



Test Report issued under the responsibility of:



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.....	250300079HZH-001
Date of issue.....	2025-03-17; Modification 1: 2025-07-22
Total number of pages	58 pages of report (including 5 pages of photos)
Name of Testing Laboratory preparing the Report	Intertek Testing Services Zhejiang Ltd., Hangzhou Branch
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	IEC 60335-2-9:2019 in conjunction with IEC 60335-1:2010, COR1:2010, COR2:2010, AMD1:2013, COR1:2014, AMD2:2016, COR1:2016
Test procedure	CB Scheme
Non-standard test method	N/A
Test Report Form No.	IEC60335_2_9P
Test Report Form(s) Originator	LCIE
Master TRF	Dated 2019-08-23
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Test item description	Hot-air fryer for household use
Trade Mark(s)	--
Original Product/Equipment Manufacturer.....	Same as applicant
Branding Manufacturer(s)	--
Model/Type reference	HC-8003EH, HC-8003EAH, HC-8003ETH, HC-8003EATH, HC-8005EH, HC-8005EAH, HC-8005EATH, HC-8005ETH, HC-8002EH, HC-8002ETH, HC-1101EH, HC-1101ETH, HC-1102EH, HC-1102ETH
Ratings	220-240V~, 50/60Hz, Class I, 2200W for HC-8002EH, HC-8002ETH, HC-8003EH, HC-8003EAH, HC-8003ETH, HC-8003EATH, HC-8005EH, HC-8005EAH, HC-8005EATH, HC-8005ETH; 2300W for HC-1101EH, HC-1101ETH, HC-1102EH, HC-1102ETH

Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):		
☒	CB Testing Laboratory:	Intertek Testing Services Zhejiang Ltd., Hangzhou branch.
Testing location/ address		4th Floor, Building 4#, No. 22, 22nd Street, Qiantang District, Hangzhou, China 310018
Tested by (name, function, signature)		Charlie Chen/ Engineer <i>charlie chen</i>
Approved by (name, function, signature) ..		Chain Zhang/ Reviewer <i>Chain Zhang</i>
☐	Testing procedure: CTF Stage 1:	
Testing location/ address		N/A
Tested by (name, function, signature)		N/A
Approved by (name, function, signature) ..		N/A
☐	Testing procedure: 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: CTF Stage 3:	
☐	Testing procedure: CTF Stage 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 they comply with the requirements of the standard.	
Tests performed (name of test and test clause): Refer to description for Modification 1 (page 7) for details.	Testing location: Same as previous page.
Summary of compliance with National Differences (List of countries addressed): None	
Statement concerning the uncertainty of the measurement systems used for the tests Determination of the test conclusion is based on IEC Guide 115 in consideration of measurement uncertainty. ☒ Internal procedure used for type testing through which traceability of the measuring uncertainty has been established: Procedure number, issue date and title: INTERTEK GLOBAL MANAGEMENT SYSTEM GMS-QC-12 Estimation of Measurement Uncertainty The last revision date: 19-Apr-2018 Calculations leading to the reported values are on file with the NCB and testing laboratory that conducted the testing. ☐ Statement not required by the standard used for type testing	

Copy of marking plate: (Representative)

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

Test item particulars	
Classification of installation and use : Class I, household and indoor use	
Supply Connection : Cord connected with 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 : 2025-03-03; 2025-07-18	
Date (s) of performance of tests : 2025-03-03 to 2025-03-17; 2025-07-18 to 2025-07-22	
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.	
Manufacturer's Declaration per sub-clause 4.2.5 of IECEE 02:	
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 and other remarks:

The appliances covered by this report are portable Hot-air fryers for household indoor use only. All models employed interlock switch and thermal link to safeguard the appliances.

All models have same construction, the difference between them as following:

Models	Fan motor type	Power PCB type	Control panel PCB type	Power PCB+ Control panel PCB type
HC-8002EH, HC-8002ETH	HC-61-16	A1	B1	--
HC-8003EH, HC-8003ETH, HC-8005EH, HC-8005ETH	HC-61-16	A2	B2	--
HC-8003EAH, HC-8003EATH, HC-8005EAH, HC-8005EATH	HC-61-16	--	--	C1
HC-1101EH, HC-1101ETH, HC-1102EH, HC-1102ETH	HC-7213	A2	B3	--

- 1.HC-8003 series and HC-8005 series have the same appearance, except for a different top cover. So do HC-1101 series and HC-1102 series.
- 2.For the HC-8002EH, HC-8003EH, HC-8005EH, HC-8003EAH, HC-8005EAH, they have four optional basket, and HC-8002ETH, HC-8003ETH, HC-8005ETH, HC-8003EATH, HC-8005EATH they have two optional basket (Basket please refer to photo).
- 3.Letter "T" in the model name means the basket does have a viewable window.
- 4.The HC-8002 series, HC-8003 series and HC-8005 series have the same fan motor, but the appearance and Power PCB are different.
- 5.The HC-8003EH and HC-8003EAH use the same fan motor, but the HC-8003EAH control panel PCB and power PCB are integrated. So do HC-8003ETH and HC-8003EATH; HC-8005EH and HC-8005EAH; HC-8005ETH and HC-8005EATH.
- 6.All models of upper and lower heating elements can only work simultaneously.

Tests were performed on models: HC-8002ETH, HC-8002EH, HC-8005ETH, HC-8005EATH, HC-8005EAH, HC-1101ETH, HC-1101EH are selected as representatives for the tests and other models are also tested while mentioned, finally only the most unfavourable results are recorded.

Modification 1:

The original test report ref. No. 250300079HZH-001 dated on 2025-03-17, was modified 2025-07-22, including the following changes and/or additions:

- 1: The PCB position for all models (except HC-8003EAH, HC-8003EATH, HC-8005EAH, HC-8005EATH) has been changed.
- 2: The grille of the air outlet has been changed for all models.
- 3: Changed the grounding continuity for all models.
- 4: Update table 24.1:
 - a) Added alternative Power cord and Thermal link of bottom for heating element.

After review, tests are performed on HC-8002ETH, HC-8005ETH, HC-1101ETH, finally only the most unfavourable results were recorded.

Clause concerned: Cl.8, Cl.11, Cl.13, Cl.16, Cl.20, Cl.21, Cl.22, Cl.27, Cl.28, Cl.29 need to be concerned. Other clauses which were not mentioned in the report were referred to original test report.

Table concerned: Table 11.8, 13.2, 13.3, 16.2, 16.3, 28.1, 24.1, 29.1, 29.2.

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IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
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
8.1.3	For appliances other than class II, use of test probe 41 of IEC 61032, with a force not exceeding 1 N: no contact with live parts of visible glowing heating elements		N/A
	For a single switching action obtained by a switching device, requirements as specified		N/A
	For appliances with a supply cord and without a switching device, the single switching action may be obtained by the withdrawal of the plug		N/A
	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
8.1.4	Accessible part not considered live if:		--
	- safety extra-low a.c. voltage: peak value not exceeding 42.4 V		N/A

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
	- safety extra-low d.c. voltage: not exceeding 42.4 V		N/A
	- or separated from live parts by protective impedance		N/A
	If protective impedance: d.c. current not exceeding 2 mA, and		N/A
	a.c. peak value not exceeding 0.7 mA		N/A
	- for peak values over 42.4 V up to and including 450 V, capacitance not exceeding 0,1 μ F		N/A
	- for peak values over 450 V up to and including 15 kV, discharge not exceeding 45 μ C		N/A
	- for peak values over 15kV, the energy in the discharge not exceeding 350 mJ		N/A
	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		N/A
8.1.5	Live parts protected at least by basic insulation before installation or assembly:		--
	- built-in appliances		N/A
	- fixed appliances		N/A
	- appliances delivered in separate units		N/A
8.2	Class II appliances and constructions constructed so that there is adequate protection against accidental contact with basic insulation and metal parts separated from live parts by basic insulation only		P
	Only possible to touch parts separated from live parts by double or reinforced insulation		P
11	HEATING		--
11.1	No excessive temperatures in normal use		P
	Compliance for toasters is also checked by the test of 11. 101 (IEC 60335-2-9)		N/A
	Compliance for ovens, rotary grills and cookers is also checked by the test of 11.102. (IEC 60335-2-9)		N/A
	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

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
	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)		N/A
	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
11.2	The appliance is held, placed or fixed in position as described	Back 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
	Other appliances are placed away from the walls. (IEC 60335-2-9)		N/A
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
	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 $4\text{ N} \pm 1\text{ N}$ 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
11.4	Heating appliances operated under normal operation at 1.15 times rated power input (W)	(see appended table)	P
	Breadmakers are operated as specified for combined appliances. (IEC 60335-2-9)		N/A
	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

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
11.5	Motor-operated appliances operated under normal operation at most unfavourable voltage between 0.94 and 1.06 times rated voltage (V)		N/A
11.6	Combined appliances operated under normal operation at most unfavourable voltage between 0.94 and 1.06 times rated voltage (V)		N/A
	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	Tests carried out in compliance with the paragraphs N° 1 to 13 (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
	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 shall not flow into places where it could 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

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
	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	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
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)		N/A
	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.		N/A
	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
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.		N/A
13	LEAKAGE CURRENT AND ELECTRIC STRENGTH AT OPERATING TEMPERATURE		--

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
13.1	Leakage current not excessive and electric strength adequate		P
	Heating appliances operated at 1.15 times the rated power input (W).....:	Same as Cl.11.4	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
	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
13.2	The leakage current is measured by means of the circuit described in Figure 4 of IEC 60990:1999		P
	For class 0I appliances and class I appliances, except parts of class II construction, C may be replaced by a low impedance ammeter	Class I	P
	Leakage current measurements	(see appended table)	P
	If earthed metal between live parts and surface of glass-ceramic (or similar) of hotplate, leakage current between live parts and each vessel 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
16	LEAKAGE CURRENT AND ELECTRIC STRENGTH		--

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
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
	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
16.2	Single-phase appliances: test voltage 1.06 times rated voltage (V)	254,4	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 vessel 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
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

