sep	N
25.20	The conductors of the supply cord for type Y and Z attachment insulated from accessible metal parts	· MILITER MILITER MILITER	N
25.21	Space for supply cord for type X attachment or for co-constructed:	onnection of fixed wiring	NETER WITH
grittige sig	- to permit checking of conductors with respect to correct positioning and connection before fitting any cover	ates and the altered whi	N
	- so there is no risk of damage to the conductors or their insulation when fitting the cover	er militar militar satiral	N
S STATES STATES	- for portable appliances, so that the uninsulated end of a conductor, if it becomes free from the terminal, prevented from contact with accessible metal parts	SHEETER WHITE SHEETER	N
	2 N test to the conductor for portable appliances; no contact with accessible metal parts	the standard standard	N
25.22	Appliance inlets:	18 / 18 3 B	- w
et gerre	- live parts not accessible during insertion or removal		N
- Sept	Requirement not applicable to appliance inlets complying with IEC 60320-1	the state of	N
	- connector can be inserted without difficulty	They then the a	N
J. 10	- the appliance is not supported by the connector	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N
	- not for cold conditions if temp. rise of external metal parts exceeds 75 K during clause 11, unless	a de de de	N
- 24	the supply cord is unlikely to touch such metal parts	and the same	N
25.23	Interconnection cords comply with the requirements for the supply cord, except that:	- INSTEAD AND THE ARREST .	N
-318 <sup>1</sup> 15 <sup>1</sup>	the cross-sectional area of the conductors is determined on the basis of the maximum current during clause 11	atticipe applicate applicate and	N
	- the thickness of the insulation may be reduced	state of the state of	N
stick Sphilitic	- 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
.035	If necessary, electric strength test of 16.3	the contraction	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 still stille sh	N



<del>24 - 1</del>			
IEC 60335-2-80			
Clause	Requirement + Test	Result - Remark	Verdic
25.25	Dimensions of pins that are inserted into socket- outlets compatible with the dimensions of the relevant socket-outlet.		N
State State	Dimensions of pins and engagement face in accordance with the dimensions of the relevant plug in IEC/TR 60083	the state water	N
26	TERMINALS FOR EXTERNAL CONDUCTORS		
26.1	Appliances provided with terminals or equally effective devices for connection of external conductors	The the the	P
	Terminals only accessible after removal of a non-detachable cover, except	all the set	Р
, 3°	for class III appliances that do not contain live parts	The state of the sole	N
568 <sub>AB</sub> ST 8 ASTOR	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		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 AND AND AND	N
John Jak	the connections are soldered	7 / St. 13	N
al gra	Screws and nuts not used to fix any other component, except		N
· September	internal conductors, if so arranged that they are unlikely to be displaced when fitting the supply conductors	the the state	N
MITTER ST	If soldered connections used, the conductor so positioned or fixed that reliance is not placed on soldering alone, unless	State Water Shirts Sh	N.
ilik yaut Kantilik	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	PARTITE SERVICE SERVICE	A STATE OF THE STA
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:	
100	- the terminal does not become loose	the state of the state	N
	- internal wiring is not subjected to stress		N
C. C. C.	- neither clearances nor creepage distances are reduced below the values in clause 29	ARTICLE MATTER ARTICLE	N
Terre of	Compliance checked by inspection and by the test of subclause 9.6 of IEC 60999-1, the torque applied	THE MATTER MATTER OF	N

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	IEC 60335-2-80		The state of
Clause	Requirement + Test	Result - Remark	Verdic
	being equal to two-thirds of the torque specified (Nm)	And the state of t	All
11 J	No deep or sharp indentations of the conductors	de de la	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
	so constructed or placed that conductors prevented from slipping out when clamping screws or nuts are tightened	STATE STATES STATES	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
-4,	Stranded conductor test, 8 mm insulation removed	and the same same	N
e gritish	No contact between live parts and accessible metal parts and,	. Alter delich delich	N
	for class II constructions, between live parts and metal parts separated from accessible metal parts by supplementary insulation only	ALTER SHIFTER SHIFTER S	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 table 13; rated current (A); nominal cross-sectional area (mm²)		N
September 1	If a specially prepared cord is used, terminals need only be suitable for that cord	the state section	N
26.7	Terminals for type X attachment, except in class III appliances not containing live parts, accessible after removal of a cover or part of the enclosure	The allered allered a	N
26.8	Terminals for the connection of fixed wiring, including the earthing terminal, located close to each other	Per Harries all the Art	N
26.9	Terminals of the pillar type constructed and located as specified	SHITTER WHITE SHITE	N
26.10	Terminals with screw clamping and screwless terminals not used for flat twin tinsel cords, unless	ALTER ANTER SELECT	N
NATE OF BERN	conductors ends fitted with means suitable for screw terminals	the state state is	N
d d	Pull test of 5 N to the connection		_ N
26.11	For type Y and Z attachment, soldered, welded, crimped or similar connections may be used	SALTER SALTE SALE	N
garite Jek	For Class II appliances, the conductor so positioned or fixed that reliance is not placed on soldering, welding or crimping alone		N
The sale	If soldering, welding or crimping alone used,	STORY STATE OF	N

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IEC 60335-2-80			The state of the s
Clause	Requirement + Test	Result - Remark	Verdict
	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 free		
27	PROVISION FOR EARTHING		
27.1	Accessible metal parts of Class 0I and I appliances permanently and reliably connected to an earthing terminal or earthing contact of the appliance inlet	STATES STATES STATE	N
Service :	Earthing terminals and earthing contacts not connected to the neutral terminal	MITTER STATES SHITTER	N
reside at	Class 0, II and III appliances have no provision for protective earthing	Class III	P
5 <sup>68</sup> 55	Class II appliances and class III appliances can incorporate an earth for functional purposes		N
	Safety extra-low voltage circuits not earthed, unless	The The The	N
1000	protective extra-low voltage circuits	· Star Star Star	N
27.2	Clamping means of earthing terminals adequately secured against accidental loosening		N
an -	Terminals for the connection of external equipotential bonding conductors allow connection of conductors of 2.5 to 6 mm², and		N
ed estre	- do not provide earthing continuity between different parts of the appliance, and		N
e get	- conductors cannot be loosened without the aid of a tool	And the state	N
artiga of	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes	aller aller action	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	pet garatus garatus gara - net sate	N
	For appliances with supply cords, current-carrying conductors become taut before earthing conductor, if the cord slips out of the cord anchorage	and and are	N
IPATTER SAR	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes	The and the property as	N
	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 ceases to operate due to live and neutral brush wear. (IEC 60335-2-80)	A STATE STATE STATE	N
27.4	No risk of corrosion resulting from contact between parts of the earthing terminal and the copper of the	REFERENCES SHOUTH A	N

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7. J. J.	IEC 60335-2-80		
Clause	Requirement + Test	Result - Remark	Verdict
300	earthing conductor or other metal		Allega Allega
gand <sup>erde</sup> sa	Parts providing earthing continuity, other than parts of a metal frame or enclosure, have adequate resistance to corrosion	ALTER SHILLER SHILLER	N
	If of steel, these parts provided with an electroplated coating with a thickness at least 5 μm	fet <sub>ser</sub> ifet skrifet skr	N
# 3855 <sup>69</sup> sk	Adequate protection against rusting of parts of coated or uncoated steel, only intended to provide or transmit contact pressure	and and and	N
agentin i	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		N N
des Proje	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes	ate and after a	N
27.5	Low resistance of connection between earthing terminal and earthed metal parts	and the second	N
AN ANGELIEB ANGELIEB ANGELIEB	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
	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes		N
, John	Resistance not exceeding 0.1 $\Omega$ at the specified low-resistance test ( $\Omega$ )		N
27.6	The printed conductors of printed circuit boards not used to provide earthing continuity in hand-held appliances.	Although the State	N
	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	the think about the	N TO AN
38 C	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes	SPRITTER SPRITTER SPRITTER	N
28	SCREWS AND CONNECTIONS	and the second of the con-	1 2 2 -
28.1	Fixings, electrical connections and connections providing earthing continuity withstand mechanical stresses	THE WALLES WILLIAM SE	LITTE NO.
	Screws not of soft metal liable to creep, such as zinc or aluminium		Р
- Strategy	Diameter of screws of insulating material min. 3 mm	active active applicat	N. T.
STORE S	Screws of insulating material not used for any electrical connections or connections providing	A St St	N-

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Clause	Requirement + Test	Result - Remark	Verdic
Clause	Requirement + Test	Tresuit - Itemark	Verdic
200	earthing continuity	They have the	
gh <sup>eolat</sup> gd	Screws used for electrical connections or connections providing earthing continuity screwed into metal	Miller affiliate affiliate affiliate	N
	Screws not of insulating material if their replacement by a metal screw can impair supplementary or reinforced insulation	See Martin Strang Martin A	N
ABOUT S	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	ARTICLE ARTICLE ARTICLE ARTICLE	N
	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	et gestet gestet gestet gestet gestet.	N
aritish s	there is resiliency in the metallic parts to compensate for shrinkage or distortion of the insulating material		N
STOR STE	This requirement does not apply to electrical connector which:	tions in circuits of appliances	<u> الاستخد</u> ابي
	30.2.2 is applicable and that carry a current not exceeding 0.5 A		N
e get	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	attir yeti attir attiri	N
	Thread-cutting (self-tapping) screws and thread rolling screws only used for electrical connections if they generate a full form standard machine screw thread	the state of the state of the state of	N
	Thread-cutting (self-tapping) screws not used if they are likely to be operated by the user or installer	AND THE SHOP SHOW SHOW	N
1900 - 1 11 <sup>10</sup> - 10	Thread-cutting, thread rolling and space threaded so connections providing earthing continuity provided it connection:		oll Nichter
	- in normal use,		N
11/1/2	- during user maintenance,	the state with the	N
- Mark	- when replacing a supply cord having a type X attachment, or	all the state state	N
4	- during installation	The the the the	N
artice. A	At least two screws being used for each connection providing earthing continuity, unless	STEEL WITH WHITE WHITE	N

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	IEC 60335-2-80	d d 5° 5°	10° 10°
Clause	Requirement + Test	Result - Remark	Verdict
	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	ATTER SECTION SECTION SECTION	N
18 N. 18 18 18 18 18 18 18 18 18 18 18 18 18	This requirement does not apply to screws in the earthing circuit if at least two screws are used, or	· after after sectors	N
	if an alternative earthing circuit is provided		N
angan sa	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 SO	LID INSULATION	
e electric	Clearances, creepage distances and solid insulation withstand electrical stress	Marie Auri	Р
SE SE	For coatings used on printed circuits boards to protect the microenvironment (Type 1) or to provide basic insulation (Type 2), Annex J applies:	THE THE ABOUT ABOUT A	N
	The microenvironment is pollution degree 1 under type 1 protection	Mary Ages Ages	N
	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		N
	These values apply to functional, basic, supplementary and reinforced insulation:	the the state	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)	Р
ar The	for basic insulation and functional insulation they comply with the impulse voltage test of clause 14	the British Blich British	N
Marited Marited	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		anti aP
grifich geri Fich grif	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	ting spring spring spring	N
-31	Impulse voltage test is not applicable:	Aller Aller	-
Septem .	- when the microenvironment is pollution degree 3, or	States and the about the	Р
NET CHE	- for basic insulation of class 0 and class 01 appliances, or	the title with the	N

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	IEC 60335-2-80		112 AT
Clause	Requirement + Test	Result - Remark	Verdict
All Control	- to appliances intended for use at altitudes exceeding 2 000 m		N
The th	Appliances are in overvoltage category II	Charles Willer Ships Alex	Р
STORE STORE	A force of 2 N is applied to bare conductors, other than heating elements	the state state with	- P
a di	A force of 30 N is applied to accessible surfaces	4	Р
29.1.1	Clearances of basic insulation withstand the overvoltages, taking into account the rated impulse voltage	Martin Martin Martin	P
200	The values of table 16 or the impulse voltage test of clause 14 are applicable:	(see appended table)	Р
56459	Clearance at the terminals of tubular sheathed heating elements may be reduced to 1.0 mm if the microenvironment is pollution degree 1		N
t de	Lacquered conductors of windings considered to be bare conductors	and the sale	Р
29.1.2	Clearances of supplementary insulation not less than those specified for basic insulation in table 16	(see appended table)	N
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
	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 values determined from:		ST 55.
in ch	- table 16 based on the rated impulse voltage:	(see appended table)	Р
iree Jacob	- table F.7a in IEC 60664-1, frequency not exceeding 30 kHz	THE MATERIAL SHALLES	N
	- clause 4 of IEC 60664-4, frequency exceeding 30 kHz	· sittle seiter seiter	N
51855E84- 2	If values of table 16 are largest, the impulse voltage test of clause 14 may be applied instead, unless	the the state of	N
	the microenvironment is pollution degree 3, or	the the state of	Р
bree the	the distances can be affected by wear, distortion, movement of the parts or during assembly	the shift white shift	Р
SE SERVICE SERVICE SERVICE	However, clearances are not specified if the appliance complies with clause 19 with the functional insulation short-circuited		N
200	Lacquered conductors of windings considered to be bare conductors	All The All Co. All Co.	Р
	However, clearances at crossover points are not	A ST ST ST	Р

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IEC 60335-2-80			
Clause	Requirement + Test	Result - Remark	Verdic
200	measured	The state of the s	
N CONTRACTOR	Clearance between surfaces of PTC heating elements may be reduced to 1mm	THE STREET STREET SHIPTER	N
29.1.5	Appliances having higher working voltages than rate insulation are the largest values determined from:	ed voltage, clearances for basic	- <sup>(</sup>
	- table 16 based on the rated impulse voltage :	(see appended table)	N
48.3	- table F.7a in IEC 60664-1, frequency not exceeding 30 kHz	Antite antite anti-	N
September 1	- clause 4 of IEC 60664-4, frequency exceeding 30 kHz	Marie Marie Marie	N
	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
t spiret spiret spiret	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		N
STANGE SANG M. M. M.	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	The state of the state of	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	SERVICE SECTION SECTIO	N
is <sup>lek</sup> and Ka	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	THE MENTER SHATTER MATTER AND	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
	Pollution degree 2 applies, unless		N
	- precautions taken to protect the insulation; pollution degree 1		N
, Alexander	- insulation subjected to conductive pollution; pollution degree 3	ANTICE MATTER MATTER SANT	Р
Santino Little	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)	All the state of the	Р

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IEC 60335-2-80			
Clause	Requirement + Test	Result - Remark	Verdict
	A force of 2 N is applied to bare conductors, other than heating elements	and and and	Р
1100 31	A force of 30 N is applied to accessible surfaces	Charles March Barrer	Р
Start Start Start	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	ter and a second	N
29.2.1	Creepage distances of basic insulation not less than specified in table 17:	(see appended table)	Р
agentin a gazenten agen	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
TEP SHIPE SHIPETER SHIPETER	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 least those specified for basic insulation in table 17, or	(see appended table)	N
عهابي أأفاد	Table 2 of IEC 60664-4, as applicable:		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 N
- 350	Table 2 of IEC 60664-4, as applicable:	1 1 1	N
29.2.4	Creepage distances of functional insulation not less than specified in table 18:	(see appended table)	Р
ites si ites sinci se sis	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
	Creepage distances may be reduced if the appliance complies with clause 19 with the functional insulation short-circuited	Aprille Aprille April	P
29.3	Supplementary and reinforced insulation have adequate thickness, or a sufficient number of layers, to withstand the electrical stresses	alter state with with	N
	Compliance checked:		
e alex	- by measurement, in accordance with 29.3.1, or	the state of the state.	N
L STAN	- by an electric strength test in accordance with 29.3.2, or	the state of	N
a Lifted	- for insulation, other than single layer internal wiring insulation, by an assessment of the thermal quality of the material combined with an electric	All the state of	N

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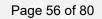
The state of	IEC 60335-2-80		at at
Clause	Requirement + Test	Result - Remark	Verdict
	strength test, in accordance with 29.3.3, and	Market Market Market W	400
aliander de I	for accessible parts of reinforced insulation consisting of a single layer, by measurement in accordance with 29.3.4, or	RESTOR AND THE SPREAD AND	N
	- 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		N
Sandara .	- 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	SHAFTER MELTER SHAFTER SH	N
29.3.1	Supplementary insulation have a thickness of at least 1 mm	LIEF WALLES SHILLS SHILL	N
Sept Shrift	Reinforced insulation have a thickness of at least 2 mm	er and the state of the state o	N
29.3.2	Each layer of material withstand the electric strength test of 16.3 for supplementary insulation	- Sight states applicable	N
SPIZE S	Supplementary insulation consist of at least 2 layers	the state with	N
	Reinforced insulation consist of at least 3 layers	W. Sh. Sh. A.	N
29.3.3	The insulation is subjected to the dry heat test Bb of IEC 60068-2-2, followed by	tille grader grader	N
64. WAL	the electric strength test of 16.3		N
	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	atter state states as	N
29.3.4	Thickness of accessible parts of reinforced insulation consisting of a single layer not less than specified in table 19:	STEE SECTION SECTION SECTION	N
30	RESISTANCE TO HEAT AND FIRE	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	, S - ,
30.1	External parts of non-metallic material,	Service All All	Р
	parts supporting live parts, and	a solo solo solo	N
3	parts of thermoplastic material providing supplementary or reinforced insulation	the state of	N
711 7	sufficiently resistant to heat	There was all the	Р
300	Ball-pressure test according to IEC 60695-10-2	as at the st	Р
State Spirite	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
Sanira Militar	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

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	IEC 60335-2-80		
Clause	Requirement + Test	Result - Remark	Verdict
garana garana garana	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):		N
30.2	Parts of non-metallic material resistant to ignition and spread of fire	THE STATES STATES SHALLES AN	Р
# 50	This requirement does not apply to:	2 A B B S	F-3
AND THE S	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		Р
KUTUK SIR SI	decorative trims, knobs and other parts unlikely to be ignited or to propagate flames that originate inside the appliance	STEP SHITTER SHITTER SHITTER S	Ρ
er akir	Compliance checked by the test of 30.2.1, and in addition:	Car Maritics Autification Subtract State	Р
	- for attended appliances, 30.2.2 applies	- A A ST ST	N
	- for unattended appliances, 30.2.3 applies	the the the	Р
and the same	For appliances for remote operation, 30.2.3 applies	the the state with	N
e Selektrik	For base material of printed circuit boards, 30.2.4 applies		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
- 1975 - 1975 - 1975	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	And the state with	N
	the material is classified at least HB40 according to IEC 60695-11-10	all the state of	N
	Parts for which the glow-wire test cannot be carried out need to meet the requirements in ISO 9772 for material classified HBF		N
30.2.2	Not applicable. (IEC 60335-2-80)		Р
30.2.3	Appliances operated while unattended, tested as specified in 30.2.3.1 and 30.2.3.2	White Militar Mair Mark	N
attacker a	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	ites anites anites anites a	N
48.5	parts of non-metallic material, other than small parts, within a distance of 3 mm,	A STREET STREET STREET STREET	N
S. C. Land	subjected to the glow-wire test of IEC 60695-2-11 with a test severity of 850 °C	(see appended table 30.2)	N
erices.	Glow-wire applied to an interposed shielding material, if relevant	THE STATE STATE STATES	N

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	IEC 60335-2-80	the time of the state of	y and
Clause	Requirement + Test	Result - Remark	Verdic
ALIENSE SEL	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	SANTE SANTE SANTE SANTE	N
30.2.3.2	Parts of non-metallic material supporting connections, and	the state with south	N
# 35 <sup>25</sup>	parts of non-metallic material within a distance of 3mm,	the state state with the	N
S. E. E. S.	subjected to the glow-wire test of IEC 60695-2-11 with appropriate severity level:	to to the fi	N
	- 750 °C, for connections carrying a current exceeding 0.2 A during normal operation	(see appended table 30.2)	N
. 4	- 650 °C, for other connections	The state of the state of	N
Sept Marile	Glow-wire applied to an interposed shielding material, if relevant	or with with spitch as	N
e Strike	However, the glow-wire test of 750 °C or 650 °C as on parts of material fulfilling both or either of the follows:		e surecti
No. of the Land	- a glow-wire ignition temperature according to IEC 60695-2-13 of at least:	The first state states	N
	775 °C, for connections carrying a current exceeding 0.2 A during normal operation		N
	675 °C, for other connections	- 1 Str. d	N
	- a glow-wire flammability index according to IEC 60695-2-12 of at least:	Marie Marie Abrille Abr	N
September 1	- 750 °C, for connections carrying a current exceeding 0.2 A during normal operation	STEET STITE SPITE SPITE	N
40	- 650 °C, for other connections	a state of	N
16 91	The glow-wire test is also not carried out on small pa	arts. These parts are to:	
THE SHOULD	- comprise material having a glow-wire ignition temperature of at least 775 °C or 675 °C as appropriate, or	THE WANTED SHILLS SHILLS AN	N
	- comprise material having a glow-wire flammability index of at least 750 °C or 650 °C as appropriate, or	THE REPORT OF THE PARTY	N
4	- comply with the needle-flame test of Annex E, or	THE SHEET SHEET SHEET	N
pictor apri sod apricol L pricod	- comprise material classified as V-0 or V-1 according to IEC 60695-11-10	THE MATTER SERVICES .	N
	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:	ne centre of the connection government carrying connections,	erek giri
Nation of	- 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	STEET WITH SELECT	N



	IEC 60335-2-80	at the the terms of	100
Clause	Requirement + Test	Result - Remark	Verdict
and the	- parts that comprised material having a glow-wire flammability index of at least 750 °C or 650 °C as appropriate, or		N
ingle salit	- small parts, that comprised material having a glow-wire flammability index of at least 750 °C or 650 °C as appropriate, or	THE MINISTER SHITTER SHITTER SH	N
	- small parts for which the needle-flame test of Annex E was applied, or	· STATE STATE SPATIAL SPAT	N
N. C. C. Carlot	- small parts for which a material classification of V- 0 or V-1 was applied	the the state with	N
	However, the consequential needle-flame test is no parts, including small parts, within the cylinder that a		500
d s	- parts having a glow-wire ignition temperature of at least 775 °C or 675 °C as appropriate, or	and the state of	N
الور الور الو	- parts comprising material classified as V-0 or V-1 according to IEC 60695-11-10, or	AND AND AND AND ARE	N
aller	- 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	ANTER ANTER MITTER MATTER	N
30.2.4	Base material of printed circuit boards subjected to the needle-flame test of Annex E	at Sala sala .	N
18 JUL	Test not applicable to conditions as specified:	Low-power circuits described in 19.11.1	P
31	RESISTANCE TO RUSTING	The The An in	
Jan Stern	Relevant ferrous parts adequately protected against rusting	Marine Marine Marine Marine	Р
32	RADIATION, TOXICITY AND SIMILAR HAZARDS	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<u></u>
	Appliance does not emit harmful radiation or present a toxic or similar hazard due to their operation in normal use	the title state of the	Р
A	ANNEX A (INFORMATIVE) ROUTINE TESTS	+ "At St St 2	# <u>-</u>
	Description of routine tests to be carried out by the manufacturer	the state of	N
В	ANNEX B (NORMATIVE) APPLIANCES POWERED BY RECHARGEABLE BARECHARGED IN THE APPLIANCE	ATTERIES THAT ARE	edi" <u>.</u> Nistis
	The following modifications to this standard are applicable for appliances powered by batteries that are recharged in the appliance	the state of the s	Р
L 15	Three forms of construction covered:	The state of	4 46
SERVICE S	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		N

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	IEC 60335-2-80			
Clause	Requirement + Test	Result - Remark	Verdict	
	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	
al and the	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		P	
3.1.9	Appliance operated under the following conditions:	The state of the s		
parties and	- the appliance, supplied by its fully charged battery, operated as specified in relevant part 2	STEEL SHITTEE SHITTEEL SI	Р	
Stage Shirt of	the battery is charged, the battery being initially discharged to such an extent that the appliance cannot operate	or animal animal and	Р	
STATES	-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		P P	
	- 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		N	
3.6.2	Part to be removed in order to discard the battery is not considered to be detachable	A Str. At	Р	
5.B.101	Appliances supplied from the supply mains tested as specified for motor-operated appliances	They have the	P	
7.1	Battery compartment for batteries intended to be replaced by the user, marked with battery voltage (V) and polarity of the terminals:	ather states of	N	
e spirit	The positive terminal indicated by symbol IEC 60417-5005 and the negative terminal by symbol IEC 60417-5006		N	
anater a	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	Shires against against	N	
es to	use only with <model designation=""> supply unit</model>	atter general general set	Р	
7.6	Additional symbols	it is the island is	Р	
7.12	The instructions give information regarding charging	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	P	
RITIGH AN	Instructions for appliances incorporating batteries intended to be replaced by the user include required information	And the state	N	

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IEC 60335-2-80				
Clause	Requirement + Test	Result - Remark	Verdict	
	Instructions for appliances containing non-user-replacements substance of the following:	aceable batteries state the		
aller all	This appliance contains batteries that are only replaceable by skilled persons	Richard Marine Marine	N	
in the	Instructions for appliances containing non-replaceat substance of the following:	ble batteries shall state the		
48.72	This appliance contains batteries that are non-replaceable	in antitute and the applicate and	Р	
	For appliances intending to be supplied from a detail purposes of recharging the battery, the type reference is stated along with the following:		and the	
para aki	WARNING: For the purposes of recharging the battery, only use the detachable supply unit provided with this appliance	ates and the states of	Р	
e de	If the symbol for detachable supply unit is used, its meaning is explained	Maritie Africa Maria Aria	Р	
7.15	Markings placed on the part of the appliance connected to the supply mains	STATES AND STATES STATES	Р	
Markey St	The type reference of the detachable supply unit is placed in close proximity to the symbol	The state states states	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	The state of the state of	P John Sill Sill Sill Sill Sill Sill Sill Sill	
- 100	If the appliance can be operated without batteries, double or reinforced insulation required	Specific april april april	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):	STEEL SHATCH SHATCH SHATCH	N	
ar Jar	If no limit specified, the temperature rise does not exceed 20 K; measured (K)	5.2K	Р	
19.1	Appliances subjected to tests of 19.B.101, 19.B.102 and 19.B.103	- SERVICE SERVICE SERVICE SERVICE	Р	
19.10	Not applicable	s 1 1 1 5	N	
19.B.101	Appliances supplied at rated voltage for 168 h, the battery being continually charged		Р	
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,		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	ARTICLE SECTION SECTION SERVICE	N	

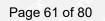
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get jet	IEC 60335-2-80	50 10
Clause	Requirement + Test Result - Remark	Verdict
19.13	The battery does not rupture or ignite	Р
21.B.101	Appliances having pins for insertion into socket- outlets have adequate mechanical strength	N
rent de la company	Part of the appliance incorporating the pins subjected to the free fall test, procedure 2, of IEC 60068-2-31, the number of falls being:	I STEEL SHE
et 500	- 100, if the mass of the part does not exceed 250 g (g):	N
	- 50, if the mass of the part exceeds 250 g:	N
Service 3	After the test, the requirements of 8.1, 15.1.1, 16.3 and clause 29 are met	N
22.3	Appliances having pins for insertion into socket- outlets tested as fully assembled as possible	N
25.13	An additional lining or bushing not required for interconnection cords in class III appliances or class III constructions operating at safety extra-low voltage not containing live parts	N
30.2	For parts of the appliance connected to the supply mains during the charging period, 30.2.3 applies	Р
aria et	For other parts, 30.2.2 applies	N
С	ANNEX C (NORMATIVE) AGEING TEST ON MOTORS	. 50 <del>1</del> -
ed apriled	Tests, as described, carried out when doubt with regard to the temperature classification of the insulation of a motor winding	N
4 1	Test conditions as specified	N
D	ANNEX D (NORMATIVE) THERMAL MOTOR PROTECTORS	4F.
ing in	Applicable to appliances having motors that incorporate thermal motor protectors necessary for compliance with the standard	N
	Test conditions as specified	N
É	ANNEX E (NORMATIVE) NEEDLE-FLAME TEST	317.70
18 <sup>12</sup> 18	Needle-flame test carried out in accordance with IEC 60695-11-5, with the following modifications:	arista.
7	Severities	
kr. Au	The duration of application of the test flame is 30 s ± 1 s	N
9	Test procedure	- Total
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	N
9.2	The first paragraph does not apply	N
162 14	If possible, the flame is applied at least 10 mm from	N

