ZHT TEST

TEST REPORT
IEC 60335-1& IEC 60335-2-98
Safety of household and similar electrical appliances
Part 2-98: Particular requirements for aroma diffusers

Report Number.....:	ZHT-20230696745S
Date of issue.....:	Jul. 10, 2023
Total number of pages.....:	94
Testing Laboratory.....:	**Shenzhen ZHT Testing Co., Ltd.**
Address .....:	206,YongFu Buiding, YongFu Road, FuYong, Bao'an District, Shenzhen City, Guangdong P.R. China.
Applicant's name.....:	**Ningbo Glory King Imp&Exp Co., Ltd.**
Address.....:	1343, No.55 Dongdu Road, Haishu District, Ningbo,Zhejiang Province,China.
Test specification:	
Standard.....:	IEC 60335.1:2020 IEC 60335.2.98:2005+A1:2009+A2:2014
Test procedure.....:	CE-LVD
Non-standard test method.....:	N/A
Test Report Form No.....:	IEC60335_2_98E
Test Report Form(s) Originator.....:	VDE
Master TRF.....:	dated 00-08

Test Item description ..... :	AROMA DIFFUSER
Trade Mark ..... :	N/A
Manufacturer..... :	Ningbo Glory King Imp&Exp Co., Ltd. 1343, No.55 Dongdu Road, Haishu District, Ningbo,Zhejiang Province,China.
Model/Type reference .....:	KJR-041 020, 021, 080, 096, 099, 186, 029, 181, 101
Ratings .....:	Input: 24V ⎓14W External adaptor: Input: AC100-240V~, 50/60Hz

Testing procedure and testing location:

Testing Laboratory.....:	**Shenzhen ZHT Testing Co., Ltd.**
Address.....:	206,YongFu Buiding, YongFu Road, FuYong, Bao'an District, Shenzhen City, Guangdong P.R. China.
Date of Test.....:	Jul. 03, 2023 - Jul. 10, 2023
Tested by (name + signature).....:	Sabrina Liang
Reviewed by (name + signature).....:	Seven Zheng
Approvedby (name + signature).....:	Sam Wang

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

-- Attachment I : EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES

-- Attachment II: Photo documentation.

Summary of testing:

Tests performed (name of test and test clause):	**Testing location:**
-- IEC 60335.1:2020 -- IEC 60335.2.98:2005+A1:2009+A2:2014 The submitted samples were found to comply with the requirements of above specification.	Shenzhen ZHT Testing Co., Ltd. 206,YongFu Buiding, YongFu Road, FuYong, Bao'an District, Shenzhen City, Guangdong P.R. China.

Copy of marking plate:

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

AROMA DIFFUSER
Model No.: KJR-041
24V ⎓ 14W

Importer:XXXXXX
Address:XXXXXX
Manufacturer: Ningbo Glory King Imp&Exp Co., Ltd.
Address: 5 /F, Building D, Heheng Industrial Park, No.19 Minqing Road,Longhua New District, Shenzhen City, Guangdong P.R.China.

Made in China

Note: The above markings are the minimum requirements required by the safety lab. For the final production samples, the additional markings which do not give rise to misunderstanding may be added.

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
5	GENERAL CONDITIONS FOR THE TESTS		--
	Tests performed according to clause 5, e.g. nature of supply, sequence of testing, etc.		P
5.1	Humidistats are short-circuited or rendered inoperative (IEC 60335-2-98)		n
6	CLASSIFICATION		--
6.1	Protection against electric shock: Class 0, 0I, I, II, III :	Class II	P
6.2	Protection against harmful ingress of water	IP20	N
7	MARKING AND INSTRUCTIONS		
7.1	Rated voltage or voltage range (V) :	Input: AC100-240V~	P
	Symbol for nature of supply, or :		P
	Rated frequency (Hz) :	50/60Hz	P
	Rated power input (W):	14W	P
	Rated current (A) :		N
	Manufacturer's or responsible vendor's name, trademark or identification mark :	Ningbo Glory King Imp&Exp Co., Ltd.	P
	Model or type reference :	KJR-041	P
	Symbol IEC 60417-5172, for class II appliances		N
	IP number, other than IPX0 :	IP20	N
	Appliances which are manually filled shall have a level mark or other means to indicate when they are filled to their rated capacity. (IEC 60335-2-98)		P
	If the temperature of water or steam exceeds 60℃. (IEC 60335-2-98)		--
	CAUTION – Hot water (IEC 60335-2-98)		n
	CAUTION – Hot steam (IEC 60335-2-98)		N
	Symbol IEC 60417-5180, for class III appliances, unless		P
	the appliance is operated by batteries only		P
	Symbol IEC 60417-5018, for class II and class III appliances incorporating a functional earth		N

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	Symbol IEC 60417-5036, for the enclosure of electrically-operated water valves in external hose-sets for connection of an appliance to the water mains, if the working voltage exceeds extra-low voltage		N
7.2	Warning for stationary appliances for multiple supply		N
	Warning placed in vicinity of terminal cover		N
7.3	Range of rated values marked with the lower and upper limits separated by a hyphen	See the marking plate	P
	Different rated values marked with the values separated by an oblique stroke	See the marking plate	P
7.4	Appliances adjustable for different rated voltages or rated frequencies, the voltage or the frequency setting is clearly discernible		N
	Requirement met if frequent changes are not required and the rated voltage or rated frequency to which the appliance is to be adjusted is determined from a wiring diagram		N
7.5	Appliances with more than one rated voltage or one or more rated voltage ranges, marked with rated input or rated current for each rated voltage or range, unless		P
	the power input or current are related to the arithmetic mean value of the rated voltage range		N
	Relation between marking for upper and lower limits of rated power input or rated current and voltage is clear		P
7.6	Correct symbols used		P
	Symbol for nature of supply placed next to rated voltage		P
	Symbol for class II appliances placed unlikely to be confused with other marking		P
	Units of physical quantities and their symbols according to international standardized system		N

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
7.7	Connection diagram fixed to appliances to be connected to more than two supply conductors and appliances for multiple supply, unless		N
	correct mode of connection is obvious		N
7.8	Except for type Z attachment, terminals for connection to the supply mains indicated as follows:		--
	- marking of terminals exclusively for the neutral conductor (letter N)		N
	- marking of protective earthing terminals (symbol IEC 60417-5019)		N
	- marking of functional earthing terminals (symbol IEC 60417-5018)		N
	- marking not placed on removable parts		P
7.9	Marking or placing of switches which may cause a hazard		N
7.10	Indications of switches on stationary appliances and controls on all appliances by use of figures, letters or other visual means :		N
	This applies also to switches which are part of a control		N
	If figures are used, the off position indicated by the figure 0		N
	The figure 0 indicates only OFF position, unless no confusion with the OFF position		N
7.11	Indication for direction of adjustment of controls		P
7.12	Instructions for safe use provided		P
	The instruction for use shall include information with regard to (IEC 60335-2-98)		--
	- the composition and quantity of solution to be used, with a warning against the excessive use of salt, if applicable (IEC 60335-2-98)		P
	The instruction for use shall include information with regard to (IEC 60335-2-98)		--
	Details concerning precautions during user maintenance		P

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	The instructions state that:		P
	- 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		P
	- children being supervised not to play with the appliance		P
	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		P
	Instructions for class III appliances state that it must only be supplied at SELV, unless		P
	it is a battery-operated appliance, the battery being charged outside the appliance		P
	For appliances for altitudes exceeding 2000 m, the maximum altitude is stated :		N
	The instructions for appliances incorporating a functional earth states that the appliance incorporates an earth connection for functional purposes only		N
7.12.1	Sufficient details for installation supplied		N
	The instructions for installation of appliances intended to be connected to water mains shall state the maximum permissible water pressure in pascals(bars). (IEC 60335-2-98)		N
	For an appliance intended to be permanently connected to the water mains and not connected by a hose-set, this is stated		N
	If different rated voltages or different rated frequencies are marked, the instructions state what action to be taken to adjust the appliance		N

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
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7.12.2	Stationary appliances not fitted with means for disconnection from the supply mains having a contact separation in all poles that provide full disconnection under overvoltage category III, the instructions state that means for disconnection must be incorporated in the fixed wiring in accordance with the wiring rules		N
7.12.3	Insulation of the fixed wiring in contact with parts exceeding 50 K during clause 11; instructions state that the fixed wiring must be protected		N
7.12.4	Instructions for built-in appliances:		--
	- dimensions of space		N
	- dimensions and position of supporting and fixing		N
	- minimum distances between parts and surrounding structure		N
	- minimum dimensions of ventilating openings and arrangement		N
	- connection to supply mains and interconnection of separate components		N
	- allow disconnection of the appliance after installation, by accessible plug or a switch in the fixed wiring, unless		N
	a switch complying with 24.3		N
7.12.5	Replacement cord instructions, type X attachment with a specially prepared cord		N
	Replacement cord instructions, type Y attachment		N
	Replacement cord instructions, type Z attachment		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

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Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
7.12.7	Instructions for fixed appliances stating how the appliance is to be fixed		N
7.12.8	Instructions for appliances connected to the water mains:		--
	- max. inlet water pressure (Pa) :		N
	- min. inlet water pressure, if necessary (Pa) :		N
	Instructions concerning new and old hose-sets for appliances connected to the water mains by detachable hose-sets		N
7.13	Instructions and other texts in an official language	In English	P
7.14	Marking clearly legible and durable, rubbing test as specified		P
7.15	Markings on a main part		P
	Marking clearly discernible from the outside, if necessary after removal of a cover		P
	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		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		P
	The symbol IEC 60417-5018 placed next to the symbol IEC 60417-5172 or IEC 60417-5180		N
7.16	Marking of a possible replaceable thermal link or fuse link clearly visible with regard to replacing the link		N
8	PROTECTION AGAINST ACCESS TO LIVE PARTS		--

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
8.1	Adequate protection against accidental contact with live parts	It has already tested in adaptor which was approved and aroma diffuser is supplied by SELV circuits.	P
8.1.1	Requirement applies for all positions, detachable parts removed		P
	Lamps behind a detachable cover not removed, if conditions met	No such lamps	N
	Insertion or removal of lamps, protection against contact with live parts of the lamp cap		N
	Use of test probe B of IEC 61032, with a force not exceeding 1 N: no contact with live parts		P
	Use of test probe B of IEC 61032 through openings, with a force of 20N: no contact with live parts		P
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
	Test probe 13 also applied through openings in earthed metal enclosures having a non-conductive coating: no contact with live parts		N
	Connecting devices in stands of cordless irons are not considered to be socket-outlets (IEC 60335-2-3)		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		P
8.1.4	Accessible part not considered live if:		--
	- safety extra-low a.c. voltage: peak value not exceeding 42.4 V		N
	- safety extra-low d.c. voltage: not exceeding 42.4 V		N

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	- or separated from live parts by protective impedance		N
	If protective impedance: d.c. current not exceeding 2 mA, and		N
	a.c. peak value not exceeding 0.7 mA		N
	- for peak values over 42.4 V up to and including 450 V, capacitance not exceeding 0,1 µF		N
	- for peak values over 450 V up to and including 15 kV, discharge not exceeding 45 µC		N
	- for peak values over 15kV, the energy in the discharge not exceeding 350 mJ		N
8.1.5	Live parts protected at least by basic insulation before installation or assembly:		--
	- built-in appliances		N
	- fixed appliances		N
	- appliances delivered in separate units		P
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	Compliance checked on the adaptor	P
	Only possible to touch parts separated from live parts by double or reinforced insulation		P
9	STARTING OF MOTOR-OPERATED APPLIANCES		--
	Requirements and tests are specified in part 2 when necessary		N
10	POWER INPUT AND CURRENT		--
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)	P
	Test for an appliance with one or more rated voltage ranges		N

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	For electrode-type appliances, the highest value of the power input is measured. (IEC 60335-2-98)		p
10.2	Current at normal operating temperature, rated voltage and normal operation not deviating from rated current by more than shown in table 2 :	(see appended table)	N
	Test for an appliance with one or more rated voltage ranges		N
	For electrode-type appliances, the highest value of the current is measured. (IEC 60335-2-98)		n
11	HEATING		--
11.1	No excessive temperatures in normal use		P
11.2	The appliance is held, placed or fixed in position as described		P
11.3	Temperature rises, other than of windings, determined by thermocouples		P
	Temperature rises of windings determined by resistance method, unless		N
	the windings are non-uniform or it is difficult to make the necessary connections		N
11.4	Heating appliances operated under normal operation at 1.15 times rated power input (W) :		N
	1.15 times rated power input. (IEC 60335-2-98)		N
11.5	Motor- operated appliances operated under normal operation at most unfavourable voltage between 0.94 and 1.06 times rated voltage (V) :		P
11.6	Combined appliances operated under normal operation at most unfavourable voltage between 0.94 and 1.06 times rated voltage (V) :		N
11.7	Appliances are operated until steady conditions are established. (IEC 60335-2-98)		P

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
11.8	Temperature rises monitored continuously and not exceeding the values in table 3 :	(see appended table)	P
	If the temperature rise of a motor winding exceeds the value of table 3, or		N
	if there is doubt with regard to classification of insulation,		N
	tests of Annex C are carried out		N
	Sealing compound does not flow out		N
	Protective devices do not operate, except		N
	components in protective electronic circuits tested for the number of cycles specified in 24.1.4		N
	The temperature rise limits of motors transformers, components of electronic circuits and parts influenced by them may be exceeded when the appliance is operated at 1.15 times rated power input. (IEC 60335-2-98)		n
13	LEAKAGE CURRENT AND ELECTRIC STRENGTH AT OPERATING TEMPERATURE		--
13.1	Leakage current not excessive and electric strength adequate		P
	Heating appliances operated at 1.15 times the rated power input (W) :		N
	Motor- operated appliances and combined appliances supplied at 1.06 times the rated voltage (V) :		P
	Protective impedance and radio interference filters disconnected before carrying out the tests		N
	Instead of being operated at 1.15 times rated power input. (IEC 60335-2-98)		n
	Electrode-type appliances are supplied at 1.06 times rated voltage. (IEC 60335-2-98)		p