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
	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
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
	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
20.101	Ovens having doors with a horizontal hinge at their lower edge or drawers and on which a load is likely to be placed shall have adequate stability. (IEC 60335-2-9)	No horizontal hinge	N/A
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

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
	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 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
	-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
21.2	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
21.101	Surfaces of hotplates of glass-ceramic or similar material withstand the stresses liable to occur in normal use, under test conditions as specified (IEC 60335-2-9).		N/A
	After the tests, surface of hotplate not broken.		N/A
	Withstand dielectric strength test of 16.3		N/A
22	CONSTRUCTION		--
22.1	Appliance marked with the first numeral of the IP system, relevant requirements of IEC 60529 are fulfilled		N/A
22.2	Stationary appliance: means to ensure all-pole disconnection from the supply being provided:		--
	- a supply cord fitted with a plug, or		N/A
	- a switch complying with 24.3, or		N/A

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
	- a statement in the instruction sheet that a disconnection incorporated in the fixed wiring is to be provided, or		N/A
	- an appliance inlet		N/A
	Singe-pole switches and single-pole protective devices for the disconnection of heating elements in single-phase, permanently connected class 01 and class I appliances, connected to the phase conductor		N/A
22.3	Appliance provided with pins: no undue strain on socket-outlets		N/A
	Applied torque not exceeding 0.25 Nm		N/A
	Pull force of 50N to each pin after the appliance has being placed in the heating cabinet; when cooled to room temperature the pins are not displaced by more than 1mm		N/A
	Each pin subjected to a torque of 0.4Nm; the pins are not rotating, unless		N/A
	rotating does not impair compliance with this standard		N/A
22.4	Appliance for heating liquids and appliance causing undue vibration not provided with pins for insertion into socket-outlets		N/A
22.5	No risk of electric shock when touching pins, for appliances having a capacitor with rated capacitance equal to or greater than 0,1μF, the appliance being disconnected from the supply at the instant of voltage peak		P
	Voltage not exceeding 34 V (V):	Max 12V	P
	If compliance relies on the operation of an electronic circuit, the electromagnetic phenomena tests of 19.11.4.3 and 19.11.4.4 are applied		N/A
	The discharge test is then repeated three times, voltage not exceeding 34 V (V):		N/A
22.6	Electrical insulation not affected by condensing water or leaking liquid		P
	Electrical insulation of Class II appliances not affected if a hose ruptures or seal leaks		N/A
	In case of doubt, test as described		N/A
22.7	Adequate safeguards against the risk of excessive pressure in appliances containing liquid or gases or having steam-producing devices		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
22.8	Electrical connections not subject to pulling during cleaning of compartments to which access can be gained without the aid of a tool, and that are likely to be cleaned in normal use		N/A
22.9	Insulation, internal wiring, windings, commutators and slip rings not exposed to oil, grease or similar substances, unless	No such substances used	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
22.12	Handles, knobs etc. fixed in a reliable manner, if loosening result in a hazard		P
	Removing or fixing in wrong position of handles, knobs etc. indicating position of switches or similar components not possible, if resulting in a hazard		P
	A choking hazard does not apply to appliances for commercial use		N/A
	Axial force 15 N applied to parts, the shape being so that an axial pull is unlikely to be applied		N/A
	Axial force 30 N applied to parts, the shape being so that an axial pull is likely to be applied	Handle	P

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Clause	Requirement + Test	Result - Remark	Verdict
	If the part is removed and can be contained within the small parts cylinder, it is considered to be a choking hazard		N/A
22.13	Unlikely that handles, when gripped as in normal use, make the operator's hand touch parts having a temperature rise exceeding the value specified for handles which are held for short periods only		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
22.15	Storage hooks and the like for flexible cords smooth and well rounded		N/A
22.16	Automatic cord reels cause no undue abrasion or damage to the sheath of the flexible cord, no breakage of conductors strands and no undue wear of contacts		N/A
	Cord reel tested with 6000 operations, as specified		N/A
	Electric strength test of 16.3, voltage of 1000 V applied		N/A
22.17	Spacers not removable from the outside by hand or by means of a screwdriver or a spanner		P
22.18	Current-carrying parts and other metal parts resistant to corrosion		P
22.19	Driving belts not relied upon to provide the required level of insulation, unless	No driving belts	N/A
	constructed to prevent inappropriate replacement		N/A
22.20	Direct contact between live parts and thermal insulation effectively prevented, unless		P
	material used is non-corrosive, non-hygroscopic and non-combustible		N/A
22.21	Wood, cotton, silk, ordinary paper and fibrous or hygroscopic material not used as insulation, unless		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 used	P

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Clause	Requirement + Test	Result - Remark	Verdict
22.24	Bare heating elements, except in class III appliances or class III constructions that do not contain live parts, adequately supported		N/A
	Heating elements constructed or supported so they are unlikely to become displaced in normal use. (IEC 60335-2-9)		N/A
	In case of rupture, the heating conductor is unlikely to come in contact with accessible metal parts		N/A
22.25	Sagging heating conductors, except in class III appliances or class III constructions that do not contain live parts, cannot come into contact with accessible metal parts		N/A
22.26	For class III constructions the insulation between parts operating at safety extra-low voltage and other live parts complies with the requirements for double or reinforced insulation		N/A
22.27	Parts connected by protective impedance separated by double or reinforced insulation		N/A
22.28	Metal parts of Class II appliances conductively connected to gas pipes or in contact with water, separated from live parts by double or reinforced insulation		N/A
22.29	Class II appliances permanently connected to fixed wiring so constructed that the required degree of access to live parts is maintained after installation		N/A
22.30	Parts serving as supplementary or reinforced insulation fixed so that they cannot be removed without being seriously damaged, or		P
	so constructed that they cannot be replaced in an incorrect position, and so that if they are omitted, the appliance is rendered inoperable or manifestly incomplete		P
22.31	Neither clearances nor creepage distances over supplementary and reinforced insulation reduced below values specified in clause 29 as a result of wear		P
	Neither clearances nor creepage distances between live parts and accessible parts reduced below values for supplementary insulation if wires, screws etc. become loose		P
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

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Clause	Requirement + Test	Result - Remark	Verdict
	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		P
	~~Insulating~~ Ceramic and similar porous 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
22.33	Conductive liquids that are or may become accessible in normal use and conductive liquids that are in contact with unearthed accessible metal parts are not in direct contact with live parts, or		N/A
	unearthed metal parts separated from live parts by basic insulation only		N/A
	Electrodes not used for heating liquids		N/A
	For class II constructions, conductive liquids that are or may become accessible in normal use and conductive liquids that are in contact with unearthed accessible metal parts, not in direct contact with basic or reinforced insulation, unless		N/A
	the reinforced insulation consists of at least 3 layers		N/A
	For class II constructions, conductive liquids which are in contact with live parts, not in direct contact with reinforced insulation, unless		N/A
	the reinforced insulation consists of at least 3 layers		N/A
	An air layer not used as basic or supplementary insulation in a double insulation system if likely to be bridged by leaking liquid		N/A
22.34	Shafts of operating knobs, handles, levers etc. not live, unless		P
	the shaft is not accessible when the part is removed		N/A
22.35	For other than class III constructions, handles, levers and knobs, held or actuated in normal use, not becoming live in the event of a failure of basic insulation		P

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

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Clause	Requirement + Test	Result - Remark	Verdict
22.42	Protective impedance consisting of at least two separate components		N/A
	Values specified in 8.1.4 not exceeded if any one of the components are short-circuited or open-circuited		N/A
	Resistors checked by the test of 14.1 a) in IEC 60065		N/A
	Capacitors checked by the tests for class Y capacitors in IEC 60384-14		N/A
22.43	Appliances adjustable for different voltages, accidental changing of the setting of the voltage unlikely to occur		N/A
22.44	Appliances not having an enclosure that is shaped or decorated like a toy		P
22.45	When air is used as reinforced insulation, clearances not reduced below the values specified in 29.1.3 due to deformation as a result of an external force applied to the enclosure		P
22.46	For programmable protective electronic circuits used to ensure compliance with the standard, the software contains measures to control the fault/error conditions in table R.1		N/A
	Software that contains measures to control the fault/error conditions specified in table R.2 is to be specified in parts 2 for particular constructions or to address specific hazards		N/A
	These requirements are not applicable to software used for functional purpose or compliance with clause 11		N/A
22.47	Appliances connected to the water mains withstand the water pressure expected in normal use		N/A
	No leakage from any part, including any inlet water hose		N/A
22.48	Appliances connected to the water mains constructed to prevent backsiphonage of non-potable water		N/A
22.49	For remote operation, the duration of operation is to be set before the appliance can be started, unless		N/A
	the appliance switches off automatically or can operate continuously without hazard		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
22.50	Controls incorporated in the appliance take priority over controls actuated by remote operation		N/A
22.51	There is a control on the appliance manually adjusted to the setting for remote operation before the appliance can be operated in this mode		N/A
	There is a visual indication showing that the appliance is adjusted for remote operation		N/A
	These requirements not necessary on appliances that can operate as follows, without giving rise to a hazard:		--
	- continuously, or		N/A
	- automatically, or		N/A
	- remotely		N/A
22.52	Socket-outlets on appliances accessible to the user in accordance with the socket-outlet system used in the country in which the appliance is sold		N/A
22.53	Class II appliances and class III appliances that incorporate functionally earthed parts have at least double insulation or reinforced insulation between live parts and the functionally earthed parts		N/A
22.54	Button cells and batteries designated R1 not accessible without the aid of a tool, unless		N/A
	the cover of their compartment can only be opened after at least two independent movements have been applied simultaneously		N/A
22.55	Devices operated to stop the intended function of the appliance, if any, are be distinguished from other manual devices by means of shape, size, surface texture or position		P
	The requirement concerning position does not preclude use of a push on push off switch		P
	An indication when the device has been operated is given by:		--
	– tactile feedback from the actuator or from the appliance, or		P
	– reduction in heat output; or		N/A
	– audible and visible feedback		P
22.56	Detachable power supply part provided with the part of class III construction		N/A
22.57	The properties of non-metallic materials do not degrade from exposure to UV-C radiation, as specified in Annex T		N/A
	This requirement does not apply to glass, ceramics		N/A

