

TEST REPORT

EN 60335-2-15**Household and similar electrical appliances - Safety - Part 2-15: Particular requirements for appliances for heating liquids**

Report Number	RHDTL260408520
Total number of pages	144 pages
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Applicant's name	DONGSHENGYAO TRADING LIMITED
Address	RM 5076, 5/F, YAU LEE CENTRE NO. 45 HOI YUEN RD KWUN TONG 999077 HONG KONG HK
Manufacturer's name	Pan-European Box (Shenzhen) Trading Co., Ltd
Address	401, Building B1, Baoneng Science and Technology Park, Bantian Street, Longgang District, Shenzhen, Guangdong,China 518000
Test specification:	
Standard	EN 60335-1:2012+A11:2014+A13:2017+A1:2019+A14:2019+A2:2019 +A15:2021 + A16:2023 EN 60335-2-15:2016 + A11:2018 + A1:2021 + A2:2021 + A12:2021
Test procedure	LVD report
Non-standard test method	N/A
Test item description	Electric lunch box
Trade Mark	Gentre
Model/Type reference	GEN-H-001,GEN-H-002,GEN-H-003,GEN-H-004,GEN-Y-001,GEN-Y-002,GEN-Y-003,GEN-Y-004,GEN-Y-005
Ratings	AC Input: 110-250V ~ , 50/60Hz, 60W DC Input: 12-24VDC 60W

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This report is only for applicant use. Any copying this report to/for any other person or entity, and use our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Unless specific mention, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification

List of Attachments:

Attachment 1: EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES

Attachment 2: 4 pages of photos.

Summary of testing:

The tested samples fulfilled the requirements of specified standards.

Testing location:

Dongguan HDTL Technology Co., Ltd.

Room 101, Building 1, No. 5 of Jinzhong Road, Dongcheng Street, Dongguan City, Guangdong Province, China.

Summary of compliance with National Differences:

List of countries addressed:

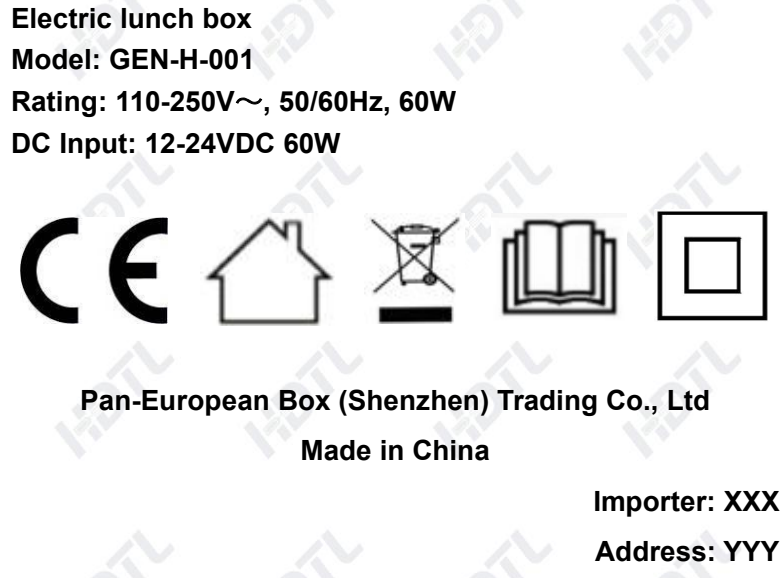
The product fulfils the requirements of


EN 60335-1:2012+A11:2014+A13:2017+A1:2019+A14:2019+ A2:2019 +A15:2021 + A16:2023

EN 60335-2-15:2016 + A11:2018 + A1:2021 + A2:2021 + A12:2021


Remark:

/

Copy of marking plate:**The artwork below may be only a draft.****Note:**

1. xxx means importer company name; yyy means importer company address information.
2. The marking for the other models are identical as above except the model no. only.
3. As declared by client that the name (or registered trade mark) and address of the certificate holder (manufacturer) or the importer or authorized representative based within the European Economic Area will be clearly affixed on the product or where that is not possible, on the packaging or in a document accompanying the product.
4. The height of letters and numerals was not less than 2mm.
5. The height of symbol “” was not less than 7mm.
6. The height of the other graphical symbols was not less than 5mm.

Test item particulars : Electric lunch box
Classification of installation and use : Class II, Portable appliance & indoor used
Supply Connection : AC inlet or DC inlet
Possible test case verdicts: - test case does not apply to the test object... : N/A - test object does meet the requirement..... : P (Pass) - test object does not meet the requirement... : F (Fail)
Testing : Date of receipt of test item : Apr. 08, 2026 Date (s) of performance of tests : Apr. 08, 2026 to Apr. 28, 2026
General remarks: "(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report. Throughout this report a <input type="checkbox"/> comma / <input checked="" type="checkbox"/> point is used as the decimal separator.
Name and address of factory (ies) : Pan-European Box (Shenzhen) Trading Co., Ltd 401, Building B1, Baoneng Science and Technology Park, Bantian Street, Longgang District, Shenzhen, Guangdong, China 518000
General product information: 1. The appliance/equipment is "Electric lunch box" with models "GEN-H-001, GEN-H-002, GEN-H-003, GEN-H-004, GEN-Y-001, GEN-Y-002, GEN-Y-003, GEN-Y-004, GEN-Y-005", class II appliance. All models are identical, except for model name difference. 2. The manufacturer has specified an ambient temperature of 25°C. 3. All test(s) were performed on model "GEN-H-001" to represent other models also. 4. The Electric lunch box comes in three colors: grass green, black, and navy blue. The main inspection model is GEN-H-001, which is black

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
5	GENERAL CONDITIONS FOR THE TESTS		P
	Tests performed according to clause 5, e.g. nature of supply, sequence of testing, etc.		P
5.2	If the test of 15.101 has to be carried out, three additional samples are required (IEC 60335-2-15)		N/A
5.3	Test of 19.101, carried out after the other tests (IEC 60335-2-15)		N/A
5.101	Induction rice cookers tested as motor-operated appliances (IEC 60335-2-15)		N/A
6	CLASSIFICATION		P
6.1	Protection against electric shock: Class 0, 0I, I, II, III.....:	Class II	P
6.2	Protection against harmful ingress of water		N/A
	Wash boilers and livestock feed boilers at least IPX3 (IEC 60335-2-15)		N/A
7	MARKING AND INSTRUCTIONS		P
7.1	Rated voltage or voltage range (V).....:	See marking plate	P
	Symbol for nature of supply, or.....:	See marking plate	P
	Rated frequency (Hz).....:	See marking plate	P
	Rated power input (W), or.....:	See marking plate	P
	Rated current (A)		N/A
	Manufacturer's or responsible vendor's name, trademark or identification mark.....:	See marking plate	P
	Model or type reference.....:	See marking plate	P
	Symbol IEC 60417-5172, for class II appliances		P
	IP number, other than IPX0.....:	IPX0	N/A
	Symbol IEC 60417-5180, for class III appliances, unless		N/A
	the appliance is operated by batteries only		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	Symbol IEC 60417-5018, for class II and class III appliances incorporating a functional earth		N/A
	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/A
	Appliances intended to be partially immersed in water for cleaning, marked with the maximum level of immersion, (IEC 60335-2-15)		N/A
	And with the substance of the following: "Do not immerse beyond this level" (IEC 60335-2-15)		N/A
	For kettles: level mark or other means which indicate the rated capacity (IEC 60335-2-15)		N/A
	Unless they cannot be filled beyond their rated capacity (IEC 60335-2-15)		N/A
	Indication visible whit kettle in filling position (IEC 60335-2-15)		N/A
	Reference to the level mark on the outside of the kettle, if the level is not self-evident (IEC 60335-2-15)		N/A
	Marking on the appliance of the closed position of the lid of pressure cooker, if it is not obvious (IEC 60335-2-15)		N/A
	Identification mark and model or type reference of stand for cordless kettles (IEC 60335-2-15)		N/A
	Soy milk makers: level mark or other means to indicate when they are filled to rated capacity (IEC 60335-2-15)		N/A
	Unless they cannot be filled beyond their rated capacity (IEC 60335-2-15)		N/A
7.2	Warning for stationary appliances for multiple supply		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	Warning placed in vicinity of terminal cover		N/A
7.3	Range of rated values marked with the lower and upper limits separated by a hyphen		P
	Different rated values marked with the values separated by an oblique stroke		P
7.4	Appliances adjustable for different rated voltages or rated frequencies, the voltage or the frequency setting is clearly discernible		N/A
	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/A
7.5	Appliances with more than one rated voltage or one or more rated voltage ranges, marked with rated input or rated current for each rated voltage or range, unless		N/A
	the power input or current are related to the arithmetic mean value of the rated voltage range		N/A
	Relation between marking for upper and lower limits of rated power input or rated current and voltage is clear		N/A
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		P
7.7	Connection diagram fixed to appliances to be connected to more than two supply conductors and appliances for multiple supply, unless		N/A
	correct mode of connection is obvious		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
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/A
	- marking of protective earthing terminals (symbol IEC 60417-5019)		N/A
	- marking of functional earthing terminals (symbol IEC 60417-5018)		N/A
	- marking not placed on removable parts		N/A
7.9	Marking or placing of switches which may cause a hazard		P
7.10	Indications of switches on stationary appliances and controls on all appliances by use of figures, letters or other visual means.....: :		P
	This applies also to switches which are part of a control		N/A
	If figures are used, the off position indicated by the figure 0		N/A
	The figure 0 indicates only OFF position, unless no confusion with the OFF position		P
7.11	Indication for direction of adjustment of controls		P
7.12	Instructions for safe use provided		P
	Details concerning precautions during user maintenance		P
	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

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	For a part of class III construction supplied from a detachable power supply unit, the instructions state that the appliance is only to be used with the unit provided		N/A
	Instructions for class III appliances state that it must only be supplied at SELV, unless		N/A
	it is a battery-operated appliance, the battery being charged outside the appliance		N/A
	For appliances for altitudes exceeding 2000 m, the maximum altitude is stated.....:		N/A
	The instructions for appliances incorporating a functional earth states that the appliance incorporates an earth connection for functional purposes only		N/A
	The instructions for appliances include the substance of the following: (IEC 60335-2-15)		P
	This appliance is intended to be used in household and similar applications such as: (IEC 60335-2-15)		P
	- staff kitchen areas in shops, offices and other working environments;		P
	- farm houses;		P
	- by clients in hotels, motels and other residential type environments;		P
	- bed and breakfast type environments.		P
	If the manufacturer wants to limit the use of the appliance to less than the above, this is clearly stated in the instructions (IEC 60335-2-15)		P
	Appliance incorporating an appliance inlet and intended to be immersed for cleaning, instructions include the following : (IEC 60335-2-15)		N/A
	- the connector must be remove before cleaning		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	- the appliance inlet must be dried before the appliance is used again		N/A
	The instructions for appliances normally cleaned after use and not intended to be immersed in water for cleaning, state that the appliance must not be immersed (IEC 60335-2-15)		N/A
	This requirement normally applies to coffee-makers, cooking pans, milk heaters, pressure cookers, steam cookers, slow cookers, soy milk makers and yoghurt makers (IEC 60335-2-15)		N/A
	The instructions for use for appliances intended to be used with a connector incorporating a thermostat, state that only the appropriate connector must be used (IEC 60335-2-15)		N/A
	Unless, kettles are constructed so that a hazard cannot arise from boiling water being ejected, the instructions for use include the following: (IEC 60335-2-15)		N/A
	- if the kettle is overfilled, boiling water may be ejected		N/A
	The instructions for use for kettles filled through a lid aperture which is situated below the handle, include the substance of the following: (IEC 60335-2-15)		N/A
	- WARNING: "Do not remove the lid while the water is boiling"		N/A
	- WARNING: "Position the lid so that steam is directed away from the handle"		N/A
	The caution statement is not required if the lid can only be closed so that steam is directed away from the handle (IEC 60335-2-15)		N/A
	The instructions for cordless appliances state that the appliance is only to be used with the stand provided (IEC 60335-2-15)		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	If the appliance and stand of cordless appliances can be lifted together by gripping the handle of the appliance, the instructions include the substance of the following: (IEC 60335-2-15)		N/A
	- CAUTION: Insure that the appliance is switched off before removing it from its stand.		N/A
	Instructions for feeding bottle heaters: (IEC 60335-2-15)		N/A
	- state that the food should not be heated for too long a period		N/A
	- state how to check that the correct food temperature has not been exceeded		N/A
	Instructions for pressure cookers, other than dynamic pressure cookers: (IEC 60335-2-15)		N/A
	- state that the ducts in the pressure regulator allowing the escape of steam should be checked regularly to ensure that they are not blocked		N/A
	Instructions for pressure cookers: (IEC 60335-2-15)		N/A
	- give details of how to open the container safely		N/A
	- and state that the container must not be opened until the pressure has decreased sufficiently		N/A
	The instructions for use for egg boilers provided with a pricking device contain the substance of the following : (IEC 60335-2-15)		N/A
	- CAUTION: "Avoid injuries from the egg pricking device"		N/A
	Instructions for espresso coffee-makers incorporating a pressurized reservoir filled by the user: (IEC 60335-2-15)		N/A
	- contain information for the safe refilling of the water reservoir and the substance of the following:		N/A
	- WARNING: The filling aperture must not be opened during use		N/A
	The instructions for all appliances include: (IEC 60335-2-15)		P
	- a warning to avoid spillage on the connector		P

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	- details on how to clean the surfaces in contact with food		N/A
	- a warning of potential injury from misuse		P
	- a statement that the heating element surface is subject to residual heat after use		P
	The instructions for soy milk makers also include a statement that care shall be taken when handling the sharp cutting blades, emptying the container and during cleaning (IEC 60335-2-15)		N/A
	The instruction for soy milk makers incorporating a switch necessary for compliance with 22.40 include the substance of the following: (IEC 60335-2-15)		N/A
	- Switch off the appliance and disconnect from supply before changing accessories or approaching parts that move in use		N/A
7.12.1	Sufficient details for installation supplied		N/A
	For an appliance intended to be permanently connected to the water mains and not connected by a hose-set, this is stated		N/A
	If different rated voltages or different rated frequencies are marked, the instructions state what action to be taken to adjust the appliance		N/A
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/A
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/A
7.12.4	Instructions for built-in appliances:		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	- dimensions of space		N/A
	- dimensions and position of supporting and fixing		N/A
	- minimum distances between parts and surrounding structure		N/A
	- minimum dimensions of ventilating openings and arrangement		N/A
	- connection to supply mains and interconnection of separate components		N/A
	- allow disconnection of the appliance after installation, by accessible plug or a switch in the fixed wiring, unless		N/A
	a switch complying with 24.3		N/A
7.12.5	Replacement cord instructions, type X attachment with a specially prepared cord		N/A
	Replacement cord instructions, type Y attachment		P
	Replacement cord instructions, type Z attachment		N/A
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/A
7.12.7	Instructions for fixed appliances stating how the appliance is to be fixed		N/A
7.12.8	Instructions for appliances connected to the water mains:		N/A
	- max. inlet water pressure (Pa).....:		N/A
	- min. inlet water pressure, if necessary (Pa):		N/A
	Instructions concerning new and old hose-sets for appliances connected to the water mains by detachable hose-sets		N/A
7.13	Instructions and other texts in an official language	In English	P

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
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/A
	For stationary appliances, name, trademark or identification mark and model or type reference visible after installation		N/A
	For fixed appliances, name, trademark or identification mark and model or type reference visible after installation according to the instructions		N/A
	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		P
7.16	Marking of a possible replaceable thermal link or fuse link clearly visible with regard to replacing the link		N/A
8	PROTECTION AGAINST ACCESS TO LIVE PARTS		--
8.1	Adequate protection against accidental contact with live parts		P
8.1.1	Requirement applies for all positions, detachable parts removed		P
	Lamps behind a detachable cover not removed, if conditions met		N/A
	Insertion or removal of lamps, protection against contact with live parts of the lamp cap		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	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		P
	Test probe 13 also applied through openings in earthed metal enclosures having a non-conductive coating: no contact with live parts		N/A
	See Note 101 (IEC 60335-2-15)		N/A
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		N/A
8.1.4	Accessible part not considered live if:		N/A
	- safety extra-low a.c. voltage: peak value not exceeding 42.4 V		N/A
	- safety extra-low d.c. voltage: not exceeding 42.4 V		N/A
	- or separated from live parts by protective impedance		N/A
	If protective impedance: d.c. current not exceeding 2 mA, and		N/A
	a.c. peak value not exceeding 0.7 mA		N/A
	- for peak values over 42.4 V up to and including 450 V, capacitance not exceeding 0,1 μ F		N/A
	- for peak values over 450 V up to and including 15 kV, discharge not exceeding 45 μ C		N/A
	- for peak values over 15kV, the energy in the discharge not exceeding 350 mJ		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
8.1.5	Live parts protected at least by basic insulation before installation or assembly:		N/A
	- built-in appliances		N/A
	- fixed appliances		N/A
	- appliances delivered in separate units		N/A
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		P
	Only possible to touch parts separated from live parts by double or reinforced insulation		P
9	STARTING OF MOTOR-OPERATED APPLIANCES		N/A
	Requirements and tests are specified in part 2 when necessary		N/A
10	POWER INPUT AND CURRENT		P
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
	If the power input varies throughout the operating cycle and the maximum value of the power input exceeds, by a factor greater than two, the arithmetic mean value of the power input occurring during a representative period, the power input is the maximum value that is exceeded for more than 10 % of the representative period		N/A
	Otherwise the power input is the arithmetic mean value		N/A
	Test carried out at upper and lower limits of the ranges for appliances with one or more rated voltage ranges, unless		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	the rated power input is related to the arithmetic mean value		N/A
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/A
	If the current varies throughout the operating cycle and the maximum value of the current exceeds, by a factor greater than two, the arithmetic mean value of the current occurring during a representative period, the current is the maximum value that is exceeded for more than 10 % of the representative period		N/A
	Otherwise the current is the arithmetic mean value		N/A
	Test carried out at upper and lower limits of the ranges for appliances with one or more rated voltage ranges, unless		N/A
	the rated current is related to the arithmetic mean value of the range		N/A
11	HEATING		P
11.1	No excessive temperatures in normal use		P
11.2	The appliance is held, placed or fixed in position as described..... :		P
	Portable appliances tested away from the walls of the test corner (IEC 60335-2-15)		P
11.3	Temperature rises, other than of windings, determined by thermocouples		P
	Temperature rises of windings determined by resistance method, unless		N/A
	the windings are non-uniform or it is difficult to make the necessary connections		N/A
	See Note 101 (IEC 60335-2-15)		N/A
11.4	Heating appliances operated under normal operation at 1.15 times rated power input (W) :	1.15 times rated power input	P

