



Test Report issued under the responsibility of:



TEST REPORT

IEC 60335-2-14

**Household and similar electrical appliances – Safety –
Part 2-14: Particular requirements for kitchen machines**

Report Number: EFSH14090153-IE-01-L02-M1
Date of issue: 2014-11-17, Modification 1: 2015-10-13
Total number of pages..... 63 pages

Applicant's name.....: Yuyao HOLON Electrical Appliance Co.,Ltd
Address: Sabei Village, Simen Town, Yuyao City, Ningbo, Zhejiang Province, China

Test specification:

Standard: IEC 60335-2-14:2006 (Fifth Edition) + A1:2008 + A2:2012 in conjunction with IEC 60335-1:2010 (Fifth Edition)
Test procedure: CB scheme
Non-standard test method.....: N/A

Test Report Form No......: IEC60335_2_14N
Test Report Form(s) Originator: CQC
Master TRF.....: Dated 2013-07

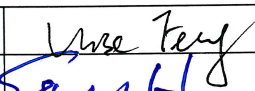
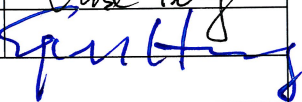
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This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.

Test item description	Hand Mixer
Trade Mark	/
Manufacturer	Yuyao HOLON Electrical Appliance Co.,Ltd
Model/Type reference	GHM001, GHM005, GHM007A, GHM007B, GHM007C, GHM007D, GHM008A, GHM008B, GHM008C, GHM008D, GHM003A, GHM003B
Ratings	220-240V~, 50-60Hz, Class II for all models GHM001, GHM007A, GHM008A, GHM003A: 150W GHM007B, GHM008B, GHM003B: 200W GHM005, GHM007C, GHM008C: 250W GHM007D, GHM008D: 300W

Testing procedure and testing location:		
<input checked="" type="checkbox"/>	CB Testing Laboratory:	Eurofins Product Testing Service (Shanghai) Co., Ltd.
Testing location/ address.....:		No. 395 West Jiangchang Road, Zhabei District, Shanghai, China
<input type="checkbox"/>	Associated CB Laboratory:	N/A
Testing location/ address.....:		N/A
Tested by (name + signature)..... :		Wise Feng/Project Engineer 
Approved by (name + signature).. :		Squall Huang/Project Supervisor 
<input type="checkbox"/>	Testing procedure: TMP	
Testing location/ address.....:		N/A
Tested by (name + signature)..... :		N/A
Approved by (name + signature).. :		N/A
<input type="checkbox"/>	Testing procedure: WMT	
Testing location/ address.....:		N/A
Tested by (name + signature)..... :		N/A
Witnessed by (name + signature). :		N/A
Approved by (name + signature).. :		N/A
<input type="checkbox"/>	Testing procedure: SMT	
Testing location/ address.....:		N/A
Tested by (name + signature)..... :		N/A
Approved by (name + signature).. :		N/A
Supervised by (name + signature):		N/A
<input type="checkbox"/>	Testing procedure: RMT	
Testing location/ address.....:		N/A
Tested by (name + signature)..... :		N/A
Approved by (name + signature).. :		N/A
Supervised by (name + signature):		N/A

<p>List of Attachments (including a total number of pages in each attachment): Photo document: 31 pages (separate file)</p>	
<p>Summary of testing: From the result of our inspection and tests on the submitted samples, we conclude they comply with the requirements of the standards.</p>	
<p>Tests performed (name of test and test clause):</p> <ul style="list-style-type: none"> <input type="checkbox"/> CI.7 Marking and instruction <input checked="" type="checkbox"/> CI.8 Protection against access to live parts <input checked="" type="checkbox"/> CI.10 Power input and current <input checked="" type="checkbox"/> CI.11 Heating <input checked="" type="checkbox"/> CI.13 Leakage current and electric strength at operating temperature <input checked="" type="checkbox"/> CI.15 Moisture resistance <input checked="" type="checkbox"/> CI.16 Leakage current and electric strength <input checked="" type="checkbox"/> CI.19 Abnormal operation <input checked="" type="checkbox"/> CI.20 Stability and mechanical hazards <input checked="" type="checkbox"/> CI.21 Mechanical strength <input checked="" type="checkbox"/> CI.22 Construction <input type="checkbox"/> CI.23 Internal wiring <input type="checkbox"/> CI.24 Components <input checked="" type="checkbox"/> CI.25 Supply connection and external flexible cords <input checked="" type="checkbox"/> CI.26 Terminals for external conductors <input type="checkbox"/> CI.27 Provision for earthing <input checked="" type="checkbox"/> CI.28 Screws and connections <input checked="" type="checkbox"/> CI.29 Clearances, creepage distances and solid insulation <input type="checkbox"/> CI.30 Resistance to heat and fire <input type="checkbox"/> CI.31 Resistance to rusting <input type="checkbox"/> CI.32 Radiation, toxicity and similar hazards 	<p>Testing location: Eurofins Product Testing Service (Shanghai) Co., Ltd. No. 395 West Jiangchang Road, Zhabei District, Shanghai, China</p>
<p>Summary of compliance with National Differences List of countries addressed: None.</p>	

Copy of marking plate

(Representative, may differ in model no./rated power input)



Test item particulars	
Classification of installation and use	Hand-held appliance for household use only
Supply Connection	Type Y
.....	
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	2015-09-17
Date (s) of performance of tests	2015-09-17 to 2015-10-10
General remarks:	
<p>The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory. "(see Enclosure #)" refers to additional information appended to the report. "(see appended table)" refers to a table appended to the report.</p> <p>Throughout this report a <input checked="" type="checkbox"/> comma / <input type="checkbox"/> point is used as the decimal separator. The related applicable CTL/OSM decisions have been considered and the requirements found fulfilled.</p>	
Manufacturer's Declaration per sub-clause 4.2.5 of IEC60335-1:	
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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> Not applicable
When differences exist; they shall be identified in the General product information section.	
Name and address of factory (ies)	Yuyao HOLON Electrical Appliance Co.,Ltd Sibei Village, Simen Town, Yuyao City, Ningbo, Zhejiang Province, China

General product information:

The appliances covered by this report are hand-held mixers for household and indoor use.

After review, GHM001 and GHM005 were subjected to the tests and the most unfavourable data was recorded.

Modification 1 :

The original test report ref. No. EFSH14090153-IE-01-L02, dated 2014-11-17, was modified on 2015-10-13 to include the following changes and/or additions:

1, Add new models GHM007A, GHM007B, GHM007C, GHM007D, GHM008A, GHM008B, GHM008C, GHM008D, GHM003A and GHM003B.

New construction is designed for GHM007 series, GHM008 series and GHM003 series.

GHM007A, GHM008A, GHM003A and GHM001 are identical except for the different appearance.

GHM007C, GHM008C and GHM005 are identical except for the different appearance.

GHM007 series are identical except for the different motor. GHM007B and GHM007D are equipped with the new motor.

GHM008 series are identical except for the different motor. GHM008B and GHM008D are equipped with the new motor.

GHM003 series are identical except for the different motor. GHM003B is equipped with the new motor.

Clause concerned: Cl.8, Cl.10, Cl.11, Cl.13, Cl.15, Cl.16, Cl.19, Cl.20, Cl.21, Cl.22, Cl.25, Cl.26, Cl.28, Cl.29 and Annex H.

After review, GHM007A, GHM007B, GHM007C, GHM007D, GHM008A, GHM008B, GHM008C, GHM008D, GHM003A and GHM003B were subjected to tests of Cl.10, Cl.11, Cl.13, Cl.15, Cl.16, Cl.19.7 and Annex H.

This report is only valid in conjunction with EFSH14090153-IE-01-L02.

IEC 60335-2-14			
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
8.1.2	Use of test probe 13 of IEC 61032, with a force not exceeding 1 N, through openings in class 0 appliances and class II appliances/constructions: no contact with live parts		P
	Test probe 13 also applied through openings in earthed metal enclosures having a non-conductive coating: no contact with live parts		N/A
8.1.3	For appliances other than class II, use of test probe 41 of IEC 61032, with a force not exceeding 1 N: no contact with live parts of visible glowing heating elements		N/A
8.1.4	Accessible part not considered live if:		--
	- safety extra-low a.c. voltage: peak value not exceeding 42.4 V		N/A
	- safety extra-low d.c. voltage: not exceeding 42.4 V		N/A
	- or separated from live parts by protective impedance		N/A
	If protective impedance: d.c. current not exceeding 2 mA, and		N/A
	a.c. peak value not exceeding 0.7 mA		N/A
	- for peak values over 42.4 V up to and including 450 V, capacitance not exceeding 0,1 μ F		N/A
	- for peak values over 450 V up to and including 15 kV, discharge not exceeding 45 μ C		N/A
	- for peak values over 15kV, the energy in the discharge not exceeding 350 mJ		N/A
8.1.5	Live parts protected at least by basic insulation before installation or assembly:		--
	- built-in appliances		N/A

IEC 60335-2-14			
Clause	Requirement - Test	Result - Remark	Verdict
	- 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
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
	A representative period is a time period of 2 min or the time specified in 11.7 for one cycle of operation, whichever is shorter. (IEC 60335-2-14)		P
11	HEATING		--
11.1	No excessive temperatures in normal use		P
11.2	The appliance is held, placed or fixed in position as described	Held in their normal position of use	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
11.4	Heating appliances operated under normal operation at 1.15 times rated power input (W)		N/A
11.5	Motor-operated appliances operated under normal operation at most unfavourable voltage between 0.94 and 1.06 times rated voltage (V)	1,06 times rated voltage is more unfavourable	P
11.6	Combined appliances operated under normal operation at most unfavourable voltage between 0.94 and 1.06 times rated voltage (V)		N/A
11.7	The appliance is operated for the period specified and where relevant the number of cycles specified (IEC 60335-2-14/A2:2012)	(see appended tables)	P