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
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		P
	For class 0I and class I appliances, a low impedance ammeter may be used		N
	For electrode-type appliances, the leakage current is also measured between a metallic mesh placed in the steam, 10 mm from the outlet, and accessible metal parts. (IEC 60335-2-98)		n
	The leakage current shall not exceeded 0.25mA (IEC 60335-2-98)		p
	Leakage current measurements :	(see appended table)	P
13.3	The appliance is disconnected from the supply		P
	Electric strength tests according to table 4 :	(see appended table)	P
	No breakdown during the tests		P
14	TRANSIENT OVERVOLTAGES		--
	Appliances withstand the transient over-voltages to which they may be subjected		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
	No flashover during the test, unless		N
	of functional insulation if the appliance complies with clause 19 with the clearance short-circuited		N
15	MOISTURE RESISTANCE		--
15.1	Enclosure provides the degree of moisture protection according to classification of the appliance	IPX0	N
	Compliance checked as specified in 15.1.1, taking into account 15.1.2, followed by the electric strength test of 16.3		N
	No trace of water on insulation which can result in a reduction of clearances or creepage distances below values specified in clause 29		N

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
15.1.1	Appliances, other than IPX0, subjected to tests as specified in IEC 60529 :		N
	Water valves containing live parts in external hoses for connection of an appliance to the water mains tested as specified for IPX7 appliances		N
15.1.2	Hand-held appliance turned continuously through the most unfavourable positions during the test		N
	Built-in appliances installed according to the instructions		N
	Appliances placed or used on the floor or table placed on a horizontal unperforated support		N
	Appliances normally fixed to a wall and appliances with pins for insertion into socket-outlets are mounted on a wooden board		N
	For IPX3 appliances, the base of wall mounted appliances is placed at the same level as the pivot axis of the oscillating tube		N
	For IPX4 appliances, the horizontal centre line of the appliance is aligned with the pivot axis of the oscillating tube, and		N
	for appliances normally used on the floor or table, the movement is limited to two times 90° for a period of 5 min, the support being placed at the level of the pivot axis of the oscillating tube		N
	Wall-mounted appliances, take into account the distance to the floor stated in the instructions		N
	Appliances normally fixed to a ceiling are mounted underneath a horizontal unperforated support, the pivot axis of the oscillating tube located at the level of the underside of the support, and		N

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IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	for IPX4 appliances, the movement of the tube is limited to two times 90° from the vertical for a period of 5 min		N
	Appliances with type X attachment fitted with a flexible cord as described		N
	Detachable parts subjected to the relevant treatment with the main part		N
	However, if a part has to be removed for user maintenance and a tool is needed, this part is not removed		N
15.2	Spillage of liquid does not affect the electrical insulation		P
	Appliances with type X attachment fitted with a flexible cord as described		N
	Appliances incorporating an appliance inlet tested with or without an connector, whichever is most unfavourable		N
	Detachable parts are removed		N
	Overfilling test with additional amount of the solution, over a period of 1 min (l) :		N
	The appliance withstands the electric strength test of 16.3		N
	No trace of water on insulation that can result in a reduction of clearances or creepage distances below values specified in clause 29		N
	spillage tests with a deviation (°) from the normal position :		N
	Appliances intended to be directly connected to water mains are operated until the maximum water level is reached. (IEC 60335-2-98)		P
15.3	Appliances proof against humid conditions		P
	Checked by test Cab: Damp heat steady state in IEC 60068-2-78		P
	Detachable parts removed and subjected, if necessary, to the humidity test with the main part		P
	Humidity test for 48 h in a humidity cabinet	93%, 45℃	P

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	Reassembly of those parts that may have been removed		P
	The appliance withstands the tests of clause 16		P
16	LEAKAGE CURRENT AND ELECTRIC STRENGTH		--
16.1	Leakage current not excessive and electric strength adequate		P
	Protective impedance disconnected from live parts before carrying out the tests		N
	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) :		P
	Three-phase appliances: test voltage 1.06 times rated voltage divided by √3 (V) :		N
	Leakage current measurements :	(see appended table)	P
16.3	Electric strength tests according to table 7 :	(see appended table)	P
	Test voltage applied between the supply cord and inlet bushing and cord guard and cord anchorage as specified :	(see appended table)	P
	No breakdown during the tests		P
17	OVERLOAD PROTECTION OF TRANSFORMERS AND ASSOCIATED CIRCUITS		--
	No excessive temperatures in transformer or associated circuits in event of short- circuits likely to occur in normal use :		N
	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) :		N
	Basic insulation is not short-circuited		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		N
	Temperature of the winding not exceeding the value specified in table 8		N

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	However, limits do not apply to fail-safe transformers complying with sub-clause 15.5 of IEC 61558-1		N
18	ENDURANCE		--
	Requirements and tests are specified in part 2 when necessary		N
19	ABNORMAL OPERATION		--
19.1	The risk of fire, mechanical damage or electric shock under abnormal or careless operation obviated		P
	Electronic circuits so designed and applied that a fault will not render the appliance unsafe :		N
	if the appliance also has a control that limit the temperature during clause 11 it is subjected to the test of 19.4, and		P
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) :		N
	The container of electrode-type appliances is filled with a saturated solution of NaCl at 20℃±5℃, the appliance being supplied at rated voltage. (IEC 60335-2-98)		P
19.3	Test of 19.2 repeated; test voltage (V), power input of 1.24 times rated power input (W) :		N
	The test is not applicable to electrode-type appliances. (IEC 60335-2-98)		N
19.4	Test conditions as in clause 11, any control limiting the temperature during tests of clause 11 short- circuited		N
	Appliances are filled sufficient water to cover the heating elements. (IEC 60335-2-98)		N
	Fans are switched off. (IEC 60335-2-98)		n
19.5	Test of 19.4 repeated on Class 0I and I appliances with tubular sheathed or embedded heating elements. No short-circuiting, but one end of the element connected to the sheath		N

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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		N
19.6	Appliances with PTC heating elements tested at rated voltage, establishing steady conditions		N
	The working voltage of the PTC heating element is increased by 5% and the appliance is operated until steady conditions are re-established. The voltage is then increased in similar steps until 1.5 times working voltage or until the PTC heating element ruptures (V) :		N
19.7	Stalling test by locking the rotor if the locked rotor torque is smaller than the full load torque, or		P
	locking moving parts of other appliances		N
	Locked rotor, capacitors open-circuited one at a time		N
	Test repeated with capacitors short-circuited one at a time, unless		N
	the capacitor is of class P2 of IEC 60252-1		N
	Appliances with timer or programmer supplied with rated voltage for each of the tests, for a period equal to the maximum period allowed:		N
	Winding temperatures not exceeding values specified in table 8 :		N
19.8	Multi- phase motors operated at rated voltage with one phase disconnected		N
19.9	Running overload test on appliances incorporating motors intended to be remotely or automatically controlled or liable to be operated continuously		N

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	Motor-operated and combined appliances for which 30.2.3 is applicable and that use overload protective devices relying on electronic circuits to protect the motor windings, are also subjected to the test		N
	Winding temperatures not exceeding values as specified :		N
19.10	Series motor operated at 1.3 times rated voltage for 1 min (V) :		N
	During the test, parts not being ejected from the appliance		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
	they comply with the conditions specified in 19.11.1		N
	Appliances incorporating an electronic circuit that relies upon a programmable component to function correctly, subjected to the test of 19.11.4.8, unless		N
	restarting does not result in a hazard		N
	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		N
	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		N
	During and after each test the following is checked:		--
	- the temperature of the windings do not exceed the values specified in table 8		N
	- the appliance complies with the conditions specified in 19.13		N

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Clause	Requirement + Test	Result - Remark	Verdict

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Clause	Requirement Test	Result - Remark	Verdict
	- any current flowing through protective impedance not exceeding the limits specified in 8.1.4		N
	If a conductor of a printed board becomes open-circuited, the appliance is considered to have withstood the particular test, provided both of the following conditions are met:		--
	- the base material of the printed circuit board withstands the test of Annex E		N
	- any loosened conductor does not reduce clearance or creepage distances between live parts and accessible metal parts below the values specified in clause 29		N
19.11.1	Fault conditions a) to g) in 19.11.2 are not applied to circuits or parts of circuits meeting both of the following conditions:		--
	- the electronic circuit is a low-power circuit, that is, the maximum power at low-power points does not exceed 15 W according to the tests specified		N
	- 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		N
19.11.2	Fault conditions applied one at a time, the appliance operating under conditions specified in clause 11, but supplied at rated voltage, duration of the tests as specified:		--
	a) short circuit of functional insulation if clearances or creepage distances are less than the values specified in clause 29		N
	b) open circuit at the terminals of any component		N
	c) short circuit of capacitors, unless		N
	they comply with IEC 60384-14		N
	d) short circuit of any two terminals of an electronic component, other than integrated circuits		N

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Clause	Requirement + Test	Result - Remark	Verdict

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Clause	Requirement Test	Result - Remark	Verdict
	This fault condition is not applied between the two circuits of an optocoupler		N
	e) failure of triacs in the diode mode		N
	f) failure of microprocessors and integrated circuits		N
	g) failure of an electronic power switching device		N
19.11.3	If the appliance incorporates a protective electronic circuit which operates to ensure compliance with clause 19, the relevant test is repeated with a single fault simulated, as indicated in a) to g) of 19.11.2		N
19.11.4	Appliances having a device with an off position obtained by electronic disconnection, or		N
	a device that can be placed in the stand-by mode,		N
	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 stand-by mode		N
	Appliances incorporating a protective electronic 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		N
	appliances operated for 30 s or 5 min during the test of 19.7 are not subjected to the tests for electromagnetic phenomena.		N
19.11.4.1	The appliance is subjected to electrostatic discharges in accordance with IEC 61000-4-2, test level 4		N
19.11.4.2	The appliance is subjected to radiated fields in accordance with IEC 61000-4-3, test level 3		N
19.11.4.3	The appliance is subjected to fast transient bursts in accordance with IEC 61000-4-4, test level 3 or 4 as specified		N

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Clause	Requirement + Test	Result - Remark	Verdict

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Clause	Requirement Test	Result - Remark	Verdict
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		N
	Earthed heating elements in class I appliances disconnected		N
19.11.4.5	The appliance is subjected to injected currents in accordance with IEC 61000-4-6, test level 3		N
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		N
19.11.4.7	The appliance is subjected to mains signals in accordance with IEC 61000-4-13, test level class 2		N
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
	requires a manual operation to restart		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		P
	Temperature rises not exceeding the values shown in table 9 :	(see appended table)	P
	Compliance with clause 8 not impaired		P

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Clause	Requirement + Test	Result - Remark	Verdict

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Clause	Requirement Test	Result - Remark	Verdict
	If the appliance can still be operated it complies with 20.2		P
	Insulation, other than of class III appliances or class III constructions that do not contain live parts, withstands the electric strength test of 16.3, the test voltage as specified in table 4:		--
	- basic insulation (V) :	1250V	P
	- supplementary insulation (V) :	1750V	P
	- reinforced insulation (V) :	3000V	P
	After operation or interruption of a control, clearances and creepage distances across the functional insulation withstand the electric strength test of 16.3, the test voltage being twice the working voltage		P
	The appliance does not undergo a dangerous malfunction, and		P
	no failure of protective electronic circuits, if the appliance is still operable		N
	Appliances tested with an electronic switch in the off position, or in the stand-by mode:		--
	- do not become operational, or		N
	- if they become operational, do not result in a dangerous malfunction during or after the tests of 19.11.4		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		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
20	STABILITY AND MECHANICAL HAZARDS		--
20.1	Appliances having adequate stability		P
	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		P

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Clause	Requirement + Test	Result - Remark	Verdict

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Clause	Requirement Test	Result - Remark	Verdict
	Tilting test repeated on appliances with heating elements, angle of inclination increased to 15°		N
	Possible heating test in overturned position; temperature rise does not exceed values shown in table 9		N
	Appliances having adequate stability		P
20.2	Moving parts adequately arranged or enclosed as to provide protection against personal injury		N
	Protective enclosures, guards and similar parts are non-detachable, and		N
	have adequate mechanical strength		N
	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		N
	Not possible to touch dangerous moving parts with the test probe described		N
21	MECHANICAL STRENGTH		--
21.1	Appliance has adequate mechanical strength and is constructed as to withstand rough handling		P
	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)	P
	If doubt, supplementary or reinforced insulation subjected to the electric strength test of 16.3		N
	If necessary, repetition of groups of three blows on a new sample		N
21.2	Accessible parts of solid insulation having strength to prevent penetration by sharp implements		P
	Test not applicable if the thickness of supplementary insulation is at least 1 mm and reinforced insulation at least 2 mm		P

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Clause	Requirement + Test	Result - Remark	Verdict

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Clause	Requirement Test	Result - Remark	Verdict
	The insulation is tested as specified, and does withstand the electric strength test of 16.3		N
22	CONSTRUCTION		--
22.1	Appliance marked with the first numeral of the IP system, relevant requirements of IEC 60529 are fulfilled		N
22.2	Stationary appliance: means to ensure all-pole disconnection from the supply being provided:		--
	- a supply cord fitted with a plug, or		N
	- a switch complying with 24.3, or		N
	- a statement in the instruction sheet that a disconnection incorporated in the fixed wiring is to be provided, or		N
	- an appliance inlet		N
	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		N
	Applied torque not exceeding 0.25 Nm		N
	Pull force of 50N to each pin after the appliance has being placed in the heating cabinet; when cooled to room temperature the pins are not displaced by more than 1mm		N
	Each pin subjected to a torque of 0.4Nm; the pins are not rotating, unless		N
22.4	Appliance for heating liquids and appliance causing undue vibration not provided with pins for insertion into socket-outlets		N
22.5	No risk of electric shock when touching the pins of the plug, 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		N