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	IEC 60335-2-80	in it it is to	500 15
Clause	Requirement + Test	Result - Remark	Verdic
350	a corner	5 3 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	
9.3	The test is carried out on one specimen		N
0.0	If the specimen does not withstand the test, the test may be repeated on two additional specimens, both		N
11	withstanding the test  Evaluation of test results		4 21
			 N
	The duration of burning not exceeding 30 s	The state of the s	N
	However, for printed circuit boards, the duration of burning not exceeding 15 s	A 10 15 5	IN.
F	ANNEX F (NORMATIVE) CAPACITORS	all the sale sale	50
iget male	Capacitors likely to be permanently subjected to the radio interference suppression or voltage dividing, or clauses of IEC 60384-14, with the following modifications.	omply with the following	
1.5	Terms and definitions	The the second	
1.5.3	Class X capacitors tested according to subclass X2	- John John Still St	N
1.5.4	This subclause is applicable	AL AL AL	N
1.6	Marking	The state white spile	"
J.	Items a) and b) are applicable		N
3.4	Approval testing	All Carrier and	ed al
3.4.3.2	Table 3 is applicable as described		N
4.1	Visual examination and check of dimensions		-2
- 25	This subclause is applicable	1 1 1 1	N
4.2	Electrical tests	The state of the s	
4.2.1	This subclause is applicable	a state of	N
4.2.5	This subclause is applicable	organ states of the states of the	N
4.2.5.2	Only table 11 is applicable	1 1 1 1 C	N
	Values for test A apply	a transition of the same	N
September 1	However, for capacitors in heating appliances the values for test B or C apply	- ARTICLE MILITED SERVICES SERV	N
4.12	Damp heat, steady state	the state of	y
71, 7	This subclause is applicable	Three Auto Alex Alex	N
parage gari	Only insulation resistance and voltage proof are checked	STATE AND THE SECTION	N
4.13	Impulse voltage	a de de	d
41	This subclause is applicable	and the sales all	N
4.14	Endurance	a de de s	e - e
The state of the s	Subclauses 4.14.1, 4.14.3, 4.14.4 and 4.14.7 are applicable	April April April April	N
4.14.7	Only insulation resistance and voltage proof are	Can The Man	N



	IEC 60335-2-80			
Clause	Requirement + Test Result - Remark	Verdic		
-	checked	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
4	No visible damage	N		
4.17	Passive flammability test	7h		
d d	This subclause is applicable	N		
4.18	Active flammability test	A		
# _5#	This subclause is applicable			
G	ANNEX G (NORMATIVE) SAFETY ISOLATING TRANSFORMERS	 er 10 50		
Ar A	The following modifications to this standard are applicable for safety isolat transformers:	ing		
7	Marking and instructions	Jan 1962 1		
7.1	Transformers for specific use marked with:	A &		
	-name, trademark or identification mark of the manufacturer or responsible vendor:	N		
100	-model or type reference:	N		
17	Overload protection of transformers and associated circuits	e st st		
the sh	Fail-safe transformers comply with subclause 15.5 of IEC 61558-1	N		
22	Construction	and a star - of		
at State	Subclauses 19.1 and 19.1.2 of IEC 61558-2-6 are applicable	N		
29	Clearances, creepage distances and solid insulation	- 4 <u></u>		
29.1, 29.2, 29.3	The distances specified in items 2a, 2c and 3 in table 13 of IEC 61558-1 apply	N		
HALLENS GALL	For insulated winding wires complying with subclause 19.12.3 of IEC 61558-1 there are no requirements for clearances or creepage distances	N		
	For windings providing reinforced insulation, the distance specified in item 2c of table 13 of IEC 61558-1 is not assessed	N		
ANTER SE SECTION SE	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			
H	ANNEX H (NORMATIVE) SWITCHES			
4.	Switches comply with the following clauses of IEC 61058-1, as modified be	elow:		
e Principle of	The tests of IEC 61058-1 carried out under the conditions occurring in the appliance	N		
Sept.	Before being tested, switches are operated 20 times without load	N-		

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	IEC 60335-2-80	55° (115)
Clause	Requirement + Test Result - Remark	Verdic
3	Marking and documentation	_
300	Switches are not required to be marked	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	
13	Mechanism	j )
200	The tests may be carried out on a separate sample	N
15	Insulation resistance and dielectric strength	
15.1	Not applicable	N
15.2	Not applicable	N
15.3	Applicable for full disconnection and micro-disconnection	N
17	Endurance	-10.
F STATE	Compliance is checked on three separate appliances or switches	N
	For 17.2.4.4, the number of cycles declared according to 7.1.4 is 10 000, unless	N
	otherwise specified in 24.1.3 of the relevant part 2 of IEC 60335:	N
al a	Switches for operation under no load and which can be operated only by a tool, and	N
1980	switches operated by hand that are interlocked so that they cannot be operated under load,	N
250	are not subjected to the tests	N
William III A	However, switches without this interlock are subjected to the test of 17.2.4.4 for 100 cycles of operation	N
d a	Subclauses 17.2.2 and 17.2.5.2 not applicable	N
المحاديد المحاديد المحاد	The ambient temperature during the test is that occurring in the appliance during the test of Clause 11 in IEC 60335-1	N
30 S. C. C.	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	NEEDE N
	Clause 20 is applicable to clearances across full disconnection and micro-disconnection	N
- 101111111	It is also applicable to creepage distances for functional insulation, across full disconnection and micro-disconnection, as stated in Table 24	N
NETTER ST	ANNEX I (NORMATIVE) MOTORS HAVING BASIC INSULATION THAT IS INADEQUATE FOR THE RATED VOLTAGE OF THE APPLIANCE	BUTEL.

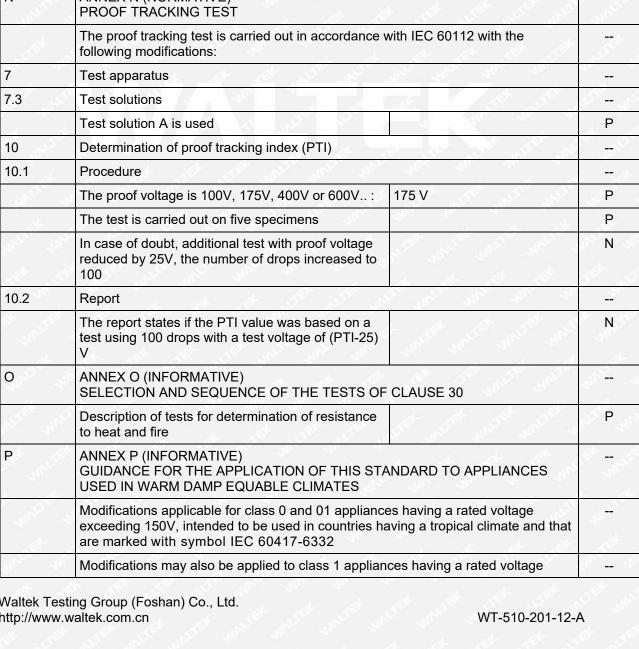
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	IEC 60335-2-80			
Clause	Requirement + Test Result - Remark	Verdict		
	The following modifications to this standard are applicable for motors having basi insulation that is inadequate for the rated voltage of the appliance:	c		
8	Protection against access to live parts			
8.1	Metal parts of the motor are considered to be bare live parts			
11	Heating	4 - x		
11.3	The temperature rise of the body of the motor is determined instead of the temperature rise of the windings	N		
11.8	The temperature rise of the body of the motor, where in contact with insulating material, not exceeding values in table 3 for the relevant insulating material	N		
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	741.		
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:			
	- short circuit of the terminals of the motor, including any capacitor incorporated in the motor circuit	N		
	- short circuit of each diode of the rectifier	N		
L st	- open circuit of the supply to the motor	N		
	- open circuit of any parallel resistor, the motor being in operation	N		
ing <sub>er</sub> in	Only one fault simulated at a time, the tests carried out consecutively	N		
22	Construction	- 5 <sup>65</sup> 5		
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		
A CONTRACTOR OF	Compliance checked by the tests specified for double and reinforced insulation	N		
J ch	ANNEX J (NORMATIVE) COATED PRINTED CIRCUIT BOARDS	- 1502 <u>-</u>		
SEP SEC	Testing of protective coatings of printed circuit boards carried out in accordance with IEC 60664-3 with the following modifications:	.01 TH 15 TH		
5.7	Conditioning of the test specimens			
Sec. 12	When production samples are used, three samples of the printed circuit board are tested	N		
5.7.1	Cold	7 J. Y.		

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200	IEC 60335-2-80		er ar
Clause	Requirement + Test	Result - Remark	Verdict
- 20-	The test is carried out at -25 °C	alking alking Alking Alking	N
5.7.3	Rapid change of temperature	15 15 15 S	·
	Severity 1 is specified	ton the the the	N
5.9	Additional tests	1 1 1 3 5 5 T	
	This subclause is not applicable	The All Al	N
K	ANNEX K (NORMATIVE) OVERVOLTAGE CATEGORIES	and the street of the street o	10 July
	The information on overvoltage categories is extracted from IEC 60664-1	nation article articles sort	Р
patrick ser	Overvoltage category is a numeral defining a transient overvoltage condition	the little state states	Р
gat gati	Equipment of overvoltage category IV is for use at the origin of the installation	the state state state	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	SHALLER SHALLER SHALLER SHALLER	N
	Equipment of overvoltage category II is energy consuming equipment to be supplied from the fixed installation		Р
	If such equipment is subjected to special requirements with regard to reliability and availability, overvoltage category III applies		N
	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	SECTION SECTION SECTION SECTION	N
	ANNEX L (INFORMATIVE) GUIDANCE FOR THE MEASUREMENT OF CLEAF DISTANCES	RANCES AND CREEPAGE	omir <mark>-</mark>
	Information for the determination of clearances and creepage distances	THE MATTER WHITE WHITE	Р
M	ANNEX M (NORMATIVE) POLLUTION DEGREE	A SEPTIFICATION SERVICES SERVICES	340
28 <sup>2560</sup> 2	The information on pollution degrees is extracted from IEC 60664-1	ALTER AND THE STREET	Р
aget .	Pollution	a de de de	
	The microenvironment determines the effect of pollution on the insulation, taking into account the macroenvironment	the state of the states.	Р
L Mark	Means may be provided to reduce pollution at the insulation by effective enclosures or similar	the state of	Р
	Minimum clearances specified where pollution may be present in the microenvironment	And the state of	Р
160 11	Degrees of pollution in the microenvironment	The street with the	- ·

J. J.	IEC 60335-2-80	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.50
Clause	Requirement + Test	Result - Remark	Verdict
- 35° - 35° - 35°	For evaluating creepage distances, the following de microenvironment are established:	grees of pollution in the	. T
elega est	- pollution degree 1: no pollution or only dry, non- conductive pollution occurs. The pollution has no influence	A THE STATE OF THE	N
ar special	- pollution degree 2: only non-conductive pollution occurs, except that occasionally a temporary conductivity caused by condensation is to be expected	THE STATE STATES	N
Santier .	- pollution degree 3: conductive pollution occurs or dry non-conductive pollution occurs that becomes conductive due to condensation that is to be expected	APRILITE APRILITED APRILITED AND	P
ites ancis	- pollution degree 4: the pollution generates persistent conductivity caused by conductive dust or by rain or snow	the state states assured	N N
N	ANNEX N (NORMATIVE) PROOF TRACKING TEST	o the the state of	NITED SHIELD
50	The proof tracking test is carried out in accordance following modifications:	with IEC 60112 with the	Car Street
7	Test apparatus	The The The Street	
7.3	Test solutions		" , 5°" , j
	Test solution A is used	4 25 25	Р
10	Determination of proof tracking index (PTI)		ari Tangan
10.1	Procedure	The The Act	
30	The proof voltage is 100V, 175V, 400V or 600V:	175 V	Р
.4	The test is carried out on five specimens		Р
ener en	In case of doubt, additional test with proof voltage reduced by 25V, the number of drops increased to 100	A STATE AND STATE	N
10.2	Report	The state of the state of	$\sigma_{I_{I}} = \overline{\sigma}_{I_{I}}$
	The report states if the PTI value was based on a test using 100 drops with a test voltage of (PTI-25) V	THE SHALLS STREET	N



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p s	IEC 60335-2-80	in it it is	
Clause	Requirement + Test	Result - Remark	Verdict
	exceeding 150V, intended to be used in countries hare marked with symbol IEC 60417-6332, if liable mains that excludes the protective earthing conduct	aving a tropical climate and that to be connected to a supply	No.
5.7	The ambient temperature for the tests of clauses 11 and 13 is 40 +3/0 °C	at the state of	N
7.1	The appliance marked with symbol IEC 60417-6332	the state of the state of	N
7.12	The instructions state that the appliance is to be supplied through a residual current device (RCD) having a rated residual operating current not exceeding 30 mA		N
الد المتحادثة ال المتحادثة	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
	If symbol IEC 60417-6332 is used, its meaning is explained	All the state of t	N
11.8	The values of Table 3 are reduced by 15 K	STATE STATE STATE	N
13.2	The leakage current for class I appliances not exceeding 0.5 mA	The fire state with	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):	THE RESERVE SHOW S	N
19.13	The leakage current test of 16.2 is applied in addition to the electric strength test of 16.3	San Strain Strain Strain Strain	N
Q	ANNEX Q (INFORMATIVE) SEQUENCE OF TESTS FOR THE EVALUATION (	OF ELECTRONIC CIRCUITS	. Water
, d*	Description of tests for appliances incorporating ele	ctronic circuits	Р
R	ANNEX R (NORMATIVE) SOFTWARE EVALUATION	Maria Maria Maria Maria	×
est and tele	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	1 L A B	
	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	the little sites still sell	40
e gariran	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

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	IEC 60335-2-80					
Clause	Requirement + Test	Result - Remark	Verdict			
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:					
	- single channel with periodic self-test and monitoring	property of	N			
	- dual channel (homogenous) with comparison	y they they they	N			
F 350	- dual channel (diverse) with comparison	e the the time of	N			
Section .	Programmable electronic circuits requiring software control the fault/error conditions specified in table R. structures:		ed			
d	- single channel with functional test	the state of	N			
to a	- single channel with periodic self-test	The Hilly Wall Day	N			
St 1	- dual channel without comparison		N			
R.2.2	Measures to control faults/errors	the think the same of	G 77			
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	SANTER ABOUT ANTER AND	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		N			
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	SECTION SECTION SECTION SECTION	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	RESTREE SERVICES SERVICES SERVI	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	The The Man	N			

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100	IEC 60335-2-80		11	
Clause	Requirement + Test	Result - Remark	Verdict	
Sales .	safety-related segments and data	The state of the s		
R.2.2.9	Software and safety-related hardware under its control is initialized and terminates before compliance with clause 19 is impaired	Mariet admirat admirat admirat	N	
R.3	Measures to avoid errors	ar de de se s	S - 5	
R.3.1	General	36. 36.		
	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 following measures to avoid systematic fault in the software are applied			
SADON SA SADON SADON SADON	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		-10	
R.3.2.1	Software safety requirements:	and the state of	- N	
400	The specification of the software safety requirements includes the descriptions listed	There were the fact	N	
R.3.2.2	Software architecture	the the state with	, ·	
R.3.2.2.1	The specification of the software architecture includes the aspects listed - techniques and measures to control software faults/errors (refer to R.2.2); - interactions between hardware and software;		N	
	- partitioning into modules and their allocation to the specified safety functions;	The tip state with		
	<ul> <li>hierarchy and call structure of the modules (control flow);</li> </ul>	all the state of	35	
	<ul><li>interrupt handling;</li><li>data flow and restrictions on data access;</li></ul>	The Miles Shirt Shirt of	10.	
	- architecture and storage of data;	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	got is	
	- time-based dependencies of sequences and data	the Marian California Agent Age		
R.3.2.2.2	The architecture specification is validated against the specification of the software safety requirements by static analysis	White white white white	N	
R.3.2.3	Module design and coding	ather arthur and and	P	
R.3.2.3.1	Based on the architecture design, software is suitably refined into modules	the tip title title	N	
	Software module design and coding is implemented in a way that is traceable to the software architecture and requirements	the state of the s	N	
R.3.2.3.2	Software code is structured	a state of	N	
R.3.2.3.3	Coded software is validated against the module specification by static analysis	Aller Aller Aller Aller	N	
de la	The module specification is validated against the	The State State State	N	

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	IEC 60335-2-80			
Clause	Requirement + Test	Result - Remark	Verdict	
- J. 17 - 17 - 17 - 17 - 17 - 17 - 17 - 17	architecture specification by static analysis	A STATE OF THE STA	Aller Angel	
R.3.3.3	Software validation			
itiga Muse	The software is validated with reference to the requirements of the software safety requirements specification	All the state of	N	
	Compliance is checked by simulation of:	the the the the		
	- input signals present during normal operation		N	
	- anticipated occurrences	20. 20. 2	N	
	- undesired conditions requiring system action	- 10° 50° 50°	N	

Company	Fault/error	Acceptable mass b, c	Definitions	Degrees	Degument	Ver-
Component	Fault/error	Acceptable measures <sup>b, c</sup>	Definitions	Document reference for applied measure	Document reference for applied test	ver- dict
1 CPU		The second second	J. 18 18 18 18 18 18 18 18 18 18 18 18 18	The sale	, A,	Ν
1.1	d 30	The state of the state of	1. 2.		s de	
Registers	Stuck at	Functional test, or	H.2.16.5	J. 300 250	100	
		periodic self-test using either:	H.2.16.6			
	105 10	- static memory test, or	H.2.19.6	1 / 25	300	
	1 4 4 4	<ul> <li>word protection with single bit redundancy</li> </ul>	H.2.19.8.2			
1.2 VOID	10 31		J. 100 J. 100	100	in the	N
1.3	Stuck at	Functional test, or	H.2.16.5		4 5	N
Programme counter	400	Periodic self-test, or	H.2.16.6	J. 500 N.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	F THE STATE OF	Independent time-slot monitoring, or	H.2.18.10.4	ar ar		
	500 3	Logical monitoring of the programme sequence	H.2.18.10.2			
2	No	Functional test, or	H.2.16.5		to the	Ν
Interrupt handling and execution	interrupt or too frequent interrupt	time-slot monitoring	H.2.18.10.4	Mariting M.	Seek garrisek	
3	Wrong	Frequency monitoring, or	H.2.18.10.1	50 5		N
Clock	frequency (for quartz synchroniz ed clock: harmonics/ sub- harmonics only)	time slot monitoring	H.2.18.10.4		gereich gerich Seine gerich	
4. Memory		A 10 50 50 50 5	NEED SOUTH	The The	491	Ν
4.1	All single	Periodic modified checksum, or	H.2.19.3.1	de de	- 4	
Invariable	bit faults	multiple checksum, or	H.2.19.3.2	200	2000 30	

Reference No.: WTF22F09191508J Page 70 of 80 IEC 60335-2-80 Clause Requirement + Test Result - Remark Verdict word protection with single bit H.2.19.8.2 memory redundancy 4.2 DC fault Periodic static memory test, or H.2.19.6 Ν Variable word protection with single bit redundancy H.2.19.8.2 memory

4.3 Addressing (relevant to variable and invariable memory)	ant to address le and able		H.2.19.8.2		N N
5 Internal data path	Stuck at	Word protection with single bit redundancy	H.2.19.8.2		N
5.1 VOID		and the state section	They are	The same	N
5.2 Addressing	Wrong address	Word protection with single bit redundancy including the address	H.2.19.8.2	alletick alletick a	N
6 External	Hamming distance 3	Word protection with multi-bit redundancy, or	H.2.19.8.1		N
communicat	10	CRC – single work, or	H.2.19.4.1	and the state	
1011	V A V	Transfer redundancy, or	H.2.18.2.2	Chi. on	20.
St. St.		Protocol test	H.2.18.14	The state of	50 5
6.1 VOID		- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	Market Market	en s	a), a,
6.2 VOID	500	Service Services		100	56th 54th
6.3	Wrong	Time-slot monitoring, or	H.2.18.10.4	the the the	N
Timing	point in	scheduled transmission	H.2.18.18	A 35	at at
	time	Time-slot and logical monitoring, or	H.2.18.10.3	A STATE OF STATE	- 10° 4
	aler (d)	comparison of redundant communication channels by either:	atternative formation	Salvering Parties	41000 2000
	7. Th.	- reciprocal comparison	H.2.18.15	5° 5°	arthur garage
	at more	<ul> <li>independent hardware comparator</li> </ul>	H.2.18.3	the state of	State State
	Wrong	Logical monitoring, or	H.2.18.10.2	in the m	
	sequence	time-slot monitoring, or	H.2.18.10.4	A 15 15	t of
h. Au	40.	Scheduled transmission	H.2.18.18		1 1 m
7 Input/output periphery	Fault conditions specified in 19.11.2	Plausibility check	H.2.18.13		N S
7.1 VOID	-27		JOHN MARK	The Thirty of	m - m -
7.2 Analog I/O	or military	STA STATE STATE STATE	d 10	ter to	N

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		TE	C 60335-2-	30				
Clause	Requirement	+ Test	STATE STATE STATE		Result - Remark			Verdict
7.2.1 A/D and D/A- converter	Fault conditions specified in 19.11.2	Plausibility check	- SANTER S	H.2.1	18.13			
7.2.2 Analog multiplexer	Wrong addressing	Plausibility check	ard artic	H.2.1	18.13	ret string	and the a	N
8 VOID	a to the	The The San			<i>y</i>	\$ 35°	J. C.	\$ J-2
9 Custom chips <sup>d</sup> e.g. ASIC, GAL, gate array	Any output outside the static and dynamic functional specificatio n	Periodic self-test		H.2.1	16.6	ARTICLE ARTICLE		N

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 BY BATTERIES THAT ARE NON-RECHARGEABLE OR NOT RECHARGED IN THE APPLIANCE		1510 1581510 16
sprie.	The following modifications to this standard are applicable for battery-operated appliances where the batteries are either non-rechargeable (primary batteries), or	AND THE SECTION SECTION SECTION	N
	rechargeable batteries (secondary batteries) that are not recharged in the appliance	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	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	States and they are a second	N
5.S.102	Appliances are tested as motor-operated appliances.	Tree whirek intrek whire	N
7.1	Appliances marked with the battery voltage (V) and the polarity of the terminals, unless:	A STAR WITH WITH	N
	the polarity is irrelevant		N
	Appliances also marked with:	The state of the s	N
	name, trade mark or identification mark of the manufacturer or responsible vendor:	the time with matter	N

<sup>&</sup>lt;sup>a)</sup> 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.

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IEC 60335-2-80				
Clause	Requirement + Test	Result - Remark	Verdic	
41.0	- model or type reference:		N	
all Language and	- IP number according to degree of protection against ingress of water, other than IPX0:	attick market spatish spatis	N	
d s	- type reference of battery or batteries:		N	
	If relevant, the positive terminal is indicated by the symbol IEC 60417-5005 and the negative terminal by the symbol IEC 60417-5006		N	
section :	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:	The wife was a		
Sept and	- the types of batteries that may be used:		N	
	- how to remove and insert the batteries	and the same	N	
s and the	non-rechargeable batteries are not to be recharged	THE WITH SPITE OF	N	
The state of	rechargeable batteries are to be removed from the appliance before being charged	at the set with all	N	
got (	different types of batteries or new and used batteries are not to be mixed		N	
	batteries are to be inserted with the correct polarity		N	
- July	exhausted batteries are to be removed from the appliance and safely disposed of	August Mag Allen A	N	
300	<ul> <li>if the appliance is to be stored unused for a long period, the batteries are removed</li> </ul>	STATE PARTY SPAN	N	
New of	- the supply terminals are not to be short-circuited	alt set set with	N	
11.5	Appliances are supplied with the most unfavourable s	supply voltage between		
	<ul> <li>0.55 and 1.0 times the battery voltage, if the appliance can be used with non-rechargeable batteries</li> </ul>		N	
	<ul> <li>- 0.75 and 1.0 times battery voltage, if the appliance is designed for use with rechargeable batteries only</li> </ul>	All retter and the state of	N	
	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	et state state sociale	N N	
19.13	The battery does not rupture or ignite	The The Asset	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	

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- 45	IEC 60335-2-80		- 41
Clause	Requirement + Test	Result - Remark	Verdict
	such a connection is unlikely to occur due to the construction of the appliance		N
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	STATES STATES STATES STATES	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	The state of the state of	N
	the battery is shielded by a barrier that meets the needle flame test of Annex E, or		N
. 55th	that comprises material classified as V-0 or V-1 according to IEC 60695-11-10	At the state and	N
T	ANNEX T (NORMATIVE) UV-C RADIATION EFFECT ON NON-METALLIC MA	ATERIALS	, ( <sup>2</sup>
	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
38.75	Does not apply to glass, ceramic and similar materials	- Miller Willer Harris	N
J. 1	Tested as specified in ISO 4892-1 and ISO 4892-2, v	with the following modifications:	N
41. 4	Modifications to ISO 4892-1:	The state of the state of	
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	THE SHITTER SHITTER SHITTER	N
100	Subclause 5.1.6.1 and Table 1 are not applicable	the title state state at	N
5.2.4	The black-panel temperature shall be 63 °C +/- 3 °C	at the set	N
5.3.1	Humidification of the chamber air is specified in part 2 when necessary	and the state of	N
9	This clause is not applicable	and the same	N

Reference No.: WTF22F09191508J

	IEC 60335-2-80		
Clause	Requirement + Test	Result - Remark	Verdict
411	Modifications to ISO 4892-2:		-
7.1	At least three test specimens are tested	at the state	N
5),	Ten samples of internal wiring is tested	the age of the	N
7.2	The specimens are attached to the specimen holders such that they are not subject to any stress	ich anith anithe an	N
7.3	Apparatus prepared as specified	. A A A	N
	The test specimens and, if used, the irradiance- measuring instrument are exposed for 1 000 h	Aller Mer. Aler.	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		N
7.5	Material properties and test methods for parts providing mechanical support or impact resistance as specified in Table T.1	and the same and	N
A STATE OF	Material properties and test method for electrical insulation of internal wiring as specified in Table T.2	The state states	N
8	This clause is not applicable		N



10.1 TABLE: Power input deviation (Ambient 40±2°C)					Р	
Input deviation	n of/at:	P rated (W)	P measured (W)	ΔΡ	Required Δ P	Remark
DC 9V		1.5	1.54	+2.7%	+20%	of the second

10.2 TABLE: Current input deviation (Ambient 40±2°C)					N
Input deviation of/at:	I rated (A)	I measured (A)	dP	Required Δ P	Remark
- The Marie Sale	J		5th -5th		alege - alege

11.8	TABLE: Heating test, thermocoup	ole measurements			Р
20	Test voltage (V)	:	1.06 x [	DC 9V = DC 9.54V	3 <sup>4</sup>
100	Ambient t <sub>1</sub> (°C)	Ambient t <sub>1</sub> (°C)		23.8	_
s <sup>st</sup> s	Ambient t <sub>2</sub> (°C)			24.2	50°-40
Thermocouple locations		Max. temperati measured, d			rise limit,
PCB surface		3.5	11-25	Ref.	
Battery surface		2.3		Ref.	
Internal wire		1.8		T80-25=55	
Fan mot	tor winding 1	23.2	edi.	Class 105,	65
Fan mot	tor winding 2	23.5		Class 105,	65
Plastic e	enclosure(inside, near fan motor)	7.8		CI.30	
Plastic e	enclosure(outside, near fan motor)	4.5		74-15=59	
Switch button		2.3		60-15=45	
Test corner		0.8		65-15=50	
Annex E	3, test voltage: 254.4V, Ambient t1:23.	4°C, t2: 23.6°C	h. W.	a The The A	
Battery	surface	5.2		20	

11.8	TABLE: Heating te	est, resistance	method				N
. John	Test voltage (V)					- Jei-	
100	Ambient t <sub>1</sub> (°C)	Ambient t <sub>1</sub> (°C)			The party	- P	
10	Ambient t <sub>2</sub> (°C)					,di	<u>, (d.</u>
Tempera	ature rise of winding	R1 (Ω)	R2 (Ω)	dT (K)	Max. dT (K)	Insulat	ion class
<del> </del>	the state was	7/2	- ·		d = <del>-</del> d	( )	gart Lit

13.2	TABLE: Leakage current (Ambient 40±2°C)	ath all the set	Р
	Heating appliances: 1.15 x rated input (W):	The the the	
allitic s	Motor-operated and combined appliances: 1.06 x rated voltage (V):	Same as Cl.11.8	No.



