Test Report issued under the responsibility of:

TEST REPORT
IEC 60335-2-8
Safety of household and similar electrical appliances
Part II : particular requirements for shavers, hair clippers and similar appliances

Report Number. .....:	NBES170200047802-M1
Date of issue .....:	2017-11-24
Total number of pages.....:	26
Applicant's name.....:	Wenzhou Kairui Electrical Appliance Co., Ltd.
Address .....:	12 Huanqiu Road, Lucheng Industrial, Shuangyu, Wenzhou, 325000, Zhejiang, China
Test specification:	
Standard .....:	IEC 60335-2-8:2012 (Sixth Edition) in conjunction with IEC 60335-1:2010 (Fifth Edition)
Test procedure .....:	CB Scheme
Non-standard test method……..:	N/A
Test Report Form No.....:	IEC60335_2_8G
Test Report Form(s) Originator ....:	Dekra Certification B.V.
Master TRF.....:	Dated 2013-05

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 .....:	Hair Clipper
Trade Mark .....:	-
Manufacturer.....:	Same as applicant
Model/Type reference .....:	HC-001, HC-002, HC-005, HC-006, HC-008, HC-2011
Ratings .....:	Hair Clipper: 3 V d.c.; 3 W; Battery voltage: 1,2 Vx2 d.c. Adaptor for HC-001, HC-002, HC-006, HC-008, HC-2011 (KHG030030D-2, KHB030030D-2): Input: 230 V - 240 V; 50 Hz; Output: 3 V d.c.; 300 mA; Class II / (KHG030015D-2): Input: 230 V - 240 V; 50 Hz; Output: 3 V d.c.; 150 mA; Class II Adaptor for all models (LY045-030-0600E, LY045-030-0600B): Input: 100 V - 240 V; 50 Hz / 60 Hz; 0,2 A max; Output: 3 V d.c.; 600 mA; Class II

Testing procedure and testing location:			
☒	**CB Testing Laboratory:**	SGS-CSTC Standards Technical Services Co., Ltd. Ningbo Branch	
Testing location/ address.....:		1-5/F West No. 4 Building, Lingyun Industry Park, No. 1177 Lingyun Road, Ningbo National Hi-Tech Zone, Ningbo, Zhejiang, China	
☐	**Associated Testing Laboratory:**	N/A	
Testing location/ address.....:			
Tested by (name + signature).....:		Daren Ding / Gloria Feng	Daren Ding Gloria Feng
Approved by (name + signature) .....:		Leo Du	Leo Du
☐	**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)...:			

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

1. Annex I – European group differences and national differences – attachment 9 pages
2. Annex II – Photo documentation – attachment 3 pages

Summary of testing:

Tests performed (name of test and test clause):

The tested samples comply with the requirements of the test specification.

IEC 60335-2-8:2012
IEC 60335-1:2010

After review, tests were performed according to below table:

Models	Tests performed on the sample
HC-001 with motor Jieshilin FF-180PA-2955V and adaptor KHG030030D-2	Tests of clause 10, 11, 13, 19, annex B and EMF
HC-005 with motor Jieshilin FF-180PA-2757V and adaptor LY045-030-0600E	
HC-006 with motor Jieshilin FF-141PA-3148V and adaptor KHG030015D-2	
HC-008 with motor Jieshilin FF-180PA-2952V and adaptor KHG030015D-2	

Testing location:

Refer to p.2

Summary of compliance with National Differences:

The requirements of national differences of EU Group were taken into account.

The product fulfils the requirements of

EN 60335-2-8: 2015
EN 60335-1: 2012 + AC:2014 + A11:2014
EN 62233: 2008

Copy of marking plate:

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

Marking of plate of adaptor	Marking plate of hair clipper
Not changed	HC-001 3 V d.c 3 W  Manufacturer: Wenzhou Kairui Electrical Appliance Co., Ltd. Postal address: 12 Huanqiu Road, Lucheng Industrial, Shuangyu, Wenzhou, 325000, Zhejiang, China Importer: Postal address:

Copies of marking plates of other models are same as above except for the model name.

1. As declared by the applicant, the importer's name, registered trade name or registered trade mark and the

postal address were not decided at the time of application, but will be marked on the products before being place on the market. The contact details shall be in a language easily understood by end-users and market surveillance authorities.

2. Marking on the packaging or in a document accompanying the electrical equipment is only acceptable if it is not possible to place such markings on the product.