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Clause	Requirement + Test	Result - Remark	Verdict

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Clause	Requirement Test	Result - Remark	Verdict
22.6	Electrical insulation not affected by condensing water or leaking liquid		P
	Electrical insulation of Class II appliances not affected if a hose ruptures or seal leaks		P
	Drains holes shall be at least 5 mm in diameter or 20 mm2 in area with a minimum dimension of at least 3 mm. (IEC 60335-2-98)		P
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		N
22.9	Insulation, internal wiring, windings, commutators and slip rings not exposed to oil, grease or similar substances, unless		P
	the substance has adequate insulating properties		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:		N
	- a non-self-resetting thermal cut-out is required by the standard, and		N
	- a voltage maintained non-self-resetting thermal cut-out is used to meet it		N
	Non-self-resetting thermal motor protectors have a trip-free action, unless		N
	they are voltage maintained		N
	Reset buttons of non-self-resetting controls so located or protected that accidental resetting is unlikely		N

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Clause	Requirement + Test	Result - Remark	Verdict

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Clause	Requirement Test	Result - Remark	Verdict
22.11	Reliable fixing of non-detachable parts that provide the necessary degree of protection against electric shock, moisture or contact with moving parts		P
	Obvious locked position of snap-in devices used for fixing such parts		P
	No deterioration of the fixing properties of snap-in devices used in parts that are likely to be removed during installation or servicing		P
	Tests as described	50N pull and push force on enclosure; 30N pull force and 50N push force on knob and handle.	P
22.12	Handles, knobs etc. fixed in a reliable manner		N
	Fixing in wrong position of handles, knobs etc. indicating position of switches or similar components not possible		N
	Axial force 15 N applied to parts, the shape being so that an axial pull is unlikely to be applied		N
	Axial force 30 N applied to parts, the shape being so that an axial pull is likely to be applied		N
22.13	Unlikely that handles, when gripped as in normal use, make the operator’s hand touch parts having a temperature rise exceeding the value specified for handles which are held for short periods only		N
22.14	No ragged or sharp edges creating a hazard for the user in normal use, or during user maintenance		P
	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		P
22.15	Storage hooks and the like for flexible cords smooth and well rounded		N

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Clause	Requirement + Test	Result - Remark	Verdict

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Clause	Requirement Test	Result - Remark	Verdict
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		N
	Cord reel tested with 6000 operations, as specified		N
	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		N
22.18	Current-carrying parts and other metal parts resistant to corrosion		P
22.19	Driving belts not relied upon to provide the required level of insulation, unless		N
	constructed to prevent inappropriate replacement		N
22.20	Direct contact between live parts and thermal insulation effectively prevented, unless		P
	material used is non-corrosive, non-hygroscopic and non-combustible		P
22.21	Wood, cotton, silk, ordinary paper and fibrous or hygroscopic material not used as insulation, unless	No such substances	P
	impregnated		P
	This requirement does not apply to magnesium oxide and mineral ceramic fibres used for the electrical insulation of heating elements		P
22.22	Appliances not containing asbestos		P
22.23	Oils containing polychlorinated biphenyl (PCB) not used	No oils	P
22.24	Bare heating elements, except in class III appliances or class III constructions that do not contain live parts, adequately supported		N
	In case of rupture, the heating conductor is unlikely to come in contact with accessible metal parts		N

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Clause	Requirement + Test	Result - Remark	Verdict

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Clause	Requirement Test	Result - Remark	Verdict
22.25	Sagging heating conductors, except in class III appliances or class III constructions that do not contain live parts, cannot come into contact with accessible metal parts		N
22.26	For class III constructions the insulation between parts operating at safety extra-low voltage and other live parts complies with the requirements for double or reinforced insulation		N
22.27	Parts connected by protective impedance separated by double or reinforced insulation		P
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		N
22.30	Parts serving as supplementary or reinforced insulation fixed so that they cannot be removed without being seriously damaged, or		P
	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		P
22.31	Neither clearances nor creepage distances over supplementary and reinforced insulation reduced below values specified in clause 29 as a result of wear		P
	Neither clearances nor creepage distances between live parts and accessible parts reduced below values for supplementary insulation if wires, screws etc. become loose		P

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Clause	Requirement + Test	Result - Remark	Verdict

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Clause	Requirement Test	Result - Remark	Verdict
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		P
	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		N
	Ceramic material not tightly sintered, similar materials or beads alone not used as supplementary or reinforced insulation		N
	Ceramic and similar porous material in which heating conductors are embedded is considered to be basic insulation, not reinforced insulation		N
	Oxygen bomb test at 70 °C for 96 h and 16 h at room temperature		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
	unearthed metal parts separated from live parts by basic insulation only		N
	Electrodes not used for heating liquids		N
	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
	the reinforced insulation consists of at least 3 layers		N

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Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	For class II constructions, conductive liquids which are in contact with live parts, not in direct contact with reinforced insulation, unless		N
	the reinforced insulation consists of at least 3 layers		N
	An air layer not used as basic or supplementary insulation in a double insulation system if likely to be bridged by leaking liquid		N
22.34	Shafts of operating knobs, handles, levers etc. not live, unless		P
	the shaft is not accessible when the part is removed		P
22.35	Handles, levers and knobs, held or actuated in normal use, not becoming live in the event of a failure of basic insulation		P
	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 other than those of electrical components, provided they are either reliably connected to an earthing terminal or earthing contact, or separated from live parts by earthed metal		N
22.36	Handles continuously held in the hand in normal use are so constructed that when gripped as in normal use, the operators hand is not likely to touch metal parts, unless they are separated from live parts by double or reinforced insulation		P

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Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
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		N
	the capacitors comply with 22.42		N
22.38	Capacitors not connected between the contacts of a thermal cut-out		N
22.39	Lamp holders used only for the connection of lamps		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		N
	If the appliance cannot operate continuously, automatically or remotely without giving rise to a hazard, appliances for remote operation being fitted with a switch for stopping the operation. The actuating member of the switch being easily visible and accessible		N
22.41	No components, other than lamps, containing mercury		P
22.42	Protective impedance consisting of at least two separate components		N
	Values specified in 8.1.4 not exceeded if any one of the components are short-circuited or open-circuited		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		P

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Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
22.45	When air is used as reinforced insulation, clearances not reduced below the values specified in 29.1.3 due to deformation as a result of an external force applied to the enclosure		P
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
	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
	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
	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

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Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	There is a visual indication showing that the appliance is adjusted for remote operation		N
	These requirements not necessary on appliances that can operate as follows, without giving rise to a hazard:		--
	- continuously, or		N
	- automatically, or		N
	- 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 ODMF21-012110 not accessible without the aid of a tool, unless		N
	the cover of their compartment can only be opened after at least two independent movements have been applied simultaneously		N
22.101	The vapour outlet of appliances incorporating means for heating water shall be free from obstructions which could give rise to a significant pressure within the container. (IEC 60335-2-98)		P
22.102	Appliances for wall mounting shall have reliable provision for fixing to a wall. (IEC 60335-2-98)		n
22.103	Electrode-type appliances shall be constructed so that both electrodes are disconnected when the filling aperture of the container is open. The contact separation shall be at least 3 mm in each pole. (IEC 60335-2-98)		n

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Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
22.104	Appliances intended to be connected to the water mains shall withstand the water pressure expected in normal use. (IEC 60335-2-98)		P
23	INTERNAL WIRING		--
23.1	Wireways smooth and free from sharp edges		P
	Wires protected against contact with burrs, cooling fins etc.		P
	Wire holes in metal well-rounded or provided with bushings		N
	Wiring effectively prevented from coming into contact with moving parts		N
23.2	Beads etc. on live wires cannot change their position, and are not resting on sharp edges		N
	Beads inside flexible metal conduits contained within an insulating sleeve		N
23.3	Electrical connections and internal conductors movable relatively to each other not exposed to undue stress		N
	Flexible metallic tubes not causing damage to insulation of conductors		N
	Open-coil springs not used		N
	Adequate insulating lining provided inside a coiled spring, the turns of which touch one another		N
	No damage after 10 000 flexings for conductors flexed during normal use, or		N
	100 flexings for conductors flexed during user maintenance		N
	Electric strength test of 16.3, 1000 V between live parts and accessible metal parts		N
23.4	Bare internal wiring sufficiently rigid and fixed		N
23.5	The insulation of internal wiring subjected to the supply mains voltage withstanding the electrical stress likely to occur in normal use		P
	Basic insulation electrically equivalent to the basic insulation of cords complying with IEC 60227 or IEC 60245, or		P

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Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	No breakdown when a voltage of 2000 V is applied for 15 min between the conductor and metal foil wrapped around the insulation		P
23.6	Sleeving used as supplementary insulation on internal wiring retained in position by clamping at both ends, or		N
	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		P
23.8	Aluminium wires not used for internal wiring		P
23.9	No lead-tin soldering of stranded conductors where they are subject to contact pressure, unless		P
	clamping means so constructed that there is no risk of bad contact due to cold flow of the solder		N
23.10	The insulation and sheath of internal wiring, incorporated in external hoses for the connection of an appliance to the water mains, at least equivalent to that of light polyvinyl chloride sheathed flexible cord (60227 IEC 52)		N
24	COMPONENTS		--
24.1	Components comply with safety requirements in relevant IEC standards		P
	List of components :	(see appended table)	P
	Motors not required to comply with IEC 60034-1, they are tested as part of the appliance		N
	Relays tested as part of the appliance, or		N
	If components have not been tested and found to comply with relevant IEC standard for the number of cycles specified, they are tested in accordance with 24.1.1 to 24.1.9		N

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Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	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		N
	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		P
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		N
	If the capacitors have to be tested, they are tested according to Annex F		N
24.1.2	Transformers in associated switch mode power supplies comply with Annex BB of IEC 61558-2-16		N
	Safety isolating transformers comply with IEC 61558-2-6		N
	If they have to be tested, they are tested according to Annex G		N
24.1.3	Switches comply with IEC 61058-1, the number of cycles of operation being at least 10 000		N
	If they have to be tested, they are tested according to Annex H		N
	If the switch operates a relay or contactor, the complete switching system is subjected to the test		N
	If the switch only operates a motor staring relay complying with IEC 60730-2-10 with the number of cycles of a least 10 000 as specified, the complete switching system need not be tested		N
24.1.4	Automatic controls comply with IEC 60730-1 with the relevant part 2. The number of cycles of operation being at least:		--

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Clause	Requirement + Test	Result - Remark	Verdict

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Clause	Requirement Test	Result - Remark	Verdict
	- thermostats: 10000		N
	- temperature limiters: 1000		N
	- self-resetting thermal cut-outs: 300		N
	- voltage maintained non-self-resetting thermal cut-outs: 1000		N
	- other non-self-resetting thermal cut-outs: 30		N
	- timers: 3000		N
	- energy regulators: 10000		N
	Thermal motor protectors are tested in combination with their motor under the conditions specified in Annex D		N
	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
24.1.5	Appliance couplers comply with IEC 60320-1		N
	However, for class II appliances classified higher than IPX0, the appliance couplers comply with IEC 60320-2-3		N
	Interconnection couplers comply with IEC 60320-2-2		N
24.1.6	Small lamp holders similar to E10 lampholders comply with IEC 60238, the requirements for E10 lampholders being applicable		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		N

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Clause	Requirement + Test	Result - Remark	Verdict

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Clause	Requirement Test	Result - Remark	Verdict
24.1.8	The relevant standard for thermal links is IEC 60691		P
	Thermal links not complying with IEC 60691 are considered to be an intentionally weak part for the purposes of Clause 19		P
24.1.9	Contactors and relays, other than motor starting relays, tested as part of the appliance		N
	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 :		N
24.2	Appliances not fitted with:		--
	- switches or automatic controls in flexible cords		P
	- devices causing the protective device in the fixed wiring to operate in the event of a fault in the appliance		P
	- thermal cut-outs that can be reset by soldering, unless		P
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		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		N

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Clause	Requirement + Test	Result - Remark	Verdict

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Clause	Requirement Test	Result - Remark	Verdict
	Voltage across capacitors in series with a motor winding does not exceed 1,1 times rated voltage, when the appliance is supplied at 1,1 times rated voltage under minimum load		N
24.6	Working voltage of motors connected to the supply mains and having basic insulation that is inadequate for the rated voltage of the appliance, not exceeding 42 V		N
	In addition, the motors comply with the requirements of Annex I		N
24.7	Detachable hose-sets for connection of appliances to the water mains comply with IEC 61770		N
	They are supplied with the appliance		N
	Appliances intended to be permanently connected to the water mains not connected by a detachable hose-set		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		N
	One or more of the following conditions are to be met:		N
	- the capacitors are of class P2 according to IEC 60252-1		N
	- the capacitors are housed within a metallic or ceramic enclosure		N
	- the distance of separation of the outer surface to adjacent non-metallic parts exceeds 50 mm		N
	- adjacent non-metallic parts within 50 mm withstand the needle-flame test of Annex E		N
	- adjacent non-metallic parts within 50 mm classified as at least V-1 according to IEC 60695-11-10		N

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Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
24.101	Thermal cut-outs which are necessary for compliance which clause 19 shall be non-self resetting. (IEC 60335-2-98)		P
25	SUPPLY CONNECTION AND EXTERNAL FLEXIBLE CORDS		--
25.1	Appliance not intended for permanent connection to fixed wiring, means for connection to the supply:		--
	- 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		N
	- pins for insertion into socket-outlets		N
25.2	Appliance not provided with more than one means of connection to the supply mains		N
	Stationary appliance for multiple supply may be provided with more than one means of connection, provided electric strength test of 1250 V for 1 min between each means of connection causes no breakdown		N
25.3	Appliance intended to be permanently connected to fixed wiring provided with one of the following means for connection to the supply mains:		--
	- a set of terminals allowing the connection of a flexible cord		N
	- a fitted supply cord		N
	- a set of supply leads accommodated in a suitable compartment		N
	- 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		N