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EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	If the temperature rise limits are exceeded in appliances incorporating motors, transformers or electronic circuits and if the power input is lower than the rated power input, test repeated with the appliance supplied at 1,06 times rated voltage (IEC 60335-2-15)		N/A
11.5	Motor-operated appliances operated under normal operation at most unfavourable voltage between 0.94 and 1.06 times rated voltage (V) :		N/A
11.6	Combined appliances operated under normal operation at most unfavourable voltage between 0.94 and 1.06 times rated voltage (V)..... :		N/A
	Combined appliances tested as heating appliances (IEC 60335-2-15)		N/A
11.7	Appliances operated for the duration specified in 11.7.101 to 11.7.106 (IEC 60335-2-15)		P
11.7.101	For kettles with temperature limiter: test terminated after second operation of temperature limiter (IEC 60335-2-15)		N/A
	For kettles with thermostat: test terminated 15 min after the water has attained 95 °C		N/A
	For other kettles: test terminated 5 min after the water has attained 95 °C		N/A
11.7.102	For cooking pans, egg boilers, feeding-bottle heaters, glue pots, livestock feed boilers, milk heaters, sterilizers, wash boilers and for appliances that boil water other than kettles, the test is terminated: (IEC 60335-2-15)		N/A
	- appliances without a thermal control: 15 min after the water in the container has attained a temperature of 95 °C or the maximum temperature it can attain if this is lower		N/A
	- portable appliances provided with a thermal control: 15 min after the thermal control has operated for the first time		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	- fixed appliances provided with a thermal control: 30 min after the thermal control has operated for the first time		N/A
	- appliances with acoustic signal: 1 min after signal		N/A
	- egg boilers having provision for keeping eggs warm, and appliances having a heated surface intended to keep liquid warm: when steady conditions are established		N/A
11.7.103	Slow cookers, rice cookers, steam cookers and yoghurt makers operated until steady conditions are established (IEC 60335-2-15)		N/A
	Slow cookers prewarmed in the dry state if this instruction is given		N/A
11.7.104	Espresso coffee-makers operated in accordance with the instructions for use (IEC 60335-2-15)		N/A
	Automatic espresso coffee makers and espresso coffee makers, the brewing period is the time necessary to produce the maximum quantity of coffee allowed by the timer or by the capacity of the coffee pot		N/A
	Manual espresso coffee makers, maximum quantity of coffee to be produced specified in the instructions, or		N/A
	the brewing period is the time necessary to produce 100 ml of coffee for each cycle		N/A
	Espresso coffee-makers having an outlet for supplying steam or hot water, the brewing period is immediately followed by a period during which the steam or water is supplied for the time stated in the instructions, or		N/A
	- espresso coffee makers having an outlet for supplying steam, 1 min.		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	- espresso coffee makers having an outlet for supplying water, the time necessary to produce 100 ml of water		N/A
	Espresso coffee-makers operated until steady conditions are established		N/A
	Other coffee-makers operated for the time necessary to make the maximum quantity of coffee stated in the instructions		N/A
	The container refilled as quickly as possible and the coffee-maker operated again until steady conditions are established		N/A
11.7.105	Pressure cookers operated 15 min after attaining the maximum cooking pressure (IEC 60335-2-15)		N/A
11.7.106	Soy milk makers operated for a complete operating cycle (IEC 60335-2-15)		N/A
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/A
	if there is doubt with regard to classification of insulation,		N/A
	tests of Annex C are carried out		N/A
	Sealing compound does not flow out		N/A
	Protective devices do not operate, except		P
	components in protective electronic circuits tested for the number of cycles specified in 24.1.4		N/A
	When an appliance connector incorporates a thermostat, the temperature rise limit for the pins of the inlet does not apply (IEC 60335-2-15)		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	The temperature rise limits of motors, transformers, components of electronic circuit and parts directly influenced by them may be exceeded when the appliance is operated at 1,15 times rated power input (IEC 60335-2-15)		N/A
13	LEAKAGE CURRENT AND ELECTRIC STRENGTH AT OPERATING TEMPERATURE		P
13.1	Leakage current not excessive and electric strength adequate		P
	Heating appliances operated at 1.15 times the rated power input (W)..... :	1.15 times rated power input	P
	Motor-operated appliances and combined appliances supplied at 1.06 times the rated voltage (V).....:		N/A
	Protective impedance and radio interference filters disconnected before carrying out the tests		N/A
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/A
	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
15	MOISTURE RESISTANCE		P
15.1	Enclosure provides the degree of moisture protection according to classification of the appliance	IPX0	N/A
	Compliance checked as specified in 15.1.1, taking into account 15.1.2, followed by the electric strength test of 16.3		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	No trace of water on insulation which can result in a reduction of clearances or creepage distances below values specified in clause 29		N/A
15.1.1	Appliances, other than IPX0, subjected to tests as specified in IEC 60529..... :		N/A
	Water valves containing live parts in external hoses for connection of an appliance to the water mains tested as specified for IPX7 appliances		N/A
15.1.2	Hand-held appliance turned continuously through the most unfavourable positions during the test		N/A
	Built-in appliances installed according to the instructions		N/A
	Appliances placed or used on the floor or table placed on a horizontal unperforated support		N/A
	Appliances normally fixed to a wall and appliances with pins for insertion into socket-outlets are mounted on a wooden board		N/A
	For IPX3 appliances, the base of wall mounted appliances is placed at the same level as the pivot axis of the oscillating tube		N/A
	For IPX4 appliances, the horizontal centre line of the appliance is aligned with the pivot axis of the oscillating tube, and		N/A
	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/A
	Wall-mounted appliances, take into account the distance to the floor stated in the instructions		N/A
	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/A

EN 60335-1&EN 60335-2-15			
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/A
	Appliances with type X attachment fitted with a flexible cord as described		N/A
	Detachable parts subjected to the relevant treatment with the main part		N/A
	However, if a part has to be removed for user maintenance and a tool is needed, this part is not removed		N/A
15.2	Spillage of liquid does not affect the electrical insulation		P
	Spillage solution comprising water containing approximately 1 % NaCl and 0,6 % rinsing agent		P
	Appliances with type X attachment fitted with a flexible cord as described		N/A
	Appliances incorporating an appliance inlet tested with or without an connector, whichever is most unfavourable		N/A
	The test is only carried out with the appliance connector in position (IEC 60335-2-15)		N/A
	For cordless appliances, the test with the appliance on the horizontal plane carried out with the appliance both on and off its stand (IEC 60335-2-15)	Not cordless appliance	N/A
	For rice cookers, the test carried out with the rice container in place (IEC 60335-2-15)		N/A
	In case of doubt, spillage tests carried out with the appliance deviating from the normal position by an angle not exceeding 5° (IEC 60335-2-15)		P
	Detachable parts are removed		P
	Overfilling test with additional amount of the solution, over a period of 1 min (I).....:	15% of the rated capacity	P

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	The appliance withstands the electric strength test of 16.3		P
	No trace of water on insulation that can result in a reduction of clearances or creepage distances below values specified in clause 29		P
	Kettles that can be filled through the spout: additional overfilling test in conditions as specified (IEC 60335-2-15)		N/A
	For cordless kettles, the additional test carried out only with the cordless kettle off its stand, the kettle being replaced on its stand in order to carry out the electric strength test of 16.3 (IEC 60335-2-15)		N/A
	Coffee makers provided with a removable coffee pot: particular overfilling test in conditions as specified (IEC 60335-2-15)		P
	Steam sterilizers: particular overfilling test in conditions as specified (IEC 60335-2-15)		N/A
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	23°C, 95%	P
	Reassembly of those parts that may have been removed		P
	The appliance withstands the tests of clause 16		P
15.101	Appliances to be partially or completely immersed in water for cleaning sufficiently protected against effects of immersion (IEC 60335-2-15)		N/A
	Compliance is checked by the tests as specified, which are carried out on three additional appliances		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	No trace of water on insulation which can result in reduction of creepage distances and clearance below values specified in 29		N/A
15.103	Interior of rice cookers not affected by water (IEC 60335-2-15)		N/A
	Compliance is checked by the test as specified		N/A
	Rice cookers withstanding the electric strength test of 16.3		N/A
16	LEAKAGE CURRENT AND ELECTRIC STRENGTH		P
16.1	Leakage current not excessive and electric strength adequate		P
	Protective impedance disconnected from live parts before carrying out the tests		N/A
	Tests carried out at room temperature and not connected to the supply		P
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 $\sqrt{3}$ (V)..... :		N/A
	Leakage current measurements..... :	(see appended table)	P
	Limit values doubled if:		N/A
	- all controls have an off position in all poles, or		N/A
	- the appliance has no control other than a thermal cut-out, or		N/A
	- all thermostats, temperature limiters and energy regulators do not have an off position, or		N/A
	- the appliance has radio interference filters		N/A
	With the radio interference filters disconnected, the leakage current do not exceed limits specified :	(see appended table)	N/A
16.3	Electric strength tests according to table 7..... :	(see appended table)	P

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	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
19	ABNORMAL OPERATION		P
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 :	(see appended table)	N/A
	Appliances incorporating heating elements subjected to the tests of 19.2 and 19.3, and		P
	if the appliance also has a control that limit the temperature during clause 11 it is subjected to the test of 19.4, and		N/A
	if applicable, to the test of 19.5		N/A
	Appliances incorporating PTC heating elements are also subjected to the test of 19.6		P
	Appliances incorporating motors subjected to the tests of 19.7 to 19.10, as applicable		N/A
	Appliances incorporating electronic circuits subjected to the tests of 19.11 and 19.12, as applicable		N/A
	Appliances incorporating contactors or relays subjected to the test of 19.14, being carried out before the tests of 19.11		N/A
	Appliances incorporating voltage selector switches subjected to the test of 19.15		N/A
	Unless otherwise specified, the tests are continued until a non-self-resetting thermal cut-out operates, or		N/A
	until steady conditions are established		P

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	If a heating element or intentionally weak part becomes open-circuited, the relevant test is repeated on a second sample		N/A
	Kettles are not subjected to the test of 19.2 (IEC 60335-2-15)		N/A
	Kettles also subjected to the test of 19.101, unless the appliance incorporates a non-self-resetting thermal cut-out, in order to comply with 19.4 (IEC 60335-2-15)		N/A
	Kettles for which compliance with 19.101 relies on the operation of a non-self-resetting thermal cut-out are subjected to the test of 19.102 (IEC 60335-2-15)		N/A
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).....:		P
	Appliances are placed as near as possible to the walls of the test corner (IEC 60335-2-15)		P
	They are tested empty with lids open or closed whichever is the more unfavourable (IEC 60335-2-15)		N/A
	Induction rice cookers operating under the conditions of clause 11 with the rice container empty (IEC 60335-2-15)		N/A
19.3	Test of 19.2 repeated; test voltage (V), power input of 1.24 times rated power input (W).....:		P
	Kettles are operated empty at 1.15 times rated power input (IEC 60335-2-15)		N/A
	The test is carried out with the kettle filled with sufficient water to cover the heating element or if the heating element is not positioned inside the container, to a depth of 10 mm (IEC 60335-2-15)		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
19.4	Test conditions as in clause 11, any control limiting the temperature during tests of clause 11 short-circuited		N/A
	Pressure cookers: (IEC 60335-2-15)		N/A
	- all pressure regulating devices rendered inoperative; and		N/A
	- in other than dynamic pressure cookers, all protective devices that vent steam and intentionally weak parts that vent steam rendered inoperative; and		N/A
	- in dynamic pressure cookers, all protective devices, other than intentionally weak parts, that vent steam rendered inoperative		N/A
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/A
	The test repeated with reversed polarity and the other end of the heating element connected to the sheath		N/A
	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/A
19.6	Appliances with PTC heating elements tested at rated voltage, establishing steady conditions		P
	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)..... :		P
19.7	Stalling test by locking the rotor if the locked rotor torque is smaller than the full load torque, or		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	locking moving parts of other appliances		N/A
	Locked rotor, capacitors open-circuited one at a time		N/A
	Test repeated with capacitors short-circuited one at a time, unless		N/A
	the capacitor is of class P2 of IEC 60252-1		N/A
	Appliances with timer or programmer supplied with rated voltage for each of the tests, for a period equal to the maximum period allowed :		N/A
	An electronic timer or programmer that operates to ensure compliance with the test before the maximum period under the conditions of Clause 11 is reached, is a protective electronic circuit		N/A
	Other appliances supplied with rated voltage for a period as specified.....:		N/A
	Espresso coffee-makers incorporating a pump operated for a period of 5 min (IEC 60335-2-15)		N/A
	Soy milk makers operated for one cycle of operation (IEC 60335-2-15)		N/A
	Winding temperatures not exceeding values specified in table 8.....:	(see appended table)	N/A
19.8	Multi-phase motors operated at rated voltage with one phase disconnected		N/A
19.9	Running overload test on appliances incorporating motors intended to be remotely or automatically controlled or liable to be operated continuously		N/A
	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/A
	Winding temperatures not exceeding values as specified.....:	(see appended table)	N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
19.10	Series motor operated at 1.3 times rated voltage for 1 min (V)..... :		N/A
	During the test, parts not being ejected from the appliance		N/A
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/A
	they comply with the conditions specified in 19.11.1		N/A
	Appliances incorporating an electronic circuit that relies upon a programmable component to function correctly, subjected to the test of 19.11.4.8, unless		N/A
	restarting does not result in a hazard		N/A
	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/A
	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/A
	During and after each test the following is checked:		N/A
	- the temperature of the windings do not exceed the values specified in table 8		N/A
	- the appliance complies with the conditions specified in 19.13		N/A
	- any current flowing through protective impedance not exceeding the limits specified in 8.1.4		N/A
	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:		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	- the base material of the printed circuit board withstands the test of Annex E		N/A
	- 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/A
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:		N/A
	- 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/A
	- 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/A
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:		N/A
	a) short circuit of functional insulation if clearances or creepage distances are less than the values specified in clause 29		N/A
	b) open circuit at the terminals of any component		N/A
	c) short circuit of capacitors, unless		N/A
	they comply with IEC 60384-14		N/A
	d) short circuit of any two terminals of an electronic component, other than integrated circuits		N/A
	This fault condition is not applied between the two circuits of an optocoupler		N/A
	e) failure of triacs in the diode mode		N/A
	f) failure of microprocessors and integrated circuits		N/A
	g) failure of an electronic power switching device		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	Each low power circuit is short-circuited by connecting the low-power point to the pole of the supply source from which the measurements were made		N/A
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/A
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/A
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		N/A
	If the appliance can still be operated it complies with 20.2		N/A
	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:		P
	- basic insulation (V).....		N/A
	- supplementary insulation (V).....		N/A
	- 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		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	The appliance does not undergo a dangerous malfunction, and		P
	no failure of protective electronic circuits, if the appliance is still operable		N/A
	Appliances tested with an electronic switch in the off position, or in the stand-by mode:		N/A
	- do not become operational, or		N/A
	- if they become operational, do not result in a dangerous malfunction during or after the tests of 19.11.4		N/A
	If the appliance contains lids or doors that are controlled by one or more interlocks, one of the interlocks may be released provided that:		N/A
	- the lid or door does not move automatically to an open position when the interlock is released, and		N/A
	- the appliance does not start after the cycle in which the interlock was released		N/A
	During the test of 19.4, protective devices of pressure cookers other than dynamic pressure cookers operate before pressure has reached 350 kPa (IEC 60335-2-15)		N/A
	During the test of 19.4, protective devices or intentionally weak parts of dynamic pressure cookers operate before pressure has reached 250 kPa (IEC 60335-2-15)		N/A
	Temperature rise of windings of induction rice cookers not exceeding the values specified in 19.7 (IEC 60335-2-15)		N/A
	Induction rice cookers: electric strength test carried out immediately after switching off the appliance (IEC 60335-2-15)		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
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/A
	For a relay or contactor with more than one contact, all contacts are short-circuited at the same time		N/A
	A relay or contactor operating only to ensure the appliance is energized for normal use is not short-circuited		N/A
	If more than one relay or contactor operates in clause 11, they are short-circuited in turn		N/A
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/A
19.101	Kettles operated empty at 0,85 times or 1,15 times rated power input, whichever is more unfavourable, with thermal cut-out that operates during the test of 19.4 short circuited (IEC 60335-2-15)		N/A
	During the test, any flames keep within the enclosure of the kettle and supporting surface does not ignite		N/A
	After the test, live parts not be accessible		N/A
19.102	Kettles incorporating two self-resetting thermal cut-outs operated with one of the thermal cut-out short circuited, empty at 0.85 or 1.15 times rated power input, whichever is most unfavourable (IEC 60335-2-15)		N/A
	Within 2 s of the thermal cut-out operating, the kettle is filled with water having a temperature of 15 °C ± 5 °C. After 1 min, the kettle is emptied		N/A
	The test is carried out 100 times		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
19.103	Appliances with detachable liquid containers: automatic transfer of liquid from one container to another is liable and safe (IEC 60335-2-15)		N/A
	Compliance is checked by the test as specified		N/A
	After the test, the appliance withstands the tests of 16.3 and		N/A
	no trace of water on insulation which can result in reduction of creepage distances and clearances below values specified in clause 29		N/A
19.104	The overloading of a soy milk maker does not result in a hazard (IEC 60335-2-15)		N/A
	Compliance is checked by the test as specified		N/A
	During the test, any flames keep within the enclosure and supporting surface does not ignite		N/A
	After the test, live parts not be accessible		N/A
19.105	When a soy milk maker is disconnected from the supply accidentally during normal use, it does not result in a hazard (IEC 60335-2-15)		N/A
	Compliance is checked by the test as specified		N/A
	During the test, any flames keep within the enclosure and supporting surface does not ignite		N/A
	After the test, live parts not be accessible		N/A
20	STABILITY AND MECHANICAL HAZARDS		P
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
	Tilting test repeated on appliances with heating elements, angle of inclination increased to 15°		P

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	Possible heating test in overturned position; temperature rise does not exceed values shown in table 9		N/A
20.2	Moving parts adequately arranged or enclosed as to provide protection against personal injury		N/A
	Protective enclosures, guards and similar parts are non-detachable, and		N/A
	have adequate mechanical strength		N/A
	Enclosures that can be opened by overriding an interlock are considered to be detachable parts		N/A
	Self-resetting thermal cut-outs and overcurrent protective devices not causing a hazard by unexpected closure		N/A
	Not possible to touch dangerous moving parts with the test probe described		N/A
20.101	The container and cutting blades of soy milk makers have adequate mechanical strength (IEC 60335-2-15)		N/A
	Compliance is checked by the test as specified		N/A
	Container and cutting blades not broken		N/A
20.102	The rotating parts of soy milk makers not become loose during operation (IEC 60335-2-15)		N/A
	Compliance is checked by inspection and manual test as specified		N/A
	Fastening of screws and nuts in a direction opposite to the direction of rotation of the rotating parts considered to be a suitable means of securing the rotating parts		N/A
20.103	For soy milk makers: lid interlock, if any, constructed so that accidental operation of the appliance is prevented (IEC 60335-2-15)		N/A
	Lid interlock switches are biased-off switches		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	If there is an interlock between the lid and the main switch, the lid is locked when the switch is in the on position		N/A
	When the lid is not correctly closed, the switch is locked in the off position		N/A
	Compliance is checked by inspection, by manual test and by applying test probe B of IEC 61032		N/A
21	MECHANICAL STRENGTH		P
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
	The appliance shows no damage impairing compliance with this standard, and		P
	compliance with 8.1, 15.1 and clause 29 not impaired		P
	If doubt, supplementary or reinforced insulation subjected to the electric strength test of 16.3		N/A
	If necessary, repetition of groups of three blows on a new sample		N/A
	Breakage of glass parts is neglected provided that compliance with 8.1, 15.1 and 15.101 is not impaired (IEC 60335-2-15)		N/A
22	CONSTRUCTION		P
22.1	Appliance marked with the first numeral of the IP system, relevant requirements of IEC 60529 are fulfilled	IPX0	N/A
22.2	Stationary appliance: means to ensure all-pole disconnection from the supply being provided:		N/A
	- a supply cord fitted with a plug, or		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	- a switch complying with 24.3, or		N/A
	- a statement in the instruction sheet that a disconnection incorporated in the fixed wiring is to be provided, or		N/A
	- an appliance inlet		N/A
	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/A
22.3	Appliance provided with pins: no undue strain on socket-outlets		N/A
	Applied torque not exceeding 0.25 Nm		N/A
	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/A
	Each pin subjected to a torque of 0.4Nm; the pins are not rotating, unless		N/A
	rotating does not impair compliance with this standard		N/A
22.4	Appliance for heating liquids and appliance causing undue vibration not provided with pins for insertion into socket-outlets		P
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/A
	Voltage not exceeding 34 V (V).....:		N/A
	If compliance relies on the operation of an electronic circuit, the electromagnetic phenomena tests of 19.11.4.3 and 19.11.4.4 are applied		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	The discharge test is then repeated three times, voltage not exceeding 34 V (V)..... :		N/A
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		N/A
	In case of doubt, test as described		P
	Drain holes, at least 5 mm in diameter or 20 mm ² in area with a width of at least 3 mm (IEC 60335-2-15)		P
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		P
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/A
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
	- a non-self-resetting thermal cut-out is required by the standard, and		N/A
	- a voltage maintained non-self-resetting thermal cut-out is used to meet it		N/A
	Non-self-resetting thermal motor protectors have a trip-free action, unless		N/A
	they are voltage maintained		N/A
	Reset buttons of non-self-resetting controls so located or protected that accidental resetting is unlikely		N/A