IEC 60335-2-14			
Clause	Requirement - Test	Result - Remark	Verdict
	If the period exceeds that stated in the instructions and if the temperature rise limits of Table 3 are exceeded, an alternative test is carried out as follows: (IEC 60335-2-14/A2:2012)		—
	the test is carried out for the number of cycles specified and using the maximum quantity of the load to be processed stated in the instructions: (IEC 60335-2-14/A2:2012)		N/A
	— the maximum period stated in the instructions plus 1 min or 7 min whichever is less, for specified operating periods not exceeding 7 min (IEC 60335-2-14/A2:2012)		P
	— the maximum period stated in the instructions or 7 min whichever is greater, for specified operating periods exceeding 7 min (IEC 60335-2-14/A2:2012)		N/A
	This procedure only applies if the power input measured in 10.1 using the maximum quantity of the load to be processed stated in the instructions is not less than that obtained when using the appropriate load specified in 3.1.9.101 to 3.1.9.119 (IEC 60335-2-14/A2:2012)		P
	If it is necessary to perform a number of operations to obtain these periods, the rest periods are equal to, where relevant, the time taken to empty and refill the container with the maximum quantity of ingredients stated in the instructions (IEC 60335-2-14/A1:2008)		N/A
	Appliances incorporating a timer are operated for the maximum period allowed by the timer (IEC 60335-2-14/A1:2008)		N/A
11.8	Temperature rises monitored continuously and not exceeding the values in table 3	(see appended table)	P
	For ice-cream machines for use in refrigerators and freezers, the temperature rise values are increased by 30 K. (IEC 60335-2-14)		N/A
	If the temperature rise of a motor winding exceeds the value of table 3, or		N/A
	if there is doubt with regard to classification of insulation,		N/A
	tests of Annex C are carried out		N/A
	Sealing compound does not flow out		N/A
	Protective devices do not operate, except		P
	components in protective electronic circuits tested for the number of cycles specified in 24.1.4		N/A

IEC 60335-2-14			
Clause	Requirement - Test	Result - Remark	Verdict
13	LEAKAGE CURRENT AND ELECTRIC STRENGTH AT OPERATING TEMPERATURE		--
13.1	Leakage current not excessive and electric strength adequate		P
	Heating appliances operated at 1.15 times the rated power input (W).....:		N/A
	Motor-operated appliances and combined appliances supplied at 1.06 times the rated voltage (V).....:	254,4V~	P
	Protective impedance and radio interference filters disconnected before carrying out the tests		N/A
13.2	For class 0, class II and class III appliances, leakage current measured by means of the circuit described in figure 4 of IEC 60990		P
	For other appliances, a low impedance ammeter may be used		N/A
	Leakage current measurements	(see appended table)	P
13.3	The appliance is disconnected from the supply		P
	Electric strength tests according to table 4	(see appended table)	P
	No breakdown during the tests		P
15	MOISTURE RESISTANCE		--
15.2	Spillage of liquid does not affect the electrical insulation		N/A
	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		N/A
	Appliances supplied at rated voltage and operated for 15 s with the solution still in the container: the leakage current shall not exceed the values specified in clause 13. (IEC 60335-2-14)		N/A
	Saline solution is then added to the liquid container until it is completely full again. A further quantity equal to 15% of the capacity of the container or 0.25 l is poured in steadily over a period of 1 min: (IEC 60335-2-14)		N/A
	Water outlets for potato peelers are blocked. (IEC 60335-2-14)		N/A

IEC 60335-2-14			
Clause	Requirement - Test	Result - Remark	Verdict
	For cordless blenders, the test is carried out on a horizontal surface with the blender both on and off its stand. (IEC 60335-2-14)		N/A
	The appliance withstands the electric strength test of 16.3		N/A
	No trace of water on insulation that can result in a reduction of clearances or creepage distances below values specified in clause 29		N/A
15.3	Appliances proof against humid conditions		P
	Checked by test Cab: Damp heat steady state in IEC 60068-2-78		P
	Detachable parts removed and subjected, if necessary, to the humidity test with the main part		P
	Humidity test for 48 h in a humidity cabinet	23 °C, 93 %R.H.	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
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:		N/A
	- all controls have an off position in all poles, or		N/A
	- the appliance has no control other than a thermal cut-out, or		N/A
	- all thermostats, temperature limiters and energy regulators do not have an off position, or		N/A
	- the appliance has radio interference filters		N/A
	With the radio interference filters disconnected, the leakage current do not exceed limits specified	(see appended table)	N/A
16.3	Electric strength tests according to table 7	(see appended table)	P

IEC 60335-2-14			
Clause	Requirement - Test	Result - Remark	Verdict
	Test voltage applied between the supply cord and inlet bushing and cord guard and cord anchorage as specified	(see appended table)	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	(see appended table)	N/A
	Appliances incorporating heating elements subjected to the tests of 19.2 and 19.3, and		N/A
	if the appliance also has a control that limit the temperature during clause 11 it is subjected to the test of 19.4, and		N/A
	if applicable, to the test of 19.5		N/A
	Appliances incorporating PTC heating elements are also subjected to the test of 19.6		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		N/A
	Appliances incorporating contactors or relays subjected to the test of 19.14, being carried out before the tests of 19.11		N/A
	Appliances incorporating voltage selector switches subjected to the test of 19.15		N/A
	Unless otherwise specified, the tests are continued until a non-self-resetting thermal cut-out operates, or		P
	until steady conditions are established		N/A
	If a heating element or intentionally weak part becomes open-circuited, the relevant test is repeated on a second sample		N/A
	Test of 19.7 only applicable to coffee mills, grain grinders, berry-juice extractors, food blenders, centrifugal juicers, churns, food mixers, food processors, ice-cream machines, mincers, and noodle makers. (IEC 60335-2-14/A2:2012)	Food mixer	P

IEC 60335-2-14			
Clause	Requirement - Test	Result - Remark	Verdict
	Coffee mills and grain grinders subjected to the tests of 19.101, and to 19.102 unless they have to be kept switched on by hand. (IEC 60335-2-14)		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)		N/A
19.3	Test of 19.2 repeated; test voltage (V), power input of 1.24 times rated power input (W)		N/A
19.4	Test conditions as in clause 11, any control limiting the temperature during tests of clause 11 short-circuited		N/A
19.5	Test of 19.4 repeated on Class 0I and I appliances with tubular sheathed or embedded heating elements. No short-circuiting, but one end of the element connected to the sheath		N/A
	The test repeated with reversed polarity and the other end of the heating element connected to the sheath		N/A
	The test is not carried out on appliances intended to be permanently connected to fixed wiring and on appliances where an all-pole disconnection occurs during the test of 19.4		N/A
19.6	Appliances with PTC heating elements tested at rated voltage, establishing steady conditions		N/A
	The working voltage of the PTC heating element is increased by 5% and the appliance is operated until steady conditions are re-established. The voltage is then increased in similar steps until 1.5 times working voltage or until the PTC heating element ruptures (V)		N/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.....		N/A
	Other appliances supplied with rated voltage for a period as specified	30s	P

IEC 60335-2-14			
Clause	Requirement - Test	Result - Remark	Verdict
	Winding temperatures not exceeding values specified in table 8.....:	(see appended table)	P
	Coffee mills that have to be kept switched on by hand, berry-juice extractors, blenders for food, centrifugal juicers for fruit and vegetables, food mixers, food processors, and mincers are operated for 30 s. (IEC 60335-2-14)	Food mixer	P
	Other coffee mills, grain grinders and noodle makers are tested for 5 min. (IEC 60335-2-14)		N/A
	Churns and ice-cream machines are operated until steady conditions are established. (IEC 60335-2-14)		N/A
19.8	Multi-phase motors operated at rated voltage with one phase disconnected		N/A
19.9	Running overload test on appliances incorporating motors intended to be remotely or automatically controlled or liable to be operated continuously		N/A
	Motor-operated and combined appliances for which 30.2.3 is applicable and that use overload protective devices relying on electronic circuits to protect the motor windings, are also subjected to the test		N/A
	Winding temperatures not exceeding values as specified	(see appended table)	N/A
19.10	Series motor operated at 1.3 times rated voltage for 1 min (V).....:	312V~	P
	During the test, parts not being ejected from the appliance		P
	Test repeated with accessories in position but without additional load. (IEC 60335-2-14)		P
	Coffee mills and grain grinders are only tested for 30 s. (IEC 60335-2-14)		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:		--

IEC 60335-2-14			
Clause	Requirement - Test	Result - Remark	Verdict
	- basic insulation (V).....:	1000 V	P
	- supplementary insulation (V)	1750 V	P
	- reinforced insulation (V)	3000 V	P
	After operation or interruption of a control, clearances and creepage distances across the functional insulation withstand the electric strength test of 16.3, the test voltage being twice the working voltage		N/A
	The appliance does not undergo a dangerous malfunction, and		P
	no failure of protective electronic circuits, if the appliance is still operable		N/A
	Appliances tested with an electronic switch in the off position, or in the stand-by mode:		N/A
	- do not become operational, or		N/A
	- if they become operational, do not result in a dangerous malfunction during or after the tests of 19.11.4		N/A
	If the appliance contains lids or doors that are controlled by one or more interlocks, one of the interlocks may be released provided that:		N/A
	- the lid or door does not move automatically to an open position when the interlock is released, and		N/A
	- the appliance does not start after the cycle in which the interlock was released		N/A
	Appliances tested with an electronic switch in the off position, or in the stand-by mode: (IEC 60335-2-14/A2:2012)		N/A
	- not become operational, or		N/A
	- if they become operational, not result in a dangerous malfunction during or after the tests of 19.11.2		N/A
20	STABILITY AND MECHANICAL HAZARDS		--
20.1	Appliances having adequate stability	Hand-held appliances	N/A
	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		N/A
	Tilting test repeated on appliances with heating elements, angle of inclination increased to 15°		N/A

IEC 60335-2-14			
Clause	Requirement - Test	Result - Remark	Verdict
	Possible heating test in overturned position; temperature rise does not exceed values shown in table 9		N/A
20.2	Moving parts adequately arranged or enclosed as to provide protection against personal injury		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		N/A
	Self-resetting thermal cut-outs and over current protective devices not causing a hazard, by unexpected reclosure		N/A
	Not possible to touch dangerous moving parts with the test probe described		P
	Detachable accessories are removed and covers are opened except that for : (IEC 60335-2-14)		—
	- centrifugal juicers, the cover and the container for collecting the residue are in position		N/A
	- graters and shredders, this is only applicable to accessories that are removed while the appliance is in operation		N/A
	Test probe not applied to: (IEC 60335-2-14)		—
	- appliances specified in the list	Mixer	P
	- the following parts of other appliances:		N/A
	smooth shafts having a diameter not exceeding 8 mm, rotating at a speed not exceeding 1 500 rev/min and driven by motors having an input not exceeding 200 W		N/A
	outlet sides of grating and shredding disks rotating at a speed not exceeding 1 500 rev/min		N/A
	projections from the surface of grinding disks, cones and similar parts having a height less than 4 mm		N/A
	Test probe not applied to feed openings having a throat with following dimensions: (IEC 60335-2-14)		N/A
	- a height of at least 100 mm, measured from the upper edge of the cutting blade		N/A
	- an average of the maximum and minimum cross-sectional dimensions of the feed opening that does not exceed 65.5 mm		N/A