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
	or similar materials		
22.101	Radiant grills: no timer that is intended to delay the operation of a heating element, (IEC 60335-2-9)		N/A
	Unless having a thermostat and being incorporated in an oven or other compartment, (IEC 60335-2-9)		N/A
	Hotplates shall not incorporate a timer that is intended to delay the operation of a heating element. (IEC 60335-2-9)		N/A
22.102	Barbecue shall not have bare heating elements (IEC 60335-2-9)		N/A
	Oven: bare heating elements at the top of the heated compartment. (IEC 60335-2-9)		N/A
22.103	Oven ventilation constructed so that they do not discharge moisture or grease in such a way that clearances and creepage distances are affected (IEC 60335-2-9)		P
22.104	Ovens constructed so that shelves can easily slide in the supports and do not fall out of position when the sides are displaced as much as possible. (IEC 60335-2-9)		N/A
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
22.106	Grills and barbecues constructed so that their heating elements are fixed in position or prevented from operating when they are not in their normal position of use. (IEC 60335-2-9)		N/A
22.107	Hotplate constructed so that heating elements are prevented from rotating about a vertical axis and are adequately supported in all positions of adjustment of their supports. (IEC 60335-2-9)		N/A
	If a heating element is clamped by a nut on a central stud, an additional means is required to prevent its rotation.		N/A
22.108	Hotplate constructed so that inadvertent operation of touch controls is unlikely if this could give rise to a hazardous situation due to spillage of liquids or damp cloth placed on the control panel, and complies with test as specified ... (IEC 60335-2-9)		N/A
22.109	Hotplate incorporating touch controls constructed so that at least two manual operations are requested to switch on a heating element but only one to switch it off..... (IEC 60335-2-9)		N/A

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
22.110	Induction hotplates constructed so that they can only be operated with a suitable vessel placed on the cooking zone. (IEC 60335-2-9)		N/A
	Temperature rise of iron not exceeding 35K (IEC 60335-2-9)		N/A
22.111	Heating element in breadmakers located so they are not exposed to dough that they may rise over the edge of the dough container during normal use of the appliance (IEC 60335-2-9)		N/A
22.112	Reconnection of the power supply to a breadmaker after an interruption shall not result in a fire due to an extended heating period (IEC 60335-2-9)		N/A
22.113	Toasters having an ejector mechanism shall be constructed so that they switch off automatically after the normal toasting time even if the ejector mechanism is blocked by the bread. (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
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 protective earthing		N/A
	Class II appliances and class III appliances can incorporate an earth for functional purposes		N/A
	Safety extra-low voltage circuits not earthed, unless		N/A
	protective extra-low voltage circuits		N/A
	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

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Clause	Requirement + Test	Result - Remark	Verdict
	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
	conductors cannot be loosened without the aid of a tool		P
	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes		N/A
27.3	For a detachable part having an earth connection and being plugged into another part of the appliance, the earth connection is made before and separated after current-carrying connections when removing the part		N/A
	For appliances with supply cords, current-carrying conductors become taut before earthing conductor, if the cord slips out of the cord anchorage		P
	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes		N/A
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
	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes		P
27.5	Low resistance of connection between earthing terminal and earthed metal parts		P

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Clause	Requirement + Test	Result - Remark	Verdict
	This requirement does not apply to connections providing earthing continuity in the protective extra-low voltage circuit, provided the clearances of basic insulation are based on the rated voltage of the appliance		N/A
	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes		N/A
	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
	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes		N/A
28	SCREWS AND CONNECTIONS		--
28.1	Fixings, electrical connections and connections providing earthing continuity withstand mechanical stresses		P
	Screws not of soft metal liable to creep, such as zinc or aluminium	No such screws	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

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Clause	Requirement + Test	Result - Remark	Verdict
28.2	Electrical connections and connections providing earthing continuity constructed so that contact pressure is not transmitted through non-ceramic insulating material liable to shrink or distort, unless		N/A
	there is resiliency in the metallic parts to compensate for shrinkage or distortion of the insulating material		N/A
	This requirement does not apply to electrical connections in circuits of appliances for which:		--
	30.2.2 is applicable and that carry a current not exceeding 0,5 A		N/A
	30.2.3 is applicable and that carry a current not exceeding 0,2 A		N/A
28.3	Space-threaded (sheet metal) screws only used for electrical connections if they clamp the parts together		N/A
	Thread-cutting (self-tapping) screws and thread rolling screws only used for electrical connections if they generate a full form standard machine screw thread		N/A
	Thread-cutting (self-tapping) screws not used if they are likely to be operated by the user or installer		N/A
	Thread-cutting, thread rolling and space threaded screws may be used in connections providing earthing continuity provided it is not necessary to disturb the connection:		--
	- 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
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

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Clause	Requirement + Test	Result - Remark	Verdict
	Rivets for electrical connections or connections providing earthing continuity secured against loosening if the connections are subjected to torsion		P
29	CLEARANCES, CREEPAGE DISTANCES AND SOLID INSULATION		--
	Clearances, creepage distances and solid insulation withstand electrical stress		P
	For coatings used on printed circuits boards to protect the microenvironment (Type 1) or to provide basic insulation (Type 2), Annex J applies:		N/A
	The microenvironment is pollution degree 1 under type 1 protection		N/A
	For type 2 protection, the spacing between the conductors before the protection is applied is not less than the values specified in Table 1 of IEC 60664-3		N/A
	These values apply to functional, basic, supplementary and reinforced insulation		N/A
29.1	Clearances not less than the values specified in table 16, taking into account the rated impulse voltage for the overvoltage categories of table 15, unless	(see appended table)	P
	for basic insulation and functional insulation they comply with the impulse voltage test of clause 14		N/A
	However, if the distances are affected by wear, distortion, movement of the parts or during assembly, the clearances for rated impulse voltages of 1500V and above are increased by 0,5 mm and the impulse voltage test is not applicable		P
	For appliances intended for use at altitudes exceeding 2 000 m, the clearances in Table 16 is increased according to the relevant multiplier values in Table A.2 of IEC 60664-1		N/A
	Impulse voltage test is not applicable:		--
	- when the microenvironment is pollution degree 3, or		P
	- for basic insulation of class 0 and class 01 appliances		N/A
	- to appliances intended for use at altitudes exceeding 2 000 m		N/A
	Appliances are in overvoltage category II		P
	A force of 2 N is applied to bare conductors, other than heating elements		P

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

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Clause	Requirement + Test	Result - Remark	Verdict
	Clearance between surfaces of PTC heating elements may be reduced to 1mm		N/A
29.1.5	Appliances having higher working voltages than rated voltage, clearances for basic insulation are the largest values determined from:		--
	- table 16 based on the rated impulse voltage		N/A
	- table F.7a in IEC 60664-1, frequency not exceeding 30 kHz		N/A
	- clause 4 of IEC 60664-4, frequency exceeding 30 kHz		N/A
	If clearances for basic insulation are selected from Table F.7a of IEC 60664-1 or Clause 4 of IEC 60664-4, the clearances of supplementary insulation are not less than those specified for basic insulation		N/A
	If clearances for basic insulation are selected from Table F.7a of IEC 60664-1, the clearances of reinforced insulation dimensioned as specified in Table F.7a are to withstand 160% of the withstand voltage required for basic insulation		N/A
	If clearances for basic insulation are selected from Clause 4 of IEC 60664-4, the clearances of reinforced insulation are twice the value required for basic insulation		N/A
	If the secondary winding of a step-down transformer is earthed, or if there is an earthed screen between the primary and secondary windings, clearances of basic insulation on the secondary side not less than those specified in table 16, but using the next lower step for rated impulse voltage		N/A
	Circuits supplied with a voltage lower than rated voltage, clearances of functional insulation are based on the working voltage used as the rated voltage in table 15		N/A
29.2	Creepage distances not less than those appropriate for the working voltage, taking into account the material group and the pollution degree	(see appended table)	P
	Pollution degree 2 applies, unless		N/A
	- precautions taken to protect the insulation; pollution degree 1	At the end terminal of heating element	P
	- insulation subjected to conductive pollution; pollution degree 3	All parts except end of heating element	P

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Clause	Requirement + Test	Result - Remark	Verdict
	A force of 2 N is applied to bare conductors, other than heating elements		P
	A force of 30 N is applied to accessible surfaces		P
	In a double insulation system, the working voltage for both the basic and supplementary insulation is taken as the working voltage across the complete double insulation system		P
	Pollution degree 3 applies, unless the insulation is enclosed or located so that it is unlikely to be exposed to pollution during normal use of the appliance (IEC 60335-2-9)		P
29.2.1	Creepage distances of basic insulation not less than specified in table 17.....:	(see appended table)	P
	However, if the working voltage is periodic and has a frequency exceeding 30 kHz, the creepage distances are also determined from table 2 of IEC 60664-4, these values being used if exceeding the values in table 17		N/A
	Except for pollution degree 1, corresponding creepage distance not less than the minimum specified for the clearance in table 16, if the clearance has been checked according to the test of clause 14		N/A
29.2.2	Creepage distances of supplementary insulation at least those specified for basic insulation in table 17, or	(see appended table)	P
	Table 2 of IEC 60664-4, as applicable		N/A
29.2.3	Creepage distances of reinforced insulation at least double those specified for basic insulation in table 17, or	(see appended table)	P
	Table 2 of IEC 60664-4, as applicable		N/A
29.2.4	Creepage distances of functional insulation not less than specified in table 18	(see appended table)	P
	However, if the working voltage is periodic and has a frequency exceeding 30 kHz, the creepage distances are also determined from table 2 of IEC 60664-4, these values being used if exceeding the values in table 18		N/A
	Creepage distances may be reduced if the appliance complies with clause 19 with the functional insulation short-circuited		P
29.3	Supplementary and reinforced insulation have adequate thickness, or a sufficient number of layers, to withstand the electrical stresses		P

IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
	Compliance checked:		--
	- by measurement, in accordance with 29.3.1, or		P
	- by an electric strength test in accordance with 29.3.2, or		N/A
	-for insulation, other than single layer internal wiring insulation by an assessment of the thermal quality of the material combined with an electric strength test, in accordance with 29.3.3, and		N/A
	for accessible parts of reinforced insulation consisting of a single layer, by measurement in accordance with 29.3.4, or		N/A
	- by an assessment of the thermal quality of the material according to 29.3.3 combined with an electric strength test in accordance with 23.5, for each single layer internal wiring insulation touching each other, or		N/A
	- as specified in subclause 6.3 of IEC 60664-4 for insulation that is subjected to any periodic voltage having a frequency exceeding 30 kHz		N/A
	Requirement not applied to the sheath of a visibly glowing heating element that is inaccessible to test probe 41 of IEC 61032 (IEC 60335-2-9)		N/A
29.3.1	Supplementary insulation have a thickness of at least 1 mm	For insulation of thermal link and insulation of internal wire	P
	Reinforced insulation have a thickness of at least 2 mm		P
29.3.2	Each layer of material withstand the electric strength test of 16.3 for supplementary insulation		N/A
	Supplementary insulation consist of at least 2 layers		N/A
	Reinforced insulation consist of at least 3 layers		N/A
29.3.3	The insulation is subjected to the dry heat test Bb of IEC 60068-2-2, followed by		N/A
	the electric strength test of 16.3		N/A
	If the temperature rise during the tests of clause 19 does not exceed the value specified in table 3, the test of IEC 60068-2-2 is not carried out		N/A
29.3.4	Thickness of accessible parts of reinforced insulation consisting of a single layer not less than specified in table 19.....:		N/A

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

11.8	TABLE: Heating test, thermocouple (for HC-1101ETH)		P
	Test voltage (V)	2880W/263V	—
	Ambient (°C)	23	—
Thermocouple locations		Max. temperature rise measured, ΔT (K)	Max. temperature rise limit, ΔT (K)
Supply cord		27	50
PCB		52	120
PCB Support		45	--
Relay		50	60(T-25)
X2 Capacitor		45	75(T-25)
Varistor		46	60(T-25)
Centre of container		167	--
Air outlet grilles		75	--
Test corner		61	65
Supplementary information: All baskets were tested, the most unfavourable data was recorded.			

11.8	TABLE: Heating test, thermocouple (for HC-8002ETH)		P
	Test voltage (V)	2755W/261V	—
	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		38	--
Relay		50	60(T-25)
X2 Capacitor		43	75(T-25)
Varistor		41	60(T-25)
Centre of container		165	--
Air outlet grilles		80	--
Test corner		55	65
Supplementary information: All baskets were tested, the most unfavourable data was recorded.			

11.8	TABLE: Heating test, thermocouple (for HC-8005ETH)		P
	Test voltage (V)	2755W/264V	—

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	48	120	
PCB Support	42	--	
Relay	52	60(T-25)	
X2 Capacitor	41	75(T-25)	
Varistor	41	60(T-25)	
Centre of container	165	--	
Air outlet grilles	96	--	
Test corner	60	65	
Supplementary information: All baskets were tested, the most unfavourable data was recorded.			

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 0,06	0,75
L/N — Enclosure (with metal foil or ungrounded metal parts)		Max 0,01 peak	0,35 peak
L/N — Knob/handle		Max 0,01 peak	0,35 peak
Supplementary information: the most unfavourable data was recorded.			

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
Supplementary information: the most unfavourable data was recorded.			

16.2	TABLE: Leakage current (for all models)		P
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IEC 60335-2-9			
Clause	Requirement + Test	Result - Remark	Verdict
	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 0,06	0,75
L/N — Enclosure (with metal foil or ungrounded metal parts)		Max 0,01	0,25
L/N — Knob/handle		Max 0,01	0,25
Supplementary information: the most unfavourable data was recorded.			

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
Supplementary information: the most unfavourable data was recorded.			

21.1	TABLE: Impact resistance			P
Impacts per surface		Surface tested	Impact energy (Nm)	Comments
3 times		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	IEC 60884-1+CEE7	TUV*/ R 50286272	
Alternative	Ningbo Liansheng Wire&Cable Co., Ltd.	LS03	250 V ~, 16A DIN 49441-R2	IEC 60884-1+CEE7	VDE*/ 40034732	
Alternative	ZheJiang JinTing Nuclear Cable Co., Ltd.	JT008	250 V ~, 16A DIN 49441-R2	IEC 60884-1+CEE7	VDE*/ 40050831	
Alternative	Yuyao Gangda Electric Co., Ltd	AU-003	250 V ~, 16A DIN 49441-R2	IEC 60884-1+CEE7	VDE*/ 40027097	

IEC 60335-2-9					
Clause	Requirement + Test		Result - Remark		Verdict
Alternative	Yuyao Gangda Electric Co., Ltd	AU-003B	250 V ~, 16A DIN 49441-R2	IEC 60884-1+CEE7	VDE*/ 40033080
Alternative	Ningbo Chaoyu Electric Appliance Co., Ltd.	CY03	250 V ~, 16A DIN 49441-R2	IEC 60884-1+CEE7	VDE*/ 40036472
Plug only for Argentina of 2200W models	ZheJiang JinTing Nuclear Cable Co., Ltd.	AR3-10	250V~, 10A	IRAM 2073:2009 IRAM-NM 60884-1:2006	IRAM: DC-E-S219-002.1(M1)
Plug only for Israel	ZheJiang JinTing Nuclear Cable Co., Ltd.	JY3-16 JY3-16C	250V~, 16A	Israel Standard No.32 Part 1.1 Edition	SII: No.44552
Plug only for U.K.	Yuyao Yunbiao Electroics Co., Ltd.	YB006 YB006A	250V~	BS 1363-1	BSI*/ KM 73093
Alternative	ZheJiang JinTing Nuclear Cable 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
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.					
Power cord for all 2300W	ZheJiang JinTing Nuclear Cable Co., Ltd.	H05VV-F	3Gx1,0 mm ² (length≤2m) or 3Gx1,5 mm ²	IEC 60227	VDE*/ 40013419
Alternative	Ningbo Qiaopu Electric Co., Ltd.	H05VV-F	3Gx1,0 mm ² (length≤2m) or 3Gx1,5 mm ²	IEC 60227	TUV*/ R 50279805
Alternative	Ningbo Liansheng Wire&Cable Co., Ltd	H05VV-F	3Gx1,0 mm ² (length≤2m) or 3Gx1,5 mm ²	IEC 60227	VDE*/ 40022054
Alternative	Yuyao Gangda Electric Co., Ltd	H05VV-F	3Gx1,0 mm ² (length≤2m) or 3Gx1,5 mm ²	IEC 60227	VDE*/ 40022724
Alternative	Ningbo Chaoyu Electric Appliance Co., Ltd.	H05VV-F	3Gx1,0 mm ² (length≤2m) or 3Gx1,5 mm ²	IEC 60227	VDE*/ 40036307

IEC 60335-2-9					
Clause	Requirement + Test		Result - Remark		Verdict
Alternative	ZheJiang JinTing Nuclear Cable Co., Ltd.	H05V2V2-F	3Gx1,0 mm ² (length≤2m) or 3Gx1,5 mm ²	IEC 60227	VDE*/ 40020021
Alternative	Ningbo Qiaopu Electric Co., Ltd.	H05V2V2-F	3Gx1,0 mm ² (length≤2m) or 3Gx1,5 mm ²	IEC 60227	TUV*/ R 50447922
Alternative	Yuyao Gangda Electric Co., Ltd	H05V2V2-F	3Gx1,0 mm ² (length≤2m) or 3Gx1,5 mm ²	IEC 60227	VDE*/ 40051249
Alternative	Ningbo Yunzheng Cable Co., Ltd.	H05VV-F	3Gx1,0 mm² (length≤2m) or 3Gx1,5 mm²	IEC 60227	VDE*/ 40056215
Power cord for 2200W models	ZheJiang JinTing Nuclear Cable Co., Ltd.	H05VV-F	3Gx0,75 mm ² (length≤2m) or 3Gx1,0mm ²	IEC 60227	VDE*/ 40013419
Alternative	Ningbo Qiaopu Electric Co., Ltd.	H05VV-F	3Gx0,75 mm ² (length≤2m) or 3Gx1,0mm ²	IEC 60227	TUV*/ R 50279805
Alternative	Ningbo Liansheng Wire&Cable Co., Ltd	H05VV-F	3Gx0,75 mm ² (length≤2m) or 3Gx1,0mm ²	IEC 60227	VDE*/ 40022054
Alternative	Yuyao Gangda Electric Co., Ltd	H05VV-F	3Gx0,75 mm ² (length≤2m) or 3Gx1,0mm ²	IEC 60227	VDE*/ 40022724
Alternative	Ningbo Chaoyu Electric Appliance Co., Ltd.	H05VV-F	3Gx0,75 mm ² (length≤2m) or 3Gx1,0mm ²	IEC 60227	VDE*/ 40036307
Alternative	ZheJiang JinTing Nuclear Cable Co., Ltd.	H05V2V2-F	3Gx0,75 mm ² (length≤2m) or 3Gx1,0mm ²	IEC 60227	VDE*/ 40020021
Alternative	Ningbo Qiaopu Electric Co., Ltd.	H05V2V2-F	3Gx0,75 mm ² (length≤2m) or 3Gx1,0mm ²	IEC 60227	TUV*/ R 50447922
Alternative	Yuyao Gangda Electric Co., Ltd	H05V2V2-F	3Gx0,75 mm ² (length≤2m) or 3Gx1,0mm ²	IEC 60227	VDE*/ 40051249
Alternative	Ningbo Yunzheng Cable Co., Ltd.	H05VV-F	3Gx0,75 mm² (length≤2m) or 3Gx1,0mm²	IEC 60227	VDE*/ 40056215
Thermal link of top for 2200W models (Two sets)	ZhongshanQilinElectronics Co.,Ltd.	QLF182	250V~,10A, Tf:184°C	IEC 60691	TUV*/ B09073500 04 Rev.01

