

TEST REPORT IEC 60335-2-9 Safety of household and similar electrical appliances Part 2: Particular requirements for grills, toasters and similar cooking appliances	
Report Number.	2305A0600SHA-001
Date of issue	2023-07-10; Amendment 4: 2025-07-29
Total number of pages	102 pages of test report (including 18 pages of photos)
Name of Testing Laboratory preparing the Report	Intertek Testing Services (Shanghai FTZ) Co., Ltd.
Applicant's name	Ningbo HengChuang Electric Appliance Co., LTD.
Address	No.58 Jinjia, Chengzhong Village, Zhouxiang Town, Cixi City, Zhejiang Province, China
Test specification:	
Standard	EN IEC 60335-2-9:2023+A11:2023 used in conjunction with EN 60335-1:2012+ AC:2014+A11:2014+A13:2017+A1:2019+ A2:2019+A14:2019 +A15:2021+A16:2023 and EN 62233:2008
Test procedure	CE-LVD
Non-standard test method	EK1-AG2:2018-05
Test Report Form No.	IEC60335_2_9K
Test Report Form(s) Originator	LCIE
Master TRF	Dated 2014-08
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Test item description	Hot-air fryer
Trade Mark.....	--
Manufacturer	Ningbo HengChuang Electric Appliance Co., LTD.
Model/Type reference	HC-6001MT, HC-6001M, HC-6001ET, HC-6001E, HC-8002MT, HC-8002M, HC-8002ET, HC-8002E, HC-8003MT, HC-8003M, HC-8003ET, HC-8003E, HC-8005MT, HC-8005M, HC-8005ET, HC-8005E, HC-8003EAT, HC-8003EA, HC-8005EAT, HC-8005EA, HC-1101E, HC-1101ET, HC-1102E, HC-1102ET, HC-5001ET, HC-5001E
Ratings	220-240V~, 50/60Hz, Class I, HC-6001MT, HC-6001M, HC-6001ET, HC-6001E for 1300W; HC-8002MT, HC-8002M, HC-8002ET, HC-8002E, HC-8003MT, HC-8003M, HC-8003ET, HC-8003E, HC-8005MT, HC-8005M, HC-8005ET, HC-8005E, HC-8003EAT, HC-8003EA, HC-8005EAT, HC-8005EA for 1700W; HC-1101E, HC-1101ET, HC-1102E, HC-1102ET for 1800W; HC-5001ET, HC-5001E for 1500W.

Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):		
☒	Testing Laboratory:	Intertek Testing Services (Shanghai FTZ) Co., Ltd.
Testing location/ address		Building No. 86, 1198 Qinzhou Road (North), Shanghai 200233, China
☐	Associated CB Testing Laboratory:	
Testing location/ address		N/A
Tested by (name, function, signature)		Charlie Chen (Engineer) <i>Charlie Chen</i>
Approved by (name, function, signature) ..		Chain Zhang (Supervisor) <i>Chain Zhang</i>
☐	Testing procedure: TMP/CTF Stage 1:	
Testing location/ address		N/A
Tested by (name, function, signature)		N/A
Approved by (name, function, signature) ..		N/A
☐	Testing procedure: WMT/CTF Stage 2:	
Testing location/ address		N/A
Tested by (name + signature)		N/A
Witnessed by (name, function, signature) ..		N/A
Approved by (name, function, signature) ..		N/A
☐	Testing procedure: SMT/CTF Stage 3 or 4:	
Testing location/ address		N/A
Tested by (name, function, signature)		N/A
Witnessed by (name, function, signature) ..		N/A
Approved by (name, function, signature) ..		N/A
Supervised by (name, function, signature) :		N/A

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

None

Summary of testing:

From the result of our inspection and tests on the submitted samples, we conclude that they comply with the requirements of the standards.

Tests performed (name of test and test clause):

Refer to description for Amendment 4 (page 6) for details.

Testing location:

Same as previous page.

Summary of compliance with National Differences**List of countries addressed:**

National difference of EU and United Kingdom concerned.

☒ **The product fulfils the requirements of EN IEC 60335-2-9:2023+A11:2023+EK1-AG2:2018-05 used in conjunction with EN 60335-1:2012+ AC:2014+A11:2014+ A13:2017+A1:2019+A2:2019+A14:2019+A15:2021+A16:2023 and EN 62233:2008**

Copy of marking plate: (representative)

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

Test item particulars :	
Classification of installation and use : Portable appliance, household and indoor use	
Supply Connection : Type Y attachment	
..... :	
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 : 2025-06-27	
Date (s) of performance of tests : 2025-06-27 to 2025-07-29	
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 ☒ comma / ☐ point is used as the decimal separator. COMMISSION IMPLEMENTING DECISION (EU) 2017/1357 has been considered. This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program. Determination of the test conclusion is based on IEC Guide 115 in consideration of measurement uncertainty.	
Manufacturer's Declaration per sub-clause 4.2.5 of IEC 60335-1:	
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided :	☐ Yes ☒ Not applicable
When differences exist; they shall be identified in the General product information section.	
Name and address of factory (ies) : Ningbo HengChuang Electric Appliance Co., LTD. No.58 Jinjia, Chengzhong Village, Zhouxiang Town, Cixi City, Zhejiang Province, China	

General product information:

Models covered by this report is portable Hot-air fryers for household indoor use only. It employed interlock switch and thermal link to safeguard the appliances.

All models are similar in appearance except for the following:

1. All models of the same series use the same fan motor.
2. The HC-8002 series and HC-6001 series have the same Power PCB and Control panel PCB.
2. HC-8003 series and HC-8005 series have the same appearance, except for a different top cover and PCB.
2. HC-6001MT, HC-6001M is same as HC-6001ET, HC-6001E, except for HC-6001MT, HC-6001M controlled by mechanical switches, HC-6001ET, HC-6001E use electronic control. So do HC-8002MT, HC-8002M and HC-8002ET, HC-8002E; HC-8003M, HC-8003MT and HC-8003ET, MT-8003E; HC-8005M, HC-8005MT and HC-8005ET, MT-8005E.
3. HC-8003EAT, HC-8003EA is same as HC-8003ET, HC-8003E, except for HC-8003EAT, HC-8003EA uses power and control integrated PCB. So do HC-8005EAT, HC-8005EA and HC-8005ET, HC-8005E.
4. The HC-8005 series and HC-1101 series has a metal top cover, while the rest are plastic top covers.
5. For the HC-8002M, HC-8003M, HC-8005M, HC-8002E, HC-8003E, HC-8005E, HC-8003EA, HC-8005EA they have four optional basket, and HC-8002MT, HC-8002ET, HC-8003MT, HC-8003ET, HC-8005MT, HC-8005ET, HC-8003EAT, HC-8005EAT they have two optional basket (Basket please refer to photo).
6. HC-1101E, HC-1101ET, HC-1102E, HC-1102ET have different PCB and Fan motor than other models.
7. A "T" in the model letter means the basket does have a viewable window.

Tests are performed on HC-6001MT, HC-6001ET, HC-8002ET, HC-8002MT, HC-8002E, HC-8002M, HC-8005ET, HC-8005E, HC-8005MT, HC-8005M, HC-8005EAT, HC-8005EA, HC-1101E, HC-1101ET, HC-5001ET, HC-5001E finally only the most unfavourable results were recorded.

Amendment 4:

The original test report ref. No. 2305A0600SHA-001, dated on 2023-07-10, with amendment 1 dated on 2024-12-19, with amendment 2 dated on 2025-03-04, with amendment 3 dated on 2025-06-09, was modified on 2025-07-29 to including the following addition:

1. The PCB position for all models (except HC-6001 series and HC-8003EAT, HC-8003EA, HC-8005EAT, HC-8005EA) has been changed (only for the electronic-controlled models).
2. The grille of the air outlet has been changed for models for all models (except HC-6001 series).
3. The earthing Continuity of model for all models (except HC-6001 series) has been changed from bolt fixation to rivet fixation.
4. Added new models: HC-5001ET, HC-5001E.
5. Update standard from "EN 60335-2-9:2003+A1:04+A2:06+A12:07+A13:10+AC:11+AC:12" to "EN IEC 60335-2-9:2023+A11:2023"
6. Added alternative Relay, Internal wire for NTC.
7. Add new components for the newly added model: NTC resistor(Only for HC-5001ET, HC-5001E) and Heating element for HC-5001ET, HC-5001E.
8. Update table 24.1.

After review, tests are performed on, HC-5001ET, HC-5001E, HC-8002ET, HC-8005ET, HC-1101ET, HC-6001MT, HC-6001ET, HC-8002MT, HC-8002ET, HC-8005MT, HC-8005ET, HC-8005EAT, HC-1101ET finally only the most unfavourable results were recorded.

Clause concerned: Cl.7, Cl.8, Cl.10, Cl.11, Cl.13, Cl.15, Cl.16, Cl.19, Cl.20, Cl.21, Cl.22, Cl.23, Cl.24, Cl.25, Cl.27, Cl.28, Cl.29, Cl.30 and new standards need to be concerned.

Other clauses which were not mentioned in the report were referred to original test report.

Table concerned: Table 10.1, 11.8, 11. Z102/Z105, 13.2, 13.3, 16.2, 16.3, 19, 19.7, 19.13, 21.1, 24.1, 29.1, 29.2. 30.

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
7	MARKING AND INSTRUCTIONS		
7.1	Rated voltage or voltage range (V)	Refer to marking	P
	Symbol for nature of supply, or	Refer to marking	P
	Rated frequency (Hz)	Refer to marking	P
	Rated power input (W), or.....	Refer to marking	P
	Rated current (A)		N/A
	Manufacturer's or responsible vendor's name, trademark or identification mark.....	Refer to marking	P
	Model or type reference.....	Refer to marking	P
	Symbol IEC 60417-5172, for class II appliances		N/A
	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
	Do not immerse beyond this level (IEC 60335-2-9)		N/A
	Hot surface..... (IEC 60335-2-9)		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
7.3	Range of rated values marked with the lower and upper limits separated by a hyphen	220-240V	P
	Different rated values marked with the values separated by an oblique stroke	50/60Hz	P
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 is related to the arithmetic mean value of the rated voltage range		P
	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		N/A

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
	Units of physical quantities and their symbols according to international standardized system		P
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)		P
	- marking not placed on removable parts		P
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	See photo documentation for details.	P
	This applies also to switches which are part of a control		P
	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		N/A
7.11	Indication for direction of adjustment of controls		N/A
7.12	Instructions for safe use provided		P
	Details concerning precautions during user maintenance		P
	The instructions state that:		
	- 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	Replaced by EN 60335-1:2012	N/A
	- children being supervised not to play with the appliance	Replaced by EN 60335-1:2012	N/A
	For a part of class III construction supplied from a detachable power supply unit, the instructions state that the appliance is only to be used with the unit provided		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

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
	Appliance with inlet and intended to be immersed for cleaning, instruction sheet including in substance:(IEC 60335-2-9)		
	- remove connector before cleaning		N/A
	- dry appliance inlet before re-use		N/A
	The instructions for use for appliances intended to be used with a connector incorporating a thermostat shall state that only the appropriate connector must be used (IEC 60335-2-9)		N/A
	Instructions for appliances for outdoor use (IEC 60335-2-9):		N/A
	The appliance is suitable for outdoor use (IEC 60335-2-9)		N/A
	The supply cord should be regularly examined for signs of damage, and if the cord is damages, the appliance must not be used (IEC 60335-2-9)		N/A
	The appliance must be supplied through a residual current device (RDC) having a rated residual operating current not exceeding 30mA (IEC 60335-2-9)		N/A
	The appliance is to be connected to a socket-outlet having an earthing contact (class I) (IEC 60335-2-9)		N/A
	The temperature of accessible surfaces may be high when the appliance is operating (IEC 60335-2-9)		N/A
	If symbol IEC 60417-5041 (DB: 2002-10) is marked on appliances, the instructions shall state that the surfaces are liable to get hot during use (IEC 60335-2-9)		N/A
	The instructions shall state that the appliances are not intended to be operated by means of an external timer or separate remote-control system (IEC 60335-2-9)		P
	Instructions for use		P
	For oven: The temperature of the door or the outer surface may be high when the appliance is operating(IEC 60335-2-9)		N/A
	For toaster: Bread may burn. Therefore toasters must not be used near or below curtains and other combustible materials. They must be watched.....(IEC 60335-2-9)		N/A

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
	For barbecue: WARNING: Charcoal or similar combustible fuels must not be used with this appliance..... (IEC 60335-2-9)		N/A
	For barbecue: Maximum quantity of water to be poured into the appliance(IEC 60335-2-9)		N/A
	If top surface of a hotplate is of glass-ceramic or similar material and protects live parts, warning : If the surface is cracked, switch off the appliance to avoid the possibility of electric shock (IEC 60335-2-9)		N/A
	For induction hotplates: Metallic objects such as knives, forks, spoons and lids not be placed on the hotplate since they can get hot ...(IEC 60335-2-9).		N/A
	For breadmakers: maximum quantities of flour and raising agent that may be used(IEC 60335-2-9)		N/A
7.12.5	Replacement cord instructions, type X attachment with a specially prepared cord		N/A
	Replacement cord instructions, type Y attachment	Type Y	P
	Replacement cord instructions, type Z attachment		N/A
7.13	Instructions and other texts in an official language	English	P
7.14	Marking clearly legible and durable, rubbing test as specified		P
	The height of the triangle used with symbol IEC 60417-5041(DB:2002-10) shall be at least 12mm (IEC 60335-2-9)		N/A
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

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
	The marking specified for hot surfaces shall be visible when the appliance is operated as in normal used (IEC 60335-2-9)		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
	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
	For toasters having a crumb tray : use of test probe 41 of IEC 61032 : no contact through crumb tray with live parts that are disconnected by double pole switch using (IEC 60335-2-9)		N/A
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	Class II constructions	P
	Test probe 13 also applied through openings in earthed metal enclosures having a non-conductive coating: no contact with live parts		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
10	POWER INPUT AND CURRENT		
10.1	Power input at normal operating temperature, rated voltage and normal operation not deviating from rated power input by more than shown in table 1 ..	(see appended table)	P
	Test carried out at upper and lower limits of the ranges for appliances with one or more rated voltage ranges, unless		N/A
	the rated power input is related to the arithmetic mean value		P

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
	Power input of induction hotplates measured separately (IEC 60335-2-9)		N/A
11	HEATING		
11.1	No excessive temperatures in normal use	(see appended table)	P
	Compliance for toasters is also checked by the test of 11. 101 (IEC 60335-2-9)		N/A
11.2	The appliance is held, placed or fixed in position as described	Backs as near as possible to one of the walls of the test corner and away from the other wall	P
	Radiant grills and raclette grills that are loaded from the front, rotary grills, ovens, breadmakers, cookers and hotplates are placed with their backs as near as possible to one of the walls of the test corner and away from the other wall (IEC 60335-2-9)		P
11.3	Temperature rises, other than of windings, determined by thermocouples		P
	Temperature rises of windings determined by resistance method, unless		P
	the windings are non-uniform or it is difficult to make the necessary connections		N/A
	If magnetic field of an induction hotplate unduly influences the results, temperature rises can be determined using platinum resistances or equivalent means (IEC 60335-2-9)		N/A
11.4	Heating appliances operated under normal operation at 1.15 times rated power input (W)	(see appended table)	P
	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, the test is repeated with the appliance supplied at 1,06 times rated voltage (IEC 60335-2-9)		N/A
11.7	Tests carried out in compliance with the paragraphs N° 1 to 11 (IEC 60335-2-9)		P
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

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
	Sealing compound does not flow out		P
	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
	For radiant grills, rotary grills, raclette grills, hotplates and cookers, instead of 65 K, the temperature rise of the wall of the test corner shall not exceed 75 K. (IEC 60335-2-9)		N/A
	When an appliance connector incorporates a thermostat, the temperature rise limit for the pins of the inlet does not apply (IEC 60335-2-9)		N/A
	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 60335-2-9)		N/A
	Cheese used in sandwich toasting attachments doesn't flow into places where it can give rise to a hazard, such as reducing clearances or creepage distances below the values specified in Clause 29 (IEC 60335-2-9).		N/A
13	LEAKAGE CURRENT AND ELECTRIC STRENGTH AT OPERATING TEMPERATURE		
13.1	Leakage current not excessive and electric strength adequate		P
	Heating appliances operated at 1.15 times the rated power input (W).....:	(see appended table)	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
	grill incorporated in oven, oven or grill operated most unfavourable (IEC 60335-2-9).		N/A
13.2	For class 0, class II and class III appliances, leakage current measured by means of the circuit described in figure 4 of IEC 60990		N/A
	For other appliances, a low impedance ammeter may be used	Class I	P
	Leakage current measurements	(see appended table)	P

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
	If earthed metal between live parts and surface of glass-ceramic (or similar) of hotplate, leakage current between live parts and each of vessels in turn connected to earthed metal not exceeding 0,75 mA (IEC 60335-2-9)		N/A
	If no earthed metal between live parts and surface of glass-ceramic (or similar) of hotplate, leakage current between live parts and each of vessels in turn not exceeding 0,25 mA (IEC 60335-2-9)		N/A
13.3	The appliance is disconnected from the supply		P
	Electric strength tests according to table 4.....:	(see appended table)	P
	test voltage of 1000V if earthed metal between live parts and surface of glass-ceramic (or similar) of hotplate (IEC 60335-2-9).		N/A
	test voltage of 3000 V if no earthed metal between live parts and surface of glass-ceramic (or similar) of hotplate (IEC 60335-2-9).		N/A
	No breakdown during the tests		P
15	MOISTURE RESISTANCE		
15.2	Spillage of liquid does not affect the electrical insulation		P
	Appliances with type X attachment fitted with a flexible cord as described		N/A
	Appliances incorporating an appliance inlet tested with or without an connector, whichever is most unfavourable		N/A
	Detachable parts are removed		P
	Overfilling test; quantity : as specified in IEC 60335-2-9		N/A
	Ovens: 0.5l (IEC 60335-2-9)		P
	Hotplates and cookers : 0.5l ,15s (IEC 60335-2-9)		N/A
	Hotplates incorporate a thermal control : 0.02l (IEC 60335-2-9)		N/A
	Hotplates having ventilating opening : 0.2l (IEC 60335-2-9)		N/A
	Other appliances : 0.1l/100cm ² 1min (IEC 60335-2-9)		P
	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

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
15.3	Appliances proof against humid conditions		P
	Checked by test Cab: Damp heat steady state in IEC 60068-2-78		P
	Detachable parts removed and subjected, if necessary, to the humidity test with the main part		P
	Humidity test for 48 h in a humidity cabinet	93%RH, 23°C	P
	Reassembly of those parts that may have been removed		P
	The appliance withstands the tests of clause 16		P
16	LEAKAGE CURRENT AND ELECTRIC STRENGTH		
16.1	Leakage current not excessive and electric strength adequate		P
	Protective impedance disconnected from live parts before carrying out the tests		N/A
	Tests carried out at room temperature and not connected to the supply		P
	For hotplates, the tests are carried out with a vessel as specified for normal operation placed on each cooking zone (IEC 60335-2-9).		N/A
16.2	Single-phase appliances: test voltage 1.06 times rated voltage (V).....:	254,4V	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:		
	- 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
	If earthed metal between live parts and surface of glass-ceramic (or similar) of hotplate, leakage current between live parts and each of vessels in turn connected to earthed metal not exceeding 0,75 mA (IEC 60335-2-9)		N/A