	IEC 60335-2-80
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Leakage current between:	I (mA)	Max. allowed I (mA)
DC inlet and plastic enclosure/ switch button	0.004	0.7 peak

13.3	TABLE: Dielectric strength (Ambient 40±2°C)			Р
Test voltage applied between:  Test potential applied (V)  Breakdown / fl (V)  (Yes/No				
DC inlet and	plastic enclosure/ switch button	500	No	\$ J.

16.2	TABLE: Leakage current		A 500	N
	Single phase appliances: 1.06 x rated voltage (V)	Alexander - 1	the state	
gradi al	Three phase appliances 1.06 x rated voltage divided by √3 (V):	Marchest Martines 211		* _ * .h
Leakage current between:		I (mA)	Max. allowe	d I (mA)
<del>-</del>	the right religion to the state of the state of		A 76	+ 10

16.3	TABLE: Dielectric strength		N
Test volt	age applied between:	Test potential applied (V)	Breakdown / flashover (Yes/No)
1 July 200		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	the Marie - Paris Pale
ad. a	3- A 1 / A 2 / / 3/A 1 W		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

19.7	TABLE: temperature rise measurements						
الاي الايماني	Abnormal conditions:	Supplied at rated voltage DC 9V; Ur conditions, locking fan motor	er aletter.				
Temperature rise dT of part/at:		dT (K)	Required	l dT (K)			
Fan motor winding 1 Fan motor winding 2		38.3	Class 105, 1	50-25=125			
		37.6	Class 105, 1	50-25=125			
Plastic enclosure		24.5	CI.3	30			

19.13	TABLE: Abnormal oper	TABLE: Abnormal operation, temperature rises						
Thermoc	ouple locations	Max. temperature rise measured, dT (K)	Max.temperature rise limit, dT (K)					
Annex B	19.B.101		at the set set.					
Battery si	urface	8.9	Ref.					
Plastic er	nclosure	9.3	Ref.					
Test floor		2.5	150					

24.1	TABLE: Critical components information								
Object / part	Object / part No.   Manufacturer/ trademark		Type / model	Technical data	Standard		x(s) of ormity <sup>1)</sup>		



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
Motor	SABIC INNOVATIVE PLASTICS US L L C	BCY8025S05 H	DC9V, 0.15A Class A	IEC/EN 60335-1 IEC/EN 60335-2- 80	Tested with appliance
Plastic enclosure	SABIC INNOVATIVE PLASTICS US L L C	945	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	SHENZHEN JINHONGYU ELECTRICITY INDUSTRY TECHNOLOGY CO LTD	1028	26AWG, 80°C, 300Vac, VW-1	IEC/EN 60335-1 IEC/EN 60335-2- 80	Tested with appliance

28.1	TABLE: Thread	TABLE: Threaded part torque test							
Threaded pa		Diameter of thread (mm)	Column number (I, II, or III)	Applied torque	e (Nm)				
Screw for fix	king enclosure	2.86		0.5	4				

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

	Overvoltage category					t de de
3 3		1	Type of ir	nsulation:	the the	100
Rated impulse voltage (V):	Min. cl (mm)	Basic (mm)	Supplementary (mm)	Reinforced (mm)	Functional (mm)	Verdict / Remark
330	0.2* / 0.5 / 0.8**		10t-	50 th 500	The same	N
500	0.2* / 0.5 / 0.8**	>0.8	710 - 010	2h 2c.	>0.8	P
800	0.2* / 0.5 / 0.8**	-	S - M	50° 50°	100° - 100°	N
1 500	0.5 / 0.8** / 1.0***	"ČΣ",	V. T. A		- A A	N
2 500	1.5 / 2.0***		d 30 3		Q. 200.	N
4 000	3.0 / 3.5***	, — 34 <sub>0</sub>			J - 4	N.
6 000	5.5 / 6.0***	4 - X	الاين <u>المثاني ال</u>	100 P		N
8 000	8.0 / 8.5***	4				O N
10 000	11.0 / 11.5***	,5	5° 5°	" - " L"	18 - 11	N

Supplementary information:

<sup>\*)</sup> For tracks on printed circuit boards if pollution degree 1 and 2 \*\*) For pollution degree 3

<sup>\*\*\*)</sup> If the construction is affected by wear, distortion, movement of the parts or during assembly



Working voltage (V):	3115	Sell with		eepage di (mm) ollution de				الي ال	,		
	1	÷ . 5	2		3			Type of insulation			J. P.
the Philips Philips		M	aterial g	terial group		Material group			`		
1 st 18	A Comment		П	Illa/Illb	er T	- II	IIIa/IIIb*	B**	S**	R**	Verdic
≤50	0.18	0.6	0.85	1.2	1.5	1.7	1.9	>1.9	'n,		Р
≤50	0.18	0.6	0.85	1.2	1.5	1.7	1.9	_		<del></del>	N
≤50	0.36	1.2	1.7	2.4	3.0	3.4	3.8				Ν
125	0.28	0.75	1.05	1.5	1.9	2.1	2.4		<u>-</u>	o	<sub>S</sub> N
125	0.28	0.75	1.05	1.5	1.9	2.1	2.4	7115	100		N
125	0.56	1.5	2.1	3.0	3.8	4.2	4.8	-	-34	2	N
250	0.56	1.25	1.8	2.5	3.2	3.6	4.0		_	_	N
250	0.56	1.25	1.8	2.5	3.2	3.6	4.0	<i>(</i> *			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			<u>ر کار</u>	N
400	1.0	2.0	2.8	4.0	5.0	5.6	6.3			d-	N
400	2.0	4.0	5.6	8.0	10.0	11.2	12.6		_		N
500	1.3	2.5	3.6	5.0	6.3	7.1	8.0		_,		N
500	1.3	2.5	3.6	5.0	6.3	7.1	8.0		0	75	N
500	2.6	5.0	7.2	10.0	12.6	14.2	16.0	<i>d</i> -	-	A Company	N
>630 and ≤800	1.8	3.2	4.5	6.3	8.0	9.0	10.0	40	_	_	N
>630 and ≤800	1.8	3.2	4.5	6.3	8.0	9.0	10.0		÷ .	<u> </u>	N
>630 and ≤800	3.6	6.4	9.0	12.6	16.0	18.0	20.0				N
>800 and ≤1000	2.4	4.0	5.6	8.0	10.0	11.0	12.5		-5	5	N
>800 and ≤1000	2.4	4.0	5.6	8.0	10.0	11.0	12.5	_			N
>800 and ≤1000	4.8	8.0	11.2	16.0	20.0	22.0	25.0	52		11 to	N
>1000 and ≤1250	3.2	5.0	7.1	10.0	12.5	14.0	16.0		_		N
>1000 and ≤1250	3.2	5.0	7.1	10.0	12.5	14.0	16.0				N
>1000 and ≤1250	6.4	10.0	14.2	20.0	25.0	28.0	32.0			d.	N
>1250 and ≤1600	4.2	6.3	9.0	12.5	16.0	18.0	20.0		77.	100	N
>1250 and ≤1600	4.2	6.3	9.0	12.5	16.0	18.0	20.0		10		N
>1250 and ≤1600	8.4	12.6	18.0	25.0	32.0	36.0	40.0	_	_		N
>1600 and ≤2000	5.6	8.0	11.0	16.0	20.0	22.0	25.0		<u>, e</u>		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	N



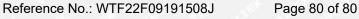
							J 3				
>2000 and ≤2500	7.5	10.0	14.0	20.0	25.0	28.0	32.0	e f	, e <sup>±</sup>	-5	N
>2000 and ≤2500	7.5	10.0	14.0	20.0	25.0	28.0	32.0	-4		-	N
>2000 and ≤2500	15.0	20.0	28.0	40.0	50.0	56.0	64.0	· –_3	, <del>-</del>	340	N
>2500 and ≤3200	10.0	12.5	18.0	25.0	32.0	36.0	40.0	4/1	- 2	_	N
>2500 and ≤3200	10.0	12.5	18.0	25.0	32.0	36.0	40.0	.5	5	-4	N
>2500 and ≤3200	20.0	25.0	36.0	50.0	64.0	72.0	80.0	_	_		N
>3200 and ≤4000	12.5	16.0	22.0	32.0	40.0	45.0	50.0	5°,	500	1	N
>3200 and ≤4000	12.5	16.0	22.0	32.0	40.0	45.0	50.0			<del></del>	N
>3200 and ≤4000	25.0	32.0	44.0	64.0	80.0	90.0	100.0				N
>4000 and ≤5000	16.0	20.0	28.0	40.0	50.0	56.0	63.0			c-L	N
>4000 and ≤5000	16.0	20.0	28.0	40.0	50.0	56.0	63.0	300	200		N
>4000 and ≤5000	32.0	40.0	56.0	80.0	100.0	112.0	126.0	=		- 3	N.
>5000 and ≤6300	20.0	25.0	36.0	50.0	63.0	71.0	80.0			_	N
>5000 and ≤6300	20.0	25.0	36.0	50.0	63.0	71.0	80.0	<u> </u>	S. C. C.		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		·		N
>6300 and ≤8000	25.0	32.0	45.0	63.0	80.0	90.0	100.0			d <del>-</del>	N
>6300 and ≤8000	50.0	64.0	90.0	126.0	160.0	180.0	200.0	, L	-	6	N
>8000 and ≤10000	32.0	40.0	56.0	80.0	100.0	110.0	125.0	1	-3		N
>8000 and ≤10000	32.0	40.0	56.0	80.0	100.0	110.0	125.0	°_ ,	0		N
>8000 and ≤10000	64.0	80.0	112.0	160.0	200.0	220.0	250.0	<i>y</i>		100	N
>10000 and ≤12500	40.0	50.0	71.0	100.0	125.0	140.0	160.0	41,		_	N
>10000 and ≤12500	40.0	50.0	71.0	100.0	125.0	140.0	160.0		÷		N
>10000 and ≤12500	80.0	100.0	142.0	200.0	250.0	280.0	320.0	- <u> </u>	_		N
- C - C - C - C - C - C - C - C - C - C				The st							

## Supplementary information:

<sup>\*)</sup> 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	: Creepa	age dista	ances, f	unctional i	nsulatio	n		P
Working voltage (V):	er er	ed <sup>b</sup> ggraf		eepage dis (mm) Pollution de			s services	
st st st	1		2	4100	417	3		a de de a
45	-	Material group		Material group			The Mary States States	
- not soft		J.	, II	IIIa/IIIb	I	II	IIIa/IIIb*	Verdict / Remark
10° 11° 1				بالدر	24	J.	18 J	
≤10	0.08	0.4	0.4	0.4	1.0	1.0	1.0	Р
50	0.16	0.56	0.8	1.1	1.4	1.6	1.8	N N





5 0.71 2 1.0 5 1.6 2.0 3.2 4.0 5.0 6.3	1.0 1.4 2.2 2.8 4.5 5.6 7.1	1.4 2.0 3.2 4.0 6.3 8.0	1.8 2.5 4.0 5.0 8.0 10.0	2.0 2.8 4.5 5.6 9.0	2.2 3.2 5.0 6.3 10.0	N N N N
5 1.6 2.0 3.2 4.0 5.0	2.2 2.8 4.5 5.6	3.2 4.0 6.3 8.0	4.0 5.0 8.0	4.5 5.6 9.0	5.0 6.3 10.0	N N
2.0 3.2 4.0 5.0	2.8 4.5 5.6	4.0 6.3 8.0	5.0 8.0	5.6 9.0	6.3	N
3.2 4.0 5.0	4.5 5.6	6.3 8.0	8.0	9.0	10.0	
4.0	5.6	8.0			- 4 9	A SN
5.0			10.0	11.0		
	7.1	10.0		11.0	12.5	N
6.3		10.0	12.5	14.0	16.0	N
	9.0	12.5	16.0	18.0	20.0	N
8.0	11.0	16.0	20.0	22.0	25.0	N
10.0	14.0	20.0	25.0	28.0	32.0	N
12.5	18.0	25.0	32.0	36.0	40.0	N N
5 16.0	22.0	32.0	40.0	45.0	50.0	N A
20.0	28.0	40.0	50.0	56.0	63.0	N
25.0	36.0	50.0	63.0	71.0	80.0	of set Noted
32.0	45.0	63.0	80.0	90.0	100.0	N
40.0	56.0	80.0	100.0	110.0	125.0	N
50.0	71.0	100.0	125.0	140.0	160.0	N
(	5 16.0 0 20.0 0 25.0 0 32.0 0 40.0	5 16.0 22.0 0 20.0 28.0 0 25.0 36.0 0 32.0 45.0 0 40.0 56.0	5     16.0     22.0     32.0       0     20.0     28.0     40.0       0     25.0     36.0     50.0       0     32.0     45.0     63.0       0     40.0     56.0     80.0	5     16.0     22.0     32.0     40.0       0     20.0     28.0     40.0     50.0       0     25.0     36.0     50.0     63.0       0     32.0     45.0     63.0     80.0       0     40.0     56.0     80.0     100.0	5     16.0     22.0     32.0     40.0     45.0       0     20.0     28.0     40.0     50.0     56.0       0     25.0     36.0     50.0     63.0     71.0       0     32.0     45.0     63.0     80.0     90.0       0     40.0     56.0     80.0     100.0     110.0	5     16.0     22.0     32.0     40.0     45.0     50.0       0     20.0     28.0     40.0     50.0     56.0     63.0       0     25.0     36.0     50.0     63.0     71.0     80.0       0     32.0     45.0     63.0     80.0     90.0     100.0       0     40.0     56.0     80.0     100.0     110.0     125.0

Supplementary information:

<sup>\*)</sup> Material group IIIb is allowed if the working voltage does not exceed 50 V

30.1	TABLE: Ball press	ABLE: Ball pressure								
Part		Test temperature (°C)	Impression diameter (mm)	Allowed impression diameter (mm)						
Plastic enclo	osure	75	1.2	2.0						

30.2	TABLE: G	low-wire test							Р
Part	10 10 10 10 10 10 10 10 10 10 10 10 10 1	550	65	650		750	850	Needle-	verdict
Jake 1			te(s)	ti(s)	te(s)	ti(s)	elletzen en	flame test (NFT)	317
Plastic enclo	sure	Х	,-	- J	<u> </u>	, T	50°-30°		Р
PCB materia	al	х	300	, · ·		_			Р
DC motor bo	obbin	Х		, c+	5 <sup>65</sup> 55	ئ <sub>ىر-</sub> °	<u>-</u>	10° - 1	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 =====

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EN 60335-2-80 – Attachment					
Clause	Requirement + Test		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)	a star star star star star
6.1	Delete "class 0" and "class 01"	P
7.1	Single-phase appliances to be connected to the supply mains: 230 V covered	N against the same of the N
ال المحاكم	Multi-phase appliances to be connected to the supply mains: 400 V covered	N Section 1985
7.12	The instructions include the substance of the follow	ng: P
e garden Santan Santan	- 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  AND  AND  AND  AND  AND  AND  AND  AN
di.	- children shall not play with the appliance	P
st st	- cleaning and user maintenance shall not be made by children without supervision	P
8.1.1	Also test probe 18 of EN 61032 is applied	P
ST S	The appliance being in every possible position during the test, except that	P
	appliances normally used on the floor and having a mass exceeding 40 kg are not tilted	N STATE STATE
	The force on the probe in the straight position is increased to 10 N when probe 18 is used	Р
4 35	When using test probe 18 the appliance is fully assembled as in normal use without any parts removed, and	P
	parts intended to be removed for user maintenance are also not removed	P

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Clause	Paguiroment + Test	Popult Pomork	Verdict
Clause	Requirement + Test	Result - Remark	verdici
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	t griff griff griff	P
Sakrifter.	Test probe B and probe 18 of EN 61032 are applied to built-in appliances and fixed appliances only after installation	STATES STATES STATES	N 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
	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
100	When using test probe 18 it is applied with a force of 2,5N on the appliance fully assembled	White With Aut	Р
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	SELECT SELECTION SELECTION	P
22.17	The requirement is not applicable to built-in appliances	THE STATES SHITTED WAY	N
24.1	Components comply with the safety requirements specified in the relevant EN standards as far as they reasonably apply	A STREET, STREET, STREET,	Р
280 SE 1	Motors are not required to comply with EN 60034- 1, but tested as part of the appliance according to this standard	STATES STATES STATES	Р
ter the	Relays are tested as part of the appliance according to this standard	eliter water series se	N
April 1	Relays may be alternatively tested to EN 60730-1 and the additional requirements in EN 60335-1	the states white	N
Selectification of the Control of th	The requirements of Clause 29 of this standard apply between live parts of components and accessible parts of the appliance	AND STATES	Р



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	EN 60335-2-80 – Attachmen	nt	3. "
Clause	Requirement + Test Re	tesult - Remark	Verdict
	Components may comply with the requirements for clearances and creepage distances for functional insulation as specified in the relevant component standard		Р
	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
agricult.	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	MILTER STRIPTS STRIPTS STRIPTS	Р
ARTICLE AND	Components that have been tested and shown to comprequirements in the EN standard for the relevant comprovided that:		Р
	- the severity specified in the component standard is not less than the severity specified in 30.2, and		Р
a and a	- the test report for the component states the values of t <sub>e</sub> and t <sub>i</sub> acc. to EN 60695-2-11	ANTINE ANTINE ANTINE ANTI	Р
Market a	If the above two conditions are not satisfied, the component is tested as part of the appliance	the the state state	Р
nijek uni	Power electronic converter circuits are not required to comply with EN 62477-1, but tested as part of the appliance according to this standard	and the second	N
ing sanitri	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	SACTOR SACTOR SACTOR	Р
ellering	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	THE MATTER SPACES SPACES	Р
ir <sup>ee</sup> gari	Components that have not been tested and found to comply with the relevant EN standard, and	the states white shifts	Р
ar sold	components that are not marked or not used in accordance with their marking,	the state state said	Р
STRUCTURE A	are tested in accordance with the conditions occurring in the appliance, the number of samples being that required by the relevant standard	aries aries aries are	Р
grifer 1967 Ilet 1967 ist International	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	ret gried gried gried gried gri	N

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Clause	Dequirement L Test	Dogult Domark	Vordict
Clause	Requirement + Test	Result - Remark	Verdict
ARTICLE ST	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		P
	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
ABRITAN BUTTEN AB	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		P
SEE MES	with connectors and appliance inlets complying with the standard sheets of EN 60320-1, if	at the state of	N N
	direct supply to these parts from the supply mains gives rise to a hazard		⊩ N
	For plugs used in CENELEC countries Annex ZH applies		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		N
iled. <sub>Selectiv</sub> i	Compliance with Clause 8 of this standard is not impaired by connecting the appliance to a device covered by EN 41003	Secretary Secretary	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	SHALLER MALLER MALLER	N
25.1	Plugs and pins for insertion into socket outlets follow the relevant standards sheets in Annex ZH	British Abrillion Abrillion A	N
25.7	Rubber sheathed cords (60245 IEC 53) are not suitable for appliances intended to be used outdoors, or	THE SERVICE SERVICES SERV	N
ALC.	when they are liable to be exposed to significant amount of ultraviolet radiation	THE WALLE WATER	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	astricus astricus astricus.	STATE STATE
	Common plugs and socket-outlets types in CENELEC countries as shown in Annex ZH	all garden garden gal	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
S. C.	unless they are held in place near the terminals independently of the solder	the set of	N-

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Clause	Paguiroment + Teet	Result - Remark	Verdic
Clause	Requirement + Test	Result - Remark	verdic
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	erick arritek arritek ar	Р
Annex I, 19.I.101	The appliance is supplied at rated voltage and operated under normal operation with each of the fault conditions specified	AND SHELLER MALTER SHELL	N
September 3	The duration of any of the tests is as specified in 19.7	SKILTED SKILTED SKILLED	N
ZA	ANNEX ZA (NORMATIVE) SPECIAL NATIONAL CONDITIONS (EN)	THE SHIPS SHIPS	Р
d d	Denmark, Sweden, Norway and Finland	4 4	d d P
7.12.8	The maximum inlet water pressure is at least 1,0 MPa		N
460	Norway	Company of the state of	Р
19.5	The test is also applicable to appliances intended to be permanently connected to fixed wiring	the state with	N
J- J	Norway		<sub>ob</sub> P
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	- A	Р
22.47	The maximum inlet water pressure is at least 1,0 MPa	alleria alleria della	N
to, Fe	Ireland and United Kingdom	STORY MATERIAL SPECTS	P
25.8	In the table, the line >10 A and ≤16 A is replaced with:		
	> 10 and ≤ 13 1,25 (1,0) <sup>b</sup>	STEE STATE SHOW SHOW	N
ir S <sup>ill</sup>	$> 13 \text{ and } \le 16  1.5 (1.0)^{b}$	L 1 1 1 1 1 1	N
ZB	ANNEX ZB (INFORMATIVE) A-DEVIATIONS		Р
All A	Ireland	ALTER AND MADE	Р
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
L , &	United Kingdom	7/11.	Р
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.	and the state	N

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300	EN 60335-2-80 – Attachm	nent	
Clause	Requirement + Test	Result - Remark	Verdict
	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 CORRESPONDING EUROPEAN PUBLICATIONS	PUBLICATIONS WITH THEIR	N
# 35 <sup>3</sup> 50	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 F	FLEXIBLE CORDS	Р
Sept.	List of IEC and CENELEC code designations for flexible cords	at the state of	Р
ZE	ANNEX ZE (INFORMATIVE) SPECIFIC ADDITIONAL REQUIREMENTS FOR A INTENDED FOR COMMERCIAL USE	PPLIANCES AND MACHINES	N
7.1	Business name and full address of the manufacturer and, where applicable, his authorized representative:	- STATES ASSESSED ASSESSED	N
	Model or type reference	a state of	N
Th	Serial number, if any	The same of the same	N
50th 5	Production year		N
2.17	Designation of the appliance	-1 Phys. 2, 12	N
7.12	Instructions provided with the appliance so that the appliance can be used safely	The second section and	N
· A	The instructions contain at least the following inform	nation:	N
and the same	- the business name and full address of the manufacturer and, where applicable, his authorized representative	attern atternation attended	N
	- model or type reference of the appliance as marked on the appliance itself, except for the serial number	The said assisted assisted as	N
of whitely	- the designation of the appliance together with its explanation in case it is given by a combination of letters and/or numbers	- STATES STATES STATES STATES	N
31 2 Table 1	- the general description of the appliance, when needed due to the complexity of the appliance	Martin agricult agricultur agricultur	N
erres Av	- specific precautions required during installation, operation, adjusting, user maintenance, cleaning, repairing or moving	arrest subtreet subtreet subtreet s	N
	- when needed drawings, diagrams, descriptions and explanations necessary for the safe use and user maintenance of the appliance		N
200	- the possible reasonably foreseeable misuse and, whenever relevant, a warning against the effects it may have on the safe use of the appliance	A St. All All All	N

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01	In	D # D	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Clause	Requirement + Test	Result - Remark	Verdict
gair Shirink Shirink	The words "Original instructions" appear on the language version(s) verified by the manufacturer or by the authorized representative		N
STOR SOLFOR	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
Services 1	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		N
545 3845 5 245	The instructions indicate the type and frequency of inspections and maintenance required for safe operation including the preventive maintenance measures	art services affected services a	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
SANSTER .	- on how to maintain adequate mechanical stability when in use, during transportation, assembly, dismantling, scrapping and any other action involving the appliance	STATE STATE STATES STATE	N
ALIEN GAR	- on the protective measures to be taken by the user, including, where appropriate, the personal protective equipment to be provided	NATED MANAGED MANAGED MANAGED	N
ir ynir	- 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		N
STATE OF	- on the specifications on the spare parts to be used, when these affect the health and safety of the operator	Military Mariety Mariety Mariety	N
NE COLOR	- on airborne noise emissions, determined and declarelevant Part 2, which includes:	ared in accordance with the	N
	- the A-weighted emission sound pressure level at workstations, where this exceeds 70 dB(A);	at attitlet attitlet attitlet at	N
- SALTER	- where this level does not exceed 70 dB(A), this fact is indicated	the street matrix	N

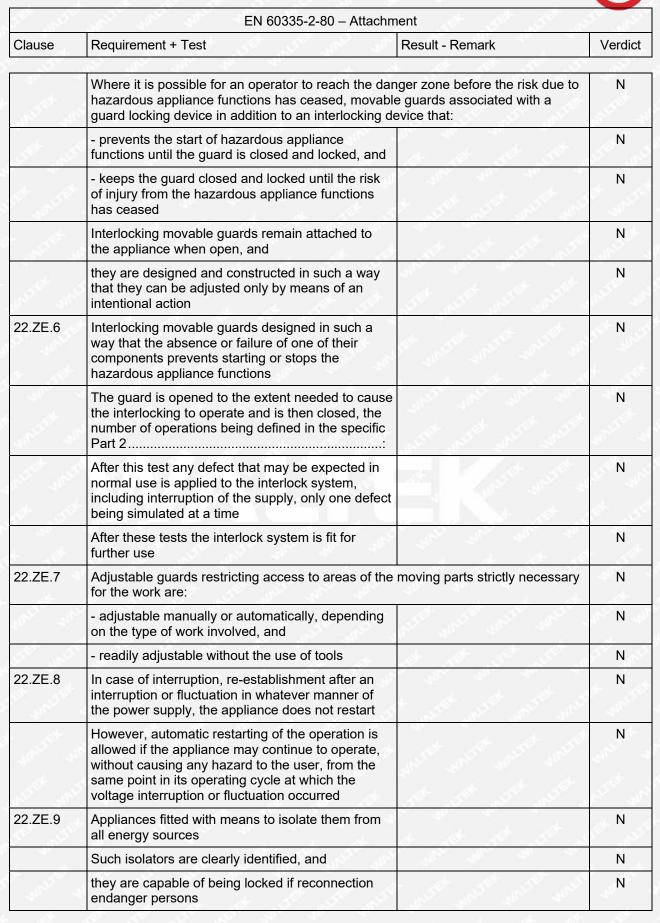
Reference No.: WTF22F09191508J Page 8 of 12

	EN 60335-2-80 – Attachm	nent	ar ar
Clause	Requirement + Test	Result - Remark	Verdict
alliana all	- the peak C-weighted instantaneous sound pressure value at workstations, where this exceeds 63 Pa (130 dB in relation to 20 µPa)		N
ige Steep	the A-weighted sound power level emitted by the machinery, where the A-weighted emission sound pressure level at workstations exceeds 80 dB(A)	The section section section .	N
7.12.ZE2	The instructions include a warning to disconnect the appliance from its power source during service and when replacing parts	safe safe safety	N
prince spri	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		N
s and the	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	- Autor against against aga	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
71.	a manual operation is required to restart it		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		N
	When guards are used, they are fixed guards, interlocking movable guards or protective devices	Mary Mary Mary Mary	N
. Jan.	Moving parts directly involved in the function of the made completely inaccessible fitted with:	appliance which cannot be	N
	- fixed guards or interlocking movable guards preventing access to those sections of the parts that are not used in the work, and	All street deliction street at	N
and al	- adjustable guards restricting access to those sections of the moving parts where access is necessary	ANTER SANTE ANTE SERV	N
	Interlocking movable guards used where frequent access is required	and the state of	N
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



	EN 60335-2-80 – Attachment					
Clause	Requirement + Test	Result - Remark	Verdict			
22.ZE.1	For appliances provided with a seat, the seat gives adequate stability		N			
Alex St	The distance between the seat and the control devices capable of being adapted to the operator	Willey Marin Alary	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		N			
garte <sup>ta</sup> .	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	Market water water	N			
22.ZE.3	Appliances designed in such a way that incorrect mounting is avoided, if this can lead to an unsafe situation	and the state of	N			
S WALLES	If this is not possible, information on the correct mounting is given directly on the part and/or the enclosure	- inter inter	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 and the Advance of	N			
rsition speci	so designed that they can be fitted with such attachments, or		N			
	be shaped in such a way that standard lifting gear can easily be used		N			
September 1	Appliances to be moved manually are constructed or equipped so that they can be moved easily and safely	State States Spatial	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	parties appropriate appropriate a	N			
ider speld St. skylde	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		N			
- Seller	Where possible, guards are incapable of remaining in place without their fixings	at the state	N			
	This does not apply if, after removal of the screws, or if the component is incorrectly repositioned, the appliance becomes inoperative	and along along a	N			
	Movable guards are interlocked		N N			
	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		N			