IEC 60335-2-9					
Clause	Requirement + Test		Result - Remark		Verdict
Alternative	The Third Radio Factory of Yangzhong, Jiangsu	RY184	250V~,10A, Tf:184°C	IEC 60691	TUV*/ R 50311907
Alternative	ZhongShan LongDe Electrical Co., Ltd.	RY184	250V~,10A, Tf:184°C	IEC 60691	TUV SUD*/ B 067446 0027 Rev.02
Alternative	Changzhou Fansheng Electric Appliance Co., Ltd.	FSRY01 184	250V~,10A, Tf:184°C	IEC 60691	TUV*/ R 50309236
Thermal link of bottom for 2200W models	Changzhou Fansheng Electric Appliance Co., Ltd.	FSRY01 169	250V~, 10A, Tf:169°C	IEC 60691	TUV*/ R 50309236
Alternative	The Third Radio Factory of Yangzhong, Jiangsu	RY169	250V~, 10A, Tf:169°C	IEC 60691	TUV*/ R 50311907
Alternative	ZhongshanQilin Electronics Co.,Ltd.	QLF169	250V~,10A, Tf:172°C	IEC 60691	TUV*/ B09073500 04 Rev.01
Thermal link of top for all models (Two sets)	ZhongshanQilin Electronics Co.,Ltd.	QLF182	250V~,16A, Tf:184°C	IEC 60691	TUV*/ B09073500 04 Rev.01
Alternative	The Third Radio Factory of Yangzhong, Jiangsu	RY184	250V~,16A, Tf:184°C	IEC 60691	TUV*/ R 50311907
Alternative	ZhongShan LongDe Electrical Co., Ltd.	RY184	250V~,16A, Tf:184°C	IEC 60691	TUV SUD*/ B 067446 0027 Rev.02
Alternative	Changzhou Fansheng Electric Appliance Co., Ltd.	FSRY01 184	250V~,16A, Tf:184°C	IEC 60691	TUV*/ R 50309236
Thermal link of bottom for all models	Changzhou Fansheng Electric Appliance Co., Ltd.	FSRY01 169	250V~, 16A, Tf:169°C	IEC 60691	TUV*/ R 50309236

IEC 60335-2-9					
Clause	Requirement + Test		Result - Remark		Verdict
Alternative	The Third Radio Factory of Yangzhong, Jiangsu	RY169	250V~, 16A, Tf:169°C	IEC 60691	TUV*/ R 50311907
Alternative	ZhongshanQilin El ectronics Co.,Ltd.	QLF169	250V~,16A, Tf:172°C	IEC 60691	TUV*/ B09073500 04 Rev.01
Interlock switch	Foshan shunde yushun Electron appliance., Ltd.	KW-16	250V~,16(6)A, 3E4, T125	IEC 61058-1	TUV*/ R 50179582
Alternative	Zhejiang Qihong Electronics Co., Ltd.	LF-20	250V~, 16(10)A, 1E4 T125	IEC 61058-1	TUV */ B 118603 0001 Rev.00
Alternative	DONGNAN ELECTRONICS CO., LTD.	KW3AT-16	250V~, 16(4)A, 10E3, T125	IEC 61058-1	VDE*/ 40011294
Alternative	ZHEJIANG Chuangye ELECTRONICS CO LTD	KW11	250V~, 16(10)A, 5E4, T125	IEC 61058-1	TUV*/ R 50199565
Internal wire	CIXI SHUANGHONG WIRE CO., LTD.	H05S-K, H05SJ-K	0,5 mm ² for indicator, 0,75-1,50 mm ² for others, T180	IEC 60245	VDE*/ 40017324
Alternative	Cixi Haosheng Wire&Cable Co., Ltd.	H05S-K, H05SJ-K	0,5 mm ² for indicator, 0,75-1,50 mm ² for others, T180	IEC 60245	VDE*/ 40020128
Alternative	Cixi Jiangyuan Power Cord Co., Ltd.	H05S-K, H05SJ-K	0,5 mm ² for indicator, 0,75-1,50 mm ² for others, T180	IEC 60245	VDE*/ 40031080
Alternative	Cixi Shenhong Wires Co., Ltd	H05S-K, H05SJ-K	0,5 mm ² for indicator, 0,75-1,50 mm ² for others, T180	IEC 60245	VDE*/ 40049048
PCB	KINGBOARD LAMINATES HOLDINGS LTD	KB-5150	Min thickness: 1,6mm, 94V-0, (E123995)	IEC 60335-2-9 IEC 60335-1	Tested with appliance

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

IEC 60335-2-9					
Clause	Requirement + Test		Result - Remark		Verdict
Alternative	DONGGUAN YONGNENG ELECTRONICS CO., LTD.	YX305-S105DM	AC277V, 17A, DC 5V, T105, 10E5	IEC 61810-1 Clause 17 of IEC/EN 60730-1	TUV*/ R50390979
Alternative	Sanyou Corporation Limited	SRD-S-105DM	250VAC, 15A, DC 5V, T105, 10E4	IEC 61810-1 Clause 17 of IEC/EN 60730-1	VDE*/ 40034479
Alternative	Mingguang Xinda Electronics Co., Ltd	243T-1A-5DSU	AC277V, 12A, DC 5V T105, 10E5	IEC 61810-1 Clause 17 of IEC/EN 60730-1	TUV*/ R 50626294
Relay only for 2200W models	NINGBO YONGWEI ELECTRONICS CO LTD	Y3F-105DM	250V~, 10A DC 5V, T85, 5E4	IEC 61810-1 Clause 17 of IEC/EN 60730-1	TUV/50369779
Alternative	HUNNAN SAN YI SEIKO TECHNOLOGY CO LTD	SED-05DM	250V~ 10A DC 5V, T105, 5E4	IEC 61810-1 Clause 17 of IEC/EN 60730-1	TUV/50328904
Alternative	DONGHAI COUNTY TONGLING ELECTRICAL APPLIANCE CO LTD	JQC-3FF-S	250V~, 10A DC 5V, T85, 1E5	IEC 61810-1 Clause 17 of IEC/EN 60730-1	TUV*/ R 50316150
Alternative	Shenzhen Yuanze Electronic co., Ltd	Y3F-SS-105DM	250VAC, 10A T105, 10E4, DC5V	IEC 61810-1 Clause 17 of IEC/EN 60730-1	TUV*/ R 50197243
Varistor	HUIZHOU SHI SONGLONG LISHANG ELECTRONICS CO LTD.	07D471K VDR	AC2500V, T125,	IEC 61051-1	VDE*/ 40028836
Alternative	SHAANXI HUAXING ELECTRONIC GROUP CO LTD	07K471 MYG	AC2500V, T85	IEC 61051-1	VDE*/ 40018747
Alternative	DONGGUAN CHENG DONG ELECTRONIC TECHNOLOGY CO LTD	07D471K CDSPC	AC1500V, T125	IEC 61051-1	VDE*/ 40052833
Alternative	Centra Science Corp.	07D471K CNR	AC2500V, T85	IEC 61051-1	VDE*/ 40008220

IEC 60335-2-9					
Clause	Requirement + Test		Result - Remark		Verdict
Alternative	Shantou High-New Technology Dev. Zone Songtian Enterprise Co., Ltd.	STE 10D471K 07D471K	AC2500V, T85	IEC 61051-1	VDE*/ 40023049
Alternative	GuangDong HongZhi ELectionic Technology Co.,Ltd.	HEL 10D471K	AC2500V, T85	IEC 61051-1	VDE*/ 40037512
Alternative	HUIZHOU SHI SONGLONG LISHANG ELECTRONICS CO.,LTD	10D471K	AC2500V, T85	IEC 61051-1	VDE*/ 40028836
Alternative	FOSHAN HAOHUA ELECTRONIC COMPANY CO.,LTD.	HVR 10K471T	AC2500V, T85	IEC 61051-1	VDE*/ 40031718
Fuse for HC-8003EH, HC-8003EAH, HC-8003ETH, HC-8003EATH, HC-8005EH, HC-8005EAH, HC-8005EATH, HC-8005ETH, HC-1101EH, HC-1101ETH, HC-1102EH, HC-1102ETH	Honghu Bluelight Electronic Co., Ltd.	6ET	T3,15A, 250V	IEC 60127-1 IEC 60127-3	VDE*/ 40034107
Alternative	Dongguan Reomax Electronics Technology Co., Ltd.	MTS	T3,15A, 250V	IEC 60127-1 IEC 60127-3	VDE*/ 40039420
Alternative	Dongguan Better Electronics Technology Co.,Ltd.	932	T3,15A, 250V	IEC 60127-1 IEC 60127-3	VDE*/ 40033369
Alternative	XC Electronics (Shenzhen) Co.,Ltd.	5TE	T3,15A, 250V	IEC 60127-1 IEC 60127-3	VDE*/ 40029550

