# TEST REPORT
# IEC 60335-2-14
## Household and similar electrical appliances – Safety – Part 2-14: Particular requirements for kitchen machines

| | |
|---|---|
| **Report Number. .....:** | 130628039GZU-001 |
| Date of issue .....: | 06 Dec., 2013, Amendment 2: 12 July, 2016 |
| Total number of pages ..... | Test report 93 pages (including 9 pages of photos) |
| **Testing Laboratory.....:** | Intertek Testing Services Shenzhen Ltd. Guangzhou Branch |
| Address .....: | Block E, No.7-2 Guang Dong Software Science Park, Caipin Road, Guangzhou Science City, GETDD, Guangzhou, China |
| **Applicant's name.....:** | Shunde Kilon Electrical Co., Ltd. |
| Address .....: | Xiqing Industrial Area, Longjiang Town,Shunde, Foshan, Guangdong, P. R. China |
| **Test specification:** | -- |
| Standard.....: | IEC 60335-2-14:2006 (Fifth Edition) + A1:2008 in conjunction with IEC 60335-1:2010 (Fifth Edition) |
| Test procedure .....: | -- |
| Non-standard test method……: | N/A |
| **Test Report Form No.....:** | IEC60335_2_14M |
| Test Report Form(s) Originator .....: | CQC |
| Master TRF .....: | Dated 2012-12 |



**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 .....:** | Chopper |
| Trade Mark .....: | Kilon |
| Manufacturer .....: | Shunde Kilon Electrical Co., Ltd. |
| Model/Type reference .....: | KL-218, KL-219, KL-210, KL-210B, KL-210C, KL-210E, KL-210F, KL-212, KL-TS128, KL-TS128A, KL-TS128B, KL-TS128C, KL-TS228, KL-TS228B, KL-TS136G, KL-TS137G, KL-TS138G, KL-TS136, KL-TS137, KL-TS138, KL-TS326, KL-TS327A, KL-TS328, KL-TS337G, KL-TS338G, KL-TS339G, KL-TS337, KL-TS338, KL-TS339, KL-TS336, KL-TS326A, KL-TS329S, KL-TS327S, KL-TS329, KL-TS327, **KL-136** |
| Ratings .....: | 220-240 V, 50/60 Hz, Class II,<br>For KL-210B, KL-TS128, KL-TS128A, KL-TS128B, KL-TS128C, KL-TS228, KL-TS228B: 200-300 W<br>For KL-210, KL-210C, KL-210E, KL-210F, KL-212, KL-TS136G, KL-TS137G, KL-TS138G, KL-TS136, KL-TS137, KL-TS138, **KL-136**: 200-400 W<br>For KL-218, KL-TS326, KL-TS327A, KL-TS328, KL-TS337G, KL-TS338G, KL-TS339G, KL-TS337, KL-TS338, KL-TS339, KL-TS336, KL-TS326A, KL-TS329S, KL-TS327S, KL-TS329, KL-TS327: 250-350 W<br>For KL-219: 180-220 W |

| | | | |
|---|---|---|---|
| **Testing procedure and testing location:** | | | |
| ☒ | **Testing Laboratory:** | Intertek Testing Services Shenzhen Ltd. Guangzhou Branch | |
| **Testing location/ address.....:** | | Block E, No.7-2 Guang Dong Software Science Park, Caipin Road, Guangzhou Science City, GETDD, Guangzhou, China | |
| ☒ | **Associated CB Laboratory:** | | |
| **Testing location/ address.....:** | | | |
| | **Tested by (name + signature).....:** | Haiti Bi/Project Engineer | Haiti Bi |
| | **Approved by (name + signature)..:** | Win Qiu/Technical Manager | |
| ☐ | **Testing procedure: TMP** | N/A | |
| **Testing location/ address.....:** | | | |
| | **Tested by (name + signature).....:** | | |
| | **Approved by (name + signature)..:** | | |
| ☐ | **Testing procedure: WMT** | N/A | |
| **Testing location/ address.....:** | | | |
| | **Tested by (name + signature).....:** | | |
| | **Witnessed by (name + signature).:** | | |
| | **Approved by (name + signature)..:** | | |
| ☐ | **Testing procedure: SMT** | N/A | |
| **Testing location/ address.....:** | | | |
| | **Tested by (name + signature).....:** | | |
| | **Approved by (name + signature)..:** | | |
| | **Supervised by (name + signature):** | | |
| ☐ | **Testing procedure: RMT** | N/A | |
| **Testing location/ address.....:** | | | |
| | **Tested by (name + signature).....:** | | |
| | **Approved by (name + signature)..:** | | |
| | **Supervised by (name + signature):** | | |

**Copy of marking plate**

**English:**

**Chopper**
**Model: KL-219**
**220-240V 50/60 Hz 180-220W**
**Shunde Kilon Electrical Co., Ltd**

**German:**

**Küchenmaschine**
**Modell: KL-219**
**220-240V 50/60 Hz 180-220W**
**Shunde Kilon Electrical Co., Ltd**

**Remark**: the marking labels for other models are identical except the model name and power input.

**Summary of testing:**

1. The submitted samples were tested and found to compliance with requirements of the standard EN 60335-2-14: 2006 + A1: 2008 +A11:2012+AC: 2013 in conjunction with EN 60335-1: 2012+ AC: 2014+A11: 2014.

2. The product has been evaluated and complied with the decision AfPS GS 2014:01 PAK

3. The product has been tested and complied with the standard EN 62233: 2008 for EMF.

| **Tests performed (name of test and test clause):** | **Testing location:** |
|---|---|
| See page 5. | Block E, No.7-2 Guang Dong Software Science Park, Caipin Road, Guangzhou Science City, GETDD, Guangzhou, China |

**Summary of compliance with National Differences:**

EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES were considered:

Germany and United states

| | |
|---|---|
| **Test item particulars** ..... : | |
| Classification of installation and use ..... : | Portable appliance and household use only |
| Supply Connection ..... : | Non detachable power cord with plug |

| | |
|---|---|
| **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 ..... | 06 June, 2016 |
| Date (s) of performance of tests ..... | 06 June, 2016-07 July, 2016 |

**General remarks:**

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.

Throughout this report a comma is used as the decimal separator.
When determining of test conclusion, measurement uncertainty of test has been considered.



The test report only allows to be revised only within the report defined retention period unless standard or regulation was withdrawn or invalid.

**Remarks:**

Amendment 2:

This test report was appended to test report 130628039GZU-001, 06 Dec., 2013 and Amendment 1: 11 Nov., 2015 (GS certificate No. 08GZH2409-03), because of following changes

1. Added new model KL-136 the difference between models, refer to General product information and photo for detail.
2. Add alternative power switch with new internal wire connection which same as of KL-136 for models KL-210E and KL-210F.
3. Changed interlock internal position and no any changes of interloch device for models KL-212, KL-TS128, KL-TS128A, KL-TS128B, KL-TS128C.

For above changed:

Clause 7, 8, 10, 11.8, 13,15,16,19,20,21,22,23,24,25,29,Annex H and construction were re-evaluated on model KL-136 with 1,0l Plastic container.

Clause 11.8,13 and Annex H were re-evaluated on model KL-210F.

Clause 11.8 and construction check were re-evaluated on model KL-212, KL-TS128.

PAH test according to AfPS GS 2014:01 PAK is considered and passed, please refer to PAH test report 13628039GZU-PAH1 for details

This test report is valid only when in conjunction with test report 130628039GZU-001, 06 Dec., 2013 and Amendment 1: 11 Nov., 2015

| **Manufacturer's Declaration per sub-clause 6.2.5 of IECEE 02:** | |
|---|---|
| **The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided .....:** | ☐ **Yes**<br>☒ **Not applicable** |

**When differences exist; they shall be identified in the General product information section.**

| | |
|---|---|
| **Name and address of factory (ies) .....:** | Shunde Kilon Electrical Co., Ltd.<br>Xiqing Industrial Area, Longjiang Town, Shunde, Foshan, Guangdong, P. R. China |

General product information:

Portable chopper for household and indoor use only.

KL-218 and KL-219 were different than other models.

KL-210, KL-210B, KL-210C, KL-210E, KL-210F, KL-212, KL-TS128, KL-TS128A, KL-TS128B, KL-TS128C, KL-TS228, KL-TS228B, **KL-136** are identical except for rated power and appearance and capacity and container and size.

| Model | Rated power | Capacity of container | Power switch |
|---|---|---|---|
| KL-210 | 200-400 W | 1,5l(one Glass+ two Plastic container); 1,2l(one Glass+ one Plastic container); 1,0l(one Glass+ two Plastic container); 0,6l(one Glass+ one Plastic container); | Two speed |
| KL-210B | 200-300 W | | Two speed |
| KL-210C | 200-400 W | | Two speed |
| KL-210E | 200-400 W | | One high speed |
| KL-210F | 200-400 W | | One high speed |
| KL-212 | 200-400 W | | Two speed switch |
| **KL-136** | 200-400 W | 0,5l(one Plastic container) | One high speed |
| | | 1,0l(one glass container) | |
| KL-TS128 | 200-300 W | 0,6l(one Plastic container) | Two speed switch |
| KL-TS128A | 200-300 W | 0,6l(one Plastic container) | No |
| KL-TS128B | 200-300 W | 0,6l(one Plastic container) | Two speed switch |
| KL-TS128C | 200-300 W | 0,6l(one Plastic container) | No |
| KL-TS228 | 200-300 W | 0,8l(one Plastic container) | Two speed switch |
| KL-TS228B | 200-300 W | 0,8l(one Plastic container) | No |

Model KL-212 is identical with model KL-210 except appearance and additional interlock switch.

Model KL-TS136G, KL-TS137G, KL-TS138G, KL-TS136, KL-TS137, KL-TS138 and KL-210 were identical except the model name.

Model KL-TS326, KL-TS327A, KL-TS328, KL-TS337G, KL-TS338G, KL-TS339G, KL-TS337, KL-TS338, KL-TS339, KL-TS336, KL-TS326A, KL-TS329S, KL-TS327S, KL-TS329, KL-TS327and KL-218 were identical except the model name.