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Clause	Requirement + Test	Result - Remark	Verdict

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Clause	Requirement Test	Result - Remark	Verdict
	- 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
	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) :		N
	Introduction of conduit or cable does not reduce clearances or creepage distances below values specified in clause 29		N
25.5	Method for assembling the supply cord to the appliance:		--
	- type X attachment		N
	- type Y attachment		N
	- type Z attachment, if allowed in relevant part 2		N
	Type X attachment, other than those with a specially prepared cord, not used for flat twin tinsel cords		N
	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		N
25.6	Plugs fitted with only one flexible cord		N
25.7	Supply cords, other than for class III appliances, being one of the following types:		--
	- rubber sheathed (at least 60245 IEC 53)		N
	- polychloroprene sheathed (at least 60245 IEC 57)		N

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Clause	Requirement + Test	Result - Remark	Verdict

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Clause	Requirement Test	Result - Remark	Verdict
	- polyvinyl chloride sheathed. Not used if they are likely to touch metal parts having a temperature rise exceeding 75 K during the test of clause 11		--
	light polyvinyl chloride sheathed cord (60227 IEC 52), for appliances not exceeding 3 kg		N
	ordinary polyvinyl chloride sheathed cord (60227 IEC 53), for other appliances		N
	- heat resistant polyvinyl chloride sheathed. Not used for type X attachment other than specially prepared cords		--
	heat-resistant light polyvinyl chloride sheathed cord (60227 IEC 56), for appliances not exceeding 3 kg		N
	heat-resistant polyvinyl chloride sheathed cord (60227 IEC 57), for other appliances		N
	Supply cords for class III appliances adequately insulated		N
	Test with 500 V for 2 min for supply cords of class III appliances that contain live parts		N
25.8	Nominal cross-sectional area of supply cords not less than table 11; rated current (A); cross-sectional area (mm^2) :		N
25.9	Supply cords not in contact with sharp points or edges		N
25.10	Supply cord of class I appliances have a green/yellow core for earthing		N
25.11	Conductors of supply cords not consolidated by soldering where they are subject to contact pressure, unless		N
	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		N
25.13	Inlet openings so constructed as to prevent damage to the supply cord		N

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Clause	Requirement + Test	Result - Remark	Verdict

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Clause	Requirement Test	Result - Remark	Verdict
	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		N
	If unsheathed supply cord, a similar additional bushing or lining is required, unless the appliance is		N
	class 0, or		N
25.14	Supply cords moved while in operation adequately protected against excessive flexing		N
	Flexing test, as described:		N
	- applied force (N) :		N
	- number of flexings :		N
	The test does not result in:		--
	- short-circuit between the conductors, such that the current exceeds a value of twice the rated current		N
	- breakage of more than 10% of the strands of any conductor		N
	- separation of the conductor from its terminal		N
	- loosening of any cord guard		N
	- damage to the cord or the cord guard		N
	- broken strands piercing the insulation and becoming accessible		N
25.15	For appliances with supply cord and appliances to be permanently connected to fixed wiring by a flexible cord, conductors of the supply cord relieved from strain, twisting and abrasion by use of cord anchorage		N
	The cord cannot be pushed into the appliance to such an extent that the cord or internal parts of the appliance can be damaged		N
	Pull and torque test of supply cord:		--
	- fixed appliances: pull 100 N; torque (not on automatic cord reel) (Nm) :		N

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Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	Pull and torque test of supply cord, values shown in table 12: mass (kg); pull (N); torque (not on automatic cord reel) (Nm) :		N
	Cord not damaged and max. 2 mm displacement of the cord		N
25.16	Cord anchorages for type X attachments constructed and located so that:		--
	- replacement of the cord is easily possible		N
	- it is clear how the relief from strain and the prevention of twisting are obtained		N
	- they are suitable for different types of supply cord		N
	- cord cannot touch the clamping screws of cord anchorage if these screws are accessible, unless		N
	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
	- at least one part of the cord anchorage securely fixed to the appliance, unless		N
	- screws which have to be operated when replacing the cord do not fix any other component, unless		N
	the appliance becomes inoperative or incomplete or the parts cannot be removed without a tool		N
	- if labyrinths can be bypassed the test of 25.15 is nevertheless withstood		N
	- for class 0, 0I and I appliances they are of insulating material or are provided with an insulating lining, unless		N
	- for class II appliances they are of insulating material, or		N
25.17	Adequate cord anchorages for type Y and Z attachment, test with the cord supplied with the appliance		N

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Clause	Requirement + Test	Result - Remark	Verdict

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Clause	Requirement Test	Result - Remark	Verdict
25.18	Cord anchorages only accessible with the aid of a tool, or		N
	Constructed so that the cord can only be fitted with the aid of a tool		N
25.19	Type X attachment, glands not used as cord anchorage in portable appliances		N
	Tying the cord into a knot or tying the cord with string not used		N
25.20	The conductors of the supply cord for type Y and Z attachment insulated from accessible metal parts		N
25.21	Space for supply cord for type X attachment or for connection of fixed wiring constructed:		--
	- to permit checking of conductors with respect to correct positioning and connection before fitting any cover		N
	- so there is no risk of damage to the conductors or their insulation when fitting the cover		N
	- 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		N
25.22	Appliance inlets:		--
	- live parts not accessible during insertion or removal		N
	Requirement not applicable to appliance inlets complying with IEC 60320-1		N
	- connector can be inserted without difficulty		N
	- the appliance is not supported by the connector		N
	- not for cold conditions if temp. rise of external metal parts exceeds 75 K during clause 11, unless		N
	the supply cord is unlikely to touch such metal parts		N

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Clause	Requirement + Test	Result - Remark	Verdict

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Clause	Requirement Test	Result - Remark	Verdict
25.23	Interconnection cords comply with the requirements for the supply cord, except that:		N
	If necessary, electric strength test of 16.3		N
25.24	Interconnection cords not detachable without the aid of a tool if compliance with this standard is impaired when they are disconnected		N
25.25	Dimensions of pins that are inserted into socket-outlets compatible with the dimensions of the relevant socket-outlet.		N
	Dimensions of pins and engagement face in accordance with the dimensions of the relevant plug in IEC/TR 60083		N
26	TERMINALS FOR EXTERNAL CONDUCTORS		--
26.1	Appliances provided with terminals or equally effective devices for connection of external conductors		N
	Terminals only accessible after removal of a non-detachable cover, except		N
	Earthing terminals may be accessible if a tool is required to make the connections and means are provided to clamp the wire independently from its connection		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		N
	the connections are soldered		N
	Screws and nuts not used to fix any other component, except		N
	internal conductors, if so arranged that they are unlikely to be displaced when fitting the supply conductors		N
	If soldered connections used, the conductor so positioned or fixed that reliance is not placed on soldering alone, unless		N

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Clause	Requirement + Test	Result - Remark	Verdict

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Clause	Requirement Test	Result - Remark	Verdict
	barriers provided so that neither clearances nor creepage distances between live parts and other metal parts reduced below the values for supplementary insulation if the conductor becomes free at the soldered joint		N
26.3	Terminals for type X attachment and for connection of cables of fixed wiring so constructed that the conductor is clamped between metal surfaces with sufficient contact pressure but without damaging the conductor		N
	Terminals fixed so that when the clamping means is tightened or loosened:		--
	- the terminal does not become loose		N
	- internal wiring is not subjected to stress		N
	- neither clearances nor creepage distances are reduced below the values in clause 29		N
	Compliance checked by inspection and by the test of subclause 9.6 of IEC 60999-1, the torque applied being equal to two-thirds of the torque specified (Nm) :		N
26.4	Terminals for type X attachment, except those with a specially prepared cord, and those for connection to fixed wiring, no special preparation of conductors required, and so constructed or placed that conductors prevented from slipping out		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
	Stranded conductor test, 8 mm insulation removed		N
	No contact between live parts and accessible metal parts and, for class II constructions, between live parts and metal parts separated from accessible metal parts by supplementary insulation only		N

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Clause	Requirement + Test	Result - Remark	Verdict

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Clause	Requirement Test	Result - Remark	Verdict
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
	If a specially prepared cord is used, terminals need only be suitable for that cord		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		N
26.8	Terminals for the connection of fixed wiring, including the earthing terminal, located close to each other		N
26.9	Terminals of the pillar type constructed and located as specified		N
26.10	Terminals with screw clamping and screwless terminals not used for flat twin tinsel cords, unless conductors ends fitted with a device suitable for screw terminals		N
	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		N
	For Class II appliances, the conductor so positioned or fixed that reliance is not placed on soldering, welding or crimping alone		N
	If soldering, welding or crimping alone used, 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		N
27	PROVISION FOR EARTHING		--

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Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
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		N
	Earthing terminals and earthing contacts not connected to the neutral terminal		N
	Class 0, II and III appliance have no provision for earthing		N
	Safety extra-low voltage circuits not earthed, unless protective extra-low voltage circuits		N
27.2	Clamping means of earthing terminals adequately secured against accidental loosening		N
	Terminals for the connection of external equipotential bonding conductors allow connection of conductors of 2.5 to 6 mm², and		N
	- do not provide earthing continuity between different parts of the appliance, and		N
	- Conductors cannot be loosened without the aid of a tool		N
27.3	For a detachable part having an earth connection and being plugged into another part of the appliance, the earth connection is made before and separated after current-carrying connections when removing the part		N
	For appliances with supply cords, current-carrying conductors become taut before earthing conductor, if the cord slips out of the cord anchorage		N
27.4	No risk of corrosion resulting from contact between parts of the earthing terminal and the copper of the earthing conductor or other metal		N
	Parts of steel providing earthing continuity provided at the essential areas with an electroplated coating, thickness at least 5 µm		N

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Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	Adequate protection against rusting of parts of coated or uncoated steel, only intended to provide or transmit contact pressure		N
	In case of aluminium alloys precautions taken to avoid risk of corrosion		N
27.5	Low resistance of connection between earthing terminal and earthed metal parts		N
	This requirement does not apply to connections providing earthing continuity in the protective extra-low voltage circuit, provided the clearances of basic insulation are based on the rated voltage of the appliance		N
	Resistance not exceeding 0,1 Ω at the specified low-resistance test (Ω) :		N
27.6	The printed conductors of printed circuit boards not used to provide earthing continuity in hand-held appliances.		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		N
28	SCREWS AND CONNECTIONS		--
28.1	Fixings, electrical connections and connections providing earthing continuity withstand mechanical stresses		P
	Screws not of soft metal liable to creep, such as zinc or aluminium		P
	Diameter of screws of insulating material min. 3 mm	No insulated material screw	N
	Screws of insulating material not used for any electrical connections or connections providing earthing continuity		N
	Screws used for electrical connections or connections providing earthing continuity screwed into metal		P

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Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	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		N
	For screws and nuts; torque-test as specified in table 14 :		P
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		P
	there is resiliency in the metallic parts to compensate for shrinkage or distortion of the insulating material		P
	This requirement does not apply to electrical connections in circuits of appliances for which:		--
	30.2.2 is applicable and that carry a current not exceeding 0,5 A		N
	30.2.3 is applicable and that carry a current not exceeding 0,2 A		N
28.3	Space-threaded (sheet metal) screws only used for electrical connections if they clamp the parts together		N
	Thread-cutting (self-tapping) screws and thread rolling screws only used for electrical connections if they generate a full form standard machine screw thread		N
	Thread-cutting (self-tapping) screws not used if they are likely to be operated by the user or installer		N
	Thread-cutting, thread rolling and space threaded screws may be used in connections providing earthing continuity provided it is not necessary to disturb the connection:		--
	- in normal use,		N
	- during user maintenance,		N

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Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	- when replacing a supply cord having a type X attachment, or		N
	- during installation		N
	At least two screws being used for each connection providing earthing continuity, unless		N
	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		P
	Rivets for electrical connections or connections providing earthing continuity secured against loosening if the connections are subjected to torsion		N
29	CLEARANCES, CREEPAGE DISTANCES AND SOLID INSULATION		--
	Clearances, creepage distances and solid insulation withstand electrical stress		N
	For coatings used on printed circuits boards to protect the microenvironment (Type 1) or to provide basic insulation (Type 2), Annex J applies:		N
	The microenvironment is pollution degree 1 under type 1 protection		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
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 :		N
	for basic insulation and functional insulation they comply with the impulse voltage test of clause 14		N

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Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	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		N
	Impulse voltage test is not applicable:		--
	- when the microenvironment is pollution degree 3, or		N
	- for basic insulation of class 0 and class 01 appliances, or		N
	Appliances are in overvoltage category II		N
	Clearances less than specified in table 16 not allowed for basic insulation of class 0 and class 0I appliances,		N
	or if pollution degree 3 is applicable		N
	Compliance is checked by inspection and measurements as specified		N
29.1.1	Clearances of basic insulation withstand the overvoltages, taking into account the rated impulse voltage		N
	Clearance at the terminals of tubular sheathed heating elements may be reduced to 1,0 mm if the microenvironment is pollution degree 1		N
	Lacquered conductors of windings considered to be bare conductors		N
29.1.2	Clearances of supplementary insulation not less than those specified for basic insulation in table 16 :		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 :		N
29.1.4	Clearances for functional insulation are the largest values determined from:		--
	For functional insulation, the values of table 16 are applicable, unless		N