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0 0	EN 60335-2-80 – Attachm	nent	
			1
Clause	Requirement + Test	Result - Remark	Verdic
and the	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
	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	STATE STATE STATE STATE	N
iler Terr	The following modifications to this standard apply to appliances having UV emitters	NATURE SHALL SHALL SHALL	N
or and	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	FER HALLES SANGER SANGER SE	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	AND THE SHIP SHIP SHIP	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	The state of the s	N
ZH	ANNEX ZH (INFORMATIVE) Common plug and socket-outlet types in CENEL	.EC countries	N
	In general, supply cords of single-phase appliances having a rated current not exceeding 16 A are fitted with a plug complying with the following standard sheets:		
ilezz. Ile Alexandria	- for class I appliances or class II appliances with functional earth, standard sheet EU2, EU3 or EU4	ALTER ANTEN ANTEN ANTEN	N
e sil	- for class II appliances, standard sheet EU5, EU6 or EU7		N
- P.	There are exemptions or differences in certain CENELEC countries	Starte Mark Mark Mark	N
ANNEX ZI (INFORMATIVE) Information on the application of A11:2014 to EN 60335-1:2012 CENELEC CLC/TC 61(SEC)2096A		N 60335-1:2012	N
ing ing Ten in	Clarification of the application of parts 2 in conjunction with the 2002 or 2012 version of EN 60335-1		N
ZZA  ANNEX ZZA (INFORMATIVE)  RELATIONSHIP BETWEEN THIS EUROPEAN STANDARD AND THE SAF OBJECTIVES OF DIRECTIVE 2014/35/EU [2014 OJ L96] AIMED TO BE COVERED			Р
allekiring	This standard provides one means of conforming to safety objectives of Directive 2014/35/EU	The street matrix sources	Р

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	EN 60335-2-80 – Attach	ment	
Clause	Requirement + Test	Result - Remark	Verdict
alberra Strat	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		P
et part	Compliance with this Part 1 when used together with the relevant Part 2 provides one means of conformity with the safety objectives	T A MILITER MILITER SHITTER SH	of P
ZZB	ANNEX ZZB (INFORMATIVE) RELATIONSHIP BETWEEN THIS EUROPEAN STANDARD AND THE ESSENTIAL REQUIREMENTS OF DIRECTIVE 2006/42/EC AIMED TO BE COVERED		N
get great	This standard provides one means of conforming to essential requirements of EU Directive 2006/42/EC	the state state states.	N
	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
	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	The second secon	N
. Joh	ANNEX EN 62233:2008 + AC:2008 EMF- ELECTROMAGNETICS FIELDS		
250	The tested product also complies with the requirements of EN 62233:2008		
	Limit100%	Measured max. : 1.022%	P

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

## **W**

## **Photo Documentation**

Model: MO6810

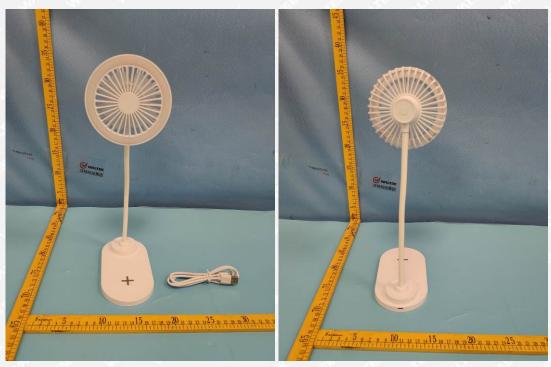


Photo 1

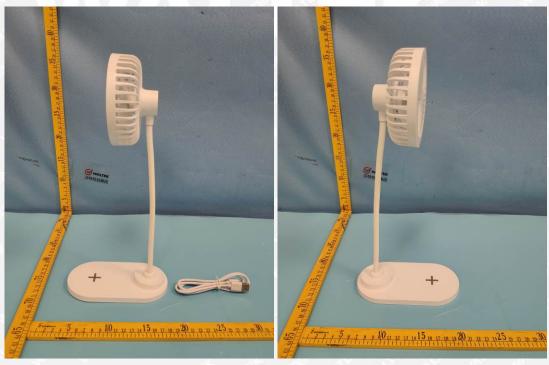


Photo 2





Photo 3



Photo 4



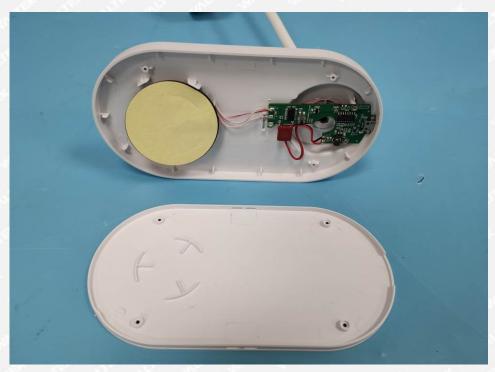


Photo 5

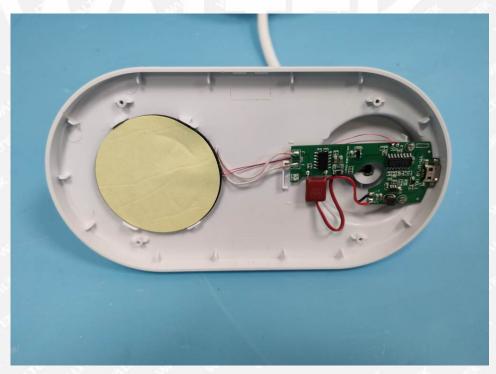


Photo 6



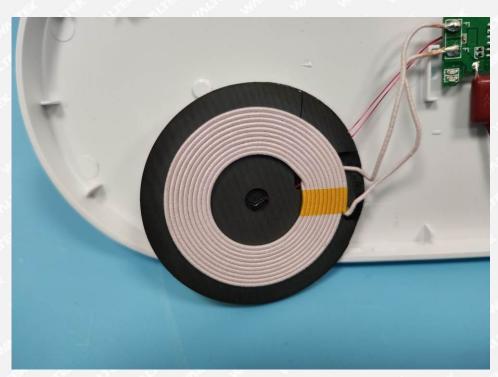


Photo 7

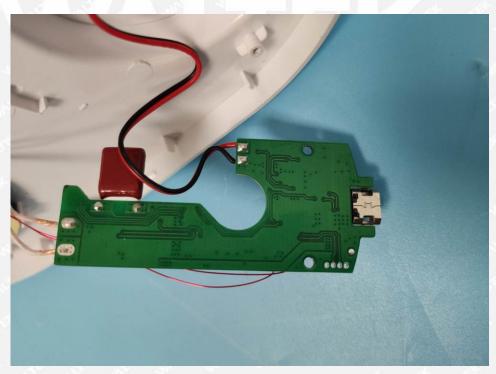


Photo 8





Photo 9



Photo 10



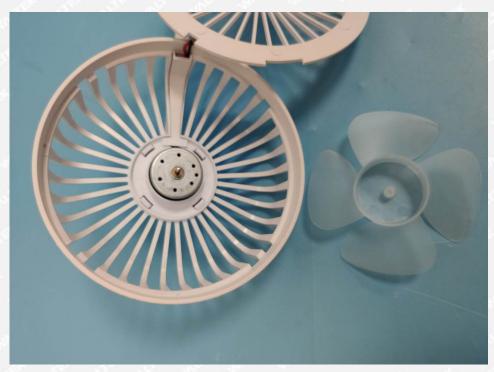


Photo 11



Photo 12



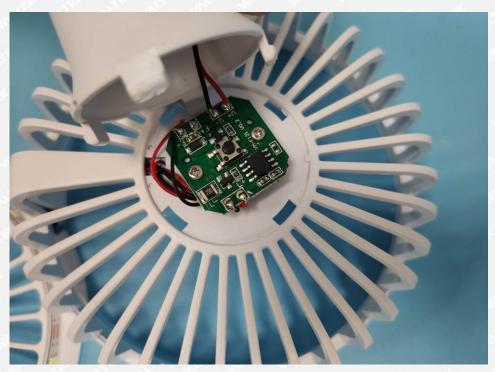


Photo 13



Photo 14

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





## TEST REPORT

Reference No. ..... WTF22D10215234S

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

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

Hong Kong

Manufacturer.....: 103221

Address .....: --

Product ...... : Desktop charger fan with light

Model(s)..... : MO6810

**Total pages**.....: 67 + 4 pages of photo documentation

Standards .....: EN IEC 62368-1: 2020+A11: 2020

Audio/video, information and communication technology equipment-

Part 1:Safety requirements

Date of Receipt sample ... : 2022-10-28

**Date of Test** ..... : 2022-10-28 to 2022-12-08

Date of Issue .....: 2022-12-08

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:

Approved by:

Soap Hu/ Project Engineer

Sam Qi / Designated Reviewer



Reference No.:WTF22D10215234S

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Test item description	Desktop cha	rger fan with light
Trademark:	МОВ	
Model and/or type reference:	MO6810	
Rating(s):		/, 2A; DC 9V, 1.1A tput Power: 10W Max.
Remark:		
Whether parts of tests for the product h	nave been sub	contracted to other labs:
☐ Yes ⊠ No		
If Yes, list the related test items and la	b information:	
Test items:		
Lab information:		the the the wife with with which a
Summary of testing:	- WITE WY	The the the tent of the tent o
Tests performed (name of test and t	est clause):	Testing location:
- EN IEC 62368-1: 2020+A11: 2020		No. 77, Houjie Section, Guantai Road,
The submitted samples were found to the requirements of above specification		Houjie Town, Dongguan City, Guangdong, China
Summary of compliance with Nation	nal Difference	s (List of countries addressed):
EU Group Differences		
The product fulfile the requirements	of ENLIC 62	269 4:2020: 444:2020
The product fulfils the requirements	OI EN IEC 02	306-1.2020+A11.2020.
Use of uncertainty of measurement	for decisions	on conformity (decision rule) :
No decision rule is specified by the applicable limit according to the specified by the spe	ne IEC standa cification in th	rd, when comparing the measurement result with the at standard. The decisions on conformity are made mple acceptance" decision rule, previously known as
Other: (to be specified, for examp requirements apply)	ole when requi	red by the standard or client, or if national accreditation
Information on uncertainty of measu	ırement:	
		the laboratory based on application of criteria given by

IECEE.

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

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



#### Copy of marking plate:



#### 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 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.





TEST ITEM PARTICULARS:	by the me my the fit
Product group	
Classification of use by:	<ul><li>☑ Ordinary person</li><li>☐ Instructed person</li><li>☐ Skilled person</li></ul>
Supply Connection:	☐ AC mains ☐ DC mains ☐ not mains connected: ☐ ES2 ☐ ES3
Supply % Tolerance:	☐ +10%/-10% ☐ +20%/-15% ☐ +%/% ☑ None
Supply Connection – Type:	<ul> <li>□ pluggable equipment type A -</li> <li>□ non-detachable supply cord</li> <li>□ appliance coupler</li> <li>□ direct plug-in</li> <li>□ pluggable equipment type B -</li> <li>□ non-detachable supply cord</li> <li>□ appliance coupler</li> <li>□ permanent connection</li> <li>□ mating connector ⋈ other: not Mains connected</li> </ul>
Considered current rating of protective device as part of building or equipment installation:	□UK: 13 A; Others: 16 A;  Location: □ building □ equipment □ N/A
Equipment mobility:	☐ movable       ☐ hand-held       ☐ transportable         ☐ direct plug-in       ☐ stationary       ☐ for building-in         ☐ wall/ceiling-mounted       ☐ SRME/rack-mounted         ☐ other:
Over voltage category (OVC):	OVC I
Class of equipment:	☐ Class I ☐ Class II ☐ Class III ☐ Not classified ☐ ☐
Access location	<ul><li>N/A ☐ restricted access area</li><li>☐ outdoor location ☐</li></ul>
Pollution degree (PD)	□PD 1⊠ PD 2 □ PD 3
Manufacturer's specified maxium operating ambient:	40°C  Outdoor: minimum°C
IP protection class:	□ IPX0 □ IP
Power Systems:	☐ TN ☐ TT ☐ ITV L-L ☐ not AC mains
Altitude during operation (m):	
Altitude of test laboratory (m)	
Mass of equipment (kg)	⊠0.34kg



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POSSIBLE TEST CASE VERDICTS:	the way we will be the
- test case does not apply to the test object:	N/A
- test object does meet the requirement:	P (Pass)
- test object does not meet the requirement:	F (Fail)
TESTING:	And the total the text of
Date of receipt of test item	2022-10-08
Date (s) of performance of tests	2022-10-08 to 2022-12-08
GENERAL REMARKS:	LIER WITE WILL MILL WALL WALL WALL
Throughout this report a ☐ comma / ☒ point is use GENERAL PRODUCT INFORMATION:	sed as the decimal separator.
GENERAL PRODUCT INFORMATION:  Product Description  1. The EUT covered by this report is a Desktop charge.	uer fan with light. It is supplied by
external power supply or via Type C port supply.	and the same of the
The manufacturer specified maximum ambient tem including 2000 m above sea level.	perature is 40°C. The specified altitude is up to and
Model Differences	EX WITER WHITE MUTEL MUTEL MUTE MUTE W
N/A	
Additional application considerations – (Considerations) N/A	rations used to test a component or sub-







Clause	Possible Hazard				
5	Electrically-caused injury				
Class and Energy Source	Body Part		Safeguards		
(e.g. ES3: Primary circuit)	(e.g. Ordinary)	В	S	R	
ES1: All internal circuit	Ordinary	N/A	N/A	N/A	
ES1: Lithium Cell	Ordinary	N/A	N/A	N/A	
6	Electrically-caused fire				
Class and Energy Source	Material part		Safeguards		
(e.g. PS2: 100 Watt circuit)	(e.g. Printed board)	В	1 <sup>st</sup> S	2 <sup>nd</sup> S	
PS2	Enclosure	N/A	N/A	N/A	
PS2	PCB, The other components/materials	N/A	See 6.2	N/A	
7	Injury caused by hazardous substances				
Class and Energy Source	Body Part		Safeguards		
(e.g. Ozone)	(e.g., Skilled)	В	S	R	
N/A	N/A	N/A	N/A	N/A	
8	Mechanically-caused injury				
Class and Energy Source	Body Part		Safeguards		
(e.g. MS3: Plastic fan blades)	(e.g. Ordinary)	В	S	R	
MS1: Edges and corners	Ordinary	N/A	N/A	N/A	
MS1: Mass of the unit	Ordinary	N/A	N/A	N/A	
9	Thermal burn				
Class and Energy Source	Body Part	Safeguards			
(e.g. TS1: Keyboard caps)	(e.g., Ordinary)	В	S	R	
TS1: All accessible parts	Ordinary	N/A	N/A	N/A	
10	Radiation				
Class and Energy Source	Body Part (e.g., Ordinary)	Safeguards			
(e.g. RS1: PMP sound output)		В	S	R	
RS1: LED for indicating	Ordinary	N/A	N/A	N/A	



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### **ENERGY SOURCE DIAGRAM**

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

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

See details in OVERVIEW OF ENERGY SOURCES AND SAFEGUARDS

# The life of the li







AV		70.	
i ni		IEC62368-1	
Clause	Requirement – Test	Result – Remark	Verdict

	The	THE THE STATE OF T	" OLO
4	GENERAL REQUIREMENTS		P
4.1.1	Acceptance of materials, components and subassemblies		
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	OME POU
4.1.3	Equipment design and construction	Equipment is adequately designed and constructed.	P
4.1.4	Specified ambient temperature for outdoor use (°C)	Indoor use only	N/A
4.1.5	Constructions and components not specifically covered	No such constructions and components.	N/A
4.1.8	Liquids and liquid filled components (LFC)	No such parts.	N/A
4.1.15	Markings and instructions	(See Annex F)	Р
4.4.3	Safeguard robustness	See below	P
4.4.3.1	General	- 1 th th	Р
4.4.3.2	Steady force tests	(See Annex T.2and T.4)	Life Pari
4.4.3.3	Drop tests	(See Annex T.7)	Р
4.4.3.4	Impact tests	set itet litet mitet ini	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
in and	Glass impact test (1J)	LIER RUTER ARTIE AND L	N/A
et et	Push/pull test (10 N)		N/A
4.4.3.8	Thermoplastic material tests	(See Annex T.8)	Р
4.4.3.9	Air comprising a safeguard		N/A
4.4.3.10	Accessibility, glass, safeguard effectiveness	After tests of 4.4.3.2, 4.4.3.3,4.4.3.4, 4.4.3.8, no safeguard damaged.	WP MATER
4.4.4	Displacement of a safeguard by an insulating liquid	No such liquid.	N/A
4.4.5	Safety interlocks	No such parts.	N/A
4.5	Explosion	at at at 1st .	TEN PITE
4.5.1	General	No explosion occurs during normal/abnormal operation and single fault conditions	P



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20,	IEC62368-1	write authority was a	$\overline{z_{l_1} - z_{l_2}}$
Clause	Requirement – Test	Result – Remark	Verdict
150	No. 1 de la descripción de la constante de la	(0. Ol D.O. D.O.	
4.5.2	No explosion during normal/abnormal operating condition	(See Clause B.2, B.3)	EL PEX
	No harm by explosion during single fault conditions	(See Clause B.4)	P
4.6	Fixing of conductors	See below	Р
Et NIE	Fix conductors not to defeat a safeguard	at get get get	CIE PN
40,	Compliance is checked by test	. (See Clause T.2)	Р
4.7	Equipment for direct insertion into mains sock	ret-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)	- TEK TEK STEK OUTE	N/A
4.8	Equipment containing coin/button cell batterie	Sur M. M.	N/A
4.8.1	General	No coin/button cell batteries used.	N/A
4.8.2	Instructional safeguard	at let let lift o	N/A
4.8.3	Battery compartment door/cover construction	the me me a	N/A
WITE.	Open torque test	y tet tet liter out	N/A
4.8.4.2	Stress relief test	The The An	N/A
4.8.4.3	Battery replacement test	LET STIFE MITE	N/A
4.8.4.4	Drop test		N/A
4.8.4.5	Impact test	THE LIFE WITH MALTE	N/A
4.8.4.6	Crush test	1 24 2	N/A
4.8.5	Compliance	STA WILL WILL MALLE WA	N/A
, Et	30N force test with test probe	70 x x	N/A
Mrs. M	20N force test with test hook	ALTER WALTER WALTE WALTE	N/A
4.9	Likelihood of fire or shock due to entry of cond	ductive object	P
4.10	Component requirements	WITE WALL WALL WALL WALL	N/A
4.10.1	Disconnect Device	a at all all	N/A
4.10.2	Switches and relays	The Marin Marin Marin M	N/A
All L	THE LIFE WITH THE AND AND AND ADDRESS OF THE PARTY OF THE		CENT SE
5	ELECTRICALLY-CAUSED INJURY		4// P
5.2	Classification and limits of electrical energy so	urces	Р
5.2.2	ES1, ES2 and ES3 limits	Will Wall May My	Р
5.2.2.2	Steady-state voltage and current limits		P
5.2.2.3	Capacitance limits		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



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01-	IEC62368-1		1,7
Clause	Requirement – Test	Result – Remark	Verdict
5.2.2.7	Audio signals	the me me m	N/A
5.3	Protection against electrical energy sources	THE LITER NUTER AND	Р
5.3.1	General Requirements for accessible parts to ordinary, instructed and skilled persons	TEX TEX TEX STEE	P
5.3.1 a)	Accessible ES1/ES2 derived from ES2/ES3 circuits	his me me an	N/A
5.3.1 b)	Skilled personsnot unintentional contact ES3 bare conductors	TER WHITE WHITE WHITE W	N/A
5.3.2.1	Accessibility to electrical energy sources and safeguards	Only ES1 circuit and the enclosure (safeguard) are accessed to person.	PY
mer we	Accessibility to outdoor equipment bare parts	alter miter and white	N/A
5.3.2.2	Contact requirements	an an at the	N/A
ic. Mr.	Test with test probe from Annex V	LIET MILE WALL WALL	_
5.3.2.2 a)	Air gap – electric strength test potential (V)	e e et et	N/A
5.3.2.2 b)	Air gap – distance (mm)	er write write were w	N/A
5.3.2.3	Compliance	at at all a	N/A
5.3.2.4	Terminals for connecting stripped wire	No stripped wire used.	N/A
5.4	Insulation materials and requirements	at the life	J P
5.4.1.2	Properties of insulating material	No insulation as a safeguard.	N/A
5.4.1.3	Material is non-hygroscopic	The Little	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	"Mris Mris Mrs M	N/A
5.4.1.5.2	Test for pollution degree 1 environment and for an insulating compound	ALTER MATER MATER WALT	N/A
5.4.1.5.3	Thermal cycling test	and the state of	N/A
5.4.1.6	Insulation in transformers with varying dimensions	LITE WITE WALL WALL	N/A
5.4.1.7	Insulation in circuits generating starting pulses	e at at at	N/A
5.4.1.8	Determination of working voltage	white Area Area A	N/A
5.4.1.9	Insulating surfaces	- It lit lit is	N/A
5.4.1.10	Thermoplastic parts on which conductive metallic parts are directly mounted	unit we we will	N/A
5.4.1.10.2	Vicat test	WITE WILL MALL MALL	N/A
5.4.1.10.3	Ball pressure test	L A It At	N/A
5.4.2	Clearances	THE WALL MALL WALL	N/A
5.4.2.1	General requirements	at at all all	N/A
July 1	Clearances in circuits connected to AC Mains, Alternative method	with the state	N/A
5.4.2.2	Procedure 1 for determining clearance	alter alte militanti	N/A



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01	IEC62368-1	D 11 D 1	N/ P /
Clause	Requirement – Test	Result – Remark	Verdict
70, 7	Temporary overvoltage	Mr. Ann Mr.	70 70
5.4.2.3	Procedure 2 for determining clearance	78 - 17 - 17 - 17 T	N/A
5.4.2.3.2.2	a.c. mains transient voltage	Wer also all	A -
5.4.2.3.2.3	d.c. mains transient voltage	West Williams	V
5.4.2.3.2.4	External circuit transient voltage	W. W. 20.	.t _
5.4.2.3.2.5	Transient voltage determined by measurement	Life Wille MULLER MA	
5.4.2.4	Determining the adequacy of a clearance using an	t set set se	N/A
20, 20	electric strength test	auty mr. mer	1/11.
5.4.2.5	Multiplication factors for clearances and test voltages	LIER SLIER MITER	N/A
5.4.2.6	Clearance measurement	an an	N/A
5.4.3	Creepage distances	LIEF WILL WILL W	N/A
5.4.3.1	General	1 1 1	N/A
5.4.3.3	Material group	Er Will Mill Mil	an —
5.4.3.4	Creepage distances measurement	A A A	N/A
5.4.4	Solid insulation	Write White Whi	N/A
5.4.4.1	General requirements	A STATE	N/A
5.4.4.2	Minimum distance through insulation	2 247 1	N/A
5.4.4.3	Insulating compound forming solid insulation		N/A
5.4.4.4	Solid insulation in semiconductor devices	is the me in	N/A
5.4.4.5	Insulating compound forming cemented joints	A TEN TEN STE	N/A
5.4.4.6	Thin sheet material	me me m	N/A
5.4.4.6.1	General requirements	THE LITTER STEEL	N/A
5.4.4.6.2	Separable thin sheet material	in in in	N/A
Tip. Murr.	Number of layers (pcs)	LIER NIFER MITER OF	N/A
5.4.4.6.3	Non-separable thin sheet material		LN/A
MULL	Number of layers (pcs)	EX SLIER WILLES WAL	N/A
5.4.4.6.4	Standard test procedure for non-separable thin sheet material	- Tel Tel Tel	N/A
5.4.4.6.5	Mandrel test	mer me me	N/A
5.4.4.7	Solid insulation in wound components	TEX LIEX SLIFE	N/A
5.4.4.9	Solid insulation at frequencies >30 kHz, $E_P$ , $K_R$ , $d$ , $V_{PW}$ (V)	of the top	N/A
k Zek	Alternative by electric strength test, tested voltage (V), K <sub>R</sub>	The me me m	N/A
5.4.5	Antenna terminal insulation	CHILL WALLE WALL	N/A
5.4.5.1	General	٠. ١	N/A

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IEC62368-1			
Clause	Requirement – Test	Result – Remark	Verdict
Mrs !	Mr. Mr. Land St.	EL STATE MULL SING	who am
5.4.5.2	Voltage surge test		N/A
5.4.5.3	Insulation resistance (M $\Omega$ )	WITE WALL WALL	N/A
all S	Electric strength test	7 A	N/A
5.4.6	Insulation of internal wire as part of supplementary safeguard	Will Mill Mill M	N/A
5.4.7	Tests for semiconductor components and for cemented joints	IER MITER MUTER MU	N/A
5.4.8	Humidity conditioning	t tek itek lite	N/A
SEK N	Relative humidity (%), temperature (°C), duration (h)	My My My	
5.4.9	Electric strength test	Write Muri Muri	N/A
5.4.9.1	Test procedure for type test of solid insulation	at at at	N/A
5.4.9.2	Test procedure for routine test	THE MUTE AND ALL	N/A
5.4.10			N/A
5.4.10.1	Parts and circuits separated from external circuits	A A A	N/A
5.4.10.2	Test methods	WILL WILL MALL	N/A
5.4.10.2.1	General	A A A	N/A
5.4.10.2.2	Impulse test	1 July 1	N/A
5.4.10.2.3	Steady-state test		N/A
5.4.10.3	Verification for insulation breakdown for impulse test	the me me	N/A
5.4.11	Separation between external circuits and earth	White white mi	N/A
5.4.11.1	Exceptions to separation between external circuits and earth	SLIER WILLER WALTER	N/A
5.4.11.2	Requirements	Con the second	N/A
12 M2.	SPDs bridge separation between external circuit and earth	RETER WALTER WALTER W	N/A
MULL	Rated operating voltage U <sub>op</sub> (V)	EL STER WILL NUT	_ n_
, et	Nominal voltage U <sub>peak</sub> (V)	20, 40, 70	_
Mr. M	Max increase due to variation ΔU <sub>sp</sub>	NITE MITTER MALTE	anci _
AEK A	Max increase due to ageing ΔU <sub>sa</sub>	41. 10. 1	
5.4.11.3	Test method and compliance	WILL WILL SAVIE	N/A
5.4.12	Insulating liquid	a to the	N/A
5.4.12.1	General requirements	THE WITE WITE W	N/A
5.4.12.2	Electric strength of an insulating liquid	1 1 1	N/A
5.4.12.3	Compatibility of an insulating liquid	White Miles	N/A
5.4.12.4	Container for insulating liquid		N/A



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IEC62368-1			
Clause	Requirement – Test	Result – Remark	Verdict

5.5	Components as safeguards		N/A
5.5.1	General	No such components as safeguards.	N/A
5.5.2	Capacitors and RC units	TEX TEX NITER MITE	N/A
5.5.2.1	General requirement	the street of	N/A
5.5.2.2	Safeguards against capacitor discharge after disconnection of a connector	TER WHITE WHITE	N/A
5.5.3	Transformers	t get get with a	N/A
5.5.4	Optocouplers	21/2 21/2 21/2 21/2	N/A
5.5.5	Relays	TER STER STER OUT	N/A
5.5.6	Resistors	The the sail and	N/A
5.5.7	SPDs	TEX LIER WIFE WIFE	N/A
5.5.8	Insulation between the mains and an external circuit consisting of a coaxial cable	at alt and water	N/A
5.5.9	Safeguards for socket-outlets in outdoor equipment	me me me	N/A
1/1 1	RCD rated residual operating current (mA)	write mr. mr. mr.	_
5.6	Protective conductor	at the set set	N/A
5.6.2	Requirement for protective conductors	The things the	N/A
5.6.2.1	General requirements	Class III equipment	N/A
5.6.2.2	Colour of insulation	y my my m	N/A
5.6.3	Requirement for protective earthing conductors	of the the other of	N/A
	Protective earthing conductor size (mm²)	24. 24. 24. 2	_
Mrtie M	Protective earthing conductor serving as a reinforced safeguard	WHITE WHITE WHITE WHIT	N/A
LIFER WILL	Protective earthing conductor serving as a double safeguard	LIER MITER WHITE	N/A
5.6.4	Requirements for protective bonding conductors	L A A A	N/A
5.6.4.1	Protective bonding conductors	in were mure mure a	N/A
CIER	Protective bonding conductor size (mm²)	et let let	d —
5.6.4.2	Protective current rating (A)	mery mer my my	N/A
5.6.5	Terminals for protective conductors	LEK LEK LIEK SITE	N/A
5.6.5.1	Terminal size for connecting protective earthing conductors (mm)	und und the test test	N/A
t let	Terminal size for connecting protective bonding conductors (mm)	The way was	N/A
5.6.5.2	Corrosion	ER WILLER WALLE MALLE M	N/A
5.6.6	Resistance of the protective bonding system	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N/A
5.6.6.1	Requirements	with out with while	N/A