EN 60335-1&EN 60335-2-15			
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		N/A
	Obvious locked position of snap-in devices used for fixing such parts		N/A
	No deterioration of the fixing properties of snap-in devices used in parts that are likely to be removed during installation or servicing		N/A
	Tests as described		N/A
22.12	Handles, knobs etc. fixed in a reliable manner		N/A
	Fixing in wrong position of handles, knobs etc. indicating position of switches or similar components not possible		N/A
	Axial force 15 N applied to parts, the shape being so that an axial pull is unlikely to be applied		N/A
	Axial force 30 N applied to parts, the shape being so that an axial pull is likely to be applied		N/A
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/A
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/A
22.17	Spacers not removable from the outside by hand or by means of a screwdriver or a spanner		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
22.18	Current-carrying parts and other metal parts resistant to corrosion		N/A
22.19	Driving belts not relied upon to provide the required level of insulation, unless		N/A
	constructed to prevent inappropriate replacement		N/A
22.20	Direct contact between live parts and thermal insulation effectively prevented, unless		N/A
	material used is non-corrosive, non-hygroscopic and non-combustible		N/A
22.21	Wood, cotton, silk, ordinary paper and fibrous or hygroscopic material not used as insulation, unless		N/A
	impregnated		N/A
	This requirement does not apply to magnesium oxide and mineral ceramic fibres used for the electrical insulation of heating elements		N/A
22.22	Appliances not containing asbestos		P
22.23	Oils containing polychlorinated biphenyl (PCB) not used		N/A
22.24	Bare heating elements, except in class III appliances or class III constructions that do not contain live parts, adequately supported		N/A
	In case of rupture, the heating conductor is unlikely to come in contact with accessible metal parts		N/A
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/A
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/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
22.27	Parts connected by protective impedance separated by double or reinforced insulation		N/A
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/A
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/A
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		N/A
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		P
	unearthed metal parts separated from live parts by basic insulation only		N/A
	Electrodes not used for heating liquids		N/A
	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		P
	the reinforced insulation consists of at least 3 layers		N/A