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 7 | MARKING AND INSTRUCTIONS | | -- |
| 7.1 | Rated voltage or voltage range (V) ..... .....: | 220-240 V | P |
| | Symbol for nature of supply, or ..... .....: | | N/A |
| | Rated frequency (Hz) ..... .....: | 50/60 Hz | P |
| | Rated power input is marked. (IEC 60335-2-14) | Refer to page 2 | P |
| | Rated current (A) ..... .....: | | N/A |
| | Manufacturer's or responsible vendor's name, trademark or identification mark..... .....: | Shunde Kilon Electrical Co., Ltd. | P |
| | Model or type reference ..... .....: | Refer to page 2 | P |
| | Symbol IEC 60417-5172, for class II appliances | ⧈ | P |
| | IP number, other than IPX0..... .....: | IPX0 | N/A |
| | Symbol IEC 60417-5180, for class III appliances, unless | | N/A |
| | the appliance is operated by batteries only | | N/A |
| | Symbol IEC 60417-5036, for the enclosure of electrically-operated water valves in external hose-sets for connection of an appliance to the water mains, if the working voltage exceeds extra-low voltage | | N/A |
| | Stands provided with cordless blenders are marked with: (IEC 60335-2-14) | | N/A |
| | - the name, trademark or identification mark of the manufacturer or responsible vendor | | N/A |
| | - the model or type reference | | N/A |
| 7.2 | Warning for stationary appliances for multiple supply | | N/A |
| | Warning placed in vicinity of terminal cover | | N/A |
| 7.3 | Range of rated values marked with the lower and upper limits separated by a hyphen | 220-240 V | P |
| | Different rated values marked with the values separated by an oblique stroke | | N/A |
| 7.4 | Appliances adjustable for different rated voltages, the voltage setting is clearly discernible | | N/A |
| | Requirement met if frequent changes are not required and the rated voltage to which the appliance is to be adjusted is determined from a wiring diagram | | N/A |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 7.5 | Appliances with more than one rated voltage or one or more rated voltage ranges, marked with rated input or rated current for each rated voltage or range, unless | | N/A |
| | the power input is related to the arithmetic mean value of the rated voltage range | | P |
| | Relation between marking for upper and lower limits of rated power input or rated current and voltage is clear | | N/A |
| 7.6 | Correct symbols used | | P |
| | Symbol for nature of supply placed next to rated voltage | | P |
| | Symbol for class II appliances placed unlikely to be confused with other marking | | P |
| | Units of physical quantities and their symbols according to international standardized system | | P |
| 7.7 | Connection diagram fixed to appliances to be connected to more than two supply conductors and appliances for multiple supply, unless | | N/A |
| | correct mode of connection is obvious | | N/A |
| 7.8 | Except for type Z attachment, terminals for connection to the supply mains indicated as follows: | | -- |
| | - marking of terminals exclusively for the neutral conductor (letter N) | | N/A |
| | - marking of protective earthing terminals (symbol IEC 60417-5019) | | N/A |
| | - marking not placed on removable parts | | N/A |
| 7.9 | Marking or placing of switches which may cause a hazard | | P |
| 7.10 | Indications of switches on stationary appliances and controls on all appliances by use of figures, letters or other visual means ..... .....: | Letters and figures | P |
| | This applies also to switches which are part of a control | | P |
| | If figures are used, the off position indicated by the figure 0 | | P |
| | The figure 0 indicates only OFF position, unless no confusion with the OFF position | | P |
| 7.11 | Indication for direction of adjustment of controls | | P |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 7.12 | Instructions for safe use provided | | P |
| | Details concerning precautions during user maintenance | | P |
| | The instructions state that: | | -- |
| | - the appliance is not to be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction | Replaced by EN deviation | N/A |
| | - children being supervised not to play with the appliance | Replaced by EN deviation | N/A |
| | For a part of class III construction supplied from a detachable power supply unit, the instructions state that the appliance is only to be used with the unit provided | | N/A |
| | Instructions for class III appliances state that it must only be supplied at SELV, unless | | N/A |
| | it is a battery-operated appliance, the battery being charged outside the appliance | | N/A |
| | Instructions include the operating times and speed settings for accessories (IEC 60335-2-14) | | P |
| | Accessories, other than those supplied with the appliance, include instructions for their safe use. (IEC 60335-2-14) | | N/A |
| | Adequate instruction for use for slicing machines provided with a base having a plain surface underneath the sliding feed table (IEC 60335-2-14) | | N/A |
| | The instructions for food processors and blenders warn against misuse (IEC 60335-2-14) | | P |
| | Instructions for hand-held blenders : (IEC 60335-2-14) | | -- |
| | - always disconnect the blender from the supply if it is left unattended and before assembling, disassembling or cleaning | | N/A |
| | - do not allow children to use the blender without supervision. | | N/A |
| | The instructions for centrifugal juicers shall include the substance of the following: (IEC 60335-2-14) | | -- |
| | - Do not use the appliance if the rotating sieve is damaged. | | N/A |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | The instructions for cordless blenders state that the blender is only to be used with the stand provided. (IEC 60335-2-14) | | N/A |
| | The blender and stand of the cordless blender can be lifted together by gripping the handle of the blender, the instructions include the substance of the following: (IEC 60335-2-14) | | -- |
| | CAUTION: Ensure that the blender is switched off before removing it from the stand. | | N/A |
| | The instructions include details on how to clean surfaces in contact with food (IEC 60335-2-14) | | P |
| | The instructions for appliances incorporating a switch necessary for compliance with 22.40 include the substance of the following: (IEC 60335-2-14) | | -- |
| | Switch off the appliance and disconnect from supply before changing accessories or approaching parts that move in use | | P |
| 7.12.1 | Sufficient details for installation supplied | | P |
| | For an appliance intended to be permanently connected to the water mains and not connected by a hose-set, this is stated | | N/A |
| 7.12.2 | Stationary appliances not fitted with means for disconnection from the supply mains having a contact separation in all poles that provide full disconnection under overvoltage category III, the instructions state that means for disconnection must be incorporated in the fixed wiring in accordance with the wiring rules | | N/A |
| 7.12.3 | Insulation of the fixed wiring in contact with parts exceeding 50 K during clause 11; instructions state that the fixed wiring must be protected | | N/A |
| 7.12.4 | Instructions for built-in appliances: | | -- |
| | - dimensions of space | | N/A |
| | - dimensions and position of supporting and fixing | | N/A |
| | - minimum distances between parts and surrounding structure | | N/A |
| | - minimum dimensions of ventilating openings and arrangement | | N/A |
| | - connection to supply mains and interconnection of separate components | | N/A |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | - allow disconnection of the appliance after installation, by accessible plug or a switch in the fixed wiring, unless | | N/A |
| | a switch complying with 24.3 | | N/A |
| 7.12.5 | Replacement cord instructions, type X attachment with a specially prepared cord | | N/A |
| | Replacement cord instructions, type Y attachment | | P |
| | Replacement cord instructions, type Z attachment | | N/A |
| 7.12.6 | Caution in the instructions for appliances incorporating a non-self-resetting thermal cut-out that is reset by disconnection of the supply mains, if this cut-out is required to comply with the standard | | N/A |
| 7.12.7 | Instructions for fixed appliances stating how the appliance is to be fixed | | N/A |
| 7.12.8 | Instructions for appliances connected to the water mains: | | -- |
| | - max. inlet water pressure (Pa) ..... .....: | | N/A |
| | - min. inlet water pressure, if necessary (Pa).....: | | N/A |
| | Instructions concerning new and old hose-sets for appliances connected to the water mains by detachable hose-sets | | N/A |
| 7.13 | Instructions and other texts in an official language | English and German | P |
| 7.14 | Marking clearly legible and durable, rubbing test as specified | | P |
| 7.15 | Markings on a main part | On the bottom | P |
| | Marking clearly discernible from the outside, if necessary after removal of a cover | | P |
| | For portable appliances, cover can be removed or opened without a tool | | N/A |
| | For stationary appliances, name, trademark or identification mark and model or type reference visible after installation | | N/A |
| | For fixed appliances, name, trademark or identification mark and model or type reference visible after installation according to the instructions | | N/A |
| | Indications for switches and controls placed on or near the components. Marking not on parts which can be positioned or repositioned in such a way that the marking is misleading | | P |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 7.16 | Marking of a possible replaceable thermal link or fuse link clearly visible with regard to replacing the link | | N/A |
| 8 | PROTECTION AGAINST ACCESS TO LIVE PARTS | | -- |
| 8.1 | Adequate protection against accidental contact with live parts | | P |
| 8.1.1 | Requirement applies for all positions, detachable parts removed | | P |
| | Lamps behind a detachable cover not removed, if conditions met | | N/A |
| | Insertion or removal of lamps, protection against contact with live parts of the lamp cap | | N/A |
| | 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 μF | | N/A |
| | - for peak values over 450 V up to and including 15 kV, discharge not exceeding 45 μC | | N/A |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | - 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 |
| | - 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 | | P |
| | the rated power input is related to the arithmetic mean value | | N/A |
| | 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 |
| 10.2 | Current at normal operating temperature, rated voltage and normal operation not deviating from rated current by more than shown in table 2.....: | | N/A |
| | Test carried out at upper and lower limits of the ranges for appliances with one or more rated voltage ranges, unless | | N/A |
| | the rated current is related to the arithmetic mean value of the range | | N/A |
| 11 | HEATING | | -- |
| 11.1 | No excessive temperatures in normal use | | P |
| 11.2 | The appliance is held, placed or fixed in position as described.....: | On floor of the test corner and away from the walls | P |
| 11.3 | Temperature rises, other than of windings, determined by thermocouples | | P |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | 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).....: | 240 x 1,06 = 254,4 V | P |
| 11.6 | Combined appliances operated under normal operation at most unfavourable voltage between 0.94 and 1.06 times rated voltage (V).....: | | N/A |
| 11.7 | The appliance is operated for the period specified and where relevant the number of cycles specified (IEC 60335-2-14/A1:2008) | (see appended tables) | P |
| | If the period exceeds that stated in the instructions and if the temperature rise limits of Table 3 are exceeded, 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 for: (IEC 60335-2-14/A1:2008) | | —— |
| | — the maximum period stated in the instructions plus 1 min, for specified operating periods not exceeding 7 min | | N/A |
| | — the maximum period stated in the instructions, for specified operating periods exceeding 7 min | | N/A |
| | 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<br>(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 |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | 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 |
| 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).....: | 1,06 x 240 V = 254,4 V | P |
| | Protective impedance and radio interference filters disconnected before carrying out the tests | | P |
| 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 | | -- |
| 15.1 | Enclosure provides the degree of moisture protection according to classification of the appliance | IPX0 | N/A |
| | Compliance checked as specified in 15.1.1, taking into account 15.1.2, followed by the electric strength test of 16.3 | | N/A |
| | No trace of water on insulation which can result in a reduction of clearances or creepage distances below values specified in clause 29 | | N/A |
| 15.1.1 | Appliances, other than IPX0, subjected to tests as specified in IEC 60529 .....: | | N/A |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | Water valves containing live parts in external hoses for connection of an appliance to the water mains tested as specified for IPX7 appliances | | N/A |
| 15.1.2 | Hand-held appliance turned continuously through the most unfavourable positions during the test | | N/A |
| | Built-in appliances installed according to the instructions | | N/A |
| | Appliances placed or used on the floor or table placed on a horizontal unperforated support | | N/A |
| | Appliances normally fixed to a wall and appliances with pins for insertion into socket-outlets are mounted on a wooden board | | N/A |
| | For IPX3 appliances, the base of wall mounted appliances is placed at the same level as the pivot axis of the oscillating tube | | N/A |
| | For IPX4 appliances, the horizontal centre line of the appliance is aligned with the pivot axis of the oscillating tube, and | | N/A |
| | for appliances normally used on the floor or table, the movement is limited to two times 90° for a period of 5 min, the support being placed at the level of the pivot axis of the oscillating tube | | N/A |
| | Wall-mounted appliances, take into account the distance to the floor stated in the instructions | | N/A |
| | Appliances normally fixed to a ceiling are mounted underneath a horizontal unperforated support, the pivot axis of the oscillating tube located at the level of the underside of the support, and | | N/A |
| | for IPX4 appliances, the movement of the tube is limited to two times 90° from the vertical for a period of 5 min | | N/A |
| | Appliances with type X attachment fitted with a flexible cord as described | | N/A |
| | Detachable parts subjected to the relevant treatment with the main part | | N/A |
| | However, if a part has to be removed for user maintenance and a tool is needed, this part is not removed | | N/A |
| 15.2 | Spillage of liquid does not affect the electrical insulation | | P |
| | Appliances with type X attachment fitted with a flexible cord as described | | N/A |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | Appliances incorporating an appliance inlet tested with or without an connector, whichever is most unfavourable | | N/A |
| | Detachable parts are removed | | P |
| | 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) | | P |
| | 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) | 0,25 l | P |
| | Water outlets for potato peelers are blocked. (IEC 60335-2-14) | | N/A |
| | 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 | | P |
| | No trace of water on insulation that can result in a reduction of clearances or creepage distances below values specified in clause 29 | | P |
| 15.3 | Appliances proof against humid conditions | 25 °C, 93% R.H. | 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 | | P |
| | Reassembly of those parts that may have been removed | | P |
| | The appliance withstands the tests of clause 16 | | P |
| 15.101 | Connecting devices of stands for cordless blenders are not affected by water. (IEC 60335-2-14) | | N/A |
| | Compliance is checked by the following test. | | N/A |
| | The stand withstands the dielectric strength test of 16.3. | | N/A |
| 16 | LEAKAGE CURRENT AND ELECTRIC STRENGTH | | -- |
| 16.1 | Leakage current not excessive and electric strength adequate | | P |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | 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).....: | 1,06 x 240 V = 254,4 V | P |
| | Three-phase appliances: test voltage 1.06 times rated voltage divided by √3 (V) .....: | | N/A |
| | Leakage current measurements .....: | (see appended table) | P |
| | Limit values doubled if: | | -- |
| | - all controls have an off position in all poles, or | | N/A |
| | - the appliance has no control other than a thermal cut-out, or | | N/A |
| | - all thermostats, temperature limiters and energy regulators do not have an off position, or | | N/A |
| | - the appliance has radio interference filters | | P |
| | With the radio interference filters disconnected, the leakage current do not exceed limits specified .....: | (see appended table) | P |
| 16.3 | Electric strength tests according to table 7 .....: | (see appended table) | P |
| | Test voltage applied between the supply cord and inlet bushing and cord guard and cord anchorage as specified .....: | (see appended table) | P |
| | No breakdown during the tests | | P |
| 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 .....: | | P |
| | 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 |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | Appliances incorporating motors subjected to the tests of 19.7 to 19.10, as applicable | | P |
| | Appliances incorporating electronic circuits subjected to the tests of 19.11 and 19.12, as applicable | | P |
| | Appliances incorporating contactors or relays subjected to the test of 19.14, being carried out before the tests of 19.11 | | 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 berry-juice extractors, blenders for food, centrifugal juicers, churns, food mixers, food processors, ice-cream machines, mincers, and noodle makers. (IEC 60335-2-14) | Food processor | P |
| | 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 |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | 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 |
| | Winding temperatures not exceeding values specified in table 8.....: | | 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 processor | 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 |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | Motor-operated and combined appliances for which 30.2.3 is applicable and that use overload protective devices relying on electronic circuits to protect the motor windings, are also subjected to the test | | N/A |
| | Winding temperatures not exceeding values as specified .....: | | N/A |
| 19.10 | Series motor operated at 1.3 times rated voltage for 1 min (V).....: | 1,3 x 240 V = 312 V | 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 |
| 19.11 | Electronic circuits, compliance checked by evaluation of the fault conditions specified in 19.11.2 for all circuits or parts of circuits, unless | | P |
| | they comply with the conditions specified in 19.11.1 | | N/A |
| | Appliances incorporating an electronic circuit that relies upon a programmable component to function correctly, subjected to the test of 19.11.4.8, unless | | N/A |
| | restarting does not result in a hazard | | N/A |
| | Appliances having a device with an off position obtained by electronic disconnection, or a device placing the appliance in a stand-by mode, subjected to the tests of 19.11.4 | | N/A |
| | If the safety of the appliance under any of the fault conditions depends on the operation of a miniature fuse-link complying with IEC 60127, the test of 19.12 is carried out | | N/A |
| | During and after each test the following is checked: | | -- |
| | - the temperature of the windings do not exceed the values specified in table 8 | | P |
| | - the appliance complies with the conditions specified in 19.13 | | P |
| | - any current flowing through protective impedance not exceeding the limits specified in 8.1.4 | | N/A |
| | If a conductor of a printed board becomes open-circuited, the appliance is considered to have withstood the particular test, provided both of the following conditions are met: | | -- |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | - the base material of the printed circuit board withstands the test of Annex E | | N/A |
| | - any loosened conductor does not reduce clearance or creepage distances between live parts and accessible metal parts below the values specified in clause 29 | | N/A |
| 19.11.1 | Fault conditions a) to g) in 19.11.2 are not applied to circuits or parts of circuits meeting both of the following conditions: | | -- |
| | - the electronic circuit is a low-power circuit, that is, the maximum power at low-power points does not exceed 15 W according to the tests specified | | N/A |
| | - the protection against electric shock, fire hazard, mechanical hazard or dangerous malfunction of other parts of the appliance does not rely on the correct functioning of the electronic circuit | | N/A |
| 19.11.2 | Fault conditions applied one at a time, the appliance operating under conditions specified in clause 11, but supplied at rated voltage, duration of the tests as specified: | | -- |
| | a) short circuit of functional insulation if clearances or creepage distances are less than the values specified in clause 29 | | N/A |
| | b) open circuit at the terminals of any component | | P |
| | c) short circuit of capacitors, unless | | N/A |
| | they comply with IEC 60384-14 | Certified | P |
| | d) short circuit of any two terminals of an electronic component, other than integrated circuits | | N/A |
| | This fault condition is not applied between the two circuits of an optocoupler | | N/A |
| | e) failure of triacs in the diode mode | | N/A |
| | f) failure of microprocessors and integrated circuits | | N/A |
| | g) failure of an electronic power switching device | | N/A |
| | Each low power circuit is short-circuited by connecting the low-power point to the pole of the supply source from which the measurements were made | | N/A |
| 19.11.3 | If the appliance incorporates a protective electronic circuit which operates to ensure compliance with clause 19, the relevant test is repeated with a single fault simulated, as indicated in a) to g) of 19.11.2 | | N/A |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 19.11.4 | Appliances having a device with an off position obtained by electronic disconnection, or | | N/A |
| | a device that can be placed in the stand-by mode, | | N/A |
| | subjected to the tests of 19.11.4.1 to 19.11.4.7, the device being set in the off position or in the stand-by mode | | N/A |
| | Appliances incorporating a protective electronic circuit subjected to the tests of 19.11.4.1 to 19.11.4.7, the tests being carried out after the protective electronic circuit has operated, except that | | N/A |
| | appliances operated for 30 s or 5 min during the test of 19.7 are not subjected to the tests for electromagnetic phenomena. | | N/A |
| | Surge protective devices disconnected, unless | | N/A |
| | They incorporate spark gaps | | N/A |
| 19.11.4.1 | The appliance is subjected to electrostatic discharges in accordance with IEC 61000-4-2, test level 4 | | N/A |
| 19.11.4.2 | The appliance is subjected to radiated fields in accordance with IEC 61000-4-3, test level 3 | | N/A |
| 19.11.4.3 | The appliance is subjected to fast transient bursts in accordance with IEC 61000-4-4, test level 3 or 4 as specified | | N/A |
| 19.11.4.4 | The power supply terminals of the appliance subjected to voltage surges in accordance with IEC 61000-4-5, test level 3 or 4 as specified | | N/A |
| | Earthed heating elements in class I appliances disconnected | | N/A |
| 19.11.4.5 | The appliance is subjected to injected currents in accordance with IEC 61000-4-6, test level 3 | | N/A |
| 19.11.4.6 | Appliances having a rated current not exceeding 16 A are subjected to the Class 3 voltage dips and interruptions in accordance with IEC 61000-4-11 | | N/A |
| | Appliances having a rated current exceeding 16 A are subjected to the Class 3 voltage dips and interruptions in accordance with IEC 61000-4-34 | | N/A |
| 19.11.4.7 | The appliance is subjected to mains signals in accordance with IEC 61000-4-13, test level class 2 | | N/A |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 19.11.4.8 | The appliance is supplied at rated voltage and operated under normal operation. After 60s the power supply is reduced to a level such that the appliance ceases to respond or parts controlled by the programmable component cease to operate | | N/A |
| | The appliance continues to operate normally, or | | N/A |
| | requires a manual operation to restart | | N/A |
| 19.12 | If the safety of the appliance for any of the fault conditions specified in 19.11.2 depends on the operation of a miniature fuse-link complying with IEC 60127, the test is repeated, measuring the current flowing through the fuse-link; measured current (A); rated current of the fuse-link (A).....: | | 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 | | N/A |
| | Insulation, other than of class III appliances or class III constructions that do not contain live parts, withstands the electric strength test of 16.3, the test voltage as specified in table 4: | | -- |
| | - basic insulation (V).....: | Live parts to motor body: 1000 V | P |
| | - supplementary insulation (V) .....: | Basic insulated wiring to accessible plastic enclosure: 1750V | P |
| | - reinforced insulation (V) .....: | Live parts to accessible plastic enclosure: 3000V | P |
| | After operation or interruption of a control, clearances and creepage distances across the functional insulation withstand the electric strength test of 16.3, the test voltage being twice the working voltage | | P |
| | The appliance does not undergo a dangerous malfunction, and | | P |
| | no failure of protective electronic circuits, if the appliance is still operable | | N/A |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | Appliances tested with an electronic switch in the off position, or in the stand-by mode: | | -- |