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IEC62368-1			
Clause	Requirement – Test	Result – Remark	Verdict
The	White the state of the state of	the write with m	- 21/L
5.6.6.2	Test Method	10 to	N/A
5.6.6.3	Resistance ( $\Omega$ ) or voltage drop	WILL MALL MALL MALL	N/A
5.6.7	Reliable connection of a protective earthing conductor	TEX LIEK NITER MITER	N/A
5.6.8	Functional earthing	W. M. W.	N/A
in all the	Conductor size (mm²)	IER STER WITE MILE	N/A
- 164	Class II with functional earthing marking	24	N/A
JULE -	Appliance inlet cl &cr (mm)	LIER WILL WILL WA	N/A
5.7	Prospective touch voltage, touch current and p	rotective conductor current	N/A
5.7.2	Measuring devices and networks	WILL WILL MAN	N/A
5.7.2.1	Measurement of touch current	a state of	N/A
5.7.2.2	Measurement of voltage	LIFE WALL WALL WALL	N/A
5.7.3	Equipment set-up, supply connections and earth connections	ex while writer whilek w	N/A
5.7.4	Unearthed accessible parts	20 x	N/A
5.7.5	Earthed accessible conductive parts	CHIEF WITE WALL WAL	N/A
5.7.6	Requirements when touch current exceeds ES2 limits	ALTER MITTER	N/A
st si	Protective conductor current (mA)	2 3	N/A
in Mirror	Instructional Safeguard	The life of the walls	N/A
5.7.7	Prospective touch voltage and touch current associated with external circuits	t tet tet stilt is	N/A
5.7.7.1	Touch current from coaxial cables	The Mr. M. M.	N/A
5.7.7.2	Prospective touch voltage and touch current associated with paired conductor cables	Whitek whitek whitek whit	N/A
5.7.8	Summation of touch currents from external circuits	stek milet waitek waitek	N/A
EK WITEK	a) Equipment connected to earthed external circuits, current (mA)	et stret stret shiret	N/A
MITER	b) Equipment connected to unearthed external circuits, current (mA)	- 1th 1th 1th of	N/A
5.8	Backfeed safeguard in battery backed up suppl	ies	N/A
in <sup>liter</sup> int	Mains terminal ES	No battery used	N/A
	Air gap (mm)	ne in in a	N/A

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



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IEC62368-1				
Clause	Requirement – Test	Result – Remark	Verdict	
6.2.2	Power source circuit classifications	PS (power source) classification determined by measuring the maximum power in Figures 34 and 35 for load and power source circuits. (See appended table 6.2.2)	P.+	
6.2.3	Classification of potential ignition sources	See the following details.	of Po	
6.2.3.1	Arcing PIS	No Arcing PIS exist in the equipment	N/A	
6.2.3.2	Resistive PIS	(See appended table 6.2.3.2)	J/P	
6.3	Safeguards against fire under normal operating conditions	and abnormal operating	Р	
6.3.1	No ignition and attainable temperature value less than 90 % defined by ISO 871 or less than 300 °C for unknown materials	No ignition and no such temperature attained within the equipment. (See appended table B.1.5 & B.3)	Milli P	
	Combustible materials outside fire enclosure	No such parts	N/A	
6.4	Safeguards against fire under single fault condit	tions	P	
6.4.1	Safeguard method	Control fire spread	Р	
6.4.2	Reduction of the likelihood of ignition under single fault conditions in PS1 circuits	THE WALLE WALLE	uni P	
6.4.3	Reduction of the likelihood of ignition under single fault conditions in PS2 and PS3 circuits	I'E MITE WITH WITH	P	
6.4.3.1	Supplementary safeguards	t at alt alt of	P	
6.4.3.2	Single Fault Conditions	White Aut Au Au	N/A	
NITER II	Special conditions for temperature limited by fuse	LEK TEK TEK SITE	N/A	
6.4.4	Control of fire spread in PS1 circuits	Mrr. Mr. Mr. An.	Р	
6.4.5	Control of fire spread in PS2 circuits	LET TEX STER STER	NET P	
6.4.5.2	Supplementary safeguards	ye we my	N/A	
6.4.6	Control of fire spread in PS3 circuits	Et TEX LIER OLIER OF	N/A	
6.4.7	Separation of combustible materials from a PIS	Mr. Mr. M.	N/A	
6.4.7.2	Separation by distance	THE LIE STEE WIT	N/A	
6.4.7.3	Separation by a fire barrier	No fire barrier used.	N/A	
6.4.8	Fire enclosures and fire barriers	See below.	N/A	
6.4.8.2	Fire enclosure and fire barrier material properties	V-0 plastic enclosure used	N/A	
6.4.8.2.1	Requirements for a fire barrier	No fire barrier used.	N/A	
6.4.8.2.2	Requirements for a fire enclosure	V-0 plastic enclosure used	N/A	
6.4.8.3	Constructional requirements for a fire enclosure and a fire barrier	See below	N/A	
6.4.8.3.1	Fire enclosure and fire barrier openings	No openings	N/A	



	A		1
V		Z	
		À	

20,	IEC62368-1				
Clause	Requirement – Test	Result – Remark	Verdict		
6.4.8.3.2	Fire barrier dimensions	No specific barrier provided.	N/A		
6.4.8.3.3	Top openings and properties	No top opening	N/A		
<u> </u>	Openings dimensions (mm)	200 1 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	N/A		
6.4.8.3.4	Bottom openings and properties	No bottom opening	N/A		
et let	Openings dimensions (mm)		N/A		
nu.	Flammability tests for the bottom of a fire enclosure	THE WALLE MULL MULL M	N/A		
10000 1	Instructional Safeguard	* SLIEF WILL MALLE WAS	N/A		
6.4.8.3.5	Side openings and properties	No side openings	N/A		
ing in	Openings dimensions (mm)	ALTER WITE WALLE WALL	N/A		
6.4.8.3.6	Integrity of a fire enclosure, condition met: a), b) or c)	No enclosure can be opened by an ordinary person	N/A		
6.4.8.4	Separation of a PIS from a fire enclosure and a fire barrier distance (mm) or flammability rating	V-0 plastic enclosure used	N/A		
6.4.9	Flammability of insulating liquid	my my my m	N/A		
6.5	Internal and external wiring	t itely itely affect and	Р		
6.5.1	General requirements	The internal wires are complied with UL standard, of which the test method and testing condition are equal to IEC/EN 60695-11-21.	WALTER O		
6.5.2	Requirements for interconnection to building wiring	See 6.5.1.	P		
6.5.3	Internal wiring size (mm2) for socket-outlets	No such wire used	N/A		
6.6	Safeguards against fire due to the connection to ac	dditional equipment	Р		
7	INJURY CAUSED BY HAZARDOUS SUBSTANC	ES	Р		
7.2	Reduction of exposure to hazardous substance		N/A		
7.3	Ozone exposure	the any man	N/A		
7.4	Use of personal safeguards or personal protect	tive equipment (PPE)	N/A		
CENT.	Personal safeguards and instructions				
7.5	Use of instructional safeguards and instruction	S Intil Marie was ville	N/A		
All C	Instructional safeguard (ISO 7010)	x x x x x x x x x x x x x x x x x x x			
7.6	Batteries and their protection circuits	Merit Mary Mary Mary	Р		
8		a de de de	1 DB		
	MECHANICALLY-CAUSED INJURY		P		
8.2	Mechanical energy source classifications	ist with outth with	P		
8.3	Safeguards against mechanical energy sources		P		
8.4	Safeguards against parts with sharp edges and	corners	Р		



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01	IEC62368-1		
Clause	Requirement – Test	Result – Remark	Verdict
8.4.1	Safeguards	The ship we ship	Р
0.4.1	Instructional Safeguard:	MS1: Edges and corners of	P P
70, 70.	instructional Saleguard	MS1: Edges and corners of enclosure	20, 1
8.4.2	Sharp edges or corners	Edges and corners of the enclosure are rounded.	Р
8.5	Safeguards against moving parts	at let let liet.	N/A
8.5.1	Fingers, jewellery, clothing, hair, etc., contact with MS2 or MS3 parts	No moving parts.	N/A
74 N	MS2 or MS3 part required to be accessible for the function of the equipment	See above.	N/A
ner in	Moving MS3 parts only accessible to skilled person	SLIER WILL WALLE	N/A
8.5.2	Instructional safeguard:	211 211	N/A
8.5.4	Special categories of equipment containing moving parts	THE WHITE WHITE WILL V	N/A
8.5.4.1	General	ex lifex when while we	N/A
8.5.4.2	Equipment containing work cells with MS3 parts	711. 72. 74	N/A
8.5.4.2.1	Protection of persons in the work cell	CLIFER WITE WALLE WALL	N/A
8.5.4.2.2	Access protection override		N/A
8.5.4.2.2.1	Override system	" July Mur	N/A
8.5.4.2.2.2	Visual indicator	the left	N/A
8.5.4.2.3	Emergency stop system	The Marie Mar Mar A	N/A
WILLER	Maximum stopping distance from the point of activation (m)	A CHIEF MILES WALTER WAY	N/A
Writek Whi	Space between end point and nearest fixed mechanical part (mm)	itet allet allet ande	N/A
8.5.4.2.4	Endurance requirements	The state of the s	N/A
T ME	Mechanical system subjected to 100 000 cycles of operation	HITEL WHITE WHITE WHITE	N/A
MILITER	- Mechanical function check and visual inspection	EX LIEX WITE WITE OF	N/A
	- Cable assembly	211. 20. 20.	N/A
8.5.4.3	Equipment having electromechanical device for destruction of media	WHITE WHITE WHITE WHI	N/A
8.5.4.3.1	Equipment safeguards	TEX LIEX NITER OUTER	N/A
8.5.4.3.2	Instructional safeguards against moving parts:	m. m. m.	N/A
8.5.4.3.3	Disconnection from the supply	TEX NITER INTER WALTER	N/A
8.5.4.3.4	Cut type and test force (N)	24 74 74	N/A
8.5.4.3.5	Compliance	It THE WILL WALL WA	N/A
8.5.5	High pressure lamps	No high pressure lamps used.	N/A
were an	Explosion test	wife out only	N/A



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- 2	IEC62368-1	VILLE THE THE	125. 2.
Clause	Requirement – Test	Result – Remark	Verdict
0.5.5.0	Class porticles disconsions (mm)	The strange of the	NI/A
8.5.5.3	Glass particles dimensions (mm):		N/A
8.6	Stability of equipment	WHILE MALL MALL MAR	N/A
8.6.1	General	MS1: Mass of the unit	N/A
20	Instructional safeguard	Will alor My My	N/A
8.6.2	Static stability	at at let let	N/A
8.6.2.2	Static stability test:	the Muri Mur Mur A	N/A
8.6.2.3	Downward force test	t get get get o	N/A
8.6.3	Relocation stability	The Mr. Mr. A.	N/A
WILLEY OF	Wheels diameter (mm):	TEK ITEK SLIEK MIT	_
	Tilt test	Mr. Mr. Mr. D.	N/A
8.6.4	Glass slide test	THE LITER RUTER WITE	N/A
8.6.5	Horizontal force test:	- 1/1 1/1 1/1 1/2 1/2 1/2 1/2 1/2 1/2 1/2	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	NITER INITER WALTE WA	N/A
Let .	Test 1, additional downwards force (N):		N/A
ie, m	Test 2, number of attachment points and test force (N)	A There sales	N/A
TEK WITE	Test 3 Nominal diameter (mm) and applied torque (Nm)	TE MILE WILL WILLEY	N/A
8.8	Handles strength	ex cet cet with	N/A
8.8.1	General	No handles	N/A
8.8.2	Handle strength test	TEX ITEX SITEX INLI	N/A
	Number of handles:	Mr. Mr. All Mr.	_
17. M. T.	Force applied (N):	THE THE MITTER MITTER	10 - 11
8.9	Wheels or casters attachment requirements	10 - 211 - 11 - 12 - 12 - 12 - 12 - 12 -	N/A
8.9.2	Pull test	No such parts	N/A
8.10	Carts, stands and similar carriers	W . W	N/A
8.10.1	General	No carts, stands or similar carriers	N/A
8.10.2	Marking and instructions:	ALTER OLIER MALTER MALTER	N/A
8.10.3	Cart, stand or carrier loading test		N/A
. Mrs.	Loading force applied (N):	TER MITE MITE WHILE	N/A
8.10.4	Cart, stand or carrier impact test	11 A A	N/A
8.10.5	Mechanical stability	ALTE WALE WATE W	N/A
J+	Force applied (N):	W 7	J - 25



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Clause	Requirement – Test	Result – Remark	Verdict
Me	All All A A	the city with any	The all
8.10.6	Thermoplastic temperature stability	210, 211, 22,	N/A
8.11	Mounting means for slide-rail mounted e	quipment (SRME)	JN/A
8.11.1	General	No such parts	N/A
8.11.2	Requirements for slide rails	LIFE MIFE WALTE WALL OF	N/A
Et JE	Instructional Safeguard	i	N/A
8.11.3	Mechanical strength test	TEX UNITE WITH WITH WITH	N/A
8.11.3.1	Downward force test, force (N) applied		N/A
8.11.3.2	Lateral push force test	anti with the the	N/A
8.11.3.3	Integrity of slide rail end stops	at at at all	N/A
8.11.4	Compliance	write our mer me	N/A
8.12	Telescoping or rod antennas	et et let let let	N/A
	Button/ball diameter (mm)	: No such parts	_

9	THERMAL BURN INJURY		Р
9.2	Thermal energy source classifications		Р
9.3	Touch temperature limits	WET MUST AND AND AND	Р
9.3.1	Touch temperatures of accessible parts	: (See appended table 5.4.1.4, 9.3, B.1.5, B.2.6)	MITP
9.3.2	Test method and compliance	See B.1.6 & B.2.3	JE P
9.4	Safeguards against thermal energy sources	MILL MILL MILL MILL WITH	Р
9.5	Requirements for safeguards		P
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.	P
9.5.2	Instructional safeguard	: Instructional safeguard is not required.	N/A
9.6	Requirements for wireless power transmitte	ers ret gire mile weit with	Р
9.6.1	General	See below.	P
9.6.2	Specification of the foreign objects	See table 9.6.	Jul P
9.6.3	Test method and compliance	: See table 9.6.	Р

10	RADIATION		P N
10.2	Radiation energy source classification	LIER WILL WHILL A	U. Bill
10.2.1	General classification	See below	EF PIEF
11/12	Lasers:	the write with the wo	_
MATER	Lamps and lamp systems:	RS1: LED only for indicating use which is considered as low	_



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nu.		IEC62368-1	
Clause	Requirement – Test	Result – Remark	Verdict
- Mr.	An An	The state salte south when	mr m

Clause	Trequirement – Test	Result – Remark	verdict
- apr		power application.	70
WILL I	Image projectors:	4 4 4	_
11 22	X-Ray:		
TILE NO	Personal music player		
10.3	Safeguards against laser radiation	her the the the	N/A
10.5	The standard(s) equipment containing laser(s)	No laser radiation	N/A
	comply:	TWO laser radiation	N/A
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)	, In P
LIEK WALT	Instructional safeguard provided for accessible radiation level needs to exceed	LIET MITER WAITER WALTER	N/A
it the	Risk group marking and location	, a st st	N/A
21/2	Information for safe operation and installation	E MILL MILL MILL W	N/A
10.4.2	Requirements for enclosures	at the fift of	N/A
1115 1	UV radiation exposure:	WALL WALL WALL WALL	N/A
10.4.3	Instructional safeguard:	at the state	N/A
10.5	Safeguards against X-radiation	2 July My	N/A
10.5.1	Requirements	No X-radiation	N/A
20.	Instructional safeguard for skilled persons	is mer me me	_
10.5.3	Maximum radiation (pA/kg)	A TEN LIET NITER ON	_
10.6	Safeguards against acoustic energy sources	1/12 1/11 1/11 1/11	N/A
10.6.1	General	THE STEE STEE WALT	N/A
10.6.2	Classification	Mr. Mr. Mr.	N/A
The Will	Acoustic output L <sub>Aeq,T</sub> , dB(A)	LIER OLIER WHILE WHILE	N/A
ek unitek	Unweighted RMS output voltage (mV):	No such electrical output socket	N/A
1	Digital output signal (dBFS):	The Mr. to.	N/A
10.6.3	Requirements for dose-based systems	- LIEF LIFE MLTER AUT	N/A
10.6.3.1	General requirements	7/1 2/1 2	N/A
10.6.3.2	Dose-based warning and automatic decrease	TIEK NITER INTER WAITE	N/A
10.6.3.3	Exposure-based warning and requirements	in to	N/A
nur.	30 s integrated exposure level (MEL30):	TER OLITER MITTER WALTER	N/A
+ Let	Warning for MEL ≥ 100 dB(A):	a st st	N/A
10.6.4	Measurement methods	THE WALL WALL OF	Р
10.6.5	Protection of persons		P
21/2 21	Instructional safeguards:	write while while while	√ P



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Clause	Requirement – Test	Result – Remark	Verdict	
10.6.6	Requirements for listening devices (headphones,	the tree with the	N/A	
10.0.0	earphones, etc.)	t tex itex street		
10.6.6.1	Corded listening devices with analogue input	Aur. Au. Au.	N/A	
Nifer Wil	Listening device input voltage (mV):	TER LIER NUMBER	N/A	
10.6.6.2	Corded listening devices with digital input	the me in a	N/A	
W. W.	Max. acoustic output $L_{Aeq,T}$ , dB(A):	TER STER WITER WA	N/A	
10.6.6.3	Cordless listening devices	711 72	N/A	
	Max. acoustic output $L_{Aeq,T}$ , dB(A):	E SLIEB MITE MITE	N/A	

В	NORMAL OPERATING CONDITION TESTS, ABI CONDITION TESTS AND SINGLE FAULT COND	NORMAL OPERATING ITION TESTS	W. P
B.1	General	at left test tiest	TO P
B.1.5	Temperature measurement conditions	(See appended table B.1.5)	Р
B.2	Normal operating conditions	et tet tet ster o	P
B.2.1	General requirements:	(See Test Item Particulars and appended test tables)	P
1711 A	Audio Amplifiers and equipment with audio amplifiers	White the total	N/A
B.2.3	Supply voltage and tolerances	Rated input 9Vdc	AL P
B.2.5	Input test:	(See appended table B.2.5)	P
B.3	Simulated abnormal operating conditions	LIFE WALL WALL WILL A	Р
B.3.1	General	(See appended table B.3)	P.
B.3.2	Covering of ventilation openings	No ventilation openings.	N/A
TEN .	Instructional safeguard:	at let the the	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	(See appended table B.3)	Р
B.3.6	Reverse battery polarity	No such battery	N/A
B.3.7	Audio amplifier abnormal operating conditions	(See appended table B.3)	Р
B.3.8	Safeguards functional during and after abnormal operating conditions:	All safeguards remained effective	, III P
B.4	Simulated single fault conditions	LEK LEK LIEK LITER	P
B.4.1	General	her my my my	Р
B.4.2	Temperature controlling device	See appended table B.4 for details	Р
B.4.3	Blocked motor test	No motors	N/A
B.4.4	Functional insulation	See below.	Р
B.4.4.1	Short circuit of clearances for functional insulation	(See appended table B.4)	Р



200	IEC62368-1	ing any any and	20. 10.
Clause	Requirement – Test	Result – Remark	Verdict
D 1 10			70
B.4.4.2	Short circuit of creepage distances for functional insulation	(See appended table B.4)	L PEN
B.4.4.3	Short circuit of functional insulation on coated printed boards	No coated printed boards within the EUT	N/A
B.4.5	Short-circuit and interruption of electrodes in tubes and semiconductors	(See appended table B.4)	Р
B.4.6	Short circuit or disconnection of passive components	(See appended table B.4)	Р
B.4.7	Continuous operation of components	The EUT is continuous operating type and no such components intended for short time operation or intermittent operation	N/A
B.4.8	Compliance during and after single fault conditions:	No change to circuits classified in 5.3	MIT P
B.4.9	Battery charging and discharging under single fault conditions	EX DITEX MITEX MAITER W	N/A
С	UV RADIATION		N/A
C.1	Protection of materials in equipment from UV r	adiation	N/A
C.1.2	Requirements	No such UV generated from the equipment.	N/A
C.1.3	Test method	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N/A
C.2	UV light conditioning test	LIE ALTE MAIN WALLE V	N/A
C.2.1	Test apparatus:	20° 1 1 1 1 1	⊳ N/A
C.2.2	Mounting of test samples	PA COLITER WALTER WALTER WA	N/A
C.2.3	Carbon-arc light-exposure test	The state of	N/A
C.2.4	Xenon-arc light-exposure test	mile while while while	N/A
D	TEST GENERATORS		N/A
D.1	Impulse test generators	WILL WELL MUST ME	N/A
D.2	Antenna interface test generator	at at age agent	N/A
D.3	Electronic pulse generator	ite with the the M	N/A
E	TEST CONDITIONS FOR EQUIPMENT CONTAIN	NING AUDIO AMPLIFIERS	N/A
E.1	Electrical energy source classification for audi	o signals	N/A
WITER NO	Maximum non-clipped output power (W):	THE THE LIFE SITE	_
	Rated load impedance (Ω):	mer me me me	_
TE WILLE	Open-circuit output voltage (V):	TER LIER SITES WITE	_
e st	Instructional safeguard:	10, 20, 20,	_
E.2	Audio amplifier normal operating conditions	TER LITER WITE WITER WA	N/A
J. J.	Audio signal source type:	20, 20, 20	_
in Time	Audio output power (W):		



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Clause	Requirement – Test	Result – Remark	Verdict	
- ch-	Audio output voltage (V):	Mary Mary Mary Mary	720.	
Write M	Rated load impedance (Ω)	THE STATE WHITE SOUTH	_	
<u>.</u>	Requirements for temperature measurement	The think the	N/A	
E.3	Audio amplifier abnormal operating conditions	alter alter and the applier	N/A	
F	EQUIPMENT MARKINGS, INSTRUCTIONS, AND SAFEGUARDS	INSTRUCTIONAL	LIET P	
F.1	General	24	P	
MULTI	Language	English	_	
F.2	Letter symbols and graphical symbols	The state of	P	
F.2.1	Letter symbols according to IEC60027-1	Letter symbols for quantities and units are complied with IEC 60027-1.	JIII P	
F.2.2	Graphic symbols according to IEC, ISO or manufacturer specific	Graphical symbols are complied with IEC 60417, ISO 3864-2, ISO 7000 or ISO 7010.	P TEX MAI	
F.3	Equipment markings	- TEX STEX NUTER WITH	Р	
F.3.1	Equipment marking locations	The required marking is located on the enclosure of the equipment and is easily visible.	P	
F.3.2	Equipment identification markings	See below for details.	P.	
F.3.2.1	Manufacturer identification	See copy of marking plate	P	
F.3.2.2	Model identification:	See copy of marking plate	Р	
F.3.3	Equipment rating markings	See below for details.	- P	
F.3.3.1	Equipment with direct connection to mains	Supplying by 5Vdc	N/A	
F.3.3.2	Equipment without direct connection to mains	See above.	Р	
F.3.3.3	Nature of the supply voltage	See copy of marking plate.	P	
F.3.3.4	Rated voltage	See copy of marking plate.	P.	
F.3.3.5	Rated frequency	DC supply	Р	
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	ner mer me m	N/A	
F.3.5.1	Mains appliance outlet and socket-outlet markings	TEX WATER WALLER WALTER W	N/A	
F.3.5.2	Switch position identification marking	at the left of	N/A	
F.3.5.3	Replacement fuse identification and rating markings:	MULL MULL MULL MI	N/A	
are a	Instructional safeguards for neutral fuse:	alife of the south work	N/A	



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IEC62368-1			
Clause	Requirement – Test	Result – Remark	Verdict
-1/1-		the state of the s	1 200
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	The state of	N/A
F.3.6	Equipment markings related to equipment classification	Class III equipment	N/A
F.3.6.1	Class I equipment	TEX SLIER WITER WALTER W	N/A
F.3.6.1.1	Protective earthing conductor terminal	an an	N/A
F.3.6.1.2	Protective bonding conductor terminals:	t alter miter units and	N/A
F.3.6.2	Equipment class marking:	100 Th	N/A
F.3.6.3	Functional earthing terminal marking:	LIER WILL WILL WALLE	N/A
F.3.7	Equipment IP rating marking:	This equipment is classified as IPX0.	MITEL S
F.3.8	External power supply output marking:	See copy of marking plate.	λ P
F.3.9	Durability, legibility and permanence of marking	Marking is considered to be legible and easily discernible. See also the following details.	P
F.3.10	Test for permanence of markings	The label was subjected to thepermanence of marking test. Thelabel was rubbed with cloth soakedwith water for 15 sec. And thenagain for 15 sec, with the clothsoaked with petroleum spirit. After this test there was nodamage to the label. The markingon the label did not fade. Therewas no curling and lifting of thelabel edge. After each test, the markingremained legible.	Whitek was
F.4	Instructions	LEK TEK JEK JEK	P
	a) Information prior to installation and initial use	See user manual	Р
EL WALTE	b) Equipment for use in locations where children not likely to be present	EX WILLEY MULTER MILLER W	N/A
CIER	c) Instructions for installation and interconnection	- et et et o	N/A
An A	d) Equipment intended for use only in restricted access area	MUT MUT MUT AND	N/A
ing the	e) Equipment intended to be fastened in place	CHIEF WALL WALL WALL	N/A
At A	f) Instructions for audio equipment terminals		N/A
14,	g) Protective earthing used as a safeguard	ITE OLITE WALL WALLY	N/A
WALTER.	h) Protective conductor current exceeding ES2 limits	# LIET NIET WIFE A	N/A
	i) Graphic symbols used on equipment	2/2 2/1 20 2	N/A



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Clause	Requirement – Test	Result – Remark	Verdict
ale.	And the state of t	Ex MILE MILE MILE	me m
WITEK N	j) Permanently connected equipment not provided with all-pole mains switch	let the tiet	N/A
	k) Replaceable components or modules providing safeguard function	and an an	N/A
20	Equipment containing insulating liquid	Write Maria Mar Mu	N/A
EK STE	m) Installation instructions for outdoor equipment	at at all at	N/A
F.5	Instructional safeguards	it mi mi mi	N/A
G	COMPONENTS		P
G.1	Switches	me m. m.	N/A
G.1.1	General	No switch used	N/A
G.1.2	Ratings, endurance, spacing, maximum load	ales, ales ales	N/A
G.1.3	Test method and compliance	TEL TEL STEP MY	N/A
G.2	Relays	the sure of	N/A
G.2.1	Requirements	No relay used.	N/A
G.2.2	Overload test	10, 10, 10	N/A
G.2.3	Relay controlling connectors supplying power to other equipment	White Multer Multer	N/A
G.2.4	Test method and compliance	Little Control of	N/A
G.3	Protective devices	2 (3)	N/A
G.3.1	Thermal cut-offs	No such component	N/A
E NITEK	Thermal cut-outs separately approved according to IEC 60730 with conditions indicated in a) & b)	t let let liet	N/A
SII EK	Thermal cut-outs tested as part of the equipment as indicated in c)	Ang Ang Ang	N/A
G.3.1.2	Test method and compliance	MULLE MULL MULL	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	HE WALL WHE WAS	N/A
2/12	b) Thermal links tested as part of the equipment	EX WITTER WALTE WALL	N/A
G.3.2.2	Test method and compliance	at at at	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	mit whit with m	N/A
G.3.5.1	Non-resettable devices suitably rated and marking provided	Ite Walter Walter Wal	N/A
G.3.5.2	Single faults conditions:	et liet outer outer	N/A
G.4	Connectors	111 111 111	N/A
G.4.1	Spacings	No such component	N/A