EN 60335-1&EN 60335-2-15			
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		P
	the reinforced insulation consists of at least 3 layers		N/A
	An air layer not used as basic or supplementary insulation in a double insulation system if likely to be bridged by leaking liquid		P
22.34	Shafts of operating knobs, handles, levers etc. not live, unless		P
	the shaft is not accessible when the part is removed		N/A
22.35	For other than class III constructions, handles, levers and knobs, held or actuated in normal use, not becoming live in the event of a failure of basic insulation		N/A
	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/A
	This requirement does not apply to handles, levers and knobs on stationary appliances and cordless appliances, other than those of electrical components, provided they are reliably connected to an earthing terminal or earthing contact, or separated from live parts by earthed metal		N/A
	Insulating material covering metal handles, levers and knobs withstand the electric strength test of 16.3 for supplementary insulation		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
22.36	For appliances other than class III, handles continuously held in the hand in normal use so constructed that when gripped as in normal use, the operators hand is not likely to touch metal parts, unless		N/A
	they are separated from live parts by double or reinforced insulation		N/A
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/A
	the capacitors comply with 22.42		N/A
22.38	Capacitors not connected between the contacts of a thermal cut-out		N/A
22.39	Lamp holders used only for the connection of lamps		N/A
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/A
	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/A
	For soy milk makers, any switch controlling the motor also disconnect electronic circuits, if their malfunction would impair compliance with this standard (IEC 60335-2-15)		N/A
	Compliance is checked by the tests of Clause 19 (IEC 60335-2-15)		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
22.41	No components, other than lamps, containing mercury		P
22.42	Protective impedance consisting of at least two separate components		N/A
	Values specified in 8.1.4 not exceeded if any one of the components are short-circuited or open-circuited		N/A
	Resistors checked by the test of 14.1 a) in IEC 60065		N/A
	Capacitors checked by the tests for class Y capacitors in IEC 60384-14		N/A
22.43	Appliances adjustable for different voltages, accidental changing of the setting of the voltage unlikely to occur		N/A
22.44	Appliances not having an enclosure that is shaped or decorated like a toy		P
22.45	When air is used as reinforced insulation, clearances not reduced below the values specified in 29.1.3 due to deformation as a result of an external force applied to the enclosure		P
22.49	For remote operation, the duration of operation is to be set before the appliance can be started, unless		N/A
	the appliance switches off automatically or can operate continuously without hazard		N/A
22.50	Controls incorporated in the appliance take priority over controls actuated by remote operation		N/A
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/A
	There is a visual indication showing that the appliance is adjusted for remote operation		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	These requirements not necessary on appliances that can operate as follows, without giving rise to a hazard:		N/A
	- continuously, or		N/A
	- automatically, or		N/A
	- remotely		N/A
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/A
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/A
22.54	Button cells and batteries designated R1 not accessible without the aid of a tool, unless		N/A
	the cover of their compartment can only be opened after at least two independent movements have been applied simultaneously		N/A
22.101	Kettles constructed so that the lid does not fall off when water is poured out (IEC 60335-2-15)		N/A
	Compliance is checked by the test as specified		N/A
	Lid not fall off and water only emitted from the spout		N/A
22.102	Kettles so constructed that there are no sudden jets of steam or hot water likely to expose the user to a hazard when the appliance is used as in normal use (IEC 60335-2-15)		N/A
	Compliance is checked by inspection during the test of clause 11		N/A
22.104	Portable appliances in which water boil with a container greater than 3 l is filled to its rated capacity with the lid closed in accordance with instructions for use (IEC 60335-2-15)		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	The plane is slowly inclined to an angle of 25 ° ; if the appliance overturns, it is left in this position for 10 s and then returned to its normal position		N/A
	The rate of discharge of liquid does not exceed 16 l/min		N/A
22.105	Fixed appliances for boiling water constructed so that the container is always open to the atmosphere through an aperture of at least 5 mm in diameter or 20 mm ² in area with a width of at least 3 mm (IEC 60335-2-15)		N/A
	Aperture not likely to be obstructed in normal use		N/A
	If the appliance has provisions for discharging steam or water overflowing, the discharge aperture shall be at the base of the appliance and discharge vertically downwards		N/A
22.106	Espresso coffee-maker: not possible to remove the filter by a simple operation while there is hazardous pressure within the container (IEC 60335-2-15)		N/A
22.107	Pressure cookers incorporate a non-self-resetting pressure or temperature responsive pressure relief device (IEC 60335-2-15)		N/A
22.109	Pressure cookers constructed so that the pressure in the container is not excessive when the lid is not closed or is incorrectly fitted (IEC 60335-2-15)		N/A
	Compliance is checked by the test as specified		N/A
	Pressure not exceeding 4,0 kPa		N/A
22.110	Feeding-bottle heater: visible or audible signal to indicate the end of the heating period (IEC 60335-2-15)		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
22.111	Espresso coffee-makers, incorporating a pressurized reservoir filled by the user constructed so that there is no spillage of water or sudden jets of steam or hot water (IEC 60335-2-15)		N/A
	When removing the filling cap of the pressurized reservoir, before the cap is removed completely, the pressure relieves in a controlled manner		N/A
	Compliance is checked by inspection during the test of clause 11 and by removing the filling cap at the end of the test		N/A
22.112	Soy milk makers constructed so that steam or hot water are not ejected which may expose the user to a hazard (IEC 60335-2-15)		N/A
22.113	Appliances with moving mechanical parts constructed so that lubricants are prevented from polluting food compartments (IEC 60335-2-15)		N/A
22.114	Appliances constructed so that food or liquids are prevented from penetrating into places that could cause electrical or mechanical faults (IEC 60335-2-15)		N/A
23	INTERNAL WIRING		P
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/A
	Wiring effectively prevented from coming into contact with moving parts		N/A
23.2	Beads etc. on live wires cannot change their position, and are not resting on sharp edges		N/A
	Beads inside flexible metal conduits contained within an insulating sleeve		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
23.4	Bare internal wiring sufficiently rigid and fixed		N/A
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		N/A
	no breakdown when a voltage of 2000 V is applied for 15 min between the conductor and metal foil wrapped around the insulation		P
	For class II construction, the requirements for supplementary insulation and reinforced insulation apply,		N/A
	except that the sheath of a cord complying with IEC 60227 or IEC 60245 may provide supplementary insulation.		N/A
	A single layer of internal wiring insulation does not provide reinforced insulation		N/A
23.6	Sleeving used as supplementary insulation on internal wiring retained in position by clamping at both ends, or		P
	be such that it can only be removed by breaking or cutting		N/A
23.7	The colour combination green/yellow only used for earthing conductors		N/A
23.8	Aluminium wires not used for internal wiring		N/A
23.9	Stranded conductors not consolidated by soldering where they are subjected to contact pressure, unless		N/A
	the contact pressure is provided by spring terminals		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
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/A
25	SUPPLY CONNECTION AND EXTERNAL FLEXIBLE CORDS		P
25.1	Appliance not intended for permanent connection to fixed wiring, means for connection to the supply:		P
	- 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/A
	- an appliance inlet having at least the same degree of protection against moisture as required for the appliance, or		P
	- pins for insertion into socket-outlets		N/A
	Appliances incorporating an appliance inlet other than those standardized in IEC 60320-1 are supplied with a cord set (IEC 60335-2-15)		N/A
25.2	Appliance not provided with more than one means of connection to the supply mains		P
	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/A
25.3	Appliance intended to be permanently connected to fixed wiring provided with one of the following means for connection to the supply mains:		N/A
	- a set of terminals allowing the connection of a flexible cord		N/A
	- a fitted supply cord		N/A
	- a set of supply leads accommodated in a suitable compartment		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	- 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/A
	- 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/A
	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/A
25.4	Cable and conduit entries, rated current of appliance not exceeding 16 A, dimension according to table 10 (mm)..... :		N/A
	Introduction of conduit or cable does not reduce clearances or creepage distances below values specified in clause 29		N/A
25.5	Method for assembling the supply cord to the appliance:		N/A
	- type X attachment		N/A
	- type Y attachment		N/A
	- type Z attachment, if allowed in relevant part 2		N/A
	Type Z attachment is allowed for egg boilers, feeding bottle heaters, yoghurt makers and stands of cordless appliances (IEC 60335-2-15)		N/A
	Type X attachment, other than those with a specially prepared cord, not used for flat twin tinsel cords		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	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/A
25.6	Plugs fitted with only one flexible cord		N/A
25.7	Supply cords, other than for class III appliances, being one of the following types:		N/A
	- rubber sheathed (at least 60245 IEC 53)		N/A
	- polychloroprene sheathed (at least 60245 IEC 57)		N/A
	- 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		N/A
	<ul style="list-style-type: none"> light polyvinyl chloride sheathed cord (60227 IEC 52), for appliances not exceeding 3 kg 		N/A
	<ul style="list-style-type: none"> ordinary polyvinyl chloride sheathed cord (60227 IEC 53), for other appliances 		N/A
	- heat resistant polyvinyl chloride sheathed. Not used for type X attachment other than specially prepared cords		N/A
	<ul style="list-style-type: none"> heat-resistant light polyvinyl chloride sheathed cord (60227 IEC 56), for appliances not exceeding 3 kg 		N/A
	<ul style="list-style-type: none"> heat-resistant polyvinyl chloride sheathed cord (60227 IEC 57), for other appliances 		N/A
	Supply cords for class III appliances adequately insulated		N/A
	Test with 500 V for 2 min for supply cords of class III appliances that contain live parts		N/A
	Supply cord of livestock feed boilers are polychloroprene sheathed (IEC 60335-2-15)		N/A
25.8	Nominal cross-sectional area of supply cords not less than table 11; rated current (A); cross-sectional area (mm ²)..... :		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	Portable appliances having a rated current of up to 10 A may incorporate a supply cord having a nominal cross-sectional area of 0,75 mm ² , if the length is less than 2 m (IEC 60335-2-15)		N/A
25.9	Supply cords not in contact with sharp points or edges		N/A
25.10	Supply cord of class I appliances have a green/yellow core for earthing		N/A
	In multi-phase appliances, the colour of the neutral conductor of the supply cord is blue.		N/A
25.11	Conductors of supply cords not consolidated by soldering where they are subject to contact pressure, unless		N/A
	the contact pressure is provided by spring terminals		N/A
25.12	Insulation of the supply cord not damaged when moulding the cord to part of the enclosure		N/A
25.13	Inlet openings so constructed as to prevent damage to the supply cord		N/A
	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/A
	If unsheathed supply cord, a similar additional bushing or lining is required, unless the appliance is		N/A
	class 0, or		N/A
	a class III appliance not containing live parts		N/A
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/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	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/A
	Pull and torque test of supply cord:		N/A
	- fixed appliances: pull 100 N; torque (not on automatic cord reel) (Nm).....:		N/A
	- other appliances: values shown in table 12: mass (kg); pull (N); torque (not on automatic cord reel) (Nm).....:		N/A
	Pull and torque test of supply cord, values shown in table 12: mass (kg); pull (N); torque (not on automatic cord reel) (Nm).....:		N/A
	Cord not damaged and max. 2 mm displacement of the cord		N/A
25.16	Cord anchorages for type X attachments constructed and located so that:		N/A
	- replacement of the cord is easily possible		N/A
	- it is clear how the relief from strain and the prevention of twisting are obtained		N/A
	- they are suitable for different types of supply cord		N/A
	- cord cannot touch the clamping screws of cord anchorage if these screws are accessible, unless		N/A
	they are separated from accessible metal parts by supplementary insulation		N/A
	- the cord is not clamped by a metal screw which bears directly on the cord		N/A
	- at least one part of the cord anchorage securely fixed to the appliance, unless		N/A
	it is part of a specially prepared cord		N/A
	- screws which have to be operated when replacing the cord do not fix any other component, unless		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	the appliance becomes inoperative or incomplete or the parts cannot be removed without a tool		N/A
	- if labyrinths can be bypassed the test of 25.15 is nevertheless withstood		N/A
	- for class 0, 0I and I appliances they are of insulating material or are provided with an insulating lining, unless		N/A
	failure of the insulation of the cord does not make accessible metal parts live		N/A
	- for class II appliances they are of insulating material, or		N/A
	if of metal, they are insulated from accessible metal parts by supplementary insulation		N/A
	After the test of 25.15, under the conditions specified, the conductors have not moved by more than 1 mm in the terminals		N/A
25.17	Adequate cord anchorages for type Y and Z attachment, test with the cord supplied with the appliance		N/A
25.18	Cord anchorages only accessible with the aid of a tool, or		N/A
	Constructed so that the cord can only be fitted with the aid of a tool		N/A
25.19	Type X attachment, glands not used as cord anchorage in portable appliances		N/A
	Tying the cord into a knot or tying the cord with string not used		N/A
25.20	The conductors of the supply cord for type Y and Z attachment insulated from accessible metal parts		N/A
25.21	Space for supply cord for type X attachment or for connection of fixed wiring constructed:		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	- to permit checking of conductors with respect to correct positioning and connection before fitting any cover		N/A
	- so there is no risk of damage to the conductors or their insulation when fitting the cover		N/A
	- 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/A
	2 N test to the conductor for portable appliances; no contact with accessible metal parts		N/A
25.22	Appliance inlets:		P
	- live parts not accessible during insertion or removal		P
	Requirement not applicable to appliance inlets complying with IEC 60320-1		P
	- connector can be inserted without difficulty		P
	- the appliance is not supported by the connector		P
	- not for cold conditions if temp. rise of external metal parts exceeds 75 K during clause 11, unless		N/A
	the supply cord is unlikely to touch such metal parts		N/A
	Soy milk maker inlets located so that pollution by soy milk is unlikely to occur during normal use (IEC 60335-2-15)		N/A
25.23	Interconnection cords comply with the requirements for the supply cord, except that:		N/A
	- the cross-sectional area of the conductors is determined on the basis of the maximum current during clause 11		N/A
	- the thickness of the insulation may be reduced		N/A
	If necessary, electric strength test of 16.3		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
25.24	Interconnection cords not detachable without the aid of a tool if compliance with this standard is impaired when they are disconnected		N/A
25.25	Dimensions of pins that are inserted into socket-outlets compatible with the dimensions of the relevant socket-outlet.		N/A
	Dimensions of pins and engagement face in accordance with the dimensions of the relevant plug in IEC/TR 60083		N/A
25.101	Supply cords of kettles are not longer than 75 cm, unless they are helically coiled (IEC 60335-2-15)		N/A
	If a cordless kettle has a cord storage facility, the length of the cord is measured after storing as much of the cord as possible		N/A
	The length of the cord is measured between the plug and the point where the cord or cord guard enters the appliance		N/A
26	TERMINALS FOR EXTERNAL CONDUCTORS		N/A
26.1	Appliances provided with terminals or equally effective devices for connection of external conductors		N/A
	Terminals only accessible after removal of a non-detachable cover, except		N/A
	for class III appliances that do not contain live parts		N/A
	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/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
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/A
	the connections are soldered		N/A
	Screws and nuts not used to fix any other component, except		N/A
	internal conductors, if so arranged that they are unlikely to be displaced when fitting the supply conductors		N/A
	If soldered connections used, the conductor so positioned or fixed that reliance is not placed on soldering alone, unless		N/A
	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/A
	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/A
26.3	Terminals fixed so that when the clamping means is tightened or loosened:		N/A
	- the terminal does not become loose		N/A
	- internal wiring is not subjected to stress		N/A
	- neither clearances nor creepage distances are reduced below the values in clause 29		N/A
	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/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	No deep or sharp indentations of the conductors		N/A
26.4	Terminals for type X attachment, except those having a specially prepared cord and those for the connection of cables of fixed wiring, no special preparation of conductors such as by soldering, use of cable lugs, eyelets or similar, and		N/A
	so constructed or placed that conductors prevented from slipping out when clamping screws or nuts are tightened		N/A
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/A
	Stranded conductor test, 8 mm insulation removed		N/A
	No contact between live parts and accessible metal parts and,		N/A
	for class II constructions, between live parts and metal parts separated from accessible metal parts by supplementary insulation only		N/A
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 (mm ²)..... :		N/A
	If a specially prepared cord is used, terminals need only be suitable for that cord		N/A
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/A
26.8	Terminals for the connection of fixed wiring, including the earthing terminal, located close to each other		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
26.9	Terminals of the pillar type constructed and located as specified		N/A
26.10	Terminals with screw clamping and screwless terminals not used for flat twin tinsel cords, unless		N/A
	conductors ends fitted with means suitable for screw terminals		N/A
	Pull test of 5 N to the connection		N/A
26.11	For type Y and Z attachment, soldered, welded, crimped or similar connections may be used		N/A
	For Class II appliances, the conductor so positioned or fixed that reliance is not placed on soldering, welding or crimping alone		N/A
	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/A
27	PROVISION FOR EARTHING		N/A
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/A
	Earthing terminals and earthing contacts not connected to the neutral terminal		N/A
	Class 0, II and III appliances have no provision for protective earthing	Class II appliance	P
	Class II appliances and class III appliances can incorporate an earth for functional purposes		N/A
	Safety extra-low voltage circuits not earthed, unless		N/A
	protective extra-low voltage circuits		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
27.2	Clamping means of earthing terminals adequately secured against accidental loosening		N/A
	Terminals for the connection of external equipotential bonding conductors allow connection of conductors of 2.5 to 6 mm ² , and		N/A
	- do not provide earthing continuity between different parts of the appliance, and		N/A
	- conductors cannot be loosened without the aid of a tool		N/A
	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes		N/A
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/A
	For appliances with supply cords, current-carrying conductors become taut before earthing conductor, if the cord slips out of the cord anchorage		N/A
	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes		N/A
27.5	Low resistance of connection between earthing terminal and earthed metal parts		N/A
	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/A
	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	Resistance not exceeding 0,1 Ω at the specified low-resistance test (Ω)..... :		N/A
27.6	The printed conductors of printed circuit boards not used to provide earthing continuity in hand-held appliances.		N/A
	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/A
	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes		N/A
28	SCREWS AND CONNECTIONS		P
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		N/A
	Screws of insulating material not used for any electrical connections or connections providing earthing continuity		N/A
	Screws used for electrical connections or connections providing earthing continuity screwed into metal		N/A
	Screws not of insulating material if their replacement by a metal screw can impair supplementary or reinforced insulation		N/A
	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/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	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		N/A
	there is resiliency in the metallic parts to compensate for shrinkage or distortion of the insulating material		N/A
	This requirement does not apply to electrical connections in circuits of appliances for which:		N/A
	<ul style="list-style-type: none"> 30.2.2 is applicable and that carry a current not exceeding 0,5 A 		N/A
	<ul style="list-style-type: none"> 30.2.3 is applicable and that carry a current not exceeding 0,2 A 		N/A
28.3	Space-threaded (sheet metal) screws only used for electrical connections if they clamp the parts together		N/A
	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/A
	Thread-cutting (self-tapping) screws not used if they are likely to be operated by the user or installer		N/A
	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:		N/A
	- in normal use,		N/A
	- during user maintenance,		N/A
	- when replacing a supply cord having a type X attachment, or		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	- during installation		N/A
	At least two screws being used for each connection providing earthing continuity, unless		N/A
	the screw forms a thread having a length of at least half the diameter of the screw		N/A
28.4	Screws and nuts that make mechanical connection secured against loosening if they also make electrical connections or connections providing earthing continuity		N/A
	This requirement does not apply to screws in the earthing circuit if at least two screws are used, or		N/A
	if an alternative earthing circuit is provided		N/A
	Rivets for electrical connections or connections providing earthing continuity secured against loosening if the connections are subjected to torsion		N/A
29	CLEARANCES, CREEPAGE DISTANCES AND SOLID INSULATION		P
	Clearances, creepage distances and solid insulation withstand electrical stress		P
	For coatings used on printed circuits boards to protect the microenvironment (Type 1) or to provide basic insulation (Type 2), Annex J applies		N/A
	The microenvironment is pollution degree 1 under type 1 protection		N/A
	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/A
	These values apply to functional, basic, supplementary and reinforced insulation.....		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
29.1	Clearances not less than the values specified in table 16, taking into account the rated impulse voltage for the overvoltage categories of table 15, unless..... :	(see appended table)	P
	for basic insulation and functional insulation they comply with the impulse voltage test of clause 14		N/A
	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/A
	For appliances intended for use at altitudes exceeding 2 000 m, the clearances in Table 16 is increased according to the relevant multiplier values in Table A.2 of IEC 60664-1		N/A
	Impulse voltage test is not applicable:		N/A
	- when the microenvironment is pollution degree 3, or		N/A
	- for basic insulation of class 0 and class 01 appliances, or		N/A
	- to appliances intended for use at altitudes exceeding 2 000 m		N/A
	Appliances are in overvoltage category II		P
	A force of 2 N is applied to bare conductors, other than heating elements		P
	A force of 30 N is applied to accessible surfaces		P
29.1.1	Clearances of basic insulation withstand the overvoltages, taking into account the rated impulse voltage		N/A
	The values of table 16 or the impulse voltage test of clause 14 are applicable..... :	(see appended table)	N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	Clearance at the terminals of tubular sheathed heating elements may be reduced to 1,0 mm if the microenvironment is pollution degree 1		N/A
	Lacquered conductors of windings considered to be bare conductors		N/A
29.1.2	Clearances of supplementary insulation not less than those specified for basic insulation in table 16 :	(see appended table)	P
29.1.3	Clearances of reinforced insulation not less than those specified for basic insulation in table 16, using the next higher step for rated impulse voltage..... :	(see appended table)	P
	For double insulation, with no intermediate conductive part between basic and supplementary insulation, clearances are measured between live parts and the accessible surface, and the insulation system is treated as reinforced insulation		P
29.1.4	Clearances for functional insulation are the largest values determined from:		P
	- table 16 based on the rated impulse voltage :	(see appended table)	P
	- table F.7a in IEC 60664-1, frequency not exceeding 30 kHz		N/A
	- clause 4 of IEC 60664-4, frequency exceeding 30 kHz		N/A
	If values of table 16 are largest, the impulse voltage test of clause 14 may be applied instead, unless		N/A
	the microenvironment is pollution degree 3, or		P
	the distances can be affected by wear, distortion, movement of the parts or during assembly		N/A
	However, clearances are not specified if the appliance complies with clause 19 with the functional insulation short-circuited		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	Lacquered conductors of windings considered to be bare conductors		N/A
	However, clearances at crossover points are not measured		N/A
	Clearance between surfaces of PTC heating elements may be reduced to 1mm		N/A
29.1.5	Appliances having higher working voltages than rated voltage, clearances for basic insulation are the largest values determined from:		N/A
	- table 16 based on the rated impulse voltage :		N/A
	- table F.7a in IEC 60664-1, frequency not exceeding 30 kHz		N/A
	- clause 4 of IEC 60664-4, frequency exceeding 30 kHz		N/A
	If clearances for basic insulation are selected from Table F.7a of IEC 60664-1 or Clause 4 of IEC 60664-4, the clearances of supplementary insulation are not less than those specified for basic insulation		N/A
	If clearances for basic insulation are selected from Table F.7a of IEC 60664-1, the clearances of reinforced insulation dimensioned as specified in Table F.7a are to withstand 160% of the withstand voltage required for basic insulation		N/A
	If clearances for basic insulation are selected from Clause 4 of IEC 60664-4, the clearances of reinforced insulation are twice the value required for basic insulation		N/A
	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/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	Circuits supplied with a voltage lower than rated voltage, clearances of functional insulation are based on the working voltage used as the rated voltage in table 15		N/A
29.2	Creepage distances not less than those appropriate for the working voltage, taking into account the material group and the pollution degree..... :	(see appended table)	P
	Pollution degree 2 applies, unless		N/A
	- precautions taken to protect the insulation; pollution degree 1		N/A
	- insulation subjected to conductive pollution; pollution degree 3		P
	The microenvironment is pollution degree 3 if the insulation can be polluted by condensation from steam produced during normal use of the appliance (IEC 60335-2-15)		N/A
	A force of 2 N is applied to bare conductors, other than heating elements		N/A
	A force of 30 N is applied to accessible surfaces		P
	In a double insulation system, the working voltage for both the basic and supplementary insulation is taken as the working voltage across the complete double insulation system		P
29.2.1	Creepage distances of basic insulation not less than specified in table 17..... :	(see appended table)	N/A
	However, if the working voltage is periodic and has a frequency exceeding 30 kHz, the creepage distances are also determined from table 2 of IEC 60664-4, these values being used if exceeding the values in table 17..... :		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	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/A
29.2.2	Creepage distances of supplementary insulation at least those specified for basic insulation in table 17, or..... :	(see appended table)	P
	Table 2 of IEC 60664-4, as applicable..... :		N/A
29.2.3	Creepage distances of reinforced insulation at least double those specified for basic insulation in table 17, or..... :	(see appended table)	P
	Table 2 of IEC 60664-4, as applicable..... :		N/A
29.2.4	Creepage distances of functional insulation not less than specified in table 18..... :		N/A
	However, if the working voltage is periodic and has a frequency exceeding 30 kHz, the creepage distances are also determined from table 2 of IEC 60664-4, these values being used if exceeding the values in table 18..... :		N/A
	Creepage distances may be reduced if the appliance complies with clause 19 with the functional insulation short-circuited		N/A
29.3	Supplementary and reinforced insulation have adequate thickness, or a sufficient number of layers, to withstand the electrical stresses		P
	Compliance checked:		P
	- by measurement, in accordance with 29.3.1, or		P
	- by an electric strength test in accordance with 29.3.2, or		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	- 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/A
	for accessible parts of reinforced insulation consisting of a single layer, by measurement in accordance with 29.3.4, or		N/A
	- 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/A
	- as specified in subclause 6.3 of IEC 60664-4 for insulation that is subjected to any periodic voltage having a frequency exceeding 30 kHz		N/A
29.3.1	Supplementary insulation have a thickness of at least 1 mm		P
	Reinforced insulation have a thickness of at least 2 mm		P
29.3.2	Each layer of material withstand the electric strength test of 16.3 for supplementary insulation		N/A
	Supplementary insulation consist of at least 2 layers		N/A
	Reinforced insulation consist of at least 3 layers		N/A
29.3.3	The insulation is subjected to the dry heat test Bb of IEC 60068-2-2, followed by		N/A
	the electric strength test of 16.3		N/A
	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/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
29.3.4	Thickness of accessible parts of reinforced insulation consisting of a single layer not less than specified in table 19.....:		N/A
30	RESISTANCE TO HEAT AND FIRE		P
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).....:	(see appended table 30.1)	P
	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/A
	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/A
	For coffee makers, egg boilers, kettles and steam cookers, the temperature rises occurring during the tests of 19.4, 19.5 and 19.101 are not taken into account (IEC 60335-2-15)		N/A
30.2	Parts of non-metallic material resistant to ignition and spread of fire		P
	This requirement does not apply to:		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	parts having a mass not exceeding 0,5 g, provided the cumulative effect is unlikely to propagate flames that originate inside the appliance by propagating flames from one part to another, or		N/A
	decorative trims, knobs and other parts unlikely to be ignited or to propagate flames that originate inside the appliance		N/A
	Compliance checked by the test of 30.2.1, and in addition:		P
	- for attended appliances, 30.2.2 applies		N/A
	- for unattended appliances, 30.2.3 applies		N/A
	For appliances for remote operation, 30.2.3 applies		N/A
	For base material of printed circuit boards, 30.2.4 applies		N/A
	For water distillers, appliances incorporating a delayed start timer and appliances intended to maintain liquid or food at a particular temperature, 30.2.3 applies (IEC 60335-2-15)		N/A
	For other appliances, 30.2.2 applies (IEC 60335-2-15:2002)		P
30.2.1	Parts of non-metallic material subjected to the glow-wire test of IEC 60695-2-11 at 550°C	(see appended table 30.2)	P
	However, test not carried out if the material is classified as having a glow-wire flammability index according to IEC 60695-2-12 of at least 550 °C, or		N/A
	the material is classified at least HB40 according to IEC 60695-11-10		N/A
	Parts for which the glow-wire test cannot be carried out need to meet the requirements in ISO 9772 for material classified HBF		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
30.2.2	Appliances operated while attended, parts of non-metallic material supporting current-carrying connections, and		N/A
	parts of non-metallic material within a distance of 3mm of such connections,		N/A
	subjected to the glow-wire test of IEC 60695-2-11 with appropriate severity level:		N/A
	- 750 °C, for connections carrying a current exceeding 0,5 A during normal operation		N/A
	- 650 °C, for other connections		N/A
	Glow-wire applied to an interposed shielding material, if relevant		N/A
	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:		N/A
	- 750 °C, for connections carrying a current exceeding 0,5 A during normal operation		N/A
	- 650 °C, for other connections		N/A
	The glow-wire test is also not carried out on small parts. These parts are to:		N/A
	- comprise material having a glow-wire flammability index of at least 750 °C, or 650 °C as appropriate, or		N/A
	- comply with the needle-flame test of Annex E, or	(see appended table 30.2/30.4)	N/A
	- comprise material classified as V-0 or V-1 according to IEC 60695-11-10.....:		N/A
	Glow-wire test not applicable to conditions as specified.....:		N/A
	30.2.3	Appliances operated while unattended, tested as specified in 30.2.3.1 and 30.2.3.2	
The tests are not applicable to conditions as specified.....:			N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
30.2.3.1	Parts of non-metallic material supporting connections carrying a current exceeding 0,2 A during normal operation, and		N/A
	parts of non-metallic material, other than small parts, within a distance of 3 mm,		N/A
	subjected to the glow-wire test of IEC 60695-2-11 with a test severity of 850 °C	(see appended table 30.2)	N/A
	Glow-wire applied to an interposed shielding material, if relevant		N/A
	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/A
30.2.3.2	Parts of non-metallic material supporting connections, and		N/A
	parts of non-metallic material within a distance of 3mm,		N/A
	subjected to the glow-wire test of IEC 60695-2-11 with appropriate severity level:	(see appended table 30.2)	N/A
	- 750 °C, for connections carrying a current exceeding 0,2 A during normal operation		N/A
	- 650 °C, for other connections		N/A
	Glow-wire applied to an interposed shielding material, if relevant		N/A
	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
	- a glow-wire ignition temperature according to IEC 60695-2-13 of at least:		N/A
	<ul style="list-style-type: none"> 775 °C, for connections carrying a current exceeding 0,2 A during normal operation 		N/A
	<ul style="list-style-type: none"> 675 °C, for other connections 		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	- a glow-wire flammability index according to IEC 60695-2-12 of at least:		N/A
	- 750 °C, for connections carrying a current exceeding 0,2 A during normal operation		N/A
	- 650 °C, for other connections		N/A
	The glow-wire test is also not carried out on small parts. These parts are to:		N/A
	- comprise material having a glow-wire ignition temperature of at least 775 °C or 675 °C as appropriate, or		N/A
	- comprise material having a glow-wire flammability index of at least 750 °C or 650 °C as appropriate, or		N/A
	- comply with the needle-flame test of Annex E, or		N/A
	- comprise material classified as V-0 or V-1 according to IEC 60695-11-10		N/A
	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/A
	- 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/A
	- parts that comprised material having a glow-wire flammability index of at least 750 °C or 650 °C as appropriate, or		N/A
	- small parts, that comprised material having a glow-wire flammability index of at least 750 °C or 650 °C as appropriate, or		N/A
	- small parts for which the needle-flame test of Annex E was applied, or		N/A
	- small parts for which a material classification of V-0 or V-1 was applied		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	However, the consequential needle-flame test is not carried out on non-metallic parts, including small parts, within the cylinder that are:		N/A
	- parts having a glow-wire ignition temperature of at least 775 °C or 675 °C as appropriate, or		N/A
	- parts comprising material classified as V-0 or V-1 according to IEC 60695-11-10, or		N/A
	- 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/A
30.2.4	Base material of printed circuit boards subjected to the needle-flame test of Annex E	(see appended table 30.2/30.4)	N/A
	Test not applicable to conditions as specified:		N/A
A	ANNEX A (INFORMATIVE) ROUTINE TESTS		N/A
	Description of routine tests to be carried out by the manufacturer		N/A
B	ANNEX B (NORMATIVE) APPLIANCES POWERED BY RECHARGEABLE BATTERIES THAT ARE RECHARGED IN THE APPLIANCE		N/A
	The following modifications to this standard are applicable for appliances powered by batteries that are recharged in the appliance		N/A
	Three forms of construction covered:		N/A
	a) Appliance supplied directly from the supply mains or a renewable energy source, the battery charging circuitry and other supply unit circuitry incorporated within the appliance		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	b) The part of the appliance incorporating the battery is supplied from the supply mains or a renewable energy source, via a detachable supply unit. The battery charging circuitry is incorporated within the part of the appliance containing the battery		N/A
	c) The part of the appliance incorporating the battery is supplied from the supply mains or a renewable energy source, via a detachable supply unit. The battery charging circuitry is incorporated within the detachable supply unit		N/A
3.1.9	Appliance operated under the following conditions:		N/A
	- the appliance, supplied by its fully charged battery, operated as specified in relevant part 2		N/A
	- the battery is charged, the battery being initially discharged to such an extent that the appliance cannot operate		N/A
	-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/A
	- 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/A
3.6.2	Part to be removed in order to discard the battery is not considered to be detachable		N/A
5.B.101	Appliances supplied from the supply mains tested as specified for motor-operated appliances		N/A
7.1	Battery compartment for batteries intended to be replaced by the user, marked with battery voltage (V) and polarity of the terminals..... :		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	The positive terminal indicated by symbol IEC 60417-5005 and the negative terminal by symbol IEC 60417-5006		N/A
	Appliances intending to be supplied from a detachable supply unit marked with symbol IEC 60417-6181 and its type reference along with symbol ISO 7000-0790 (2004-01), or		N/A
	use only with <model designation> supply unit:		N/A
7.6	Additional symbols		N/A
7.12	The instructions give information regarding charging		N/A
	The instructions for appliances incorporating batteries intended to be replaced by the user includes required information		N/A
	Details about how to remove batteries containing materials hazardous to the environment given		N/A
	For appliances intending to be supplied from a detachable supply unit for the purposes of recharging the battery, the type reference of the detachable supply unit is stated along with the following:		N/A
	WARNING: For the purposes of recharging the battery, only use the detachable supply unit provided with this appliance		N/A
	If the symbol for detachable supply unit is used, its meaning is explained		N/A
7.15	Markings placed on the part of the appliance connected to the supply mains		N/A
	The type reference of the detachable supply unit is placed in close proximity to the symbol		N/A
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/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	If the appliance can be operated without batteries, double or reinforced insulation required		N/A
11.7	The battery is charged for the period stated in the instructions or 24 h..... :		N/A
11.8	Temperature rise of the battery surface does not exceed the limit in the battery manufacturer's specification; measured (K); limit (K)..... :		N/A
	If no limit specified, the temperature rise does not exceed 20 K; measured (K) :		N/A
19.1	Appliances subjected to tests of 19.B.101, 19.B.102 and 19.B.103		N/A
19.10	Not applicable		N/A
19.B.101	Appliances supplied at rated voltage for 168 h, the battery being continually charged		N/A
19.B.102	For appliances having batteries that can be removed without the aid of a tool, short-circuit of the terminals of the battery, the battery being fully charged,		N/A
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/A
19.13	The battery does not rupture or ignite		N/A
21.B.101	Appliances having pins for insertion into socket-outlets have adequate mechanical strength		N/A
	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:		N/A
	- 100, if the mass of the part does not exceed 250 g (g)..... :		N/A
	- 50, if the mass of the part exceeds 250 g.... :		N/A
	After the test, the requirements of 8.1, 15.1.1, 16.3 and clause 29 are met		N/A