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

IEC 60335-2-9					
Clause	Requirement + Test		Result - Remark		Verdict
Multi wire	ZHONGSHAN WEIFENG ELECTRIC APPLIANCES CO LTD	2651	26-28AWG, 300VAC, 105°C (E314135)	IEC 60335-1 IEC 60335-2-9	Tested with appliance
Alternative	ZHONGSHAN WEIFENG ELECTRIC APPLIANCES CO LTD	2468	26AWG, 300VAC, 80°C (E314135)	IEC 60335-1 IEC 60335-2-9	Tested with appliance
Alternative	GUANG DONG XIN LONG ENTERPRISE CO	2651	26-28AWG, 300VAC, 105°C (E207567)	IEC 60335-1 IEC 60335-2-9	Tested with appliance
Alternative	GUANG DONG XIN LONG ENTERPRISE CO	2468	26AWG, 300VAC, 80°C (E207567)	IEC 60335-1 IEC 60335-2-9	Tested with appliance
Alternative	GUANGDONG ZHOUSHISHENLONG WIRE MANUFACTURE CO LTD	2468	26AWG, 300V, 80°C (E257280)	IEC 60335-1 IEC 60335-2-9	Tested with appliance
Alternative	Zhejiang Jiezhui Wire & Cable Co Ltd	2468 2651	24-26AWG, 300V, 80°C for 2468, 105°C for 2651 (E480750)	IEC 60335-1 IEC 60335-2-9	Tested with appliance
Fan motor except for HC-1101EH, HC-1101ETH, HC-1102EH, HC-1102ETH	Ningbo HengChuang Electric appliance.Co.,Ltd	HC-61-16	220-240V~, 50/60Hz, Class H	IEC 60335-1 IEC 60335-2-9	Tested with appliance
Fan motor for HC-1101EH, HC-1101ETH, HC-1102EH, HC-1102ETH	Ningbo HengChuang Electric appliance.Co.,Ltd	HC-7213	220-240V~, 50/60Hz, Class H	IEC 60335-1 IEC 60335-2-9	Tested with appliance
Thermal link for motor	Zhangzhou Aupo Electronics Co., Ltd.	A8-F	250V~, 2A, Tf:150°C	IEC 60691	VDE*/ 40008720
Alternative	Xiamen SET Electronics co., Ltd.	K7	250V~, 2A, Tf:150°C	IEC 60691	VDE*/ 40017055
Winding for motor	Guandong Wellkey Electric Material Co., Ltd.	QZY-2/180	Class180 (E211138)	IEC 60335-1 IEC 60335-2-9	Tested with appliance
Bobbin for motor	E I DUPONT DE NEMOURS & CO INC	PET	FR530 (E69939)	IEC 60335-1 IEC 60335-2-9	Tested with appliance

IEC 60335-2-9					
Clause	Requirement + Test		Result - Remark		Verdict
Top Heating element except for HC-1101EH, HC-1101ETH, HC-1102EH, HC-1102ETH	Ningbo HengChuang Electric appliance.Co.,Ltd	--	220-240V~, 1700W	IEC 60335-1 IEC 60335-2-9	Tested with appliance
Top Heating element for HC-1101EH, HC-1101ETH, HC-1102EH, HC-1102ETH	Ningbo HengChuang Electric appliance.Co.,Ltd	--	220-240V~, 1800W	IEC 60335-1 IEC 60335-2-9	Tested with appliance
Bottom Heating element for all models	Ningbo HengChuang Electric appliance.Co.,Ltd	--	220-240V~, 500W	IEC 60335-1 IEC 60335-2-9	Tested with appliance
Wire connector	Heavy Power Co., Ltd.	CE2, CE2X, CE5, CE5X	300V,105°C (E113650)	IEC 60335-1 IEC 60335-2-9	Tested with appliance
Alternative	SHENZHEN HONGYU ELECTRICAL CO LTD	HY-CE2, HY-CE5, HY-CE2X, HY-CE5X	300V,105°C (E314734)	IEC 60335-1 IEC 60335-2-9	Tested with appliance
Alternative	Jiangxi Gaochao Industrial Co.,LTD	CE2 CE2X	300V 105°C/750°C	IEC 60335-1 IEC 60335-2-9	Tested with appliance
Insulation of thermal link	FOSHAN SHUNDE BEIJIAO HONGQIAO INSULATION MATERIAL CO LTD	CSEEUL001	VW-1,200°C (E154902)	IEC 60335-1 IEC 60335-2-9	Tested with appliance
Alternative	JIANGYIN HUAQIANG RUBBERS&PLASTICS CO LTD	SRG-514	VW-1, 200°C (E231589)	IEC 60335-1 IEC 60335-2-9	Tested with appliance
Alternative	JIANGYIN HUAXUAN CABLE CO LTD	HX1303	VW-1, 200°C (E360584)	IEC 60335-1 IEC 60335-2-9	Tested with appliance
Alternative	Jiangyin Zhijun Appliance Electric Cable&Wire Co., Ltd	HST	VW-1, 200°C (E302890)	IEC 60335-1 IEC 60335-2-9	Tested with appliance

IEC 60335-2-9					
Clause	Requirement + Test			Result - Remark	Verdict
Alternative	Jiangyin Huate Electrical Material Co., Ltd.	SRT-70	VW-1, 200°C (E482983)	IEC 60335-1 IEC 60335-2-9	Tested with appliance
Knob, handle cover, Top cover	Ningbo HengChuang Electric appliance.Co.,Ltd	ABS	Min thickness: 2,0 mm	IEC 60335-1 IEC 60335-2-9	Tested with appliance
Handle	Ningbo HengChuang Electric appliance.Co.,Ltd	PA66	Min thickness: 2,0 mm	IEC 60335-1 IEC 60335-2-9	Tested with appliance
Glass for models with letter "T"	Ningbo HengChuang Electric appliance.Co.,Ltd	Glass	Min thickness: 2,0 mm	IEC 60335-1 IEC 60335-2-9	Tested with appliance
Control panel and window plastic	Ningbo HengChuang Electric appliance.Co.,Ltd	PC	Min thickness: 2,0 mm	IEC 60335-1 IEC 60335-2-9	Tested with appliance
External enclosure	Ningbo HengChuang Electric appliance.Co.,Ltd	PP	Min thickness: 2,0 mm	IEC 60335-1 IEC 60335-2-9	Tested with appliance
Internal enclosure and Air outlet	Ningbo HengChuang Electric appliance.Co.,Ltd	PA66	Min thickness: 2,0 mm	IEC 60335-1 IEC 60335-2-9	Tested with appliance
Supplementary information: 1)Provided evidence ensures the agreed level of compliance. See OD-CB2039. License available upon request.					

28.1	TABLE: Threaded part torque test			P
Threaded part identification		Diameter of thread (mm)	Column number (I, II, or III)	Applied torque (Nm)
Earthing connection		2,9	II	0,5
Supplementary information:				

29.1		TABLE: Clearances		P
	Overvoltage category	II		—
		Type of insulation:		

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

Rated impulse voltage (V):	Min. cl (mm)	Basic (mm)	Supplementary (mm)	Reinforced (mm)	Functional (mm)	Verdict / Remark
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</u> / 2,0***	3,2	3,2		3,2	P
4 000	<u>3,0</u> / 3,5***			4,8		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>	4,8m m	—	—	P
250	0,56	1,25	1,8	2,5	3,2	3,6	<u>4,0</u>	—	4,8m m	—	P

IEC 60335-2-9											
Clause	Requirement + Test							Result - Remark			Verdict
250	1,12	2,5	3,6	5,0	6,4	7,2	8,0	—	—	8,8m m	P
400	1,0	2,0	2,8	4,0	5,0	5,6	6,3		—	—	N/A
400	1,0	2,0	2,8	4,0	5,0	5,6	6,3	—		—	N/A
400	2,0	4,0	5,6	8,0	10,0	11,2	12,6	—	—		N/A
500	1,3	2,5	3,6	5,0	6,3	7,1	8,0		—	—	N/A
500	1,3	2,5	3,6	5,0	6,3	7,1	8,0	—		—	N/A
500	2,6	5,0	7,2	10,0	12,6	14,2	16,0	—	—		N/A
>630 and ≤800	1,8	3,2	4,5	6,3	8,0	9,0	10,0		—	—	N/A
>630 and ≤800	1,8	3,2	4,5	6,3	8,0	9,0	10,0	—		—	N/A
>630 and ≤800	3,6	6,4	9,0	12,6	16,0	18,0	20,0	—	—		N/A
>800 and ≤1000	2,4	4,0	5,6	8,0	10,0	11,0	12,5		—	—	N/A
>800 and ≤1000	2,4	4,0	5,6	8,0	10,0	11,0	12,5	—		—	N/A
>800 and ≤1000	4,8	8,0	11,2	16,0	20,0	22,0	25,0	—	—		N/A
>1000 and ≤1250	3,2	5,0	7,1	10,0	12,5	14,0	16,0		—	—	N/A
>1000 and ≤1250	3,2	5,0	7,1	10,0	12,5	14,0	16,0	—		—	N/A
>1000 and ≤1250	6,4	10,0	14,2	20,0	25,0	28,0	32,0	—	—		N/A
>1250 and ≤1600	4,2	6,3	9,0	12,5	16,0	18,0	20,0		—	—	N/A
>1250 and ≤1600	4,2	6,3	9,0	12,5	16,0	18,0	20,0	—		—	N/A
>1250 and ≤1600	8,4	12,6	18,0	25,0	32,0	36,0	40,0	—	—		N/A
>1600 and ≤2000	5,6	8,0	11,0	16,0	20,0	22,0	25,0		—	—	N/A
>1600 and ≤2000	5,6	8,0	11,0	16,0	20,0	22,0	25,0	—		—	N/A
>1600 and ≤2000	11,2	16,0	22,0	32,0	40,0	44,0	50,0	—	—		N/A
>2000 and ≤2500	7,5	10,0	14,0	20,0	25,0	28,0	32,0		—	—	N/A
>2000 and ≤2500	7,5	10,0	14,0	20,0	25,0	28,0	32,0	—		—	N/A
>2000 and ≤2500	15,0	20,0	28,0	40,0	50,0	56,0	64,0	—	—		N/A
>2500 and ≤3200	10,0	12,5	18,0	25,0	32,0	36,0	40,0		—	—	N/A
>2500 and ≤3200	10,0	12,5	18,0	25,0	32,0	36,0	40,0	—		—	N/A
>2500 and ≤3200	20,0	25,0	36,0	50,0	64,0	72,0	80,0	—	—		N/A
>3200 and ≤4000	12,5	16,0	22,0	32,0	40,0	45,0	50,0		—	—	N/A
>3200 and ≤4000	12,5	16,0	22,0	32,0	40,0	45,0	50,0	—		—	N/A
>3200 and ≤4000	25,0	32,0	44,0	64,0	80,0	90,0	100,0	—	—		N/A