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
	If no earthed metal between live parts and surface of glass-ceramic (or similar) of hotplate, leakage current between live parts and each of vessels in turn not exceeding 0,25 mA (IEC 60335-2-9)		N/A
16.3	Electric strength tests according to table 7	(see appended table)	P
	Test voltage applied between the supply cord and inlet bushing and cord guard and cord anchorage as specified	(see appended table)	P
	test voltage of 1250 V if earthed metal between live parts and surface of glass-ceramic (or similar) of hotplate. (IEC 60335-2-9)		N/A
	test voltage of 3000 V if no earthed metal between live parts and surface of glass-ceramic (or similar) of hotplate. (IEC 60335-2-9)		N/A
	No breakdown during the tests		P
19	ABNORMAL OPERATION		
19.1	The risk of fire, mechanical damage or electric shock under abnormal or careless operation obviated		P
	Electronic circuits so designed and applied that a fault will not render the appliance unsafe	For HC-5001ET, HC-5001E	P
	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		P
	if applicable, to the test of 19.5		P
	Appliances incorporating PTC heating elements are also subjected to the test of 19.6		N/A
	Appliances incorporating motors subjected to the tests of 19.7 to 19.10, as applicable		P
	Appliances incorporating electronic circuits subjected to the tests of 19.11 and 19.12, as applicable		P
	Appliances incorporating contactors or relays subjected to the test of 19.14, being carried out before the tests of 19.11		P
	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		P

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
	until steady conditions are established		P
	If a heating element or intentionally weak part becomes open-circuited, the relevant test is repeated on a second sample		P
	Tests of 19.4 and 19.5 are only applicable to: -breadmakers, contact grills, food dehydrators - ovens, roasters, hotplates, cookers, rotary grills if they incorporate a timer or if their instructions indicate a cooking operation longer than 1h (IEC 60335-2-9)		P
	Toasters are subjected to the tests 19.101 and 19.102 (IEC 60335-2-9)		N/A
	Induction hotplates are subjected to the tests 19.103 and 19.104 (IEC 60335-2-9)		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).....:	(see appended table)	P
	Radiant grills, raclette grills that are loaded from the front , rotary grills, ovens, hotplates and cookers are placed as near as possible to the walls of the test corner (IEC 60335-2-9)		N/A
	They are tested empty with lids open or closed whichever is the more unfavourable (IEC 60335-2-9)	Container installed	P
	Hotplates are operated without a vessel and with the controls adjusted to the highest setting (IEC 60335-2-9)		N/A
	Induction hotplates are operated under conditions of clause 11 but with empty vessels, controls adjusted to the highest setting (IEC 60335-2-9)		N/A
	Cookers are only tested with the heating unit that results in the most unfavourable conditions, their controls adjusted to the highest setting. However ovens are operated if they do not have an indicating lamp to show when they are switched on, controls adjusted to the highest setting (IEC 60335-2-9)		N/A
19.3	Test of 19.2 repeated; test voltage (V), power input of 1.24 times rated power input (W).....:	(see appended table)	P
19.4	Test conditions as in clause 11, any control limiting the temperature during tests of clause 11 short-circuited		P
	Air-circulating fans of food dehydrators disconnected (IEC 60335-2-9)		N/A

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
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	two thermal links at the both side of heating element;	P
	The test repeated with reversed polarity and the other end of the heating element connected to the sheath		P
	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
19.7	Stalling test by locking the rotor if the locked rotor torque is smaller than the full load torque, or		P
	locking moving parts of other appliances		N/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
	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	Maximum period allowed and thermal link of motor opened.	P
	Other appliances supplied with rated voltage for a period as specified		N/A
	Winding temperatures not exceeding values specified in table 8.....	(see appended table)	P
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	For HC-5001ET, HC-5001E	P
	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		P
	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	Stand-by mode	P
	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		P

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Clause	Requirement + Test	Result - Remark	Verdict
	During and after each test the following is checked:		
	- the temperature of the windings do not exceed the values specified in table 8		P
	- the appliance complies with the conditions specified in 19.13		P
	- 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:		
	- 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:		
	- 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:		
	a) short circuit of functional insulation if clearances or creepage distances are less than the values specified in clause 29	No fire and no hazard.	P
	b) open circuit at the terminals of any component	For HC-5001ET, HC-5001E: D1, D2: the appliance didn't work; No hazard.	P
	c) short circuit of capacitors, unless	For HC-5001ET, HC-5001E: EC1, EC2: the appliance didn't work; the fuse opened (two times), No hazard.	P
	they comply with IEC 60384-14	Certified	P

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
	d) short circuit of any two terminals of an electronic component, other than integrated circuits	For HC-5001ET, HC-5001E: EC1, EC2: the appliance didn't work; Varistor: the fuse opened (two times); No hazard.	P
	This fault condition is not applied between the two circuits of an optocoupler		N/A
	e) failure of triacs in the diode mode	No fire and no hazard.	P
	f) failure of microprocessors and integrated circuits	No fire and no hazard.	P
	g) failure of an electronic power switching device		N/A
	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
19.11.4	Appliances having a device with an off position obtained by electronic disconnection, or		P
	a device that can be placed in the stand-by mode,		P
	subjected to the tests of 19.11.4.1 to 19.11.4.7, the device being set in the off position or in the stand-by mode		P
	Appliances incorporating a protective electronic circuit subjected to the tests of 19.11.4.1 to 19.11.4.7, the tests being carried out after the protective electronic circuit has operated, except that		N/A
	appliances operated for 30 s or 5 min during the test of 19.7 are not subjected to the tests for electromagnetic phenomena.		N/A
	Surge protective devices disconnected, unless		P
	They incorporate spark gaps		N/A
19.11.4.1	The appliance is subjected to electrostatic discharges in accordance with IEC 61000-4-2, test level 4		P
19.11.4.2	The appliance is subjected to radiated fields in accordance with IEC 61000-4-3, test level 3		P
19.11.4.3	The appliance is subjected to fast transient bursts in accordance with IEC 61000-4-4, test level 3 or 4 as specified		P
19.11.4.4	The power supply terminals of the appliance subjected to voltage surges in accordance with IEC 61000-4-5, test level 3 or 4 as specified		P

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
	Earthed heating elements in class I appliances disconnected		P
19.11.4.5	The appliance is subjected to injected currents in accordance with IEC 61000-4-6, test level 3		P
19.11.4.6	Appliances having a rated current not exceeding 16 A are subjected to the Class 3 voltage dips and interruptions in accordance with IEC 61000-4-11		P
	Appliances having a rated current exceeding 16 A are subjected to the Class 3 voltage dips and interruptions in accordance with IEC 61000-4-34		N/A
19.11.4.7	The appliance is subjected to mains signals in accordance with IEC 61000-4-13, test level class 2		P
19.11.4.8	The appliance is supplied at rated voltage and operated under normal operation. After 60s the power supply is reduced to a level such that the appliance ceases to respond or parts controlled by the programmable component cease to operate		P
	The appliance continues to operate normally, or		P
	requires a manual operation to restart		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)	Fuse open circuited in test 19.11, relevant test is repeated on a second sample result the same, No hazard.	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		P
	If the appliance can still be operated it complies with 20.2		P
	Insulation, other than of class III appliances or class III constructions that do not contain live parts, withstands the electric strength test of 16.3, the test voltage as specified in table 4:		
	- basic insulation (V).....	1000V/1min	P
	- supplementary insulation (V)	1750V/1min	P
	- reinforced insulation (V).....	3000V/1min	P

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Clause	Requirement + Test	Result - Remark	Verdict
	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	480V	P
	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:		
	- do not become operational, or		P
	- 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:		
	- 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 19.102 any flame or smoke from the bread are ignored (IEC 60335-2-9)		N/A
	Temperature rise of the windings of induction hotplates not exceeding the values specified in 19.7 (IEC 60335-2-9)		N/A
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		P
	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		P
	If more than one relay or contactor operates in clause 11, they are short-circuited in turn		P
20	STABILITY AND MECHANICAL HAZARDS		
20.1	Appliances having adequate stability		P
	Tilting test through an angle of 10°, appliance placed on an inclined plane/horizontal support, not connected to the supply mains; appliance does not overturn		P

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Clause	Requirement + Test	Result - Remark	Verdict
	Tilting test repeated on appliances with heating elements, angle of inclination increased to 15°		P
	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		P
	Protective enclosures, guards and similar parts are non-detachable, and		P
	have adequate mechanical strength		P
	Enclosures that can be opened by overriding an interlock are considered to be detachable parts		P
	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		P
21	MECHANICAL STRENGTH		
21.1	Appliance has adequate mechanical strength and is constructed as to withstand rough handling		P
	Checked by applying 3 blows to every point of the enclosure like to be weak, in accordance with test Ehb of IEC 60068-2-75, spring hammer test, with an impact energy of 0,5 J	(see appended table)	P
	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
	For appliances intended for outdoor use, the impact energy is 0.7J (IEC 60335-2-9)		N/A
	Appliances incorporates visibly glowing heating elements located at the top of the oven and accessible to the test probe 41 of IEC 61032 (IEC 60335-2-9)		N/A
	For hotplates with surfaces of glass-ceramic or similar, three blows applied to parts surfaces not exposed to the test of 21.101, impact energy 0,70J ± 0,05 J. (IEC 60335-2-9).		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
21.2	Accessible parts of solid insulation having strength to prevent penetration by sharp implements		P
	Test not applicable if the thickness of supplementary insulation is at least 1 mm and reinforced insulation at least 2 mm		P
	The insulation is tested as specified, and does withstand the electric strength test of 16.3		N/A
22	CONSTRUCTION		
22.5	No risk of electric shock when touching the pins of the plug, for appliances having a capacitor with rated capacitance exceeding 0,1µF, the appliance being disconnected from the supply at the instant of voltage peak		P
	Voltage not exceeding 34 V (V):	Max. 12V	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
22.11	Reliable fixing of non-detachable parts that provide the necessary degree of protection against electric shock, moisture or contact with moving parts		P
	Obvious locked position of snap-in devices used for fixing such parts		P
	No deterioration of the fixing properties of snap-in devices used in parts that are likely to be removed during installation or servicing		P
	Tests as described	50N pull and push to enclosure and handle	P

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Clause	Requirement + Test	Result - Remark	Verdict
22.12	Handles, knobs etc. fixed in a reliable manner		P
	Fixing in wrong position of handles, knobs etc. indicating position of switches or similar components not possible		P
	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	Handle	P
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		P
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
22.18	Current-carrying parts and other metal parts resistant to corrosion		P
22.20	Direct contact between live parts and thermal insulation effectively prevented, unless		P
	material used is non-corrosive, non-hygrosopic and non-combustible		N/A
22.21	Wood, cotton, silk, ordinary paper and fibrous or hygroscopic material not used as insulation, unless		P
	impregnated		N/A
	This requirement does not apply to magnesium oxide and mineral ceramic fibres used for the electrical insulation of heating elements		P
22.22	Appliances not containing asbestos		P
22.23	Oils containing polychlorinated biphenyl (PCB) not used	No oils	P
22.30	Parts serving as supplementary or reinforced insulation fixed so that they cannot be removed without being seriously damaged, or		P
	so constructed that they cannot be replaced in an incorrect position, and so that if they are omitted, the appliance is rendered inoperable or manifestly incomplete		P

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Clause	Requirement + Test	Result - Remark	Verdict
22.31	Neither clearances nor creepage distances over supplementary and reinforced insulation reduced below values specified in clause 29 as a result of wear		P
	Neither clearances nor creepage distances between live parts and accessible parts reduced below values for supplementary insulation if wires, screws etc. become loose		P
22.32	Supplementary and reinforced insulation constructed or protected against pollution so that clearances or creepage distances are not reduced below the values in clause 29		P
	Supplementary insulation of natural or synthetic rubber resistant to ageing, or arranged and dimensioned so that creepage distances are not reduced below values specified in 29.2		N/A
	Ceramic material not tightly sintered, similar materials or beads alone not used as supplementary or reinforced insulation		N/A
	Insulating material in which heating conductors are embedded is considered to be basic insulation, not reinforced insulation		P
	Oxygen bomb test at 70 °C for 96 h and 16 h at room temperature		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		P
	Such parts being of metal, and their shafts or fixings are likely to become live in the event of a failure of basic insulation, are either adequately covered by insulation material or their accessible parts are separated from their shafts or fixings by supplementary insulation		P
	This requirement does not apply to handles, levers and knobs on stationary 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
22.38	Capacitors not connected between the contacts of a thermal cut-out		P

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Clause	Requirement + Test	Result - Remark	Verdict
22.39	Lamp holders used only for the connection of lamps		P
22.41	No components, other than lamps, containing mercury		P
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
22.105	Appliances have not openings on the underside that would allow small items to penetrate and touch live parts. (IEC 60335-2-9)	No such opening	P
	Distance measured between the supporting surface and live parts through openings (IEC 60335-2-9)		N/A
	Distance requested as specified: (IEC 60335-2-9)		N/A
23	INTERNAL WIRING		
23.1	Wireways smooth and free from sharp edges		P
	Wires protected against contact with burrs, cooling fins etc.		P
	Wire holes in metal well-rounded or provided with bushings		P
	Wiring effectively prevented from coming into contact with moving parts		P
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
23.7	The colour combination green/yellow only used for earthing conductors		P
23.8	Aluminium wires not used for internal wiring	Aluminium wires not used	P
23.9	Stranded conductors not consolidated by soldering where they are subjected to contact pressure, unless		P
	the contact pressure is provided by spring terminals		N/A
24	COMPONENTS		

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Clause	Requirement + Test	Result - Remark	Verdict
24.1	Components comply with safety requirements in relevant IEC standards		P
	List of components:	(see appended table)	P
	If components have not been tested and found to comply with relevant IEC standard for the number of cycles specified, they are tested in accordance with 24.1.1 to 24.1.9		P
	For components mentioned in 24.1.1 to 24.1.9 no additional tests specified in the relevant component standard are necessary other than those specified in 24.1.1 to 24.1.9		P
	Components not tested and found to comply with relevant IEC standard and components not marked or not used in accordance with its marking, tested under the conditions occurring in the appliance		P
	Lampholders and starterholders that have not being tested and found to comply with the relevant IEC standard, tested as a part of the appliance and additionally according to the gauging and interchangeability requirements of the relevant IEC standard		P
	No additional tests specified for nationally standardized plugs such as those detailed in IEC/TR 60083 or connectors complying with the standard sheets of IEC 60320-1 and IEC 60309		P
24.1.1	Capacitors likely to be permanently subjected to the supply voltage and used for radio interference suppression or for voltage dividing, complying with IEC 60384-14	Certified component	P
	If the capacitors have to be tested, they are tested according to Annex F		N/A
24.1.3	Switches complying with IEC 61058-1, the number of cycles of operation being at least 10 000	Certified component	P
	If they have to be tested, they are tested according to Annex H		N/A
	If the switch operates a relay or contactor, the complete switching system is subjected to the test		N/A
	If the switch only operates a motor starting relay complying with IEC 60730-2-10 with the number of cycles of a least 10 000 as specified, the complete switching system need not be tested		N/A
	Switches controlling heating elements of hotplates subjected to 50000 cycles of operation (IEC 60335-2-9)		N/A

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
24.1.4	Automatic controls complying with IEC 60730-1 with the relevant part 2. The number of cycles of operation being at least:		
	- thermostats: 10 000	Electronic thermostats	P
	- temperature limiters: 1 000		N/A
	- self-resetting thermal cut-outs: 300		N/A
	- voltage maintained non-self-resetting thermal cut-outs: 1 000		N/A
	- other non-self-resetting thermal cut-outs: 30		N/A
	- timers: 3 000		N/A
	- energy regulators: 10 000		N/A
	- energy regulators for automatic action (IEC 60335-2-9): 100 000		N/A
	- energy regulators for manual action (IEC 60335-2-9): 10 000		N/A
	Self-resetting thermal cut-outs for heating elements of glass-ceramic hotplates (IEC 60335-2-9) 100 000		N/A
	The number of cycles for controls operating during clause 11 need not be declared, if the appliance meets the requirements of this standard when they are short-circuited		N/A
	Thermal motor protectors are tested in combination with their motor under the conditions specified in Annex D		N/A
	For water valves containing live parts and that are incorporated in external hoses for connection of an appliance to the water mains, the degree of protection declared for subclause 6.5.2 of IEC 60730-2-8 is IPX7		N/A
24.1.8	The relevant standard for thermal links is IEC 60691	Certified	P
	Thermal links not complying with IEC 60691 are considered to be an intentionally weak part for the purposes of Clause 19		N/A
24.1.9	Contactors and relays, other than motor starting relays, tested as part of the appliance	Certified	P
	They are also tested in accordance with Clause 17 of IEC 60730-1, the number of cycles of operations in 24.1.4 selected according to the contactor or relay function in the appliance	10000 cycles	P
24.2	Appliances not fitted with:		

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Clause	Requirement + Test	Result - Remark	Verdict
	- switches or automatic controls in flexible cords		P
	- devices causing the protective device in the fixed wiring to operate in the event of a fault in the appliance		P
	- thermal cut-outs that can be reset by soldering, unless		P
	the solder has a melting point of at least 230 °C		N/A
25	SUPPLY CONNECTION AND EXTERNAL FLEXIBLE CORDS		
25.1	Appliance not intended for permanent connection to fixed wiring, means for connection to the supply:		
	- supply cord fitted with a plug,		P
	- an appliance inlet having at least the same degree of protection against moisture as required for the appliance, or		N/A
	- pins for insertion into socket-outlets		N/A
	Appliances incorporating an appliance inlet other than those standardized in IEC 60320-1, shall be supplied with a cord set (IEC 60335-2-9)		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
25.5	Method for assembling the supply cord to the appliance:		
	- type X attachment		N/A
	- type Y attachment		P
	- type Z attachment, if allowed in relevant part 2		N/A
	Type X attachment, other than those with a specially prepared cord, not used for flat twin tinsel cords		N/A
	For multi-phase appliances supplied with a supply cord and that are intended to be permanently connected to fixed wiring, the supply cord is assembled to the appliance by type Y attachment		N/A
25.6	Plugs fitted with only one flexible cord		P
25.7	Supply cords, other than for class III appliances, being one of the following types:		
	- rubber sheathed (at least 60245 IEC 53)		N/A
	- polychloroprene sheathed (at least 60245 IEC 57)		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	- cross-linked polyvinyl chloride sheathed (at least 60245 IEC 88)		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		
	light polyvinyl chloride sheathed cord (60227 IEC 52), for appliances not exceeding 3 kg		N/A
	ordinary polyvinyl chloride sheathed cord (60227 IEC 53), for other appliances	H05VV-F	P
	- heat resistant polyvinyl chloride sheathed. Not used for type X attachment other than specially prepared cords		
	heat-resistant light polyvinyl chloride sheathed cord (60227 IEC 56), for appliances not exceeding 3 kg		N/A
	heat-resistant polyvinyl chloride sheathed cord (60227 IEC 57), for other appliances	H05V2V2-F	P
	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
25.8	Nominal cross-sectional area of supply cords not less than table 11; rated current (A); cross-sectional area (mm ²)	Rated current < 6A, 3x0,75mm ² or 3x1,0mm ²	P
25.9	Supply cords not in contact with sharp points or edges		P
25.10	Supply cord of class I appliances have a green/yellow core for earthing		P
25.11	Conductors of supply cords not consolidated by soldering where they are subject to contact pressure, unless		P
	the contact pressure is provided by spring terminals		N/A
25.13	Inlet openings so constructed as to prevent damage to the supply cord		P
	If the enclosure at the inlet opening is not of insulating material, 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