IEC 60335-2-14			
Clause	Requirement - Test	Result - Remark	Verdict
	- a maximum cross-sectional dimension of the feed opening that does not exceed 76 mm		N/A
	For blenders, detachable parts, except lids, are not removed. Test carried out with a test probe similar to that of test probe B of IEC 61032 but with circular stop face as specified. (IEC 60335-2-14)		N/A
20.104	Not possible to operate the cutting blades of blenders, other than hand-held blenders, while they are accessible: test with test finger specified for blender. (IEC 60335-2-14)		N/A
	With detachable parts removed, if the cutting blades of the blender can be touched with the test probe specified for blenders in 20.2, it shall not be possible to operate the appliance.		N/A
	Switches, other than biased-off switches, are placed in the on position and two simultaneous or sequential applications of test probe B of IEC 61032 are applied to biased-off switches, including interlock switches, with a force not exceeding 20 N in an attempt to operate the cutting blades.		N/A
	During the test, it shall not be possible to operate the appliance.		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		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
	Test also carried out on detachable parts that are necessary for protection against mechanical hazards. (IEC 60335-2-14)		P
21.2	Accessible parts of solid insulation having strength to prevent penetration by sharp implements		P
	Test not applicable if the thickness of supplementary insulation is at least 1 mm and reinforced insulation at least 2 mm		P

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Clause	Requirement - Test	Result - Remark	Verdict
	The insulation is tested as specified, and does withstand the electric 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
	- a statement in the instruction sheet that a disconnection incorporated in the fixed wiring is to be provided, or		N/A
	- an appliance inlet		N/A
	Singe-pole switches and single-pole protective devices for the disconnection of heating elements in single-phase, permanently connected class 01 and class I appliances, connected to the phase conductor		N/A
22.3	Appliance provided with pins: no undue strain on socket-outlets		N/A
	Applied torque not exceeding 0.25 Nm		N/A
	Pull force of 50N to each pin after the appliance has being placed in the heating cabinet; when cooled to room temperature the pins are not displaced by more than 1mm		N/A
	Each pin subjected to a torque of 0.4Nm; the pins are not rotating, unless		N/A
	rotating does not impair compliance with this standard		N/A
22.4	Appliance for heating liquids and appliance causing undue vibration not provided with pins for insertion into socket-outlets		P
22.5	No risk of electric shock when touching the pins of the plug, for appliances having a capacitor with rated capacitance exceeding 0,1 μ F, the appliance being disconnected from the supply at the instant of voltage peak		P
	Voltage not exceeding 34 V (V):	0 V	P
22.6	Electrical insulation not affected by condensing water or leaking liquid		P

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Clause	Requirement - Test	Result - Remark	Verdict
	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
22.8	Electrical connections not subject to pulling during cleaning of compartments to which access can be gained without the aid of a tool, and that are likely to be cleaned in normal use		P
22.9	Insulation, internal wiring, windings, commutators and slip rings not exposed to oil, grease or similar substances, unless		P
	the substance has adequate insulating properties		N/A
22.10	Not possible to reset voltage-maintained non-self-resetting thermal cut-outs by the operation of an automatic switching device incorporated within the appliance, if:		N/A
	- a non-self-resetting thermal cut-out is required by the standard, and		N/A
	- a voltage maintained non-self-resetting thermal cut-out is used to meet it		N/A
	Non-self-resetting thermal motor protectors have a trip-free action, unless		N/A
	they are voltage maintained		N/A
	Reset buttons of non-self-resetting controls so located or protected that accidental resetting is unlikely		N/A
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 push/pull force to enclosure and handle; 50N push/30N pull force to switch knob	P
22.12	Handles, knobs etc. fixed in a reliable manner		P

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Clause	Requirement - Test	Result - Remark	Verdict
	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	Switch knob	P
	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
22.15	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		N/A
22.18	Current-carrying parts and other metal parts resistant to corrosion		P
22.19	Driving belts not relied upon to provide the required level of insulation, unless		N/A
	constructed to prevent inappropriate replacement		N/A
22.20	Direct contact between live parts and thermal insulation effectively prevented, unless		N/A
	material used is non-corrosive, non-hygroscopic and non-combustible		N/A
22.21	Wood, cotton, silk, ordinary paper and fibrous or hygroscopic material not used as insulation, unless		P
	impregnated		N/A
	This requirement does not apply to magnesium oxide and mineral ceramic fibres used for the electrical insulation of heating elements		N/A

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Clause	Requirement - Test	Result - Remark	Verdict
22.22	Appliances not containing asbestos		P
22.23	Oils containing polychlorinated biphenyl (PCB) not used		P
22.24	Bare heating elements, except in class III appliances or class III constructions that do not contain live parts, adequately supported		N/A
	In case of rupture, the heating conductor is unlikely to come in contact with accessible metal parts		N/A
22.25	Sagging heating conductors, except in class III appliances or class III constructions that do not contain live parts, cannot come into contact with accessible metal parts		N/A
22.26	For class III constructions the insulation between parts operating at safety extra-low voltage and other live parts complies with the requirements for double or reinforced insulation		N/A
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		N/A
	Insulating material in which heating conductors are embedded is considered to be basic insulation, not reinforced insulation		N/A
	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		P
	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
	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

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Clause	Requirement - Test	Result - Remark	Verdict
	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
22.36	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		P
	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		P
	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		N/A
22.40	Motor-operated appliances and combined appliances intended to be moved while in operation, or having accessible moving parts, fitted with a switch to control the motor. The actuating member of the switch being easily visible and accessible		P
	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		P
22.42	Protective impedance consisting of at least two separate components		N/A
	Values specified in 8.1.4 not exceeded if any one of the components are short-circuited or open-circuited		N/A
	Resistors checked by the test of 14.1 a) in IEC 60065		N/A

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Clause	Requirement - Test	Result - Remark	Verdict
	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
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:		N/A
	- continuously, or		N/A

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Clause	Requirement - Test	Result - Remark	Verdict
	- 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
22.101	Appliances constructed so that lubricants are prevented from polluting food compartments (IEC 60335-2-14)		P
22.102	Appliances constructed so that food or liquids are prevented from penetrating into places that could cause electrical or mechanical faults. (IEC 60335-2-14)	Two hook accessories can not be inserted into wrong openings	P
22.103	The appliance coupler of cordless blenders shall be constructed to withstand the stresses occurring during normal use. (IEC 60335-2-14)		N/A
	The two live pins of the blender are connected together and an external resistive load is connected in series with the supply. The external load is such that the current is 1,1 times rated current.		N/A
	The blender is placed on its stand and withdrawn 10 000 times at a rate of approximately 10 times per minute. The test is continued for a further 10 000 times without current flowing.		N/A
	If the connection contacts cannot be energized when making or breaking the connection, instead of the above sequence, the test is carried out 20 000 times without current.		N/A
	After the test, the blender shall be suitable for further use and compliance with 8.1, 16.3, 27.5 and Clause 29 shall not be impaired.		N/A
22.104	Knife sharpeners shall be constructed so that knife blades are prevented from penetrating into areas that could cause an electrical or mechanical hazard (IEC 60335-2-14/A12:2012)		N/A
	Test probe D of IEC 61032 is inserted in any position through openings intended for sharpening		N/A
	It is not possible to touch live parts, electrical insulation or moving parts, other than a grinding wheel		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

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Clause	Requirement - Test	Result - Remark	Verdict
	- pins for insertion into socket-outlets		N/A
	Ice-cream machines for use in refrigerators and freezers and hand-held appliances: no appliance inlet. (IEC 60335-2-14)		N/A
25.2	Appliance not provided with more than one means of connection to the supply mains		P
	Stationary appliance for multiple supply may be provided with more than one means of connection, provided electric strength test of 1250 V for 1 min between each means of connection causes no breakdown		N/A
25.3	Appliance intended to be permanently connected to fixed wiring provided with one of the following means for connection to the supply mains:		--
	- a set of terminals allowing the connection of a flexible cord		N/A
	- a fitted supply cord		N/A
	- a set of supply leads accommodated in a suitable compartment		N/A
	- a set of terminals for the connection of cables of fixed wiring, cross-sectional areas specified in 26.6, and the appliance allows the connection of the supply conductors after the appliance has been fixed to its support		N/A
	- a set of terminals and cable entries, conduit entries, knock-outs or glands, allowing connection of appropriate types of cable or conduit, and the appliance allows the connection of the supply conductors after the appliance has been fixed to its support		N/A
	For a fixed appliance constructed so that parts can be removed to facilitate easy installation, this requirement is met if it is possible to connect the fixed wiring without difficulty after a part of the appliance has been fixed to its support		N/A
25.4	Cable and conduit entries, rated current of appliance not exceeding 16 A, dimension according to table 10 (mm)		N/A
	Introduction of conduit or cable does not reduce clearances or creepage distances below values specified in clause 29		N/A
25.5	Method for assembling the supply cord to the appliance:		--
	- type X attachment		N/A
	- type Y attachment		P

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Clause	Requirement - Test	Result - Remark	Verdict
	- 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
	Type Z attachment allowed for : (IEC 60335-2-14)		N/A
	- can openers		N/A
	- coffee mills and grain grinders having a mass not exceeding 1.5 kg		N/A
	- cream whippers		N/A
	- egg beaters		N/A
	- ice-cream machines including those for use in refrigerators and freezers		N/A
	- knife sharpeners		N/A
	Type X attachments, other than those with a specially prepared cord, not used for ice-cream machines for use in refrigerators and freezers. (IEC 60335-2-14)		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:		P
	- rubber sheathed (at least 60245 IEC 53)		N/A
	- polychloroprene sheathed (at least 60245 IEC 57)		N/A
	- 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		N/A
	<ul style="list-style-type: none"> light polyvinyl chloride sheathed cord (60227 IEC 52), for appliances not exceeding 3 kg 	H03VVH2-F	P
	<ul style="list-style-type: none"> ordinary polyvinyl chloride sheathed cord (60227 IEC 53), for other appliances 		N/A
	- heat resistant polyvinyl chloride sheathed. Not used for type X attachment other than specially prepared cords		N/A
	<ul style="list-style-type: none"> heat-resistant light polyvinyl chloride sheathed cord (60227 IEC 56), for appliances not exceeding 3 kg 		N/A
	<ul style="list-style-type: none"> heat-resistant polyvinyl chloride sheathed cord (60227 IEC 57), for other appliances 		N/A