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Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	the appliance complies with clause 19 with the functional insulation short-circuited		N
	Lacquered conductors of windings considered to be bare conductors		N
	However, clearances at crossover points are not measured		N
	Clearance between surfaces of PTC heating elements may be reduced to 1mm		N
29.1.5	Appliances having higher working voltages than rated voltage, clearances for basic insulation are the largest values determined from:		--
	Appliances having higher working voltage than rated voltage, the voltage used for determining clearances from table 16 is the sum of the rated impulse voltage and the difference between the peak value of the working voltage and the peak value of the rated voltage		N
	If the secondary winding of a step-down transformer is earthed, or if there is an earthed screen between the primary and secondary windings, clearances of basic insulation on the secondary side not less than those specified in table 16, but using the next lower step for rated impulse voltage		N
	Circuits supplied with a voltage lower than rated voltage, clearances of functional insulation based on the working voltage used as the rated voltage in table 15		N
29.2	Creepage distances not less than those appropriate for the working voltage, taking into account the material group and the pollution degree :		N
	Pollution degree 2 applies, unless		N
	- precautions taken to protect the insulation; pollution degree 1		N
	- insulation subjected to conductive pollution; pollution degree 3		N

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Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	Compliance is checked by inspection and measurements as specified		N
	Creepage distances of basic insulation not less than specified in table 17		N
29.2.1	Creepage distances of basic insulation not less than specified in table 17 :		N
	Except for pollution degree 1, corresponding creepage distance not less than the minimum specified for the clearance in table 16, if the clearance has been checked according to the test of clause 14 :		N
29.2.2	Creepage distances of supplementary insulation at least those specified for basic insulation in table 17, or :		N
29.2.3	Creepage distances of reinforced insulation at least double those specified for basic insulation in table 17, or :		N
29.2.4	Creepage distances of functional insulation not less than specified in table 18 :		N
	Creepage distances may be reduced if the appliance complies with clause 19 with the functional insulation short-circuited		N
29.3	Supplementary and reinforced insulation have adequate thickness, or a sufficient number of layers, to withstand the electrical stresses		N
	Compliance checked:		--
	- by measurement, in accordance with 29.3.1, or		N
	- by an electric strength test in accordance with 29.3.2, or		N
	- for insulation, other than single layer internal wiring insulation, by an assessment of the thermal quality of the material combined with an electric strength test, in accordance with 29.3.3, and		N

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Clause	Requirement + Test	Result - Remark	Verdict

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Clause	Requirement Test	Result - Remark	Verdict
	for accessible parts of reinforced insulation consisting of a single layer, by measurement in accordance with 29.3.4, or		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
29.3.1	Supplementary insulation have a thickness of at least 1 mm		N
	Reinforced insulation have a thickness of at least 2 mm		N
29.3.2	Each layer of material withstand the electric strength test of 16.3 for supplementary insulation		N
	Supplementary insulation consist of at least 2 layers		N
	Reinforced insulation consist of at least 3 layers		N
29.3.3	The insulation is subjected to the dry heat test Bb of IEC 60068-2-2, followed by		N
	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		N
30	RESISTANCE TO HEAT AND FIRE		--
30.1	External parts of non-metallic material,		P
	parts supporting live parts, and		P
	parts of thermoplastic material providing supplementary or reinforced insulation		P
	sufficiently resistant to heat		P
	Ball-pressure test according to IEC 60695-10-2		P
	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) :	Enclosure	P

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Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	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) :		N
	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		P
	This requirement does not apply to:		--
	This requirement does not apply to decorative trims, knobs and other parts unlikely to be ignited or to propagate flames that originate inside the appliance		P
	Compliance checked by the test of 30.2.1, and in addition:		P
	- for attended appliances, 30.2.2 applies		P
	- for unattended appliances, 30.2.3 applies		N
	For appliances for remote operation, 30.2.3 applies		N
	For base material of printed circuit boards, 30.2.4 applies		N
30.2.1	Parts of non-metallic material subjected to the glow-wire test of IEC 60695-2-11 at 550°C		P
	the material is classified at least HB40 according to IEC 60695-11-10		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	Appliances operated while attended, parts of non-metallic material supporting current-carrying connections, and		N
	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:		--

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	- 750 °C, for connections carrying a current exceeding 0,5 A during normal operation		N
	- 650 °C, for other connections		N
	Test as specified for an interposed shielding material		N
	When the glow-wire test of IEC 60695-2-11 is carried out, the temperatures are:		--
	-750 C, for connections carrying a current exceeding 0,5A during normal operation		N
	-650 C, for other connections		N
	Test not applicable to conditions as specified		P
	No applicable (IEC 60335-2-98)		--
30.2.3	Not applicable (IEC 60335-2-3)		N
30.2.3	Appliances operated while unattended, tested as specified in 30.2.3.1 and 30.2.3.2		N
	The tests are not applicable to conditions as specified :		N
30.2.3.1	Parts of non-metallic material supporting connections carrying a current exceeding 0,2 A during normal operation, and		N
	parts of non-metallic material, other than small parts, within a distance of 3 mm,		N
	subjected to the glow-wire test of IEC 60695-2-11 with a test severity of 850°C		N
	Glow-wire applied to an interposed shielding material, if relevant		N
	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		N
30.2.3.2	Parts of non-metallic material supporting connections, and		N
	parts of non-metallic material within a distance of 3mm,		N
	subjected to the glow-wire test of IEC 60695-2-11 with appropriate severity level:		N

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	- 750°C, for connections carrying a current exceeding 0,2 A during normal operation		N
	- 650°C, for other connections		N
	Glow-wire applied to an interposed shielding material, if relevant		N
	However, the glow-wire test of 750°C or 650°C as appropriate, is not carried out on parts of material fulfilling both or either of the following classifications:		N
	- a glow-wire ignition temperature according to IEC 60695-2-13 of at least:		N
	775°C, for connections carrying a current exceeding 0,2 A during normal operation		N
	675°C, for other connections		N
	- a glow-wire flammability index according to IEC 60695-2-12 of at least:		N
	- 750°C, for connections carrying a current exceeding 0,2 A during normal operation		N
	- 650 °C, for other connections		N
	The glow-wire test is also not carried out on small parts. These parts are to:		N
	- comprise material having a glow-wire ignition temperature of at least 775 °C or 675 °C as appropriate, or		
	- comprise material having a glow-wire flammability index of at least 750 °C or 650 °C as appropriate, or		N
	- comply with the needle-flame test of Annex E, or		N
	- comprise material classified as V-0 or V-1 according to IEC 60695-11-10		N
	The consequential needle-flame test of Annex E applied to non-metallic parts that encroach within the vertical cylinder placed above the centre of the connection zone and on top of the non-metallic parts supporting current-carrying connections, and parts of non-metallic material within a distance of 3 mm of such connections if these parts are those:		N

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	- 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		N
	- parts that comprised material having a glow-wire flammability index of at least 750 °C or 650 °C as appropriate, or		N
	- small parts, that comprised material having a glow-wire flammability index of at least 750 °C or 650 °C as appropriate, or		N
	- small parts for which the needle-flame test of Annex E was applied, or		N
	- small parts for which a material classification of V-0 or V-1 was applied		N
	However, the consequential needle-flame test is not carried out on non-metallic parts, including small parts, within the cylinder that are:		N
	- parts having a glow-wire ignition temperature of at least 775 °C or 675 °C as appropriate, or		N
	- parts comprising material classified as V-0 or V-1 according to IEC 60695-11-10, or		N
	- parts shielded by a flame barrier that meets the needle-flame test of Annex E or that comprises material classified as V-0 or V-1 according to IEC 60695-11-10		N
30.2.4	Base material of printed circuit boards subjected to the needle-flame test of Annex E		N
	Test not applicable to conditions as specified :		N
31	RESISTANCE TO RUSTING		--
	Relevant ferrous parts adequately protected against rusting		P
32	RADIATION, TOXICITY AND SIMILAR HAZARDS		--
	Appliance does not emit harmful radiation or present a toxic or similar hazard due to their operation in normal use		P

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	Compliance is checked by the limits or tests specified in part 2, if relevant		P
A	ANNEX A (INFORMATIVE) ROUTINE TESTS		--
	Description of routine tests to be carried out by the manufacturer		P
B	ANNEX B (NORMATIVE) APPLIANCES POWERED BY RECHARGEABLE BATTERIES THAT ARE RECHARGED IN THE APPLIANCE		--
	The following modifications to this standard are applicable for appliances powered by batteries that are recharged in the appliance		N
	This annex does not apply to battery chargers		N
3.1.9	Appliance operated under the following conditions:		--
	- the appliance, supplied by its fully charged battery, operated as specified in relevant part 2		N
	- the battery is charged, the battery being initially discharged to such an extent that the appliance cannot operate		N
	-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		N
	- 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		N
5.B.101	Appliances supplied from the supply mains tested as specified for motor-operated appliances		N

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
7.1	Battery compartment for batteries intended to be replaced by the user, marked with battery voltage (V) and polarity of the terminals :		N
7.12	The instructions give information regarding charging		N
	The instructions for appliances incorporating batteries intended to be replaced by the user includes required information		N
	Details about how to remove batteries containing materials hazardous to the environment given		N
7.15	Markings placed on the part of the appliance connected to the supply mains		N
	The type reference of the detachable supply unit is placed in close proximity to the symbol		N
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		N
	If the appliance can be operated without batteries, double or reinforced insulation required		N
11.7	The battery is charged for the period stated in the instructions or 24 h :		N
19.1	Appliances subjected to tests of 19.B.101, 19.B.102 and 19.B.103		N
19.10	Not applicable		N
19.B.101	Appliances supplied at rated voltage for 168 h, the battery being continually charged		N
19.B.102	Short-circuiting of the terminals of the battery, being fully charged, for appliances having batteries that can be removed without the aid of a tool		N

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
19.B.103	Appliances having batteries replaceable by the user supplied at rated voltage under normal operation with the battery removed or in any position allowed by the construction		N
21.B.101	Appliances having pins for insertion into socket-outlets have adequate mechanical strength		N
	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:		--
	- 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
	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		N
	For other parts, 30.2.2 applies		N
C	ANNEX C (NORMATIVE) AGEING TEST ON MOTORS		--
	Tests, as described, carried out when doubt with regard to the temperature classification of the insulation of a motor winding		N
D	ANNEX D (NORMATIVE) THERMAL MOTOR PROTECTORS		--
	Applicable to appliances having motors that incorporate thermal motor protectors necessary for compliance with the standard		N
E	ANNEX E (NORMATIVE) NEEDLE-FLAME TEST		--

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	Needle-flame test carried out in accordance with IEC 60695- 11-5, with the following modifications:		N
7	Severities		--
	The duration of application of the test flame is 30 s ± 1 s		N
9	Test procedure		--
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
	If possible, the flame is applied at least 10 mm from a corner		N
9.3	The test is carried out on one specimen		N
	If the specimen does not withstand the test, the test may be repeated on two additional specimens, both withstanding the test		N
11	Evaluation of test results		--
	The duration of burning not exceeding 30 s		N
	However, for printed circuit boards, the duration of burning not exceeding 15 s		N
F	ANNEX F (NORMATIVE) CAPACITORS		--
	Capacitors likely to be permanently subjected to the supply voltage, and used for radio interference suppression or voltage dividing, comply with the following clauses of IEC 60384-14, with the following modifications:		N
1.5	Terms and definitions		--
1.5.3	Class X capacitors tested according to subclass X2		N
1.5.4	This subclause is applicable		N
1.6	Marking		--
	Items a) and b) are applicable		N
3.4	Approval testing		--
3.4.3.2	Table 3 is applicable as described		N
4.1	Visual examination and check of dimensions		--
	This subclause is applicable		N
4.2	Electrical tests		--
4.2.1	This subclause is applicable		N

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
4.2.5	This subclause is applicable		N
4.2.5.2	Only table 11 is applicable		N
	Values for test A apply		N
	However, for capacitors in heating appliances the values for test B or C apply		N
4.12	Damp heat, steady state		--
	This subclause is applicable		N
	Only insulation resistance and voltage proof are checked		N
4.13	Impulse voltage		--
	This subclause is applicable		N
4.14	Endurance		--
	Subclauses 4.14.1, 4.14.3, 4.14.4 and 4.14.7 are applicable		N
4.14.7	Only insulation resistance and voltage proof are checked		N
	No visible damage		N
4.17	Passive flammability test		--
	This subclause is applicable		N
4.18	Active flammability test		--
	This subclause is applicable		N
G	ANNEX G (NORMATIVE) SAFETY ISOLATING TRANSFORMERS		--
	The following modifications to this standard are applicable for safety isolating transformers:		N
7	Marking and instructions		--
7.1	Transformers for specific use marked with:		--
	-name, trademark or identification mark of the manufacturer or responsible vendor :		N
	-model or type reference :		N
17	Overload protection of transformers and associated circuits		--
	Fail-safe transformers comply with subclause 15.5 of IEC 61558-1		N
22	Construction		--
	Subclauses 19.1 and 19.1.2 of IEC 61558-2-6 are applicable		N
29	Clearances, creepage distances and solid insulation		--

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
29.1, 29.2, 29.3	The distances specified in items 2a, 2c and 3 in table 13 of IEC 61558-1 apply		N
H	ANNEX H (NORMATIVE) SWITCHES		--
	Switches comply with the following clauses of IEC 61058-1, as modified below:		--
	The tests of IEC 61058-1 carried out under the conditions occurring in the appliance		N
	Before being tested, switches are operated 20 times without load		N
8	Marking and documentation		--
	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		N
13	Mechanism		--
	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		--
	Compliance is checked on three separate appliances or switches		N
	For 17.2.4.4, the number of cycles is 10 000, unless otherwise specified in 24.1.3 of the relevant part 2 of IEC 60335		N
	Switches for operation under no load and which can be operated only by a tool and switches operated by hand that are interlocked so that they cannot be operated under load, are not subjected to the tests		N
	Subclauses 17.2.2 and 17.2.5.2 not applicable		N