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
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		P
	The cord cannot be pushed into the appliance to such an extent that the cord or internal parts of the appliance can be damaged		P
	Pull and torque test of supply cord, values shown in table 12: mass (kg); pull (N); torque (not on automatic cord reel) (Nm)	>1kg and <4kg, 60N, 0,25Nm	P
	Cord not damaged and max. 2 mm displacement of the cord	Max 1,0mm	P
25.17	Adequate cord anchorages for type Y and Z attachment, test with the cord supplied with the appliance	Type Y	P
25.18	Cord anchorages only accessible with the aid of a tool, or		P
	Constructed so that the cord can only be fitted with the aid of a tool		P
25.20	The insulated conductors of the supply cord for type Y and Z attachment additionally insulated from accessible metal parts	Type Y	P
27	PROVISION FOR EARTHING		
27.1	Accessible metal parts of Class 0I and I appliances permanently and reliably connected to an earthing terminal or earthing contact of the appliance inlet	Class I	P
	Earthing terminals and earthing contacts not connected to the neutral terminal		P
	Class 0, II and III appliances have no provision for earthing		N/A
	Safety extra-low voltage circuits not earthed, unless		N/A
	protective extra-low voltage circuits		N/A
	No earthing via flexible metal tubes, coiled springs and cord anchorage (IEC 60335-2-9)		N/A
27.2	Clamping means of earthing terminals adequately secured against accidental loosening		P
	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		P

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
	conductors cannot be loosened without the aid of a tool		P
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		P
27.4	No risk of corrosion resulting from contact between parts of the earthing terminal and the copper of the earthing conductor or other metal		P
	Parts providing earthing continuity, other than parts of a metal frame or enclosure, have adequate resistance to corrosion		P
	If of steel, these parts provided with an electroplated coating with a thickness at least 5 µm		P
	Adequate protection against rusting of parts of coated or uncoated steel, only intended to provide or transmit contact pressure		P
	In the body of the earthing terminal is a part of a frame or enclosure of aluminium or aluminium alloys, precautions taken to avoid risk of corrosion		P
27.5	Low resistance of connection between earthing terminal and earthed metal parts		P
	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
	Resistance not exceeding 0,1 Ω at the specified low-resistance test (Ω).....:	Max 0,02 Ω	P
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
28	SCREWS AND CONNECTIONS		
28.1	Fixings, electrical connections and connections providing earthing continuity withstand mechanical stresses		P

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
	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		P
	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
	For screws and nuts; torque-test as specified in table 14	(see appended table)	P
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:		
	- in normal use,		N/A
	- during user maintenance,		N/A
	- when replacing a supply cord having a type X attachment, or		N/A
	- during installation		N/A
	At least two screws being used for each connection providing earthing continuity, unless		P
	the screw forms a thread having a length of at least half the diameter of the screw		N/A

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
28.4	Screws and nuts that make mechanical connection secured against loosening if they also make electrical connections or connections providing earthing continuity		P
	This requirement does not apply to screws in the earthing circuit if at least two screws are used, or		P
	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		P

Annex: IEC 60335-2-9:2019			
Clause	Requirement + Test	Result - Remark	Verdict
5	GENERAL CONDITIONS FOR THE TESTS		-
5.101	Modification:		N/A
	In appliances that incorporate induction hotplates in addition to other heating units, the induction hotplates are operated simultaneously and supplied separately (IEC 60335-2-9)		N/A
7	MARKING AND INSTRUCTIONS		N/A
7.1	Modification:		N/A
	If appliances have accessible metal surfaces, for which temperature rise limits are specified in Table 102 and for which the provisions of footnote b to Table 102 apply, then the appliance shall be marked with symbol IEC 60417-5041(2002-10), the rules of ISO 3864-1 applying except for the specified colours, or marked with the substance of the following: CAUTION: Hot surface (IEC 60335-2-9)		N/A
7.12	Modification:		N/A
	If symbol IEC 60417-5041 (2002-10) is marked on appliances, its meaning shall be explained.... (IEC 60335-2-9)		N/A
	Addition:		N/A
	For candy floss appliances shall state the maximum quantities of sugar and other ingredients that may be used. (IEC 60335-2-9)		N/A
	The instructions shall include the substance of the following:(IEC 60335-2-9)		-
	This appliances is intended to be used in household and similar applications such as: -staff kitchen areas in shops, offices and others working environments; -farm houses; -by clients in hotels, motels and other residential type environments; -bed and breakfast type environments.		P
	If the use of the appliance is limited to less than the above, this shall be clearly stated in the instructions. (IEC 60335-2-9)		P
7.14	Modification: The height of the triangle used with symbol IEC 60417-5041(2002-10) shall be at least 20 mm. (IEC 60335-2-9)		P

Annex: IEC 60335-2-9:2019			
Clause	Requirement + Test	Result - Remark	Verdict
7.15	The marking specified for hot surfaces shall be visible when the appliance is operated as in normal used including when actuating any switch, adjusting any control or opening a lid, door or drawer. It shall not be placed on a hot functional surface(IEC 60335-2-9)		N/A
7.101	The cooking zone of hot plates shall be identified by appropriate marking (IEC 60335-2-9)		N/A
	unless it is obvious		N/A
8	PROTECTION AGAINST ACCESS TO LIVE PARTS		-
8.1.3	Addition: For toasters it is not necessary for the heating element switching device to provide full disconnection or meet the clearances for full disconnection specified in 20.1.5.3 of IEC 61058-1:2000 obtained from Table 22 of IEC 61058-1:2000. (IEC 60335-2-9)		N/A
11	HEATING		-
11.1	Addition: Compliance for ovens, rotary grills and cookers is also checked by the test of 11.102. (IEC 60335-2-9)		P
	Compliance for contact grills, waffle irons, radiant grills, raclette grills, barbecues, candy floss appliances and hot plates, is also checked by the test of 11.103. (IEC 60335-2-9)		N/A
	Compliance for breadmakers, pop-corn makers, and food dehydrators is also checked by the test of 11.104. (IEC 60335-2-9)		N/A
	Compliance for roasters is also checked by the test of 11.105. (IEC 60335-2-9)		P
	For all other types of appliances, compliance is checked by submitting the appliance to the tests of the nearest mentioned relevant type of appliance. (IEC 60335-2-9)		N/A
11.3	Addition: Where the external accessible surfaces are suitably flat and access permits, then the test probe of Figure 105 is used to measure the temperature rises of external accessible surfaces specified in Table 102. The probe is applied with a force of 4 N ± 1 N to the surface in such a way that the best possible contact between the probe and the surface is ensured. (IEC 60335-2-9)		P

Annex: IEC 60335-2-9:2019			
Clause	Requirement + Test	Result - Remark	Verdict
11.4	Addition: Breadmakers are operated as specified for combined appliances. (IEC 60335-2-9)		N/A
11.6	Addition: Induction hot plates are also operated with vessels, as specified in Figure 104, containing water and covered with a lid. Controls are adjusted to their highest setting until the water boils and then adjusted so that the water simmers. Water is added to maintain the level during simmering. (IEC 60335-2-9)		N/A
11.7	Modification: Tests carried out in compliance with the paragraphs N° 1 to 13 (IEC 60335-2-9)		P
11.8	Addition: The temperature rise limits for touch controls also include all surfaces within 5 mm of the touch controls, regardless of their shape..... (IEC 60335-2-9)		N/A
11.101	Modification: Toasters are placed as specified in 11.2 and are operated for three cycles at rated power under normal operation..... (IEC 60335-2-9).		N/A
	During the test, the temperature rise of surfaces shall not exceed the values specified in Table 102 (IEC 60335-2-9).		N/A
	Addition:		N/A
11.102	Ovens, rotary grills and cookers are placed as specified in 11.2 and are supplied at rated power input and operated under normal operation (IEC 60335-2-9)		P
	Appliances are operated until steady conditions are established or for 60 min, whichever is shorter. During the test, the temperature rise of surfaces shall not exceed the values specified in Table 102.		P
	Ovens having settings higher than 240 °C are also operated at the maximum setting until steady conditions are established or for 60 min, whichever is shorter. The temperature rise limits of Table 102 for top surfaces and door or drawer surfaces are increased by 10 K.		N/A

Annex: IEC 60335-2-9:2019			
Clause	Requirement + Test	Result - Remark	Verdict
11.103	Contact grills, waffle irons, radiant grills, raclette grills, barbecues, candy floss appliances and hot plates are placed as specified in 11.2 and are supplied at rated power input and operated under normal operation. (IEC 60335-2-9)		N/A
	Induction hotplates and induction wok hotplates are operated at rated voltage instead of rated power input.		N/A
	During the test, the temperature rise of surfaces shall not exceed the values specified in Table 102.		N/A
11.104	Breadmakers, pop-corn makers and food dehydrators are placed as specified in 11.2 and operated under normal operation. Pop-corn makers and food dehydrators are supplied at rated power input and breadmakers are supplied at rated voltage. During the test, the temperature rise of surfaces shall not exceed the values specified in Table 102. (IEC 60335-2-9).		N/A
11.105	Roasters are placed as specified in 11.2 and are supplied at rated power input and operated under normal operation. (IEC 60335-2-9) During the test, the temperature rise of surfaces shall not exceed the values specified in Table 102.		P
13	LEAKAGE CURRENT AND ELECTRIC STRENGTH AT OPERATING TEMPERATURE		-
13.1	Addition: Induction wok hotplates are operated with the wok pan that is supplied by the manufacturer with the induction wok hotplate at the point of sale. (IEC 60335-2-9).		N/A
15	MOISTURE RESISTANCE		N/A
15.2	Addition: For induction wok hotplates, the test is performed using the wok pan that is supplied by the manufacturer with the induction wok hotplate at the point of sale. (IEC 60335-2-9)		N/A
16	LEAKAGE CURRENT AND ELECTRIC STRENGTH		-
16.1	Addition: Induction wok hotplates are operated with the wok pan that is supplied by the manufacturer with the induction wok hotplate at the point of sale. (IEC 60335-2-9).		N/A
19	ABNORMAL OPERATION		-
19.1	Modification:		P

Annex: IEC 60335-2-9:2019			
Clause	Requirement + Test	Result - Remark	Verdict
	Tests of 19.4 and 19.5 are only applicable to: - breadmakers, - food dehydrators - the following appliances, if they incorporate a timer or if their instructions indicate a cooking operation longer than 1h: ovens, roasters, hotplates other than induction hotplates, cookers, rotary grills... (IEC 60335-2-9)		P
	However, induction wok hotplates are not subjected to the test of 19.104, 19.105 and 19.107, but 19.2, 19.3 and 19.4 are not applicable. (IEC 60335-2-9)		N/A
	Induction hotplates are subjected to the tests 19.104, 19.105 and 19.107 (IEC 60335-2-9)		N/A
	Induction wok hotplates are subjected to the tests 19.105 and 19.107 (IEC 60335-2-9)		N/A
19.11.2	Addition:		-
	For toasters having devices with an off position obtained by electronic disconnection, the fault conditions a) to g) are also simulated with the appliance supplied at rated voltage but with the controls switched off. (IEC 60335-2-9)		N/A
	Heating elements shall not become energized. (IEC 60335-2-9)		N/A
19.102	Addition: Toasters: test with the ejector mechanism locked (IEC 60335-2-9)		N/A
19.107	Addition:		N/A
	Induction hotplates are operated under the conditions of Clause 11 but with empty vessels, controls being adjusted to the highest setting. (IEC 60335-2-9)		N/A
	Induction wok hotplates are operated under the conditions of Clause 11 with an empty wok pan that is supplied by the manufacturer with the induction wok hotplate at the point of sale, controls being adjusted to the highest setting.		N/A
21	MECHANICAL STRENGTH		-
21.1	Modification:		-
	Appliances incorporates visibly glowing heating elements the blows are applied to the tubes without removing any heater guards as mounted in the appliance if they are (IEC 60335-2-9)		-
	-located at the top of the oven and accessible to test probe 41 of IEC 61032;		N/A

Annex: IEC 60335-2-9:2019			
Clause	Requirement + Test	Result - Remark	Verdict
	-located elsewhere in the oven and accessible to test probe B of IEC 61032.		N/A
	For hotplates with surfaces of glass-ceramic or similar, three blows applied to parts surfaces not exposed to the test of 21.101, impact energy 0,7 J(IEC 60335-2-9).		N/A
21.101	Addition: Induction wok hotplates are tested with a wok pan that is supplied by the manufacturer with the induction wok hotplate at the point of sale. The wok pan is filled with sand or shot so that the total mass, including the mass of the wok pan, is equal to 1,8 kg $\pm$ 0,01 kg.(IEC 60335-2-9)		N/A
22	CONSTRUCTION		-
	Addition:		-
22.101	Hotplates shall not incorporate a timer that is intended to delay the operation of a heating element. (IEC 60335-2-9)		N/A
22.107	If a heating element is clamped by a nut on a central stud, an additional means is required to prevent its rotation. (IEC 60335-2-9)		N/A
22.114	Heating elements in candy floss appliances shall be located so that they are not exposed to sugar during normal use of the appliance. (IEC 60335-2-9)		N/A
22.115	For appliances incorporating a hotplate with at least one heating unit controlled by an electronic circuit, safety shall not be impaired in the event of a fault in the electronic circuit. (IEC 60335-2-9)		N/A
30	RESISTANCE TO HEAT AND FIRE		-
30.2	Modification: For cookers, hotplates, ovens, roasters, rotary grills if they incorporate a timer or if their instructions indicate a cooking operation longer than 1h , 30.2.3 applies (IEC 60335-2-9)		P
R	ANNEX R (NORMATIVE) SOFTWARE EVALUATION		-
	Addition:		-
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, detection of a fault/error occur before compliance with clause 19 and 22.115 is impaired (IEC 60335-2-9)		N/A

Annex: IEC 60335-2-9:2019			
Clause	Requirement + Test	Result - Remark	Verdict
R.2.2.9	Software and safety-related hardware under its control is initialized and terminates before compliance with clause 19 and 22.115 is impaired (IEC 60335-2-9)		N/A

ATTACHMENT TO TRF IEC60335_2_9P			
Clause	Requirement + Test	Result - Remark	Verdict
ATTACHMENT TO TEST REPORT IEC 60335-1:2010, IEC 60335-1:2010/AMD1:2013, IEC 60335-1:2010/AMD2:2016 IEC 60335-2-9:2019 EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY – PART 2-9: PARTICULAR REQUIREMENTS FOR GRILLS, TOASTERS AND SIMILAR PORTABLE COOKING APPLIANCES			
Differences according to	EN IEC 60335-2-9:2023 + A11:2023 used in conjunction with EN 60335-1:2012 + A11:2014 + A13:2017 + A1:2019 + A14:2019 + A2:2019 + A15:2021 + A16:2023 EN 62233:2008		
TRF template used	IECEE OD-2020-F2:2022, Ed. 1.2		
Attachment Form No.	EU_GD_IEC60335_2_9P		
Attachment Originator	Nemko Group AS		
Master Attachment	Dated 2024-05-16		
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	CENELEC COMMON MODIFICATIONS (EN)		--
6.1	Delete “class 0” and “class 01”		N/A
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
	If appliances have accessible surfaces, for which temperature rise limits are specified in Table 102 and for which the provisions of footnote b to Table 102 apply or the value of Table 102+40K is allowed in Clause 11.102, the appliance is marked with symbol IEC 60417-5041(2002-10), the rules of ISO 3864-1 applying except for the specified colours, or		N/A
	marked with the substance of the following: CAUTION: Hot surfaces		N/A
7.12	The instructions include the substance of the following:		--
	- this appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved		P

ATTACHMENT TO TRF IEC60335_2_9P			
Clause	Requirement + Test	Result - Remark	Verdict
	- children shall not play with the appliance		P
	- cleaning and user maintenance shall not be made by children without supervision		P
8.1.1	Also test probe 18 of EN 61032 is applied		P
	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 inspection and by applying the test probes of EN 61032 in accordance with the conditions specified in 8.1.1		P
	Test probe B and probe 18 of EN 61032 are applied to built-in appliances and fixed appliances only after installation		N/A
11.8	Footnote b: When the required values are not met, the maximum temperature rise is not higher than two times the values indicated, as defined for specific appliances		N/A
11.101	Temperature rises are also not measured on ventilation openings and the surface within 25 mm from the ventilation opening that does not exceed the 20 % of the accessible enclosure surface		N/A
	If the ventilation openings and the surfaces within 25 mm of them exceed 20 % of the accessible enclosure surface, the rest of the surfaces within 25 mm around ventilation openings meet the temperature limits from Table 102		N/A
	For toasters, the footnote b is only applicable for areas as specified		N/A

ATTACHMENT TO TRF IEC60335_2_9P			
Clause	Requirement + Test	Result - Remark	Verdict
11.102	Temperature rises are also not measured on ventilation openings and the surface within 25 mm from the ventilation opening that does not exceed the 20 % of the accessible enclosure surface		N/A
	If the ventilation openings and the surfaces within 25 mm of them exceed 20 % of the accessible enclosure surface, the rest of the surfaces within 25 mm around ventilation openings meet the temperature limits foreseen in this subclause		P
	During the test, the temperature rise of the external front, top and rear surfaces touchable by test probe B of EN 61032 does not exceed the values specified in Table 102 + 40 K, except non measured surfaces		P
	The temperature rise of other external surfaces do not exceed the values specified in Table 102, except non measured surfaces		P
	For ovens, rotary grills and cookers footnote b is only applicable as specified		N/A
11.103	For contact grills, waffle irons, raclette grills, barbecues and radiant grills footnote b is applicable to the entire enclosure		N/A
	Temperature rises are also not measured on ventilation openings and the surface within 25 mm from the ventilation opening that does not exceed the 20 % of the accessible enclosure surface		N/A
	If the ventilation openings and the surfaces within 25 mm of them exceed 20 % of the accessible enclosure surface, the rest of the surfaces within 25 mm around ventilation openings meet the temperature limits from Table 102		N/A
11.104	Temperature rises are also not measured on ventilation openings and the surface within 25 mm from the ventilation opening that does not exceed the 20 % of the accessible enclosure surface		N/A
	If the ventilation openings and the surfaces within 25 mm of them exceed 20 % of the accessible enclosure surface, the rest of the surfaces within 25 mm around ventilation openings meet the temperature limits from Table 102		N/A
11.105	Temperature rises are also not measured on ventilation openings and the surface within 25 mm from the ventilation opening that does not exceed the 20 % of the accessible enclosure surface		P

ATTACHMENT TO TRF IEC60335_2_9P			
Clause	Requirement + Test	Result - Remark	Verdict
	If the ventilation openings and the surfaces within 25 mm of them exceed 20 % of the accessible enclosure surface, the rest of the surfaces within 25 mm around ventilation openings meet the temperature limits from Table 102		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 a test probe similar to test probe B of EN 61032, having a circular stop face and applied with a force of 5N, the accessories and detachable covers are removed		P
	When using test probe 18 it is applied with a force of 2,5N on the appliance fully assembled		P
22.12	Other parts intended to be detached during use, maintenance or cleaning (e.g. batteries, battery covers, lids, attachments, steam nozzles) are not considered as parts providing a similar function as handles, knobs, grips, levers		P
22.17	The requirement is not applicable to built-in appliances		N/A
22.44	An appliance is child-appealing if one of the following criteria is present:		--
	- 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:		--
	- 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		--
	- has a mass less than 4 kg, and		N/A