| | - 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: | | -- |
| | - 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 |
| 19.14 | Appliances operated under the conditions of clause 11, any contactor or relay contact operating under the conditions of clause 11 being short-circuited | | N/A |
| | For a relay or contactor with more than one contact, all contacts are short-circuited at the same time | | N/A |
| | A relay or contactor operating only to ensure the appliance is energized for normal use is not short-circuited | | N/A |
| | If more than one relay or contactor operates in clause 11, they are short-circuited in turn | | N/A |
| 19.15 | For appliances with a mains voltage selector switch, the switch is set to the lowest rated voltage position and the highest value of rated voltage is applied | | N/A |
| 19.101 | Coffee mills and grain grinders are supplied at rated voltage and operated under normal operation five times with rest periods. (IEC 60335-2-14) | | N/A |
| 19.102 | Coffee mills and grain grinders subjected to the test as specified in IEC 60335-2-14 and carried out on three additional appliances. (IEC 60335-2-14) | | N/A |
| | If any of the motors stall, original appliance subjected to the test of 19.7 | | N/A |
| 20 | STABILITY AND MECHANICAL HAZARDS | | -- |
| 20.1 | Appliances having adequate stability | | P |
| | Tilting test through an angle of 10°, appliance placed on an inclined plane/horizontal support, not connected to the supply mains; appliance does not overturn | | P |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | Tilting test repeated on appliances with heating elements, angle of inclination increased to 15° | | N/A |
| | Possible heating test in overturned position; temperature rise does not exceed values shown in table 9 | | N/A |
| 20.2 | Moving parts adequately arranged or enclosed as to provide protection against personal injury | | P |
| | Protective enclosures, guards and similar parts are non-detachable, and | | P |
| | have adequate mechanical strength | | P |
| | Enclosures that can be opened by overriding an interlock are considered to be detachable parts | | P |
| | Self-resetting thermal cut-outs and 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 | | P |
| | Test probe not applied to: (IEC 60335-2-14) | | -- |
| | - appliances specified in the list | | N/A |
| | – 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) | | -- |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | - a height of at least 100 mm, measured from the upper edge of the cutting blade .....: | For KL-218: 116,2 mm | P |
| | - an average of the maximum and minimum cross-sectional dimensions of the feed opening that does not exceed 65.5 mm ..... : | For KL-218: 58,6 mm | P |
| | - a maximum cross-sectional dimension of the feed opening that does not exceed 76 mm ..... : | For KL-218: 62,8 mm | P |
| | 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 |
| 20.101 | Accessories for cream whippers, egg beaters and hand-held food mixers have no knife edges, unless a suitable guard prevents accidental contact with their rotating parts (IEC 60335-2-14) | | N/A |
| | Hand-held food mixer: not possible to release the working tools while rotating at a speed exceeding 1500rev/min | | N/A |
| 20.102 | Blades of hand-held blenders are completely screened from above and are not able to touch a flat surface while rotating (IEC 60335-2-14) | | N/A |
| | Not possible to touch the blades with the end of the test rod (diameter 8 mm) and checked by inspection | | N/A |
| 20.103 | Biased-off switch of hand-held blenders recessed or otherwise guarded: Test with a cylindrical rod having a diameter of 40 mm and hemispherical end: appliance does not operate. (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 |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 20.105 | Centrifugal juicers (IEC 60335-2-14) | | -- |
| | - lids and covers do not open due to vibration | | N/A |
| | - rotating parts adequately secured against becoming loose during operation | | N/A |
| | - If speed of rotating parts >5000rev/min: lids and covers can only be closed after removal of tools | | N/A |
| | - teeth of grating disks do not exceed 1,5mm in height | | N/A |
| | - Ejectors on filter drums shall not project by more than 4 mm. | | N/A |
| | - feed pusher provided, of a size that fills the throat of the hopper | | N/A |
| | - lids and covers do not open by force test of 5N | | N/A |
| 20.106 | For appliances having a feed screw: (IEC 60335-2-14)<br>- the maximum cross-sectional dimension of the hopper not exceed 45 mm. | | N/A |
| | - provide a feed pusher and the feed screw of the appliance is not accessible to test probe B of IEC 61032 with the pusher in position (IEC 60335-2-14/A1:2008) | | N/A |
| 20.107 | Slicing machines, other than fixed appliances and those having a biased-off switch, incorporate means to hold the appliance in place and allow it to be released after use: no move on glass plate when subjected to test as specified. (IEC 60335-2-14) | | N/A |
| 20.108 | slicing machines: (IEC 60335-2-14) | | —— |
| | - provided with a guard surrounding the knife and its edge | | N/A |
| | - guard opening as small as permitted by effective use | | N/A |
| | - edge of knife guarded as shown in Fig.101 | | N/A |
| | Knife guards shall be non-detachable unless the motor cannot be switched on after their removal. | | N/A |
| | It shall not be possible to operate interlocks by means of test probe B of IEC 61032. | | N/A |
| | Angle of the upper part of guard opening not exceed 75° | | N/A |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | The angle may be increased to 90° if the exposed part of the knife exceeding 75° is screened from above. | | N/A |
| | Radial distance not exceed 2 mm, if the guard is flush with the plane of the knife; or | | N/A |
| | 3 mm, if the guard projects at least 0,2 mm beyond the plane of the knife. | | N/A |
| | Distance between the outer circumference of the knife and the plate that sets the thickness of the slices shall not exceed 6 mm. | | N/A |
| | Distance between the plate that sets the thickness of the slices and any other protecting part shall not exceed 5 mm. | | N/A |
| | Additional guard provided if slices thicker than 15mm allowed | | N/A |
| | Slicing machines shall incorporate a sliding feed table with a hand rest, a thumb guard and a piece holder. | | N/A |
| | Sliding feed table adequately designed (f_30mm, d≤ 5mm, thumb guard projects radially by at least 8mm beyond the blades) | | N/A |
| | Piece holder enables small pieces to be sliced | | N/A |
| | Dimensions of spikes or similar as specified | | N/A |
| | Support of sliding table not usable for supplying food without the table in position; verified dash Nos. | | N/A |
| 20.109 | Slicing machines constructed so that accidental operation of the appliance is prevented. (IEC 60335-2-14) | | N/A |
| | Actuating member of push-button, toggle, rocker or slide switch recessed and actuated with force at least 2N. | | N/A |
| | Actuating member of slide switch located so that unintentional actuation is unlikely and actuated with force at least 5N. | | N/A |
| 20.110 | The cutting blades of bean slicers: (IEC 60335-2-14) | | —— |
| | - are at least 30 mm from the plane of the inlet opening. | | N/A |
| | - length of the major and minor axis of the inlet and outlet openings not exceed 30 mm and 15 mm | | N/A |
| | - dimensions of outlet openings not limited if compliance with test specified. | | N/A |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 20.111 | The rotating parts of blenders, graters and shredders:<br>- are secured so that they are not liable to become loose during operation. (IEC 60335-2-14) | | P |
| | - a feed pusher shall be provided which fills the throat of the hopper | | P |
| 20.112 | The cutting blade of food processors stopped within 1,5 s after the lid has been opened or removed. (IEC 60335-2-14) | | P |
| 20.113 | The lid interlock of food processors shall be constructed so that accidental operation of the appliances is prevented (IEC 60335-2-14) | | P |
| | Lid interlock switches shall be biased-off switches | | P |
| | If there is an interlock between the lid and the main switch, the lid shall be locked when the switch is in the on position | | P |
| | When the lid is not correctly closed , the switch shall be locked in the off position | | P |
| 20.114 | Access to dangerous moving parts of food processors prevented for all combinations of assembly of detachable parts that allow the motor to operate: comply with test as specified (IEC 60335-2-14) | | P |
| 20.115 | Knives shall incorporate a biased-off switch that is recessed or guarded to prevent accidental operation. (IEC 60335-2-14) | | N/A |
| | Appliance don't operate when applying a cylindrical rod with diameter 40mm to the switch | | N/A |
| 20.116 | Centrifugal juicers for fruit and vegetables shall be constructed so that parts cannot become disengaged when the appliance is operated at high speed. (IEC 60335-2-14) | | N/A |
| | Lid removed, appliance supply at rated voltage and highest speed (10 times): no part of appliance disengaged | | N/A |
| | Lid in position, when the speed reaches its maximum value, attempt is made to remove the lid<br>( 10 times ): no part of appliance disengaged | | N/A |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 20.117 | Centrifugal juicers shall withstand the stresses resulting from parts rotating at high speed (IEC 60335-2-14) | | N/A |
| | Compliance is checked by the following test which is carried out on three new appliance) | | N/A |
| | Or by testing the sieve in accordance with Annex AA. | | N/A |
| | The rim of plastic material retaining the rotating sieve is cut | | N/A |
| | If the sieve retains its structure, the rim is cut further and the test repeated until disintegration takes place | | N/A |
| | During the test, parts shall not be ejected from the appliance. | | N/A |
| 20.118 | The operation of cordless appliances incorporating cutting blades that are accessible to test probe B of IEC 61032 shall require two separate movements, unless (IEC 60335-2-14) | | N/A |
| | The control device is not directly accessible to the probe. | | N/A |
| 20.119 | Bowl and cutting blades of food blenders and hand-held blenders shall have adequate mechanical strength. (IEC 60335-2-14) | | N/A |
| | After the test, the bowl and cutting blades shall not be broken. | | 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 |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 21.2 | Accessible parts of solid insulation having strength to prevent penetration by sharp implements | | P |
| | Test not applicable if the thickness of supplementary insulation is at least 1 mm and reinforced insulation at least 2 mm | | P |
| | The insulation is tested as specified, and does withstand the electric strength test of 16.3 | | N/A |
| 22 | CONSTRUCTION | | -- |
| 22.1 | Appliance marked with the first numeral of the IP system, relevant requirements of IEC 60529 are fulfilled | IPX0 | N/A |
| 22.2 | Stationary appliance: means to ensure all-pole disconnection from the supply being provided: | | -- |
| | - 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 |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 22.5 | No risk of electric shock when touching the pins of the plug, for appliances having a capacitor with rated capacitance exceeding 0,1μF, the appliance being disconnected from the supply at the instant of voltage peak | | P |
| | Voltage not exceeding 34 V (V) .....: | 4,5 V | P |
| 22.6 | Electrical insulation not affected by condensing water or leaking liquid | | P |
| | Electrical insulation of Class II appliances not affected if a hose ruptures or seal leaks | | N/A |
| | In case of doubt, test as described | | N/A |
| 22.7 | Adequate safeguards against the risk of excessive pressure in appliances containing liquid or gases or having steam-producing devices | | N/A |
| 22.8 | Electrical connections not subject to pulling during cleaning of compartments to which access can be gained without the aid of a tool, and that are likely to be cleaned in normal use | | N/A |
| 22.9 | Insulation, internal wiring, windings, commutators and slip rings not exposed to oil, grease or similar substances, unless | | 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 | Enclosure fixed by screw | P |
| | Obvious locked position of snap-in devices used for fixing such parts | | P |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | No deterioration of the fixing properties of snap-in devices used in parts that are likely to be removed during installation or servicing | | N/A |
| | Tests as described | Push force: 50 N<br>Pull force: 50 N | P |
| 22.12 | Handles, knobs etc. fixed in a reliable manner | | P |
| | Fixing in wrong position of handles, knobs etc. indicating position of switches or similar components not possible | | P |
| | Axial force 15 N applied to parts, the shape being so that an axial pull is unlikely to be applied | 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 |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | 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 |
| 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 | | N/A |
| | so constructed that they cannot be replaced in an incorrect position, and so that if they are omitted, the appliance is rendered inoperable or manifestly incomplete | | P |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 22.31 | Neither clearances nor creepage distances over supplementary and reinforced insulation reduced below values specified in clause 29 as a result of wear | | P |
| | Neither clearances nor creepage distances between live parts and accessible parts reduced below values for supplementary insulation if wires, screws etc. become loose | | P |
| 22.32 | Supplementary and reinforced insulation constructed or protected against pollution so that clearances or creepage distances are not reduced below the values in clause 29 | | P |
| | Supplementary insulation of natural or synthetic rubber resistant to ageing, or arranged and dimensioned so that creepage distances are not reduced below values specified in 29.2 | | N/A |
| | Ceramic material not tightly sintered, similar materials or beads alone not used as supplementary or reinforced insulation | | N/A |
| | Insulating material in which heating conductors are embedded is considered to be basic insulation, not reinforced insulation | | 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 | | P |
| | 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 |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 22.34 | Shafts of operating knobs, handles, levers etc. not live, unless | No live shaft | 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 |
| | 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 | | N/A |
| | they are separated from live parts by double or reinforced insulation | | N/A |
| 22.37 | Capacitors in Class II appliances not connected to accessible metal parts and their casings, if of metal, separated from accessible metal parts by supplementary insulation, unless | | 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 |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 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 |
| | Any switch controlling the motor also disconnects electronic circuits, the malfunction of which would impair compliance with this standard (checked during the tests of Clause 19). (IEC 60335-2-14) | | 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 |
| | 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 |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | 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 |
| | - 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) | | P |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 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 |
| 23 | INTERNAL WIRING | | -- |
| 23.1 | Wireways smooth and free from sharp edges | | P |
| | Wires protected against contact with burrs, cooling fins etc. | | P |
| | Wire holes in metal well-rounded or provided with bushings | | N/A |
| | Wiring effectively prevented from coming into contact with moving parts | | P |
| 23.2 | Beads etc. on live wires cannot change their position, and are not resting on sharp edges | | N/A |
| | Beads inside flexible metal conduits contained within an insulating sleeve | | N/A |
| 23.3 | Electrical connections and internal conductors movable relatively to each other not exposed to undue stress | | N/A |
| | Flexible metallic tubes not causing damage to insulation of conductors | | N/A |
| | Open-coil springs not used | | N/A |
| | Adequate insulating lining provided inside a coiled spring, the turns of which touch one another | | N/A |
| | No damage after 10 000 flexings for conductors flexed during normal use, or | | N/A |
| | 100 flexings for conductors flexed during user maintenance | | N/A |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | Electric strength test of 16.3, 1000 V between live parts and accessible metal parts | | N/A |
| | Not more than 10% of the strands of any conductor broken, and | | N/A |
| | not more than 30% for wiring supplying circuits that consume no more than 15W | | N/A |
| 23.4 | Bare internal wiring sufficiently rigid and fixed | | P |
| 23.5 | The insulation of internal wiring subjected to the supply mains voltage withstanding the electrical stress likely to occur in normal use | | P |
| | Basic insulation electrically equivalent to the basic insulation of cords complying with IEC 60227 or IEC 60245, or | | N/A |
| | no breakdown when a voltage of 2000 V is applied for 15 min between the conductor and metal foil wrapped around the insulation | | P |
| 23.6 | Sleeving used as supplementary insulation on internal wiring retained in position by clamping at both ends, or | | P |
| | be such that it can only be removed by breaking or cutting | | P |
| 23.7 | The colour combination green/yellow only used for earthing conductors | | N/A |
| 23.8 | Aluminium wires not used for internal wiring | | P |
| 23.9 | Stranded conductors not consolidated by soldering where they are subjected to contact pressure, unless | | P |
| | the contact pressure is provided by spring terminals | | N/A |
| 23.10 | The insulation and sheath of internal wiring, incorporated in external hoses for the connection of an appliance to the water mains, at least equivalent to that of light polyvinyl chloride sheathed flexible cord (60227 IEC 52) | | N/A |
| 24 | COMPONENTS | | -- |
| 24.1 | Components comply with safety requirements in relevant IEC standards | | P |
| | List of components .....: | (see appended table) | P |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | If components have not been tested and found to comply with relevant IEC standard for the number of cycles specified, they are tested in accordance with 24.1.1 to 24.1.9 | | P |
| | For components mentioned in 24.1.1 to 24.1.9 no additional tests specified in the relevant component standard are necessary other than those specified in 24.1.1 to 24.1.9 | | P |
| | Components not tested and found to comply with relevant IEC standard and components not marked or not used in accordance with its marking, tested under the conditions occurring in the appliance | | P |
| | Lampholders and starterholders that have not being tested and found to comply with the relevant IEC standard, tested as a part of the appliance and additionally according to the gauging and interchangeability requirements of the relevant IEC standard | | N/A |
| | No additional tests specified for nationally standardized plugs such as those detailed in IEC/TR 60083 or connectors complying with the standard sheets of IEC 60320-1 and IEC 60309 | | P |
| 24.1.1 | Capacitors likely to be permanently subjected to the supply voltage and used for radio interference suppression or for voltage dividing, complying with IEC 60384-14 | Certified X/Y-capacitors | P |
| | If the capacitors have to be tested, they are tested according to Annex F | | N/A |
| 24.1.2 | Safety isolating transformers complying with IEC 61558-2-6 | | N/A |
| | If they have to be tested, they are tested according to Annex G | | N/A |
| 24.1.3 | Switches complying with IEC 61058-1, the number of cycles of operation being at least 10 000 | | P |
| | If they have to be tested, they are tested according to Annex H | KL-136,KL-210F | P |
| | If the switch operates a relay or contactor, the complete switching system is subjected to the test | | N/A |
| | If the switch only operates a motor staring relay complying with IEC 60730-2-10 with the number of cycles of a least 10 000 as specified, the complete switching system need not be tested | | N/A |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | Switches incorporated in the following appliances are tested for 3 000 cycles of operation:<br>(IEC 60335-2-14) | | —— |
| | - bean slicers; | | N/A |
| | - liquid blenders; | | N/A |
| | - cheese graters; | | N/A |
| | - graters; | | N/A |
| | - ice-cream machines for use in refrigerators and freezers; | | N/A |
| | - sieving machines; | | N/A |
| | - shredders. | | P |
| 24.1.4 | Automatic controls complying with IEC 60730-1 with the relevant part 2. The number of cycles of operation being at least: | | -- |
| | - thermostats: 10 000 | | N/A |
| | - temperature limiters: 1 000 | | N/A |
| | - self-resetting thermal cut-outs: 300 | | N/A |
| | - voltage maintained non-self-resetting thermal cut-outs: 1 000 | | N/A |
| | - other non-self-resetting thermal cut-outs: 30 | | N/A |
| | - timers: 3 000 | | N/A |
| | - energy regulators: 10 000 | | N/A |
| | The number of cycles for controls operating during clause 11 need not be declared, if the appliance meets the requirements of this standard when they are short-circuited | | N/A |
| | Thermal motor protectors are tested in combination with their motor under the conditions specified in Annex D | | N/A |
| | For water valves containing live parts and that are incorporated in external hoses for connection of an appliance to the water mains, the degree of protection declared for subclause 6.5.2 of IEC 60730-2-8 is IPX7 | | N/A |
| 24.1.5 | Appliance couplers complying with IEC 60320-1 | | N/A |
| | However, for appliances classified higher than IPX0, the appliance couplers complying with IEC 60320-2-3 | | N/A |
| | Interconnection couplers complying with IEC 60320-2-2 | | N/A |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 24.1.6 | Small lamp holders similar to E10 lampholders complying with IEC 60238, the requirements for E10 lampholders being applicable | | N/A |
| 24.1.7 | For remote operation of the appliance via a telecommunication network, the relevant standard for the telecommunication interface circuitry in the appliance is IEC 62151 | | N/A |
| 24.1.8 | The relevant standard for thermal links is IEC 60691 | | N/A |
| | Thermal links not complying with IEC 60691 are considered to be an intentionally weak part for the purposes of Clause 19 | | N/A |
| 24.1.9 | Contactors and relays, other than motor starting relays, tested as part of the appliance | | N/A |
| | They are also tested in accordance with Clause 17 of IEC 60730-1, the number of cycles of operations in 24.1.4 selected according to the contactor or relay function in the appliance.....: | | N/A |
| 24.2 | Appliances not fitted with: | | -- |
| | - switches or automatic controls in flexible cords | | P |
| | - devices causing the protective device in the fixed wiring to operate in the event of a fault in the appliance | | P |
| | - thermal cut-outs that can be reset by soldering, unless | | N/A |
| | the solder has a melding point of at least 230 ˚C | | N/A |
| 24.3 | Switches intended for all-pole disconnection of stationary appliances are directly connected to the supply terminals and have a contact separation in all poles, providing full disconnection under overvoltage category III conditions | | N/A |
| 24.4 | Plugs and socket-outlets for extra-low voltage circuits and heating elements, not interchangeable with plugs and socket-outlets listed in IEC/TR 60083 or IEC 60906-1 or with connectors and appliance inlets complying with the standard sheets of IEC 60320-1 | | N/A |
| 24.5 | Capacitors in auxiliary windings of motors marked with their rated voltage and capacitance, and used accordingly | | N/A |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | Voltage across capacitors in series with a motor winding does not exceed 1,1 times rated voltage, when the appliance is supplied at 1,1 times rated voltage under minimum load | | N/A |
| 24.6 | Working voltage of motors connected to the supply mains and having basic insulation that is inadequate for the rated voltage of the appliance, not exceeding 42 V | | N/A |
| | In addition, the motors comply with the requirements of Annex I | | N/A |
| 24.7 | Detachable hose-sets for connection of appliances to the water mains comply with IEC 61770 | | N/A |
| | They are supplied with the appliance | | N/A |
| | Appliances intended to be permanently connected to the water mains not connected by a detachable hose-set | | N/A |
| 24.8 | Motor running capacitors in appliances for which 30.2.3 is applicable and that are permanently connected in series with a motor winding, not causing a hazard in event of a failure | | N/A |
| | One or more of the following conditions are to be met: | | N/A |
| | - the capacitors are of class P2 according to IEC 60252-1 | | N/A |
| | - the capacitors are housed within a metallic or ceramic enclosure | | N/A |
| | - the distance of separation of the outer surface to adjacent non-metallic parts exceeds 50 mm | | N/A |
| | - adjacent non-metallic parts within 50 mm withstand the needle-flame test of Annex E | | N/A |
| | - adjacent non-metallic parts within 50 mm classified as at least V-1 according to IEC 60695-11-10 | | N/A |
| 25 | SUPPLY CONNECTION AND EXTERNAL FLEXIBLE CORDS | | -- |
| 25.1 | Appliance not intended for permanent connection to fixed wiring, means for connection to the supply: | | -- |
| | - supply cord fitted with a plug, | | P |
| | - an appliance inlet having at least the same degree of protection against moisture as required for the appliance, or | | N/A |
| | - pins for insertion into socket-outlets | | N/A |