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	The ambient temperature during the test is that occurring in the appliance during the test of Clause 11 in IEC 60335-1		N
	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		--
	This clause is applicable to clearances and creepage distances for functional insulation, across full disconnection and micro-disconnection, as stated in table 24		N
I	ANNEX I (NORMATIVE) MOTORS HAVING BASIC INSULATION THAT IS INADEQUATE FOR THE RATED VOLTAGE OF THE APPLIANCE		--
	The following modifications to this standard are applicable for motors having basic insulation that is inadequate for the rated voltage of the appliance:		N
8	Protection against access to live parts		--
8.1	Metal parts of the motor are considered to be bare live parts		N
11	Heating		--
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		--
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:		--

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	- 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
	- open circuit of the supply to the motor		N
	- open circuit of any parallel resistor, the motor being in operation		N
	Only one fault simulated at a time, the tests carried out consecutively		N
22	Construction		--
22.I.101	For class I appliances incorporating a motor supplied by a rectifier circuit, the d.c. circuit being insulated from accessible parts of the appliance by double or reinforced insulation		N
	Compliance checked by the tests specified for double and reinforced insulation		N
J	ANNEX J (NORMATIVE) COATED PRINTED CIRCUIT BOARDS		--
	Testing of protective coatings of printed circuit boards carried out in accordance with IEC 60664-3 with the following modifications:		--
5.7	Conditioning of the test specimens		--
	When production samples are used, three samples of the printed circuit board are tested		N
5.7.1	Cold		--
	The test is carried out at -25 °C		N
5.7.3	Rapid change of temperature		--
	Severity 1 is specified		N
5.9	Additional tests		--
	This subclause is not applicable		N
K	ANNEX K (NORMATIVE) OVERVOLTAGE CATEGORIES		--
	The information on overvoltage categories is extracted from IEC 60664-1		P
	Overvoltage category is a numeral defining a transient overvoltage condition		P
	Equipment of overvoltage category IV is for use at the origin of the installation		N

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	Equipment of overvoltage category III is equipment in fixed installations and for cases where the reliability and the availability of the equipment is subject to special requirements		N
	Equipment of overvoltage category II is energy consuming equipment to be supplied from the fixed installation		P
	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		N
L	ANNEX L (INFORMATIVE) GUIDANCE FOR THE MEASUREMENT OF CLEARANCES AND CREEPAGE DISTANCES		--
	Information for the determination of clearances and creepage distances		P
M	ANNEX M (NORMATIVE) POLLUTION DEGREE		--
	The information on pollution degrees is extracted from IEC 60664-1		P
	Pollution		--
	The microenvironment determines the effect of pollution on the insulation, taking into account the macroenvironment		P
	Means may be provided to reduce pollution at the insulation by effective enclosures or similar		P
	Minimum clearances specified where pollution may be present in the microenvironment		P
	Degrees of pollution in the microenvironment		--
	For evaluating creepage distances, the following degrees of pollution in the microenvironment are established:		--
	- pollution degree 1: no pollution or only dry, non-conductive pollution occurs. The pollution has no influence	End of heating element	P

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	- pollution degree 2: only non-conductive pollution occurs, except that occasionally a temporary conductivity caused by condensation is to be expected		P
	- pollution degree 3: conductive pollution occurs or dry non-conductive pollution occurs that becomes conductive due to condensation that is to be expected		N
	- pollution degree 4: the pollution generates persistent conductivity caused by conductive dust or by rain or snow		N
N	ANNEX N (NORMATIVE) PROOF TRACKING TEST		--
	The proof tracking test is carried out in accordance with IEC 60112 with the following modifications:		P
7	Test apparatus		--
7.3	Test solutions		--
	Test solution A is used		P
10	Determination of proof tracking index (PTI)		--
10.1	Procedure		--
	The proof voltage is 100V, 175V, 400V or 600V :	100V	P
	The test is carried out on five specimens		P
	The last paragraph of Clause 3 applies		P
	In case of doubt, additional test with proof voltage reduced by 25V, the number of drops increased to 100		N
10.2	Report		--
	The report states if the PTI value was based on a test using 100 drops with a test voltage of (PTI-25) V		N
O	ANNEX O (INFORMATIVE) SELECTION AND SEQUENCE OF THE TESTS OF CLAUSE 30		--
	Description of tests for determination of resistance to heat and fire		P

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
P	ANNEX P (INFORMATIVE) GUIDANCE FOR THE APPLICATION OF THIS STANDARD TO APPLIANCES USED IN WARM DAMP EQUABLE CLIMATES		--
	Modifications applicable for class 0 and 01 appliances having a rated voltage exceeding 150V, intended to be used in countries having a warm damp equable climate and that are marked WDaE		--
	Modifications may also be applied to class 1 appliances having a rated voltage exceeding 150V, intended to be used in countries having a warm damp equable climate and that are marked WdaE, if liable to be connected to a supply mains that excludes the protective earthing conductor		--
5.7	The ambient temperature for the tests of clauses 11 and 13 is 40 +3/0 °C		N
7.1	The appliance marked with the letters WDaE		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
	The instructions state that the appliance is considered to be suitable for use in countries having a warm damp equable climate, but may also be used in other countries		N
11.8	The values of Table 3 are reduced by 15 K		N
13.2	The leakage current for class I appliances not exceeding 0,5 mA		N
15.3	The value of t is 37 °C		N
16.2	The leakage current for class I appliances not exceeding 0,5 mA (mA):		N
19.13	The leakage current test of 16.2 is applied in addition to the electric strength test of 16.3		N
Q	ANNEX Q (INFORMATIVE) SEQUENCE OF TESTS FOR THE EVALUATION OF ELECTRONIC CIRCUITS		--
	Description of tests for appliances incorporating electronic circuits		N
R	ANNEX R (NORMATIVE) SOFTWARE EVALUATION		--

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict
	Software evaluated in accordance with the following clauses of Annex H of IEC 60730-1, as modified		N
H.2	Definitions		--
	Only definitions H.2.16 to H.2.20 applicable		N
H.7	Information		--
	Only footnotes 12) to 18) of Table 7.2, as modified, applicable		N
H.11.12	Controls using software		--
	All the subclauses of H.11.12, as modified, except H.11.12.6 and H.11.12.6.1, applicable		N
H.11.12.7	Delete text		N
H.11.12.7.1	For appliances using software class C having a single channel with self-test and monitoring structure, the manufacturer provides the measures necessary to address the fault/errors in safety related segments and data		N
H.11.12.8	Software fault/error detection occurs before compliance with 19.13 of IEC 60335-1 is impaired		N
H.11.12.8.1	Replace text		N
H.11.12.13	Software and safety related hardware under its control initializes and terminates before compliance with 19.13 of IEC 60335-1 is impaired		N
ZA	ANNEX ZA(NORMATIVE) SPECIAL NATIONAL CONDITION		N
	National characteristic or practice that cannot be changed even over a long period, e.g. climatic conditions, electrical earthing conditions. If it affects harmonization, it forms part of the European Standard or Harmonization Document.		N
ZB	ANNEX ZB(INFORMATIVE)		N

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60335-1& IEC 60335-2-98			
Clause	Requirement Test	Result - Remark	Verdict

	A-DEVIATION		
	National deviation due to regulations, the alteration of which is for the time being outside the competence of the CEN/CENELEC member.		N
ZC	ANNEX ZC(NORMATIVE) NORMATIVE REFERENCE TO INTERNATIONAL PUBLICATIONS WITH THEIR CORRESPONDING EUROPEAN PUBLICATIONS		P
	IEC standards and EN standards used		P
ZD	ANNEX Z(INFORMATIVE) IEC AND CENELEC CODE DESIGNATIONS FOR FLEXIBLE CORDS		P
	IEC and CENELEC code designations for flexible cords		P

IEC 60335-2-98			
Clause	Requirement + Test	Result - Remark	Verdict

10.1	TABLE: Power input deviation				P
Input deviation of/at:	P rated (W)	P measured (W)	dP	Required dP	Remark
100V50Hz	12	10.3	-14.2%	+20%	--
100V60Hz	12	10.3	-14.2%	+20%	--
220V50Hz	12	10.1	-15.8%	+20%	--
220V60Hz	12	10.1	-15.8%	+20%	--

10.2	TABLE : Current deviation				N
Current deviation of/at:	I rated (A)	I measured (A)	dI	Required dI	Remark
--	--	--	--	--	--

11.8	TABLE: Heating test, thermocouples		
	Test voltage (V) :	AC254.4V	—
	Ambient (°C) :	25.0	—

Thermocouple locations	dT (K)	Max. dT (K)
Enclosure	6.6	50
adapter Enclosure	7.8	50
Internal wire	7.9	35
Fan	9.2	--
C2 body	10.8	60
L1 body	14.3	85
PCB near U1	18.1	105
PCB near Q9	11.2	105
Test corner	1.4	65

13.2	TABLE: Leakage current			P
	Heating appliances: 1.15 x rated input :	--		—
	Motor-operated and combined appliances: 1.06 x rated voltage :	AC254.4V		—
Leakage current between		I (mA)	Max. allowed I (mA)	
L/N and enclosure with metal foil		0.005	0.25	

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Clause	Requirement + Test	Result - Remark	Verdict

13.3	TABLE: Electric strength		P
Test voltage applied between:		Voltage (V)	Breakdown (Yes/No)
L/N and enclosure with metal foil		3000	No

16.2	TABLE: Leakage current		P
	Single phase appliances: 1.06 x rated voltage:	AC254.4V	—
	Three phase appliances 1.06 x rated voltage divided by √3: :	--	—
Leakage current between		I (mA)	Max. allowed I (mA)
L/N and enclosure with metal foil		0.006	0.25

16.3	TABLE: Electric strength		P
Test voltage applied between:		Voltage (V)	Breakdown (Yes/No)
L/N and enclosure with metal foil		3000	No

24.1	TABLE: Components				P
object part No.	manufacturer/trademark	type/model	technical data	standard	mark(s) of conformity
PCB	Interchangeable	Interchangeable	94V-0, 130℃	UL 94	UL
Internal wire	Interchangeable	Interchangeable	80℃, 26AWG 300V	UL 758	UL
Enclosure	Chi mei	PA-765A+	V-0, 80℃,	UL 94	UL
adapter	Changzhou Yunming Transformer factory	YMD-K2400500-SAA	Input:AC100-240V,50/60Hz Output:DC24V12W	IEC 62368	CE

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Clause	Requirement + Test	Result - Remark	Verdict

28.1	TABLE: Threaded part torque test		P
Threaded part identification	Diameter of thread (mm)	Column number (I, II, or III)	Applied torque (Nm)
Enclosure screws	3.01	II	0.6

29.1	TABLE: Clearances Overvoltage category					P
Rated impulse voltage (V)	Min. cl (mm)	Type of insulation				Verdict
		Basic	Functional	Supplementary	Reinforced	
330	0.5	-	-	-	-	
550	0.5	-	-	-	-	
800	0.5	-	-	-	-	
1500	0.5	-	-	-	-	
2500	1.5	>4.5	>3.3	>8.0	-	P
4000	3.0	-	-	-	>8.1	P
6000	5.5	-	-	-	-	
8000	8.0	-	-	-	-	
10000	11	-	-	-	-	
supplementary information:						

29.2	TABLE: Creepage distances, basic, supplementary and reinforced insulation										P
Working voltage (V)	Creepage distance (mm) Pollution degree										
	1	2			3			Type of insulation			
		Material group			Material group						
		I	II	IIIa/IIIb	I	II	IIIa/IIIb	B*)	S*)	R*)	Verdict
≤50	0,2	0,6	0,9	1,2	1,5	1,7	1,9	—	—	—	
>50 and ≤125	0,3	0,8	1,1	1,5	1,9	2,1	2,4	—	—	—	
>125 and ≤250	0,6	1,3	1,8	2,5	3,2	3,6	4,0	X	—	—	P
>125 and ≤250	0,6	1,3	1,8	2,5	3,2	3,6	4,0	—	X	—	P
>125 and ≤250	1,2	2,6	3,6	5,0	6,4	7,2	8,0	—	—	X	P

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Clause	Requirement + Test	Result - Remark	Verdict

>250 and ≤400	1,0	2,0	2,8	4,0	5,0	5,6	6,3	—	—	—	
>400 and ≤500	2,6	5,0	7,2	10,0	12,6	14,2	16,0	—	—	—	
>500 and ≤800	3,6	6,4	9,0	12,6	16,0	18,0	20,0	—	—	—	
>800 and ≤1000	2,4	4,0	5,6	8,0	10,0	11,0	12,5	—	—	—	
>1000 and ≤1250	3,2	5,0	7,1	10,0	12,5	14,0	16,0	—	—	—	
>1250 and ≤1600	8,4	12,6	18,0	25,0	32,0	36,0	40,0	—	—	—	
>1600 and ≤2000	5,6	8,0	11,0	16,0	20,0	22,0	25,0	—	—	—	
>2000 and ≤2500	15,0	20,0	28,0	40,0	50,0	56,0	64,0	—	—	—	
>2500 and ≤3200	10,0	12,5	18,0	25,0	32,0	36,0	40,0	—	—	—	
>3200 and ≤4000	25,0	32,0	44,0	64,0	80,0	90,0	100,0	—	—	—	
>4000 and ≤5000	16,0	20,0	28,0	40,0	50,0	56,0	63,0	—	—	—	
>5000 and ≤6300	20,0	25,0	36,0	50,0	63,0	71,0	80,0	—	—	—	
>6300 and ≤8000	25,0	32,0	45,0	63,0	80,0	90,0	100,0	—	—	—	
>8000 and ≤10000	64,0	80,0	112,0	160,0	200,0	220,0	250,0	—	—	—	
>10000 and ≤12500	40,0	50,0	71,0	100,0	125,0	140,0	160,0	—	—	—	
*), B=Basic, S=Supplementary and R=Reinforced											