ATTACHMENT TO TRF IEC60335_2_9P			
Clause	Requirement + Test	Result - Remark	Verdict
	- is mounted or normally intended for use at a height less than 850 mm,		N/A
	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.Z01	After the toasting process a maximum of 60 mm of the toast is resting in the toaster slot		N/A
	This may be provided by an additional manual lifting function		N/A
	Requirement is not applicable:		--
	- for appliances which top surface temperatures comply with the temperatures limits in Table 102 without considering the allowance in footnote b		N/A
	- for appliances equipped with sandwich-toasting attachment		N/A
22.Z102	To avoid accidental contact with hot surfaces of raclette appliances, the handle of the pan is clearly identified by tactile means		N/A
24.1	Components comply with the safety requirements specified in the relevant EN standards as far as they reasonably apply		P
	Motors are not required to comply with EN 60034-1, but tested as part of the appliance according to this standard		P
	Relays are tested as part of the appliance according to this standard		N/A
	Relays may be alternatively tested to EN 60730-1 and the additional requirements in EN 60335-1		P
	The requirements of Clause 29 of this standard apply between live parts of components and accessible parts of the appliance		P

ATTACHMENT TO TRF IEC60335_2_9P			
Clause	Requirement + Test	Result - Remark	Verdict
	Components may comply with the requirements for clearances and creepage distances for functional insulation as specified in the relevant component standard		P
	The requirements of 30.2 of this standard apply to parts of non-metallic material in components including parts of non-metallic material supporting current-carrying connections inside components		P
	Components that have not been tested and shown to comply with the EN standard for the relevant component are tested according to the requirements of 30.2 of this standard		P
	Components that have been tested and shown to comply with the resistance to fire requirements in the EN standard for the relevant component need not be retested provided that:		--
	- the severity specified in the component standard is not less than the severity specified in 30.2, and		P
	- the test report for the component states the values of t_e and t_i acc. to EN 60695-2-11		P
	If the above two conditions are not satisfied, the component is tested as part of the appliance		P
	Power electronic converter circuits are not required to comply with EN 62477-1, but tested as part of the appliance according to this standard		N/A
	Unless components have been tested and found to comply with the relevant EN standard for the number of cycles specified, they are tested in accordance with 24.1.1 to 24.1.9		N/A
	For components mentioned in 24.1.1 to 24.1.9, no additional tests specified in the relevant EN standard for the component are necessary other than those specified in 24.1.1 to 24.1.9		P
	Components that have not been tested and found to comply with the relevant EN standard, and		P
	components that are not marked or not used in accordance with their marking,		N/A
	are tested in accordance with the conditions occurring in the appliance, the number of samples being that required by the relevant standard		P

ATTACHMENT TO TRF IEC60335_2_9P			
Clause	Requirement + Test	Result - Remark	Verdict
	Lamp-holders and starter-holders that have not been tested and found to comply with the relevant EN standard are tested as a part of the appliance and additionally comply with the gauging and interchangeability requirements of the relevant EN standard under the conditions occurring in the appliance		P
	Where the relevant EN standard specifies these gauging and interchangeability requirements at elevated temperatures, the temperatures measured during the tests of Clause 11 are used		P
	There are no additional tests specified for nationally standardized plugs such as those detailed in IEC/TR 60083 or connectors complying with the standard sheets of EN 60320-1 and EN 60309, unless they are specifically mentioned in the text of this standard		N/A
	Plugs and socket-outlets and other connecting devices of interconnection cords are not interchangeable with plugs and socket-outlets listed in IEC/TR 60083 or IEC 60906-1, or		N/A
	with connectors and appliance inlets complying with the standard sheets of EN 60320-1, if		N/A
	direct supply to these parts from the supply mains gives rise to a hazard		N/A
	For plugs used in CENELEC countries Annex ZH applies		P
24.Z1	Type S2 and S3 capacitors according to EN 60252-1 are not required to undergo the testing as required by 30.2.2 and 30.2.3.1		N/A
25.1	Plugs and pins for insertion into socket outlets follow the relevant standards sheets in Annex ZH		P
25.7	Rubber sheathed cords (60245 IEC 53) are not suitable for appliances intended to be used outdoors, or		N/A
	when they are liable to be exposed to significant amount of ultraviolet radiation		N/A
25.25	Instead of IEC/TR 60083, dimensions of the pins and engagement face of plugs of appliances that are inserted into socket-outlets are in accordance with the dimensions of the relevant plug standard		P
	Common plugs and socket-outlets types in CENELEC countries as shown in Annex ZH		P

ATTACHMENT TO TRF IEC60335_2_9P			
Clause	Requirement + Test	Result - Remark	Verdict
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,		N/A
	unless they are held in place near the terminals independently of the solder		N/A
29.3.Z1	Appliance constructed so that if there is a possibility of damaging the insulation during installation, the insulation withstands the scratch and penetration test of 21.2		N/A
32	Compliance regarding electromagnetic fields is checked according to EN 62233		P
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 any of the tests is as specified in 19.7		N/A
ZA	ANNEX ZA (NORMATIVE) SPECIAL NATIONAL CONDITIONS (EN)		--
	Denmark, Sweden, Norway and Finland		--
7.12.8	The maximum inlet water pressure is at least 1,0 MPa		N/A
	Norway		--
19.5	The test is also applicable to appliances intended to be permanently connected to fixed wiring		N/A
	Norway		--
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		--
22.47	The maximum inlet water pressure is at least 1,0 MPa		N/A
	Ireland, United Kingdom and Cyprus		--

ATTACHMENT TO TRF IEC60335_2_9P			
Clause	Requirement + Test	Result - Remark	Verdict
25.8	In the table, the line >10 A and ≤16 A is replaced with:		--
	> 10 and ≤ 13 1,25 (1,0) ^b		N/A
	> 13 and ≤ 16 1,5 (1,0) ^b		N/A
ZB	ANNEX ZB (INFORMATIVE) A-DEVIATIONS		--
	Ireland		--
25.1 and 25.25	These regulations apply to all plugs for domestic use at a voltage of not less than 200 V and in general allow only plugs complying with I.S. 401:1997, or equivalent, to be fitted to domestic appliances		N/A
	United Kingdom		--
25.1 and 25.25	These regulations apply to all plugs for domestic use at a voltage of not less than 200 V and in general allow only plugs to BS 1363 to be fitted to domestic appliances.		P
	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		--
	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		--
	List of IEC and CENELEC code designations for flexible cords		P
ZE	ANNEX ZE (INFORMATIVE) SPECIFIC ADDITIONAL REQUIREMENTS FOR APPLIANCES AND MACHINES INTENDED FOR COMMERCIAL USE		--
7.1	Business name and full address of the manufacturer and, where applicable, his authorized representative		N/A

ATTACHMENT TO TRF IEC60335_2_9P			
Clause	Requirement + Test	Result - Remark	Verdict
	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:		--
	- 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
	- 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

ATTACHMENT TO TRF IEC60335_2_9P			
Clause	Requirement + Test	Result - Remark	Verdict
	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:		--
	- 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:		--
	- 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
	- 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

ATTACHMENT TO TRF IEC60335_2_9P			
Clause	Requirement + Test	Result - Remark	Verdict
	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
19.11.4.8	The appliance continues to operate, without causing any hazard to the user, from the same point in its operating cycle at which the voltage fluctuation occurred, or		N/A
	a manual operation is required to restart it		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:		--
	- fixed guards or interlocking movable guards preventing access to those sections of the parts that are not used in the work, and		N/A
	- 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

ATTACHMENT TO TRF IEC60335_2_9P			
Clause	Requirement + Test	Result - Remark	Verdict
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
	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:		--

ATTACHMENT TO TRF IEC60335_2_9P			
Clause	Requirement + Test	Result - Remark	Verdict
	- prevents the start of hazardous appliance functions until the guard is closed and locked, and		N/A
	- 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:		--
	- 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
	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

ATTACHMENT TO TRF IEC60335_2_9P			
Clause	Requirement + Test	Result - Remark	Verdict
	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		--
	List of standards under CENELEC/TC61 with the allocation under the LVD (Low Voltage Directive) or the MD (Machinery Directive)	LVD	P
ZG	ANNEX ZG (NORMATIVE) UV APPLIANCES		--
	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
32	For appliances incorporating UV emitters the manufacturer delivers a declaration providing evidence that the plastic material exposed to the radiation is UV resistant		N/A
ZH	ANNEX ZH (INFORMATIVE) Common plug and socket-outlet types in CENELEC countries		--
	In general, supply cords of single-phase appliances having a rated current not exceeding 16 A are fitted with a plug complying with the following standard sheets:		--

ATTACHMENT TO TRF IEC60335_2_9P			
Clause	Requirement + Test	Result - Remark	Verdict
	- for class I appliances or class II appliances with functional earth, standard sheet EU2, EU3 or EU4:	EU4	P
	- for class II appliances, standard sheet EU5, EU6 or EU7		N/A
	There are exemptions or differences in certain CENELEC countries		P
ZI	ANNEX ZI (INFORMATIVE) Information on the application of A11:2014 to EN 60335-1:2012 CENELEC CLC/TC 61(SEC)2096A		--
	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		--
	This standard provides one means of conforming to safety objectives of Directive 2014/35/EU		P
	When cited in the Official Journal under that Directive, compliance with the normative clauses of this standard given in Table ZZA.1 confers a presumption of conformity with the safety objectives of that Directive and associated EFTA regulations		P
	Compliance with this Part 1 when used together with the relevant Part 2 provides one means of conformity with the safety objectives		P

	ANNEX EN 62233:2008 EMF- ELECTROMAGNETICS FIELDS		
	The tested product also complies with the requirements of EN 62233:2008		--
	Limit 100%	Measured max.: 0,681uT	P

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict

10.1	TABLE: Power input deviation					P
Input deviation of/at:		P rated (W)	P measured (W)	ΔP	Required ΔP	Remark
HC-5001ET		1500	1497	-0,2%	-10% ~ +5%	Tested at 230V
HC-5001E		1500	1462	-2,5%	-10% ~ +5%	Tested at 230V
Supplementary information: Tested in both 50Hz and 60Hz, the most unfavourable results were recorded.						

11.8	TABLE: Heating test HC-5001ET		P
	Test voltage (V):	1878W, 267V	—
	Ambient (°C).....:	23	—
Thermocouple locations		Max. temperature rise measured, Δ T (K)	Max. temperature rise limit, Δ T (K)
Supply cord		28	50
Internal wire		88	155(T-25)
Interlock switch		80	100(T-25)
Wire connector		36	--
Insulation of thermal link 1		116	--
Insulation of thermal link 2		117	--
PCB		53	120
PCB support		47	--
Relay		47	60(T-25)
Varistor		50	60(T-25)
X2 capacitor		52	75(T-25)
Lamp support		112	175(T-25)
External enclosure		69	--
Top cover		20	--
Control panel		29	60
Handle of basket (Plastic)		41	60
Internal enclosure		115	--
Centre of container		143	--
Air outlet grilles		75	--
Wooden support		62	65
Supplementary information: the most unfavourable results recorded.			

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict

EK1-AG2 11.Z102/ 11.Z105	TABLE: Heating test (for HC-5001ET)		P
	Test voltage (V) :	1633W, 249V	—
	Ambient (°C) :	23	—
Thermocouple locations		Max. temperature rise measured, ΔT (K)	Max. temperature rise limit, ΔT (K)
Bare metal		--	45
Coated metal		--	55
Glass and ceramic		--	60
Plastic and plastic coating > 0,3mm		61	65

EK1-AG2 11.Z102/ 11.Z105	TABLE: Heating test (for HC-5001E)		P
	Test voltage (V) :	1633W, 249V	—
	Ambient (°C) :	23	—
Thermocouple locations		Max. temperature rise measured, ΔT (K)	Max. temperature rise limit, ΔT (K)
Bare metal		--	45
Coated metal		--	55
Glass and ceramic		--	60
Plastic and plastic coating > 0,3mm		62	65

11.8	TABLE: Heating test, resistance method for HC-5001ET					P
	Test voltage (V)	267V			—	
	Ambient, t1 (°C)	23			—	
	Ambient, t2 (°C)	23			—	
Temperature rise of winding		R1 (Ω)	R2 (Ω)	ΔT (K)	Max. ΔT (K)	Insulation class
Winding of motor (HC-6116)		283,5	406,5	112	140	Class 180
Supplementary information: The HC-5001 series were tested, the most unfavourable results recorded.						

11.8	TABLE: Heating test HC-8002ET					P
	Test voltage (V)	2129W, 260V			—	

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict

	Ambient (°C).....:	23	—
Thermocouple locations		Max. temperature rise measured, ΔT (K)	Max. temperature rise limit, ΔT (K)
Supply cord		27	50
PCB		44	120
PCB support		35	--
Relay		47	60(T-25)
Varistor		45	60(T-25)
X2 capacitor		43	75(T-25)
Centre of container		167	--
Air outlet grilles		82	--
Wooden support		55	65
Supplementary information: the most unfavourable results recorded.			

11.8	TABLE: Heating test HC-8005ET		P
	Test voltage (V).....:	2129W, 259V	—
	Ambient (°C).....:	23	—
Thermocouple locations		Max. temperature rise measured, ΔT (K)	Max. temperature rise limit, ΔT (K)
Supply cord		25	50
PCB		45	120
PCB support		36	--
Relay		47	60(T-25)
Varistor		41	60(T-25)
X2 capacitor		42	75(T-25)
Centre of container		164	--
Air outlet grilles		82	--
Wooden support		57	65
Supplementary information: the most unfavourable results recorded.			

11.8	TABLE: Heating test HC-1101ET		P
	Test voltage (V).....:	2254W, 260V	—
	Ambient (°C).....:	23	—

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict

Thermocouple locations	Max. temperature rise measured, ΔT (K)	Max. temperature rise limit, ΔT (K)
Supply cord	25	50
PCB	50	120
PCB support	39	--
Relay	52	60(T-25)
Varistor	50	60(T-25)
X2 capacitor	48	75(T-25)
Centre of container	165	--
Air outlet grilles	76	--
Wooden support	56	65
Supplementary information: the most unfavourable results recorded.		

EK1-AG2 11.Z102/ 11.Z105	TABLE: Heating test (for HC-6001ET)		P
	Test voltage (V)..... :	1416W, 235V	—
	Ambient (°C) :	23	—
Thermocouple locations		Max. temperature rise measured, Δ T (K)	Max. temperature rise limit, Δ T (K)
Bare metal		--	45
Coated metal		--	55
Glass and ceramic		--	60
Plastic and plastic coating > 0,3mm		61	65

EK1-AG2 11.Z102/ 11.Z105	TABLE: Heating test (for HC-6001MT)		P
	Test voltage (V)..... :	1416W, 235V	—
	Ambient (°C) :	23	—
Thermocouple locations		Max. temperature rise measured, Δ T (K)	Max. temperature rise limit, Δ T (K)
Bare metal		--	45
Coated metal		--	55
Glass and ceramic		--	60

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict

Plastic and plastic coating > 0,3mm	60	65	
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EK1-AG2 11.Z102/ 11.Z105	TABLE: Heating test (for HC-8002ET)		P
	Test voltage (V) :	1851W, 242V	—
	Ambient (°C)	23	—
Thermocouple locations		Max. temperature rise measured, ΔT (K)	Max. temperature rise limit, ΔT (K)
Bare metal		34	45
Coated metal		--	55
Glass and ceramic		--	60
Plastic and plastic coating > 0,3mm		60	65

EK1-AG2 11.Z102/ 11.Z105	TABLE: Heating test (for HC-8002MT)		P
	Test voltage (V) :	1851W, 245V	—
	Ambient (°C)	23	—
Thermocouple locations		Max. temperature rise measured, ΔT (K)	Max. temperature rise limit, ΔT (K)
Bare metal		34	45
Coated metal		--	55
Glass and ceramic		--	60
Plastic and plastic coating > 0,3mm		61	65

EK1-AG2 11.Z102/ 11.Z105	TABLE: Heating test (for HC-8005ET)		P
	Test voltage (V) :	1851W, 242V	—
	Ambient (°C)	23	—
Thermocouple locations		Max. temperature rise measured, ΔT (K)	Max. temperature rise limit, ΔT (K)
Bare metal		38	45
Coated metal		--	55
Glass and ceramic		--	60
Plastic and plastic coating > 0,3mm		52	65

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict

EK1-AG2 11.Z102/ 11.Z105	TABLE: Heating test (for HC-8005MT)		P
	Test voltage (V) :	1851W, 243V	—
	Ambient (°C)	23	—
Thermocouple locations		Max. temperature rise measured, ΔT (K)	Max. temperature rise limit, ΔT (K)
Bare metal		40	45
Coated metal		--	55
Glass and ceramic		--	60
Plastic and plastic coating > 0,3mm		57	65

EK1-AG2 11.Z102/ 11.Z105	TABLE: Heating test (for HC-8005EAT)		P
	Test voltage (V) :	1851W, 242V	—
	Ambient (°C)	23	—
Thermocouple locations		Max. temperature rise measured, ΔT (K)	Max. temperature rise limit, ΔT (K)
Bare metal		41	45
Coated metal		--	55
Glass and ceramic		--	60
Plastic and plastic coating > 0,3mm		57	65

EK1-AG2 11.Z102/ 11.Z105	TABLE: Heating test (for HC-1101ET)		P
	Test voltage (V) :	1960W, 240V	—
	Ambient (°C)	23	—
Thermocouple locations		Max. temperature rise measured, ΔT (K)	Max. temperature rise limit, ΔT (K)
Bare metal		40	45
Coated metal		--	55
Glass and ceramic		--	60
Plastic and plastic coating > 0,3mm		42	65

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict

13.2	TABLE: Leakage current (for all models)		P
	Heating appliances: 1.15 x rated input (W).. :	Same as Cl.11.4	—
	Motor-operated and combined appliances: 1.06 x rated voltage (V)..... :	N/A	—
Leakage current between		I (Ma)	Max. allowed I (Ma)
L/N — Earthing metal parts		Max 0,13	0,75
L/N — Enclosure (with metal foil or ungrounded metal parts)		Max 0,02 peak	0,35 peak
L/N — Knob/handle		Max 0,02 peak	0,35 peak

13.3	TABLE: Dielectric strength (for all models)		P
Test voltage applied between:		Test potential applied (V)	Breakdown / flashover (Yes/No)
Parts isolated with basic insulation		1000	No
Parts isolated with supplementary insulation		1750	No
Parts isolated with reinforced insulation		3000	No

16.2	TABLE: Leakage current (for all models)		P
	Single phase appliances: 1.06 x rated voltage (V)	254,4V	—
	Three phase appliances 1.06 x rated voltage divided by $\sqrt{3}$ (V)	N/A	—
Leakage current between		I (Ma)	Max. allowed I (Ma)
L/N — Earthing metal parts		Max 0,13	0,75
L/N — Enclosure (with metal foil or ungrounded metal parts)		Max 0,02	0,25
L/N — Knob/handle		Max 0,02	0,25

16.3	TABLE: Dielectric strength (for all models)		P
Test voltage applied between:		Test potential applied (V)	Breakdown / flashover (Yes/No)
Parts isolated with basic insulation		1250	No
Parts isolated with supplementary insulation		1750	No
Parts isolated with reinforced insulation		3000	No

19	Abnormal operation conditions		P
Operational characteristics	YES/NO	Operational conditions	

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Clause	Requirement + Test	Result - Remark	Verdict

Are there electronic circuits to control the appliance operation?	YES	For electronic circuit control models: Test at 240V
Are there “off” or “stand-by” position?	YES	For electronic circuit control models: “stand-by” Test at 240V
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	Refer to clause 19.2	No hazard	N/A	N/A	N/A	N/A	P
19.3	Refer to clause 19.3	No hazard	N/A	N/A	N/A	N/A	P
19.4	Refer to clause 19.4	No hazard	N/A	N/A	N/A	N/A	P
19.5	Refer to clause 19.5	No hazard	N/A	N/A	N/A	N/A	P
19.7	Refer to clause 19.7	No hazard	N/A	N/A	N/A	N/A	P
19.11.2	Refer to clause 19.11	No hazard	N/A	N/A	N/A	N/A	P
19.11.4.8	Refer to Cl. 19.11.4.8	No hazard	N/A	N/A	N/A	N/A	P

19.7	TABLE: Abnormal operation, locked rotor/moving parts					P
	Test voltage (V)..... :	240				—
	Ambient, t1 (°C)..... :	23				—
	Ambient, t2 (°C)..... :	23				—
Temperature of winding		R1 (Ω)	R2 (Ω)	Δ T (K)	T (°C)	Max. T (°C)
Winding of motor (HC-6116)		--	--	136	159	260
Supplementary information: The HC-5001 series were tested. 18 min. 33 sec. thermal link of motor opened. the most unfavourable results recorded.						