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Clause	Requirement – Test	Result – Remark	Verdict
Mr.		THE STIP MET WALL	The The
G.4.2	Mains connector configuration:	100 100	N/A
G.4.3	Plug is shaped that insertion into mains socket- outlets or appliance coupler is unlikely	WHITE WHITE WHITE	N/A
G.5	Wound components	TER LIER NITER IN	N/A
G.5.1	Wire insulation in wound components	No such component	N/A
G.5.1.2	Protection against mechanical stress	TER STER WITER WITE	N/A
G.5.2	Endurance test	4	N/A
G.5.2.1	General test requirements	ALTER MALTER MALTER	N/A
G.5.2.2	Heat run test	4	N/A
ne in	Test time (days per cycle):	WITE WILL M	Vec
16t 16	Test temperature (°C):		EK _
G.5.2.3	Wound components supplied from the mains	WITE WALL MALL WAS	N/A
G.5.2.4	No insulation breakdown	at at at all	N/A
G.5.3	Transformers	MULL AUT. AUT.	N/A
G.5.3.1	Compliance method:	at the the	N/A
4, 2,	Position	West Mer Mer.	N/A
RETER INL	Method of protection	LET STEEL	N/A
G.5.3.2	Insulation	1 11 11	N/A
TER WITE	Protection from displacement of windings:	the the title all	_
G.5.3.3	Transformer overload tests	The The Ann	N/A
G.5.3.3.1	Test conditions	the liter alter with	N/A
G.5.3.3.2	Winding temperatures	14. 14.	N/A
G.5.3.3.3	Winding temperatures - alternative test method	LIER OLIER WITE	N/A
G.5.3.4	Transformers using FIW	211 211	N/A
G.5.3.4.1	General	ALTER MILTER WALLE WA	N/A
Et TEX	FIW wire nominal diameter:		+ _
G.5.3.4.2	Transformers with basic insulation only	THE MITTER WALL WALL	N/A
G.5.3.4.3	Transformers with double insulation or reinforced insulation:	- STEE STEET WITER	N/A
G.5.3.4.4	Transformers with FIW wound on metal or ferrite core	THE SET STEET	N/A
G.5.3.4.5	Thermal cycling test and compliance	m. m. m. n.	N/A
G.5.3.4.6	Partial discharge test	TEX STEX STEE WIT	N/A
G.5.3.4.7	Routine test	. 1/1, 1/1, 2,	N/A
G.5.4	Motors	No motors used.	N/A
G.5.4.1	General requirements	24 20 2	N/A
G.5.4.2	Motor overload test conditions	THE LIFE RULE	N/A

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	IEC62368-1	V 11, 11, 21,	
Clause	Requirement – Test	Result – Remark	Verdict
G.5.4.3	Running overload test	the man man	N/A
G.5.4.4.2	Locked-rotor overload test	All The Title	N/A
0.0.4.4.2	Test duration (days):	They have all a	3014/7
G.5.4.5	Running overload test for DC motors	The The NUMBER	N/A
G.5.4.5.2	Tested in the unit	We are any	N/A
G.5.4.5.2 G.5.4.5.3	Alternative method	CE THE STEE	N/A
G.5.4.5.3 G.5.4.6	Locked-rotor overload test for DC motors	10, 21, 21,	N/A N/A
		L OF THE THE	, C , C , C , C , C , C , C , C , C , C
G.5.4.6.2	Tested in the unit	"Ny" 2" "	N/A
0.5.4.0.0	Maximum Temperature	THE STEE WITE MY	N/A
G.5.4.6.3	Alternative method	in in in	N/A
G.5.4.7	Motors with capacitors	STEP RITER WITE WALL	N/A
G.5.4.8	Three-phase motors	" " " " t	N/A
G.5.4.9	Series motors	EX MITTER WITE WALLY	N/A
	Operating voltage:	10, 1	
G.6	Wire Insulation	HILLER WILL MILL OF	N/A
G.6.1	General	Only ES1 existed	N/A
G.6.2	Enamelled winding wire insulation	JULIE WALL	N/A
G.7	Mains supply cords	+ 0	N/A
G.7.1	General requirements	No such component	N/A
t the	Type:	and the state of	
G.7.2	Cross sectional area (mm² or AWG):	MULTE WALL WAL.	N/A
G.7.3	Cord anchorages and strain relief for non- detachable power supply cords	THE MITES WILLER	N/A
G.7.3.2	Cord strain relief	M. W.	N/A
G.7.3.2.1	Requirements	ALTER WITE WALTE WALT	N/A
et let	Strain relief test force (N)		N/A
G.7.3.2.2	Strain relief mechanism failure	the write with with	N/A
G.7.3.2.3	Cord sheath or jacket position, distance (mm):	and the state of	N/A
G.7.3.2.4	Strain relief and cord anchorage material	WALLE WALL MALE A	N/A
G.7.4	Cord Entry	at at all.	N/A
G.7.5	Non-detachable cord bend protection	MULL MULL MULL MULL	N/A
G.7.5.1	Requirements	at all all a	N/A
G.7.5.2	Test method and compliance	The Mary Mary Mary	N/A
WILLEY	Overall diameter or minor overall dimension, <i>D</i> (mm)	EX MITER MALTER MALTER	ans . —
	Radius of curvature after test (mm):		



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IEC62368-1				
Clause	Requirement – Test	Result – Remark	Verdict	
"Alex "	an an a second second	EL STEEL STEEL STEEL STEEL STEEL	201	
G.7.6	Supply wiring space		N/A	
G.7.6.1	General requirements	WILL MILL MULL MULL	N/A	
G.7.6.2	Stranded wire	The state of the	N/A	
G.7.6.2.1	Requirements	alter with walk walk	N/A	
G.7.6.2.2	Test with 8 mm strand	a stack all	N/A	
G.8	Varistors	it was was war w	N/A	
G.8.1	General requirements	No such component	N/A	
G.8.2	Safeguards against fire	MULL MULL MULL MULL	N/A	
G.8.2.1	General	of get get get	N/A	
G.8.2.2	Varistor overload test	aller aller aller aller	N/A	
G.8.2.3	Temporary overvoltage test	It THE THE STEE	N/A	
G.9	Integrated circuit (IC) current limiters	ver me me m	N/A	
G.9.1	Requirements	No such component	N/A	
4	IC limiter output current (max. 5A):	m m m	_	
NI TIE	Manufacturers' defined drift	TEX STEX STEELS	_	
G.9.2	Test Program	Mary May 211 18	N/A	
G.9.3	Compliance	LEE MILLER MILLER	N/A	
G.10	Resistors	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N/A	
G.10.1	General	No such component	N/A	
G.10.2	Conditioning	THE STATE OF	N/A	
G.10.3	Resistor test	A MITE WALL WALL WAS	N/A	
G.10.4	Voltage surge test		N/A	
G.10.5	Impulse test	WILL MILL MULL MILL	N/A	
G.10.6	Overload test	a at all let	N/A	
G.11	Capacitors and RC units	WILL MULL AND AND	N/A	
G.11.1	General requirements	No such component	N/A	
G.11.2	Conditioning of capacitors and RC units	when many man my	N/A	
G.11.3	Rules for selecting capacitors	- At At At Att	N/A	
G.12	Optocouplers	me me me	N/A	
INLIES WILL	Optocouplers comply with IEC 60747-5-5 with specifics	No such component	N/A	
TEX SITE	Type test voltage V <sub>ini,a</sub> :	at let tet tet	_	
77)	Routine test voltage, V <sub>ini, b</sub> :	it with the the	_	
G.13	Printed boards	at let let let let	N/A	
G.13.1	General requirements	Only need to comply with functional insulation, see only B.4.4.	N/A	



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01	IEC62368-1		1,4 ,1,
Clause	Requirement – Test	Result – Remark	Verdict
G.13.2	Uncoated printed boards	The Are My	N/A
G.13.3	Coated printed boards	TEX TEX STEX	N/A
G.13.4	Insulation between conductors on the same inner surface	The same of the same of	N/A
G.13.5	Insulation between conductors on different surfaces	The state of the s	N/A
100	Distance through insulation:	THE WALL WALL	N/A
- UEA	Number of insulation layers (pcs):	L St. St. St.	<u> </u>
G.13.6	Tests on coated printed boards	White Mrit with	N/A
G.13.6.1	Sample preparation and preliminary inspection	at let let	N/A
G.13.6.2	Test method and compliance	Merch Merch And Al	N/A
G.14	Coating on components terminals	AR THE THE N	N/A
G.14.1	Requirements	and the same of	N/A
G.15	Pressurized liquid filled components	CER STEE STEE STEE	N/A
G.15.1	Requirements	No such component	N/A
G.15.2	Test methods and compliance	LIET ALTER MALIER	N/A
G.15.2.1	Hydrostatic pressure test		N/A
G.15.2.2	Creep resistance test	The market we	N/A
G.15.2.3	Tubing and fittings compatibility test		N/A
G.15.2.4	Vibration test	The water was	N/A
G.15.2.5	Thermal cycling test	and the set	N/A
G.15.2.6	Force test	White Mary Mary	N/A
G.15.3	Compliance	the state of	N/A
G.16	IC including capacitor discharge function (ICX)	while with while a	N/A
G.16.1	Condition for fault tested is not required	No such component	N/A
	ICX with associated circuitry tested in equipment	Very Mer, Mer, May	N/A
et outer	ICX tested separately	Et TEX SEX NOTE	N/A
G.16.2	Tests	Mr. Mr. M.	N/A
MUTTER A	Smallest capacitance and smallest resistance specified by ICX manufacturer for impulse test:	WALTER WALTER WALTER	wat -
INLIER WA	Mains voltage that impulses to be superimposed on	UNITER WHITEK WHITEK	LITER —
TEX MUTE	Largest capacitance and smallest resistance for ICX tested by itself for 10000 cycles test:	IER NIER WIER	- I
G.16.3	Capacitor discharge test:	70, 70, 7	N/A
Н	CRITERIA FOR TELEPHONE RINGING SIGNAL	S	N/A
H.1	General	W 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N/A
H.2	Method A	ALTER OUTER MOLIE	N/A



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IEC62368-1			
Clause	Requirement – Test	Result – Remark	Verdict

H.3	Method B	74, 75	N/A
H.3.1	Ringing signal	No telephone ringing signal generated within the equipment.	N/A
H.3.1.1	Frequency (Hz)	Viz. Mrs. Mrs. Mrs.	_
H.3.1.2	Voltage (V):	et set set with a	_
H.3.1.3	Cadence; time (s) and voltage (V):	in the the the the	_
H.3.1.4	Single fault current (mA)::	t tet litet aller mi	_
H.3.2	Tripping device and monitoring voltage	Mr. Mr. And	N/A
H.3.2.1	Conditions for use of a tripping device or a monitoring voltage	united white white white	N/A
H.3.2.2	Tripping device	let tet tiet atter.	N/A
H.3.2.3	Monitoring voltage (V):	in the the	N/A
J	INSULATED WINDING WIRES FOR USE WITHO INSULATION	UT INTERLEAVED	N/A
J.1	General	t lest test their site	N/A
211 1	Winding wire insulation:	whi me me m	_
NITER SIN	Solid round winding wire, diameter (mm):	it ite suite	N/A
SER SLIFE	Solid square and rectangular (flatwise bending) winding wire, cross-sectional area (mm²):	The state of the s	N/A
J.2/J.3	Tests and Manufacturing	in with the me of	
K	SAFETY INTERLOCKS		N/A
K.1	General requirements	The Me Me M. W.	N/A
Malifer W	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	write mure mure muse	N/A
K.4	Interlock safeguard override	at let tet tet atet	N/A
K.5	Fail-safe	me me me	N/A
K.5.1	Under single fault condition	- TEK TEK STEK MIT	N/A
K.6	Mechanically operated safety interlocks	The The M. M.	N/A
K.6.1	Endurance requirement	TEX LIEX NLIER WITE	N/A
K.6.2	Test method and compliance:	14. 14. 12.	N/A
K.7	Interlock circuit isolation	TER STER STER SPITE S	N/A
K.7.1	Separation distance for contact gaps & interlock circuit elements	et let let litt ni	N/A
THE STATE OF THE S	In circuit connected to mains, separation distance for contact gaps (mm):	me me m	N/A



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. "	IEC62368-1	or any any	
Clause	Requirement – Test	Result – Remark	Verdict
-71,	In circuit isolated from mains, separation distance	the contract of the sale	N/A
MITER S	for contact gaps (mm):	LET TEX TEX WITH	IN/A
	Electric strength test before and after the test of K.7.2	(See appended table 5.4.9)	N/A
K.7.2	Overload test, Current (A):	write mure mure mure	N/A
K.7.3	Endurance test	at the tell till	N/A
K.7.4	Electric strength test	in the the the	N/A
L	DISCONNECT DEVICES		N/A
L.1	General requirements	Any Mr. Mr. M.	N/A
L.2	Permanently connected equipment	TEX TEX STEE STEE	N/A
L.3	Parts that remain energized	mer me me	N/A
L.4	Single-phase equipment	TER LIER SLIER WLIER	N/A
L.5	Three-phase equipment	20, 20, 20,	N/A
L.6	Switches as disconnect devices	Et liet sliet stiet stiet so	N/A
L.7	Plugs as disconnect devices	The rill of	N/A
L.8	Multiple power sources	LITER OLIVE MILIER WALF	N/A
et .	Instructional safeguard:		N/A
M	EQUIPMENT CONTAINING BATTERIES AND TH	HEIR PROTECTION CIRCUITS	N/A
M.1	General requirements	- 1 k // /	N/A
M.2	Safety of batteries and their cells	LITE WALL WALL WALL A	N/A
M.2.1	Batteries and their cells comply with relevant IEC standards	Approved battery pack used	N/A
M.3	Protection circuits for batteries provided within the equipment	THE THE STEE STEE	N/A
M.3.1	Requirements	any any any	N/A
M.3.2	Test method	TEN JEN NIE NIE NIE	N/A
Et NIE	Overcharging of a rechargeable battery	(See appended table AnnexM)	N/A
CIEN	Excessive discharging	(See appended table AnnexM)	N/A
'M' '	Unintentional charging of a non-rechargeable battery	No such battery used	N/A
ur. m	Reverse charging of a rechargeable battery	Built-in battery used, reverse charging is prevented	N/A
M.3.3	Compliance  ILLER MILIER MILIE	No chemical leakage, no spillage of liquid, no explosion of the battery, no emission of flame or expulsion of molten metal	N/A
M.4	Additional safeguards for equipment containin lithium battery	g a portable secondary	N/A



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- 20,	IEC62368-1	sir and any	, ,,
Clause	Requirement – Test	Result – Remark	Verdict
M.4.1	General	The The Mr. M.	N/A
M.4.2	Charging safeguards	Under normal operating conditions, abnormal operating conditions or single fault conditions, the charging voltage, charging current of the battery no exceed the maximum specified charging voltage and maximum specified charging current.	N/A
M.4.2.1	Requirements	Mer Mer Mr. M.	N/A
M.4.2.2	Compliance:	(See appended table M.4.2)	N/A
M.4.3	Fire enclosure:	V-0 fire enclosure used	N/A
M.4.4	Drop test of equipment containing a secondary lithium battery	LIER WHITER WHITER WHITER	N/A
M.4.4.2	Preparation and procedure for the drop test	at the test the	N/A
M.4.4.3	Drop, Voltage on reference and dropped batteries (V); voltage difference during 24 h period (%)::	The voltage difference not exceed 5%.	N/A
M.4.4.4	Check of the charge/discharge function	Three complete discharge and charge cycles under normal operating conditions.	N/A
M.4.4.5	Charge / discharge cycle test	No fire, explosion and any electrolyte leakage	N/A
M.4.4.6	Compliance	The water was made in	N/A
M.5	Risk of burn due to short-circuit during carryin	g ,t ,t	P. P.
M.5.1	Requirement	No bare conductive terminal used	N/A
M.5.2	Test method and compliance	Will Mill Mill Mill	N/A
M.6	Safeguards against short-circuits	at the test test	N/A
M.6.1	External and internal faults	HILL MULL MULL MULL	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.	N/A
M.7	Risk of explosion from lead acid and NiCd batte	eries	N/A
M.7.1	Ventilation preventing explosive gas concentration	No such battery used	N/A
The Water	Calculated hydrogen generation rate:	TEX STEE WIFE WITE	N/A
M.7.2	Test method and compliance	711	N/A
wine.	Minimum air flow rate, Q (m³/h)	It WITE WITE WHILE MA	N/A
M.7.3	Ventilation tests	The state of the state of	N/A
M.7.3.1	General	alier of the south wall	N/A



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- "	IEC62368-1	1 24 M	
Clause	Requirement – Test	Result – Remark	Verdict
M 7 2 2	Ventilation test often edited	F. M. C. M. M. M.	NI/A
M.7.3.2	Ventilation test – alternative 1	at the total	N/A
M 700	Hydrogen gas concentration (%)	with fire mer my	N/A
M.7.3.3	Ventilation test – alternative 2	the state of the	N/A
2. 70.	Obtained hydrogen generation rate	WILL MALL MAN.	N/A
M.7.3.4	Ventilation test – alternative 3	et et et	N/A
- 20,	Hydrogen gas concentration (%)	in were the the the	N/A
M.7.4	Marking	e at all set is	N/A
M.8	Protection against internal ignition from extern with aqueous electrolyte	al spark sources of batteries	N/A
M.8.1	General	mitter mite white white	N/A
M.8.2	Test method	The state of	N/A
M.8.2.1	General	LIFE WALTE WALL WALL	N/A
M.8.2.2	Estimation of hypothetical volume $V_Z$ (m³/s)	a at at at	16th - 1
M.8.2.3	Correction factors:	anti mi mi m	2/1
M.8.2.4	Calculation of distance d (mm):	at at the s	£ 250
M.9	Preventing electrolyte spillage	weit men men men	N/A
M.9.1	Protection from electrolyte spillage	Et Jule Jule	N/A
M.9.2	Tray for preventing electrolyte spillage	2 10 10 10	N/A
M.10	Instructions to prevent reasonably foreseeable misuse	TE WHITE WHITE WHITE	N/A
t lifet	Instructional safeguard:	t at at the	N/A
N	ELECTROCHEMICAL POTENTIALS	WILL MILL MILL MILL	N/A
CITE!	Material(s) used:	at left the till	
0	MEASUREMENT OF CREEPAGE DISTANCES A	IND CLEARANCES	N/A
urest out	Value of X (mm)	et let jet jet	CLIER.
P	SAFEGUARDS AGAINST CONDUCTIVE OBJEC	TS	N/A
P.1	General	See below	N/A
P.2	Safeguards against entry or consequences of e	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N/A
P.2.1	General	- CIEN STEP OUTER SINCE	N/A
P.2.2	Safeguards against entry of a foreign object	21/2 21, 21, 2	N/A
in the	Location and Dimensions (mm)	No opening.	an in
P.2.3	Safeguards against the consequences of entry of a foreign object	Tet Tet Tet West	N/A
P.2.3.1	Safeguard requirements	20, 20, 30, 30, 3	N/A
nu .	The ES3 and PS3 keep-out volume in Figure P.3 not applicable to transportable equipment	White white white	N/A



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IEC62368-1				
Clause	Requirement – Test	Result – Remark	Verdict	
- apr	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	E WILL MILL MAY MAY	1 21/0	
	Transportable equipment with metalized plastic parts	et det det set	N/A	
P.2.3.2	Consequence of entry test:	me me me	N/A	
P.3	Safeguards against spillage of internal liquids	the the the state	N/A	
P.3.1	General	No such liquids.	N/A	
P.3.2	Determination of spillage consequences	SEK LIEK SLIEK MITER S	N/A	
P.3.3	Spillage safeguards	14, 24, 2, 3	N/A	
P.3.4	Compliance	t lift with with whi	N/A	
P.4	Metallized coatings and adhesives securing pa	rts	N/A	
P.4.1	General	No such construction.	N/A	
P.4.2	Tests Tests	The state of	N/A	
r. 1211 gr.	Conditioning, T <sub>C</sub> (°C)	LIE WALLE WALL WALL	3 Leg _ 7	
y Jek	Duration (weeks):	e of the	16th -	
Q JU	CIRCUITS INTENDED FOR INTERCONNECTION	WITH BUILDING WIRING	N/A	
Q.1	Limited power sources	See appended table Annex Q.1	N/A	
Q.1.1	Requirements	The set	N/A	
he m	a) Inherently limited output	Mult whi	N/A	
Cet It	b) Impedance limited output	the life	N/A	
1/1	c) Regulating network limited output	The west was also	N/A	
t TIER	d) Overcurrent protective device limited output	t of left itely is	N/A	
20,	e) IC current limiter complying with G.9	They are the m	N/A	
Q.1.2	Test method and compliance:	See below	N/A	
18 18 18 18 18 18 18 18 18 18 18 18 18 1	Current rating of overcurrent protective device (A)	See appended table Annex Q.1	N/A	
Q.2	Test for external circuits – paired conductor cable	No such circuit for connection to the EUT	N/A	
Aut	Maximum output current (A)	IER WILL MILL MALL M	N/A	
TEK	Current limiting method:	1 1 1 1	r 6	
R	LIMITED SHORT CIRCUIT TEST	in the white white whi	N/A	
R.1	General	No such consideration.	N/A	
R.2	Test setup	MUTTER MUTT MUTE MUTE	N/A	
TEN JI	Overcurrent protective device for test:	at the the the	JEE .	
R.3	Test method	CL AUT, MUT, ML A	N/A	
NITE!	Cord/cable used for test	at let let let let	SEE THE	
R.4	Compliance	The Me The A	N/A	



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r	in in	Mr. Mr. All.	IEC62368-1	Lifet and the Marie W	Write Music Mari
	Clause	Requirement – Test	Will Mrs. My M.	Result – Remark	Verdict

S	TESTS FOR RESISTANCE TO HEAT AND FIRE		N/A
S.1	Flammability test for fire enclosures and fire ba where the steady state power does not exceed		N/A
Life, M	Samples, material:	TEX LIEX NUTER NUTER	11 <sup>276</sup> 01
.L.	Wall thickness (mm)	L. M. M. M.	<i>*</i> -
WALT	Conditioning (°C):	THE SLIFE WITE WHITE SUP	it with
MATER	Test flame according to IEC 60695-11-5 with conditions as set out	t the the state and	N/A
. A.	- Material not consumed completely	Mr. Mr. Mr.	N/A
Willey of	- Material extinguishes within 30s	TEX STEE WIFE WITE	N/A
,t	- No burning of layer or wrapping tissue	M. M. M.	N/A
S.2	Flammability test for fire enclosure and fire bar	rier integrity	N/A
y 16	Samples, material:	, , , , , , , , , , , , , , , , , , ,	(et - 1
Me	Wall thickness (mm)	ER WILL WATER WATER ON	40
Tet.	Conditioning (°C):		
S.3	Flammability test for the bottom of a fire enclos	sure that we will	N/A
S.3.1	Mounting of samples	A THE THE	N/A
S.3.2	Test method and compliance	2 20 20	N/A
IEK NU	Mounting of samples	The Life	17 <sup>65</sup> -101
	Wall thickness (mm)	in me me	<u> </u>
S.4	Flammability classification of materials	to the tiet street mi	N/A
S.5	Flammability test for fire enclosure materials of equipment with a steady state power exceeding 4 000 W	WILLER WILLER MUTER MUTER	N/A
et .	Samples, material:		10th
2/1	Wall thickness (mm)	Will write while while	12 - 21
Et JE	Conditioning (°C):	at the left of	(E <sup>K</sup> — ()
T S	MECHANICAL STRENGTH TESTS	in mi mi mi	Р
T.1 (100)	General	t at alt all all	Р
T.2	Steady force test, 10 N:	(See appended table T.2)	N/A
T.3	Steady force test, 30 N:	THE THE THE STATE	N/A
T.4	Steady force test, 100 N:	(See appended table T.4)	Р
T.5	Steady force test, 250 N:	TEX STEX STEX WITE ST	N/A
T.6	Enclosure impact test	11. 11. 2.	N/A
WALTE	Fall test	it lift outer write and	N/A
at-	Swing test	711 72 V	N/A
T.7	Drop test:	(See appended table T.7)	W P





	IEC62368-1		
Clause	Requirement – Test	Result – Remark	Verdict
all a	THE STATE OF	er with the will me w	an.
T.8	Stress relief test:	(See appended table T.8)	Р
T.9	Glass Impact Test:	No such glass	N/A
T.10	Glass fragmentation test	at at let let	N/A
70	Number of particles counted:	No such glass	N/A
T.11	Test for telescoping or rod antennas	at the text that	N/A
- JEK	Torque value (Nm):	No such antennas provided within the equipment.	N/A
Usil	MECHANICAL STRENGTH OF CATHODE RAY T PROTECTION AGAINST THE EFFECTS OF IMPL		N/A
U.1 🐠	General	SLIER WILL SULLE WALL	N/A
LIEK WALT	Instructional safeguard:	No CRT provided within the equipment.	N/A
U.2	Test method and compliance for non-intrinsical	y protected CRTs	N/A
U.3	Protective screen	ret rise nite anite an	N/A
V	DETERMINATION OF ACCESSIBLE PARTS	711 72 4	N/A
V.1	Accessible parts of equipment	ALTER OLIFE WALTE WAL	N/A
V.1.1	General		N/A
V.1.2	Surfaces and openings tested with jointed test probes	The fact of the same	N/A
V.1.3	Openings tested with straight unjointed test probes	THE LIFE ONLY WAITE	N/A
V.1.4	Plugs, jacks, connectors tested with blunt probe	241 20 2	N/A
V.1.5	Slot openings tested with wedge probe	* NITER INLIER MILITE WIN	N/A
V.1.6	Terminals tested with rigid test wire	W 4	N/A
V.2	Accessible part criterion	ALTER MITE WALL WALL	N/A
X EL WALL	ALTERNATIVE METHOD FOR DETERMINING CL INSULATION IN CIRCUITS CONNECTED TO AN 420 V PEAK (300 V RMS)		N/A
EK WITER	Clearance	of get tet the	N/A
Υ	CONSTRUCTION REQUIREMENTS FOR OUTDO	OR ENCLOSURES	N/A
Y.1	General	Indoor equipment	N/A
Y.2	Resistance to UV radiation	m m m	N/A
Y.3	Resistance to corrosion	TEX LIER ALTER MITE	N/A
Y.3	Resistance to corrosion	Mr. Mi An A.	N/A
Y.3.1	Metallic parts of outdoor enclosures are resistant to effects of water-borne contaminants by:	TEK WALTER WALTER WALTER	N/A
Y.3.2	Test apparatus	IF THE THE STEEL O	N/A
Y.3.3	Water – saturated sulphur dioxide atmosphere	Mr. Mr. M. M.	N/A
Y.3.4	Test procedure.	it at the the	N/A



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IEC62368-1				
Clause	Requirement – Test	Result – Remark	Verdict	
all a	THE THE STATE OF	fer with their will	Mrs. Mr.	
Y.3.5	Compliance	70, 7, 7	N/A	
Y.4	Gaskets	ALIER WILLER WALTER	N/A	
Y.4.1	General	70 T	N/A	
Y.4.2	Gasket tests	NITER WILL WHILE W	N/A	
Y.4.3	Tensile strength and elongation tests		N/A	
All .	Alternative test methods:	life while while whi	N/A	
Y.4.4	Compression test	L St St St	N/A	
Y.4.5	Oil resistance	ANTIL MATE MATE	N/A	
Y.4.6	Securing means	at let let	N/A	
Y.5	Protection of equipment within an outdoor encl	osure	N/A	
Y.5.1	General	at the the	N/A	
Y.5.2	Protection from moisture	her mer mer in	N/A	
MITE	Relevant tests of IEC 60529 or Y.5.3:	LEK TEK TEK KLI	N/A	
Y.5.3	Water spray test	The The The	N/A	
Y.5.4	Protection from plants and vermin	Y THE LITTER MATERIAL	N/A	
Y.5.5	Protection from excessive dust	1012 101	N/A	
Y.5.5.1	General	AL MITTER	N/A	
Y.5.5.2	IP5X equipment	2 3	N/A	
Y.5.5.3	IP6X equipment	TE RITE WILL WA	N/A	
Y.6	Mechanical strength of enclosures		N/A	
Y.6.1	General	THE MITTER WALTER WALTER	N/A	
Y.6.2	Impact test:	- L 1	N/A	