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

| IEC 60335-2-14 | | | |
|---|---|---|---|
| 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) | | -- |
| | - 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: | | -- |
| | - 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 | | -- |
| | • light polyvinyl chloride sheathed cord (60227 IEC 52), for appliances not exceeding 3 kg | H03VVH2-F | P |
| | • ordinary polyvinyl chloride sheathed cord (60227 IEC 53), for other appliances | | |
| | - heat resistant polyvinyl chloride sheathed. Not used for type X attachment other than specially prepared cords | | -- |
| | • heat-resistant light polyvinyl chloride sheathed cord (60227 IEC 56), for appliances not exceeding 3 kg | | N/A |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | • heat-resistant polyvinyl chloride sheathed cord (60227 IEC 57), for other appliances | | N/A |
| | Supply cords for class III appliances adequately insulated | | N/A |
| | Test with 500 V for 2 min for supply cords of class III appliances that contain live parts | | N/A |
| | 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 °C ± 2 °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 (mm²).....: | Rated current: 2,0 A; 0,5 $mm^2$(L<2 m) or 2×0,75 $mm^2$ | P |
| 25.9 | Supply cords not in contact with sharp points or edges | | P |
| 25.10 | Supply cord of class I appliances have a green/yellow core for earthing | | 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 | | N/A |
| | Flexing test, as described: | | -- |
| | - applied force (N).....: | | N/A |
| | - number of flexings.....: | | N/A |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | The test does not result in: | | N/A |
| | - short-circuit between the conductors, such that the current exceeds a value of twice the rated current | | N/A |
| | - breakage of more than 10% of the strands of any conductor | | N/A |
| | - separation of the conductor from its terminal | | N/A |
| | - loosening of any cord guard | | N/A |
| | - damage to the cord or the cord guard | | N/A |
| | - broken strands piercing the insulation and becoming accessible | | N/A |
| | 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) | | N/A |
| 25.15 | For appliances with supply cord and appliances to be permanently connected to fixed wiring by a flexible cord, conductors of the supply cord relieved from strain, twisting and abrasion by use of cord anchorage | | 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)..... | <4kg<br>Pull: 60 N; Torque: 0,25 Nm | P |
| | Cord not damaged and max. 2 mm displacement of the cord | 0,5 mm | 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 |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | - at least one part of the cord anchorage securely fixed to the appliance, unless | | N/A |
| | it is part of a specially prepared cord | | N/A |
| | - screws which have to be operated when replacing the cord do not fix any other component, unless | | N/A |
| | 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 | | P |
| 25.18 | Cord anchorages only accessible with the aid of a tool, or | | N/A |
| | Constructed so that the cord can only be fitted with the aid of a tool | | 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 | | 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 |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | - so there is no risk of damage to the conductors or their insulation when fitting the cover | | N/A |
| | - for portable appliances, so that the uninsulated end of a conductor, if it becomes free from the terminal, prevented from contact with accessible metal parts | | N/A |
| | 2 N test to the conductor for portable appliances; no contact with accessible metal parts | | N/A |
| 25.22 | Appliance inlets: | | -- |
| | - 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.<br>(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 |
| 29 | CLEARANCES, CREEPAGE DISTANCES AND SOLID INSULATION | | -- |
| | Clearances, creepage distances and solid insulation withstand electrical stress | | P |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | For coatings used on printed circuits boards to protect the microenvironment (Type 1) or to provide basic insulation (Type 2), Annex J applies.....: | | N/A |
| | The microenvironment is pollution degree 1 under type 1 protection | | N/A |
| | For type 2 protection, the spacing between the conductors before the protection is applied is not less than the values specified in Table 1 of IEC 60664-3 | | N/A |
| | These values apply to functional, basic, supplementary and reinforced insulation .....: | | N/A |
| 29.1 | Clearances not less than the values specified in table 16, taking into account the rated impulse voltage for the overvoltage categories of table 15, unless .....: | (see appended table) | P |
| | for basic insulation and functional insulation they comply with the impulse voltage test of clause 14 | | N/A |
| | However, if the distances are affected by wear, distortion, movement of the parts or during assembly, the clearances for rated impulse voltages of 1500V and above are increased by 0,5 mm and the impulse voltage test is not applicable | | P |
| | Impulse voltage test is not applicable: | | P |
| | - 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) | P |
| | 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 |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 29.1.2 | Clearances of supplementary insulation not less than those specified for basic insulation in table 16: | (see appended table) | P |
| 29.1.3 | Clearances of reinforced insulation not less than those specified for basic insulation in table 16, using the next higher step for rated impulse voltage .....: | (see appended table) | P |
| | For double insulation, with no intermediate conductive part between basic and supplementary insulation, clearances are measured between live parts and the accessible surface, and the insulation system is treated as reinforced insulation | | P |
| 29.1.4 | Clearances for functional insulation are the largest values determined from: | | -- |
| | - table 16 based on the rated impulse voltage .....: | (see appended table) | P |
| | - table F.7a in IEC 60664-1, frequency not exceeding 30 kHz | | 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 | | P |
| | 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 |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | If clearances for basic insulation are selected from Table F.7a of IEC 60664-1 or Clause 4 of IEC 60664-4, the clearances of supplementary insulation are not less than those specified for basic insulation | | N/A |
| | If clearances for basic insulation are selected from Table F.7a of IEC 60664-1, the clearances of reinforced insulation dimensioned as specified in Table F.7a are to withstand 160% of the withstand voltage required for basic insulation | | N/A |
| | If clearances for basic insulation are selected from Clause 4 of IEC 60664-4, the clearances of reinforced insulation are twice the value required for basic insulation | | N/A |
| | If the secondary winding of a step-down transformer is earthed, or if there is an earthed screen between the primary and secondary windings, clearances of basic insulation on the secondary side not less than those specified in table 16, but using the next lower step for rated impulse voltage | | N/A |
| | Circuits supplied with a voltage lower than rated voltage, clearances of functional insulation are based on the working voltage used as the rated voltage in table 15 | | N/A |
| 29.2 | Creepage distances not less than those appropriate for the working voltage, taking into account the material group and the pollution degree.....: | (see appended table) | P |
| | Pollution degree 2 applies, unless | | N/A |
| | - precautions taken to protect the insulation; pollution degree 1 | | 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 |

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

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | - 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 |
| | 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)<br>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 |

| IEC 60335-2-14 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 13 | Mechanism | | -- |
| | The tests may be carried out on a separate sample | | N/A |
| 15 | Insulation resistance and dielectric strength | | -- |
| 15.1 | Not applicable | | N/A |
| 15.2 | Not applicable | | N/A |
| 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 | 10000 cycles | 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 |
| | 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).....: | 10,4 K | 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 |

**Tables:**

| 10.1 | TABLE: Power input deviation | | | | | P |
|---|---|---|---|---|---|---|
| Input deviation of/at: | P rated (W) | P measured (W) | dP (W, %) | Required dP (W, %) | Remark | |
| 220 V, 50/60Hz | 200 | 125,4 | -37,3% | +20% | KL-136, beef 200 g | |
| 240 V, 50/60Hz | 400 | 145,7 | -63,6% | +60 W | With 1,0l plastic container | |

| 11.7-1 | Table : normal operation (for model KL-136) | | | | P |
|---|---|---|---|---|---|
| Test step | Load (ingredients) | quantity | Time of operation (on/off) | Number of operation | remark |
| 1.Placed far away from the test corner;<br>2. Supplied with 1,06 times rated voltage. | beef | 200 g | 15 s/15 s | 3 | According to instruction |
| Remark: the temperature rise limits of Table 3 are exceeded by rated power, then redo the heating test according to the instruction manual. | | | | | |

| 11.8-1/ Table Z101 | TABLE: Heating test, thermocouples (for model KL-136) | | P |
|---|---|---|---|
| | Test voltage (V) ..... : | 1,06 × 240 = 254,4 V | — |
| | Ambient (°C) ..... : | 21,5-22,9 | — |

| Thermocouple locations | dT (K) | Max. dT (K) |
|---|---|---|
| Insulation of power cord | 3,4 | 50 |
| Power switch plastic | 23,7 | Annex H |
| Ambient of interlock switch/holder | 8,7 | T85-25=60 |
| Interlock switch bracket | 7,6 | Clause 30 |
| X capacitor | 29,4 | T85-25=60 |
| Y capacitor | 15,3 | T85-25=60 |
| Internal wire | 24,5 | T105-25=80 |
| Motor brush holder | 27,8 | Clause 30 |
| Motor stator winding | 53,8 | 115 |
| Heat shrinkable tube | 10,3 | T125-25=100 |
| Motor support plastic | 23,1 | Clause 30 |
| Inner surface of housing enclosure | 6,2 | Clause 30 |
| Inner surface of bottom enclosure | 7,3 | Clause 30 |
| Knob of power switch | 4,1 | 60/Clause 30 |

| | | |
|---|---|---|
| Contain enclosure surface | 3,2 | 65 |
| Enclosure surface | 10,8 | 65 |
| Floor of test corner | 4,6 | 65 |

| | | | |
|---|---|---|---|
| 11.8-1 | TABLE: Heating test, resistance method (for model KL-136) | | P |
| | Test voltage (V) ..... : | 1,06 × 240 = 254,4 V | — |
| | Ambient ( °C ) ..... : | 23,8-21,9 | — |

| Temperature rise of winding | $R_1$ (Ω) | $R_2$ (Ω) | dT (K) | Max. dT (K) | Insulation class |
|---|---|---|---|---|---|
| Winding of stator | 21,5 | 26,2 | 56,6 | 115 | 155 |
| Winding of rotor | 37,8 | 46,2 | 57,3 | 115 | 155 |

| | | |
|---|---|---|
| 11.7-2 | Table : normal operation (for model KL-210F) | P |

| Test step | Load (ingredients) | quantity | Time of operation (on/off) | Number of operation | remark |
|---|---|---|---|---|---|
| 1.Placed far away from the test corner;<br>2. Supplied with 1,06 times rated voltage. | beef | 200 g | 15 s/15 s | 3 | According to instruction |

Remark: the temperature rise limits of Table 3 are exceeded by rated power, then redo the heating test according to the instruction manual.

| | | | |
|---|---|---|---|
| 11.8-2 | TABLE: Heating test, thermocouples (for model KL-210F) | | P |
| | Test voltage (V) ..... : | 1,06 × 240 = 254,4 V | — |
| | Ambient ( °C ) ..... : | 23,9-23,6 | — |

| Thermocouple locations | dT (K) | Max. dT (K) |
|---|---|---|
| Insulation of power cord | 7,8 | 50 |
| Power switch plastic | 33,5 | Annex H |
| X capacitor | 33,7 | T85-25=60 |
| Internal wire | 30,4 | T105-25=80 |

| | | |
|---|---|---|
| 11.7-3 | Table : normal operation (for model KL-212) | P |

| Test step | Load (ingredients) | quantity | Time of operation (on/off) | Number of operation | remark |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| 1.Placed far away from the test corner;<br>2. Supplied with 1,06 times rated voltage. | beef | 200 g | 15 s/15 s | 3 | According to instruction |
| Remark: the temperature rise limits of Table 3 are exceeded by rated power, then redo the heating test according to the instruction manual. | | | | | |

| | | | |
|---|---|---|---|
| 11.8-3 | TABLE: Heating test, thermocouples (for model KL-212) | | P |
| | Test voltage (V) ..... : | 1,06 × 240 = 254,4 V | — |
| | Ambient (°C) ..... : | 23,1-23,9 | — |

| Thermocouple locations | dT (K) | Max. dT (K) |
|---|---|---|
| Ambient of interlock switch | 9,3 | T85-25=60 |
| Interlock switch bracket | 6,3 | Clause 30 |
| Internal wire | 18,4 | T105-25=80 |

| | | | | | |
|---|---|---|---|---|---|
| 11.7-4 | Table : normal operation (for model KL-TS128) | | | | P |
| Test step | Load (ingredients) | quantity | Time of operation (on/off) | Number of operation | remark |
| 1.Placed far away from the test corner;<br>2. Supplied with 1,06 times rated voltage. | beef | 200 g | 15 s/15 s | 3 | According to instruction |
| Remark: the temperature rise limits of Table 3 are exceeded by rated power, then redo the heating test according to the instruction manual. | | | | | |

| | | | |
|---|---|---|---|
| 11.8-4 | TABLE: Heating test, thermocouples (for model KL-TS128) | | P |
| | Test voltage (V) ..... : | 1,06 × 240 = 254,4 V | — |
| | Ambient (°C) ..... : | 23,1-23,4 | — |

| Thermocouple locations | dT (K) | Max. dT (K) |
|---|---|---|
| Ambient of interlock switch | 6,7 | T85-25=60 |
| Interlock switch bracket | 9,2 | Clause 30 |
| Internal wire | 16,3 | T105-25=80 |

| | | | |
|---|---|---|---|
| 13.2 | TABLE: Leakage current for modle | | P |
| | Heating appliances: 1.15 x rated input ..... : | -- | — |
| | Motor-operated and combined appliances: 1.06 x rated voltage ..... : | 1,06×240=254,4 V | — |

| Leakage current between | I (mA) | Max. allowed I (mA) |
|---|---|---|

| | | | |
|---|---|---|---|
| L/N and Plastic enclosure /handle /Power switch knob | | 0,12 | 0,35 (Peak Value) |
| 13.3 | TABLE: Electric strength | | P |
| Test voltage applied between: | | Voltage (V) | Breakdown (Yes/No) |
| Live parts and plastic enclosure/ Power switch knob | | 3000 | No |
| Internal wire and plastic enclosure/ Power switch knob | | 1750 | No |
| Live parts and motor body | | 1000 | No |