19.13	TABLE: Abnormal operation, temperature rises (for HC-5001ET)				P
Thermocouple locations		Max. temperature rise measured, Δ T (K)		Max. temperature rise limit, Δ T (K)	
		19.2, 19.3	19.4		
Supply cord		33	38	150	

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Test corner	66	76	150
External enclosure	75	--	For Cl.30
Internal enclosure	122	--	For Cl.30
Top cover	26	--	For Cl.30
Control panel	33	--	For Cl.30

21.1	TABLE: Impact resistance			P
Impacts per surface	Surface tested	Impact energy (Nm)	Comments	
3	All surface	0,5	P	

24.1	TABLE: Components information					P
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹	
Plug	Ningbo Qiaopu Electric Co., Ltd.	D03	250 V ~, 16A DIN 49441-R2	DIN VDE 0620-2-1	TUV*/ R 50286272	
Alternative	Ningbo Liansheng Wire&Cable Co., Ltd.	LS03	250 V ~, 16A DIN 49441-R2	DIN VDE 0620-2-1	VDE*/ 40034732	
Alternative	ZheJiang JinTing Nuclear Cable Co., Ltd.	JT008	250 V ~, 16A DIN 49441-R2	DIN VDE 0620-2-1	VDE*/ 40050831	
Alternative	Yuyao Gangda Electric Co., Ltd	AU-003	250 V ~, 16A DIN 49441-R2	DIN VDE 0620-2-1	VDE*/ 40027097	
Alternative	Yuyao Gangda Electric Co., Ltd	AU-003B	250 V ~, 16A DIN 49441-R2	DIN VDE 0620-2-1	VDE*/ 40033080	
Alternative	Ningbo Chaoyu Electric Appliance Co., Ltd.	CY03	250 V ~, 16A DIN 49441-R2	DIN VDE 0620-2-1	VDE*/ 40036472	
Plug only for U.K.	Yuyao Yunbiao Electroics Co., Ltd.	YB006 YB006A	250V~	BS 1363-1	BSI*/ KM 73093	
Alternative	Shangyu Jintao Electronic Co., Ltd.	JT006A	250V~	BS 1363-1	ASTA*/ 1120	
Alternative	Ningbo Qiaopu Electric Co., Ltd.	D09 D09A	250V~	BS 1363-1	ASTA*/ 930	
Alternative	Yuyao Gangda Electric Co., Ltd	AU-006B	250V~	BS 1363-1	ASTA*/ 1458	

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Alternative	Ningbo Chaoyu Electric Appliance Co., Ltd	CY07	250V~	BS 1363-1	ASTA*/1413
Remark: The rating of BS fuse-links should be used according to the table 2 of BS 1361-1:2016+A1:2018.					
Plug only for Swiss	Ningbo Qiaopu Electric Co., Ltd.	D13	AC250V, 10A L+N+PE	SEV 6534-2	SEV 17.0974
Alternative	Yuyao Gangda Electric Co. Ltd.	GD302	AC250V, 10A L+N+PE	SEV 6534-2	SEV 24.0680
Power cord for HC-6001MT, HC-6001M, HC-6001ET, HC-6001E	Zhejiang Jinting Nuclear Cable Co.,Ltd.	H05VV-F	3Gx0,75 mm ² 3Gx1,0 mm ²	EN 50525-2-11	VDE*/40013419
Alternative	Ningbo Qiaopu Electric Co., Ltd.	H05VV-F	3Gx0,75 mm ² 3Gx1,0 mm ²	EN 50525-2-11	TUV*/R 50279805
Alternative	Ningbo Liansheng Wire&Cable Co., Ltd	H05VV-F	3Gx0,75 mm ² 3Gx1,0 mm ²	EN 50525-2-11	VDE*/40022054
Alternative	Yuyao Gangda Electric Co., Ltd	H05VV-F	3Gx0,75 mm ² 3Gx1,0 mm ²	EN 50525-2-11	VDE*/40022724
Alternative	Ningbo Chaoyu Electric Appliance Co., Ltd.	H05VV-F	3Gx0,75 mm ² 3Gx1,0 mm ²	EN 50525-2-11	VDE*/40036307
Alternative	Ningbo Chaoyu Electric Appliance Co., Ltd.	H05VV-F	3Gx0,75 mm ² 3Gx1,0 mm ²	EN 50525-2-11	VDE*/40034480
Alternative	ZheJiang JinTing Nuclear Cable Co., Ltd.	H05V2V2-F	3Gx0,75 mm ² 3Gx1,0 mm ²	EN 50525-2-11	VDE*/40020021
Alternative	Ningbo Qiaopu Electric Co., Ltd.	H05V2V2-F	3Gx0,75 mm ² 3Gx1,0 mm ²	EN 50525-2-11	TUV*/R 50447922
Alternative	Yuyao Gangda Electric Co., Ltd	H05V2V2-F	3Gx0,75 mm ² 3Gx1,0 mm ²	EN 50525-2-11	VDE*/40051249
Power cord except for HC-6001MT, HC-6001M, HC-6001ET, HC-6001E	Zhejiang Jinting Nuclear Cable Co.,Ltd.	H05VV-F	3Gx0,75 mm ² (length≤2m) or 3Gx1,0 mm ²	EN 50525-2-11	VDE*/40013419

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Clause	Requirement + Test		Result - Remark		Verdict
Alternative	Ningbo Qiaopu Electric Co., Ltd.	H05VV-F	3Gx0,75 mm ² (length≤2m) or 3Gx1,0 mm ²	EN 50525-2-11	TUV*/ R 50279805
Alternative	Ningbo Liansheng Wire&Cable Co., Ltd	H05VV-F	3Gx0,75 mm ² (length≤2m) or 3Gx1,0 mm ²	EN 50525-2-11	VDE*/ 40022054
Alternative	Yuyao Gangda Electric Co., Ltd	H05VV-F	3Gx0,75 mm ² (length≤2m) or 3Gx1,0 mm ²	EN 50525-2-11	VDE*/ 40022724
Alternative	Ningbo Chaoyu Electric Appliance Co., Ltd.	H05VV-F	3Gx0,75 mm ² (length≤2m) or 3Gx1,0 mm ²	EN 50525-2-11	VDE*/ 40036307
Alternative	Ningbo Chaoyu Electric Appliance Co., Ltd.	H05VV-F	3Gx0,75 mm ² (length≤2m) or 3Gx1,0 mm ²	EN 50525-2-11	VDE*/ 40034480
Alternative	ZheJiang JinTing Nuclear Cable Co., Ltd.	H05V2V2-F	3Gx0,75 mm ² (length≤2m) or 3Gx1,0 mm ²	EN 50525-2-11	VDE*/ 40020021
Alternative	Ningbo Qiaopu Electric Co., Ltd.	H05V2V2-F	3Gx0,75 mm ² (length≤2m) or 3Gx1,0 mm ²	EN 50525-2-11	TUV*/ R 50447922
Alternative	Yuyao Gangda Electric Co., Ltd	H05V2V2-F	3Gx0,75 mm ² (length≤2m) or 3Gx1,0 mm ²	EN 50525-2-11	VDE*/ 40051249
Thermal link (Except HC-5001E, HC-5001ET)	ZhongshanQilinElectronics Co.,Ltd.	QLF182	250V~, 10A, Tf:184°C	EN 60691	TUV*/ B09073500 04 Rev.01
Alternative	The Third Radio Factory of Yangzhong, Jiangsu	RY184	250V~, 10A, Tf:184°C	EN 60691	TUV*/ R 50311907
Alternative	ZhongShan LongDe Electrical Co., Ltd.	RY184	250V~, 10A, Tf:184°C	EN 60691	TUV SUD*/ B 067446 0027 Rev.02
Alternative	Changzhou Fansheng Electric Appliance Co., Ltd.	FSRY01 184	250V~, 10A, Tf:184°C	EN 60691	TUV*/ R 50309236

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Clause	Requirement + Test		Result - Remark		Verdict
Thermal link for HC-5001E, HC-5001ET	ZhongshanQilin Electronics Co.,Ltd.	QLF188	250V~,10A, Tf:192°C	EN 60691	TUV*/ B09073500 04 Rev.01
Alternative	The Third Radio Factory of Yangzhong, Jiangsu	RY192	250V~, 10A, Tf:192°C	EN 60691	TUV*/ R 50311907
Alternative	ZhongShan LongDe Electrical Co., Ltd.	RY192	250V~, 10A, Tf:192°C	EN 60691	TUV SUD*/ B 067446 0027 Rev.02
Alternative	Changzhou Fansheng Electric Appliance Co., Ltd.	FSRY01 192	250V~, 10A, Tf:192°C	EN 60691	TUV*/ R 50309236
Interlock switch	Foshan shunde yushun Electron appliance., Ltd.	KW-16	250V~, 16(6)A, 3E4, T125	EN 61058-1	TUV*/ R 50179582
Alternative	Zhejiang Qihong Electronics Co., Ltd.	LF-20	250V~, 16(10)A, 1E4 T125	EN 61058-1	TUV */ B 118603 0001 Rev.00
Alternative	DONGNAN ELECTRONICS CO., LTD.	KW3AT-16	250V~, 16(4)A, 10E3, T125	EN 61058-1	VDE*/ 40011294
Alternative	ZHEJIANG Chuangye ELECTRONICS CO LTD	KW11	250V~, 16(10)A, 5E4, T125	EN 61058-1	TUV*/ R 50199565
Internal wire	CIXI SHUANGHONG WIRE CO., LTD.	H05S-K, H05SJ-K	0,5 mm ² for indicator, 0,75-1,0 mm ² for others, T180	EN 50525-2-41	VDE*/ 40017324
Alternative	Cixi Haosheng Wire&Cable Co., Ltd.	H05S-K, H05SJ-K	0,5 mm ² for indicator, 0,75-1,0 mm ² for others, T180	EN 50525-2-41	VDE*/ 40020128
Alternative	Cixi Jiangyuan Power Cord Co., Ltd.	H05S-K, H05SJ-K	0,5 mm ² for indicator, 0,75-1,0 mm ² for others, T180	EN 50525-2-41	VDE*/ 40031080

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Clause	Requirement + Test		Result - Remark		Verdict
Alternative	Cixi Shenhong Wires Co., Ltd	H05S-K, H05SJ-K	0,5 mm ² for indicator, 0,75-1,0 mm ² for others, T180	EN 50525-2-41	VDE*/40049048
Timer for mechanical control models	Jiangsu Shalong Mechanical&Electrical Technology Co.,LTD	SL-30B	250V~, 15A T120, 1E4	EN 60730-1 EN 60730-2-7	TUV/ R50024942
Alternative	Jiangsu Shalong Mechanical&Electrical Technology Co.,LTD	SL-60c	250V~, 15A T120, 1E4	EN 60730-1 EN 60730-2-7	TUV/ R50024942
Alternative	Ningbo Zichuan Time control Electrical Appliance CO.,LTD	ZCD-30B ZCD-60B	250V~, 15A T120, 1E4	EN 60730-1 EN 60730-2-7	TUV/ R 50548949
Alternative	Hangzhou Westlake Timer Switch Factory	DKJ/1-30 DKJ/1-60	250V~, 16A T150, 1E4	EN 60730-1 EN 60730-2-7	TUV/ R 50277599
Thermostat for mechanical control models	Wenzhou Leheng Technology Co.,Ltd	WHD-185H	125/250V~ 16A T150, 1E5, Tf185	EN 60730-1 EN 60730-2-9	TUV/ B09222300 02Rev.02
Alternative	Cixi Wangsheng Electrical Appliance Co.,LTD	KST 207C	125/250V~, 16/10A T300, 1E5, Tf185	EN 60730-1 EN 60730-2-9	TUV/ R 50430935
Alternative	Changzhou Foland Electrical Appliance co.,LTD	WY185A-J	125/250V~, 16A T150, 1E5, Tf185	EN 60730-1 EN 60730-2-9	TUV/ R 50560721
Alternative	Zhongshan City zhongheng Electronics CO.,LTD	WYE-185-0200	250V~, 16A, 5E4 T175, Tf185	EN 60730-1 EN 60730-2-9	TUV/ R 50139037
PCB	KINGBOARD LAMINATES HOLDINGS LTD	KB-5150	Min thickness: 1,6mm, 94V-0, (E123995)	EN 60335-2-9 EN 60335-1	Tested with appliance

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Clause	Requirement + Test		Result - Remark		Verdict
Alternative	KINGBOARD LAMINATES HOLDINGS LTD	KB-5152	Min thickness: 1,6mm, 94V-0, (E123995)	EN 60335-2-9 EN 60335-1	Tested with appliance
X2 capacitor	TENTA ELECTRIC INDUSTRIAL CO LTD	MEX	0,1uF, 275V~ 40/100/21/B	EN 60384-14	VDE/ 119119
Alternative	SHAOYANG SHIRONG ELECTRONIC CO LTD	MKP	0,1uF, 275VA~ 40/100/21/C	EN 60384-14	TUV/ 69262154
Alternative	DAIN ELECTRONICS CO LTD	MPX	0,1uF, 275VA~ 40/100/21/C	EN 60384-14	VDE/ 40018798
Alternative	DONGGUAN CHENG DONG ELECTRONIC TECHNOLOGY CO LTD	MPX	0,1uF, 275/300/305/ 310V~ 40/110/56/B	EN 60384-14	VDE/ 40046845
Alternative	GUANGDONG FENG MING ELECTRONIC TECH. CO., LTD.	MKP-X2	0,1uF, 275/305/310V~ 40/105/21/C	EN 60384-14	VDE*/ 40025702
Alternative	SHANTOU BONDED AREA SONGTIAN ELECTRONIC TECHNOLOGY CO., LTD	MPX	0,1uF, 310VAC/305VAC/2 75VAC 40/110/56	EN 60384-14	VDE*/ 40034679
Alternative	JYH HSU(JEC)ELECTRONICS.,LTD.	MPX	0,1uF, 310/305/ 300/275/250~, 40/110/56	EN 60384-14	VDE*/ 40044985
Relay	NINGBO JIAGUAN ELECTRONIC CO LTD	GSK-1A-5VDC	250V~, 15A/20A, DC 5V, T85, 1E5	EN 61810-1 Clause 17 of IEC/EN 60730-1	TUV*/ R 50463327
Alternative	Anhui Mingguang Life Electronic Co., Ltd	BRD-SS-105LM	250 V~, 12A, DC 5V, T85, 6E4	EN 61810-1 Clause 17 of IEC/EN 60730-1	TUV*/ R 50183595
Alternative	Marketing Department of Yuanze Relay	Y3F-SS-105DM Y3U-SS-105LM	250V~, 15A/20A, DC 5V, T85, 1E4	EN 61810-1 Clause 17 of IEC/EN 60730-1	TUV*/ R 50197243

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Alternative	NINGBO YONGWEI ELECTRONICS CO LTD	Y3F-105DM	250V~, 10/16A DC 5V, T85, 5E4	EN 61810-1 Clause 17 of IEC/EN 60730-1	TUV/503697 79
Alternative	HUNNAN SAN YI SEIKO TECHNOLOGY CO LTD	SED-05DM	250V~ 16A/10A DC 5V, T105, 5E4	EN 61810-1 Clause 17 of IEC/EN 60730-1	TUV/503289 04
Alternative	Ningbo Hui Long Cang Electronics Co Ltd	973-5VDC-SL-A	250V~, 15A, DC 5V, T85, 5E4	EN 61810-1 Clause 17 of IEC/EN 60730-1	TUV*/ R 50156096
Alternative	DONGHAI COUNTY TONGLING ELECTRICAL APPLIANCE CO LTD	JQC-3FF-S	250V~, 10A DC 5V, T85, 1E5	EN 61810-1 Clause 17 of IEC/EN 60730-1	TUV*/ R 50316150
Alternative	Shenzhen Yuanze Electronic co., Ltd	Y3F-SS105DM	250VAC, 10A T105, 10E4, DC5V	EN 61810-1 Clause 17 of IEC/EN 60730-1	TUV*/ R 50197243
Alternative	DONGGUAN YONGNENG ELECTRONIC CSCO., LTD.	YX305-S105DM	AC277V, 17A, DC 5V, T105, 10E5	EN 61810-1 Clause 17 of IEC/EN 60730-1	TUV*/ R50390979
Alternative	Sanyou Corporation Limited	SRD-S-105DM	250VAC, 15A, DC 5V, T105, 10E4	EN 61810-1 Clause 17 of IEC/EN 60730-1	VDE*/ 40034479
Alternative	Mingguang Xinda Electronics Co.,Ltd	243T-1A-5DSU	AC277V, 12A, DC5V, T105, 10E5	EN 61810-1 Clause 17 of IEC/EN 60730-1	TUV*/ R 50626294
Varistor	HUIZHOU SHI SONGLONG LISHANG ELECTRONICS CO LTD.	07D471K VDR	AC2500V, T125,	EN 61051-1	VDE*/ 40028836
Alternative	SHAANXI HUAXING ELECTRONIC GROUP CO LTD	07K471 MYG	AC2500V, T85	EN 61051-1	VDE*/ 40018747
Alternative	DONGGUAN CHENG DONG ELECTRONIC TECHNOLOGY CO LTD	07D471K CDSPC	AC1500V, T125	EN 61051-1	VDE*/ 40052833

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Clause	Requirement + Test		Result - Remark		Verdict
Alternative	Centra Science Corp.	07D471K CNR	AC2500V, T85	EN 61051-1	VDE*/ 40008220
Alternative	Shantou High-New Technology Dev. Zone Songtian Enterprise Co., Ltd.	STE 10D471K 07D471K	AC2500V, T85	EN 61051-1	VDE*/ 40023049
Alternative	GuangDong HongZhi EElectronic Technology Co.,Ltd.	HEL 10D471K	AC2500V, T85	EN 61051-1	VDE*/ 40037512
Alternative	HUIZHOU SHI SONGLONG LISHANG ELECTRONICS CO.,LTD	10D471K	AC2500V, T85	EN 61051-1	VDE*/ 40028836
Alternative	FOSHAN HAOHUA ELECTRONIC COMPANY CO.,LTD.	HVR 10K471T	AC2500V, T85	EN 61051-1	VDE*/ 40031718
Fuse for HC-8003ET, HC-8003E, HC-8005ET, HC-8005E, HC-8003EAT, HC-8003EA, HC-8005EAT, HC-8005EA, HC-1101E, HC-1101ET, HC-1102E, HC-1102ET, HC-5001E, HC-5001ET	Honghu Bluelight Electronic Co., Ltd.	6ET	T3,15A, 250V	EN 60127-1 EN 60127-3	VDE*/ 40034107
Alternative	Dongguan Reomax Electronics Technology Co., Ltd.	MTS	T3,15A, 250V	EN 60127-1 EN 60127-3	VDE*/ 40039420
Alternative	Dongguan Better Electronics Technology Co.,Ltd.	932	T3,15A, 250V	EN 60127-1 EN 60127-3	VDE*/ 40033369