Test item particulars ..... :	Hair Clipper
Classification of installation and use ..... :	Hand-held appliance
Supply Connection ..... :	Plug-in power adaptor
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 ..... :	2017-10-18
Date (s) of performance of tests ..... :	2017-10-18 to 2017-11-24

General remarks:

"(See Annex #)" refers to additional information appended to the report.
"(See appended table)" refers to a table appended to the report.

Throughout this report a ☒ comma / ☐ point is used as the decimal separator.

Manufacturer's Declaration per sub-clause 4.2.5 of IECEE 02:

The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided ..... :

☐ **Yes**

☒ **Not applicable**

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

Name and address of factory (ies) ..... : Same as applicant.

General product information:

The hair clippers are for household and indoor use only.
Hair clippers are supplied with the detachable power supply (KHG030030D-2, KHB030030D-2, KHG030015D-2, LY045-030-0600B or LY045-030-0600E).
Six models are covered in test report. They share same electrical circuit connection and the enclosure material, and the differences between the models are listed in the following table:

Model	Adaptor	Motor	Appearance	Circuit diagram	Battery	Supplied from the supply mains through the battery charger
HC-001	KHG030030D-2, KHG030015D-2, KHB030030D-2, LY045-030-0600E, LY045-030-0600B	Jieshilin FF-180PA-2955V or Changlong FF-180PA-2952V	HC-001	HC-001	Liaoning WKF AA, Ni-Mh, 600 mAh	Yes
HC-002			Similar as model HC-001			
HC-2011						
HC-005	LY045-030-0600E, LY045-030-0600B	Jieshilin FF-180PA-2757V or Changlong FF-180PA-2952V	HC-005	HC-005		No
HC-006	KHG030030D-2, KHG030015D-2, KHB030030D-2, LY045-030-0600E, LY045-030-0600B	Changlong FF-141PA-3148V or Changlong FF-180PA-2952V	HC-006	HC-006	Liaoning WKF 2/3AA, Ni-Mh, 600 mAh	No
HC-008		Jieshilin FF-180PA-2955V or Changlong FF-180PA-2952V	HC-008	HC-001	Liaoning WKF AAA, Ni-Mh, 600 mAh	Yes

Modification 1 Report NBES170200047802-M1:
The original test report Ref. No.: NBES170200047801 dated 2017-04-07 was modified on 2017-11-24 to include the following changes and additions, which were considered technical modifications:

1.Alternative battery for these models. Refer to below table for details.

Model	Battery
HC-001, HC-002, HC-2011, HC-005	Zouping Mingbo Power Supply Co., Ltd. AA, Ni-Mh 600 mAh
HC-006	Zouping Mingbo Power Supply Co., Ltd. 2/3AA, Ni-Mh 600mAh
HC-008	Zouping Mingbo Power Supply Co., Ltd. AAA, Ni-Mh 600mAh

2. The requirements of EN 60335-2-8:2015 and EN 60335-1:2012 + AC:2014 + A11:2014 were evaluated.
3. Correct the internal wire model from ‘06V’ to ‘06(RV)’.
4. Update the marking plate of clipper.
5. Correct the photo of open view of HC-2011

IEC 60335-2-8			
Clause	Requirement + Test	Result - Remark	Verdict
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		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.....:	Normal operation: The appliance is held by a clamp, with the major axis of the cutting head positioned in a horizontal plane Charging mode: The appliance is put on the test corner during the charging period	P
11.3	Temperature rises, other than of windings, determined by thermocouples		P
	Temperature rises of windings determined by resistance method, unless		N/A
	the windings are non-uniform or it is difficult to make the necessary connections	DC motor	P
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).....:	(see appended table)	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

IEC 60335-2-8			
Clause	Requirement + Test	Result - Remark	Verdict
11.7	Appliances intended for household use only are operated continuously for 10 min. (IEC 60335-2-8)	Considered together with the requirements of Annex B Test 1: battery was charged for 24 h, the battery being initially discharged to such an extent that the appliance cannot operate Test 2: supplied by its fully charged battery, operated fo10 min Test 3: supplied by adaptor, operated fo10 min	P
	Animal shearers are operated until steady conditions are established. (IEC 60335-2-8)		N/A
	Animal clippers and other appliances are operated for 10 min followed by a rest period of 10 min. This cycle of operation is repeated until steady conditions are established. (IEC 60335-2-8)		N/A
11.8	Temperature rises monitored continuously and not exceeding the values in table 3 .....:	(see appended table)	P
	If the temperature rise of a motor winding exceeds the value of table 3, or		P
	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~~N/A
	components in protective electronic circuits tested for the number of cycles specified in 24.1.4		N/A
	The temperature rise of parts that are in contact with skin or hair in normal use, or are held in the hand, shall not exceed the limits specified for handles which are continuously held in normal use. (IEC 60335-2-8)		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).....:	(see appended table)	P