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EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
22.3	Appliances having pins for insertion into socket-outlets tested as fully assembled as possible		N/A
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/A
30.2	For parts of the appliance connected to the supply mains during the charging period, 30.2.3 applies		N/A
	For other parts, 30.2.2 applies		N/A
C	ANNEX C (NORMATIVE) AGEING TEST ON MOTORS		N/A
	Tests, as described, carried out when doubt with regard to the temperature classification of the insulation of a motor winding		N/A
	Test conditions as specified		N/A
	The value of p in Table C.1 is 2 000 (IEC 60335-2-15)		N/A
D	ANNEX D (NORMATIVE) THERMAL MOTOR PROTECTORS		N/A
	Applicable to appliances having motors that incorporate thermal motor protectors necessary for compliance with the standard		N/A
	Test conditions as specified		N/A
E	ANNEX E (NORMATIVE) NEEDLE-FLAME TEST		N/A
	Needle-flame test carried out in accordance with IEC 60695- 11-5, with the following modifications:		N/A
7	Severities		N/A
	The duration of application of the test flame is 30 s ± 1 s		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
9	Test procedure		N/A
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/A
9.2	The first paragraph does not apply		N/A
	If possible, the flame is applied at least 10 mm from a corner		N/A
9.3	The test is carried out on one specimen		N/A
	If the specimen does not withstand the test, the test may be repeated on two additional specimens, both withstanding the test		N/A
11	Evaluation of test results		N/A
	The duration of burning not exceeding 30 s		N/A
	However, for printed circuit boards, the duration of burning not exceeding 15 s		N/A
F	ANNEX F (NORMATIVE) CAPACITORS		N/A
	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/A
1.5	Terms and definitions		N/A
1.5.3	Class X capacitors tested according to subclass X2		N/A
1.5.4	This subclause is applicable		N/A
1.6	Marking		N/A
	Items a) and b) are applicable		N/A
3.4	Approval testing		N/A
3.4.3.2	Table 3 is applicable as described		N/A
4.1	Visual examination and check of dimensions		N/A
	This subclause is applicable		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
4.2	Electrical tests		N/A
4.2.1	This subclause is applicable		N/A
4.2.5	This subclause is applicable		N/A
4.2.5.2	Only table 11 is applicable		N/A
	Values for test A apply		N/A
	However, for capacitors in heating appliances the values for test B or C apply		N/A
4.12	Damp heat, steady state		N/A
	This subclause is applicable		N/A
	Only insulation resistance and voltage proof are checked		N/A
4.13	Impulse voltage		N/A
	This subclause is applicable		N/A
4.14	Endurance		N/A
	Subclauses 4.14.1, 4.14.3, 4.14.4 and 4.14.7 are applicable		N/A
4.14.7	Only insulation resistance and voltage proof are checked		N/A
	No visible damage		N/A
4.17	Passive flammability test		N/A
	This subclause is applicable		N/A
4.18	Active flammability test		N/A
	This subclause is applicable		N/A
G	ANNEX G (NORMATIVE) SAFETY ISOLATING TRANSFORMERS		N/A
	The following modifications to this standard are applicable for safety isolating transformers:		N/A
7	Marking and instructions		N/A
7.1	Transformers for specific use marked with:		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	-name, trademark or identification mark of the manufacturer or responsible vendor..... :		N/A
	-model or type reference..... :		N/A
17	Overload protection of transformers and associated circuits		N/A
	Fail-safe transformers comply with subclause 15.5 of IEC 61558-1		N/A
22	Construction		N/A
	Subclauses 19.1 and 19.1.2 of IEC 61558-2-6 are applicable		N/A
29	Clearances, creepage distances and solid insulation		N/A
29.1, 29.2, 29.3	The distances specified in items 2a, 2c and 3 in table 13 of IEC 61558-1 apply		N/A
	For insulated winding wires complying with subclause 19.12.3 of IEC 61558-1 there are no requirements for clearances or creepage distances		N/A
	For windings providing reinforced insulation, the distance specified in item 2c of table 13 of IEC 61558-1 is not assessed		N/A
	For safety isolating transformers subjected to periodic voltages with a frequency exceeding 30 kHz, the clearances, creepage distances and solid insulation values specified in IEC 60664-4 are applicable, if greater than the values specified in items 2a, 2c and 3 in table 13 of IEC 61558-1		N/A
H	ANNEX H (NORMATIVE) SWITCHES		N/A
	Switches comply with the following clauses of IEC 61058-1, as modified below:		N/A
	The tests of IEC 61058-1 carried out under the conditions occurring in the appliance		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	Before being tested, switches are operated 20 times without load		N/A
8	Marking and documentation		N/A
	Switches are not required to be marked		N/A
	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/A
13	Mechanism		N/A
	The tests may be carried out on a separate sample		N/A
15	Insulation resistance and dielectric strength		N/A
15.1	Not applicable		N/A
15.2	Not applicable		N/A
15.3	Applicable for full disconnection and micro-disconnection		N/A
17	Endurance		N/A
	Compliance is checked on three separate appliances or switches		N/A
	For 17.2.4.4, the number of cycles declared according to 7.1.4 is 10 000, unless		N/A
	otherwise specified in 24.1.3 of the relevant part 2 of IEC 60335.....:		N/A
	Switches for operation under no load and which can be operated only by a tool, and		N/A
	switches operated by hand that are interlocked so that they cannot be operated under load,		N/A
	are not subjected to the tests		N/A
	However, switches without this interlock are subjected to the test of 17.2.4.4 for 100 cycles of operation		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	Subclauses 17.2.2 and 17.2.5.2 not applicable		N/A
	The ambient temperature during the test is that occurring in the appliance during the test of Clause 11 in IEC 60335-1		N/A
	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/A
20	Clearances, creepage distances, solid insulation and coatings of rigid printed board assemblies		N/A
	Clause 20 is applicable to clearances across full disconnection and micro-disconnection		N/A
	It is also applicable to creepage distances for functional insulation, across full disconnection and micro-disconnection, as stated in Table 24		N/A
I	ANNEX I (NORMATIVE) MOTORS HAVING BASIC INSULATION THAT IS INADEQUATE FOR THE RATED VOLTAGE OF THE APPLIANCE		N/A
	The following modifications to this standard are applicable for motors having basic insulation that is inadequate for the rated voltage of the appliance:		N/A
8	Protection against access to live parts		N/A
8.1	Metal parts of the motor are considered to be bare live parts		N/A
11	Heating		N/A
11.3	The temperature rise of the body of the motor is determined instead of the temperature rise of the windings		N/A
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/A
16	Leakage current and electric strength		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
16.3	Insulation between live parts of the motor and its other metal parts is not subjected to the test		N/A
19	Abnormal operation		N/A
19.1	The tests of 19.7 to 19.9 are not carried out		N/A
19.1.101	Appliance operated at rated voltage with each of the following fault conditions:		N/A
	- short circuit of the terminals of the motor, including any capacitor incorporated in the motor circuit		N/A
	- short circuit of each diode of the rectifier		N/A
	- open circuit of the supply to the motor		N/A
	- open circuit of any parallel resistor, the motor being in operation		N/A
	Only one fault simulated at a time, the tests carried out consecutively		N/A
22	Construction		N/A
22.1.101	For class I appliances incorporating a motor supplied by a rectifier circuit, the d.c. circuit being insulated from accessible parts of the appliance by double or reinforced insulation		N/A
	Compliance checked by the tests specified for double and reinforced insulation		N/A
J	ANNEX J (NORMATIVE) COATED PRINTED CIRCUIT BOARDS		N/A
	Testing of protective coatings of printed circuit boards carried out in accordance with IEC 60664-3 with the following modifications:		N/A
5.7	Conditioning of the test specimens		N/A
	When production samples are used, three samples of the printed circuit board are tested		N/A
5.7.1	Cold		N/A
	The test is carried out at -25 °C		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
5.7.3	Rapid change of temperature		N/A
	Severity 1 is specified		N/A
5.9	Additional tests		N/A
	This subclause is not applicable		N/A
K	ANNEX K (NORMATIVE) OVERVOLTAGE CATEGORIES		P
	The information on overvoltage categories is extracted from IEC 60664-1		N/A
	Overvoltage category is a numeral defining a transient overvoltage condition		N/A
	Equipment of overvoltage category IV is for use at the origin of the installation		N/A
	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/A
	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/A
	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/A
L	ANNEX L (INFORMATIVE) GUIDANCE FOR THE MEASUREMENT OF CLEARANCES AND CREEPAGE DISTANCES		P
	Information for the determination of clearances and creepage distances		P

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
M	ANNEX M (NORMATIVE) POLLUTION DEGREE		P
	The information on pollution degrees is extracted from IEC 60664-1		P
	Pollution		P
	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		P
	For evaluating creepage distances, the following degrees of pollution in the microenvironment are established:		P
	- pollution degree 1: no pollution or only dry, non-conductive pollution occurs. The pollution has no influence		N/A
	- pollution degree 2: only non-conductive pollution occurs, except that occasionally a temporary conductivity caused by condensation is to be expected		N/A
	- pollution degree 3: conductive pollution occurs or dry non-conductive pollution occurs that becomes conductive due to condensation that is to be expected		P
	- pollution degree 4: the pollution generates persistent conductivity caused by conductive dust or by rain or snow		N/A
N	ANNEX N (NORMATIVE) PROOF TRACKING TEST		N/A
	The proof tracking test is carried out in accordance with IEC 60112 with the following modifications:		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
7	Test apparatus		N/A
7.3	Test solutions		N/A
	Test solution A is used		N/A
10	Determination of proof tracking index (PTI)		N/A
10.1	Procedure		N/A
	The proof voltage is 100V, 175V, 400V or 600V :		N/A
	The test is carried out on five specimens		N/A
	In case of doubt, additional test with proof voltage reduced by 25V, the number of drops increased to 100		N/A
10.2	Report		N/A
	The report states if the PTI value was based on a test using 100 drops with a test voltage of (PTI-25) V		N/A
O	ANNEX O (INFORMATIVE) SELECTION AND SEQUENCE OF THE TESTS OF CLAUSE 30		P
	Description of tests for determination of resistance to heat and fire		P
P	ANNEX P (INFORMATIVE) GUIDANCE FOR THE APPLICATION OF THIS STANDARD TO APPLIANCES USED IN WARM DAMP EQUABLE CLIMATES		N/A
	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		N/A
	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		N/A
5.7	The ambient temperature for the tests of clauses 11 and 13 is 40 +3/0 °C		N/A
7.1	The appliance marked with the letters WDaE		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
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/A
	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/A
11.8	The values of Table 3 are reduced by 15 K		N/A
13.2	The leakage current for class I appliances not exceeding 0,5 mA		N/A
15.3	The value of t is 37 °C		N/A
16.2	The leakage current for class I appliances not exceeding 0,5 mA (mA):		N/A
19.13	The leakage current test of 16.2 is applied in addition to the electric strength test of 16.3		N/A
Q	ANNEX Q (INFORMATIVE) SEQUENCE OF TESTS FOR THE EVALUATION OF ELECTRONIC CIRCUITS		N/A
	Description of tests for appliances incorporating electronic circuits		N/A
R	ANNEX R (NORMATIVE) SOFTWARE EVALUATION		N/A
	Programmable electronic circuits requiring software incorporating measures to control the fault/error conditions specified in table R.1 or R.2 validated in accordance with the requirements of this annex		N/A
R.1	Programmable electronic circuits using software		N/A
	Programmable electronic circuits requiring software incorporating measures to control the fault/error conditions specified in table R.1 or R.2 constructed so that the software does not impair compliance with the requirements of this standard		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
R.2	Requirements for the architecture		N/A
	Programmable electronic circuits requiring software incorporating measures to control the fault/error conditions specified in table R.1 or R.2 use measures to control and avoid software-related faults/errors in safety-related data and safety-related segments of the software		N/A
R.2.1.1	Programmable electronic circuits requiring software incorporating measures to control the fault/error conditions specified in table R.2 have one of the following structures:		N/A
	- single channel with periodic self-test and monitoring		N/A
	- dual channel (homogenous) with comparison		N/A
	- dual channel (diverse) with comparison		N/A
	Programmable electronic circuits requiring software incorporating measures to control the fault/error conditions specified in table R.1 have one of the following structures:		N/A
	- single channel with functional test		N/A
	- single channel with periodic self-test		N/A
	- dual channel without comparison		N/A
R.2.2	Measures to control faults/errors		N/A
R.2.2.1	When redundant memory with comparison is provided on two areas of the same component, the data in one area is stored in a different format from that in the other area		N/A
R.2.2.2	Programmable electronic circuits with functions requiring software incorporating measures to control the fault/error conditions specified in table R.2 and that use dual channel structures with comparison, have additional fault/error detection means for any fault/errors not detected by the comparison		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
R.2.2.3	For programmable electronic circuits with functions requiring software incorporating measures to control the fault/error conditions specified in table R.1 or R.2, means are provided for the recognition and control of errors in transmissions to external safety-related data paths		N/A
R.2.2.4	For programmable electronic circuits with functions requiring software incorporating measures to control the fault/error conditions specified in table R.1 or R.2, the programmable electronic circuits incorporate measures to address the fault/errors in safety-related segments and data indicated in table R.1 and R.2 as appropriate		N/A
R.2.2.5	For programmable electronic circuits with functions requiring software incorporating measures to control the fault/error conditions specified in table R.1 or R.2, detection of a fault/error occur before compliance with clause 19 is impaired		N/A
R.2.2.6	The software is referenced to relevant parts of the operating sequence and the associated hardware functions		N/A
R.2.2.7	Labels used for memory locations are unique		N/A
R.2.2.8	The software is protected from user alteration of safety-related segments and data		N/A
R.2.2.9	Software and safety-related hardware under its control is initialized and terminates before compliance with clause 19 is impaired		N/A
R.3	Measures to avoid errors		N/A
R.3.1	General		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	For programmable electronic circuits with functions requiring software incorporating measures to control the fault/error conditions specified in table R.1 or R.2, the following measures to avoid systematic fault in the software are applied		N/A
	Software that incorporates measures used to control the fault/error conditions specified in table R.2 is inherently acceptable for software required to control the fault/error conditions specified in table R.1		N/A
R.3.2	Specification		N/A
R.3.2.1	Software safety requirements:	Software Id:	N/A
	The specification of the software safety requirements includes the descriptions listed		N/A
R.3.2.2	Software architecture		N/A
R.3.2.2.1	The specification of the software architecture includes the aspects listed - techniques and measures to control software faults/errors (refer to R.2.2); - interactions between hardware and software; - partitioning into modules and their allocation to the specified safety functions; - hierarchy and call structure of the modules (control flow); - interrupt handling; - data flow and restrictions on data access; - architecture and storage of data; - time-based dependencies of sequences and data	Document ref. No:	N/A
R.3.2.2.2	The architecture specification is validated against the specification of the software safety requirements by static analysis		N/A
R.3.2.3	Module design and coding		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
R.3.2.3.1	Based on the architecture design, software is suitably refined into modules		N/A
	Software module design and coding is implemented in a way that is traceable to the software architecture and requirements		N/A
R.3.2.3.2	Software code is structured		N/A
R.3.2.3.3	Coded software is validated against the module specification by static analysis		N/A
	The module specification is validated against the architecture specification by static analysis		N/A
R.3.3.3	Software validation		N/A
	The software is validated with reference to the requirements of the software safety requirements specification		N/A
	Compliance is checked by simulation of:		N/A
	- input signals present during normal operation		N/A
	- anticipated occurrences		N/A
	- undesired conditions requiring system action		N/A

TABLE R.1^e – GENERAL FAULT/ERROR CONDITIONS

Component ^a	Fault/error or	Acceptable measures ^{b, c}	Definitions	Document reference for applied measure	Document reference for applied test	Ver-dict

EN 60335-1&EN 60335-2-15						
Clause	Requirement – Test			Result - Remark		Verdict
1 CPU 1.1 Registers	Stuck at	Functional test, or periodic self-test using either: - static memory test, or - word protection with single bit redundancy	H.2.16.5 H.2.16.6 H.2.19.6 H.2.19.8.2			N/A
1.2 VOID						N/A
1.3 Programme counter	Stuck at	Functional test, or Periodic self-test, or Independent time-slot monitoring, or Logical monitoring of the programme sequence	H.2.16.5 H.2.16.6 H.2.18.10. 4 H.2.18.10. 2			N/A
2 Interrupt handling and execution	No interrupt or too frequent interrupt	Functional test, or time-slot monitoring	H.2.16.5 H.2.18.10. 4			N/A

EN 60335-1&EN 60335-2-15						
Clause	Requirement – Test			Result - Remark		Verdict
3 Clock	Wrong frequency (for quartz synchronized clock: harmonics/ sub-harmonics only)	Frequency monitoring, or time slot monitoring	H.2.18.10.1 H.2.18.10.4			N/A
4. Memory 4.1 Invariable memory	All single bit faults	Periodic modified checksum, or multiple checksum, or word protection with single bit redundancy	H.2.19.3.1 H.2.19.3.2 H.2.19.8.2			N/A
4.2 Variable memory	DC fault	Periodic static memory test, or word protection with single bit redundancy	H.2.19.6 H.2.19.8.2			N/A
4.3 Addressing (relevant to variable and invariable memory)	Stuck at	Word protection with single bit redundancy including the address	H.2.19.8.2			N/A
5 Internal data path	Stuck at	Word protection with single bit redundancy	H.2.19.8.2			N/A
5.1 VOID						N/A
5.2 Addressing	Wrong address	Word protection with single bit redundancy including the address	H.2.19.8.2			N/A

EN 60335-1&EN 60335-2-15						
Clause	Requirement – Test			Result - Remark		Verdict
6 External communication	Hamming distance 3	Word protection with multi-bit redundancy, or CRC – single work, or Transfer redundancy, or Protocol test	H.2.19.8.1 H.2.19.4.1 H.2.18.2.2 H.2.18.14			N/A
6.1 VOID						N/A
6.2 VOID						N/A
6.3 Timing	Wrong point in time Wrong sequence	Time-slot monitoring, or scheduled transmission Time-slot and logical monitoring, or comparison of redundant communication channels by either: - reciprocal comparison - independent hardware comparator Logical monitoring, or time-slot monitoring, or Scheduled transmission	H.2.18.10.4 H.2.18.18 H.2.18.10.3 H.2.18.15 H.2.18.3 H.2.18.10.2 H.2.18.10.4 H.2.18.18			N/A
7 Input/output periphery	Fault conditions specified in 19.11.2	Plausibility check	H.2.18.13			N/A
7.1 VOID						N/A

EN 60335-1&EN 60335-2-15						
Clause	Requirement – Test			Result - Remark		Verdict
7.2 Analog I/O 7.2.1 A/D and D/A-converter	Fault conditions specified in 19.11.2	Plausibility check	H.2.18.13			N/A
7.2.2 Analog multiplexer	Wrong addressing	Plausibility check	H.2.18.13			N/A
8 VOID						N/A
9 Custom chips ^d e.g. ASIC, GAL, gate array	Any output outside the static and dynamic functional specification	Periodic self-test	H.2.16.6			N/A
NOTE A Stuck-at fault model denotes a fault model representing an open circuit or a non-varying signal level. A DC fault model denotes a stuck-at fault model incorporating short circuit between signal lines.						
a) For fault/error assessment, some components are divided into their sub-functions. b) For each sub-function in the table, the Table R.2 measure will cover the software fault/error. c) Where more than one measure is given for a sub-function, these are alternatives. d) To be divided as necessary by the manufacturer into sub-functions. e) Table R.1 is applied according to the requirements of R.1 to R.2.2.9 inclusive.						
S	ANNEX S (NORMATIVE) BATTERY OPERATED APPLIANCES POWERED BY BATTERIES THAT ARE NON-RECHARGEABLE OR NOT RECHARGED IN THE APPLIANCE					N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	The following modifications to this standard are applicable for battery-operated appliances where the batteries are either non-rechargeable (primary batteries), or		N/A
	rechargeable batteries (secondary batteries) that are not recharged in the appliance		N/A
5.8.1	If the supply terminals for the connection of the battery have no indication of polarity, the more unfavourable polarity is applied		N/A
5.S.101	Appliances intended for use with a battery box are tested with the battery box supplied with the appliance or with the battery box recommended in the instructions		N/A
5.S.102	Appliances are tested as motor-operated appliances.		N/A
7.1	Appliances marked with the battery voltage (V) and the polarity of the terminals, unless..... :		N/A
	the polarity is irrelevant		N/A
	Appliances also marked with:		N/A
	– name, trade mark or identification mark of the manufacturer or responsible vendor..... :		N/A
	– model or type reference..... :		N/A
	– IP number according to degree of protection against ingress of water, other than IPX0..... :		N/A
	– type reference of battery or batteries..... :		N/A
	If relevant, the positive terminal is indicated by the symbol IEC 60417-5005 and the negative terminal by the symbol IEC 60417-5006		N/A
	If appliances use more than one battery, they are marked to indicate correct polarity connection of the batteries		N/A
7.6	Additional symbols		N/A
7.12	The instructions contain the following, as applicable:		N/A