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Clause	Requirement - Test	Result - Remark	Verdict
	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
	Polyvinyl chloride sheathed supply cords of ice-cream machines for use in refrigerators and freezers are resistant to low temperatures: comply with tests 8.1, 8.2 and 8.3 of IEC 60811-1-4, carried out at a temperature of $-25\text{ °C} \pm 2\text{ °C}$. (IEC 60335-2-14)		N/A
25.8	Nominal cross-sectional area of supply cords not less than table 11; rated current (A); cross-sectional area (mm ²).....:	0,607A; 2x0,5 mm ² , length≤2m	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		N/A
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
25.12	Insulation of the supply cord not damaged when moulding the cord to part of the enclosure		N/A
25.13	Inlet openings so constructed as to prevent damage to the supply cord		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
25.14	Supply cords moved while in operation adequately protected against excessive flexing		P
	Flexing test, as described:		--
	- applied force (N).....:	5N	P
	- number of flexings.....:	10000	P
	The test does not result in:		--

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Clause	Requirement - Test	Result - Remark	Verdict
	- short-circuit between the conductors, such that the current exceeds a value of twice the rated current		P
	- breakage of more than 10% of the strands of any conductor		P
	- separation of the conductor from its terminal		P
	- loosening of any cord guard		P
	- damage to the cord or the cord guard		P
	- broken strands piercing the insulation and becoming accessible		P
	Hand-held blenders and hand-held mixers subjected to 2000 flexings as specified in IEC 60335-2-14, while mounted on an apparatus similar to that of Figure 8. (IEC 60335-2-14)		P
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).....:	0,67kg, 30N, 0,1Nm	P
	Cord not damaged and max. 2 mm displacement of the cord	0,53mm	P
25.16	Cord anchorages for type X attachments constructed and located so that:		--
	- replacement of the cord is easily possible		N/A
	- it is clear how the relief from strain and the prevention of twisting are obtained		N/A
	- they are suitable for different types of supply cord		N/A
	- cord cannot touch the clamping screws of cord anchorage if these screws are accessible, unless		N/A
	they are separated from accessible metal parts by supplementary insulation		N/A
	- the cord is not clamped by a metal screw which bears directly on the cord		N/A
	- at least one part of the cord anchorage securely fixed to the appliance, unless		N/A
	it is part of a specially prepared cord		N/A

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Clause	Requirement - Test	Result - Remark	Verdict
	- screws which have to be operated when replacing the cord do not fix any other component, unless		N/A
	the appliance becomes inoperative or incomplete or the parts cannot be removed without a tool		N/A
	- if labyrinths can be bypassed the test of 25.15 is nevertheless withstood		N/A
	- for class 0, 0I and I appliances they are of insulating material or are provided with an insulating lining, unless		N/A
	failure of the insulation of the cord does not make accessible metal parts live		N/A
	- for class II appliances they are of insulating material, or		N/A
	if of metal, they are insulated from accessible metal parts by supplementary insulation		N/A
	After the test of 25.15, under the conditions specified, the conductors have not moved by more than 1 mm in the terminals		N/A
25.17	Adequate cord anchorages for type Y and Z attachment, test with the cord supplied with the appliance	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
25.19	Type X attachment, glands not used as cord anchorage in portable appliances		N/A
	Tying the cord into a knot or tying the cord with string not used		N/A
25.20	The insulated conductors of the supply cord for type Y and Z attachment additionally insulated from accessible metal parts	Type Y	P
25.21	Space for supply cord for type X attachment or for connection of fixed wiring constructed:		--
	- to permit checking of conductors with respect to correct positioning and connection before fitting any cover		N/A
	- so there is no risk of damage to the conductors or their insulation when fitting the cover		N/A

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Clause	Requirement - Test	Result - Remark	Verdict
	- for portable appliances, so that the uninsulated end of a conductor, if it becomes free from the terminal, prevented from contact with accessible metal parts		N/A
	2 N test to the conductor for portable appliances; no contact with accessible metal parts		N/A
25.22	Appliance inlets:		--
	- live parts not accessible during insertion or removal		N/A
	Requirement not applicable to appliance inlets complying with IEC 60320-1		N/A
	- connector can be inserted without difficulty		N/A
	- the appliance is not supported by the connector		N/A
	- not for cold conditions if temp. rise of external metal parts exceeds 75 K during clause 11, unless the supply cord is unlikely to touch such metal parts		N/A
	- located so that pollution by food or liquid is unlikely to occur during normal use. (IEC 60335-2-14)		N/A
25.23	Interconnection cords comply with the requirements for the supply cord, except that:		N/A
	- the cross-sectional area of the conductors is determined on the basis of the maximum current during clause 11		N/A
	- the thickness of the insulation may be reduced		N/A
	If necessary, electric strength test of 16.3		N/A
25.24	Interconnection cords not detachable without the aid of a tool if compliance with this standard is impaired when they are disconnected		N/A
25.25	Dimensions of pins that are inserted into socket-outlets compatible with the dimensions of the relevant socket-outlet.		N/A
	Dimensions of pins and engagement face in accordance with the dimensions of the relevant plug in IEC/TR 60083		N/A
26	TERMINALS FOR EXTERNAL CONDUCTORS		--
26.1	Appliances provided with terminals or equally effective devices for connection of external conductors		P
	Terminals only accessible after removal of a non-detachable cover, except		P

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Clause	Requirement - Test	Result - Remark	Verdict
	for class III appliances that do not contain live parts		N/A
	Earthing terminals may be accessible if a tool is required to make the connections and means are provided to clamp the wire independently from its connection		N/A
26.2	Appliances with type X attachment and appliances for the connection of cables to fixed wiring provided with terminals in which connections are made by means of screws, nuts or similar devices, unless		N/A
	the connections are soldered		N/A
	Screws and nuts not used to fix any other component, except		N/A
	internal conductors, if so arranged that they are unlikely to be displaced when fitting the supply conductors		N/A
	If soldered connections used, the conductor so positioned or fixed that reliance is not placed on soldering alone, unless		N/A
	barriers provided so that neither clearances nor creepage distances between live parts and other metal parts reduced below the values for supplementary insulation if the conductor becomes free at the soldered joint		N/A
26.3	Terminals for type X attachment and for connection of cables of fixed wiring so constructed that the conductor is clamped between metal surfaces with sufficient contact pressure but without damaging the conductor		N/A
	Terminals fixed so that when the clamping means is tightened or loosened:		--
	- the terminal does not become loose		N/A
	- internal wiring is not subjected to stress		N/A
	- neither clearances nor creepage distances are reduced below the values in clause 29		N/A
	Compliance checked by inspection and by the test of subclause 9.6 of IEC 60999-1, the torque applied being equal to two-thirds of the torque specified (Nm).....:		N/A
	No deep or sharp indentations of the conductors		N/A
26.4	Terminals for type X attachment, except those having a specially prepared cord and those for the connection of cables of fixed wiring, no special preparation of conductors such as by soldering, use of cable lugs, eyelets or similar, and		N/A

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Clause	Requirement - Test	Result - Remark	Verdict
	so constructed or placed that conductors prevented from slipping out when clamping screws or nuts are tightened		N/A
26.5	Terminals for type X attachment so located or shielded that if a wire of a stranded conductor escapes, no risk of accidental connection to other parts that result in a hazard		N/A
	Stranded conductor test, 8 mm insulation removed		N/A
	No contact between live parts and accessible metal parts and,		N/A
	for class II constructions, between live parts and metal parts separated from accessible metal parts by supplementary insulation only		N/A
26.6	Terminals for type X attachment and for connection of cables of fixed wiring suitable for connection of conductors with cross-sectional area according to table 13; rated current (A); nominal cross-sectional area (mm ²).....:		N/A
	If a specially prepared cord is used, terminals need only be suitable for that cord		N/A
26.7	Terminals for type X attachment, except in class III appliances not containing live parts, accessible after removal of a cover or part of the enclosure		N/A
26.8	Terminals for the connection of fixed wiring, including the earthing terminal, located close to each other		N/A
26.9	Terminals of the pillar type constructed and located as specified		N/A
26.10	Terminals with screw clamping and screwless terminals not used for flat twin tinsel cords, unless		P
	conductors ends fitted with means suitable for screw terminals		P
	Pull test of 5 N to the connection		P
26.11	For type Y and Z attachment, soldered, welded, crimped or similar connections may be used	Type Y	P
	For Class II appliances, the conductor so positioned or fixed that reliance is not placed on soldering, welding or crimping alone		P
	If soldering, welding or crimping alone used, barriers provided so that clearances and creepage distances between live parts and other metal parts are not reduced below the values for supplementary insulation if the conductor becomes free		P

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Clause	Requirement - Test	Result - Remark	Verdict
28	SCREWS AND CONNECTIONS		--
28.1	Fixings, electrical connections and connections providing earthing continuity withstand mechanical stresses		P
	Screws not of soft metal liable to creep, such as zinc or aluminium		P
	Diameter of screws of insulating material min. 3 mm		N/A
	Screws of insulating material not used for any electrical connections or connections providing earthing continuity		N/A
	Screws used for electrical connections or connections providing earthing continuity screwed into metal		N/A
	Screws not of insulating material if their replacement by a metal screw can impair supplementary or reinforced insulation		N/A
	For type X attachment, screws to be removed for replacement of supply cord or for user maintenance, not of insulating material if their replacement by a metal screw impairs basic insulation		N/A
	For screws and nuts; torque-test as specified in table 14.....:	(see appended table)	N/A
28.2	Electrical connections and connections providing earthing continuity constructed so that contact pressure is not transmitted through non-ceramic insulating material liable to shrink or distort, unless		P
	there is resiliency in the metallic parts to compensate for shrinkage or distortion of the insulating material		N/A
	This requirement does not apply to electrical connections in circuits of appliances for which:		N/A
	<ul style="list-style-type: none"> 30.2.2 is applicable and that carry a current not exceeding 0,5 A 		N/A
	<ul style="list-style-type: none"> 30.2.3 is applicable and that carry a current not exceeding 0,2 A 		N/A
28.3	Space-threaded (sheet metal) screws only used for electrical connections if they clamp the parts together		N/A
	Thread-cutting (self-tapping) screws and thread rolling screws only used for electrical connections if they generate a full form standard machine screw thread		N/A

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Clause	Requirement - Test	Result - Remark	Verdict
	Thread-cutting (self-tapping) screws not used if they are likely to be operated by the user or installer		N/A
	Thread-cutting, thread rolling and space threaded screws may be used in connections providing earthing continuity provided it is not necessary to disturb the connection:		N/A
	- in normal use,		N/A
	- during user maintenance,		N/A
	- when replacing a supply cord having a type X attachment, or		N/A
	- during installation		N/A
	At least two screws being used for each connection providing earthing continuity, unless		N/A
	the screw forms a thread having a length of at least half the diameter of the screw		N/A
28.4	Screws and nuts that make mechanical connection secured against loosening if they also make electrical connections or connections providing earthing continuity		N/A
	This requirement does not apply to screws in the earthing circuit if at least two screws are used, or		N/A
	if an alternative earthing circuit is provided		N/A
	Rivets for electrical connections or connections providing earthing continuity secured against loosening if the connections are subjected to torsion		N/A
29	CLEARANCES, CREEPAGE DISTANCES AND SOLID INSULATION		--
	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