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Clause	Requirement + Test			Result - Remark	Verdict
Alternative	XC Electronics (Shenzhen) Co., Ltd.	5TE	T3, 15A, 250V	EN 60127-1 EN 60127-3	VDE*/ 40029550
Alternative	Dongguan Chevron Electronic Technology Co., Ltd.	SET	T3, 15A, 250V	EN 60127-1 EN 60127-3	VDE*/ 40038565
Lamp holder for models with letter "T"	Ningbo Lai Ting Electrical Appliance Co., Ltd.	MR16-01	250V~, 2 A, T200	EN 60838-1 EN 60335-1 EN 60335-2-9	VDE*/ 40017006
NTC resistor For all models(except HC-5001E, HC-5001ET)	AnHui Eagle Electron Co Ltd(E502983)	MF58 series MF51 series	Resistance at 25°C: 100KΩ (E502983)	EN 60335-1 EN 60335-2-9	Tested with appliance
NTC resistor only for HC-5001E, HC-5001ET,	HEFEI SENSING ELECTRONIC CO LTD	MF58 series	Resistance at 25°C: 100KΩ (E318225)	EN 60335-1 EN 60335-2-9	Tested with appliance
Internal wire for NTC	FOSHAN CITY ZHENG GUAN FLUORPLASTICS WIRE FACTORY	1332	22-26AWG, 300VAC, 200°C (E307535)	EN 60335-1 EN 60335-2-9	Tested with appliance
Alternative	FOSHAN CITY ZHENG GUAN FLUORPLASTICS WIRE FACTORY	10362	22-26AWG, 600VAC, 250°C (E307535)	EN 60335-1 EN 60335-2-9	Tested with appliance
Alternative	Dongguan zhihe electrical cable tech (134986-001)CO.,LTD	1332	24AWG/26AWG 200°C, 300V (E258239)	EN 60335-1 EN 60335-2-9	Tested with appliance
Alternative	Dongguan zhihe electrical cable tech (134986-001)CO.,LTD	10362	24AWG/26AWG 250°C, 600V (E258239)	EN 60335-1 EN 60335-2-9	Tested with appliance
Alternative	HONG SHUN WIRE & CABLE FLUOROPLASTICS FACTORY	1332	24-26AWG, 300VAC, 200°C (E238396)	EN 60335-1 EN 60335-2-9	Tested with appliance

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Clause	Requirement + Test		Result - Remark		Verdict
Alternative	HONG SHUN WIRE & CABLE FLUOROPLASTICS FACTORY	10362	24-26AWG, 600VAC, 250°C (E238396)	EN 60335-1 EN 60335-2-9	Tested with appliance
Alternative	ZHE JIANG CHENGBAO WIRE & CABLE CO LTD	1332	22-26AWG, 300VAC, 200°C (E315651)	EN 60335-1 EN 60335-2-9	Tested with appliance
Signal wire for connect PCB	ZHONGSHAN WEIFENG ELECTRIC APPLIANCES CO LTD	2651	26-28AWG, 300VAC, 105°C (E314135)	EN 60335-1 EN 60335-2-9	Tested with appliance
Alternative	ZHONGSHAN WEIFENG ELECTRIC APPLIANCES CO LTD	2468	26AWG, 300VAC, 80°C (E314135)	EN 60335-1 EN 60335-2-9	Tested with appliance
Alternative	GUANG DONG XIN LONG ENTERPRISE CO	2651	26-28AWG, 300VAC, 105°C (E207567)	EN 60335-1 EN 60335-2-9	Tested with appliance
Alternative	GUANG DONG XIN LONG ENTERPRISE CO	2468	26AWG, 300VAC, 80°C (E207567)	EN 60335-1 EN 60335-2-9	Tested with appliance
Alternative	GUANGDONG ZHOUSHISHENLONG WIRE MANUFACTURE CO LTD	2468	26AWG, 300V, 80°C (E257280)	EN 60335-1 EN 60335-2-9	Tested with appliance
Alternative	Zhejiang Jiezhong Wire & Cable Co Ltd	2468 2651	24-26AWG, 300V, 80°C for 2468, 105°C for 2651 (E480750)	EN 60335-1 EN 60335-2-9	Tested with appliance
Fan motor for HC-6001 series HC-5001 series	Ningbo HengChuang Electric appliance.Co.,Ltd	HC-6116	220-240V~, 50/60Hz, Class H	EN 60335-1 EN 60335-2-9	Tested with appliance
Fan motor for HC 8002 series HC 8003 series HC 8005 series	Ningbo HengChuang Electric appliance.Co.,Ltd	HC-61-16	220-240V~, 50/60Hz, Class H	EN 60335-1 EN 60335-2-9	Tested with appliance
Fan motor for HC-1101 series HC-1102 series	Ningbo HengChuang Electric appliance.Co.,Ltd	HC-7213	220-240V~, 50/60Hz, Class H	EN 60335-1 EN 60335-2-9	Tested with appliance
Thermal link for motor	Zhangzhou Aupo Electronics Co., Ltd.	A8-F	250V~, 2A, Tf:150°C	EN 60691	VDE*/40008720

IEC 60335-2-9					
Clause	Requirement + Test		Result - Remark		Verdict
Alternative	Xiamen SET Electronics co., Ltd.	K7	250V~, 2A, Tf:150°C	EN 60691	VDE*/40017055
Winding for motor	Guandong Wellkey Electric Material Co., Ltd.	QZY-2/180	Class180 (E211138)	EN 60335-1 EN 60335-2-9	Tested with appliance
Bobbin for motor	E I DUPONT DE NEMOURS & CO INC	PET	FR530 (E69939)	EN 60335-1 EN 60335-2-9	Tested with appliance
Heating element for HC-6001 series	Ningbo HengChuang Electric appliance.Co.,Ltd	--	220-240V~, 1300W	EN 60335-1 EN 60335-2-9	Tested with appliance
Heating element for HC-5001 series	Ningbo HengChuang Electric appliance.Co.,Ltd	--	220-240V~, 1500W	EN 60335-1 EN 60335-2-9	Tested with appliance
Heating element for HC 8002 series HC 8003 series HC 8005 series	Ningbo HengChuang Electric appliance.Co.,Ltd	--	220-240V~, 1700W	EN 60335-1 EN 60335-2-9	Tested with appliance
Heating element for HC-1101 series HC-1102 series	Ningbo HengChuang Electric appliance.Co.,Ltd	--	220-240V~, 1800W	EN 60335-1 EN 60335-2-9	Tested with appliance
Wire connector	Heavy Power Co., Ltd.	CE2, CE2X, CE5, CE5X	300V,105°C (E113650)	EN 60335-1 EN 60335-2-9	Tested with appliance
Alternative	SHENZHEN HONGYU ELECTRICAL CO LTD	HY-CE2, HY-CE5, HY-CE2X, HY-CE5X	300V,105°C (E314734)	EN 60335-1 EN 60335-2-9	Tested with appliance
Alternative	Jiangxi Gaochao Industrial Co.,LTD	CE2 CE2X	300V 105°C/750°C	EN 60335-1 EN 60335-2-9	Tested with appliance
Insulation of thermal link	FOSHAN SHUNDE BEIJIAO HONGQIAO INSULATIION MATERIAL CO LTD	CSEEUL001	VW-1,200°C (E154902)	EN 60335-1 EN 60335-2-9	Tested with appliance

IEC 60335-2-9					
Clause	Requirement + Test		Result - Remark		Verdict
Alternative	JIANGYIN HUAQIANG RUBBERS&PLA STICS CO LTD	SRG-514	VW-1, 200°C (E231589)	EN 60335-1 EN 60335-2-9	Tested with appliance
Alternative	JIANGYIN HUAXUAN CABLE CO LTD	HX1303	VW-1, 200°C (E360584)	EN 60335-1 EN 60335-2-9	Tested with appliance
Alternative	Jiangyin Zhijun Appliance Electric Cable&Wire Co., Ltd	HST	VW-1, 200°C (E302890)	EN 60335-1 EN 60335-2-9	Tested with appliance
Alternative	Jiangyin Huate Electrical Material Co., Ltd.	SRT-70	VW-1, 200°C (E482983)	EN 60335-1 EN 60335-2-9	Tested with appliance
Knob, handle cover, Top cover	Ningbo HengChuang Electric appliance.Co.,Ltd	ABS	Min thickness: 2,0 mm	EN 60335-1 EN 60335-2-9	Tested with appliance
Handle	Ningbo HengChuang Electric appliance.Co.,Ltd	PA66	Min thickness: 2,0 mm	EN 60335-1 EN 60335-2-9	Tested with appliance
Glass for models with letter "T"	Ningbo HengChuang Electric appliance.Co.,Ltd	Glass	Min thickness: 2,0 mm	EN 60335-1 EN 60335-2-9	Tested with appliance
Control panel and window plastic	Ningbo HengChuang Electric appliance.Co.,Ltd	PC	Min thickness: 2,0 mm	EN 60335-1 EN 60335-2-9	Tested with appliance
External enclosure	Ningbo HengChuang Electric appliance.Co.,Ltd	PP	Min thickness: 2,0 mm	EN 60335-1 EN 60335-2-9	Tested with appliance
Internal enclosure and Air outlet	Ningbo HengChuang Electric appliance.Co.,Ltd	PA66	Min thickness: 2,0 mm	EN 60335-1 EN 60335-2-9	Tested with appliance
¹⁾ An asterisk indicates a mark which assures the agreed level of surveillance					

29.1	TABLE: Clearances			P
	Overvoltage category..... ::	II		—

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict

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	<u>1,5 / 2,0***</u>	X	X		X	P
4 000	<u>3,0 / 3,5***</u>			X		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) Pollution degree										
	1	2			3			Type of insulation			
		Material group			Material group						
		I	II	IIIa/IIIb	I	II	IIIa/IIIb*	B**	S**	R**	Verdict
≤50	0,18	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	<u>0,56</u>	1,25	1,8	2,5	3,2	3,6	<u>4,0</u>	X	—	—	P
250	0,56	1,25	1,8	2,5	3,2	3,6	<u>4,0</u>	—	X	—	P
250	1,12	2,5	3,6	5,0	6,4	7,2	<u>8,0</u>	—	—	X	P

IEC 60335-2-9											
Clause	Requirement + Test							Result - Remark			Verdict
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

IEC 60335-2-9											
Clause	Requirement + Test							Result - Remark			Verdict
>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	220,0	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			
		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	1,1	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

IEC 60335-2-9								
Clause	Requirement + Test					Result - Remark		Verdict
>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								

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict

30	TABLE: Resistance to heat and fire																			
Object/ part No.	Manufa cturer/ tradema rk	Type/ model	Ball pressure test °C				Glow wire test (GWT) °C					Glow-wire flammability index (GWFI) °C				Glow- wire ignition temp. (GWIT) °C		Needle - flame test (NFT)	Verdict	
			75	125	cl. 11 +40	cl. 19 +25	550	650		750		850	550	650	750	850	675	775		
								te	ti	te	ti									
External enclosure	Refer to table 24.1				109°C 1,5mm						NI	X								P
Internal enclosure	Refer to table 24.1				155°C 1,4mm						NI	X								P
Control panel	Refer to table 24.1			1,6 Mm					X											P
PCB	Refer to table 24.1			0,5 Mm																P
Bobbin of Fan motor	Refer to table 24.1			1,0 mm					X											P
Air outlet grilles	Refer to table 24.1				122°C 1,0mm		X													P

IEC 60335-2-9																		
Clause	Requirement + Test								Result - Remark								Verdict	

Relay	Refer to table 24.1									NI	X							P
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Supplementary information:

- 1) **Parts of material classified at least HB40 or if relevant HBF**
- 2) **Parts of material classified as V-0 or V-1**
- 3) **Flame persisting longer than 2 s (= $t_e - t_i$) need only be reported for unattended appliances**
- 4) **Surrounding parts subjected to the needle-flame test of annex E**
- 5) **Base material classified as V-0 or if relevant VTM-0**
- 6) **The GWIT pre-selection option, the 850 °C GWFI pre-selection option, and the 850 °C GWT are not applicable for attended appliances**

Photo 1.

Description: Overall view for HC-8003MT, HC-8003M, HC-8003ET, HC-8003E, HC-8005MT, HC-8005M, HC-8005ET, HC-8005E, HC-8003EAT, HC-8003EA, HC-8005EAT, HC-8005EA



Photo 2.

Description: Earthling Continuity view for HC-8002MT, HC-8002M, HC-8002ET, HC-8002E, HC-8003MT, HC-8003M, HC-8003ET, HC-8003E, HC-8005MT, HC-8005M, HC-8005ET, HC-8005E, HC-1101E, HC-1101ET, HC-1102E, HC-1102ET, HC-8003EAT, HC-8003EA, HC-8005EAT, HC-8005EA

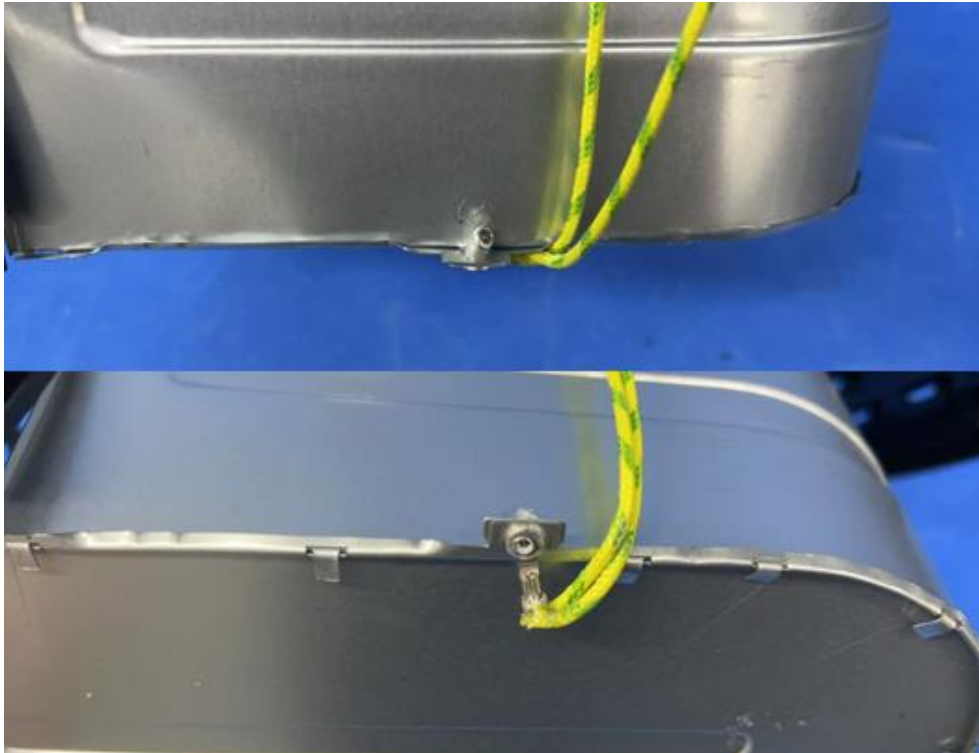


Photo 3.

Description: Overall view for HC-8002MT, HC-8002M, HC-8002ET, HC-8002E

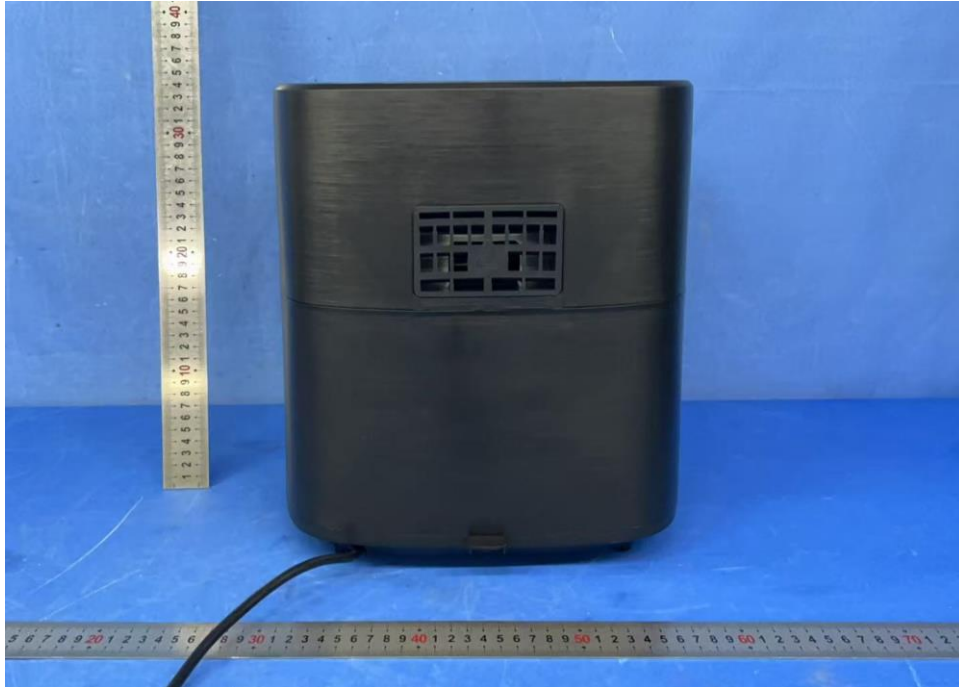


Photo 4.

Description: Overall view for HC-1101E, HC-1101ET, HC-1102E, HC-1102ET



Photo 5.

Description: Internal view for HC-8002ET

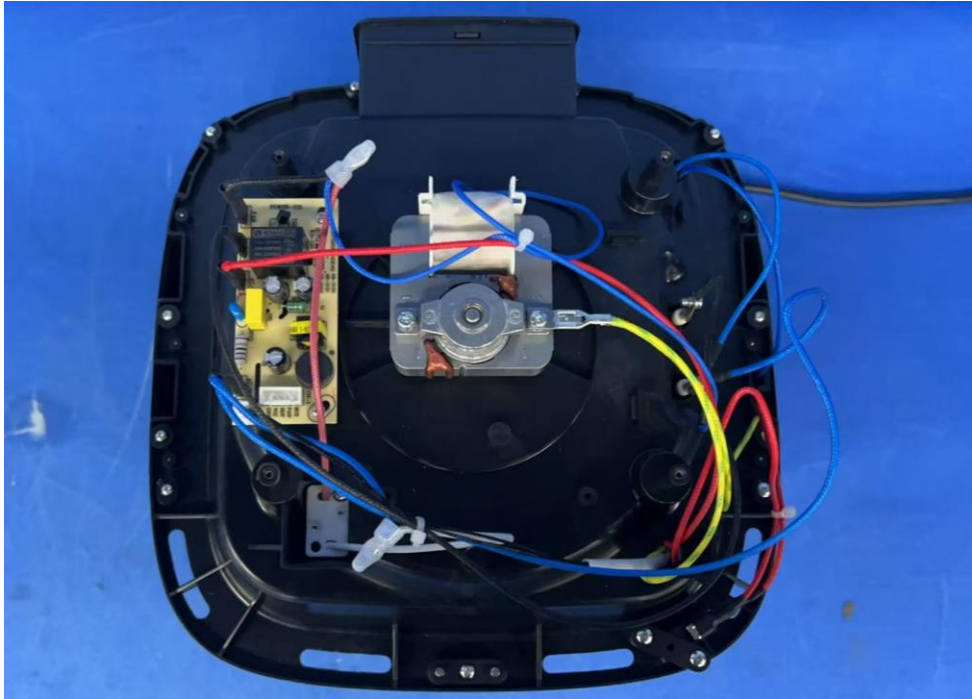


Photo 6.