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EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
	– the types of batteries that may be used..... :		N/A
	– how to remove and insert the batteries		N/A
	– non-rechargeable batteries are not to be recharged		N/A
	– rechargeable batteries are to be removed from the appliance before being charged		N/A
	– different types of batteries or new and used batteries are not to be mixed		N/A
	– batteries are to be inserted with the correct polarity		N/A
	– exhausted batteries are to be removed from the appliance and safely disposed of		N/A
	– if the appliance is to be stored unused for a long period, the batteries are removed		N/A
	– the supply terminals are not to be short-circuited		N/A
11.5	Appliances are supplied with the most unfavourable supply voltage between		N/A
	– 0,55 and 1,0 times the battery voltage, if the appliance can be used with non-rechargeable batteries		N/A
	– 0,75 and 1,0 times battery voltage, if the appliance is designed for use with rechargeable batteries only		N/A
	The values specified in Table S.101 for the internal resistance per cell of the battery is taken into account		N/A
19.1	The tests are carried out with the battery fully charged unless otherwise specified		N/A
19.13	The battery does not rupture or ignite		N/A

EN 60335-1&EN 60335-2-15			
Clause	Requirement – Test	Result - Remark	Verdict
19.S.101	Appliances are supplied with the voltage specified in 11.5. The supply terminals having an indication of polarity are connected to the opposite polarity, unless		N/A
	such a connection is unlikely to occur due to the construction of the appliance		N/A
19.S.102	For appliances with provision for multiple batteries, one or more of the batteries are reversed and the appliance is operated, if reversal of batteries is allowed by the construction		N/A
25.5	The flexible leads or flexible cord used to connect an external battery or battery box in is connected to the appliance by a type X attachment		N/A
25.13	This requirement is not applicable to the flexible leads or flexible cord connecting external batteries or a battery box with an appliance		N/A
25.S.101	Appliances have suitable means for connection of the battery. If the type of battery is marked on the appliance, the means of connection is suitable for this type of battery		N/A
26.5	Terminal devices in an appliance for the connection of the flexible leads or flexible cord connecting an external battery or battery box are so located or shielded that there is no risk of accidental connection between supply terminals		N/A
30.2.3.2	There is no battery in the area of the vertical cylinder used for the consequential needle flame test, unless		N/A
	the battery is shielded by a barrier that meets the needle flame test of Annex E, or		N/A
	that comprises material classified as V-0 or V-1 according to IEC 60695-11-10		N/A

10.1	TABLE: Power input deviation					P
Input deviation of/at:	P rated (W)	P measured (W)	ΔP (W, %)	Required ΔP (W, %)	Remark	
110V/50Hz	60	65.3	+8.83%	+10%/-10%	--	
110V/60Hz	60	65.3	+8.83%	+10%/-10%	--	
230V/50Hz	60	63.3	+5.50%	+10%/-10%	--	
230V/60Hz	60	63.3	+5.50%	+10%/-10%	--	
250V/50Hz	60	59.1	-1.50%	+10%/-10%	--	
250V/60Hz	60	59.1	-1.50%	+10%/-10%	--	
DC 12V	60	64.2	+7.00%	+10%/-10%	--	
DC 24V	60	63.7	+6.17%	+10%/-10%	--	
Supplementary information:						

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

11.8	TABLE: Heating test, thermocouples (For AC power supply)			P
	Test voltage or power (V/W)..... :	25.8V(1.15x60W)		—
	Ambient (°C)..... :	t1: 24.2°C, t2: 24.1°C		—
	Thermocouple locations	dT (K)	Max. dT (K)	
	Inside the DC input port	55.9	Ref	
	Outside the DC input port	21.0	45	
	Internal wire near PTC	125.0	T200-25=175	
	PTC	103.5	Ref	
	Plastic enclosure near PTC (inside)	38.3	Cl.30	
	Plastic enclosure near PTC (outside)	23.0	50	
	Test corner	10.9	65	

11.8	TABLE: Heating test, thermocouples (For DC power supply)			P
------	--	--	--	---

	Test voltage or power (V/W)..... :	259.1V(1.15x60W)	—
	Ambient (°C)..... :	t1: 24.2°C, t2: 24.1°C	—
Thermocouple locations	dT (K)	Max. dT (K)	
Inside the AC input port	60.1	Ref	
Outside the AC input port	35.8	45	
Internal wire near PTC	131.0	T180-25=155	
PTC	109.7	Ref	
Plastic enclosure near PTC (inside)	41.4	Cl.30	
Plastic enclosure near PTC (outside)	27.2	50	
Test corner	13.9	65	

11.8	TABLE: Heating test, resistance method				N/A
	Test voltage (V) :		--		—
	Ambient, t1 (°C) :		--		—
	Ambient, t2 (°C) :		--		—
Temperature of winding	R1 (Ω)	R2 (Ω)	ΔT (K)	Max. dT (K)	Insulation class

13.2	TABLE: Leakage current				P
	Heating appliances: 1.15 x rated input..... :	1.15x60W			—
	Motor-operated and combined appliances: 1,06 x rated voltage..... :	--			—
Leakage current between		I (mA)	Max. allowed I (mA)		
L/N & accessible plastic enclosure		0.034	0.35		

13.3	TABLE: Electric strength			P
Test voltage applied between:		Voltage (V)	Breakdown (Yes/No)	
Live parts and accessible plastic enclosure		3000	No	

14	TABLE: Transient overvoltages			N/A
----	-------------------------------	--	--	-----

Clearance between:	CI (mm)	Required CI (mm)	Rated impulse voltage (V)	Impulse test voltage (V)	Flashover (Yes/No)
--	--	--	--	--	--

16.2	TABLE: Leakage current			P
	Single phase appliances: 1,06 x rated voltage.....:		250V*1.06	—
	Three phase appliances 1,06 x rated voltage divided by $\sqrt{3}$:		--	—
Leakage current between			I (mA)	Max. allowed I (mA)
Live parts and accessible plastic enclosure			0.041	0.25

16.3	TABLE: Electric strength		P
Test voltage applied between:	Voltage (V)		Breakdown (Yes/No)
Live parts and accessible enclosure	3000		No

17	TABLE: Overload protection, thermocouple measurements			N/A
Temperature rise of part/at:	ΔT (K)		Max. ΔT (K)	
--	--		--	
Supplementary information:				

17	TABLE: Overload protection, resistance method					N/A
Test voltage (V):	--					—
Ambient, t1 (°C):	--					—
Ambient, t2 (°C):	--					—
Temperature of winding	R1 ((Ω))	R2 ((Ω))	ΔT (K)	T (°C)	Max. T (°C)	
--	--	--	--	--	--	
Supplementary information:						

19	Abnormal operation conditions		P
Operational characteristics	YES/NO	Operational conditions	
Are there electronic circuits to control the	NO	--	

appliance operation?							
Are there "off" or "stand-by" position?		NO		--			
The unintended operation of the appliance results in dangerous malfunction?		NO		--			
Sub-clause	Operating conditions description	Test results description	PEC description	EMP 19.11.4	Software type required	19.11.3 PEC	Final result
19.2	Ref to Cl.19.2	No hazards	N/A	N/A	N/A	N/A	P
19.3	Ref to Cl.19.3	No hazards	N/A	N/A	N/A	N/A	P
19.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19.6	Ref to Cl.19.6	No hazards	N/A	N/A	N/A	N/A	P
19.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19.10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19.11.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19.11.4.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19.101	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Supplementary information:							

19.7	TABLE: Abnormal operation, locked rotor/moving parts					N/A
	Test voltage (V):				—	—
	Ambient, t1 (°C):				—	—
	Ambient, t2 (°C):				—	—
Temperature of winding		R1 (Ω)	R2 (Ω)	ΔT (K)	T (°C)	Max. T (°C)
—		—	—	—	—	—
Supplementary information:						

19.9	TABLE: Abnormal operation, running overload	N/A
-------------	--	-----

Test voltage (V)..... :		—	—
Ambient, t1 (°C)..... :		—	—
Ambient, t2 (°C)..... :		—	—
Temperature of winding	R1 (Ω)	R2 (Ω)	dT (K)
—	—	—	—
—	—	—	—

19.13	TABLE: Abnormal operation, temperature rises (For AC supply)			P
Thermocouple locations:	Max. temperature rise measured, Δ T (K)			Max. temperature rise limit, Δ T (K)
	19.2	19.3	19.6	
Inside the AC input port	59.9	60.6	61.2	Ref
Outside the AC input port	35.2	35.5	36.1	Cl.30
Plastic enclosure near PTC (inside)	42.1	41.5	43.4	Ref
Plastic enclosure near PTC (outside)	25.2	27.5	28.8	Ref
Test corner	22.9	23.0	24.6	150
Ambient temperature (°C)	25.0(23.9°C)	25.0(24.1°C)	25.0(24.0°C)	---
Supplementary information:				

19.13	TABLE: Abnormal operation, temperature rises (For DC supply)			P
Thermocouple locations:	Max. temperature rise measured, Δ T (K)			Max. temperature rise limit, Δ T (K)
	19.2	19.3	19.6	
Inside the DC input port	31.2	21.3	21.7	Ref
Outside the DC input port	55.5	56.5	56.9	Cl.30
Plastic enclosure near PTC (inside)	38.0	37.2	37.5	Ref
Plastic enclosure near PTC (outside)	21.0	23.2	23.4	Ref
Ambient temperature (°C)	25.0(23.9°C)	25.0(24.1°C)	25.0(24.2°C)	---
Supplementary information:				

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21.1	TABLE: Impact resistance			P
Impacts per surface	Surface tested	Impact energy (J)	Comments	
Three times	Enclosure	0.5J	P	
Supplementary information:				

TABLE: Components information					P
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity
Power cord	ZHONG SHAN COLON	H03VVH2-F	2×0.5mm ²	DIN EN 50525-2-11	VDE 40042876
Power plug(EU)	HONGCHEN	HC-68	AC 250V, 2.5A	DIN VDE 0620-1 EN 50075	DEKRA 433624200
Appliance connector	HUAN QIU	CB201	AC 110 V, 2.5A	IEC/EN 60320-1	VDE 40026949
AC inlet	Yueqing Lihe Electronics Co.,Ltd.	LH-8	AC 250 V, 2.5A	IEC/EN 60320-1	VDE 40048401
Plastic enclosure of charger	SABIC INNOVATIVE PLASTICS US LLC	945(GG)	V-0, 120°C	UL 94	UL E121562
Enclosure	LOTTE CHEMICAL CORPORATION	AN-3805	PC, V-0, min. Thickness:2.0mm	UL 94	Tested with appliance UL E85371
Heat Shrink Tube	Interchangeable	Interchangeable	Min. 300V, min. 125°C, VW-1	UL 224	Tested with appliance UL

Internal wire for heating element	DONG GUAN SHENG PAI ELECTRIC WIRE & CABLE CO LTD	1332	Min. 300V, 200°C 24AWG	UL 758	Tested with appliance UL E347603
Alternative	GUANGDONG RIZHAN HIGH TEMPERATUR E WIRE CO.,LTD	1332	Min. 300V, 200°C 24AWG	UL 758	Tested with appliance UL E353571
Alternative	ZHONGSHAN CITY DINGXIANG ELECTRICAL CO LTD	1332	Min. 300V, 200°C 24AWG	UL 758	Tested with appliance UL E354487
insulating sleeve	JIANGYIN HUAYUE ELECTRICAL MATERIAL CO LTD	SR	200°C ,600 V	UL 224	E253008
Thermal fuse	SHANGHAI XINYUAN ELECTRONIC S CO LTD	RY121	10A 250VAC	UL 60691	ULE362696
Supplementary information: 1) Provided evidence ensures the agreed level of compliance. See OD-CB2039. 2) License available upon request					

28.1	TABLE: Threaded part torque test			P
Threaded part identification	Diameter of thread (mm)	Column number (I, II, or III)	Applied torque (Nm)	
Screws inside the lunch box	3.10	II	0.6	
Supplementary information:				

29.1	TABLE: Clearances			P
	Overvoltage category:	II		—

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Rated impulse voltage (V):	Min. cl (mm)	Type of insulation:				Verdict / Remark
		Basic (mm)	Supplementary (mm)	Reinforced (mm)	Functional (mm)	
330	0,2* / 0,5 / 0,8**	--	--	--	--	N/A
500	0,2* / 0,5 / 0,8**	--	--	--	--	N/A
800	0,2* / 0,5 / 0,8**	--	--	--	--	N/A
1 500	0,5 / 0,8** / 1,0***	--	--	--	--	N/A
2 500	1,5 / 2,0***	--	>3.5	—	>3.5	P
4 000	3,0 / 3,5***	--	--	>6.0mm	--	P
6 000	5,5 / 6,0***	--	--	--	--	N/A
8 000	8,0 / 8,5***	--	--	--	--	N/A
10 000	11,0 / 11,5***	--	--	--	--	N/A

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

29.2	TABLE: Creepage distances, basic, supplementary and reinforced insulation										P	
Working voltage (V)	Creepage distance (mm)							Type of insulation				Verdict
	Pollution degree											
	1	2			3							
	Material group				Material group							
		I	II	IIIa/III b	I	II	IIIa/III b*)	B**)	S**)	R**)		
≤50	0,18	0,6	0,85	1,2	1,5	1,7	1,9	—	—	—	N/A	
≤50	0,18	0,6	0,85	1,2	1,5	1,7	1,9	—	—	—	N/A	
≤50	0,36	1,2	1,7	2,4	3,0	3,4	3,8	—	—	—	N/A	
125	0,28	0,75	1,05	1,5	1,9	2,1	2,4	—	—	—	N/A	
125	0,28	0,75	1,05	1,5	1,9	2,1	2,4	—	—	—	N/A	
125	0,56	1,5	2,1	3,0	3,8	4,2	4,8	—	—	—	N/A	
250	0,56	1,25	1,8	2,5	3,2	3,6	4,0	--	—	—	N/A	

250	0,56	1,25	1,8	2,5	3,2	3,6	4,0	—	>2. 4	—	P
250	1,12	2,5	3,6	5,0	6,4	7,2	8,0	—	—	>4. 8	P
400	1,0	2,0	2,8	4,0	5,0	5,6	6,3	—	—	—	N/A
400	1,0	2,0	2,8	4,0	5,0	5,6	6,3	—	—	—	N/A
400	2,0	4,0	5,6	8,0	10,0	11,2	12,6	—	—	—	N/A
500	1,3	2,5	3,6	5,0	6,3	7,1	8,0	—	—	—	N/A
500	1,3	2,5	3,6	5,0	6,3	7,1	8,0	—	—	—	N/A
500	2,6	5,0	7,2	10,0	12,6	14,2	16,0	—	—	—	N/A
>630 and ≤800	1,8	3,2	4,5	6,3	8,0	9,0	10,0	—	—	—	N/A
>630 and ≤800	1,8	3,2	4,5	6,3	8,0	9,0	10,0	—	—	—	N/A
>630 and ≤800	3,6	6,4	9,0	12,6	16,0	18,0	20,0	—	—	—	N/A
>800 and ≤1000	2,4	4,0	5,6	8,0	10,0	11,0	12,5	—	—	—	N/A
>800 and ≤1000	2,4	4,0	5,6	8,0	10,0	11,0	12,5	—	—	—	N/A
>800 and ≤1000	4,8	8,0	11,2	16,0	20,0	22,0	25,0	—	—	—	N/A
>1000 and ≤1250	3,2	5,0	7,1	10,0	12,5	14,0	16,0	—	—	—	N/A
>1000 and ≤1250	3,2	5,0	7,1	10,0	12,5	14,0	16,0	—	—	—	N/A
>1000 and ≤1250	6,4	10,0	14,2	20,0	25,0	28,0	32,0	—	—	—	N/A
>1250 and ≤1600	4,2	6,3	9,0	12,5	16,0	18,0	20,0	—	—	—	N/A
>1250 and ≤1600	4,2	6,3	9,0	12,5	16,0	18,0	20,0	—	—	—	N/A
>1250 and ≤1600	8,4	12,6	18,0	25,0	32,0	36,0	40,0	—	—	—	N/A
>1600 and ≤2000	5,6	8,0	11,0	16,0	20,0	22,0	25,0	—	—	—	N/A
>1600 and ≤2000	5,6	8,0	11,0	16,0	20,0	22,0	25,0	—	—	—	N/A
>1600 and ≤2000	11,2	16,0	22,0	32,0	40,0	44,0	50,0	—	—	—	N/A
>2000 and ≤2500	7,5	10,0	14,0	20,0	25,0	28,0	32,0	—	—	—	N/A
>2000 and ≤2500	7,5	10,0	14,0	20,0	25,0	28,0	32,0	—	—	—	N/A
>2000 and ≤2500	15,0	20,0	28,0	40,0	50,0	56,0	64,0	—	—	—	N/A
>2500 and ≤3200	10,0	12,5	18,0	25,0	32,0	36,0	40,0	—	—	—	N/A
>2500 and ≤3200	10,0	12,5	18,0	25,0	32,0	36,0	40,0	—	—	—	N/A
>2500 and ≤3200	20,0	25,0	36,0	50,0	64,0	72,0	80,0	—	—	—	N/A

>3200 and ≤4000	12,5	16,0	22,0	32,0	40,0	45,0	50,0		—	—	N/A
>3200 and ≤4000	12,5	16,0	22,0	32,0	40,0	45,0	50,0	—		—	N/A
>3200 and ≤4000	25,0	32,0	44,0	64,0	80,0	90,0	100,0	—	—		N/A
>4000 and ≤5000	16,0	20,0	28,0	40,0	50,0	56,0	63,0		—	—	N/A
>4000 and ≤5000	16,0	20,0	28,0	40,0	50,0	56,0	63,0	—		—	N/A
>4000 and ≤5000	32,0	40,0	56,0	80,0	100,0	112,0	126,0	—	—		N/A
>5000 and ≤6300	20,0	25,0	36,0	50,0	63,0	71,0	80,0		—	—	N/A
>5000 and ≤6300	20,0	25,0	36,0	50,0	63,0	71,0	80,0	—		—	N/A
>5000 and ≤6300	40,0	50,0	72,0	100,0	126,0	142,0	160,0	—	—		N/A
>6300 and ≤8000	25,0	32,0	45,0	63,0	80,0	90,0	100,0		—	—	N/A
>6300 and ≤8000	25,0	32,0	45,0	63,0	80,0	90,0	100,0	—		—	N/A
>6300 and ≤8000	50,0	64,0	90,0	126,0	160,0	180,0	200,0	—	—		N/A
>8000 and ≤10000	32,0	40,0	56,0	80,0	100,0	110,0	125,0		—	—	N/A
>8000 and ≤10000	32,0	40,0	56,0	80,0	100,0	110,0	125,0	—		—	N/A
>8000 and ≤10000	64,0	80,0	112,0	160,0	200,0	240,0	250,0	—	—		N/A
> 10000 and ≤12500	40,0	50,0	71,0	100,0	125,0	140,0	160,0		—	—	N/A
> 10000 and ≤12500	40,0	50,0	71,0	100,0	125,0	140,0	160,0	—		—	N/A
> 10000 and ≤12500	80,0	100,0	142,0	200,0	250,0	280,0	320,0	—	—		N/A

Supplementary information:

*) Material group IIIb is allowed if the working voltage does not exceed 50 V

**) B = Basic insulation, S = Supplementary insulation, R = Reinforced insulation

29.2	TABLE: Creepage distances, functional insulation						P
Working voltage (V)	Creepage distance (mm)						
	Pollution degree						
	1	2		3			
		Material group		Material group			