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Clause	Requirement - Test	Result - Remark	Verdict
29.1	Clearances not less than the values specified in table 16, taking into account the rated impulse voltage for the overvoltage categories of table 15, unless	(see appended table)	P
	for basic insulation and functional insulation they comply with the impulse voltage test of clause 14		N/A
	However, if the distances are affected by wear, distortion, movement of the parts or during assembly, the clearances for rated impulse voltages of 1500V and above are increased by 0,5 mm and the impulse voltage test is not applicable		P
	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
	Appliances are in overvoltage category II		P
	A force of 2 N is applied to bare conductors, other than heating elements		P
	A force of 30 N is applied to accessible surfaces		P
29.1.1	Clearances of basic insulation withstand the overvoltages, taking into account the rated impulse voltage		P
	The values of table 16 or the impulse voltage test of clause 14 are applicable.....	(see appended table)	N/A
	Clearance at the terminals of tubular sheathed heating elements may be reduced to 1,0 mm if the microenvironment is pollution degree 1		N/A
	Lacquered conductors of windings considered to be bare conductors		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:		--

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Clause	Requirement - Test	Result - Remark	Verdict
	- table 16 based on the rated impulse voltage	(see appended table)	P
	- table F.7a in IEC 60664-1, frequency not exceeding 30 kHz		N/A
	- clause 4 of IEC 60664-4, frequency exceeding 30 kHz		N/A
	If values of table 16 are largest, the impulse voltage test of clause 14 may be applied instead, unless		N/A
	the microenvironment is pollution degree 3, or		P
	the distances can be affected by wear, distortion, movement of the parts or during assembly		N/A
	However, clearances are not specified if the appliance complies with clause 19 with the functional insulation short-circuited		N/A
	Lacquered conductors of windings considered to be bare conductors		P
	However, clearances at crossover points are not measured		P
	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

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Clause	Requirement - Test	Result - Remark	Verdict
	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		N/A
	- insulation subjected to conductive pollution; pollution degree 3		P
	A force of 2 N is applied to bare conductors, other than heating elements		P
	A force of 30 N is applied to accessible surfaces		P
	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
	Microenvironment is pollution degree 3 (IEC 60335-2-14)		P
	unless insulation enclosed or located so that it is unlikely to be exposed to pollution during normal use of the appliance (IEC 60335-2-14)		N/A
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

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Clause	Requirement - Test	Result - Remark	Verdict
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		N/A
29.3	Supplementary and reinforced insulation have adequate thickness, or a sufficient number of layers, to withstand the electrical stresses		P
	Compliance checked:		--
	- by measurement, in accordance with 29.3.1, or		P
	- by an electric strength test in accordance with 29.3.2, or		N/A
	- 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
	- as specified in subclause 6.3 of IEC 60664-4 for insulation that is subjected to any periodic voltage having a frequency exceeding 30 kHz		N/A
29.3.1	Supplementary insulation have a thickness of at least 1 mm		P
	Reinforced insulation have a thickness of at least 2 mm		P
29.3.2	Each layer of material withstand the electric strength test of 16.3 for supplementary insulation		N/A
	Supplementary insulation consist of at least 2 layers		N/A

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Clause	Requirement - Test	Result - Remark	Verdict
	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
H	ANNEX H (NORMATIVE) SWITCHES		--
	Switches comply with the following clauses of IEC 61058-1, as modified below:		--
	The tests of IEC 61058-1 carried out under the conditions occurring in the appliance		P
	Before being tested, switches are operated 20 times without load		P
8	Marking and documentation		--
	Switches are not required to be marked		P
	However, a switch that can be tested separately from the appliance marked with the manufacturer's name or trade mark and the type reference		N/A
13	Mechanism		--
	The tests may be carried out on a separate sample		P
15	Insulation resistance and dielectric strength		--
15.1	Not applicable		P
15.2	Not applicable		P
15.3	Applicable for full disconnection and micro-disconnection		P
17	Endurance		--
	Compliance is checked on three separate appliances or switches		P
	For 17.2.4.4, the number of cycles declared according to 7.1.4 is 10 000, unless		P
	otherwise specified in 24.1.3 of the relevant part 2 of IEC 60335		N/A
	Switches for operation under no load and which can be operated only by a tool, and		N/A

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Clause	Requirement - Test	Result - Remark	Verdict
	switches operated by hand that are interlocked so that they cannot be operated under load,		N/A
	are not subjected to the tests		N/A
	However, switches without this interlock are subjected to the test of 17.2.4.4 for 100 cycles of operation		N/A
	Subclauses 17.2.2 and 17.2.5.2 not applicable		N/A
	The ambient temperature during the test is that occurring in the appliance during the test of Clause 11 in IEC 60335-1		P
	The temperature rise of the terminals not more than 30 K above the temperature rise measured in clause 11 of IEC 60335-1 (K)	SW003: 12K; SW007: 14K. SW008: 15K.	P
20	Clearances, creepage distances, solid insulation and coatings of rigid printed board assemblies		--
	This clause is applicable to clearances and creepage distances for functional insulation, across full disconnection and micro-disconnection, as stated in table 24		P

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Clause	Requirement - Test	Result - Remark			Verdict
10.1	TABLE: Power input deviation				P
Input deviation of/at:	P rated (W)	P measured (W)	dP (W, %)	Required dP (W, %)	Remark
GHM007A	150	130	-13,3%	+20%	P
GHM007B	200	152	-24,0%	+20%	P
GHM007C	250	120	-52,0%	+20%	P
GHM007D	300	191	-36,3%	+20%	P
GHM008A	150	132	-12,0%	+20%	P
GHM008B	200	156	-22,0%	+20%	P
GHM008C	250	118	-52,8%	+20%	P
GHM008D	300	192	-36,0%	+20%	P
GHM003A	150	130	-13,3%	+20%	P
GHM003B	200	152	-24,0%	+20%	P
Supplementary information: Supplied at 230V, operated as mixer.					

10.2	TABLE: Current deviation				N/A
Current deviation of/at:	I rated (A)	I measured (A)	dI (A, %)	Required dI (A, %)	Remark
Supplementary information:					

11.7	Table : Normal operation				P
Test step	Load (ingredients)	quantity	Time of operation (on/off)	Number of operation	remark
Operated at 1,06 times rated voltage	72g water being added for each 100g of flour	916 g flour + 660 g water	5 min on	1	/
Supplementary information:					

11.8	TABLE: Heating test, thermocouples (GHM007A)			P
	Test voltage (V)	:	254,4	—
	Ambient (°C)	:	22	—
Thermocouple locations		dT (K)	Max. dT (K)	

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Clause	Requirement - Test	Result - Remark	Verdict
Power cord	25	50	
Ambient of rotate switch	12	30	
Internal wiring	28	55(T80)	
Enclosure(inner)	21	--	
Switch knob surface	5	60	
Handle	24	50	
X2 capacitor(beside motor)	36	85(T110)	
Y2 capacitor	30	60(T85)	
Brush holder	66	--	

11.8	TABLE: Heating test, resistance method (GHM007A)					P
	Test voltage (V)				254,4	—
	Ambient, t ₁ (°C)				22	—
	Ambient, t ₂ (°C)				22	—
Temperature rise of winding	R ₁ (Ω)	R ₂ (Ω)	dT (K)	Max. dT (K)	Insulation class	
Stator winding	32,533	41,402	69,9	90	120	
Rotor winding	68,540	89,801	79,6	90	120	

11.8	TABLE: Heating test, thermocouples (GHM007B)			P	
	Test voltage (V)			254,4	—
	Ambient (°C)			22	—
Thermocouple locations	dT (K)		Max. dT (K)		
Power cord	26		50		
Ambient of rotate switch	14		30		
Internal wiring	31		55(T80)		
Enclosure(inner)	24		--		
Switch knob surface	7		60		
Handle	25		50		
X2 capacitor(beside motor)	38		85(T110)		
Y2 capacitor	32		60(T85)		
Brush holder	72		--		

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Clause	Requirement - Test	Result - Remark			Verdict
11.8	TABLE: Heating test, resistance method (GHM007B)				P
	Test voltage (V)	254,4			—
	Ambient, t_1 (°C)	22			—
	Ambient, t_2 (°C)	22			—
Temperature rise of winding	R_1 (Ω)	R_2 (Ω)	dT (K)	Max. dT (K)	Insulation class
Stator winding	45,396	56,683	63,8	90	120
Rotor winding	65,499	83,244	69,5	90	120

11.8	TABLE: Heating test, thermocouples (GHM007C)				P
	Test voltage (V)	254,4			—
	Ambient (°C)	22			—
Thermocouple locations	dT (K)		Max. dT (K)		
Power cord	18		50		
Ambient of rotate switch	9		30		
Internal wiring	8		55(T80)		
Enclosure(inner)	11		--		
Switch knob surface	6		60		
Handle	12		50		
X2 capacitor(beside motor)	22		85(T110)		
Y2 capacitor	21		60(T85)		
Brush holder	57		--		

11.8	TABLE: Heating test, resistance method (GHM007C)				P
	Test voltage (V)	254,4			—
	Ambient, t_1 (°C)	22			—
	Ambient, t_2 (°C)	22			—
Temperature rise of winding	R_1 (Ω)	R_2 (Ω)	dT (K)	Max. dT (K)	Insulation class
Stator winding	17,411	19,464	30,2	90	120
Rotor winding	55,064	63,310	38,4	90	120

11.8	TABLE: Heating test, thermocouples (GHM007D)				P
	Test voltage (V)	254,4			—

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Clause	Requirement - Test	Result - Remark	Verdict
	Ambient (°C)	22	—
Thermocouple locations	dT (K)	Max. dT (K)	
Power cord	25	50	
Ambient of rotate switch	16	30	
Internal wiring	19	55(T80)	
Enclosure(inner)	15	--	
Switch knob surface	9	60	
Handle	16	50	
X2 capacitor(beside motor)	38	85(T110)	
Y2 capacitor	35	60(T85)	
Brush holder	74	--	