Š	IEC62368-1			
	Clause	Requirement – Test	Result – Remark	Verdict

#### ATTACHMENT TO TEST REPORT

#### IEC 62368-1

#### **EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES**

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

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

Attachment Form No...... EU\_GD\_IEC62368\_1E

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

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

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	CENELEC COMMON MODIFICATIONS (EN)	STEE WITE WILL WILL WILL	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.	VINTER VINTER
EL WILLE	Add the following annexes:  Annex ZA (normative)Normative references to interr corresponding European publications  Annex ZB (normative)Special national conditions  Annex ZC (informative)A-deviations  Annex ZD (informative)IEC and CENELEC code des	LIE WHITE WHITE WHITE WA	EX WALTE
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 Pa <sup>2</sup> s. $T$ $E = \int_{0}^{T} p(t)^{2} dt$	SOUTH WHITE	N/A



		IEC62368-1	
Clause	Requirement – Test	Result – Remark	Verdict

7 N	Troquiroment Tool			
de	M W ALL THE IT	the little with the state of	no m	
3.3.19.4	sound exposure level, SEL	20, 20	N/A	
	logarithmic measure of sound exposure relative to a reference value, <i>Eo</i> , typically the 1 kHz threshold of hearing in humans.	MULTER WHITER WHITER WA	LIE WALLE	
	Note 1 to entry: SEL is measured as A-weighted levels in dB.	LIER SLIER WHITER WHITE	The The MA	
	TEX STEEL WILLER WILLE MULL MAN A	the state of	Et S	
	$SEL = 10 \lg \left(\frac{E}{E_0}\right) dB$	ER MUTEL MUTE MUTE	WAL WALL	
	Note 2 to entry: See B.4 of EN 50332-3:2017 for additional information.	White white whit w	LEK WILEK	
3.3.19.5	digital signal level relative to full scale, dBFS	Note that 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	TEX WALTER WALTER WALTER	anti Kanti	
WALTER	Note 1 to entry: It is invalid to use dBFS for non-r.m.s. levels. Because the definition of full scale is based on a sine wave, the level of signals with a crest factor lower than that of a sine wave may exceed 0 dBFS. In particular, square wave signals may reach +3,01 dBFS.	Whitek whitek wh	LIEK WHITEK	
2	Modification to Clause 10		N/A	
10.6	Safeguards against acoustic energy sources	41.	N/A	
	Replace 10.6 of IEC 62368-1 with the following:			
10.6.1.1	Introduction	Not such equipment	N/A	
	Safeguard requirements for protection against long-term exposure to excessive sound	MULTER MULTER MULTER	Vr. ave	
	pressurelevels 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 <b>ordinary person</b> , that:	Whitek whitek whitek whitek	TEX UNITER VIOLE	
	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 <b>ordinary person</b> , that:  — is designed to allow the user to listen to audio or audiovisual content / material; and — uses a listening device, such as headphones or earphones that can be worn in or on or around the ears; and — has a player that can be body worn (of a size suitable to be carried in a clothing pocket) and is intended for the user to walk around with while in continuous use (for example, on a street, in a subway, at an airport, etc.).	JUNITER WHITER	TEX MILEX WAS AND TEXT OF THE WAS A STEEL	
	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 <b>ordinary person</b> , that:  — is designed to allow the user to listen to audio or audiovisual content / material; and — uses a listening device, such as headphones or earphones that can be worn in or on or around the ears; and — has a player that can be body worn (of a size suitable to be carried in a clothing pocket) and is intended for the user to walk around with while in continuous use (for example, on a street, in a	JUNITER WHITER WHITER WHITER  WHITER WHITER WHITER WHITER  WHITER WHITER WHITER  WHITER WHITER WHITER  WHITER WHITER  WHITER WHITER  WHITER	TEX MILEX WALLEY  WALTER WALTER  WAL	





TO O O O O	No.:WTF22D10215234S Page 40	, or or	
- 20,	IEC62368-1	FIFT WELL MUT MUS.	- 10 m
Clause	Requirement – Test	Result – Remark	Verdict
- Ch.	requirements of either 10.6.2 or 10.6.3.	The The The	7/1 1/2
	NOTE 1 Protection against acoustic energy sources from	TEX LIEX NITER	MITER MALTER
	telecom applications is referenced to ITU-T P.360.	mer mer mir	L X
	NOTE 2 It is the intention of the Committee to allow the alternative methods for now, but to only use the dose	THE LITTER NATIONAL	THE WALTER ON
	measurement method as given in 10.6.5 in future. Therefore, manufacturers are encouraged to implement 10.6.5 as soon as	S. Mr. M. M.	4
	possible.	EX SITEX OUTEX WITH	NAL WALL
	Listening devices sold separately shall comply	Mr. M. M.	a at
	with the requirements of 10.6.6.  These requirements are valid for music or video	LIER WITER WITER	WALL WALK
	mode only.	111, 111, 12	at at
	The requirements do not apply to:  – professional equipment;	LIER SLIER WIFE OF	Will Will a
	if the the liter will make and	n. n. n.	* #
	NOTE 3Professional equipment is equipment sold through special sales channels. All products sold throughnormal	TEX SLIER WITER WAY	in in an
	electronics stores are considered not to be professional equipment.	20, 20, 2	+ 1
	were the the the	A STER WIFE WIFE	WILL WILL
	<ul> <li>hearing aid equipment and other devices for assistive listening;</li> </ul>	201, 10, 10,	
	- the following type of analogue personal music	LIER STER WITER	WHITE WALL
	players: • long distance radio receiver (for example, a	11. 20.	* 4
	multiband radio receiver or world band radio	THE MITTER OF	LITE MALITY IN
	receiver, an AM radio receiver), and • cassette player/recorder;	7 1 1	4
	NOTE 4 This exemption has been allowed because this	THE LIFE WITH WITH	e while with
	technology is falling out of use and it is expected that within a	1/11 20 20	
	few years it will no longer exist. This exemption will not be extended to other technologies.	LIER NITER MATTER	WILL WILL
	- a player while connected to an external amplifier	14 14 14 14 14 14 14 14 14 14 14 14 14 1	it et
	that does not allow the user to walk around while	LIER SLIER WILLER	WILL MULL
	in use.	m. m. w.	at at
	For equipment that is clearly designed or intended	CIEN SLIEN WALTER WAL	The Maria My
	primarily for use by children, the limits of the relevant toy standards may apply.	. W. W.	+ + 1
	The August Any Any Any The Et	ex street writer white	MUT, MUT.
	The relevant requirements are given in EN 71-1:2011, 4.20 and the related tests methods	201, 20, 2	ON LEX
211 C	and measurement distances apply.	THE LIE WALTE	antis antis
10.6.1.2	Non-ionizing radiation from radio frequencies in the range 0 to 300 GHz	11 14 St	N/A
	The amount of non-ionizing radiation is regulated	WITE WALLE MULLING	7. Mr. 7.
	by European Council Recommendation 1999/519/EC of 12 July 1999 on the limitation of	1 1 1	EX TEX
	exposure of the general public to electromagnetic	TER WITH WALL WAL	The The
	fields (0 Hz to 300 GHz). For intentional radiators, ICNIRP guidelines should	t at at at	· 16t 16
	be taken into account for Limiting Exposure to	White while while	Mr. Mr.
	Time-Varying Electric, Magnetic, and Electromagnetic Fields (up to 300 GHz). For hand-	4 4 1	TEN TEN
	held and body mounted devices, attention is	WITE WILL MILL	Wer aller



Victor March	IEC62368-1				111
Clause	Requirement – Test	The April 10	Result – Remark	J	Verdict

	drawn to EN 50360 and EN 50566.	711 22	L
10.6.2	Classification of devices without the capacity to	estimate sound dose	N/A
10.6.2.1	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-	Not such equipment	N/A
	3.  For classifying the acoustic output <i>L</i> <sub>Aeq</sub> , <i>τ</i> , measurements are based on the A-weighted equivalent sound pressure level over a 30 s period.  For music where the average sound pressure	MULTER WALTER WALTER WALTER	LIE WALTER
	(long term $L_{Aeq,7}$ ) 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, $T$ becomes the duration of the song.	The waited water water	TEX MUTEX
LIFE WALTE	NOTE Classical music, acoustic music and broadcast typically has an average sound pressure (long term LAeq, r) 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.	THE WALTER WALTER WALTER W	WALTER WALTE
	RS1 limits (to be superseded, see 10.6.3.2)  RS1 is a class 1 acoustic energy source that does not exceed the following:  — for equipment provided as a package (player with its listening device), and with a proprietary connector between the player and its listening device, or where the combination of player and listening device is known by other means such as setting or automatic detection, the LAeq, τ acoustic output shall be ≤ 85 dB when playing the fixed "programme simulation noise" described in EN	Whitek Wh	IN N/A
	50332-1.  - for equipment provided with a standardized connector (for example, a 3,5 phone jack) that allows connection to a listening device for general use, the unweighted r.m.s. output voltage shall be ≤ 27 mV (analogue interface) or -25 dBFS (digital interface) when playing the fixed "programme simulation noise" described in EN 50332-1.  - The RS1 limits will be updated for all devices as per 10.6.3.2.	TEX WITEX WITEX WITEX	MULTER MULTER



N/A

IEC62368-1				
Result – Remark	Verdict			
10.6.3.3)	P			
ge (player roprietary listening ayer and sans such as e $L$ Aeq, $ au$ when playing e" as lardized ack) that e for general tage shall be dBFS (digital gramme 50332-1	TEX WITEX WAS			
rce that	MA WALLEY			
	N/A			
Not such equipment dant false id level The 9, are given	N/A			
ge (player roprietary listening player and player and player acoustic the fixed player in EN clardized ack) that e for general	N/A			
	Ce that does ge (player roprietary listening ayer and ans such as a LAeq, τ when playing a as lardized ack) that ge for general age shall be dBFS (digital gramme 50332-1.  The general age shall be devel the general age shall be devel to the general age shall be devel to the general age shall be devel to the general age shall be detailed as a such as a s			

RS2 limits (new)

not exceed the following:

RS2 is a class 2 acoustic energy source that does

- for equipment provided as a package (player

10.6.3.3





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		V	
A			(C)

72.	IEC62368-1			
Clause	Requirement – Test	Result – Remark	Verdict	
WALTER WA	with its listening device), and with a proprietary connector between the player and its listening device, or where the combination of player and listening device is known by other means such as setting or automatic detection, the weekly sound exposure level, as described in EN 50332-3, shall be ≤ 80 dB when playing the fixed "programme simulation noise" described in EN 50332-1.  – for equipment provided with a standardized connector (for example, a 3,5 phone jack) that allows connection to a listening device for general use, the unweighted r.m.s. output level, integrated over one week, as described in EN50332-3, shall be ≤ 15 mV (analogue interface) or -30 dBFS (digital interface) when playing the fixed "programme simulation noise" described in EN50332-1.	antifek whitek w	NATER WALTER	
10.6.4	Requirements for maximum sound exposure	it, mur mur mur	N/A	
10.6.4.1	Measurement methods All volume controls shall be turned to maximum during tests.  Measurements shall be made in accordance with EN 50332-1 or EN 50332-2 as applicable.	Not such equipment	N/A	
	Protection of persons  Except as given below, protection requirements for parts accessible to ordinary persons, instructed persons and skilled persons are given in 4.3.  NOTE 1 Volume control is not considered a safeguard.  Between RS2 and an ordinary person, the basic safeguard may be replaced by an instructional safeguard in accordance with Clause F.5, except that the instructional safeguard shall be placed on the equipment, or on the packaging, or in the instruction manual.  Alternatively, the instructional safeguard may be given through the equipment display during use.  The elements of the instructional safeguard shall be as follows:  — element 1a: the symbol follows:  — element 1a: the symbol follows:  — element 1a: the symbol follows:	THE WALTER WALTER WALTER	White white  White white  Whit	



100	IEC62368-1	is the the this	20. 10.
Clause	Requirement – Test	Result – Remark	Verdict
The s	all all the contract of	er alle mit and	The Me
	of an <b>ordinary person</b> to an RS2 source without intentional physical action from the <b>ordinary person</b> and shall automatically return to an output level not exceeding what is specified for an RS1 source when the power is switched off.	MULTER MULTER WILLER W	ALTER WALTER
	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.	EX WHITEX	t while while the little to the little the l
	NOTE 2 Examples of means include visual or audible signals. Action from the user is always needed.	TEX MILES MILES MILES	er merer m
	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.	* Whitek Whitek whitek	MUTTER
MALIEK W	A <b>skilled person</b> shall not be unintentionally exposed to RS3.	lifet milital milital	ULIEK WALTER
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.	Not such equipment	N/A  N/A  N/A  N/A  N/A  N/A  N/A  N/A
whitek white	The personal music player shall be supplied with 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.	NUTER WHITEK WHITEK WHI	TEX MITEX
10.6.5.2	Dose-based warning and requirements	ALTER UNITED MALTER	N/A
	When a dose of 100 % <i>CSD</i> is reached, and at least at every 100 % further increase of <i>CSD</i> , the device shall warn the user and require an	TEX TEX STEEL	NITEK WALTER

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	IEC62368-1	. an an an	
Clause	Requirement – Test	Result – Remark	Verdict
n.	WILL THE THE THE	The Will Mar.	are an
	acknowledgement. In case the user does not	20, 2	* 4
	acknowledge, the output level shall automatically	Let LET SEE	Little Children
	decrease to compliance with class RS1.	WES MUST AND A	1. 20.
	The warring shall at least already indicate that		A Lit
	The warning shall at least clearly indicate that	THE THE STITE OF	
	listening above 100 % CSD leads to the risk of	for the tile in	
10050	hearing damage or loss.	1 1 1 10	21/0
10.6.5.3	Exposure-based requirements	ex alter white wall	N/A
	With only dose-based requirements, cause and	24, 25,	
	effect could be far separated in time, defying the	at the set	JE JIV
	purpose of educating users about safe listening	SLIP WILL WALL	21/2
	practice. In addition to dose-based requirements,	20, 20, 2	at At-
	a PMP shall therefore also put a limit to the short-	at the test	TEL STE
ines until	term sound level a user can listen at.	WILL WILL WILL MI	- 71
	The exposure-based limiter (EL) shall		A St
	automatically reduce the sound level not to exceed	THE THE STEE ST	11 2 0
	100 dB(A) or 150 mV integrated over the past 180	in the the	20
	s, based on methodology defined in EN 50332-3.	, , at at	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	The EL settling time (time from starting level	of the street of	They were
	reduction to reaching target output) shall be 10 s	The Mr. in	
	or faster.	at the left	TEK (TE
	IN THE THE THE	ALTER OLIVE MALL W	Vr. Oly
	Test of EL functionality is conducted according to	411 21	
	EN 50332-3, using the limits from this clause. For	At A Lite	THE LITTER
	equipment provided as a package (player with its	Wer was	2, ,
	listening device), the level integrated over 180 s		4
	shall be 100 dB or lower. For equipment provided	The Life	- N
	with a standardized connector, the unweighted	in the man and	20,
	level integrated over 180 s shall be no more than	1	1 1
	150 mV for an analogue interface and no more than -10 dBFS for a digital interface.	TER STEE NITE	WILL WITE
	than - 10 dbF3 for a digital interface.	The Mr. M.	20.
	NOTE In case the source is known not to be music (or test	a at at	TEK TEK
	signal), the EL may be disabled.	The street of	- N
10.6.6	Requirements for listening devices (headphone	s, earphones, etc.)	N/A
	Corded listening devices with analogue input	Not such equipment	N/A
	With 94 dB LAeq acoustic pressure output of the	21/2 211 22	
	listening device, and with the volume and sound	a the set set	
	settings in the listening device (for example, built-	the still with white	The The
	in volume level control, additional sound features	24, 24, 2,	
	like equalization, etc.) set to the combination of	at at at	TE TE
	positions that maximize the measured acoustic	intite anti- unti-	11.
	output, the input voltage of the listening device	24, 24, 2	1
	when playing the fixed "programme simulation	it let let	TEN RUTE
	noise" as described in EN 50332-1 shall be ≥ 75	WILL MULL WAY MA	30,
	mV.		+ 2+
	NOTE The values of 94 dB and 75 mV correspond with 85 dB	CET THE THE ST	11/20
	and 27 mV or 100 dB and 150 mV.	MUT MUT MI	20.
10.6.6.2	Corded listening devices with digital input	L A B B	N/A
	With any playing device playing the fixed	" THE WILL WILL	Mr. Mr.
	"programme simulation noise" described in EN	20, 20, 20	4 4
	50332-1, and with the volume and sound settings	at the title	LIET SLIFE
	in the listening device (for example, built-in volume	The second secon	



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	IEC62368-1		
Clause	Requirement – Test	Result – Remark	Verdict
ale	THE THE THE	The will will	The The
waltek w	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 $\leq 100$ dB with an input signal of - 10 dBFS.	antifek antifek antifek.	AND LIES WASTER
10.6.6.3	Cordless listening devices		N/A
JUNETER JUNETE	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 ∠Aeq, τ acoustic output of the listening device shall be ≤ 100 dB with an input signal of -10 dBFS.	EX WHITEK WHITEK WHITEK  MITEK WHITEK WHITEK  TEK WHITEK WHITEK  WHITEK WHITEK  WHITEK  WHITEK  WHITEK  WHITEK  WHITEK  WHITEK  WHITEK  WHITEK	JUNE WILLER JUNETER JU
10.6.6.4	Measurement method	mile will will	N/A
	Measurements shall be made in accordance with EN 50332-2 as applicable.	The Tree of	LIER NIER

Modification to the whole document



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Victor March	Mrs. Mrs. All Mrs.	IEC62368-1	LIET MLIET WILLER WIN	The Marie	111
Clause	Requirement – Test	The April 10	Result – Remark	J	Verdict

e		e of certain substa ent is restricted w					- JEV
ALL MA	dd the follow	ving note:	A	16t 16t	TEN ST	ER WILL MALL	, ITP
N	odification 1	to Clause 1					Р
WILLE OF		1					11° "
24	Y.4.5	Note					. <del></del>
ik NALTE	10.6.1	Note 3	F.3.3.6	Note 3	Y.4.1	Note	ALTER
741			Table 39				20,
TEX NOT	8.5.4.2.3	Note	10.2.1	Note 3 and 4 and 5	10.5.3	Note 2	المارين الم
ar an	0.5.4.0.0	N	40.04	N	40.50		240
TEX	5.6.8	Note 2	5.7.6	Note	5.7.7.1	Note 1 and Note 2	₹,
White .						and 4	U. 1
- 10	5.5.2.1	Note	5.5.6	Note	5.6.4.2.1	Note 2 and 3	et.
E. WILL	5.4.10.2.1	Note	5.4.10.2.2	Note	5.4.10.2.3	Note	METE
	Table 13						74
LIEK MIL	5.4.2.3.2.4	Note 2	5.4.2.5	Note 2	5.4.5.1	Note	et mi
n, n			Table 12				
JEK	5.2.2.2	Note	5.4.2.3.2.2	Note c	5.4.2.3.2.4	Note 1 and 3	Et.
MULL	3.3.8.3	Note 1	4.1.15	Note	4.7.3	Note 1 and 2	su <sup>sta</sup> lia
t 10-	0.2.1	Note 1 and 2	1	Note 4 and 5	3.3.8.1	Note 2	EX



N/A

N/A

N/A

N/A

N/A

No connection to external

No such radiation from the

circuit.

equipment.

#### Reference No.:WTF22D10215234S

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IEC62368-1

Clause	Requirement – Test	Result – Remark	Verdict
ar.	W W The state of	ALTE MET MET MET MAN	2/12
4.Z1	Add the following new subclause after 4.9:	Not directly connected to the	N/A
	To protect against excessive current, short-circuits and earth faults in circuits connected to an a.c. mains, protective devices shall be included either as integral parts of the equipment or as parts of the building installation, subject to the following, a), b) and c):  a) except as detailed in b) and c), protective	mains	MALITER W
	devices necessary to comply with the	Mer Mer Mer M	
	requirements of B.3.1 and B.4 shall be included as parts of the equipment;	TER STER STER WITH	E MALTE
	b) for components in series with the mains input to	me me m	
	the equipment such as the supply cord, appliance coupler, r.f.i. filter and switch, short-circuit and	TITEL MILER WALTER WALTER	MALTE
	earth fault protection may be provided by protective devices in the building installation;	11 22	.04
	c) it is permitted for pluggable equipment type B	TEX STER SLIFER MITE.	in an
	or permanently connected equipment, to rely on	24, 24, 20, 2	
	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.	Whitek whitek whitek wh	I WAL

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

Add the following to the end of this subclause:

Add the following to c) and d) in table 39:For

additional requirements, see 10.5.1.

The requirement for interconnection with **external circuit** is in addition given in EN 50491-3:2009.

of the wall socket outlet.

Modification to 5.4.2.3.2.4

Modification to 10.2.1

Modification to 10.5.1

5.4.2.3.2.4

10.2.1

8

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711.	IEC62368-1	LIE WILL WALL WAY	21, 21,
Clause	Requirement – Test	Result – Remark	Verdict
nh.	All All Street Street	EN WILL MUTTE WALL	we me
10.5.1	Add the following after the first paragraph:  For RS 1 compliance is checked by measurement under the following conditions:	unliet united united	N/A
	In addition to the normal operating conditions, all controls adjustable from the outside by hand, by any object such as a tool or a coin, and those internal adjustments or pre-sets which are not locked in a reliable manner, are adjusted so as to give maximum radiation whilst maintaining an intelligible picture for 1 h, at the end of which the measurement is made.	LITER WHITER WHITER WHITER	EX WHITE WHITEX
	NOTE Z1 Soldered joints and paint lockings are examples of adequate locking.	MILIER MILIER MILIER	mitter mite o
	The dose-rate is determined by means of a radiation monitor with an effective area of 10 cm <sup>2</sup> , at any point 10 cm from the outer surface of the apparatus.	TEX WHITEX WHITEX WH	TEWAN TE AND
	Moreover, the measurement shall be made under fault conditions causing an increase of the high voltage, provided an intelligible picture is maintained for 1 h, at the end of which the measurement is made.	Whitek whitek whitek	Whitek Whitek
	For RS1, the dose-rate shall not exceed 1 µSv/h taking account of the background level.		EX WATER WAL
t JIEX	NOTE Z2 These values appear in Directive 96/29/Euratom of 13 May 1996.	A 15 16	- JE - JE
9	Modification to G.7.1		N/A
G.7.1	Add the following note:	at at at	N/A
21, 21,	NOTE Z1 The harmonized code designations corresponding to the IEC cord types are given in AnnexZD.	mit mit mit	n
10	Modification to Bibliography		Р



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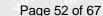
The Music	Mr. Mc M.	IEC62368-1	TEX WITE MUTER WA	The Marie
Clause	Requirement – Test	ric Mr. M. M.	Result – Remark	Verdict

Me	W W S S S S S S S S S S S S S S S S S S	20
CEN	Add the following notes for the standards indicated:	P-
	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 61558-2-6 NOTE Harmonized as EN 61558-2-6. IEC 61643-1 NOTE Harmonized as EN 61643-1. IEC 61643-21 NOTE Harmonized as EN 61643-21. IEC 61643-311 NOTE Harmonized as EN 61643-311.	MALTER WA
	IEC 61643-321 NOTE Harmonized as EN 61643-321. IEC 61643-331 NOTE Harmonized as EN 61643-331.	
" whi	The say of the ten the say with the	Mer
11	ADDITION OF ANNEXES	Р
ZB 4.1.15	ANNEX ZB, SPECIAL NATIONAL CONDITIONS (EN)  Denmark, Finland, Norway and Sweden  Not directly connected to the	P N/A
TEK WALTER WALT WALTER WALTER WALTER WALTER WALTER WALTER WALTER WALTER WALTER	To the end of the subclause the following is added:  Class I pluggable equipment type A intended for connection to other equipment or anetwork 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"	TEX JUNITER  JUNITER
4.7.3	United Kingdom  To the end of the subclause the following is added:  The torque test is performed using a socket-outlet complying with BS 1363, and the plug part shall be assessed to the relevant clauses of BS 1363. Also see Annex G.4.2 of this annex	N/A



Lange Charles	My My M	IEC62368-1	LIET WITE WILLER	Tip Music Mili
Clause	Requirement – Test	Ver Mur. In In	Result – Remark	Verdict

E 2 2 2	Donmoule	No bigh tough surrent	NI/A
5.2.2.2	Denmark  After the 2nd paragraph add the following:	No high touch current measured.	N/A
TIEK WALTE	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.	erek warrek warrek warrek	WALTER 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:	es unite unite unit w	Ve arien
	For separation of the telecommunication network from earth the following is applicable:	white mail was and	L CLER
	If this insulation is solid, including insulation forming part of a component, it shall at least consist of either	INCIDE WALLE WALL WALL	TEX IN
	two layers of thin sheet material, each of which shall pass the electric strength test below, or	t at alt and	
	one layer having a distance through insulation of at least 0,4 mm, which shall pass the electric strength test below.	MULTER WILL MULTER MALE	EX WALTEX
	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	THE WILLEST WHILEST	WALTEX W
	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	I WHITE WHITEK WHITEK WA	IN TE WALTE
	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),	MILIER WHITER WHITER WHITER	MULIEN.
	and	A LET LIET STEEL	LTEK NILT
	is subject to routine testing for electric strength during manufacturing, using a test voltage of 1,5 kV.	THE WILL AUTER WILL	EX WHITEK
	It is permitted to bridge this insulation with a capacitor complying with EN 60384-14:2005, subclass Y2.	NITER WATER WATER	MITEH W
	A capacitor classified Y3 according to EN 60384-14:2005, may bridge this insulation under the following conditions:	THE WALTER WALTER WALTER	itek muri Litek
	the insulation requirements are satisfied by having a capacitor classified Y3 as defined by EN 60384-14, which in addition to the Y3	TEH LITER NUTER WILL	MALTER







	IEC62368-1		
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;  the impulse test of 2,5 kV is to be performed	antifek whitek whitek whi	AND WINDS
71/2	before the endurance test in EN 60384-14, in the sequence of tests as described in EN 60384-14.	the marity marity walk	m, m
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	N/A
5.5.6 White	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	No such resistors.	N/A  N/A  N/A
5.6.1	G.10.2.  Denmark	No such equipment.	N/A
	Add to the end of the subclause Due to many existing installations where the socket-outlets can be protected with fuseswith 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	No such equipment.	
F C 4 O 4	protected by a 20 A fuse.	mr mr m n	A1/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.	LIER WALTER WALTER WALTER	N/A
5.6.4.2.1	France	ALTER MILIER MALTER	N/A
nlifek viri	After the indent for <b>pluggable equipment type A</b> , the following is added:  – in certain cases, the <b>protective current rating</b> of the circuit supplied from the mains is taken as 20 A instead of 16 A.	ALIER WALTER WALTER WA	TEX JUILEY
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 mm²to 1,5 mm²in cross-sectional area.	t whilet whilet whilet	N/A





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4		A	é
	X.	1	
	· •	A T	
		W	W/

211	IEC62368-1	LIL WILL WILL WILL	21, 21,
Clause	Requirement – Test	Result – Remark	Verdict
The same	The the tent of	alter mile and	The Miles
5.6.8 A	Norway 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.	united un	antek antek
5.7.6	Denmark	They we want	Р
WHITEK W	To the end of the subclause the following is added:  The installation instruction shall be affixed to the equipment if the <b>protective conductor current</b> exceeds the limits of 3,5 mA a.c. or 10 mA d.c.	Milited Milited Milited	White white white .
5.7.6.2	Denmark	TELL STEEL STEEL ON	P
	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.	A THE MILIER MILIER	t white whi
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.	AND THE WHITE WHITE WHITE WHITE	White mit
	It is however accepted to provide the insulation external to the equipment by an adapter or an interconnection cable with galvanic isolator, which may be provided by a retailer, for example.	MILIER WHITER WHITER W	unite unit
	The user manual shall then have the following or similar information in Norwegian and Swedish language respectively, depending on in what country the equipment is intended to be used in:	MULTER WHITER WHITE	MUNICIPAL MAN

country the equipment is intended to be used in: "Apparatus connected to the protective earthing of the building installation through the mains connection or through other apparatus with a connection to protective earthing and to a television distribution system using coaxial cable, may in some circumstances create a fire hazard. Connection to a television distribution system therefore has to be provided through a device providing electrical isolation below a certain frequency range (galvanic isolator, see EN 60728-11)" NOTE In Norway, due to regulation for CATV-installations, and



IEC62368-1						
Clause	Requirement – Test	Result – Remark	Verdict			
NATE AN	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.	TEX SLIEX SLIEX SOLE	Junites W			
	Translation to Norwegian (the Swedish text will also be accepted in Norway):	WAL MILET WATER WATER	WALTER WAL			
	"Apparater som er koplet til beskyttelsesjord via nettplugg og/eller via annet jordtilkoplet utstyr – og er tilkoplet et koaksialbasert kabel-TV nett, kan forårsake brannfare. For å unngå dette skal det ved tilkopling av apparater til kabel-TV nett installeres en galvanisk isolator mellom apparatet og kabel-TV nettet."	Multer multer multer mil	LE WALTER			
un un litek unlite unlitek unlitek	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."	Antite white whitek whi	un itek wati Elek watiek Kantiek			
8.5.4.2.3	United Kingdom  Add the following after the 2 <sup>nd</sup> dash bullet in 3 <sup>rd</sup> 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.	No external circuits.	N/A S			
B.3.1 and B.4	Ireland and United Kingdom The following is applicable:  To protect against excessive currents and short-circuits in the primary circuit of direct plug-in equipment, tests according to Annexes B.3.1 and B.4 shall be conducted using an external miniature circuit breaker complying with EN 60898-1, Type B, rated 32A. If the equipment does not pass these tests, suitable protective devices shall be included as an integral part of the direct plug-in equipment, until the requirements of Annexes B.3.1 and B.4 are met	Not directly connected to the mains	N/A			
G.4.2	Denmark To the end of the subclause the following is added: Supply cords of single phase appliances having a rated current not exceeding 13 A shall be provided with a plug according to DS 60884-2-D1:2011. CLASS I EQUIPMENT provided with socketoutlets with earth contacts or which are intended to be used in locations where protection against	Not directly connected to the mains	N/A			



-20,	IEC62368-1	is we was any	1. 1.
Clause	Requirement – Test	Result – Remark	Verdict
de	THE THE THE THE	TE SULL SINCE SINCE	10
UNITEK N	rules shall be provided with a plug in accordance with standard sheet DK 2-1a or DK 2-5a.	TER STER STER WITE	MALTER
	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.	THE MUTTER MUTTER MUTTER	with w
	Mains socket outlets intended for providing power to Class II apparatus with a rated current of 2,5 A shall be in accordance DS 60884-2-D1:2011 standard sheet DKA 1-4a.	Whitek whitek whitek whitek	INLIEK V
	Other current rating socket outlets shall be in compliance with Standard Sheet DKA 1-3a or DKA 1-1c.	TEX MUTER MUTER MUTER	in cien in
	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	MULTER WALTER WALTER WAL	er andrek
	Justification:	ar ar ar	
	Heavy Current Regulations, Section 6c	THE STREET STREET	CLIE .
2.4.0			21/4
3.4.2	United Kingdom  To the end of the subclause the following is added:	Not directly connected to the mains	N/A
k whitek whitek whi	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.	JEK WALTER WALTER WALTER	res unite unites unites un
G.7.1	United Kingdom	a at at let	N/A
	To the first paragraph the following is added:	the write while my	211
	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.	JEK JOLIEK WALTER WALTER	IN TEX WA
	NOTE "Standard plug" is defined in SI 1768:1994 and essentially means an approved plug conforming to BS 1363 or an approved conversion plug.	t whilet whilet whilet wh	JEK WALTE



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IEC62368-1						
Clause	Requirement – Test	Result – Remark	Verdict			
The same	W W JET JE	LITE WILL THE WAY	1/11			
G.7.1	Ireland	20, 20,	N/A			
	To the first paragraph the following is added:	THE STEEL WITE MILIT	MULL			
LITER WAY	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	Whitek whitek whitek whitek	grifet Gestani			
G.7.2	Ireland and United Kingdom	CHIEF MITE WALL WAL	N/A			
	To the first paragraph the following is added:	The second second	TEX			
	A power supply cord with a conductor of 1,25 mm <sup>2</sup> is allowed for equipment which is rated over 10 A and up to and including 13 A.	Writes white mail while	CIEK 1			
ZC	ANNEX ZC, NATIONAL DEVIATIONS (EN)	is must also also	N/A			
10.5.2	Germany	No CRT within the equipment.	N/A			
	The following requirement applies:	MULL MULL MULL MAY	72,			
	For the operation of any cathode ray tube intended for the display of visual images operating at an	MILEY WHITEK WHITEK WHITE	WALTE			

acceleration voltage exceeding 40 kV,

Justification:

ZD

96/29/EURATOM.