Description: Internal view for HC-8002E

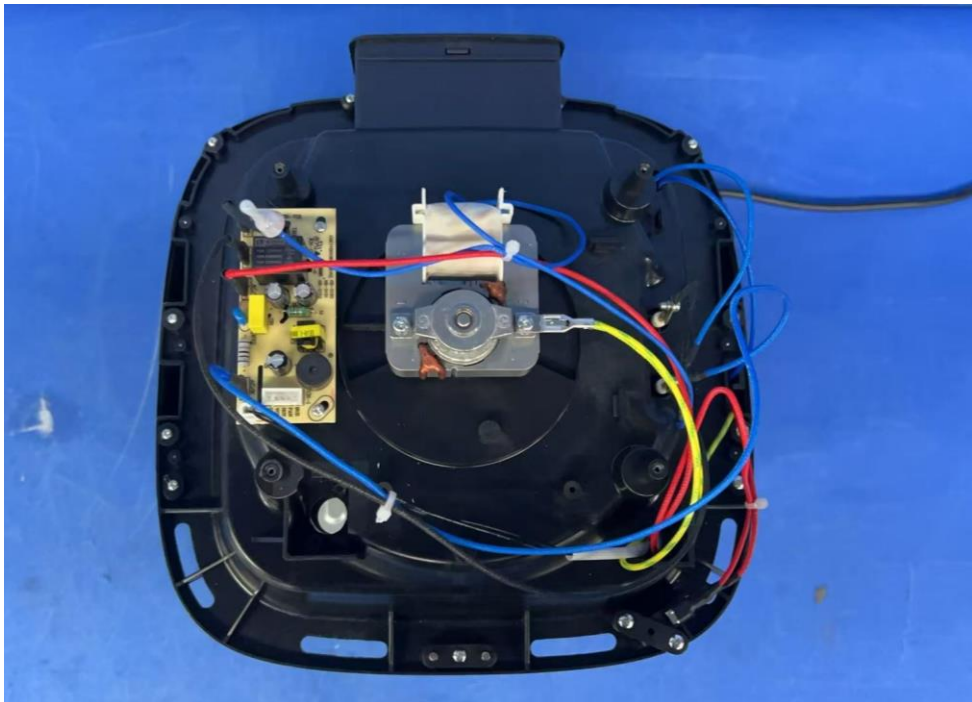


Photo 7.

Description: Internal view for HC-1101ET, HC-1102ET

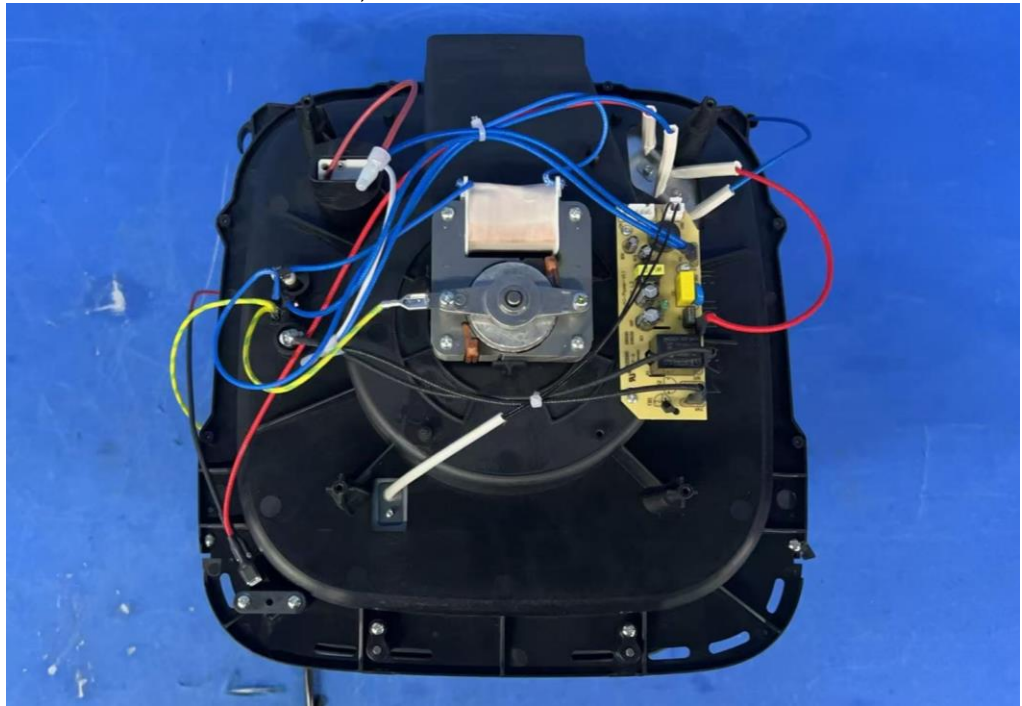


Photo 8.

Description: Internal view for HC-1101E, HC-1102E



Photo 9.

Description: Overall view for HC-5001ET



Photo 10.

Description: Overall view for HC-5001ET, HC-5001E



Photo 11.

Description: Overall view for HC-5001ET, HC-5001E



Photo 12.

Description: Overall view for HC-5001ET, HC-5001E



Photo 13.

Description: Overall view for HC-5001ET, HC-5001E

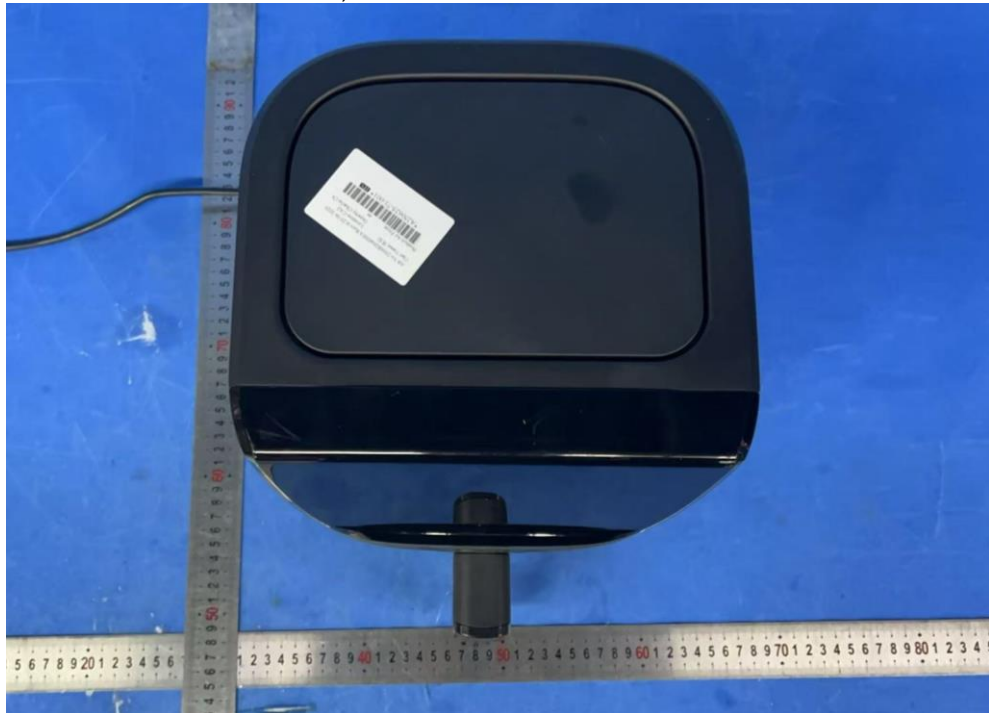


Photo 14.

Description: Overall view for HC-5001ET, HC-5001E



Photo 15.

Description: Overall view for HC-5001ET



Photo 16.

Description: Overall view for HC-5001E



Photo 17.

Description: Overall view for HC-5001E



Photo 18.

Description: Internal view for HC-5001ET, HC-5001E



Photo 19.

Description: Internal view for HC-5001ET, HC-5001E



Photo 20.

Description: Internal view for HC-5001ET, HC-5001E



Photo 21.

Description: Internal view for HC-5001ET, HC-5001E



Photo 22.

Description: Control panel PCB view for HC-5001ET, HC-5001E

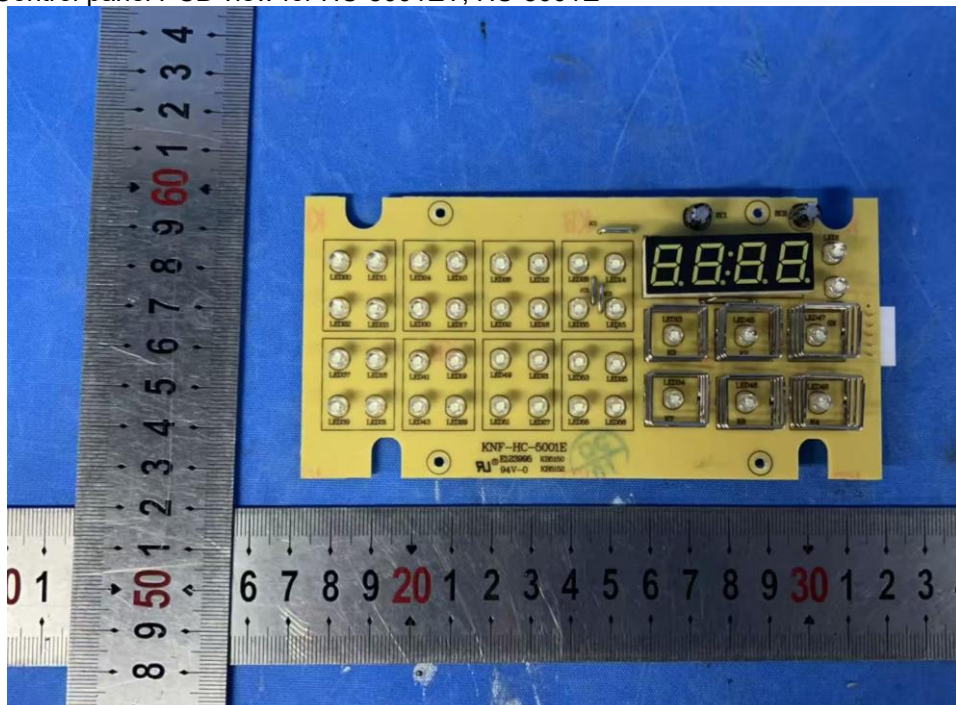


Photo 23.

Description: Control panel PCB view for HC-5001ET, HC-5001E

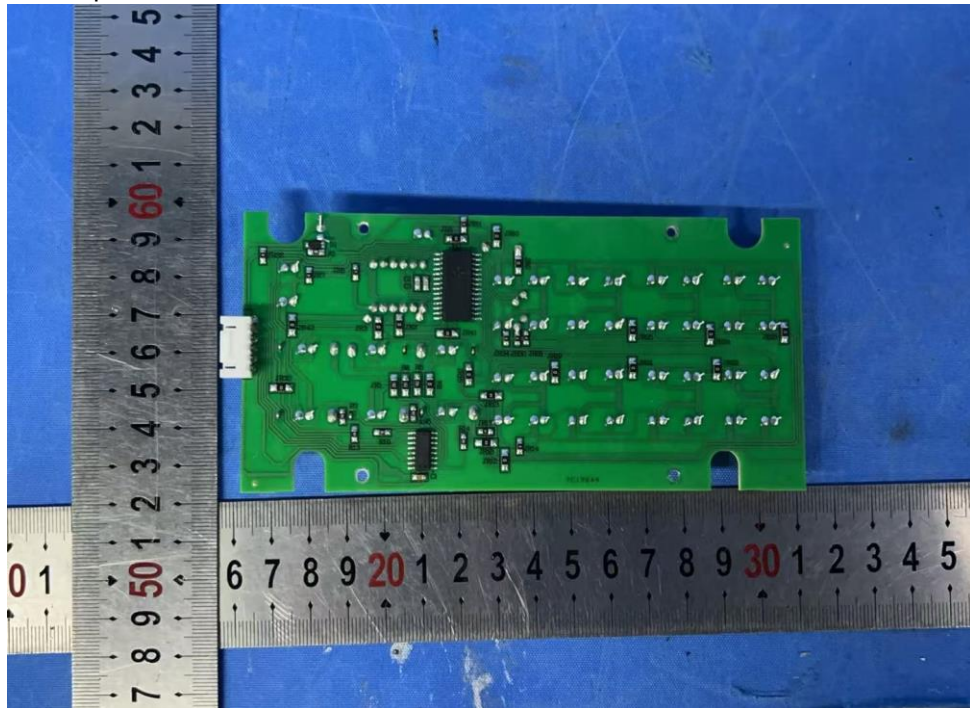


Photo 24.

Description: Internal view for HC-5001ET

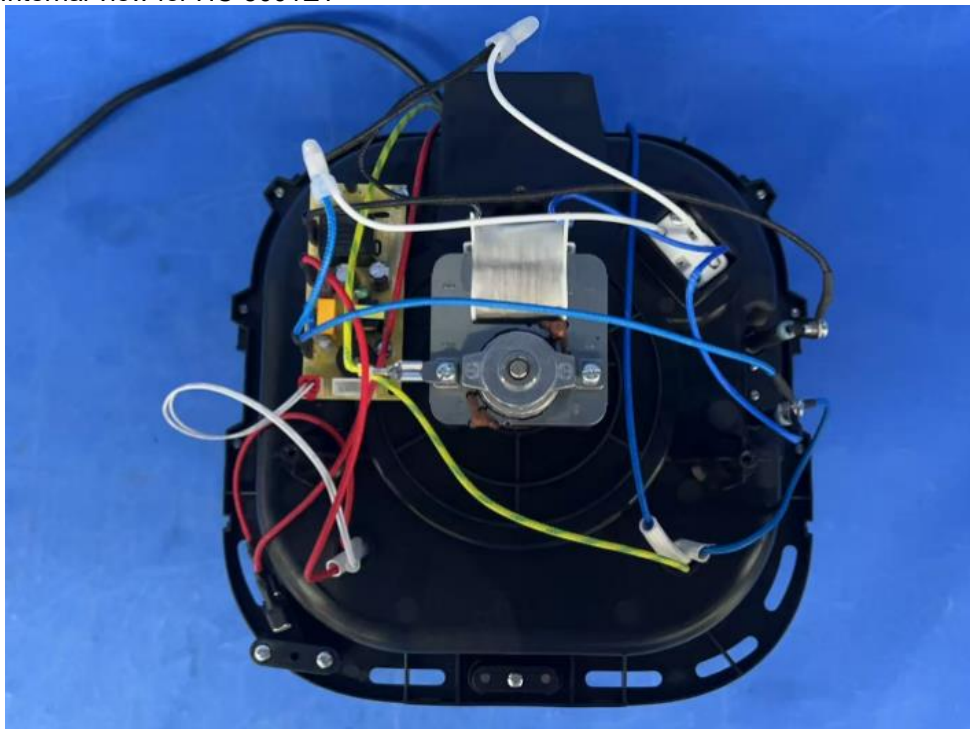


Photo 25.

Description: Internal view for HC-5001E

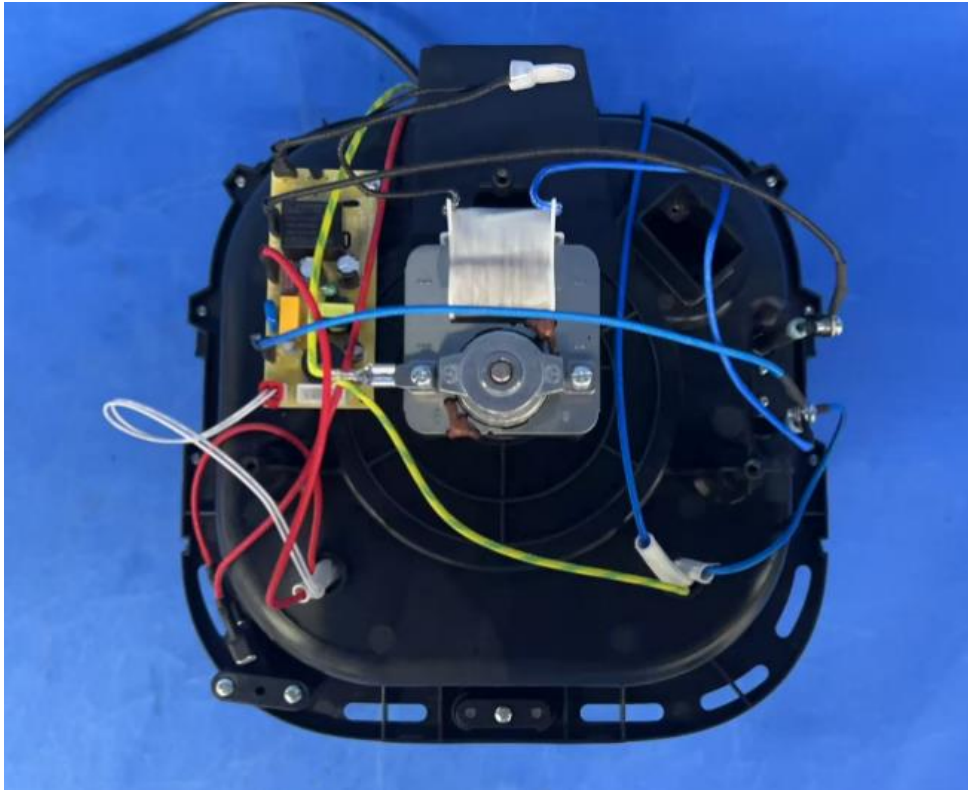


Photo 26.

Description: Power PCB view for HC-5001ET, HC-5001E

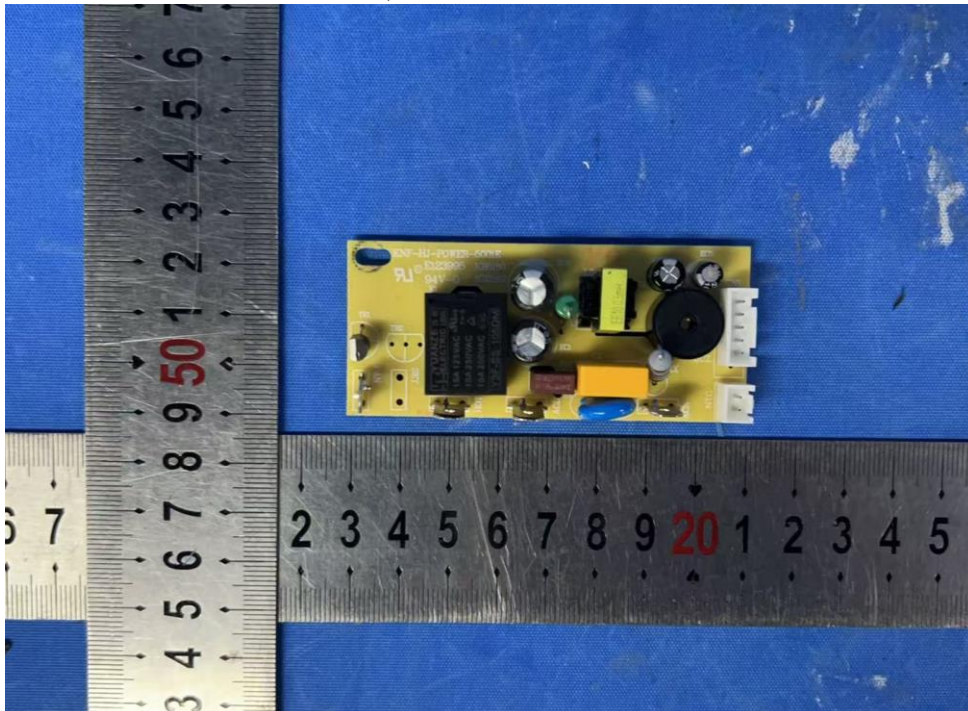


Photo 27.