11.8	TABLE: Heating test, resistance method (GHM007D)					P
	Test voltage (V)	254,4				—
	Ambient, t ₁ (°C)	22				—
	Ambient, t ₂ (°C)	22				—
Temperature rise of winding	R ₁ (Ω)	R ₂ (Ω)	dT (K)	Max. dT (K)	Insulation class	
Stator winding	49,192	62,526	69,5	90	120	
Rotor winding	43,130	55,922	76,1	90	120	

11.8	TABLE: Heating test, thermocouples (GHM008A)					P
	Test voltage (V)	254,4				—
	Ambient (°C)	22				—
Thermocouple locations	dT (K)			Max. dT (K)		
Power cord	24			50		
Ambient of rotate switch	10			30		
Internal wiring	27			55(T80)		
Enclosure(inner)	20			--		
Switch knob surface	5			60		
Handle	22			50		
X2 capacitor(beside motor)	35			85(T110)		
Y2 capacitor	28			60(T85)		

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Clause	Requirement - Test	Result - Remark	Verdict
Brush holder	63	--	

11.8	TABLE: Heating test, resistance method (GHM008A)					P
	Test voltage (V)				254,4	—
	Ambient, t ₁ (°C)				22	—
	Ambient, t ₂ (°C)				22	—
Temperature rise of winding	R ₁ (Ω)	R ₂ (Ω)	dT (K)	Max. dT (K)	Insulation class	
Stator winding	32,533	41,386	69,8	90	120	
Rotor winding	68,540	89,609	78,8	90	120	

11.8	TABLE: Heating test, thermocouples (GHM008B)			P	
	Test voltage (V)			254,4	—
	Ambient (°C)			22	—
Thermocouple locations	dT (K)		Max. dT (K)		
Power cord	27		50		
Ambient of rotate switch	16		30		
Internal wiring	30		55(T80)		
Enclosure(inner)	25		--		
Switch knob surface	8		60		
Handle	26		50		
X2 capacitor(beside motor)	40		85(T110)		
Y2 capacitor	34		60(T85)		
Brush holder	70		--		

11.8	TABLE: Heating test, resistance method (GHM008B)					P
	Test voltage (V)				254,4	—
	Ambient, t ₁ (°C)				22	—
	Ambient, t ₂ (°C)				22	—
Temperature rise of winding	R ₁ (Ω)	R ₂ (Ω)	dT (K)	Max. dT (K)	Insulation class	
Stator winding	45,396	56,499	62,7	90	120	
Rotor winding	65,499	83,534	70,6	90	120	

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Clause	Requirement - Test	Result - Remark	Verdict
11.8	TABLE: Heating test, thermocouples (GHM008C)		P
	Test voltage (V)	254,4	—
	Ambient (°C)	22	—
Thermocouple locations	dT (K)	Max. dT (K)	
Power cord	17	50	
Ambient of rotate switch	8	30	
Internal wiring	6	55(T80)	
Enclosure(inner)	10	--	
Switch knob surface	7	60	
Handle	11	50	
X2 capacitor(beside motor)	20	85(T110)	
Y2 capacitor	19	60(T85)	
Brush holder	59	--	

11.8	TABLE: Heating test, resistance method (GHM008C)					P
	Test voltage (V)		254,4		—	
	Ambient, t ₁ (°C)		22		—	
	Ambient, t ₂ (°C)		22		—	
Temperature rise of winding	R ₁ (Ω)	R ₂ (Ω)	dT (K)	Max. dT (K)	Insulation class	
Stator winding	17,411	19,560	31,7	90	120	
Rotor winding	55,064	63,418	38,9	90	120	

11.8	TABLE: Heating test, thermocouples (GHM008D)			P
	Test voltage (V)		254,4	—
	Ambient (°C)		22	—
Thermocouple locations	dT (K)		Max. dT (K)	
Power cord	26		50	
Ambient of rotate switch	18		30	
Internal wiring	20		55(T80)	
Enclosure(inner)	16		--	
Switch knob surface	11		60	
Handle	16		50	

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Clause	Requirement - Test	Result - Remark	Verdict
X2 capacitor(beside motor)	38	85(T110)	
Y2 capacitor	36	60(T85)	
Brush holder	72	--	

11.8	TABLE: Heating test, resistance method (GHM008D)					P
	Test voltage (V)				254,4	—
	Ambient, t ₁ (°C)				22	—
	Ambient, t ₂ (°C)				22	—
Temperature rise of winding	R ₁ (Ω)	R ₂ (Ω)	dT (K)	Max. dT (K)	Insulation class	
Stator winding	49,192	62,512	69,5	90	120	
Rotor winding	43,130	55,892	75,9	90	120	

11.8	TABLE: Heating test, thermocouples (GHM003A)			P	
	Test voltage (V)			254,4	—
	Ambient (°C)			22	—
Thermocouple locations	dT (K)		Max. dT (K)		
Power cord	24		50		
Ambient of rotate switch	11		30		
Internal wiring	28		55(T80)		
Enclosure(inner)	20		--		
Switch knob surface	6		60		
Handle	25		50		
X2 capacitor(beside motor)	35		85(T110)		
Y2 capacitor	31		60(T85)		
Brush holder	69		--		

11.8	TABLE: Heating test, resistance method (GHM003A)					P
	Test voltage (V)				254,4	—
	Ambient, t ₁ (°C)				22	—
	Ambient, t ₂ (°C)				22	—
Temperature rise of winding	R ₁ (Ω)	R ₂ (Ω)	dT (K)	Max. dT (K)	Insulation class	
Stator winding	32,533	41,431	70,2	90	120	

IEC 60335-2-14						
Clause	Requirement - Test			Result - Remark		Verdict
Rotor winding	68,540	89,912	80,0	90	120	

11.8	TABLE: Heating test, thermocouples (GHM003B)				P
	Test voltage (V)			254,4	—
	Ambient (°C)			22	—
Thermocouple locations		dT (K)		Max. dT (K)	
Power cord		26		50	
Ambient of rotate switch		15		30	
Internal wiring		32		55(T80)	
Enclosure(inner)		25		--	
Switch knob surface		9		60	
Handle		26		50	
X2 capacitor(beside motor)		41		85(T110)	
Y2 capacitor		32		60(T85)	
Brush holder		73		--	

11.8	TABLE: Heating test, resistance method (GHM003B)					P
	Test voltage (V)				254,4	—
	Ambient, t ₁ (°C)				22	—
	Ambient, t ₂ (°C)				22	—
Temperature rise of winding		R ₁ (Ω)	R ₂ (Ω)	dT (K)	Max. dT (K)	Insulation class
Stator winding		45,396	56,588	63,2	90	120
Rotor winding		65,499	83,122	69,0	90	120

13.2	TABLE: Leakage current (all models)			P
	Heating appliances: 1.15 x rated input (W)		N/A	—
	Motor-operated and combined appliances: 1.06 x rated voltage (V)		254,4V~	—
Leakage current between			I (mA)	Max. allowed I (mA)
L/N to plastic enclosure			0,112	0,35 peak
L/N to switch knob			0,112	0,35 peak
Supplementary information:				

IEC 60335-2-14			
Clause	Requirement - Test	Result - Remark	Verdict

13.3	TABLE: Electric strength (all models)		P
Test voltage applied between:		Voltage (V)	Breakdown (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:			

16.2	TABLE: Leakage current (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 to plastic enclosure		0,132	0,25
L/N to switch/knob		0,132	0,25
Supplementary information:			

16.3	TABLE: Electric strength (all models)		P
Test voltage applied between:		Voltage (V)	Breakdown (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:			

19	Abnormal operation conditions						P
Operational characteristics		YES/NO	Operational conditions				
Are there electronic circuits to control the appliance operation?		NO	N.A				
Are there "off" or "stand-by" position?		YES	Manually operated				
The unintended operation of the appliance results in dangerous malfunction?		NO	N.A				
Sub-clause	Operating	Test	PEC	EMP	Software	19.11.3	Final

IEC 60335-2-14							
Clause	Requirement - Test			Result - Remark			Verdict
	conditions description	results description	description	19.11.4	type required	PEC	result
19.2	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.3	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.4	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.5	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.6	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.7	Refer to Cl.19.7	No hazard	N.A	N.A	N.A	N.A	P
19.8	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.9	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.10	Refer to Cl.19.10	No hazard	N.A	N.A	N.A	N.A	P
19.11.2	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.11.4.8	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.12	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.14	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.15	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.10X	N.A	N.A	N.A	N.A	N.A	N.A	N.A
Supplementary information:							

19.7	TABLE: Abnormal operation, locked rotor/moving parts (GHM007A)					P
	Test voltage (V)	:	240			—
	Ambient, t ₁ (°C)	:	22			—
	Ambient, t ₂ (°C)	:	22			—
Temperature of winding		R ₁ (Ω)	R ₂ (Ω)	dT (K)	T (°C)	Max. T (°C)
Stator winding		32,533	46,231	108,0	130,0	215
Rotor winding		68,540	102,686	127,8	151,8	215

19.7	TABLE: Abnormal operation, locked rotor/moving parts (GHM007B)					P
	Test voltage (V)	:	240			—
	Ambient, t ₁ (°C)	:	22			—
	Ambient, t ₂ (°C)	:	22			—
Temperature of winding		R ₁ (Ω)	R ₂ (Ω)	dT (K)	T (°C)	Max. T (°C)
Stator winding		45,396	61,821	92,8	114,8	215

IEC 60335-2-14						
Clause	Requirement - Test			Result - Remark		Verdict

Rotor winding	65,499	92,455	105,6	127,6	215
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19.7	TABLE: Abnormal operation, locked rotor/moving parts (GHM007C)					P
	Test voltage (V)		240		—	
	Ambient, t ₁ (°C)		22		—	
	Ambient, t ₂ (°C)		22		—	
Temperature of winding	R ₁ (Ω)	R ₂ (Ω)	dT (K)	T (°C)	Max. T (°C)	
Stator winding	17,411	23,632	91,6	113,6	215	
Rotor winding	55,064	77,892	106,3	128,3	215	

19.7	TABLE: Abnormal operation, locked rotor/moving parts (GHM007D)					P
	Test voltage (V)		240		—	
	Ambient, t ₁ (°C)		22		—	
	Ambient, t ₂ (°C)		22		—	
Temperature of winding	R ₁ (Ω)	R ₂ (Ω)	dT (K)	T (°C)	Max. T (°C)	
Stator winding	49,192	68,122	98,7	120,7	215	
Rotor winding	43,130	60,872	105,5	127,5	215	

19.7	TABLE: Abnormal operation, locked rotor/moving parts (GHM008A)					P
	Test voltage (V)		240		—	
	Ambient, t ₁ (°C)		22		—	
	Ambient, t ₂ (°C)		22		—	
Temperature of winding	R ₁ (Ω)	R ₂ (Ω)	dT (K)	T (°C)	Max. T (°C)	
Stator winding	32,533	46,080	106,8	128,8	215	
Rotor winding	68,540	98,822	113,3	135,3	215	