| | | | |
|---|---|---|---|
| 16.2 | TABLE: Leakage current | | P |
| | Single phase appliances: 1.06 x rated voltage .....: | 1,06 × 240 = 254,4 V | — |
| | Three phase appliances 1.06 x rated voltage divided by √3: .....: | -- | — |
| Leakage current between | | I (mA) | Max. allowed I (mA) |
| L/N and Plastic enclosure /handle /Power switch knob | | 0,07 | 0,25 |

| | | | |
|---|---|---|---|
| 16.3 | TABLE: Electric strength | | P |
| Test voltage applied between: | | Voltage (V) | Breakdown (Yes/No) |
| Live parts and plastic enclosure/ Power switch knob | | 3000 | No |
| Internal wire and plastic enclosure/ Power switch knob | | 1750 | No |
| Live parts and motor body | | 1250 | No |

| | | | |
|---|---|---|---|
| **19** | **Abnormal operation conditions** | | P |
| Operational characteristics | | YES/NO | Operational conditions |
| Are there electronic circuits to control the appliance operation? | | NO | |
| Are there “off” or “stand-by” position? | | NO | Mechaincal switch |
| The unintended operation of the appliance results in dangerous malfunction? | | NO | |

| Sub-clause | Operating conditions description | Test results description | PEC description | EMP 19.11.4 | Software type required | 19.11.3 PEC | Final result |
|---|---|---|---|---|---|---|---|
| 19.2 | 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 | Lock the moter 30 s at rated voltage | 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 | 1,3 times rated voltage | No hazard | N/A | N/A | N/A | N/A | P |
| 19.11.2 | 240V | No hazard | N/A | N/A | N/A | N/A | P |
| 19.11.4.8 | 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 (for KL-136) | | | | | P |
| | Test voltage (V) ..... : | | 240 V | | | — |
| | Ambient, $t_1$ ( °C ) ..... : | | 22,9 | | | — |
| | Ambient, $t_2$ ( °C) ..... : | | 23,1 | | | — |
| Temperature of winding | | $R_1$ (Ω) | $R_2$ (Ω) | dT (K) | T (°C) | Max. T (°C) |
| Winding of stator | | 18,7 | 30,6 | 165,6 | 188,7 | 240 |
| Winding of rotor | | 37,8 | 61,7 | 162,5 | 185,6 | 240 |
| Remark: lock the motor for 30 s, no hazard. | | | | | | |

| | | | |
|---|---|---|---|
| 19.13 | TABLE: Abnormal operation, temperature rises (for KL-136) | | P |
| Thermocouple locations | dT (K) | Max. dT (K) | |
| | Clause 19.7 | | |
| Wall and floor of the test corner | 2,4 | 150 | |
| Insulation of the supply cord | 4,6 | 150 | |
| Plastic enclosure | 6,9 | Clause 30 | |
| Knob of power switch | 3,6 | Clause 30 | |

| | | | | | |
|---|---|---|---|---|---|
| 24.1 | TABLE: Components | | | | P |
| Object / part No. | Manufacturer/ trademark | Type / model | Technical data | Standard | Mark(s)of conformity |

| | | | | | |
|---|---|---|---|---|---|
| Plug | Chau's Electrical Co., Ltd. | CE-503 | AC 250 V, 2,5 A<br>EN50075, sheet 1<br>Colour: Black and white | DIN VDE 0620-1<br>AfPS GS 2014:01 PAK | VDE* |
| Alternative | Guangzhou Huan Qiu Electrical & Appliance Co. Ltd. | HQ-B201 | AC 250 V, 2,5 A<br>EN50075, sheet 1<br>Colour: Black and white | DIN VDE 0620-1<br>AfPS GS 2014:01 PAK | VDE* |
| | MAINLAND ELECTRIC WIRE & CABLE CO., LTD. | ML-207 | AC 250 V, 2,5 A<br>EN50075, sheet 1<br>Colour: Black and white | DIN VDE 0620-1<br>AfPS GS 2014:01 PAK | VDE* |
| | Sheng Yi Electrical Factory | SY-21 | AC 250 V, 2,5 A<br>EN50075, sheet 1<br>Colour: Black | DIN VDE 0620-1<br>AfPS GS 2014:01 PAK | VDE* |
| | Zhongshan Guzhen Hongli Cable & Appliance Factory | HL-6 | AC 250 V, 2,5 A<br>EN50075, sheet 1<br>Colour: Black and white | DIN VDE 0620-1<br>AfPS GS 2014:01 PAK | VDE* |
| | Zhongshan Xiaolan Qiangli Electric Factory Co., Ltd. | QL-VA1 | AC 250 V, 2,5 A<br>EN50075, sheet 1<br>Colour: Black | VDE 0620-1<br>AfPS GS 2014:01 PAK | VDE* |
| BS plug | Friendship Enterprises international Ltd. | FE-130P | AC 250 V, 13 A (with approved 3A or 5A fuse) | BS 1363 | KEMA* |
| Alternative | Foshan Anden Lndastry Co. Ltd. | DL-203<br>DL113 | AC 250 V, 13A (with approved 3A or 5A fuse) | BS 1363 | KEMA* |
| | Joint Gain Plastic Prodacts Factory | JG-663 | AC 250 V, 13A (with approved 3A or 5A fuse) | BS 1363 | KEMA* |
| | Sheng Yi Electrical Factory | SY-88 | AC 250 V, 5 A or 3A (with approved 3A or 5A fuse) | BS 1363 | KEMA* |
| | Hsuan Tai Electronic Co., Ltd | MCY | AC 250 V, 13A (with approved 3A or 5A fuse) | BS 1363 | VDE* |
| | Guangzhou Huanqiu Electrical & Appliance Co., Ltd | HQ-BS301 | AC 250 V, 5 A or 3A (with approved 3A or 5A fuse) | BS 1363 | KEMA* |

| | | | | | |
|---|---|---|---|---|---|
| Supply Cord | Chau's Electrical Co., Ltd. | H03VVH2-F | 2×0,5 $mm^2$ or 2×0,75 $mm^2$ (length <2m) Colour: Black and white | DIN VDE 0281-5 AfPS GS 2014:01 PAK | VDE* |
| Alternative | Guangzhou Huan Qiu Electrical & Appliance Co. Ltd. | H03VVH2-F | 2×0,5 $mm^2$ or 2×0,75 $mm^2$ (length <2m) Colour: Black and white | DIN VDE 0281-5 AfPS GS 2014:01 PAK | VDE* |
| | MAINLAND ELECTRIC WIRE & CABLE CO., LTD. | H03VVH2-F | 2×0,5 $mm^2$ or 2×0,75 $mm^2$ (length <2m) Colour: Black and white | DIN VDE 0281-5 AfPS GS 2014:01 PAK | VDE* |
| | Sheng Yi Electrical Factory | H03VVH2-F | 2×0,5 $mm^2$ or 2×0,75 $mm^2$ (length <2m) Colour: Black | DIN VDE 0281-5 AfPS GS 2014:01 PAK | VDE* |
| | Zhongshan Guzhen Hongli Cable & Appliance Factory | H03VVH2-F | 2×0,5 $mm^2$ or 2×0,75 $mm^2$ (length <2m) Colour: Black and white | DIN VDE 0281-5 AfPS GS 2014:01 PAK | VDE* |
| | Zhongshan Xiaolan Qiangli Electric Factory Co., Ltd. | H03VVH2-F | 2×0,5 $mm^2$ or 2×0,75 $mm^2$ (length <2m) Colour: Black | DIN VDE 0281-5 AfPS GS 2014:01 PAK | VDE* |
| X-capacitor | Dain Electronics Co., Ltd. | MPX | AC 275 V, X2; 0,1 µF; T110 | EN 60384-14 | VDE* |
| Alternative | Carli Electronic Co., Ltd. | MPX | AC 275 V, X2, 0,1µF, T100 | EN 60384-14 | VDE* |
| | DONGGUAN CITY JURCC ELECTRONICS CO LTD | MPX/MKP | AC275 V; X2; 0,1 µF; T110 | EN 60384-14 | VDE* |
| | Hsuan Tai Electronic Co. Ltd. | MCY | AC275 V; X2; 0,1 µF; T85 | EN 60384-14 | VDE* |
| | Tenta Electric Industrial Co. Ltd. | MEX | AC 275 V, X2, 0,1µF, T100 | EN 60384-14 | VDE* |
| | Shunde Da Hua Electric Co., Ltd. | HD-Series | AC 275 V, X2, 0,1 µF, T105 | EN 60384-14 | VDE* |
| | Foshan Shunde Chuang Ge Electronic Industrial Co., Ltd. | MKP-X2 | AC275V; X2; 0,1 µF; T105 | EN 60384-14 | VDE* |
| | Guangdong Fengming Electronic Tech. Co., Ltd. | MKP-X2 | AC 275 V, X2, 0,1 µF , T105 | EN 60384-14 | VDE* |

| | | | | | |
|---|---|---|---|---|---|
| Y-capacitor | JYH CHUNG Electronic Co., Ltd. | JY | AC 300 V; Y2; 4700 pF; T85 | EN 60384-14 | VDE* |
| Alternative | JYA-NAY Co., Ltd. | JY | AC250 V; Y2; 4700 pF; T125 | EN 60384-14 | VDE* |
| | SHANTOU HIGH-NEW TECHNOLOGY DEV. ZONE SONGTIAN ENTERPRISE CO.,LTD | CE Series | AC 250V; Y2; 4700 pF; T125 | EN 60384-14 | VDE |
| | JYH HSU(JEC) ELECTRONICS LTD. | JY | AC300V,Y2, 4700pF, T125 | EN 60384-14 | VDE |
| Internal wire | GUANGZHOU JIN-YING SPECIAL WIRE FACTORY | 1015 | 600 V, 105 ℃, 22 AWG | EN 60335-1 EN 60335-2-14 | Tested with appliance E192725 |
| Alternative | DONGGUAN ZHIHE ELECTRICAL CABLE TECH CO LTD | 1015 | 600 V, 105 ℃, 22 AWG | EN 60335-1 EN 60335-2-14 | Tested with appliance E258239 |
| | QIFURUI ELECTRONICS CO | 1015 | 600 V, 105 ℃, 22 AWG | EN 60335-1 EN 60335-2-14 | Tested with appliance E211048 |
| | FOSHAN CITY ZHENG GUAN FLUORPLASTICS WIRE FACTORY | 1015 | 600 V, 105 ℃, 22 AWG | EN 60335-1 EN 60335-2-14 | Tested with appliance E307535 |
| | XIANGSHAN FAHUA ELECTRIC WIRE & CABLE CO LTD | 1015 | 600 V, 105 ℃, 22 AWG | EN 60335-1 EN 60335-2-14 | Tested with appliance E222362 |
| | FOSHAN SHUNDE YONGGAOLIAN WIRE & CABLE CO LTD | 1015 | 600 V, 105 ℃, 22 AWG | EN 60335-1 EN 60335-2-14 | Tested with appliance E314925 |
| | HESHAN CITY TEHSING HUANCHIU ELECTRIC CABLE CO LTD | 1015 | 600 V, 105 ℃, 22 AWG | EN 60335-1 EN 60335-2-14 | Tested with appliance E229340 |
| | SHENZHEN DONG JU WIRE & CABLE CO LTD | 1015 | 600 V, 105 ℃, 22 AWG | EN 60335-1 EN 60335-2-14 | Tested with appliance E189674 |
| | ZHONGSHAN DONGFENG KESHIRUIHUA WIRE & CABLE FACTORY | 1015 | 600 V, 105 ℃, 22 AWG | EN 60335-1 EN 60335-2-14 | Tested with appliance E307703 |

| | | | | | |
|---|---|---|---|---|---|
| | GUANGDONG YONG ROI CABLE TECHNOLOGY CO LTD | 1015 | 600 V, 105 ℃, 22 AWG | EN 60335-1 EN 60335-2-14 | Tested with appliance E204893 |
| | JIANGMEN CITY JIANG CI ELECTRICAL APPLIANCES ENTERPRISE CO LTD | 1015 | 600 V, 105 ℃, 22 AWG | EN 60335-1 EN 60335-2-14 | Tested with appliance E189669 |
| Heating shrinkable tube | CHANGYUAN ELECTRONICS (SHENZHEN) CO., LTD. | CB-HFT | 125 ℃, 600 V | EN 60335-1 EN 60335-2-14 | Tested with appliance E180908 |
| Alternative | QIFURUI ELECTRONICS CO | QFR-h | 125 ℃; 600 V | EN 60335-1 EN 60335-2-14 | Tested with appliance E225897 |
| | SHENZHEN WOLIDA TRADING CO LTD | RSFR-H | 125 ℃; 600 V | EN 60335-1 EN 60335-2-14 | Tested with appliance E329530 |
| | SHENZHEN WOER HEAT-SHRINKABLE MATERIAL CO LTD | RSFR-H | 125 ℃; 600 V | EN 60335-1 EN 60335-2-14 | Tested with appliance E203950 |
| | DONGGUAN SALIPT CO LTD | SALIPT S-901-600 | 125 ℃; 600 V | EN 60335-1 EN 60335-2-14 | Tested with appliance E209436 |
| Micro switch | Foshan Shunde Hushun Electric Appliance Co., Ltd. | LXW-5-1-2 | AC 250 V, 5 A, T85, 10E3, Glow wire 850℃ | EN 61058-1 | VDE* |
| Alternative | Zhongxun Electronics Industry Company | KW11-3Z | AC 250 V, 5 A, T85, 50E3, Glow wire 850℃ | EN 61058-1 | TÜV Rheinland* |
| | Guangzhou Taiheng Electric Appliance Co., Ltd. | THW-3 | AC 250 V, 5 A, T85, 50E3, Glow wire 850℃ | EN 61058-1 | TÜV Rheinland* |
| | Foshan Shunde Yushun | KW-5 | AC 250 V; 5 A; T125; 30E3 cycles; Glow wire: 850 °C | EN 61058-1 | TÜV Rheinland* |
| | Jufond Switches Manufacturing Factory | SW312 | AC250 V; 5 A; T125; 5E4 cycles; Glow wire: 850 °C | EN 61058-1 | TÜV Rheinland* |

| | | | | | |
|---|---|---|---|---|---|
| Motor (for model KL-210B, KL-TS128, KL-TS128A, KL-TS128B, KL-TS128C, KL-TS228, KL-TS228B, **KL-136**) | Shunde Kilon Electrical Co., Ltd. | HC55/15 | 220-240V～, 50/60Hz；<br>Class 155 | EN 60335-1<br>EN 60335-2-14 | Tested with appliance |
| Motor (for model KL-210, KL-210C, KL-210E, KL-212, KL-210F, KL-TS136G, KL-TS137G, KL-TS138G, KL-TS136, KL-TS137, KL-TS138) | Shunde Kilon Electrical Co., Ltd. | HC55/25 | 220-240V～, 50/60Hz；<br>Class 155 | EN 60335-1<br>EN 60335-2-14 | Tested with appliance |
| Motor<br>(for model KL-219 ) | Shunde Kilon Electrical Co., Ltd. | HC55/20 | 220-240V～, 50/60Hz；<br>Class 155 | EN 60335-1<br>EN 60335-2-14 | Tested with appliance |
| Motor<br>(for model KL-218, KL-TS326, KL-TS327A, KL-TS328, KL-TS337G, KL-TS338G, KL-TS339G, KL-TS337, KL-TS338, KL-TS339, KL-TS336, KL-TS326A, KL-TS329S, KL-TS327S, KL-TS329, KL-TS327) | Shunde Kilon Electrical Co., Ltd. | HC55/30 | 220-240V～, 50/60Hz；<br>Class 155 | EN 60335-2-14<br>EN 60335-1 | Tested with appliance |
| -Winding of stator | HESHAN CITY TEHSING HUANCHIU ELECTRIC CABLE CO LTD | PEW | 155 °C | EN 60335-1<br>EN 60335-2-14 | Tested with appliance<br>UL E242554 |

| | | | | | |
|---|---|---|---|---|---|
| alternative | ZHEJIANG GUANGTONG COPPER INDUSTRY CO LTD | QZY-X | MW5-C, 155°C | EN 60335-1<br>EN 60335-2-14 | Tested with appliance<br>UL E313056 |
| alternative | JIANGMEN XIANGYU ELECTRICIAN CO LTD | QZ-X | MW5, 155°C | EN 60335-1<br>EN 60335-2-14 | Tested with appliance<br>UL E339033 |
| -Winding of rotor | HESHAN CITY TEHSING HUANCHIU ELECTRIC CABLE CO LTD | PEW | 155 °C | EN 60335-1<br>EN 60335-2-14 | Tested with appliance<br>UL E242554 |
| alternative | ZHEJIANG GUANGTONG COPPER INDUSTRY CO LTD | QZY-X | MW5-C, 155°C | EN 60335-1<br>EN 60335-2-14 | Tested with appliance<br>UL E313056 |
| alternative | JIANGMEN XIANGYU ELECTRICIAN CO LTD | QZ-X | MW5, 155°C | EN 60335-1<br>EN 60335-2-14 | Tested with appliance<br>UL E339033 |
| -Insulating tape | 3M COMPANY ELECTRICAL MARKETS DIV (EMD) | -- | thickness: 0,1 mm | EN 60335-1<br>EN 60335-2-14 | Tested with appliance<br>UL E17385 |
| alternative | TORAY INDUSTRIES INC | -- | thickness: 0,1 mm | EN 60335-1<br>EN 60335-2-14 | Tested with appliance<br>UL E86511 |
| -Motor brush holder | Changchun Plastics Co., Ltd. | T375J | Bakelite; 94V-0; Thickness: 2,0mm | EN 60335-1<br>EN 60335-2-14 | Tested with appliance |
| Motor support/ micro switch support | Shunde Kilon Electrical Co., Ltd. | PA | Thickness: 2,0mm | EN 60335-1<br>EN 60335-2-14 | Tested with appliance |
| Motor clutch plastic | Shunde Kilon Electrical Co., Ltd. | POM,PA | Thickness: 2,0mm | EN 60335-1<br>EN 60335-2-14 | Tested with appliance |