Description: Power PCB view for HC-5001ET, HC-5001E

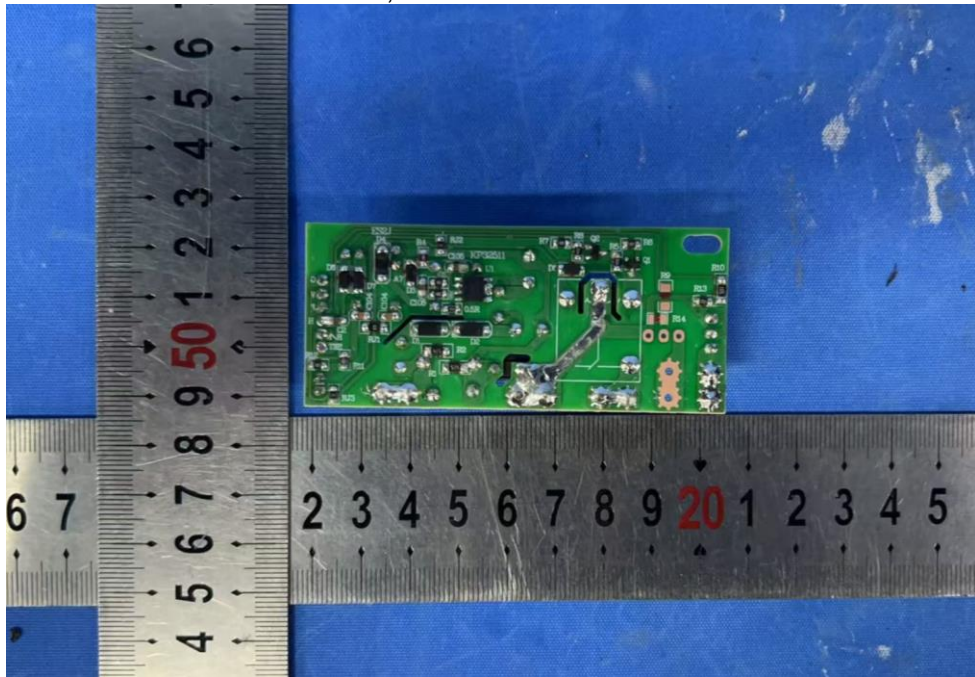


Photo 28.

Description: Internal view for HC-5001ET

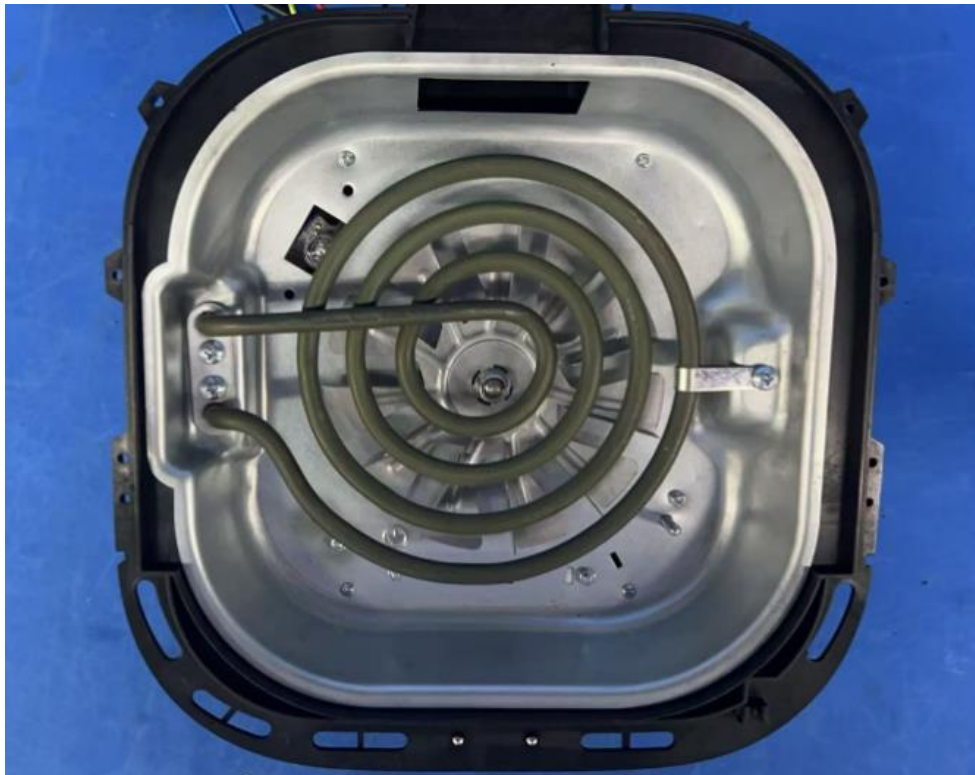


Photo 29.

Description: Internal view for HC-5001E

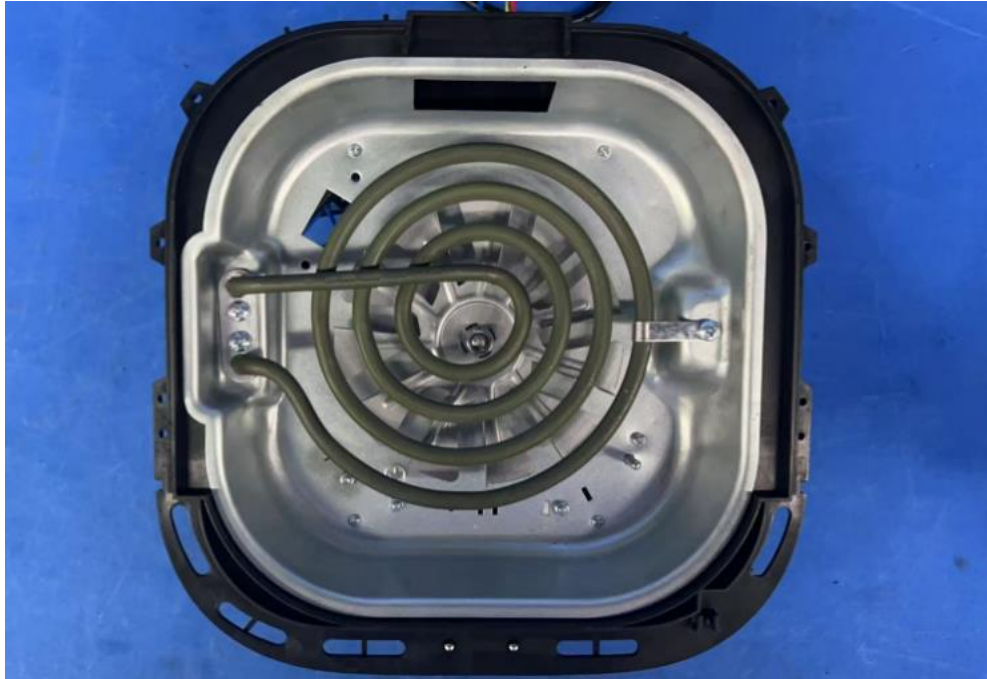


Photo 30.

Description: Internal view for HC-5001ET, HC-5001E

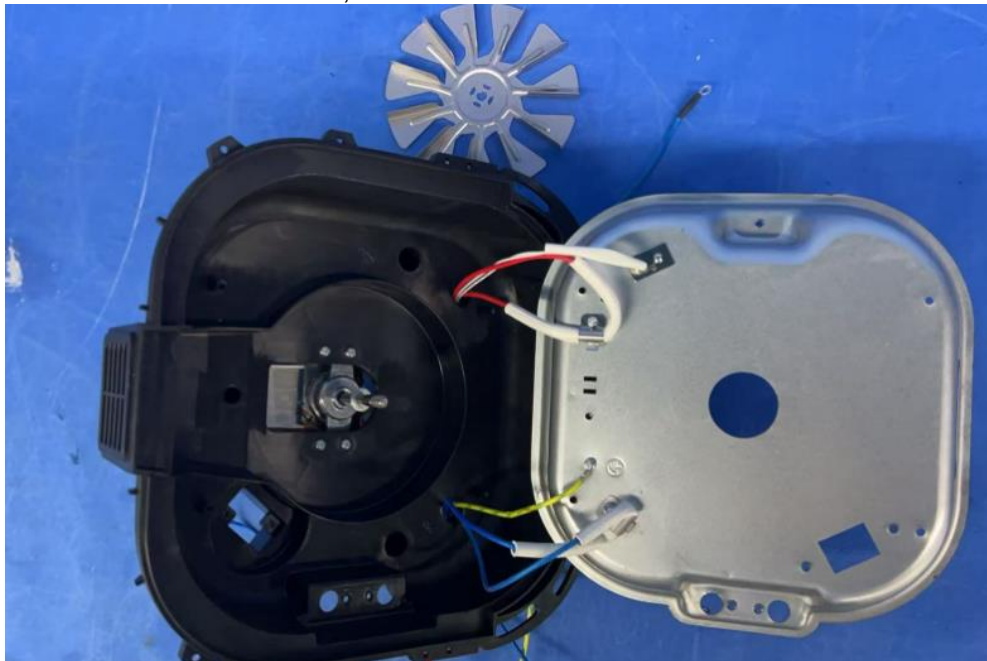


Photo 31.

Description: Fan motor view for HC-5001ET, HC-5001E

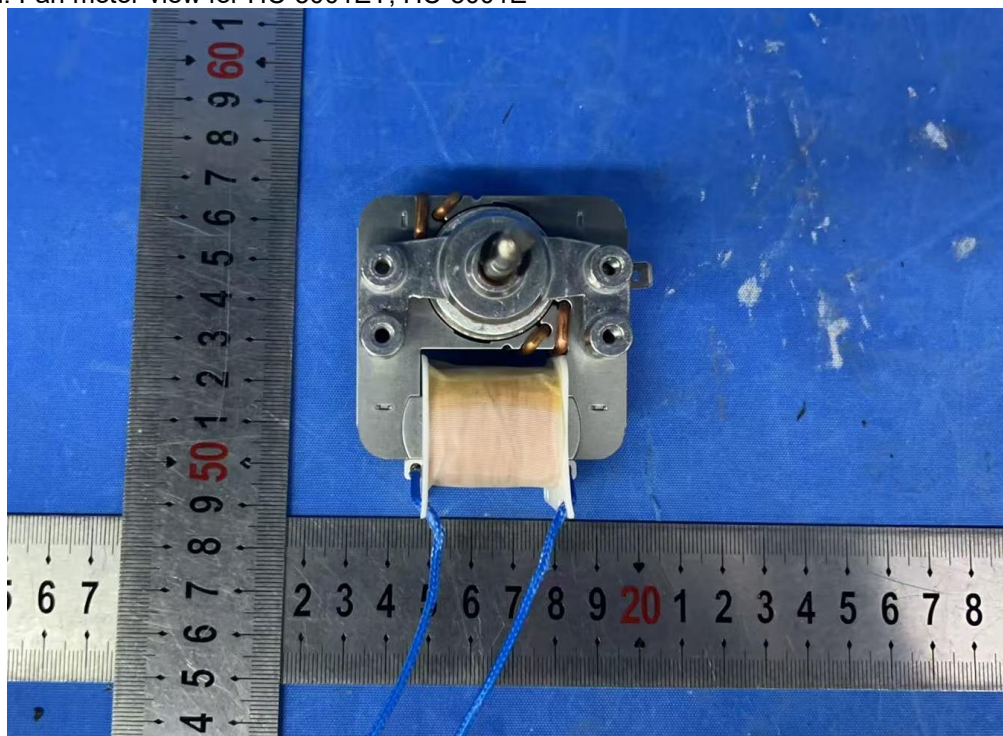


Photo 32.

Description: Fan motor view for HC-5001ET, HC-5001E

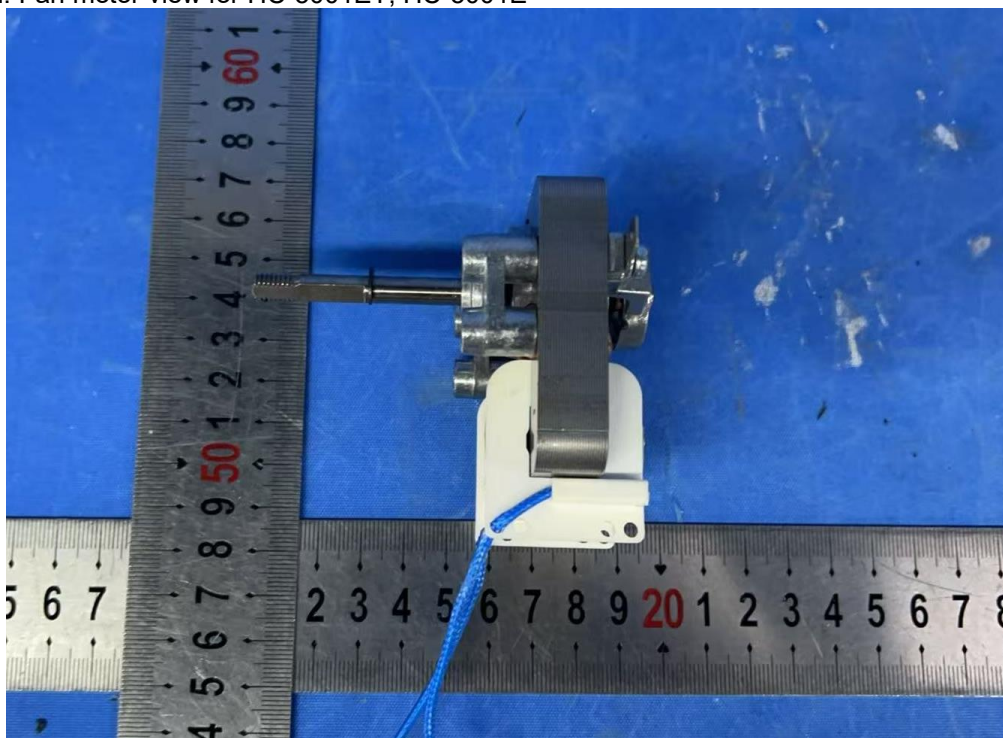


Photo 33.

Description: Fan motor view for HC-5001ET, HC-5001E

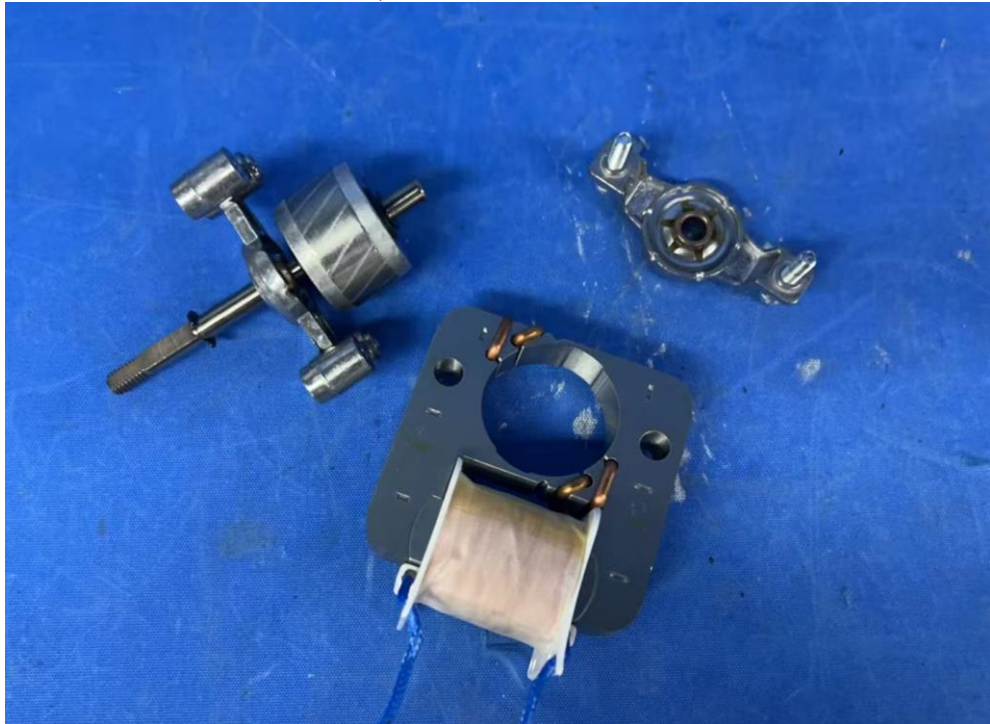


Photo 34.

Description: Fan motor view for HC-5001ET, HC-5001E

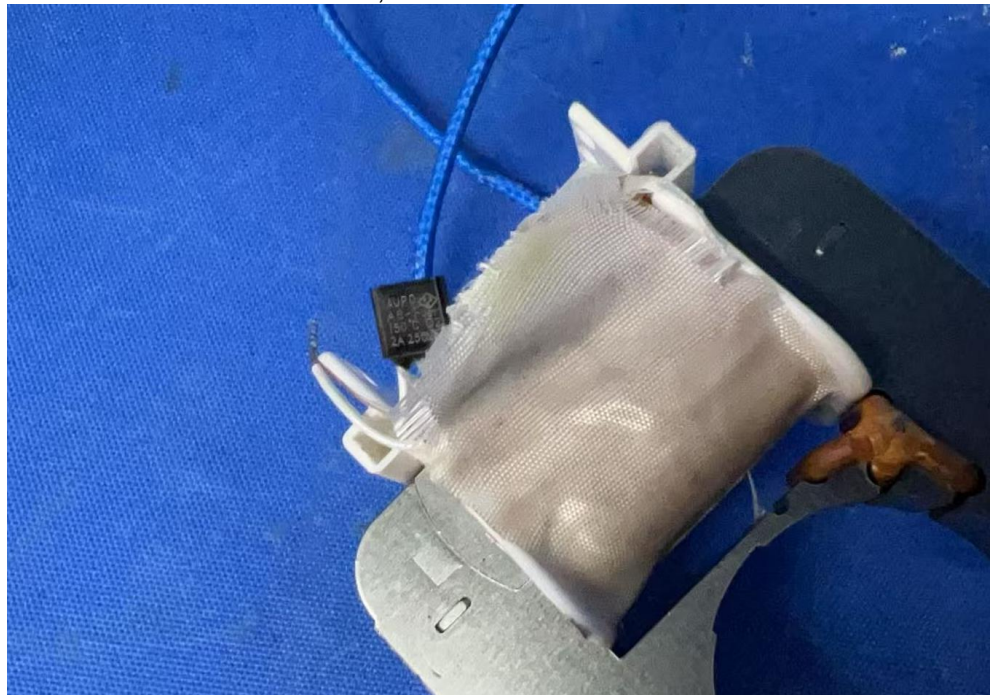


Photo 35.

Description: Heater element view for HC-5001ET, HC-5001E



Photo 36.

Description: lamp support view for HC-5001ET