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		I	II	IIIa/IIIb	I	II	IIIa/IIIb*)	Verdict / Remark
≤10	0,08	0,4	0,4	0,4	1,0	1,0	1,0	N/A
50	0,16	0,56	0,8	1,0	1,4	1,6	1,8	N/A
125	0,25	0,71	1,0	1,4	1,8	2,0	2,2	N/A
250	0,42	1,0	1,4	2,0	2,5	2,8	3,2	P
400	0,75	1,6	2,2	3,2	4,0	4,5	5,0	N/A
500	1,0	2,0	2,8	4,0	5,0	5,6	6,3	N/A
>630 and ≤800	1,8	3,2	4,5	6,3	8,0	9,0	10,0	N/A
>800 and ≤1000	2,4	4,0	5,6	8,0	10,0	11,0	12,5	N/A
>1000 and ≤1250	3,2	5,0	7,1	10,0	12,5	14,0	16,0	N/A
>1250 and ≤1600	4,2	6,3	9,0	12,5	16,0	18,0	20,0	N/A
>1600 and ≤2000	5,6	8,0	11,0	16,0	20,0	22,0	25,0	N/A
>2000 and ≤2500	7,5	10,0	14,0	20,0	25,0	28,0	32,0	N/A
>2500 and ≤3200	10,0	12,5	18,0	25,0	32,0	36,0	40,0	N/A
>3200 and ≤4000	12,5	16,0	22,0	32,0	40,0	45,0	50,0	N/A
>4000 and ≤5000	16,0	20,0	28,0	40,0	50,0	56,0	63,0	N/A
>5000 and ≤6300	20,0	25,0	36,0	50,0	63,0	71,0	80,0	N/A
>6300 and ≤8000	25,0	32,0	45,0	63,0	80,0	90,0	100,0	N/A
>8000 and ≤10000	32,0	40,0	56,0	80,0	100,0	110,0	125,0	N/A
>10000 and ≤12500	40,0	50,0	71,0	100,0	125,0	140,0	160,0	N/A

Supplementary information:
 *) Material group IIIb is allowed if the working voltage does not exceed 50 V

30.1	TABLE: Ball Pressure Test of Thermoplastics			P
Allowed impression diameter (mm):			<2mm	—
Object/ Part No./ Material	Manufacturer/ trademark	Test temperature (°C)	Impression diameter (mm)	
Plastic parts of enclosure	See table 24.1	75	1.22	

Supplementary information:

30.2	TABLE: Resistance to heat and fire - Glow wire tests	P
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Object/ Part No./ Material	Manufacturer/ trademark	Glow wire test (GWT); (°C)						Verdict
		550	650		750		850	
			te	ti	te	ti		
Plastic parts of enclosure	See table 24.1	no ignition	--	--	--	--	--	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	
insulating sleeve	See table 24.1	no ignition	--	--	--	--	--	P
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) :								--
The test specimen passed the test by virtue of most of the flaming material being withdrawn with the glow-wire (Yes/No)? :								Yes
Ignition of the specified layer placed underneath the test specimen (Yes/No) :								Yes
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)					N/A
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	
--	--	--	--	--	--	
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						

ATTACHMENT TO TRF IEC60335_2_15P			
Clause	Requirement + Test	Result - Remark	Verdict
ATTACHMENT TO TEST REPORT IEC 60335-2-15:2012, IEC 60335-2-15:2012/AMD1:2016, IEC 60335-2-15:2012/AMD2:2018 IEC 60335-1:2010, IEC 60335-1:2010/AMD1:2013, IEC 60335-1:2010/AMD2:2016 EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES Household and similar electrical appliances – Safety – Part 2-15: Particular requirements for appliances for heating liquids			
Differences according to.....:	EN 60335-2-15:2016 + A11:2018 + A1:2021 + A2:2021 + A12:2021 used in conjunction with EN 60335-1:2012 + A11:2014 + A13:2017 + A1:2019 + A14:2019 + A2:2019 + A15:2021 + A16:2023		
TRF template used.....:	IECEE OD-2020-F2:2022, Ed. 1.2		
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	CENELEC COMMON MODIFICATIONS (EN)		--
6.1	Delete “class 0” and “class 0I”		P
7.1	Single-phase appliances to be connected to the supply mains: 230 V covered		P
	Multi-phase appliances to be connected to the supply mains: 400 V covered		N/A
	When the provisions of footnote ^b to Table Z101 apply, the appliance is marked with: (EN 60335-2-15)		N/A
	– the substance of “CAUTION: Hot surface”, or		N/A
	– symbol IEC 60417-5041		N/A
	The warning is put on the surface of the appliance having the highest temperature, (EN 60335-2-15)		N/A

ATTACHMENT TO TRF IEC60335_2_15P			
Clause	Requirement + Test	Result - Remark	Verdict
	and is visible during normal use (EN 60335-2-15)		N/A
	Pot coffee-makers have a level mark to indicate when they are filled to rated capacity. This indication is visible when the pot coffee-maker is in the filling position (EN 60335-2-15/A11)		N/A
7.6	[symbol IEC 60417-5041] Caution, hot surface (EN 60335-2-15)		N/A
7.12	The instructions for pressure cookers, glue pots with a water jacket, livestock feed boilers, sterilizers, pot coffee-makers include the substance of the following: (EN 60335-2-15/A11)		N/A
	- This appliance shall not be used by children. Keep the appliance and its cord out of reach of children		N/A
	The instructions for cooking pans, slow cookers, steam cookers, rice cookers, coffee-makers, kettles, egg boilers, milk heaters, tea makers include the substance of the following: (EN 60335-2-15)		P
	- This appliance can be used by children aged from 8 years and above if they have been given supervision or instruction concerning use of the appliance in a safe way and if they understand the hazards involved. Cleaning and user maintenance shall not be made by children unless they are older than 8 and supervised. Keep the appliance and its cord out of reach of children aged less than 8 years		P
	The instructions for feeding-bottle heaters, yoghurt makers include the substance of the following: (EN 60335-2-15)		N/A

ATTACHMENT TO TRF IEC60335_2_15P			
Clause	Requirement + Test	Result - Remark	Verdict
	- This appliance can be used by children aged from 3 years and above if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Cleaning and user maintenance shall not be made by children unless they are aged from 8 years and above and supervised. Keep the appliance and its cord out of reach of children aged less than 3 years		N/A
	The instructions also include the substance of the following: (EN 60335-2-15)		P
	- Appliances can be used by persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved		P
	- Children shall not play with the appliance		P
	If symbol IEC 60417-5041 is marked on the appliance, the instructions state that surfaces are liable to get hot during use (EN 60335-2-15)		N/A
	Instructions for pot coffee-makers contain the substance of the following: (EN 60335-2-15/A11)		N/A
	CAUTION: Never fill the pot coffee-maker above the maximum level since hot foaming coffee or other liquids (e.g. milk) might overflow during heating		N/A
7.14	The height of symbol IEC 60417-5041 is at least 8 mm (EN 60335-2-15)		N/A
	The height of the warning "CAUTION. Hot surface" is at least 4 mm (measured on the capital letters) (EN 60335-2-15)		N/A
8.1.1	Also test probe 18 of EN 61032 is applied		P

ATTACHMENT TO TRF IEC60335_2_15P			
Clause	Requirement + Test	Result - Remark	Verdict
	The appliance being in every possible position during the test, except that		P
	appliances normally used on the floor and having a mass exceeding 40 kg are not tilted		N/A
	The force on the probe in the straight position is increased to 10 N when probe 18 is used		P
	When using test probe 18 the appliance is fully assembled as in normal use without any parts removed, and		P
	parts intended to be removed for user maintenance are also not removed		P
8.1.3	Instead of test probe B, test probe 18 and test probe 13, for appliances other than those of class II, test probe 41 of IEC 61032 is applied with a force not exceeding 1 N to live parts of visibly glowing heating elements, all poles of which can be disconnected by a single switching action		N/A
8.2	Compliance is checked by applying the test probes of EN 61032		P
	For built-in appliances and fixed appliances, the test probe B and probe 18 of EN 61032 are applied only after installation		P
11.Z101	For coffee-makers, milk heaters, egg boilers, cooking pans, slow cookers, steam cookers, pressure cookers, wash boilers, rice cookers, glue pots with a water jacket, livestock feed boilers, sterilizers, soy milk makers, tea makers, kettles, pot coffee-makers and other appliances for boiling water having a rated capacity not exceeding 10 l, the temperature rise limits in Table Z101 apply.....: (EN 60335-2-15/A11)	(see appended table)	P

ATTACHMENT TO TRF IEC60335_2_15P			
Clause	Requirement + Test	Result - Remark	Verdict
	The appliance is supplied at rated voltage and operated under normal operation (EN 60335-2-15)		P
	Temperature rises are not measured on: (EN 60335-2-15)		P
	– the lids,		P
	– surfaces within 25 mm from <ul style="list-style-type: none"> • the edge of the lid, • the ventilation openings, the edge of the hot functional surface		P
	– enclosure at a distance within 25 mm from the heating element		P
	– underside surfaces that are not accessible with probe 41 of EN 61032. The probe is applied without appreciable force		N/A
11.Z102	For feeding-bottle heaters and yoghurt makers the temperature rise limits in Table Z101 apply.....: (EN 60335-2-15)	(see appended table)	N/A
	The appliance is supplied at rated voltage and operated under normal operation (EN 60335-2-15)		N/A
15.1.2	Appliances with an automatic cord reel tested with the cord in the most unfavourable position so that the reeling of the wet cord may affect electrical insulation during operation, the cord not being dried before reeling		N/A
20.2	For appliances having hazardous moving parts, due to their working function, e.g. the needle of a sewing machine, tools of kitchen machines or the blade of an electrical knife, full protection is not possible for performing their intended use		N/A
	When using the test probe similar to test probe B with a circular stop face, the accessories and detachable covers are removed		N/A

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ATTACHMENT TO TRF IEC60335_2_15P			
Clause	Requirement + Test	Result - Remark	Verdict
	Test probe 18 applied with a force of 2,5 N on the appliance fully assembled		N/A
22.12	Other parts intended to be detached during use, maintenance or cleaning (examples are batteries, battery covers, lids, attachments, steam nozzles) are not considered as parts providing a similar function as handles, knobs, grips, levers		P
22.17	The requirement is not applicable to built-in appliances		N/A
22.40	Appliances except eggs boilers, feeding-bottle heaters, yogurt makers and slow cookers are fitted with an accessible switch or other means to stop operational functions of the appliance (EN 60335-2-15)		N/A
22.44	An appliance is child-appealing if one of the following criteria is present:		N/A
	- appliance decorated using faces, cartoon like characters, or similar images		N/A
	- appliance using shapes representing animals, characters, persons or scale models		N/A
	An appliance is child-appealing if more than one of the following criteria are present:		N/A
	- using non-functional light (functional light is e.g. illumination of an object or area, signal indicating status of an appliance)		N/A
	- using non-functional sound (e.g. music)		N/A
	- using non-functional movement		N/A
	If the appliance is child-appealing and		N/A
	- has a mass less than 4 kg, and		N/A
	- is mounted or normally intended for use at a height less than 850 mm,		N/A

ATTACHMENT TO TRF IEC60335_2_15P			
Clause	Requirement + Test	Result - Remark	Verdict
	the following conditions are met:		N/A
	- surface temperature rise requirements not exceeded		N/A
	- hazardous moving parts not accessible		N/A
	- live parts not accessible		N/A
	- liquid temperature requirement not exceeded,		N/A
	unless for vessels in which two independent and sequential actions are needed to access the liquid		N/A
	- the requirement of 22.12 is applicable for all accessible parts of the appliance		N/A
22.Z101	For pot coffee-maker the operation does not give a spillage of foaming coffee in normal use (EN 60335-2-15/A11)		N/A
	Compliance is checked by the following test. The pot coffee-maker is filled with water up to the maximum level set by the manufacturer or up to 40 % of its total capacity whichever is greater. 8 g of ground coffee with no particles larger than 89 µm should be added per 100 ml of water. The appliance is switched on, the content of the pot is stirred continuously so that all coffee gets wet and mixes with water until it attains a temperature of 75 °C. The operation is continued without stirring until the mixture attains a temperature of 90 °C. Then the operation is continued without stirring for 3 minutes. During the test no overflow is observed (EN 60335-2-15/A11)		N/A
25.1	Plugs and pins for insertion into socket-outlets follow the relevant standards sheets in Annex ZH		P

ATTACHMENT TO TRF IEC60335_2_15P			
Clause	Requirement + Test	Result - Remark	Verdict
25.7	Rubber sheathed cords (60245 IEC 53) are not suitable for appliances intended to be used outdoors or when they are liable to be exposed to significant amount of ultraviolet radiation.....		N/A
	Halogen-free thermoplastic compound sheathed supply cords have properties at least those of:		N/A
	halogen-free thermoplastic compound sheathed cords (H03Z1Z1H2-F or H03Z1Z1-F), for appliances having a mass not exceeding 3 kg		N/A
	halogen-free thermoplastic compound sheathed cords (H05Z1Z1H2-F or H05Z1Z1-F), for other appliances		N/A
	Cross-linked halogen-free compound sheathed supply cords have properties at least those of cross-linked halogen-free compound sheathed cords (H07ZZ-F)		N/A
25.25	Dimensions of the pins and engagement face of plugs of appliances that are inserted into socket-outlets are to be in accordance with the dimensions of the relevant plug standard		N/A
	Common plugs and socket-outlets types in CENELEC countries as shown in Annex ZH		N/A
26.11	Conductors connected by soldering are not considered to be positioned or fixed so that reliance is not placed upon the soldering alone to maintain them in position unless they are held in place near the terminals independently of the solder		N/A
Annex I, 19.1.101	The appliance is supplied at rated voltage and operated under normal operation with each of the fault conditions specified		N/A
	The duration of the test is as specified in 19.7		N/A

ATTACHMENT TO TRF IEC60335_2_15P			
Clause	Requirement + Test	Result - Remark	Verdict
ZA	ANNEX ZA (NORMATIVE) SPECIAL NATIONAL CONDITIONS (EN)		N/A
	Denmark, Sweden, Norway and Finland		N/A
7.12.8	The maximum inlet water pressure is at least 1,0 MPa..... :		N/A
	Norway		N/A
19.5	The test is also applicable to appliances intended to be permanently connected to fixed wiring		N/A
	Norway		N/A
22.2	The second paragraph of this subclause, dealing with single-phase, permanently connected class I appliances having heating elements, is not applicable due to the supply system		N/A
	Denmark		N/A
22.47	The maximum inlet water pressure is at least 1,0 MPa..... :		N/A
	Cyprus, Ireland and United Kingdom		N/A
25.8	In the table, the line "> 10 A and ≤ 16 A" is replaced by:		N/A
	> 10 and ≤ 13 1,25 (1,0) ^b		N/A
	> 13 and ≤ 16 1,5 (1,0) ^b		N/A

ATTACHMENT TO TRF IEC60335_2_15P			
Clause	Requirement + Test	Result - Remark	Verdict
ZB	ANNEX ZB (INFORMATIVE) A-DEVIATIONS		N/A
	Ireland		N/A
25.1 and 25.5	These regulations apply to all plugs for domestic use at a voltage of not less than 200 V and in general allow only plugs complying with I.S. 401:1997, or equivalent, to be fitted to domestic appliances		N/A
	United Kingdom		N/A
25.1 and 25.5	These regulations apply to all plugs for domestic use at a voltage of not less than 200 V and in general allow only plugs to BS 1363 to be fitted to domestic appliances		N/A
	It also allows plugs to BS 4573 and EN 50075 to be fitted to shavers and toothbrushes		N/A
ZC	ANNEX ZC (NORMATIVE) NORMATIVE REFERENCES TO INTERNATIONAL PUBLICATIONS WITH THEIR CORRESPONDING EUROPEAN PUBLICATIONS		P
	A list of documents referred to in the text of this standard in such a way that some or all of their content constitutes requirements of this document		P
ZD	ANNEX ZD (INFORMATIVE) IEC and CENELEC CODE DESIGNATIONS FOR FLEXIBLE CORDS		P
	List of IEC and CENELEC code designations for flexible cords		P

ATTACHMENT TO TRF IEC60335_2_15P			
Clause	Requirement + Test	Result - Remark	Verdict
ZE	ANNEX ZE (INFORMATIVE) SPECIFIC ADDITIONAL REQUIREMENTS FOR APPLIANCES AND MACHINES INTENDED FOR COMMERCIAL USE		N/A
7.1	Business name and full address of the manufacturer and, where applicable, his authorized representative.....:		N/A
	Model or type reference.....:		N/A
	Serial number, if any		N/A
	Production year		N/A
	Designation of the appliance..... :		N/A
7.12	Instructions provided with the appliance so that the appliance can be used safely		N/A
	The instructions contain at least the following information:		N/A
	- the business name and full address of the manufacturer and, where applicable, his authorized representative		N/A
	- model or type reference of the appliance as marked on the appliance itself, except for the serial number		N/A
	- the designation of the appliance together with its explanation in case it is given by a combination of letters and/or numbers		N/A
	- the general description of the appliance, when needed due to the complexity of the appliance		N/A
	- specific precautions required during installation, operation, adjusting, user maintenance, cleaning, repairing or moving		N/A

ATTACHMENT TO TRF IEC60335_2_15P			
Clause	Requirement + Test	Result - Remark	Verdict
	- when needed drawings, diagrams, descriptions and explanations necessary for the safe use and user maintenance of the appliance		N/A
	- the possible reasonably foreseeable misuse and, whenever relevant, a warning against the effects it may have on the safe use of the appliance		N/A
	The words "Original instructions" appear on the language version(s) verified by the manufacturer or by the authorized representative		N/A
	When a translation of the original instructions has been provided by a person introducing the appliance on the market; the meaning of the sentence "Translation of the original instructions" appear in the relevant instructions delivered with the appliance		N/A
	The instructions for maintenance/service to be done by specialized personnel, mandated by the manufacturer or the authorized representative may be supplied in only one Community language which the specialized personnel understand		N/A
	The instructions indicate the type and frequency of inspections and maintenance required for safe operation including the preventive maintenance measures		N/A
7.12.ZE1	If needed for specific appliances, the following information to be given:		N/A

ATTACHMENT TO TRF IEC60335_2_15P			
Clause	Requirement + Test	Result - Remark	Verdict
	- on use, transportation, assembly, dismantling when out of service, testing or foreseeable breakdowns, if these operations have consequences on stability of the appliance in order to avoid overturning, falling or uncontrolled movements of the appliance or of its component parts		N/A
	- on how to maintain adequate mechanical stability when in use, during transportation, assembly, dismantling, scrapping and any other action involving the appliance		N/A
	- on the protective measures to be taken by the user, including, where appropriate, the personal protective equipment to be provided		N/A
	- on the operating method to be followed in the event of accident or breakdown; if a blockage is likely to occur the operating method to safely unblock the appliance		N/A
	- on the specifications on the spare parts to be used, when these affect the health and safety of the operator		N/A
	- on airborne noise emissions, determined and declared in accordance with the relevant Part 2, which includes:		N/A
	- the A-weighted emission sound pressure level at workstations, where this exceeds 70 dB(A)..... ;		N/A
	- where this level does not exceed 70 dB(A), this fact is indicated		N/A
	- the peak C-weighted instantaneous sound pressure value at workstations, where this exceeds 63 Pa (130 dB in relation to 20 µPa)..... :		N/A

ATTACHMENT TO TRF IEC60335_2_15P			
Clause	Requirement + Test	Result - Remark	Verdict
	- the A-weighted sound power level emitted by the machinery, where the A-weighted emission sound pressure level at workstations exceeds 80 dB(A).....:		N/A
7.12.ZE2	The instructions include a warning to disconnect the appliance from its power source during service and when replacing parts		N/A
	If the removal of the plug is foreseen, it is clearly indicated that the removal of the plug is such that an operator can check from any of the points to which he has access that the plug remains removed		N/A
	If this is not possible, due to the construction of the appliance or its installation, a disconnection with a locking system in the isolated position is provided		N/A
20.1	Appliances and their components and fittings have adequate mechanical stability during transportation, assembly, dismantling and any other action involving the appliance		N/A
20.2	Dangerous moving transmission parts safeguarded either by design or guards		N/A
	When guards are used, they are fixed guards, interlocking movable guards or protective devices		N/A
	Moving parts directly involved in the function of the appliance which cannot be made completely inaccessible fitted with:		N/A
	- fixed guards or interlocking movable guards preventing access to those sections of the parts that are not used in the work, and		N/A