IEC 60335-2-9											
Clause	Requirement + Test							Result - Remark		Verdict	
>4000 and ≤5000	16,0	20,0	28,0	40,0	50,0	56,0	63,0		—	—	N/A
>4000 and ≤5000	16,0	20,0	28,0	40,0	50,0	56,0	63,0	—		—	N/A
>4000 and ≤5000	32,0	40,0	56,0	80,0	100,0	112,0	126,0	—	—		N/A
>5000 and ≤6300	20,0	25,0	36,0	50,0	63,0	71,0	80,0		—	—	N/A
>5000 and ≤6300	20,0	25,0	36,0	50,0	63,0	71,0	80,0	—		—	N/A
>5000 and ≤6300	40,0	50,0	72,0	100,0	126,0	142,0	160,0	—	—		N/A
>6300 and ≤8000	25,0	32,0	45,0	63,0	80,0	90,0	100,0		—	—	N/A
>6300 and ≤8000	25,0	32,0	45,0	63,0	80,0	90,0	100,0	—		—	N/A
>6300 and ≤8000	50,0	64,0	90,0	126,0	160,0	180,0	200,0	—	—		N/A
>8000 and ≤10000	32,0	40,0	56,0	80,0	100,0	110,0	125,0		—	—	N/A
>8000 and ≤10000	32,0	40,0	56,0	80,0	100,0	110,0	125,0	—		—	N/A
>8000 and ≤10000	64,0	80,0	112,0	160,0	200,0	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	<u>3,2</u>	3,8mm /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

IEC 60335-2-9								
Clause	Requirement + Test						Result - Remark	Verdict
>800 and ≤1000	2,4	4,0	5,6	8,0	10,0	11,0	12,5	N/A
>1000 and ≤1250	3,2	5,0	7,1	10,0	12,5	14,0	16,0	N/A
>1250 and ≤1600	4,2	6,3	9,0	12,5	16,0	18,0	20,0	N/A
>1600 and ≤2000	5,6	8,0	11,0	16,0	20,0	22,0	25,0	N/A
>2000 and ≤2500	7,5	10,0	14,0	20,0	25,0	28,0	32,0	N/A
>2500 and ≤3200	10,0	12,5	18,0	25,0	32,0	36,0	40,0	N/A
>3200 and ≤4000	12,5	16,0	22,0	32,0	40,0	45,0	50,0	N/A
>4000 and ≤5000	16,0	20,0	28,0	40,0	50,0	56,0	63,0	N/A
>5000 and ≤6300	20,0	25,0	36,0	50,0	63,0	71,0	80,0	N/A
>6300 and ≤8000	25,0	32,0	45,0	63,0	80,0	90,0	100,0	N/A
>8000 and ≤10000	32,0	40,0	56,0	80,0	100,0	110,0	125,0	N/A
>10000 and ≤12500	40,0	50,0	71,0	100,0	125,0	140,0	160,0	N/A
Supplementary information:								
*) Material group IIIb is allowed if the working voltage does not exceed 50 V								

Photo 1.

Description: Overall view for HC-8003EH, HC-8003EAH, HC-8003ETH, HC-8003EATH, HC-8005EH, HC-8005EAH, HC-8005EATH, HC-8005ETH



Photo 2.

Description: Overall view for HC-8002EH, HC-8002ETH

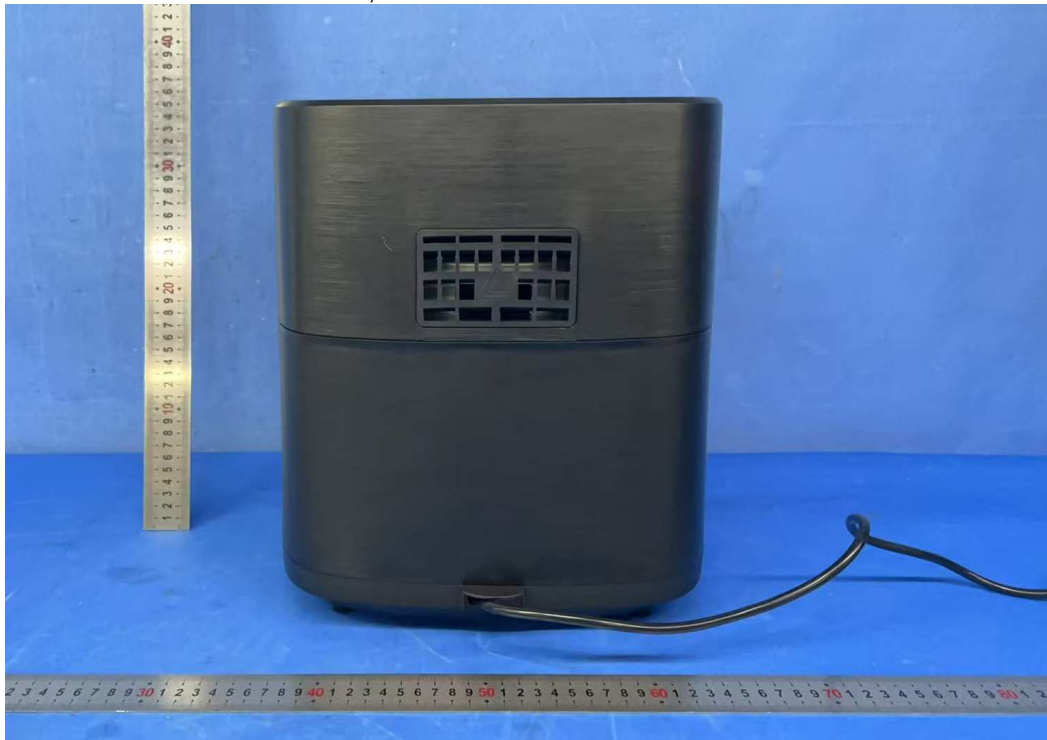


Photo 3.

Description: Overall view for HC-1101EH, HC-1101ETH, HC-1102EH, HC-1102ETH



Photo 4.

Description: Internal view for HC-8003ETH, HC-8005ETH

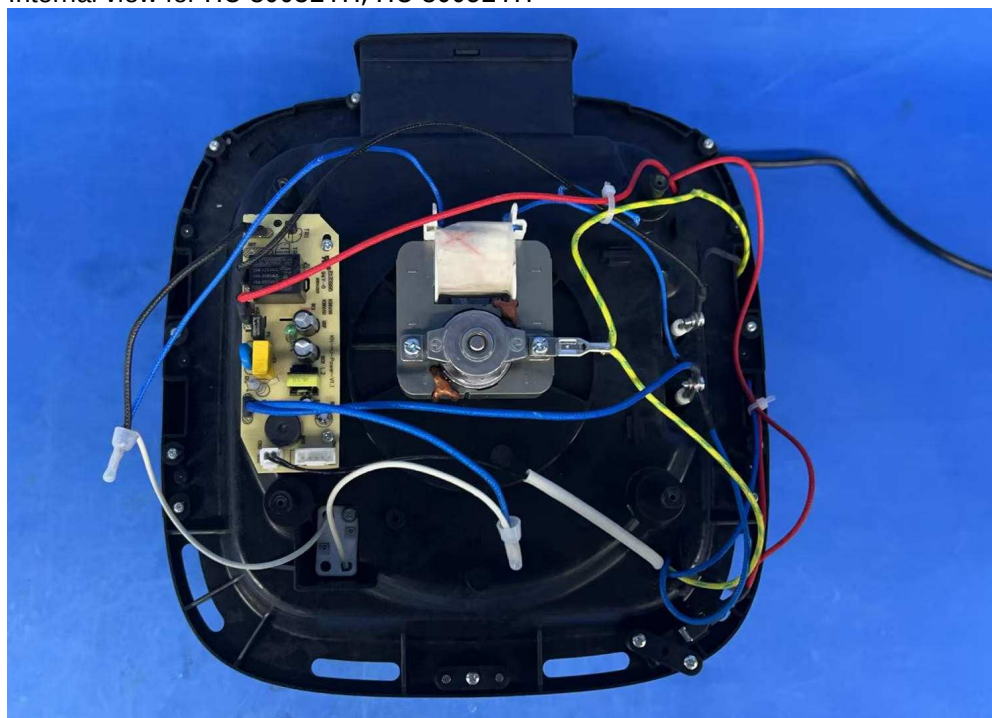


Photo 5.

Description: Internal view for HC-8003EH, HC-8005EH

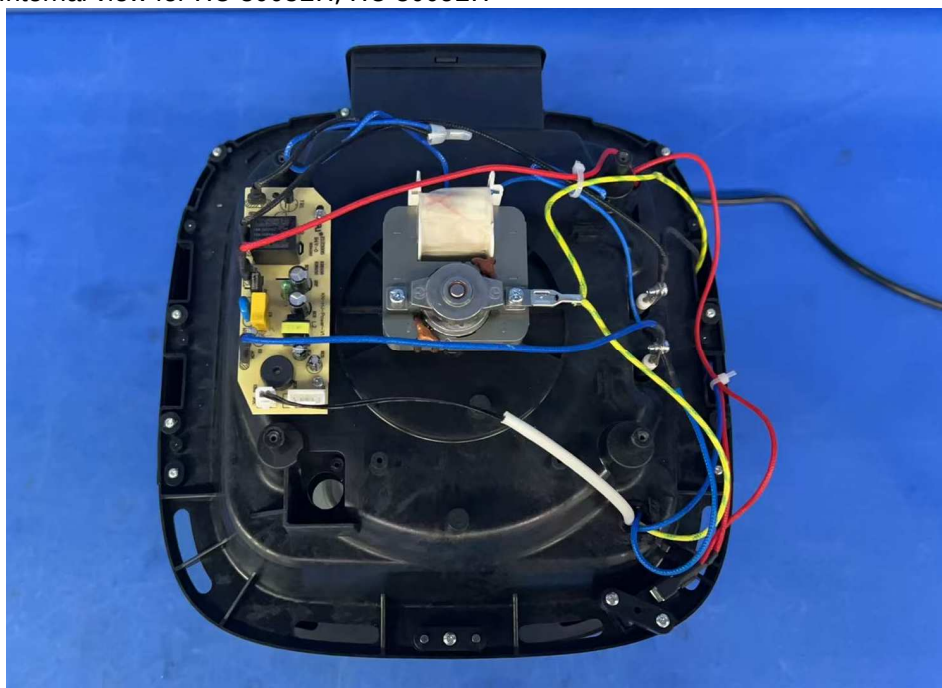


Photo 6.