| | | | | | |
|---|---|---|---|---|---|
| Switch of model KL-210, KL-210B, KL-210C, KL-TS136G, KL-TS137G, KL-TS138G, KL-TS136, KL-TS137, KL-TS138, **KL-136, KL-210E, KL-210F**) | Shunde Kilon Electrical Co., Ltd. | -- | AC240 V; 1,3 A; 10000 cycles | EN 60335-1<br>EN 60335-2-14 | Tested with appliance |
| -Switch plastic | Shunde Kilon Electrical Co., Ltd. | PA | Thickness: 1,5 mm | EN 60335-1<br>EN 60335-2-14 | Tested with appliance |
| Main switch<br>(for model KL-219, KL-212) | Shunde Kilon Electrical Co., Ltd. | -- | AC250V, 5A,<br>10E3 cycles | EN 60335-1<br>EN 60335-2-14 | Tested with appliance |
| -Plastic of main switch | Shunde Kilon Electrical Co., Ltd. | PA | Thickness: 1,5 mm | EN 60335-1<br>EN 60335-2-14 | Tested with appliance |
| Switch of model KL-TS128, KL-TS128B, KL-TS228 | Shenzhen Baokezhen Electronics Co., Ltd. | SC777 | AC250 V; 12(4)A; 10E3 cycles, T90, Glow wire 850℃ | EN 61058-1 | VDE* |
| alternative | Zhejiang LECI Electronics Co., Ltd | RS601 | AC250V, 6(4)A, 10E3 cycles, T85, Glow wire 850℃ | EN 61058-1 | VDE* |
| | Tongde Electronics Electric Appliances Co., Ltd. | KDC-A05-B | AC250V, 6A,<br>1E4 cycles, T85, Glow wire 850℃ | EN 61058-1 | TÜV Rheinland* |
| | Dongguan Ningrui Switch Co., Ltd. | SB | AC250V, 10(8)A,<br>10000 cycles,T105 Glow wire 850℃ | EN 61058-1 | DEKRA |
| Switch bracket<br>(for model KL-219) | Shunde Kilon Electrical Co., Ltd. | PP | Thickness: 1,5 mm | EN 60335-1<br>EN 60335-2-14 | Tested with appliance |
| Motor support (for model KL-219) | Shunde Kilon Electrical Co., Ltd. | PA | Thickness: 1,5 mm | EN 60335-1<br>EN 60335-2-14 | Tested with appliance |

| | | | | | |
|---|---|---|---|---|---|
| Button | Shunde Kilon Electrical Co., Ltd. | ABS,PC | Thickness: 1,5 mm Color: White | EN 60335-1<br>EN 60335-2-14<br>AfPS GS 2014:01 PAK | Tested with appliance |
| Body enclosure | Shunde Kilon Electrical Co., Ltd. | PP,ABS | Thickness: 1,5 mm Color: White | EN 60335-1<br>EN 60335-2-14<br>AfPS GS 2014:01 PAK | Tested with appliance |
| Bottom cover | Shunde Kilon Electrical Co., Ltd. | PP,ABS | Thickness: 1,5 mm | EN 60335-1<br>EN 60335-2-14<br>AfPS GS 2014:01 PAK | Tested with appliance |
| 1) An asterisk indicates a mark which assures the agreed level of surveillance | | | | | |

| **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 | 1,5 / 2,0*** | **4,5** | **4,4** | -- | **4,4** | P |
| 4 000 | 3,0 / 3,5*** | -- | -- | **8,0** | -- | P |
| 6 000 | 5,5 / 6,0*** | -- | -- | -- | -- | N/A |
| 8 000 | 8,0 / 8,5*** | -- | -- | -- | -- | N/A |
| 10 000 | 11,0 / 11,5*** | -- | -- | -- | -- | N/A |
| Supplementary information:<br>*) For tracks on printed circuit boards if pollution degree 1 and 2<br>**) For pollution degree 3<br>***) If the construction is affected by wear, distortion, movement of the parts or during assembly<br>B = Basic insulation, S = Supplementary insulation, R = Reinforced insulation | | | | | | |

| **29.2** | **TABLE: Creepage distances, basic, supplementary and reinforced insulation** | P |
|---|---|---|

| Working voltage (V) | Creepage distance (mm) Pollution degree | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | | | 3 | | | Type of insulation | | | |
| | | Material group | | | Material group | | | | | | |
| | | I | II | IIIa/IIIb | I | II | **IIIa**/IIIb*) | B**) | S**) | R**) | Verdict |
| ≤50 | 0,18 | 0,6 | 0,85 | 1,2 | 1,5 | 1,7 | 1,9 | - | — | — | N/A |
| ≤50 | 0,18 | 0,6 | 0,85 | 1,2 | 1,5 | 1,7 | 1,9 | — | - | — | N/A |
| ≤50 | 0,36 | 1,2 | 1,7 | 2,4 | 3,0 | 3,4 | 3,8 | — | — | - | N/A |
| 125 | 0,28 | 0,75 | 1,05 | 1,5 | 1,9 | 2,1 | 2,4 | - | — | — | N/A |
| 125 | 0,28 | 0,75 | 1,05 | 1,5 | 1,9 | 2,1 | 2,4 | — | - | — | N/A |
| 125 | 0,56 | 1,5 | 2,1 | 3,0 | 3,8 | 4,2 | 4,8 | — | — | - | N/A |
| 250 | 0,56 | 1,25 | 1,8 | 2,5 | 3,2 | 3,6 | **4,0** | **4,8** | — | — | **P** |
| 250 | 0,56 | 1,25 | 1,8 | 2,5 | 3,2 | 3,6 | **4,0** | — | **5,2** | — | **P** |
| 250 | 1,12 | 2,5 | 3,6 | 5,0 | 6,4 | 7,2 | **8,0** | — | — | **8,9** | **P** |
| 400 | 1,0 | 2,0 | 2,8 | 4,0 | 5,0 | 5,6 | 6,3 | - | — | — | N/A |
| 400 | 1,0 | 2,0 | 2,8 | 4,0 | 5,0 | 5,6 | 6,3 | — | - | — | N/A |
| 400 | 2,0 | 4,0 | 5,6 | 8,0 | 10,0 | 11,2 | 12,6 | — | — | - | N/A |
| 500 | 1,3 | 2,5 | 3,6 | 5,0 | 6,3 | 7,1 | 8,0 | - | — | — | N/A |
| 500 | 1,3 | 2,5 | 3,6 | 5,0 | 6,3 | 7,1 | 8,0 | — | - | — | N/A |
| 500 | 2,6 | 5,0 | 7,2 | 10,0 | 12,6 | 14,2 | 16,0 | — | — | - | N/A |
| >630 and ≤800 | 1,8 | 3,2 | 4,5 | 6,3 | 8,0 | 9,0 | 10,0 | - | — | — | N/A |
| >630 and ≤800 | 1,8 | 3,2 | 4,5 | 6,3 | 8,0 | 9,0 | 10,0 | — | - | — | N/A |
| >630 and ≤800 | 3,6 | 6,4 | 9,0 | 12,6 | 16,0 | 18,0 | 20,0 | — | — | - | N/A |
| >800 and ≤1000 | 2,4 | 4,0 | 5,6 | 8,0 | 10,0 | 11,0 | 12,5 | - | — | — | N/A |
| >800 and ≤1000 | 2,4 | 4,0 | 5,6 | 8,0 | 10,0 | 11,0 | 12,5 | — | - | — | N/A |
| >800 and ≤1000 | 4,8 | 8,0 | 11,2 | 16,0 | 20,0 | 22,0 | 25,0 | — | — | - | N/A |
| >1000 and ≤1250 | 3,2 | 5,0 | 7,1 | 10,0 | 12,5 | 14,0 | 16,0 | - | — | — | N/A |
| >1000 and ≤1250 | 3,2 | 5,0 | 7,1 | 10,0 | 12,5 | 14,0 | 16,0 | — | - | — | N/A |
| >1000 and ≤1250 | 6,4 | 10,0 | 14,2 | 20,0 | 25,0 | 28,0 | 32,0 | — | — | - | N/A |
| >1250 and ≤1600 | 4,2 | 6,3 | 9,0 | 12,5 | 16,0 | 18,0 | 20,0 | - | — | — | N/A |
| >1250 and ≤1600 | 4,2 | 6,3 | 9,0 | 12,5 | 16,0 | 18,0 | 20,0 | — | - | — | N/A |
| >1250 and ≤1600 | 8,4 | 12,6 | 18,0 | 25,0 | 32,0 | 36,0 | 40,0 | — | — | - | N/A |
| >1600 and ≤2000 | 5,6 | 8,0 | 11,0 | 16,0 | 20,0 | 22,0 | 25,0 | - | — | — | N/A |

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

**Basic insulation:** Live parts of brush holder to motor body;

**Supplementary insulation:** Internal wire to accessible plastic enclosure;

**Reinforced insulation:** Live parts to accessible plastic enclosure.

| **29.2** | **TABLE: Creepage distances, functional insulation** | P |
|---|---|---|

| Working voltage (V) | Creepage distance (mm) Pollution degree | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | | | 3 | | | |
| | | Material group | | | Material group | | | |
| | | I | II | IIIa/IIIb | I | II | **IIIa/**IIIb*) | Verdict / Remark |
| ≤10 | 0,08 | 0,4 | 0,4 | 0,4 | 1,0 | 1,0 | 1,0 | N/A |
| 50 | 0,16 | 0,56 | 0,8 | 1,0 | 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 (4,4)** | **P/(Between Land N of supply cord)** |
| 400 | 0,75 | 1,6 | 2,2 | 3,2 | 4,0 | 4,5 | 5,0 | N/A |
| 500 | 1,0 | 2,0 | 2,8 | 4,0 | 5,0 | 5,6 | 6,3 | N/A |
| >630 and ≤800 | 1,8 | 3,2 | 4,5 | 6,3 | 8,0 | 9,0 | 10,0 | N/A |
| >800 and ≤1000 | 2,4 | 4,0 | 5,6 | 8,0 | 10,0 | 11,0 | 12,5 | N/A |
| >1000 and ≤1250 | 3,2 | 5,0 | 7,1 | 10,0 | 12,5 | 14,0 | 16,0 | N/A |
| >1250 and ≤1600 | 4,2 | 6,3 | 9,0 | 12,5 | 16,0 | 18,0 | 20,0 | N/A |
| >1600 and ≤2000 | 5,6 | 8,0 | 11,0 | 16,0 | 20,0 | 22,0 | 25,0 | N/A |
| >2000 and ≤2500 | 7,5 | 10,0 | 14,0 | 20,0 | 25,0 | 28,0 | 32,0 | N/A |
| >2500 and ≤3200 | 10,0 | 12,5 | 18,0 | 25,0 | 32,0 | 36,0 | 40,0 | N/A |
| >3200 and ≤4000 | 12,5 | 16,0 | 22,0 | 32,0 | 40,0 | 45,0 | 50,0 | N/A |
| >4000 and ≤5000 | 16,0 | 20,0 | 28,0 | 40,0 | 50,0 | 56,0 | 63,0 | N/A |
| >5000 and ≤6300 | 20,0 | 25,0 | 36,0 | 50,0 | 63,0 | 71,0 | 80,0 | N/A |
| >6300 and ≤8000 | 25,0 | 32,0 | 45,0 | 63,0 | 80,0 | 90,0 | 100,0 | N/A |
| >8000 and ≤10000 | 32,0 | 40,0 | 56,0 | 80,0 | 100,0 | 110,0 | 125,0 | N/A |
| >10000 and ≤12500 | 40,0 | 50,0 | 71,0 | 100,0 | 125,0 | 140,0 | 160,0 | N/A |
| Supplementary information:<br>*) Material group IIIb is allowed if the working voltage does not exceed 50 V | | | | | | | | |

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

## ATTACHMENT TO TEST REPORT IEC 60335-2-14
## EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES

Household and similar electrical appliances – Safety –

Part 2: Particular requirements for kitchen machines

| | |
|---|---|
| **Differences according to:** | EN 60335-2-14:2006 + A1:2008 + A11:2012 used in conjunction with EN 60335-1:2012<br>EN 62233:2008 |
| **Attachment Form No.:** | EU_GD_IEC60335_2_14M |
| **Attachment Originator:** | IMQ |
| **Master Attachment:** | 2013-05 |

| IEC 60335-2-14- ATTACHMENT | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | **CENELEC COMMON MODIFICATIONS** | | |
| 7.1 | Single-phase appliances to be connected to the supply mains: 230 V covered | | P |
| | Multi-phase appliances to be connected to the supply mains: 400 V covered | | N/A |
| 7.10 | The accessible switch required by 22.40 distinguished from other manual devices by means of shape, or size, or surface texture, or position, etc. (EN 60335-2-14, A11:2012) | | P |
| | An indication that the device has been operated is given by: (EN 60335-2-14, A11:2012) | | -- |
| | • a tactile feedback, or | | P |
| | • an audible and visual feedback | | P |
| | A selector switch with an off-position clearly identifiable is allowed (EN 60335-2-14, A11:2012) | | N/A |
| | An ON/OFF switch, if any, is considered a suitable device to stop operational functions (EN 60335-2-14, A11:2012) | | P |
| | A plug is not considered a suitable device to stop operational functions, as it can be difficult to be reached by vulnerable persons (EN 60335-2-14, A11:2012) | | P |
| 7.12 | The instructions include the substance of the following: | | -- |
| | - this appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved | | N/A |
| | - children shall not play with the appliance | | N/A |
| | - cleaning and user maintenance shall not be made by children without supervision | | N/A |
| | The instructions for appliances warn against misuse (EN 60335-2-14, A11:2012) | | P |
| | The instructions include the substance of the following: (EN 60335-2-14, A11:2012) | | -- |
| | Always disconnect the appliance from the supply if it is left unattended and before assembling, disassembling or cleaning (EN 60335-2-14, A11:2012) | | P |

| IEC 60335-2-14- ATTACHMENT | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | The instructions for bean slicers, berry-juice extractors, blenders and hand-held blenders churns, centrifugal juicers, coffee mills, food mixers, food processors, grain grinders, knife sharpeners, knives, mincers, noodle makers, potato peelers, shredders, sieving machines and slicing machines include the substance of the following: (EN 60335-2-14, A11:2012) | | -- |
| | This appliance shall not be used by children. Keep the appliance and its cord out of reach of children (EN 60335-2-14, A11:2012) | food processors | P |
| | The instructions for can openers, citrus-fruit squeezers, cream whippers, egg beaters, graters and ice-cream machines include the substance of the following: (EN 60335-2-14, A11:2012) | | -- |
| | This appliance can be used by children aged from 8 years and above if they have been given supervision or instruction concerning use of the appliance in a safe way and if they understand the hazards involved (EN 60335-2-14, A11:2012) | | N/A |
| | Cleaning and user maintenance shall not be made by children unless they are aged from 8 years and above and supervised (EN 60335-2-14, A11:2012) | | N/A |
| | Keep the appliance and its cord out of reach of children aged less than 8 years (EN 60335-2-14, A11:2012) | | N/A |
| | The instructions also include the substance of the following: (EN 60335-2-14, A11:2012) | | -- |
| | Appliances can be used by persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and if they understand the hazards involved (EN 60335-2-14, A11:2012) | | P |
| | Children shall not play with the appliance (EN 60335-2-14, A11:2012) | | P |
| 7.12.Z1 | The specific instructions related to the safe operation of this appliance is collated together in the front section of the user instructions | | P |
| | The height of the characters, measured on the capital letters, is at least 3 mm | | P |
| | These instructions are also available in an alternative format, e.g. on a website | | P |
| 8.1.1 | Also test probe 18 of EN 61032 is applied | | P |
| | The appliance being in every possible position during the test | | P |