NOTE Contact address:

authorization is required, or application of type approval (Bauartzulassung) and marking.

German ministerial decree against ionizing radiation (Röntgenverordnung), in force since 2002-07-01, implementing the European Directive

Physikalisch-Technische Bundesanstalt, Bundesallee 100, D-38116 Braunschweig, Tel.: Int+49-531-592-6320, Internet: http://www.ptb.de

IEC and CENELEC CODE DESIGNATIONS FOR FLEXIBLE CORDS (EN)



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The Music	Mr. Mc M.	IEC62368-1	TEX WITE MUTER WA	The Marie
Clause	Requirement – Test	ric Mr. M. M.	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 co	rd 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 corr	d 60245 IEC 57	H05RN-F
Heavy polychloroprene sheathed flexible cord	60245 IEC 66	H07RN-F
Cords having high flexibility		
Rubber insulated and sheathed cord	60245 IEC 86	H03RR-H
Rubber insulated, crosslinked PVC sheathed co	ord 60245 IEC 87	ноз ₹∨4-н
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-l
Ordinary halogen-free thermoplastic insulated a sheathed flexible cords	and	H05Z1Z1-F H05Z1Z1H2-I

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The Walter	My My My My	IEC62368-1	Mr. M.
Clause	Requirement – Test	Result – Remark	Verdict

5.2	TABLE: Classification	on of electrical en	ergy sourc	es	at a	JE TEN	N/A
Supply Voltage	Location (e.g.	Test conditions		Parame	ters	<u>.</u>	ES
	circuit designation)		U (V)	I (mA)	Type <sup>1)</sup>	Additional Info 2)	Class
9VDC	The EUT is	Normal	9VDC	* - #	SS	DC (	ES1
	designed to be	Abnormal	will we	il taili	10, 1,	. 70	77.
	supplied by Type -C port	Single fault – SC/OC	UEK SU	ek unitek mi	LIEK.	EK WITER	MALTERY
SEX ST	IE NITER WITE W	Normal	9VDC	T.	SS	DC	ES1
9VDC	Wireless Output	Abnormal	IEE TOLIES	White Whi	71/1	415 - 111	20
		Single fault – SC/OC	TIEN.	NIEK WIEK	MALTEK.	UNLIENT WINLE	White

### 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.

**Test Conditions:** 

Normal -Full load and no load. Abnormal - Overload output short circuit; OC= open circuit

SC=

3)

5.4.1.8 TABLE: Working	ng voltage measu	rement			N/A
Location	RMS voltage (V)	Peak voltage (V)	Frequency (Hz)	Commen	ts
-m m m	7	it with the	EK MATER W	The Mary Mary	m.
- JEK STEK KITER SK	TE WILL ON	21, - 22	-	of the test	JEN.
Supplementary information:					
THE THE STEEL STEEL	Will Mur	27, 4,	- 4	at at	All S

N/A	at the	5.4.1.10.2 TABLE: Vicat softening temperature of thermoplastics						
_	Mrs. Mrs	.: ISO 306 / B50		Method				
ing (°C)	T softenir	Thickness (mm)	Object/ Part No./Material Manufacturer/trademark					
1, ,	2/1/2	Write - Will M	at water all the	7/1, 7/1, 1,				
				Supplementary information:				
	- Zill		* * * * * * * * * * * * * * * * * * *	Supplementary information:				

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

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		IEC62368-1					
Clause	Requirement – Test	R	Result – Remark				
Me	The The state of t	ART SET	alite mile april	Who are			
et	TEX LIEX SLIER WITE WHITE	m m-	70, 7	A At			
Suppleme	entary information:		·				
et .	THE THE STIFF WITH WELL WE	n 24. 24		11th 11th			
	The state of the s		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	and the state of			

5.4.2, 5.4.3 TABLE: Minimum Clearances/Creepage distance							N/A	
Clearance (cl) and creepage distance (cr) at/of/between:	U <sub>p</sub> (V)	U <sub>rms</sub> (V)	Freq <sup>1)</sup> (kHz)	Required cl (mm)	cl (mm)	E.S. <sup>2)</sup> (V)	Required cr (mm)	cr (mm)
- nite with whi whi	2/1/2	14	,		46 <del>1</del>	56th 50	Er Tile	an III
Supplementary information:								
Only for frequency above 30     Complete Electric Strength volta		(V) who	en 5 4 2	4 applied)	iek mir	ek walte	WALTE V	2)

5.4.4.2	TABLE: Minimum	distance through insu	lation	when where	N/A
Distance th (DTI) at/of	rough insulation	Peak voltage (V)	Insulation*	Required DTI (mm)	Measured DTI (mm)
1	TEX TEX ST	MITE WALLE WALL	n, -n,	*	Let - Let
Supplemen	tary information:				
*See also s	ub-clause 5.4.4.9	1,11,1	11. 12. 2.		et et
ne ar				Later Market	in the

5.4.4.9 TABLE: Solid insulation at frequencies >30 kHz								
Insulation material	E <sub>P</sub>	Frequency (kHz)	<b>K</b> <sub>R</sub>	Thickness d (mm)	Insulation	V <sub>PW</sub> (Vpk)		
- WILL MULL MULL M	- W		# 1th	-TEN JE	CLIER OF	SE WILL		
Supplementary information:								
oupplementary information.	20.	·		CENT SEE	a Life To Calif	all line		

5.4.9	TABLE: Electric strength tests	at at the	LIEF NITER MITE	N/A
Test voltage	e applied between:	Voltage shape (Surge, Impulse, AC, DC, etc.)	Test voltage (V)	Breakdown Yes / No
Functional:	THE MULTINAL WAY AND THE	. It let it	H STEEL STEEL S	NITE WALTER
- 4	EX TEX STEX WITE WITE	The Me Me	7 7	at the
Basic/suppl	ementary:	LIEK SLIEK MATER	white white whi	i mr. mr
TEX SITEX	WILL MILLER MILLER WALL	4n ~ %	- pr det de	L STEE WIFE
Reinforced:	THE TEXT SELECTION	IEE WALL WALL W	ur mur mur	74. A.
- Write A	with mer mer and		of olifer outer	WILL WILL.
Routine Tes	ets:- Tex Tree Military	me me me	The state of	et let
AUT. MU	THE THE STATE OF	Liek Wife Wife	-Write Murie M	r, mr, m



		IEC62368-1	
Clause	Requirement – Test	Result – Remark	Verdict

6000				-1			4			2017	31/1		
Supp	lementar	y inform	nation:										
m	ap.	20.	10	7,4	, est-	Let.	CLT E.R.	MITE	MILIT	CALTA	1917	24r	711

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		
MILIE IN	Vrie AN	10, 10,	Normal	et ret is	CE CLICK	Life Milita		
	TER ANLT	t white white w	Single fault: SC/ OC	711 - 711 - 71 - 711	10th 15	ek nitek in		

# 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	5.6.6 TABLE: Resistance of protective conductors and terminations								
Location		Test current (A)	Duration (min)	Voltage drop (V)	Resistance (Ω)				
-CIEN C	if his her	1 200 3	-1 -7 -3+		Elt SLIFE SI				
Supplementary information:									
TER SUIT				THE THE	LIFE OLIV				

5.7.4 TABL	E: Unearthed acces	ssible parts				N/A
Location	Operating and	Supply Voltage (V)	F		ES class	
	fault conditions		Voltage (V <sub>rms</sub> or V <sub>pk</sub> )	Current (A <sub>rms</sub> or A <sub>pk</sub> )	Freq. (Hz)	
L/N to secondary terminals	Normal	MILIE WALL	ang - ang	14 14.		
	Abnormal: overload	TEX MITER	Whitek Whitek	uniter unite	uniii u	21/1
	Single fault: SC/ OC		STER STER O	LIEK WIEK	TEK-VILL	er Wille

5.7.5	TABLE: Earthed acces	sible conductive part	The Street	all the all	N/A
Supply volta	ige (V)	" TILL MULL MULL M	. 24 . 2		_
Phase(s)		[] Single Phase; [] Three F	Phase: [ ] Delta	] Wye	
Power Distri	bution System	[] TN [] TT [] IT			
Location		Fault Condition No in IEC 60990 clause 6.2.2	Touch current (mA)	Comme	nt
- 5th 5	IER INLIE UNLIE WALT	10. 11.	*- *	THE THE	TIER O
21/2 21	70, 7	TER LIER LIER	inlite and it	in in in.	211. 21.





nu,		IEC62368-1	LIER WILLER WILLIAM	ir. an	211
Clause	Requirement – Test	Mrr. Mr. M.	Result – Remark	et d	Verdict

Supplementary 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		
1 <sub>11</sub> 1 <sub>2</sub>	- zt	At - At o	Lien - Mile	MULL - MULL	200, 2	12 Ta		
Supplementary information:								
2n. 2n. 1		1 St S		Wr. Wr.	211.	24		

6.2.2 T	ABLE: Power source	e circuit classif	ications	it will	Will Will	h b
Location	Operating and fault condition	Voltage (V)	Current (A)	Max. Power <sup>1)</sup> (W)	Time (S)	PS class
9V input	Pin + to -	9.0	2.1	18.9	5S	PS2
Wireless outp	ut Output	9.0	1.67	15.0	5S	PS2

Supplementary information:

Abbreviation: SC= short circuit; OC= open circuit1) Measured after 3 s for PS1 and measured after 5 s for PS2 and PS3.\* Unit shutdown immediately, recoverable, no hazard.

6.2.3.1	TABLE: Determ	ination of Arcing PIS	LU -	211 211	Р
Location		Open circuit voltage after 3 s (Vpk)	Measured r.m.s current (A)	Calculated value	Arcing PIS? Yes / No
<del>-</del>	LIER ALTER IN	ie unti wa	11. 15. 2		All - JEK
Suppleme	ntary information:				
et e	THE CIENTER	WILL MY M	20, 21	A A	et let

6.2.3.2 TABLE: De	termination of resistive PIS	24. 25. 2	N/A
Location	Operating and fault condition	Dissipate power (W)	Arcing PIS? Yes / No
All primary circuits/components	M T MAY THE THE THE	ek avitek antrek antrek	Yes (declaration)

Supplementary information:

All circuits are considered as resistive PIS;

A combination of

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

If a separate

voltmeter and ammeter are used, the product of (VA x IA) is used to determine Resistive PIS classification. A Resistive PIS: (a) dissipates more than 15 W, measured after 30 s of normal operation, or (b) under single fault conditions has either a power exceeding 100 W measured immediately after the introduction of the fault if electronic circuits, regulators or PTC devices are used, or has an available power exceeding 15 W measured 30 s after introduction of the fault.

8.5.5 TABLE: High pre	essure lamp	TEK STEK STE	WITE WALTE	27.57	N/A
Lamp manufacturer	Lamp type	Explosion method	Longest axis of glass particle		ticle found nd 1 m Yes





in the	74 24 24 T	IEC62368-1	LIER WILLER WILLER	Vr. Au	41.
Clause	Requirement – Test	Mar. Mr. Mr.	Result – Remark	et d	Verdict

				(mm)	/ No
" While Muri Muri Muri	41, 2,	ī	JEK JEK	NITER WIFE	Will Marin a
Supplementary information:				·	
Kry Wer Mer All	20, 1	1. 1	et let	THE NUTE OF	in with the

Supply voltage (V)			9.0\	1 21/2/2 21			20.	_
Max. transmit pow	er of transr	nitter (W)	15W	1	TEK LIE	- CLIFE .	NLTE W	_
		eiver and contact		eiver and contact		ver and at of 2 mm		eiver and at ce of 5 mm
Foreign objects	Object (°C)	Ambient (°C)	Object (°C)	Ambient (°C)	Object (°C)	Ambient (°C)	Object (°C)	Ambient (°C)
Steel disc	26.9	24.3	35.6	24.5	27.8	24.5	26.3	24.8
Aluminum ring	26.5	24.3	32.9	24.2	27.1	24.4	26.0	24.9
Aluminum foil	26.5	24.1	33.5	24.8	27.3	24.6	26.2	24.8

5.4.1.4, 9.3, B.1.5, B.2.6	perature m	easureme	ents		\_\7	in the	it stifft	P P
Supply voltage (V)	:	9VDC	9VDC	3 <sub>10</sub>	70,	2,-	_	
Ambient temperature durir	(°C):	22.2	40.0	JE	TITEL	JALLE M	_	
Maximum measured temp	part/at:	T (°C)				Allowed T <sub>max</sub> (°C)		
Wireless winding	LIEK	51.8	69.6	1	n- 4	-11	Ref.	
Type-c input terminal	10,	56.8	74.6		(1) (1)	Et - CIE	77	
C31	LIEK N	58.7	76.5	m,	-20	10.	105	
PCB near U1	11/2 11		63.3	81.1	Ś	y (1)	NAE.	130
Plastic enclosure inside	TEK ST	LEK MAL	46.6	64.4	a,	10,		Ref.
where mer mer .	14. 14.	Acc	essible of 2	5°C	56t	RUTER	INLIE WY	12 Mer. 1
External surface of enclosu	ıre	Me	41.0	43.8		7	A	- 77
Ambient			22.2	25.0		alifer on	ile Min	me m
Temperature T of winding:	t <sub>1</sub> (°C)	R <sub>1</sub> (Ω)	t <sub>2</sub> (°C)	$R_2(\Omega)$	T	(°C)	Allowed T <sub>max</sub> (°C)	Insulation class
T st st st	Take 1	wite - wi	14-6	m.	n,	- 24		+

Supplementary information:

<sup>\*</sup> Temperature limit for TS1 of accessible enclosure according to Table 38 to be measured at normal ambient temperature.

Note 1: The apparatus was submitted and evaluated for maximum manufacturer's recommended ambient

Supplementary information:

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- We	My In In	IEC62368-1	LIER WITE WALLE	Mers an	in an
Clause	Requirement – Test	MUT. All M.	Result – Remark	at A	Verdict

(Tma) of 40°C.

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

B.2.5	T	ABLE: Inp	ut test		,et	LIE*	NITE.	MITE WALL AND A PAIN
U (V)	Hz	I (A)	I rated (A)	P (W)	P rated (W)	Fuse No	I fuse (A)	Condition/status
9	,	1.98	2.0	17.82	18.0	- 41	- 711	- A A At

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

B.3, B.4 T	ABLE: Abnor	mal operatin	g and fau	ılt condit	ion tes	sts	LEX LEX LIES	CITE P NO
Ambient temp	erature T <sub>amb</sub> (	°C)	<u>*</u>			See b	pelow	_
Power source	for EUT: Mar	ufacturer, mo	del/type,	outputrati	ng:	<	IF STEEL STEEL IN	_
Component No.	Condition	Supply voltage (V)	Test time	Fuse no.		use ent (A)	Observation	n
9V Wireless output	0-1	9.0VDC	1H			nti.	PCB near U1:81.7°C Ambient: 40.0°C External enclosure near charger:45.6°C Ambient: 25.0°C	ar wireless
C1 WELL TUN	S-C	9.0VDC	10mins	WALTE -	STALLEY.	wat.	Unit shut down immed damage, no hazard. Recoverable.	liately. No

#### Supplementary information

- <sup>1)</sup> Supply by external DC source, <sup>2)</sup> Measured battery cell voltage and current. Test table is provided to record abnormal and fault conditions for all applicable energy sources including Thermal burn injury. Column "Abnormal/Fault." Specify if test condition by indicating "Abnormal" then the condition for a Clause B.3 test or "Single Fault" then the condition for Clause B.4.
- 1) s-c: Short-circuited; o-l: Overloaded; BL=Blocked.
- 2) The test result shown all safeguards remained effective and didn't lead to a single fault condition during abnormal operating condition; In addition all safeguards complied with applicable requirements in this standard after restoration of normal operating conditions.
- 3) The test result showed no Class 1 or 2 energy source become Class 3 level during and after single fault condition.
- 4) Limit temperature: Plastic material: 87°C

M.3	TABLE: Pro	tection circuits for batteries provided within the equipment N/A					
Is it poss	sible to install the	battery in a reverse polarity position?:	TEK ITEK NITEK K	_			
		Chargi	ng				
Equipme	ent Specification	Voltage (V)	Current (A)				
		TEX LIFE WHITE WHITE WHEN V	2 M M	J.			
Manu	facturer/type	acturer/type Battery specification					

Reference	No.:WTF22D	10215234S





" In	The state of the s	IEC62368-1	Tr. Mrs. Mrs.
Clause	Requirement – Test	Result – Remark	Verdict

		Non-recharge	able	batteries			Red	hargeab	le batteries	
		Discharging		ntentional	(	Char	ging		Discharging	Reverse
		current (A)		narging rrent (A)	Voltage	(V)	Curr	ent (A)	current (A)	charging current (A)
20		et let	15th	TEK	در المالية	Will.	all.	10	7/1	10 10
Note: The tes	sts of M.3.2 a	re applicable c	nly v	vhen abov	e appropr	iate (	data is	s not ava	nilable.	
Specified bat	tery tempera	ature (°C)	,t			:	m,	In.	10-45	
Component No.	Fault condition	Charge/ discharge mo	ode	Test time	Temp. (°C)		rrent (A)	Voltage (V)	Obs	ervation
TER ALT	IN LITER OF	neite white	m	20	~~		٠	et	LEF JE	t Liek N
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	Charging sa	feguards for	guards for equipment containing a secondary lithium					
Maximum	specified	charging voltag	ge (V)		hi ngh s	EX SITER RITE	_		
Maximum	specified	charging curre	nt (A)		The Man	20, 20,	_		
Highest s	pecified ch	arging tempera	ature (°C)			WITE WILLE			
Lowest sp	ecified cha	arging tempera	ture (°C)	<u> </u>	:	L L			
Battery	<i>t.</i>	Operating	Measurement Observa				n		
manufacturer/type		and fault condition	Charging voltage (V)	Charging current (A)	Temp. (°C)				
NITEK 1	NLIEK WA	Normal	LIER WULLE	Mury Aur	ALCA ALL	t liet sliet	MITEN		
		Abnormal-	EK STEK.	ALTE WALTE	aury aug	211 211	3.°		
		Single fault – ()	70 ·	JEK SIJEK	INLIEK NALTER	WALLER WALTER AND	The M		

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)							
Output	Condition	11 (\( \( \) \( \)	Time (a)	I <sub>sc</sub> (	(A)	S (	VA)	
Output Circuit	Condition	U <sub>oc</sub> (V)	Time (s)	Meas.	Limit	Meas.	Limit	
t	EK TEK SEK	inlite will	MULL	11/2 11	24	2	at at	
MILLE	Vir My My		E+	JEF J	A CLIER	WILE W	Whi.	
at .	Et JEK JEK	LITER WALL	11/2 1	L 14	12.		t let	
MULL MU	The the	, et	LEK .	IET STEET	MITER	VILL MULL	Mrs. M	





in m	M. M. M.	IEC62368-1	The Ave
Clause	Requirement – Test	Result – Remark	Verdict

Supplementary Information:

SC = short circuit, OC = open circuit\* Unit shutdown immediately, recoverable, no hazard.

T.2, T.3, T.4, T.5	TABLE: St	teady force te	est			Multer multer multir par Pour
Location / Part	Material	Thickness (mm)	Probe	Force (N)	Test Duration (s)	Observation
Enclosure top(T.4)	Plastics*	See table 4.1.2	t TER	100	15 th	Enclosure remained intact, no crack/ opening developed
Enclosure side(T.4)	Plastics*	See table 4.1.2	20 <u>-</u>	100	NITE SUNT	Enclosure remained intact, no crack/ opening developed
Enclosure bottom (T.4)	Plastics*	See table 4.1.2	24	100	TELL S	Enclosure remained intact, no crack/ opening developed
Supplementa	ary information	on:				

T.6, T.9	TABLE: Impa	act test		LIER WITER WITE WALL WALL	N/A
Location/Pa	rt Material	Thickness (mm)	Height (mm)	Observation	
at at		, Etc. 12°	"Will.		at di
The WALL	212 21	5	at d	H THE LIFE NITE MILE WE	TI MUL
+ 1+	Et JEt	SLIFE SLIFE.	iner me	Mr. Mr.	at alt
Supplement	ary information	າ:			
*Test was p	erformed on pi	oduct with each so	urce listed in	table 4.1.2.	, st

T.7	TABLE: Drop	test		The Man and Man A
Location/Part	Material	Thickness (mm)	Height (mm)	Observation
Enclosure Top	Metal*	See table 4.1.2	1000	Enclosure remained intact, no crack/ opening developed. No hazards.
Enclosure Side	Plastics*	See table 4.1.2	1000	Enclosure remained intact, no crack/ opening developed. No hazards.
Enclosure Bottom	Metal*	See table 4.1.2	1000	Enclosure remained intact, no crack/ opening developed. No hazards.

T.8 1	ABLE: Stress	s relief test			THE LITTER STIFF WITE .	Р
Location/Part	Material	Thickness (mm)	Oven Temperatur e (°C)	Duration (h)	Observation	



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				IEC623	68-1		
Clause	Req	uirement -	- Test	r. 20.	Re	esult – Remark	Verdict
Enclosure	1) 5(E) - - -	Plastic*	See table 4.1.2	70°C	7h	Enclosure remained cracking/opening de enclosure joint. No h	veloped in the
Supplementa	ary in	formation:					
*Test was pe	erform	ned on pro	duct with each sour	ce listed in t	able 4.1.2	The was you	. 1n 2

X	TABLE: Alternat	ive method for determ	ning minimum clearance	s distances N/	Α
	nce distanced etween:	Peak of working voltag (V)	e Required cl (mm)	Measured cl (mm)	
3- 4	EF JEF JE	CHIEF WATE WAL	211. 25	A ST A	Ļ
Supplement	ary information:				
at all	- TEK TEK	WITE WITE MAN	24, 24, 24	at at at	





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Clause	Requirement – Test	Result – Remark	Verdict

4.1.2	TABLE: Critical components information				<i>≯</i> ₽
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity <sup>1</sup>
PCB	Jiangxi Zhong Xin Hua Electronics Industry Co Ltd	ZXH-2	130°C, V-0	UL 796	UL E331298
(Alternative)	Interchangeable	Interchangeabl e	Min. 105°C, V-0	UL 796	UL
Plastic enclosure	Korea Kumho Petrochemical Co Ltd	ABS-710	HB, min. thickness: 1.5mm, 70°C	UL94	UL E65424
Wireless coil	Shenzhen Defuruilin Electronics Technology Co., Ltd.	A11	6.3±10% µH at 100КHz, 130°С, N1: Ф0.08mm x 105Р x 10Тs	IEC/EN 62368- 1	Tested with appliance

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



# **Photo Documentation**

Reference No.: WTF22D10215234S





Figure 1: Overview



Figure 2: Overview

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# **Photo Documentation**

Reference No.: WTF22D10215234S



Figure 3: Overview



Figure 4: Overview



# **Photo Documentation**

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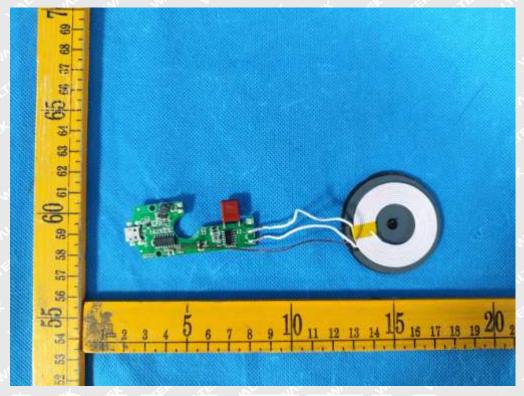


Figure 5: Internal view



Figure 6: PCB



# **Photo Documentation**

Reference No.: WTF22D10215234S



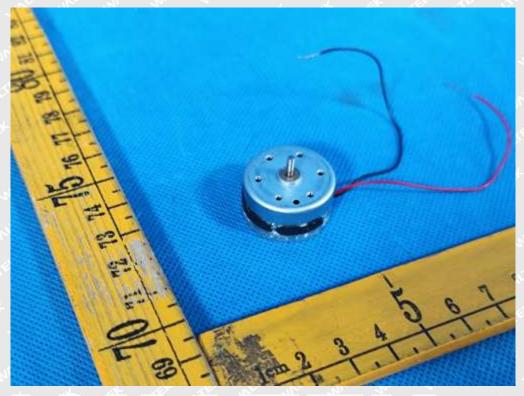


Figure 7: PCB

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