Description: Internal view for HC-8002ETH

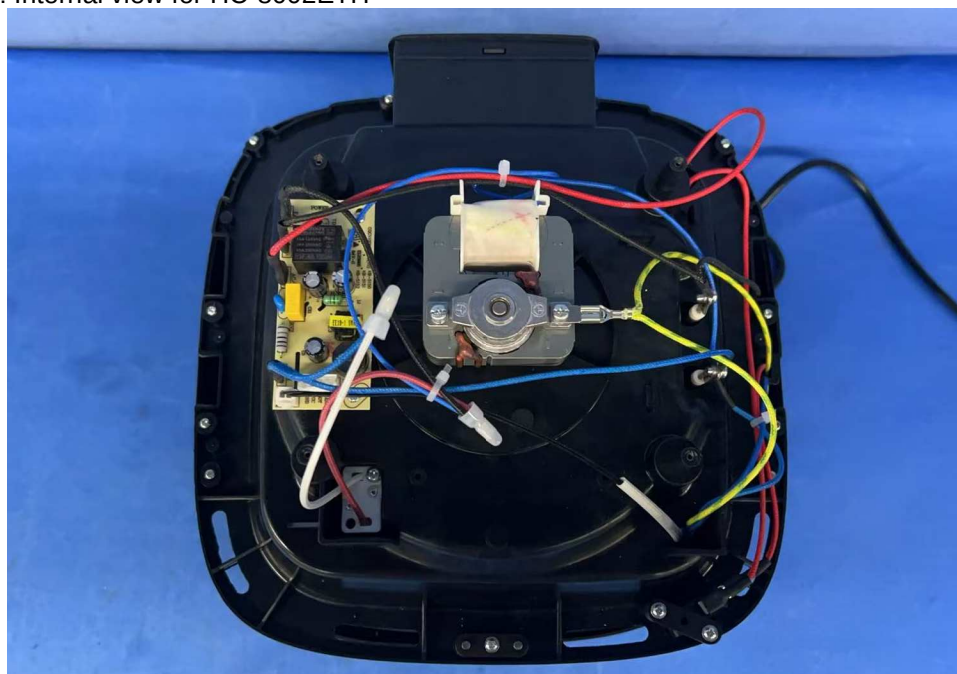


Photo 7.

Description: Internal view for HC-8002EH

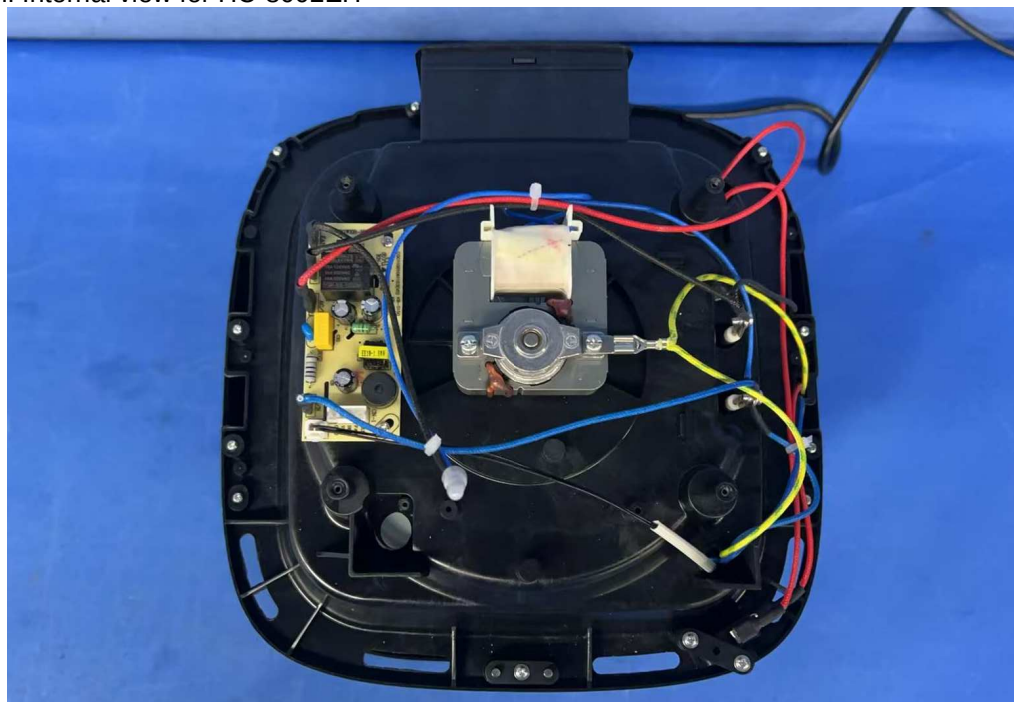


Photo 8.

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

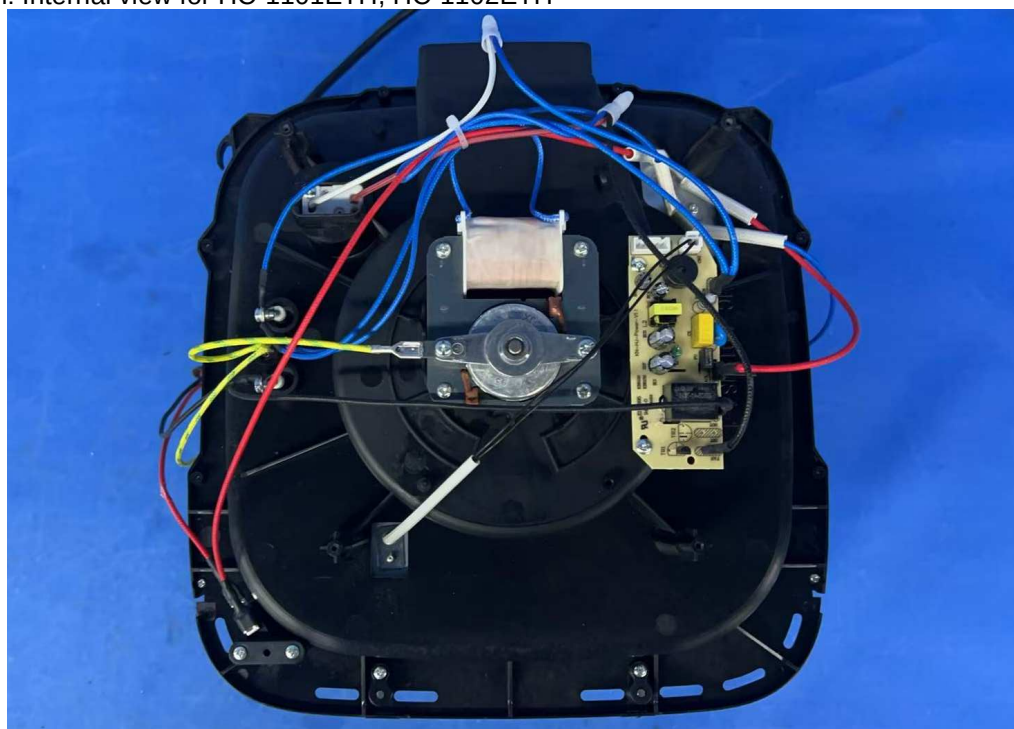


Photo 9.

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

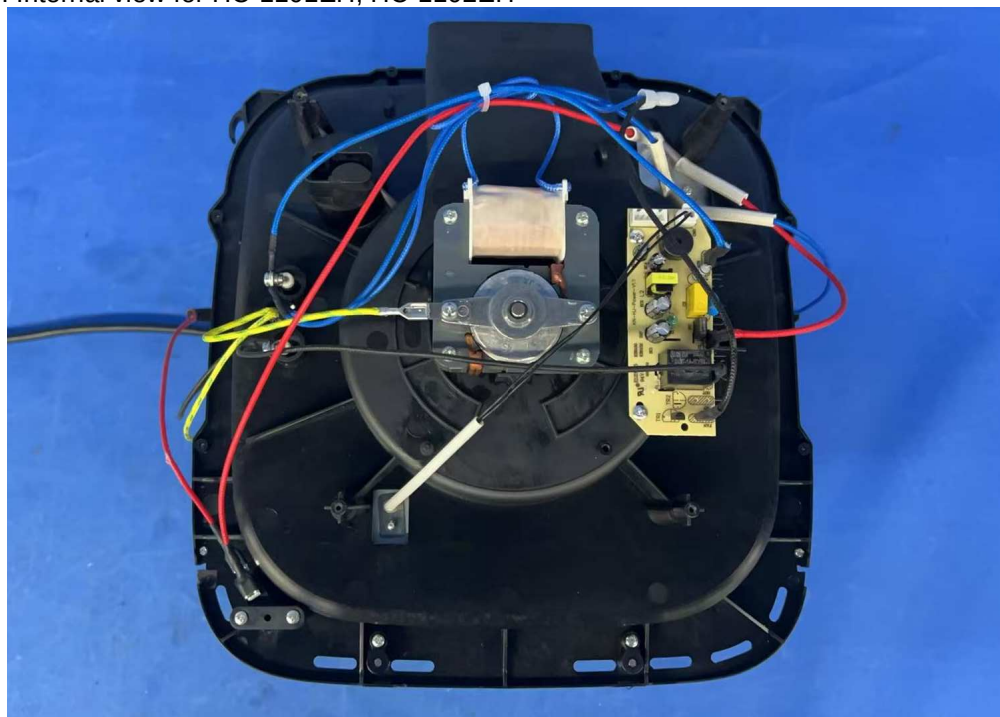


Photo 10.

Description: Earthling Continuity view for all models