| IEC 60335-2-14- ATTACHMENT | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | The force on the probe in the straight position is increased to 10 N when probe 18 is used | | P |
| | When using test probe 18 the appliance is fully assembled as in normal use without any parts removed, and | | P |
| | parts intended to be removed for user maintenance are also not removed | | P |
| 8.2 | Compliance is checked by applying the test probes of EN 61032 | | P |
| | For built-in appliances and fixed appliances, the test probe B and probe 18 of EN 61032 are applied only after installation | | N/A |
| 11.8 | Add the following Table Z101<br>(EN 60335-2-14, A11:2012) | | P |
| 15.1.2 | Appliances with an automatic cord reel tested with the cord in the most unfavourable position so that the reeling of the wet cord may affect electrical insulation during operation, the cord not being dried before reeling | | N/A |
| 20.2 | When using the test probe similar to test probe B with a circular stop face, the accessories and detachable covers are removed | | P |
| | Test probe 18 applied with a force of 2,5N on the appliance fully assembled | | P |
| | Test probe B not applied to: (EN 60335-2-14, A11:2012) | | -- |
| | - appliances specified in the list | | N/A |
| | - 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 r/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 r/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 18 not applied to: (EN 60335-2-14, A11:2012) | | -- |
| | - appliances specified in the list | food processors | P |
| | - the following parts of other appliances: | | N/A |

| IEC 60335-2-14- ATTACHMENT | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | smooth shafts having a diameter not exceeding 8 mm, rotating at a speed not exceeding 1 500 r/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 r/min | | N/A |
| | projections from the surface of grinding disks, cones and similar parts having a height less than 4 mm | | N/A |
| 21.Z101 | Drop test for hand-held appliances (EN 60335-2-14, A11:2012) | | N/A |
| | The appliance not damaged to such an extent that compliance with this standard, in particular with Clauses 8 and 29, is impaired (EN 60335-2-14, A11:2012) | | N/A |
| 24.1 | Components comply with the safety requirements specified in the relevant standards as far as they reasonably apply | | P |
| | The requirements of Clause 29 of this standard apply between live parts of components and accessible parts of the appliance. | | P |
| | The requirements of 30.2 of this standard apply to parts of non-metallic material in components including parts of non-metallic material supporting current-carrying connections inside components | | P |
| | Components that have not been previously tested or do not comply with the standard for the relevant component are tested according to the requirements of 30.2 | | P |
| | Components that have been previously tested and shown to comply with the resistance to fire requirements in the standard for the relevant component need not be retested provided that: | | -- |
| | - the severity specified in the component standard is not less than the severity specified in 30.2, and | | N/A |
| | - the test report for the component states whether it complied with the standard for the relevant component with or without flame, flames not exceeding 2 s during the test are ignored | | N/A |
| | Unless components have been previously tested and found to comply with the relevant standard for the number of cycles specified, they are tested in accordance with 24.1.1 to 24.1.9 | | P |

| IEC 60335-2-14- ATTACHMENT | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | For components mentioned in 24.1.1 to 24.1.9, no additional tests specified in the relevant standard for the component are necessary other than those specified in 24.1.1 to 24.1.9 | | P |
| | Components that have not been separately tested and found to comply with the relevant standard, and | | P |
| | components that are not marked or not used in accordance with their marking, | | P |
| | are tested in accordance with the conditions occurring in the appliance, the number of samples being that required by the relevant standard | | P |
| | Lamp holders and starter holders that have not been previously tested and found to comply with the relevant standard are tested as a part of the appliance and additionally comply with the gauging and interchangeability requirements of the relevant standard under the conditions occurring in the appliance | | N/A |
| | Where the relevant standard specifies these gauging and interchangeability requirements at elevated temperatures, the temperatures measured during the tests of Clause 11 are used | | P |
| | Plugs and socket-outlets and other connecting devices of interconnection cords are not interchangeable with plugs and socket-outlets listed in IEC/TR 60083 or IEC 60906-1, or | | N/A |
| | with connectors and appliance inlets complying with the standard sheets of IEC 60320-1, | | N/A |
| | if direct supply to these parts from the supply mains gives rise to a hazard | | N/A |
| 24.1.7 | If the remote operation of the appliance is via a telecommunication network, the relevant standard for the telecommunication interface circuitry in the appliance is EN 41003 | | N/A |
| | Compliance with Clause 8 of this standard is not impaired by connecting the appliance to a device covered by EN 41003 | | N/A |
| 24.Z1 | For motor running capacitors (IEC 60252-1 type P2) with a metallic enclosure having an overpressure fuse the flame testing of internal plastic parts supporting current carrying connections as required in 30.2.2 and 30.2.3.1 is not necessary | | N/A |

| IEC 60335-2-14- ATTACHMENT | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 25.6 | Supply cords of single-phase portable appliances having a rated current not exceeding 16 A, fitted with a plug complying with the following standard sheets of IEC/TR 60083: | | -- |
| | - for Class I appliances:<br>standard sheet C2b, C3b or C4 .....: | | N/A |
| | - for Class II appliances:<br>standard sheet C5 or C6 .....: | C5 | P |
| 25.7 | Rubber sheathed cords (60245 IEC 53) are not suitable for appliances intended to be used outdoors or when they are liable to be exposed to significant amount of ultraviolet radiation | | N/A |
| | Halogen-free thermoplastic compound sheathed supply cords have properties at least those of: | | -- |
| | • halogen-free thermoplastic compound sheathed cords (H03Z1Z1H2-F or H03Z1Z1-F), for appliances having a mass not exceeding 3 kg | | N/A |
| | • halogen-free thermoplastic compound sheathed cords (H05Z1Z1H2-F or H05Z1Z1-F), for other appliances | | N/A |
| | Cross-linked halogen-free compound sheathed supply cords have properties at least those of cross-linked halogen-free compound sheathed cords (H07ZZ-F) | | N/A |
| 29.3.Z1 | Appliance constructed so that if there is a possibility of damaging the insulation during installation, the insulation withstands the scratch and penetration test of 21.2 | | N/A |

| IEC 60335-2-14- ATTACHMENT | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| **ZA** | **ANNEX ZA** (NORMATIVE)<br>**SPECIAL NATIONAL CONDITIONS** | | -- |
| | | | |
| | **Norway** | | -- |
| 19.5 | The test is also applicable to appliances intended to be permanently connected to fixed wiring | | N/A |
| | | | |
| | **Norway** | | -- |
| 22.2 | The second paragraph of this subclause, dealing with single-phase, permanently connected class I appliances having heating elements, is not applicable due to the supply system | | N/A |
| | | | |
| | **All CENELEC countries** | | -- |
| 25.6 and 25.25 | Information concerning National plug and socket-outlets is available from the CENELEC website. Normative national requirements concerning plug and socket-outlets are shown in the relevant National standard | | P |
| | | | |
| | **Ireland and United Kingdom** | | -- |
| 25.8 | In the table, the lines for 10 A and 16 A are replaced by: | | -- |
| | > 10 and ≤ 13 1,25 | | N/A |
| | > 13 and ≤ 16 1,5 | | N/A |
| | | | |
| **ZB** | **ANNEX ZB** (INFORMATIVE)<br>**A-DEVIATIONS** | | |
| | | | |
| | **Ireland** | | -- |
| 25.6 | These regulations apply to all plugs for domestic use at a voltage of not less than 200 V and in general allow only plugs complying with I.S. 401:1997, or equivalent, to be fitted to domestic appliances | | N/A |
| | | | |
| | **United Kingdom** | | -- |

| IEC 60335-2-14- ATTACHMENT | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 25.6 | These regulations apply to all plugs for domestic use at a voltage of not less than 200 V and in general allow only plugs to BS 1363 to be fitted to domestic appliances. It also allows plugs to BS 4573 and EN 50075 to be fitted to shavers and toothbrushes | | N/A |

| Annex EN 62233:2008 | | | |
|---|---|---|---|
| Clause | Requirement + Test | Result - Remark | Verdict |
| EMF- ELECTROMAGNETICS FIELDS | | | |
| | The tested product also complies with the requirements of EN 62233:2008 | | |
| | Limit ……100% | Measured max. :….0,738% | P |

| EN 60335-1:2012/AC:2014 | | | |
|---|---|---|---|
| 8.1.1 | Test probe B and probe 18 of EN 61032 are applied with a force not exceeding 1 N, the appliance<br>being in every possible position, except that appliances normally used on the floor and having a mass exceeding 40 kg are not tilted. | | P |
| Annex ZA | Ireland and United Kingdom | | -- |
| 25.8 | In the table, the lines for 10 A and 16 A are replaced by: | | -- |
| | > 10 and ≤ 13 1,25 (1,0)b | | N/A |
| | > 13 and ≤ 16 1,5 (1,0)b | | N/A |

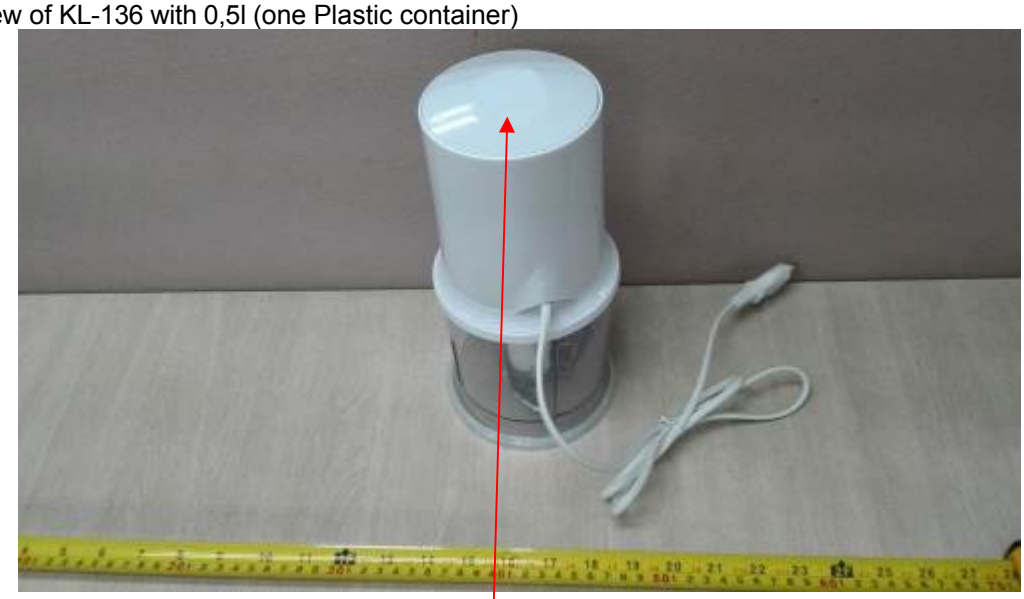
| EN 60335-1: 2012 / A11: 2014 | | | |
|---|---|---|---|
| 7.14 | In NOTE Z1, replace "IEC 82079-1" by "EN 82079-1". | | N/A |
| Annex ZF | In Table ZF.1 – List of standards under CLC/TC 61, replace line of EN 60335-2-38 by the following:<br>EN 60335-2-38, Commercial electric griddles and griddle grills ☒ ☒ With moving parts | | N/A |

| | | |
|---|---|---|
| | **EN 60335-2-14:2006/A11:2012/AC:2013** | -- |

| IEC 60335-2-14- ATTACHMENT | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 7.12 | Change "**Replace** the fifth paragraph with the following:" by "**Replace** the 3rd and 4th paragraphs of Part 1 beginning by "The instructions shall include the substance… " and "This appliance can be used by children…" with the following: | | P |
| 11.8 | **Delete** the row and corresponding footnotes to "External enclosure of motor-operated appliances, except handles held in normal use" in table 3 (**AC:2013**) | | P |
| | Add the following Table Z101 (EN 60335-2-14/A11) | | P |
| | During the test, the temperature rises are monitored continuously and shall not exceed the values shown in table 3 and table Z101. (**AC:2013**) | | P |

**Photo Document**

Overall view of KL-136 with 0,5l (one Plastic container)

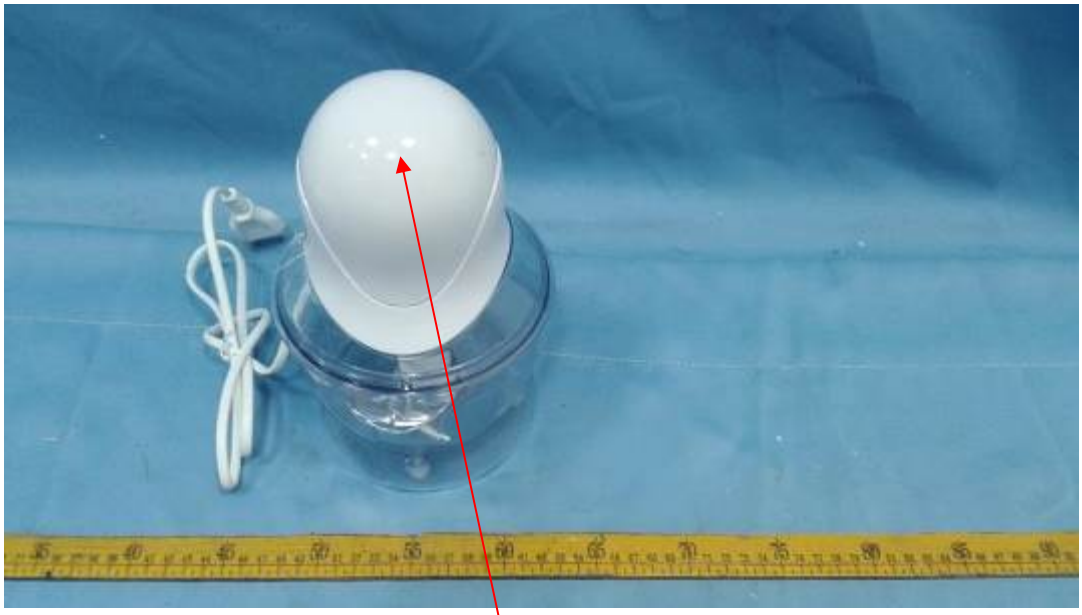


Power switch

Marking label position

**Photo Document**

Overall view of KL-210E



Power switch

Overall view of KL-210F

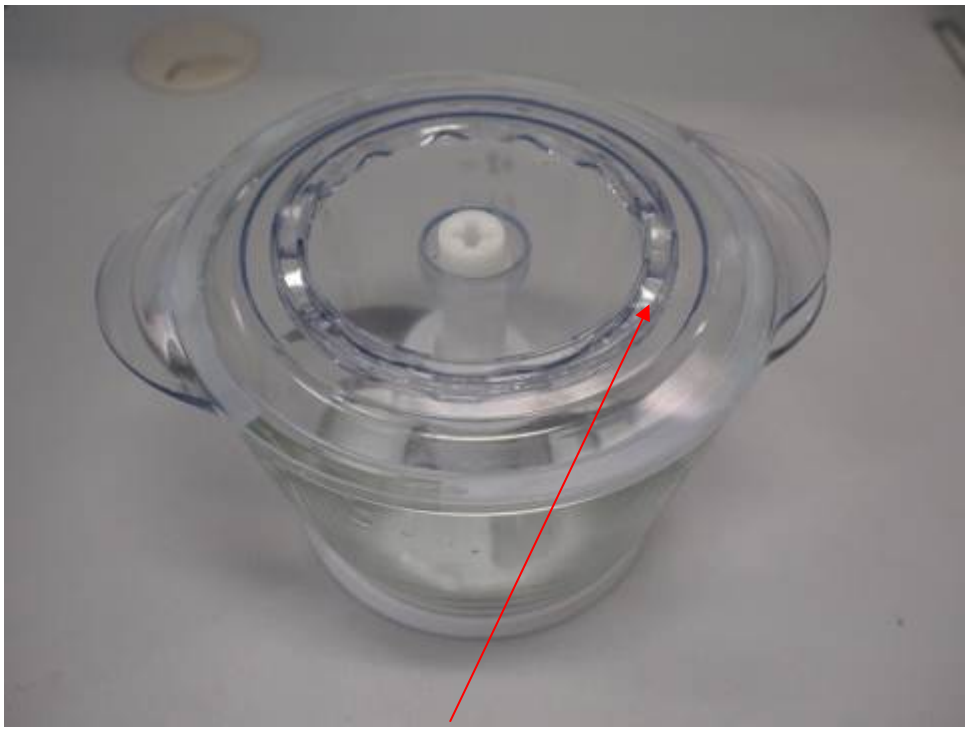
**Photo Document**

Explode view for model KL-136 with 0,5l (one Plastic container)