19.7	TABLE: Abnormal operation, locked rotor/moving parts (GHM008B)					P
	Test voltage (V)		240		—	
	Ambient, t ₁ (°C)		22		—	
	Ambient, t ₂ (°C)		22		—	
Temperature of winding	R ₁ (Ω)	R ₂ (Ω)	dT (K)	T (°C)	Max. T (°C)	
Stator winding	45,396	60,892	87,6	109,6	215	
Rotor winding	65,499	90,632	98,4	120,4	215	

IEC 60335-2-14			
Clause	Requirement - Test	Result - Remark	Verdict

19.7	TABLE: Abnormal operation, locked rotor/moving parts (GHM008C)					P
	Test voltage (V)				240	—
	Ambient, t_1 (°C)				22	—
	Ambient, t_2 (°C)				22	—
Temperature of winding		R_1 (Ω)	R_2 (Ω)	dT (K)	T (°C)	Max. T (°C)
Stator winding		17,411	23,231	85,7	107,7	215
Rotor winding		55,064	76,120	98,1	120,1	215

19.7	TABLE: Abnormal operation, locked rotor/moving parts (GHM008D)					P
	Test voltage (V)				240	—
	Ambient, t_1 (°C)				22	—
	Ambient, t_2 (°C)				22	—
Temperature of winding		R_1 (Ω)	R_2 (Ω)	dT (K)	T (°C)	Max. T (°C)
Stator winding		49,192	68,008	98,1	120,1	215
Rotor winding		43,130	60,588	103,8	125,8	215

19.7	TABLE: Abnormal operation, locked rotor/moving parts (GHM003A)					P
	Test voltage (V)				240	—
	Ambient, t_1 (°C)				22	—
	Ambient, t_2 (°C)				22	—
Temperature of winding		R_1 (Ω)	R_2 (Ω)	dT (K)	T (°C)	Max. T (°C)
Stator winding		32,533	45,922	105,6	127,6	215
Rotor winding		68,540	98,692	112,8	134,8	215

19.7	TABLE: Abnormal operation, locked rotor/moving parts (GHM003B)					P
	Test voltage (V)				240	—
	Ambient, t_1 (°C)				22	—
	Ambient, t_2 (°C)				22	—
Temperature of winding		R_1 (Ω)	R_2 (Ω)	dT (K)	T (°C)	Max. T (°C)
Stator winding		45,396	60,746	86,7	108,7	215
Rotor winding		65,499	90,481	97,8	119,8	215

19.13	TABLE: Abnormal operation, temperature rises (GHM007A)		P
Thermocouple locations		dT (K)	Max. dT (K)

IEC 60335-2-14			
Clause	Requirement - Test	Result - Remark	Verdict
Enclosure	15	--	
Supplementary information: The most unfavourable data was recorded.			

19.13	TABLE: Abnormal operation, temperature rises (GHM007B)		P
Thermocouple locations	dT (K)	Max. dT (K)	
Enclosure	11	--	
Supplementary information: The most unfavourable data was recorded.			

19.13	TABLE: Abnormal operation, temperature rises (GHM007C)		P
Thermocouple locations	dT (K)	Max. dT (K)	
Enclosure	16	--	
Supplementary information: The most unfavourable data was recorded.			

19.13	TABLE: Abnormal operation, temperature rises (GHM007D)		P
Thermocouple locations	dT (K)	Max. dT (K)	
Enclosure	17	--	
Supplementary information: The most unfavourable data was recorded.			

19.13	TABLE: Abnormal operation, temperature rises (GHM008A)		P
Thermocouple locations	dT (K)	Max. dT (K)	
Enclosure	12	--	
Supplementary information: The most unfavourable data was recorded.			

19.13	TABLE: Abnormal operation, temperature rises (GHM008B)		P
Thermocouple locations	dT (K)	Max. dT (K)	
Enclosure	8	--	
Supplementary information: The most unfavourable data was recorded.			

19.13	TABLE: Abnormal operation, temperature rises (GHM008C)		P
Thermocouple locations	dT (K)	Max. dT (K)	
Enclosure	14	--	
Supplementary information: The most unfavourable data was recorded.			

IEC 60335-2-14			
Clause	Requirement - Test	Result - Remark	Verdict
19.13	TABLE: Abnormal operation, temperature rises (GHM008D)		P
Thermocouple locations		dT (K)	Max. dT (K)
Enclosure		15	--
Supplementary information: The most unfavourable data was recorded.			

19.13	TABLE: Abnormal operation, temperature rises (GHM003A)		P
Thermocouple locations		dT (K)	Max. dT (K)
Enclosure		15	--
Supplementary information: The most unfavourable data was recorded.			

19.13	TABLE: Abnormal operation, temperature rises (GHM003B)		P
Thermocouple locations		dT (K)	Max. dT (K)
Enclosure		18	--
Supplementary information: The most unfavourable data was recorded.			

24.1	TABLE: Components information					P
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾	
Power plug	Shangyu Jintao Electron Co., Ltd.	JT001	250V~, 2,5A	VDE 0620-1	VDE*/ 40020667	
Alternative	Ningbo Qiaopu Electric Co., Ltd.	D01	250V~, 2,5A	VDE 0620-1	VDE*/ 40001746	
Alternative	Ningbo Jiajie Electronic Co., Ltd.	JF-01	250V~, 2,5A	VDE 0620-1	VDE*/ 40030752	
Alternative	Yuyao Shengshida Electronic Co., Ltd.	YD-01	250V~, 2,5A	VDE 0620-1	VDE*/ 40035523	
Power plug (for U.K.)	Ningbo Yunhuan Electronics Group Corporation	Y006, Y006A	250V~, 13A	BS 1363-1	KM*/ 45980	
Power cord	Shangyu Jintao Electron Co., Ltd.	H03VVH2-F	2 x 0,5mm ² (length≤2m)	EN 50525-2-11	VDE*/ 40013419	
Alternative	Ningbo Qiaopu Electric Co., Ltd.	H03VVH2-F	2 x 0,5mm ² (length≤2m)	EN 50525-2-11	VDE*/ 40035976	
Alternative	Yuyao Shengshida Electronic Co., Ltd.	H03VVH2-F	2 x 0,5mm ² (length≤2m)	EN 50525-2-11	VDE*/ 40034303	

IEC 60335-2-14					
Clause	Requirement - Test			Result - Remark	Verdict
Internal wiring	ZHEJIANG XINXIN ELECTRONIC WIRE ROD CO LTD	1007	300V, 22AWG, 80°C (UL E225383)	IEC 60335-1 IEC 60335-2-14	Tested with appliance
Alternative	NINGBO YUNHUAN ELECTRONICS GROUP CORP	1007	300V, 22AWG, 80°C (UL E137395)	IEC 60335-1 IEC 60335-2-14	Tested with appliance
Alternative	KUNSHAN NEW ZHICHENG ELECTRONICS TECHNOLOGIES CO LTD	1007	300V, 22AWG, 80°C (UL E137395)	IEC 60335-1 IEC 60335-2-14	Tested with appliance
Alternative	XingDa Electronics Wire& Cable Co., LTD	1015	600V, 22AWG, 105°C (UL E187208)	IEC 60335-1 IEC 60335-2-14	Tested with appliance
Alternative	Yuyao ChengZhu Electric appliance Factory	1015	600V, 22AWG, 105°C (UL E231643)	IEC 60335-1 IEC 60335-2-14	Tested with appliance
Alternative	YUYAO RIYUE WIRE&CABLE INDUSTRY CO.,LTD	1015	600V, 22AWG, 105°C (UL E256446)	IEC 60335-1 IEC 60335-2-14	Tested with appliance
Alternative	ZHEJIANG XINXIN ELECTRONIC WIRE ROD CO LTD	1015	600V, 22AWG, 105°C (UL E225383)	IEC 60335-1 IEC 60335-2-14	Tested with appliance
Alternative	ZHONG SHAN YONG ROI ELECTRIC FACTORY CO.,LTD.	1015	600V, 22AWG, 105°C (UL E204893)	IEC 60335-1 IEC 60335-2-14	Tested with appliance
Alternative	SHENZHEN DONG JU WIRE & CABLE CO.,LTD.	1015	600V, 22AWG, 105°C (UL E189674)	IEC 60335-1 IEC 60335-2-14	Tested with appliance
Motor for GHM001, GHM007A, GHM008A, GHM003A	Jiangmen City Hengrun Electric Co.,LTD	HC4515	220-240V, 50/60Hz, 150W Class 120	IEC 60335-1 IEC 60335-2-14	Tested with appliance
Motor for GHM007B, GHM008B, GHM003B	Ningbo Pinqiang Electric Co.,LTD	HC4520	220-240V, 50/60Hz, 200W Class 120	IEC 60335-1 IEC 60335-2-14	Tested with appliance
Motor for GHM005, GHM007C, GHM008C	Ningbo Pinqiang Electric Co.,LTD	AC4525	220-240V, 50/60Hz, 250W Class 120	IEC 60335-1 IEC 60335-2-14	Tested with appliance