ATTACHMENT TO TRF IEC60335_2_15P			
Clause	Requirement + Test	Result - Remark	Verdict
	- adjustable guards restricting access to those sections of the moving parts where access is necessary		N/A
	Interlocking movable guards used where frequent access is required		N/A
21.1	Appliances and their components and fittings have adequate mechanical strength and is constructed to withstand such rough handling that may be expected in normal use, during transportation, assembly, dismantling, scrapping and any other action involving the appliance		N/A
22.ZE.1	For appliances provided with a seat, the seat gives adequate stability		N/A
	The distance between the seat and the control devices capable of being adapted to the operator		N/A
22.ZE.2	For appliances provided with separate devices for the start and the stop functions, the stop function is unambiguously identifiable and does always override the start function		N/A
	For appliances provided with one device performing the start and the stop function, the stop function is unambiguously identifiable and does always override the start function		N/A
22.ZE.3	Appliances designed in such a way that incorrect mounting is avoided, if this can lead to an unsafe situation		N/A
	If this is not possible, information on the correct mounting is given directly on the part and/or the enclosure		N/A
22.ZE.4	Where the weight, size or shape prevents appliances from being moved manually, they are fitted with attachments for lifting gear, or		N/A

ATTACHMENT TO TRF IEC60335_2_15P			
Clause	Requirement + Test	Result - Remark	Verdict
	so designed that they can be fitted with such attachments, or		N/A
	be shaped in such a way that standard lifting gear can easily be used		N/A
	Appliances to be moved manually are constructed or equipped so that they can be moved easily and safely		N/A
22.ZE.5	The fixing systems of fixed guards which prevent access to hazardous moving transmission parts only removable with the use of tools		N/A
	If such guards have to be removed by the user for routine cleaning or maintenance their fixing systems remain attached to the fixed guards or to the machine after removal		N/A
	Where possible, guards are incapable of remaining in place without their fixings		N/A
	This does not apply if, after removal of the screws, or if the component is incorrectly repositioned, the appliance becomes inoperative		N/A
	Movable guards are interlocked		N/A
	The interlocking devices prevent the start of hazardous appliance functions until the guards are fixed in their position, and give a stop command whenever they are no longer closed		N/A
	Where it is possible for an operator to reach the danger zone before the risk due to hazardous appliance functions has ceased, movable guards associated with a guard locking device in addition to an interlocking device that:		N/A
	- prevents the start of hazardous appliance functions until the guard is closed and locked, and		N/A

ATTACHMENT TO TRF IEC60335_2_15P			
Clause	Requirement + Test	Result - Remark	Verdict
	- keeps the guard closed and locked until the risk of injury from the hazardous appliance functions has ceased		N/A
	Interlocking movable guards remain attached to the appliance when open, and		N/A
	they are designed and constructed in such a way that they can be adjusted only by means of an intentional action		N/A
22.ZE.6	Interlocking movable guards designed in such a way that the absence or failure of one of their components prevents starting or stops the hazardous appliance functions		N/A
	The guard is opened to the extent needed to cause the interlocking to operate and is then closed, the number of operations being defined in the specific Part 2.....:		N/A
	After this test any defect that may be expected in normal use is applied to the interlock system, including interruption of the supply, only one defect being simulated at a time		N/A
	After these tests the interlock system is fit for further use		N/A
22.ZE.7	Adjustable guards restricting access to areas of the moving parts strictly necessary for the work are:		N/A
	- adjustable manually or automatically, depending on the type of work involved, and		N/A
	- readily adjustable without the use of tools		N/A
22.ZE.8	In case of interruption, re-establishment after an interruption or fluctuation in whatever manner of the power supply, the appliance does not restart		N/A

ATTACHMENT TO TRF IEC60335_2_15P			
Clause	Requirement + Test	Result - Remark	Verdict
	However, automatic restarting of the operation is allowed if the appliance may continue to operate, without causing any hazard to the user, from the same point in its operating cycle at which the voltage interruption or fluctuation occurred		N/A
22.ZE.9	Appliances fitted with means to isolate them from all energy sources		N/A
	Such isolators are clearly identified, and		N/A
	they are capable of being locked if reconnection endanger persons		N/A
	After the energy source is disconnected, it is possible to dissipate any energy remaining or stored in the circuits of the appliance without risk to persons		N/A
22.ZE.10	Noise reduction is achieved by applying measures at source to control noise, for example EN ISO 11688-1:2009		N/A
	The success of the applied noise reduction measures is assessed based on the actual noise emission values in relation to other machines of the same type with comparable non-acoustical technical data		N/A
	Compliance is checked by the noise test code, if any, given in part 2		N/A
ZF	ANNEX ZF (INFORMATIVE) CRITERIA APPLIED FOR THE ALLOCATION OF PRODUCTS COVERED BY STANDARDS IN THE EN 60335 SERIES UNDER LVD OR MD		P
	List of standards under CENELEC/TC61 with the allocation under the LVD (Low Voltage Directive) or the MD (Machinery Directive).... :		P

ATTACHMENT TO TRF IEC60335_2_15P			
Clause	Requirement + Test	Result - Remark	Verdict
ZG	ANNEX ZG (NORMATIVE) UV APPLIANCES		N/A
	The following modifications to this standard apply to appliances having UV emitters		N/A
	This annex is not applicable to appliances covered by the scopes of IEC 60335-2-27, IEC 60335-2-59 or IEC 60335-2-109		N/A
7.12.ZG	The instructions for appliances incorporating UVC emitters include the substance of the following: WARNING — This appliance contains a UV emitter. Do not stare at the light source		N/A
ZH	ANNEX ZH (INFORMATIVE) Common plug and socket-outlet types in CENELEC countries		N/A
ZH.1	General		N/A
	After the first paragraph, add the following note: NOTE: The dimensions of the plugs are purely for information. The exact dimensions of the plugs can be found in the relevant national standards		N/A
ZH.2	General national data		N/A
	Plugs according to standard sheet EU2 are not allowed in Belgium, France and the United Kingdom		N/A
	Plugs according to standard sheet EU3 are not allowed in Austria, Finland, Germany, Iceland, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, Switzerland and the United Kingdom		N/A
ZH.3	Specific country data		N/A
ZH.3.1	Belgium		N/A

ATTACHMENT TO TRF IEC60335_2_15P			
Clause	Requirement + Test	Result - Remark	Verdict
	Plugs according to standard sheet EU2 are not allowed in Belgium, France and the United Kingdom		N/A
	Plugs according to standard sheet EU3 are not allowed in Austria, Finland, Germany, Iceland, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, Switzerland and the United Kingdom		N/A
ZH.3.2	Cyprus		N/A
	Replace the text as follows: Only plugs according to standard sheets GB1, GB6 and GB7 of IEC/TR 60083 are allowed. They correspond with plug designations: EU9, EU6 and EU10		N/A
ZH.3.3	Denmark		N/A
	Plugs and socket-outlets for household and similar purposes shall be in accordance with DS 60884-2-D1” Plugs and Socket-outlets for household and similar purposes - Requirements for Danish systems”		N/A
	For single-phased appliances with rated current above 13 A and supplied via a plug in accordance with DS 60884-2-D1 ” Plugs and socket-outlets for household and similar purposes - Requirements for Danish systems” the following warning shall be given in the installation instructions: — Inden apparatet tilsluttes skal det sikres at installationen er egnet til apparater med en mærkestrøm der overstiger 13 A. I tvivlstilfælde bør en autoriseret el-installatør kontaktes		N/A
ZH.3.4	Finland		N/A

ATTACHMENT TO TRF IEC60335_2_15P			
Clause	Requirement + Test	Result - Remark	Verdict
	Replace the first paragraph as follows: Plugs according to Publications SFS 5610 and SFS-EN 50075 are allowed. Plugs according to Publications SFS 5215 and SFS-EN 60309 are allowed		N/A
ZH.3.5	Germany		N/A
	Plugs allowed in Germany are specified in DIN 49400. These plugs are shown in IEC/TR 60083 as DE1, DE2, DE3 and DE4. They correspond with plug designations: EU2, EU 4, EU5, EU6, EU7 and EU8		N/A
ZH.3.6	Greece		N/A
	Special national conditions based on regulations applicable to plugs: Government Gazette No 67/B/28-1-2000		N/A
	National Standards applicable to plugs: — ELOT EN 50075:1992 "Flat non-rewirable two-pole plugs, 2,5 A, 250 V, with cord, for the connection of class II equipment for household and similar purposes" (identical to EN 50075:1990) — ELOT 294:1997 (identical to CEE 7) — ELOT 1413-1:1999 "Plugs and socket-outlets for household and similar purposes (identical to IEC 60884-1:1994 +A1:1994+A2:1995) (tests are performed with the current edition of IEC 60884-1 and ELOT 1413-1)		N/A

ATTACHMENT TO TRF IEC60335_2_15P																
Clause	Requirement + Test		Result - Remark	Verdict												
	Characteristics of the plugs: <table border="1" data-bbox="331 465 911 734"> <thead> <tr> <th>N° of poles</th> <th>Rated current (A)</th> <th>Rated voltage (V)</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>2,5</td> <td>250</td> </tr> <tr> <td>2</td> <td>16</td> <td>250</td> </tr> <tr> <td>2+earth</td> <td>16</td> <td>250</td> </tr> </tbody> </table>		N° of poles	Rated current (A)	Rated voltage (V)	2	2,5	250	2	16	250	2+earth	16	250		N/A
N° of poles	Rated current (A)	Rated voltage (V)														
2	2,5	250														
2	16	250														
2+earth	16	250														
	Characteristics of the socket-outlets: <table border="1" data-bbox="331 792 911 1010"> <thead> <tr> <th>N° of poles</th> <th>Rated current (A)</th> <th>Rated voltage (V)</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>2,5</td> <td>250</td> </tr> <tr> <td>2+earth</td> <td>16</td> <td>250</td> </tr> </tbody> </table>		N° of poles	Rated current (A)	Rated voltage (V)	2	2,5	250	2+earth	16	250		N/A			
N° of poles	Rated current (A)	Rated voltage (V)														
2	2,5	250														
2+earth	16	250														
	In the Greek market mainly socket-outlets with side earth contacts EU2 can be found, but also socket-outlets with pin earth EU3 and Italian style socket-outlets can be found			N/A												
ZH.3.7	Ireland			N/A												
	Only plugs according to standard sheets EU9, EU6 and EU5 are allowed			N/A												
ZH.3.8	Italy			N/A												
	Only plugs according to the Standard CEI 23-50 and CEI EN 50075 are allowed. These plugs are shown in IEC/TR 60083 as IT1, IT2, IT3, IT4, IT5, IT6 and IT7. They correspond with plug designations: EU2, EU4, and EU7			N/A												
ZH.3.9	Netherlands			N/A												

ATTACHMENT TO TRF IEC60335_2_15P			
Clause	Requirement + Test	Result - Remark	Verdict
	Only plugs according to NEN 1020:2019 are allowed, standard sheets: — IV or IVa 16A 250 V class I plug (L+N+PE) with side earthing [= TR IEC 60083 - NL 2 / EU2] — VII or VIIa 16A 250 V class I plug (L+N+PE) with dual (side and pin) earthing [= TR IEC 60083 - NL 2 / EU4] — XVI 2,5A 250 V class II plug (L+N): [= TR IEC 60083 - NL 3 / EU5] — XVII or XVIIa 16A 250 V class II plug (L+N) [= TR IEC 60083 - NL 4 / EU7] — IX (Perilex) 16A 400/230 V class I plug (L1+L2+L3+N+PE) [= EU8]		N/A
	Or plug according EN 50075 is allowed, standard sheet: — 1 2,5A 250 V class II plug (L+N) [= TR IEC 60083 - NL 5 / EU6]		N/A
	These plugs are shown in IEC/TR 60083 as NL2, NL3, NL4, NL5 and DE4		N/A
	They correspond with plug designations: EU 2, EU4, EU5, EU6, EU7 and EU8		N/A
			N/A
ZH.3.10	Norway		N/A
	Only plugs according to standard sheets NO 2, NO 4, NO 5 and NO 6 of IEC/TR 60083 are allowed. They correspond with plug designations: EU 2, EU4, EU5, EU6 and EU7		N/A
ZH.3.11	Slovenia		N/A
	Only plugs and socket-outlets according to SIST 1050:2010 are allowed		N/A
ZH.3.12	Spain		N/A

ATTACHMENT TO TRF IEC60335_2_15P			
Clause	Requirement + Test	Result - Remark	Verdict
	For appliances for household use, only the following plugs are allowed: — according to UNE 20315: ESC 10b, ESB 25b, ESB 32b, EU2, EU4 or EU7; — according to UNE-EN 50075 [EU6]. These plugs are shown in IEC/TR 60083 as ES1, ES2, ES3, ES4, ES5, ES6 and ES7. They correspond with plug designations: EU2, EU4, EU6 and EU7		N/A
ZH.3.13	Sweden		N/A
	Only plugs according to standard sheets SE 2, SE 3, and SE 4 of IEC/TR 60083 are allowed. They correspond with plug designation EU 2, EU 4, EU5, EU6 and EU7. National implementation of a plug corresponding to EU 8 is also allowed		N/A
ZH.3.14	Switzerland		N/A
	Replace the clause by following: Supply cords of portable household and similar electrical appliances having a rated current not exceeding 16 A shall be provided with a plug complying with SN 441011-1:2019		N/A
	The Table A is applicable for Plug with IP20, and Table B is applicable for plug with IP55: Table A Table B		N/A
			N/A
ZH.3.15	United Kingdom		N/A
	Only plugs according to standard sheets GB1, GB6 and GB7 of IEC/TR 60083 are allowed. They correspond with plug designations: EU9, EU6 and EU10		N/A
ZH.4	List of country codes		N/A

ATTACHMENT TO TRF IEC60335_2_15P			
Clause	Requirement + Test	Result - Remark	Verdict
	List of country codes		N/A
ZI	ANNEX ZI (INFORMATIVE) Information on the application of A11:2014 to EN 60335-1:2012 CENELEC CLC/TC 61(SEC)2096A		P
	Clarification of the application of parts 2 in conjunction with the 2002 or 2012 version of EN 60335-1		P
ZZA	ANNEX ZZA (INFORMATIVE) RELATIONSHIP BETWEEN THIS EUROPEAN STANDARD AND THE SAFETY OBJECTIVES OF DIRECTIVE 2014/35/EU [2014 OJ L96] AIMED TO BE COVERED		P
	This European Standard has been prepared under a Commission's standardization request relating to harmonized standards in the field of the Low Voltage Directive, M/511, to provide one voluntary means of conforming to safety objectives of Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonization of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits [2014 OJ L96]		P
	Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding safety objectives of that Directive, and associated EFTA regulations		P

ATTACHMENT TO TRF IEC60335_2_15P			
Clause	Requirement + Test	Result - Remark	Verdict
	Compliance with this Part 2 when used together with the Part 1 provides one means of conformity with the safety objectives		P
	A table with correspondence between this European Standard and Annex I of Directive 2014/35/EU [2014 OJ L96]		P
	WARNING 1 — Presumption of conformity stays valid only as long as a reference to this European Standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union		P
	WARNING 2 — Other Union legislation may be applicable to the product(s) falling within the scope of this standard		P
ZZB	ANNEX ZZB (INFORMATIVE) RELATIONSHIP BETWEEN THIS EUROPEAN STANDARD AND THE ESSENTIAL REQUIREMENTS OF DIRECTIVE 2006/42/EC AIMED TO BE COVERED		N/A
	The ANNEX ZZB is not applicable (EN 60335-2-15/A12)		N/A
	When cited in the Official Journal under that Directive, compliance with the normative clauses of this standard given in Table ZZB.1 confers a presumption of conformity with the essential requirements of that Directive and associated EFTA regulations		N/A
	Compliance with this Part 1 when used together with the relevant Part 2 provides one means of conformity with the essential health and safety requirements		N/A

Photo documentation

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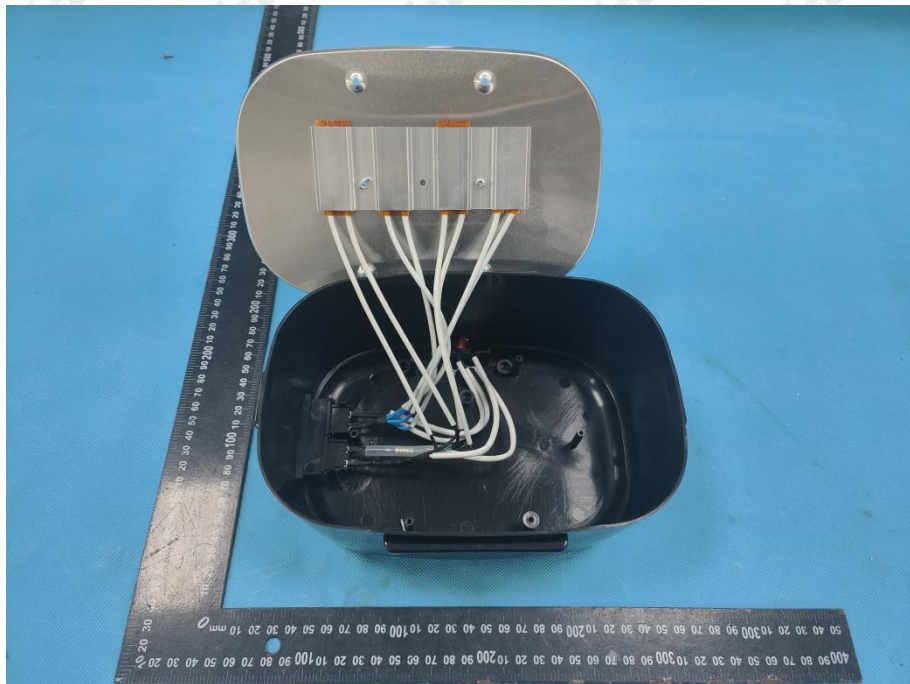
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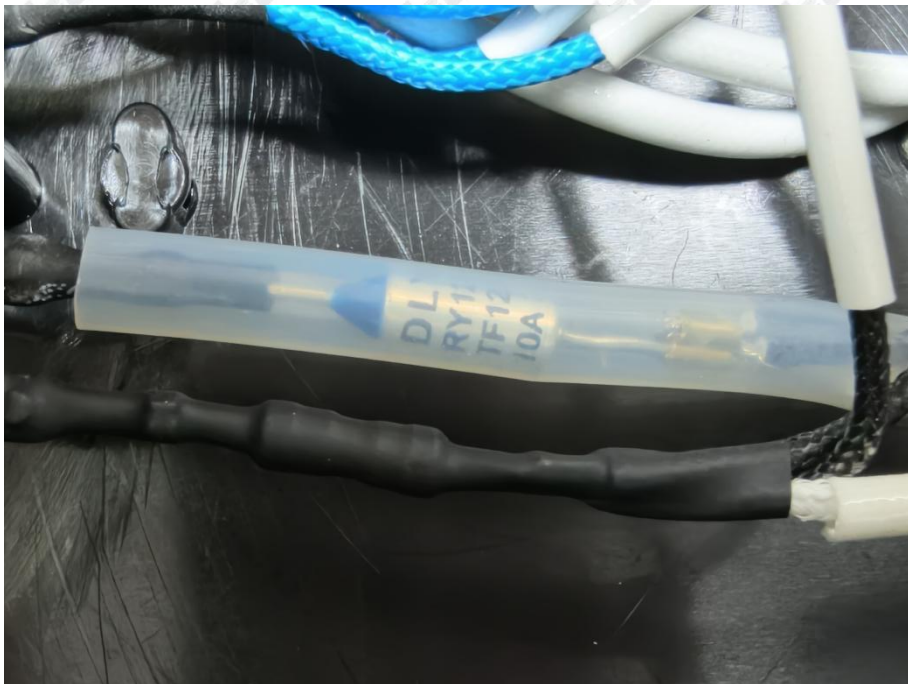
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*** End of Report ***