29.2	TABLE: Creepage distances, functional insulation							P
Working voltage (V)	Creepage distance (mm) Pollution degree							
	1	2			3			
		Material group			Material group			
		I	II	IIIa/IIIb	I	II	IIIa/IIIb	Verdict
≤50	0,2	0,6	0,8	1,1	1,4	1,6	1,8	
>50 and ≤125	0,3	0,7	1,0	1,4	1,8	2,0	2,2	
>125 and ≤250	0,4	1,0	1,4	2,0	2,5	2,8	3,2	P
>250 and ≤400	0,8	1,6	2,2	3,2	4,0	4,5	5,0	
>400 and ≤500	1,0	2,0	2,8	4,0	5,0	5,6	6,3	
>500 and ≤800	1,8	3,2	4,5	6,3	8,0	9,0	10,0	
>800 and ≤1000	2,4	4,0	5,6	8,0	10,0	11,0	12,5	
>1000 and ≤1250	3,2	5,0	7,1	10,0	12,5	14,0	16,0	
>1250 and ≤1600	4,2	6,3	9,0	12,5	16,0	18,0	20,0	
>1600 and ≤2000	5,6	8,0	11,0	16,0	20,0	22,0	25,0	

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Clause	Requirement + Test	Result - Remark	Verdict

>2000 and ≤2500	7,5	10,0	14,0	20,0	25,0	28,0	32,0	
>2500 and ≤3200	10,0	12,5	18,0	25,0	32,0	36,0	40,0	
>3200 and ≤4000	12,5	16,0	22,0	32,0	40,0	45,0	50,0	
>4000 and ≤5000	16,0	20,0	28,0	40,0	50,0	56,0	63,0	
>5000 and ≤6300	20,0	25,0	36,0	50,0	63,0	71,0	80,0	
>6300 and ≤8000	25,0	32,0	45,0	63,0	80,0	90,0	100,0	
>8000 and ≤10000	32,0	40,0	56,0	80,0	100,0	110,0	125,0	
>10000 and ≤12500	40,0	50,0	71,0	100,0	125,0	140,0	160,0	

30.1	TABLE: Ball Pressure Test of Thermoplastics		P
Allowed impression diameter (mm) :		≤2,0	—
Object/ Part No./ Material	Manufacturer/ trademark	Test temperature (°C)	Impression diameter (mm)
Enclosure	See table 24.1	75	0,8
Main PCB	See table 24.1	125	1,0
Supplementary information:			

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Clause	Requirement + Test	Result - Remark	Verdict

30.2	TABLE: Resistance to heat and fire - Glow wire tests							P
Object/ Part No./ Material	Manufacturer/ trademark	Glow wire test (GWT); (°C)						Verdict
		550	650		750		850	
			te	ti	te	ti		
Motor bobbin	See table 24.1	√	-	-	1	0	√	P
PCB	See table 24.1	√	-	-	0	0	-	P
Object/ Part No./ Material	Manufacturer/ trademark	Glow-wire flammability index (GWFI), °C				GW ignition temp. (GWIT), °C		Verdict
		550	650	750	850	675	775	
-	-	-	-	-	-	-	-	-
The test specimen passed the glow wire test (GWT) with no ignition [(te – ti) ≤ 2s] (Yes/No) :								Yes
If no, then surrounding parts passed the needle-flame test of annex E (Yes/No) :								N/A
The test specimen passed the test by virtue of most of the flaming material being withdrawn with the glow-wire (Yes/No)? :								N/A
Ignition of the specified layer placed underneath the test specimen (Yes/No) :								No
Supplementary information: - 550 °C GWT not relevant (or applicable) to parts of material classified at least HB40 or if relevant HBF - The GWIT pre-selection option, the 850 °C GWFI pre-selection option, and the 850 °C GWT are not relevant (or applicable) for attended appliances								

30.2/30.2.4	TABLE: Needle- flame test (NFT)				P
Object/ Part No./ Material	Manufacturer/ trademark	Duration of application of test flame (ta); (s)	Ignition of specified layer Yes/No	Duration of burning (tb) (s)	Verdict
Main PCB	See table 24.1	30	No	0	P
Supplementary information: - NFT not relevant (or applicable) for Parts of material classified as V-0 or V-1 - NFT not relevant (or applicable) for Base material of PCBs classified as V-0 or if relevant VTM-0					

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Clause	Requirement + Test	Result - Remark	Verdict

Attachment I: Australia / New Zealand National Deviations IEC 60335.2.98:2005+A1:2009+A2:2014 and IEC 60335.1:2020			
Clause	Requirement + Test	Result - Remark	Verdict
	National Differences		
3	TERMS AND DEFINITIONS		-
AZ.3.1.201	Outlet load (IEC 60335.1:2020)		N/A
	maximum allowed load that may be connected to appliance outlets and socket outlets accessible to the user (IEC 60335.1:2020)		N/A
	Note to entry 1 A USB outlet is not considered to be an appliance outlet (IEC 60335.1:2020)		N/A
5	GENERAL CONDITIONS FOR THE TESTS		-
5.2	Add the following variation:		-
	If the tests of AZ.22.201 need to be performed they are carried out on separate appliances, the number of appliances is that required by IEC 3112. (IEC 60335.1:2020)		P
5.8.1	Replace the test condition by the following variation:		P
	Appliances for a.c. only are tested with a.c. at 50 Hz, and those for a.c. and d.c. are tested at a.c. 50 Hz or d.c., whichever is the more unfavourable supply. (IEC 60335.1:2020)	Tested with a.c. at 50 Hz	P
6	CLASSIFICATION		-
6.1	Replace the first paragraph of the requirement by the following variation:		-
	Appliances shall be of one of the following classes with respect to protection against electric shock:: class I, class II, class III. (IEC 60335.1:2020)	Class I appliances	P
7	MARKING AND INSTRUCTIONS		-
7.1	After the first paragraph of the requirement insert the following variation:		-
	Appliances intended for connection to the supply mains, other than class III appliances, shall be marked with: (IEC 60335.1:2020)		P

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Clause	Requirement + Test	Result - Remark	Verdict

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Clause	Requirement + Test	Result - Remark	Verdict
	- a rated voltage of at least: 230 V for single-phase appliances; 400 V for poly-phase appliances; or (IEC 60335.1:2020)		N/A
	- a rated voltage range that includes: 230 V for single-phase appliances; 400 V for poly-phase appliances. (IEC 60335.1:2020))		P
	For appliance outlets and socket outlets accessible to the user (IEC 60335.1:2020)		N/A
	- that are incorporated in appliances connected to the supply mains; and (IEC 60335.1:2020)		N/A
	- that operate at rated voltage; (IEC 60335.1:2020)		N/A
	the appliances shall be marked with their maximum outlet load in Watts. (IEC 60335.1:2020)		N/A
	Max. Outlet load (W)……:		N/A
7.12	Add the following variation: The instructions for partition fans and duct fans shall include the substance of the following: Exhaust fans may adversely affect the safe operation of appliances burning gas or other fuels (including those in other rooms) due to back flow of combustion gases. These gases can potentially result in carbon monoxide poisoning. After installation of an exhaust fan such as a partition fan or a duct fan the operation of flued gas appliances should be tested by a competent person to ensure that back flow of combustion gases does not occur. (IEC 60335.2.80:2016+A1:2020) (AUSTRALIAN NATIONAL VARIATIONS)		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

Attachment I: Australia / New Zealand National Deviations IEC 60335.2.98:2005+A1:2009+A2:2014 and IEC 60335.1:2020			
Clause	Requirement + Test	Result - Remark	Verdict
7.12	Add the following variation: The instructions for partition fans and duct fans shall include the substance of the following: Exhaust fans may adversely affect the safe operation of appliances burning gas or other fuels (including those in other rooms) due to back flow of combustion gases. These gases can potentially result in carbon monoxide poisoning. After installation of an exhaust fan such as a partition fan or a duct fan the operation of open flued gas appliances should be tested by a competent person to ensure that back flow of combustion gases does not occur. (IEC 60335.2.80:2016+A1:2020) (NEW ZEALAND NATIONAL VARIATIONS)		N/A
7.12.1	Replace the third dashed item in the first paragraph of the addition with the following variation.		-
	– that the fan is to be installed so that the blades are more than 2,1 m above the floor; (IEC 60335.2.80:2016)		N/A
	Replace the second dashed item in the second paragraph of the addition with the following variation.		-
	– that the fan is to be installed so that the blades are more than 2,1 m above the floor; (IEC 60335.2.80:2016)		N/A
7.13	Replace the requirement with the following variation:		-
	Instructions and other text required by this standard are written in English. (IEC 60335.1:2020)		N/A
7.15	After the last paragraph of the requirement insert the following variation:		-
	The marking of the maximum outlet load shall be close to the appliance outlet or socket outlet. (IEC 60335.1:2020)		N/A
10	POWER INPUT AND CURRENT		-
10.1	After the last paragraph of the test specification insert the following variation:		-

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Clause	Requirement + Test	Result - Remark	Verdict
	Appliance outlets and socket outlets accessible to the user that are incorporated in appliances connected to the supply mains; and		N/A
	that operate at rated voltage;		N/A
	are not loaded during the test, however their contribution to the power input is considered to be the marked outlet load per appliance outlet or socket-outlet. (IEC 60335.1:2020)		N/A
11	HEATING		-
11.7	After the first paragraph of the test specification insert the following variation:		-
	Appliance outlets and socket outlets accessible to the user are loaded with a resistive load that gives the marked outlet load in watts. (IEC 60335.1:2020)		N/A
11.8	After the first paragraph of the test specification insert the following variation:		-
	The pins of plug connectors inserted into appliance outlets accessible to the user and plugs inserted into socket outlets accessible to the user shall have a temperature rise not exceeding 45 K. (IEC 60335.1:2020)		N/A
	Temperature rise (K)……..……:		N/A
19	ABNORMAL OPERATION		-
19.13	After the seventh paragraph of the test specification insert the following variation:		-
	During and after the tests the no-load output voltage of an accessible safety extra-low voltage outlet or connector or Universal Serial Bus (USB) outlet shall not have increased by more than 3 V or 10% of its no-load output voltage in normal use, whichever is higher. (IEC 60335.1:2020)		N/A
	Voltage normal use (V)……...:		-

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Clause	Requirement + Test	Result - Remark	Verdict

Attachment I: Australia / New Zealand National Deviations IEC 60335.2.98:2005+A1:2009+A2:2014 and IEC 60335.1:2020			
Clause	Requirement + Test	Result - Remark	Verdict
	Voltage abnormal operation (V)……:		-
	Deviation (%)……:		-
22	CONSTRUCTION		-
22.2	After the first paragraph of the requirement insert the following variation:		-
	For stationary appliances permanently connected to the fixed wiring, compliance with this requirement is considered to be met if the instruction concerning disconnection incorporated in the fixed wiring is in accordance with IEC 3000. (IEC 60335.1:2020)		N/A
22.3	Replace the text with the following variation::		-
	VOID (IEC 60335.1:2020)		N/A
22.33	Delete the last sentence of the first paragraph of the requirement and introduce it as a new first paragraph of the requirement. (IEC 60335.1:2020)		N/A
AZ.22.201	After Clause 22.52 add the following variation: Appliances having integral pins for insertion into socket outlets shall comply with the appropriate requirements of IEC 3112. (IEC 60335.1:2020)		N/A
	Compliance is checked as specified in Annex J of IEC 3112 (IEC 60335.1:2020)		N/A
AZ.22.202	After AZ.22.201 add the following variation: Appliance outlets and socket outlets accessible to the user that are incorporated in appliances connected to the supply mains; and (IEC 60335.1:2020)		N/A
	that operate at rated voltage (IEC 60335.1:2020)		N/A
	shall be single-phase and have a current rating not exceeding 16 A. (IEC 60335.1:2020)		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

Attachment I: Australia / New Zealand National Deviations IEC 60335.2.98:2005+A1:2009+A2:2014 and IEC 60335.1:2020			
Clause	Requirement + Test	Result - Remark	Verdict
	The socket outlets shall comply with IEC 3112; (IEC 60335.1:2020)		N/A
	accept a 3-pin, flat-pin plug as described in figure 2.1(a1) of IEC 3112. (IEC 60335.1:2020)		N/A
	The appliance outlets and socket outlets shall be protected by one of the following protection devices that has a current rating not exceeding the current rating of the appliance outlet or socket-outlet: (IEC 60335.1:2020)		N/A
	- a circuit breaker for equipment complying with IEC 60934; (IEC 60335.1:2020)		N/A
	- a manually resettable trip-free or cycling trip-free overcurrent protection device; (IEC 60335.1:2020)		N/A
	- a non-user replaceable fuse-link. (IEC 60335.1:2020)		N/A
	Current of outlet (A)……..:		N/A
	Current of protection device (A)…….:		N/A
	The protection device shall be placed behind a non-detachable cover. The actuating member of the circuit breaker and the manually resettable protection device may be accessible. (IEC 60335.1:2020)		N/A
	The current rating of the appliance outlets and socket outlets is obtained from the marked outlet load in watts divided by the rated voltage. (IEC 60335.1:2020)		N/A
	Load of outlet (W)……..……..:		-
	Rated voltage (V)…….:		-

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Clause	Requirement + Test	Result - Remark	Verdict

Attachment I: Australia / New Zealand National Deviations IEC 60335.2.98:2005+A1:2009+A2:2014 and IEC 60335.1:2020			
Clause	Requirement + Test	Result - Remark	Verdict
	Current of outlet (A)……..:		-
	Compliance is checked by inspection and for a manually resettable trip-free or cycling trip-free overcurrent protection device by the following tests: (IEC 60335.1:2020)		N/A
	The device shall be operated at rated voltage at 136% of its current rating, in an ambient temperature of 23°C ± 2°C in a draught-free environment. (IEC 60335.1:2020)		N/A
	Rated voltage (V)……..:		-
	Current of outlet (A)……..:		-
	Test current (A)……..……..……..:		-
	Ambient temperature (°C)…..…..……..:		-
	The device shall operate to interrupt the current within 2 h. (IEC 60335.1:2020)		N/A
	Overload condition existed for (_h,_min, _sec)…..:		N/A
	The device shall be operated at rated voltage at 600% of its current rating in an ambient temperature of 23°C ± 2°C in a draught-free environment (IEC 60335.1:2020)		N/A
	Rated voltage (V)……..:		-
	Current of outlet (A)……..:		-
	Test current (A)……..……..……..:		-
	Ambient temperature (°C)…..…..……..:		-