Cup 0,5l view for model KL-136

**Photo Document**

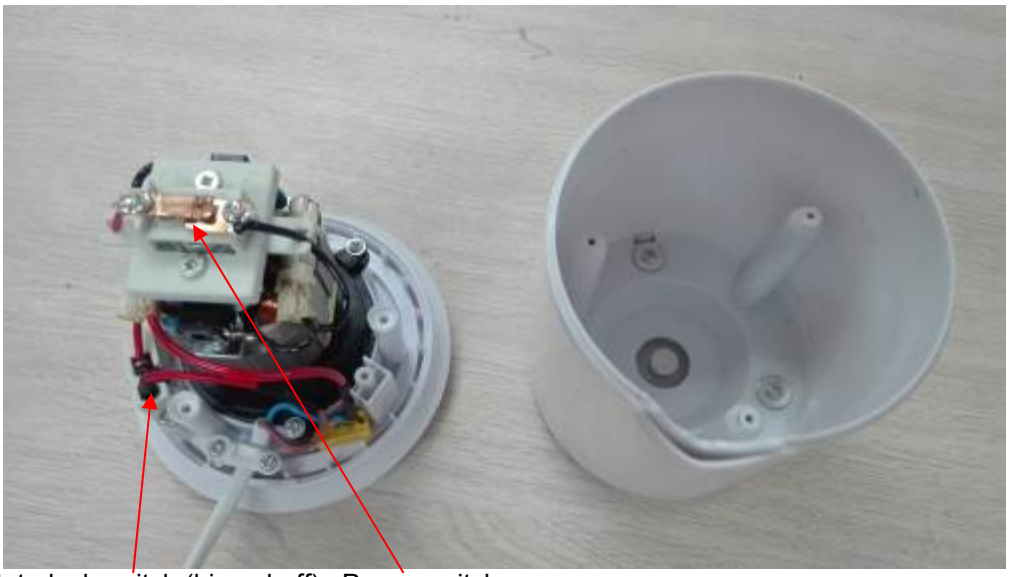
1,0l (one glass container) of KL-136



Lid Interlock device

**Photo Document**

Internal view of model KL-136



Interlock switch (biased-off) Power switch

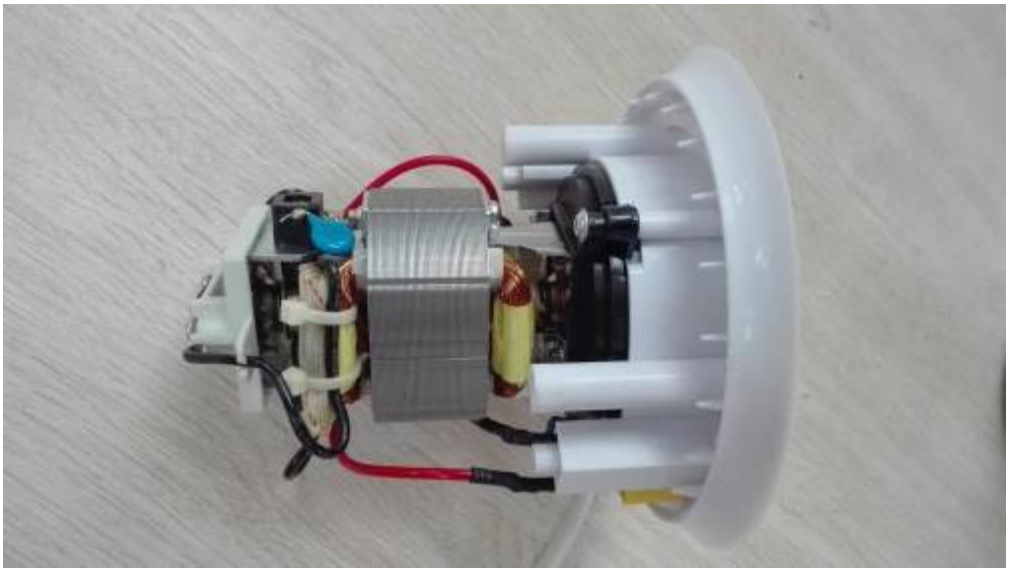
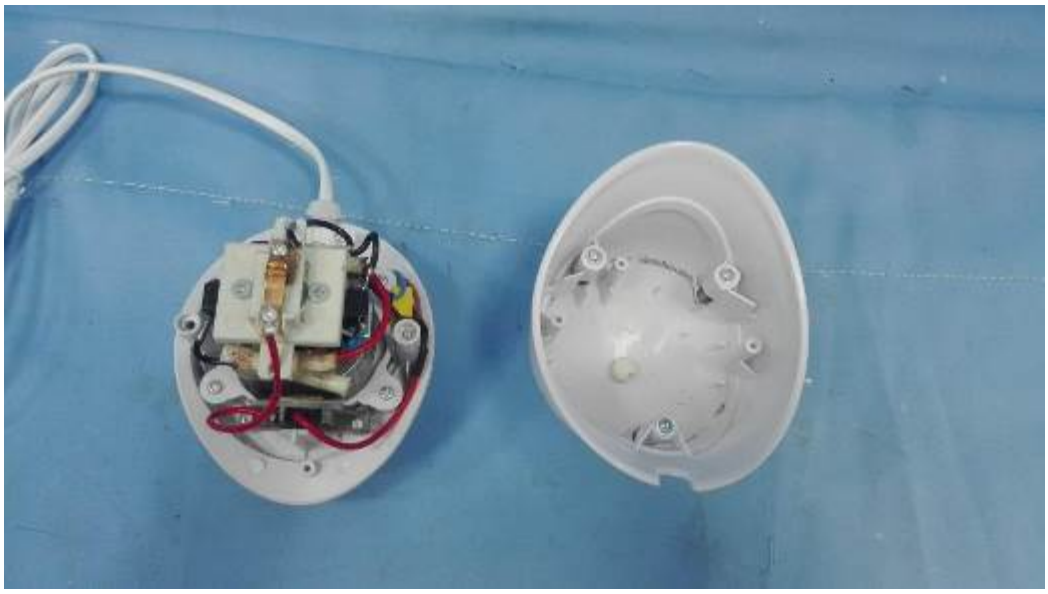


**Photo Document**

Internal view for models KL-210E



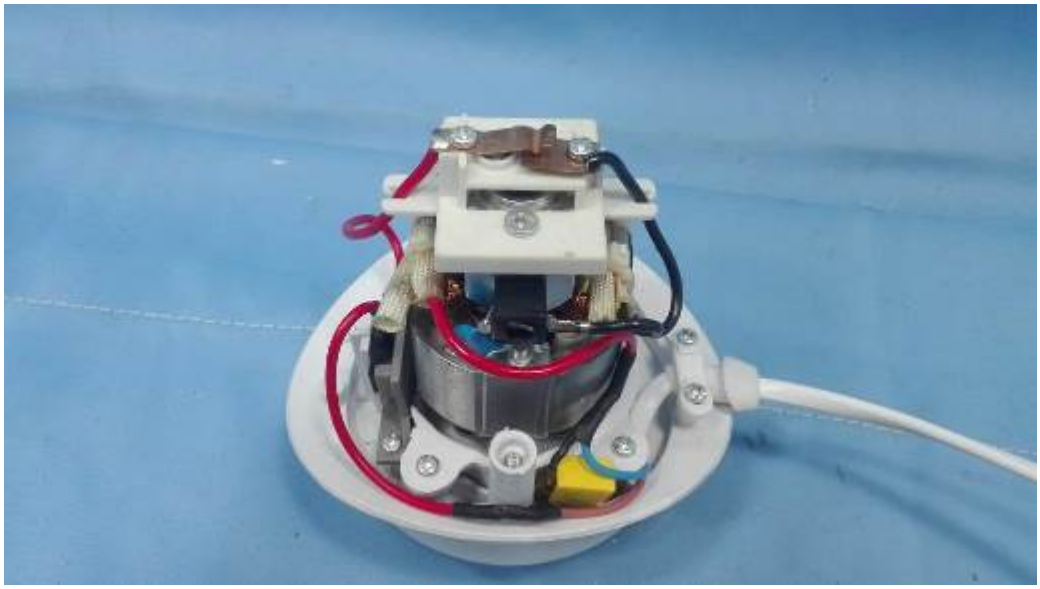
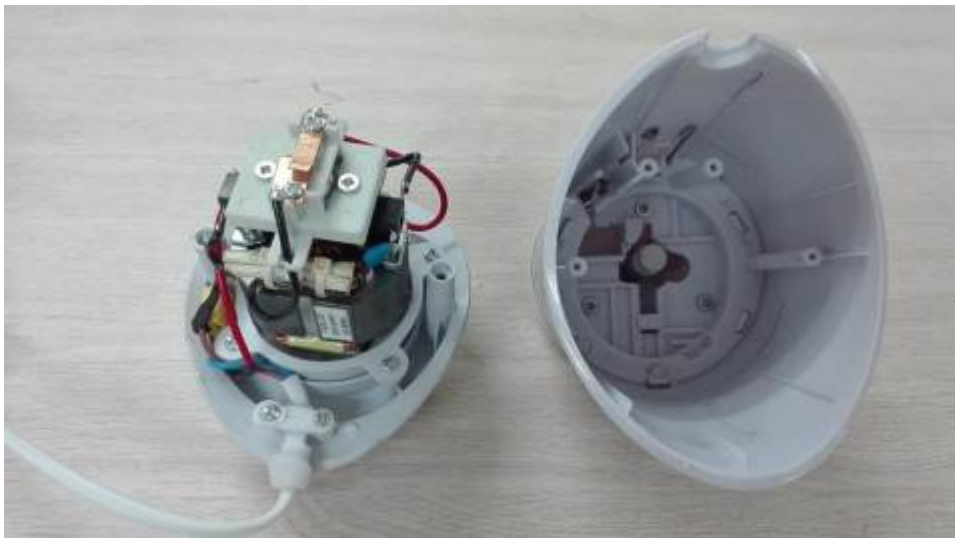


**Photo Document**

Internal view for models KL-210F



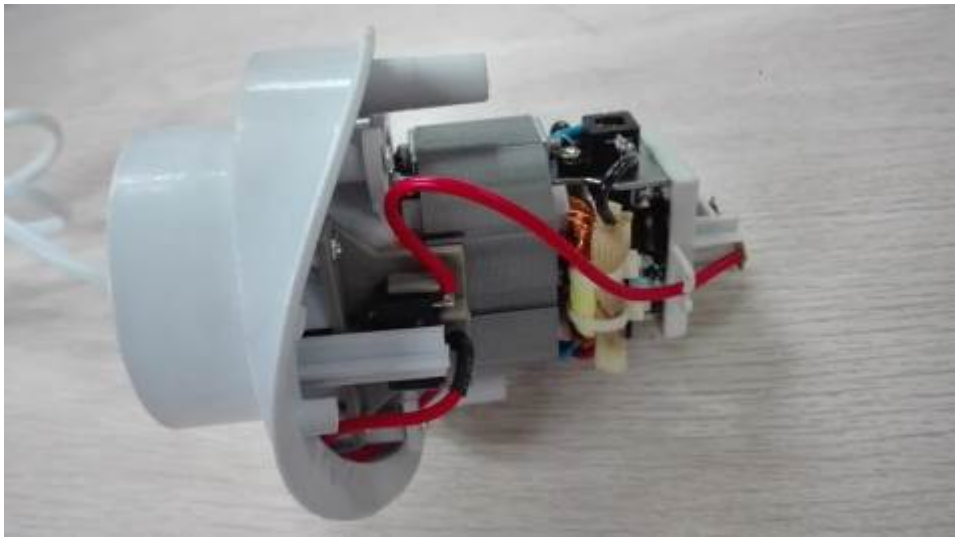
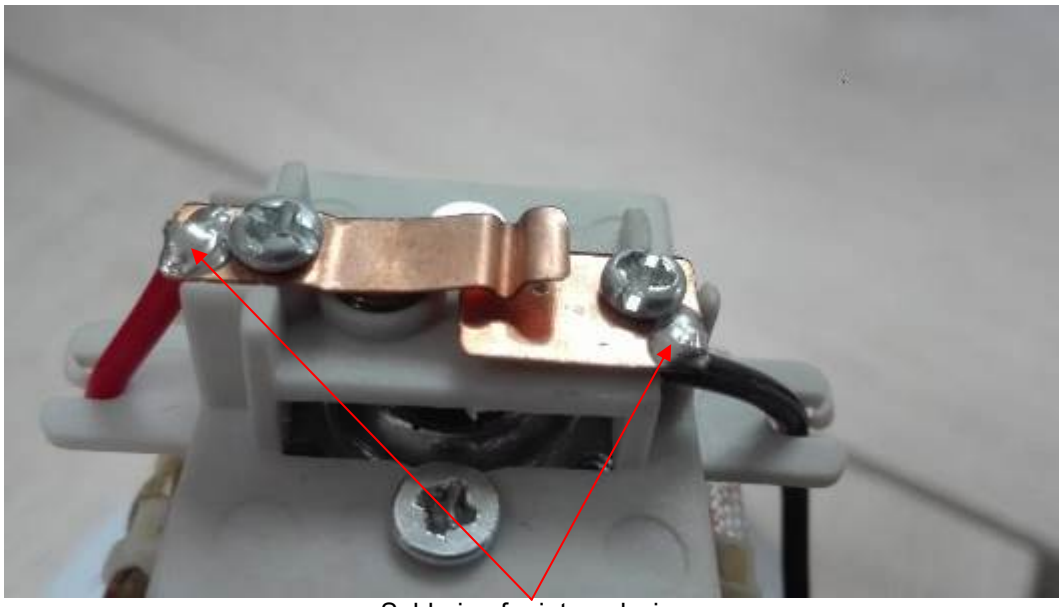


**Photo Document**

Power switch (biased-off) for models KL-210E, KL-210F, KL-136



Soldering for internal wire

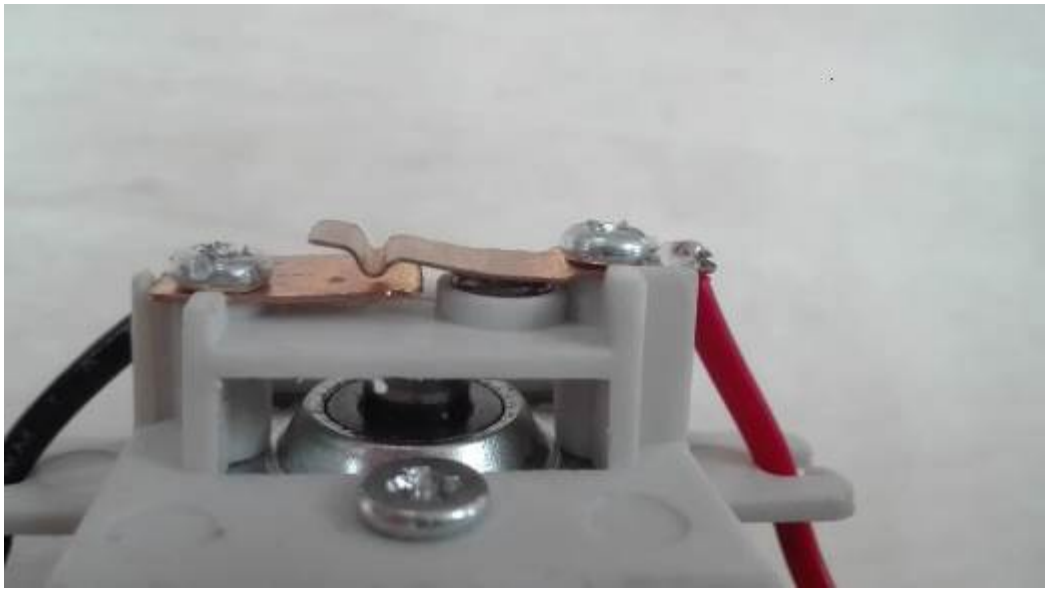
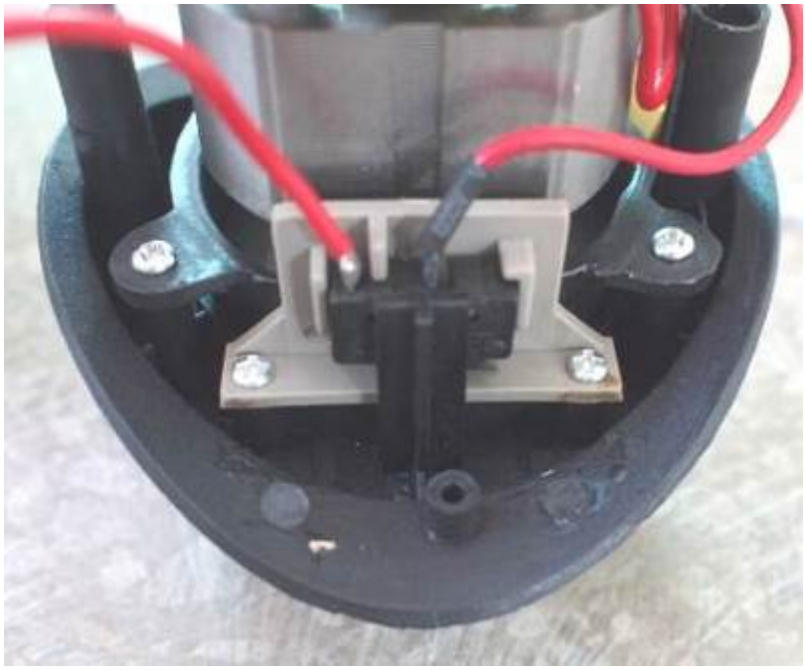


**Photo Document**

View of Changed interlock internal position and no any changes of interloch device for models: KL-TS128, KL-TS128A, KL-TS128B, KL-TS128C

View of Changed interlock internal position and no any changes of interloch device for model KL-212



(End of report)