IEC 60335-2-14					
Clause	Requirement - Test			Result - Remark	Verdict
Motor for GHM007D, GHM008D	Ningbo Pinqiang Electric Co.,LTD	HC4530	220-240V, 50/60Hz, 300W Class 120	IEC 60335-1 IEC 60335-2-14	Tested with appliance
Brush holder	SHANGHAI EUROPEAN-ASIAN SYNTHETIC MATERIAL CO LTD	EA-5551J	V-0, 150°C, 51*10,5*31 UL: E176036	IEC 60335-1 IEC 60335-2-14	Tested with appliance
Alternative	E I DUPONT DE NEMOURS & CO INC	FR530L(I)(+)(f1)	V-0, 155°C, 51*10,5*31 UL: E41938	IEC 60335-1 IEC 60335-2-14	Tested with appliance
X2 Capacitor of motor	Dain Electronics Co., Ltd.	MPX	AC275V, 0,22µF, 40/110/21/C	IEC 60335-1 IEC 60335-2-14	VDE*/ 40018798
Y2 capacitor	Jyh Chung Electronic Co., Ltd.	JY	AC300V, 3300pf, 25/085/21/C	IEC 60335-1 IEC 60335-2-14	VDE*/ 123326
Thermal link	Joint Force Metal Research & Company Limited	L33	AC250V, 2A, Tf130	IEC 60335-1 IEC 60335-2-14	VDE*/ 40008646
Heat-shrink tube	SHENZHEN WOER HEAT-SHRINKABLE MATERIAL CO LTD	RSFR-H	T125 UL: E203950	IEC 60335-1 IEC 60335-2-14	Tested with appliance
Alternative	DONGGUAN SALIPT CO LTD	SALIPT S-901-300	T125 UL: E209436	IEC 60335-1 IEC 60335-2-14	Tested with appliance
Alternative	GUANGZHOU KAIHENG NEW MATERIAL CO LTD	K-102 (CB)	T125 UL: E321827	IEC 60335-1 IEC 60335-2-14	Tested with appliance
Wire connector	HEAVY POWER CO LTD	CE-2	300V,150°C UL: E113650	IEC 60335-1 IEC 60335-2-14	Tested with appliance
Switch frame	LANXESS AG	PA66-AKV35	HB, HWI=4, HAI=0, RTI=(120,105,115) UL: E245249	IEC 60335-1 IEC 60335-2-14	Tested with appliance
Rotate switch for GHM001	Yuyao HOLON Electrical Appliance Co.,Ltd	SW001	250V, 3A	IEC 60335-1 IEC 60335-2-14	Tested with appliance
Rotate switch for GHM003	Yuyao HOLON Electrical Appliance Co.,Ltd	SW003	250V, 3A	IEC 60335-1 IEC 60335-2-14	Tested with appliance
Rotate switch for GHM005	Yuyao HOLON Electrical Appliance Co.,Ltd	SW005	250V, 3A	IEC 60335-1 IEC 60335-2-14	Tested with appliance
Rotate switch for GHM007 series	Yuyao HOLON Electrical Appliance Co.,Ltd	SW007	250V, 3A	IEC 60335-1 IEC 60335-2-14	Tested with appliance

IEC 60335-2-14					
Clause	Requirement - Test			Result - Remark	Verdict
Rotate switch for GHM008 series	Yuyao HOLON Electrical Appliance Co.,Ltd	SW008	250V, 3A	IEC 60335-1 IEC 60335-2-14	Tested with appliance
Rotate switch knob	Yuyao HOLON Electrical Appliance Co.,Ltd	ABS	Min.thickness: 2,0mm Color: White or orange	IEC 60335-1 IEC 60335-2-14	Tested with appliance
Housing	Yuyao HOLON Electrical Appliance Co.,Ltd	ABS	Min.thickness: 2,0mm Color: White, light grey	IEC 60335-1 IEC 60335-2-14	Tested with appliance
Enclosure/ Handle	Yuyao HOLON Electrical Appliance Co.,Ltd	ABS	Min.thickness: 2,0mm Color: White, light grey	IEC 60335-1 IEC 60335-2-14	Tested with appliance
Supplementary information: ¹⁾ Provided evidence ensures the agreed level of compliance. See OD-CB2039.					

24.1	TABLE: Components information					P
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾	
The test report is only valid in conjunction with the current valid version of the Constructional Data Form (EFSH14090153-IE-01-CDF).						
Supplementary information: ¹⁾ Provided evidence ensures the agreed level of compliance. See OD-CB2039.						

29.1	TABLE: Clearances					P
Overvoltage category			II			
		Type of insulation:				
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***	a	b		>2,0	P
4 000	<u>3,0</u> / 3,5***			>3,9		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

IEC 60335-2-14			
Clause	Requirement - Test	Result - Remark	Verdict

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

Remark:

a. The clearance between motor winding and core, of GHM001 is 2,23mm, 2,0mm required.
The most unfavourable data was recorded.

b. The clearance between internal wiring and accessible surface, of GHM001 is 2,22mm, 1,5mm required.
The most unfavourable data was recorded.

29.2	TABLE: Creepage distances, basic, supplementary and reinforced insulation										P
Working voltage (V)	Creepage distance (mm) Pollution degree							Type of insulation			Verdict
	1	2			3						
	Material group			Material group				B ^{**})	S ^{**})	R ^{**})	Verdict
	I	II	IIIa/IIIb	I	II	IIIa/IIIb [*])					
≤50	0,18	0,6	0,85	1,2	1,5	1,7	1,9		—	—	N/A
≤50	0,18	0,6	0,85	1,2	1,5	1,7	1,9	—		—	N/A
≤50	0,36	1,2	1,7	2,4	3,0	3,4	3,8	—	—		N/A
125	0,28	0,75	1,05	1,5	1,9	2,1	2,4		—	—	N/A
125	0,28	0,75	1,05	1,5	1,9	2,1	2,4	—		—	N/A
125	0,56	1,5	2,1	3,0	3,8	4,2	4,8	—	—		N/A
250	0,56	1,25	1,8	2,5	3,2	3,6	4,0	a	—	—	P
250	0,56	1,25	1,8	2,5	3,2	3,6	4,0	—	b	—	P
250	1,12	2,5	3,6	5,0	6,4	7,2	8,0	—	—	> 10,4	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

IEC 60335-2-14												
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	
>800 and ≤1000	2,4	4,0	5,6	8,0	10,0	11,0	12,5	—		—	N/A	
>800 and ≤1000	4,8	8,0	11,2	16,0	20,0	22,0	25,0	—	—		N/A	
>1000 and ≤1250	3,2	5,0	7,1	10,0	12,5	14,0	16,0		—	—	N/A	
>1000 and ≤1250	3,2	5,0	7,1	10,0	12,5	14,0	16,0	—		—	N/A	
>1000 and ≤1250	6,4	10,0	14,2	20,0	25,0	28,0	32,0	—	—		N/A	
>1250 and ≤1600	4,2	6,3	9,0	12,5	16,0	18,0	20,0		—	—	N/A	
>1250 and ≤1600	4,2	6,3	9,0	12,5	16,0	18,0	20,0	—		—	N/A	
>1250 and ≤1600	8,4	12,6	18,0	25,0	32,0	36,0	40,0	—	—		N/A	
>1600 and ≤2000	5,6	8,0	11,0	16,0	20,0	22,0	25,0		—	—	N/A	
>1600 and ≤2000	5,6	8,0	11,0	16,0	20,0	22,0	25,0	—		—	N/A	
>1600 and ≤2000	11,2	16,0	22,0	32,0	40,0	44,0	50,0	—	—		N/A	
>2000 and ≤2500	7,5	10,0	14,0	20,0	25,0	28,0	32,0		—	—	N/A	
>2000 and ≤2500	7,5	10,0	14,0	20,0	25,0	28,0	32,0	—		—	N/A	
>2000 and ≤2500	15,0	20,0	28,0	40,0	50,0	56,0	64,0	—	—		N/A	
>2500 and ≤3200	10,0	12,5	18,0	25,0	32,0	36,0	40,0		—	—	N/A	
>2500 and ≤3200	10,0	12,5	18,0	25,0	32,0	36,0	40,0	—		—	N/A	
>2500 and ≤3200	20,0	25,0	36,0	50,0	64,0	72,0	80,0	—	—		N/A	
>3200 and ≤4000	12,5	16,0	22,0	32,0	40,0	45,0	50,0		—	—	N/A	
>3200 and ≤4000	12,5	16,0	22,0	32,0	40,0	45,0	50,0	—		—	N/A	
>3200 and ≤4000	25,0	32,0	44,0	64,0	80,0	90,0	100,0	—	—		N/A	
>4000 and ≤5000	16,0	20,0	28,0	40,0	50,0	56,0	63,0		—	—	N/A	
>4000 and ≤5000	16,0	20,0	28,0	40,0	50,0	56,0	63,0	—		—	N/A	
>4000 and ≤5000	32,0	40,0	56,0	80,0	100,0	112,0	126,0	—	—		N/A	
>5000 and ≤6300	20,0	25,0	36,0	50,0	63,0	71,0	80,0		—	—	N/A	
>5000 and ≤6300	20,0	25,0	36,0	50,0	63,0	71,0	80,0	—		—	N/A	
>5000 and ≤6300	40,0	50,0	72,0	100,0	126,0	142,0	160,0	—	—		N/A	
>6300 and ≤8000	25,0	32,0	45,0	63,0	80,0	90,0	100,0		—	—	N/A	
>6300 and ≤8000	25,0	32,0	45,0	63,0	80,0	90,0	100,0	—		—	N/A	
>6300 and ≤8000	50,0	64,0	90,0	126,0	160,0	180,0	200,0	—	—		N/A	
>8000 and ≤10000	32,0	40,0	56,0	80,0	100,0	110,0	125,0		—	—	N/A	
>8000 and ≤10000	32,0	40,0	56,0	80,0	100,0	110,0	125,0	—		—	N/A	

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Clause	Requirement - Test							Result - Remark			Verdict
>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											
Remark:											
a. The creepage distance between motor winding and core, of GHM001 is 2,23mm, 2,0mm required. The most unfavourable data was recorded.											
b. The creepage distance between internal wiring and accessible surface, of GHM001 is 4,17mm, 4,0mm required. The most unfavourable data was recorded.											

29.2	TABLE: Creepage distances, functional insulation								P
Working voltage (V)	Creepage distance (mm)							Verdict / Remark	
	Pollution degree								
	1	2			3				
		Material group			Material group				
		I	II	IIIa/IIIb	I	II	IIIa/IIIb ^{*)}		
≤10	0,08	0,4	0,4	0,4	1,0	1,0	1,0	N/A	
50	0,16	0,56	0,8	1,0	1,4	1,6	1,8	N/A	
125	0,25	0,71	1,0	1,4	1,8	2,0	2,2	N/A	
250	0,42	1,0	1,4	2,0	2,5	2,8	3,2	P(>4,16)	
400	0,75	1,6	2,2	3,2	4,0	4,5	5,0	N/A	
500	1,0	2,0	2,8	4,0	5,0	5,6	6,3	N/A	
>630 and ≤800	1,8	3,2	4,5	6,3	8,0	9,0	10,0	N/A	
>800 and ≤1000	2,4	4,0	5,6	8,0	10,0	11,0	12,5	N/A	
>1000 and ≤1250	3,2	5,0	7,1	10,0	12,5	14,0	16,0	N/A	
>1250 and ≤1600	4,2	6,3	9,0	12,5	16,0	18,0	20,0	N/A	
>1600 and ≤2000	5,6	8,0	11,0	16,0	20,0	22,0	25,0	N/A	
>2000 and ≤2500	7,5	10,0	14,0	20,0	25,0	28,0	32,0	N/A	
>2500 and ≤3200	10,0	12,5	18,0	25,0	32,0	36,0	40,0	N/A	
>3200 and ≤4000	12,5	16,0	22,0	32,0	40,0	45,0	50,0	N/A	

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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	
>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										