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Clause	Requirement + Test	Result - Remark	Verdict

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Clause	Requirement + Test	Result - Remark	Verdict
	The device shall operate to interrupt the current within 5 s. (IEC 60335.1:2020)		N/A
	Overload condition existed for (sec)……..…..:		-
	Immediately following the overcurrent tests, the test of clause 16.3 shall be applied, and the device shall comply with the specified requirements of the test. (IEC 60335.1:2020)		N/A
	The device shall comply with the ball pressure test of 30.1 carried out at 160 °C. (IEC 60335.1:2020)		N/A
	Plastic material type……:		-
	Impression diameter (mm)…….……..:		-
	The device shall comply with the glow-wire test of 30.2.3.1 with a test severity of 960 °C. (IEC 60335.1:2020)		N/A
	Plastic material type…….……:		-
	Time of ignition (sec)…….……..:		-
	Time of extinguish (sec)…….……..:		-
	Specified layer placed underneath the test specimen does not ignite. …….……..:		-
24	COMPONENTS		-
24.1	Insert the following variation before NOTE 1:		-
	NOTE 201 The relevant IEC standard can be replaced with the relevant Australia/New Zealand standard where applicable. (IEC 60335.1:2020)		N/A
25	SUPPLY CONNECTION AND EXTERNAL FLEXIBLE CORDS		-
25.1	After the requirement insert the following variation.		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Supply cords for single-phase portable appliances intended for direct connection to the supply mains, shall be fitted with an appropriate plug complying with IEC 3112. (IEC 60335.1:2020)		N/A
Table 11	In footnote a insert the following variation		-
	However, they cannot be used in class I appliances. (IEC 60335.1:2020)		N/A
	Special national conditions (if any)		-
	Australia		-
5	GENERAL CONDITIONS FOR THE TESTS		-
5.201	For appliances, other than class III appliances, that are intended for connections to the supply mains and that are not marked with: (IEC 60335.1:2020)		P
	- a rated voltage of at least 240 V for single-phase appliances and at least 415 V for three-phase appliances, or (IEC 60335.1:2020)		N/A
	- a rated voltage range that includes 240 V for single-phase appliances and 415 V for three-phase appliances, (IEC 60335.1:2020)		P
	the rated voltage is equal to 240 V for single-phase appliances and 415 V for three phase appliances, (IEC 60335.1:2020)		N/A
	and the upper limit of the rated voltage range is equal to 240 V for single-phase appliances and 415 V for three-phase appliances.		P
	In addition, the rated current or rated power input is equal to the calculated value corresponding to 240 V for single-phase appliances and 415 V for three-phase appliances as appropriate (IEC 60335.1:2020)		P
24	COMPONENTS		-

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Clause	Requirement + Test	Result - Remark	Verdict

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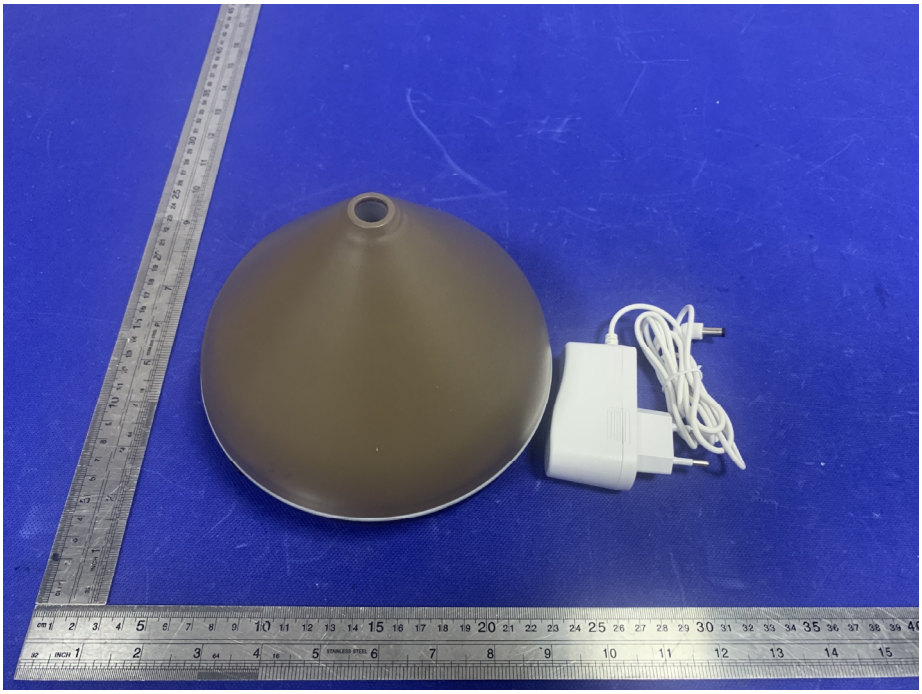
Clause	Requirement + Test	Result - Remark	Verdict
24.1.7	Add the following variation to the test specification:		N/A
	Telecommunication interface circuitry must comply with the Telecom Labelling Notice issued under the Telecommunications Act instead of IEC 62151. (IEC 60335.1:2020)		N/A
	NOTE 201 The Telecommunications Act is administered by the Australian Media and Communications Authority. (IEC 60335.1:2020)		N/A

Attachment II:

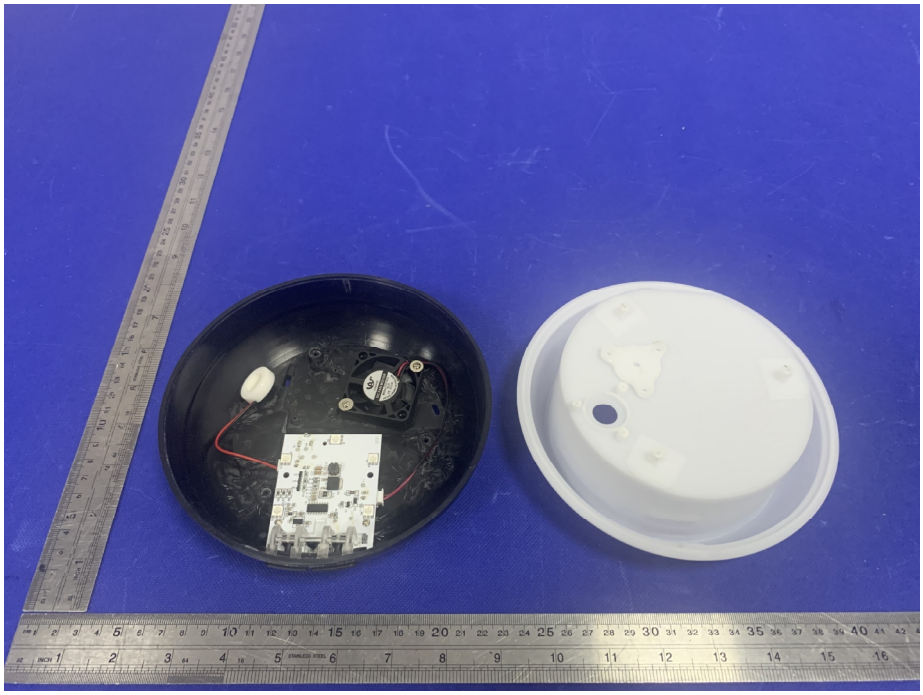
Photo-documentation

EUT Photo 1

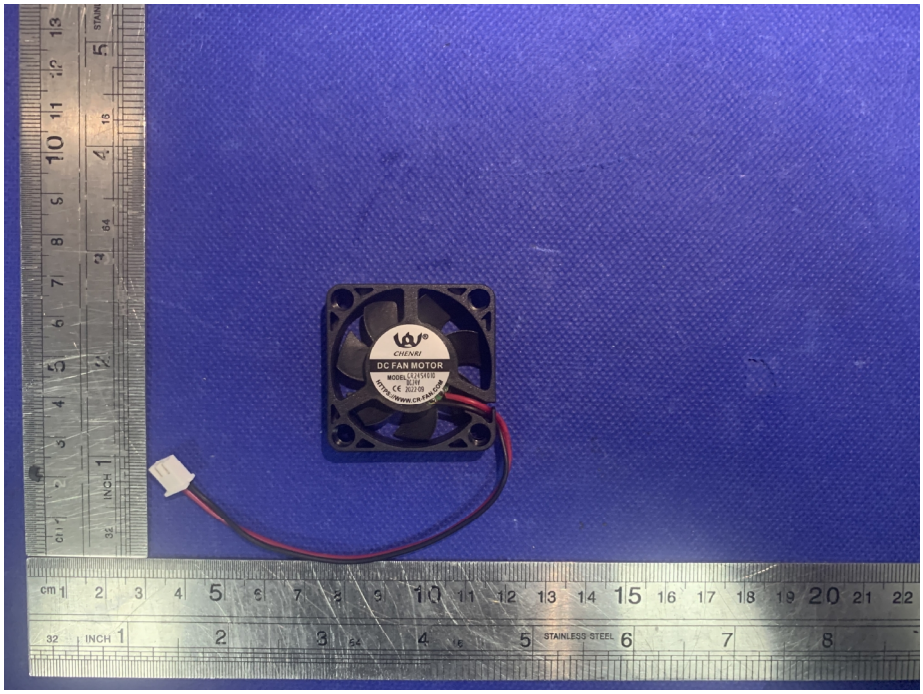


EUT Photo 2

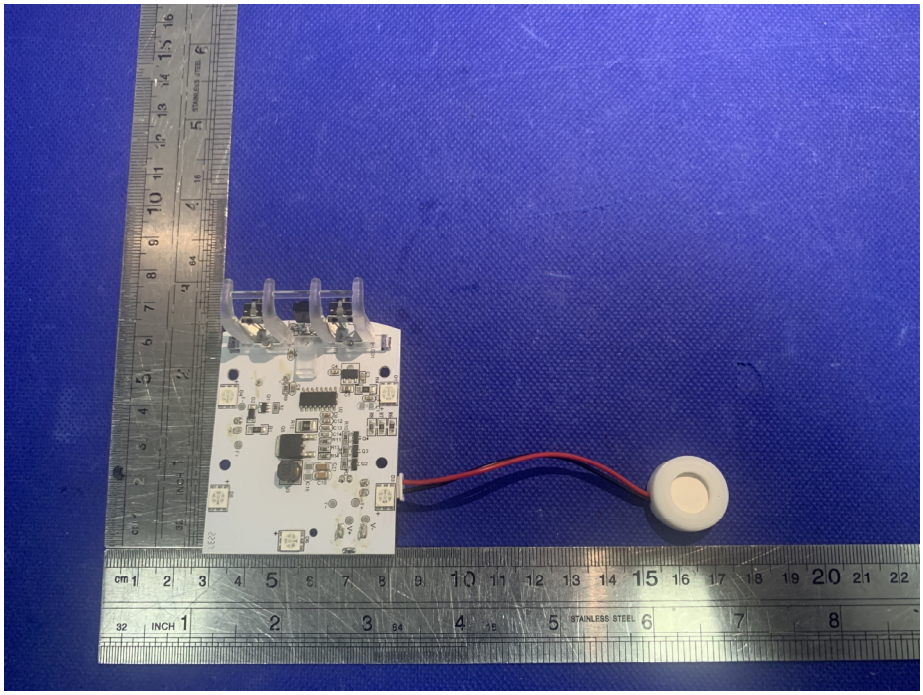
EUT Photo 3



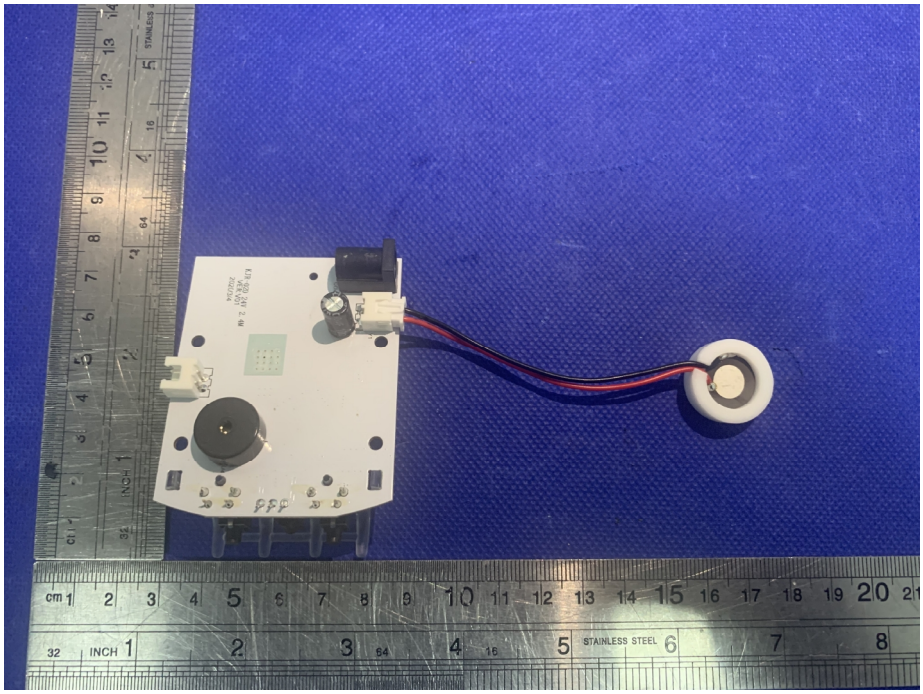
EUT Photo 4



EUT Photo 5



EUT Photo 6



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