IEC 60335-2-8			
Clause	Requirement + Test	Result - Remark	Verdict
	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
19	ABNORMAL OPERATION		—
19.1	The risk of fire, mechanical damage or electric shock under abnormal or careless operation obviated		P
	Electronic circuits so designed and applied that a fault will not render the appliance unsafe .....:	(see appended table)	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
	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~~N/A
	until steady conditions are established		P

IEC 60335-2-8			
Clause	Requirement + Test	Result - Remark	Verdict
	If a heating element or intentionally weak part becomes open-circuited, the relevant test is repeated on a second sample		N/A
	Hand-held appliances are also subjected to the test of 19.101. (IEC 60335-2-8)		P
19.2	Test of appliances with heating elements with restricted heat dissipation; test voltage (V), power input of 0.85 times rated power input (W) .....:		N/A
19.3	Test of 19.2 repeated; test voltage (V), power input of 1.24 times rated power input (W) .....:		N/A
19.4	Test conditions as in clause 11, any control limiting the temperature during tests of clause 11 short-circuited		N/A
19.5	Test of 19.4 repeated on Class 0I and I appliances with tubular sheathed or embedded heating elements. No short-circuiting, but one end of the element connected to the sheath		N/A
	The test repeated with reversed polarity and the other end of the heating element connected to the sheath		N/A
	The test is not carried out on appliances intended to be permanently connected to fixed wiring and on appliances where an all-pole disconnection occurs during the test of 19.4		N/A
19.6	Appliances with PTC heating elements tested at rated voltage, establishing steady conditions		N/A
	The working voltage of the PTC heating element is increased by 5% and the appliance is operated until steady conditions are re-established. The voltage is then increased in similar steps until 1.5 times working voltage or until the PTC heating element ruptures (V) .....:		N/A
19.7	Stalling test by locking the rotor if the locked rotor torque is smaller than the full load torque, or		N/A
	locking moving parts of other appliances	Moving part locked	P
	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

IEC 60335-2-8			
Clause	Requirement + Test	Result - Remark	Verdict
	Other appliances supplied with rated voltage for a period as specified .....:	30 s	P
	Winding temperatures not exceeding values specified in table 8.....:	(see appended table)	P
	Appliances that are not hand-held or are not kept switched on by hand are tested for 5 min.(IEC 60335-2-8)		N/A
19.8	Multi-phase motors operated at rated voltage with one phase disconnected		N/A
19.9	Running overload test on appliances incorporating motors intended to be remotely or automatically controlled or liable to be operated continuously		N/A
	Motor-operated and combined appliances for which 30.2.3 is applicable and that use overload protective devices relying on electronic circuits to protect the motor windings, are also subjected to the test		N/A
	Winding temperatures not exceeding values as specified .....:		N/A
19.10	Series motor operated at 1.3 times rated voltage for 1 min (V).....:		N/A
	During the test, parts not being ejected from the appliance		N/A
19.11	Electronic circuits, compliance checked by evaluation of the fault conditions specified in 19.11.2 for all circuits or parts of circuits, unless		N/A
	they comply with the conditions specified in 19.11.1		P
	Appliances incorporating an electronic circuit that relies upon a programmable component to function correctly, subjected to the test of 19.11.4.8, unless	According to OSM/HA 401, hair clipper was considered not possible unsafe operation	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~~N/A

IEC 60335-2-8			
Clause	Requirement + Test	Result - Remark	Verdict
	- the appliance complies with the conditions specified in 19.13		~~P~~N/A
	- any current flowing through protective impedance not exceeding the limits specified in 8.1.4		N/A
	If a conductor of a printed board becomes open-circuited, the appliance is considered to have withstood the particular test, provided both of the following conditions are met:		—
	- 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	At the out point of adaptor	P
	- 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		P
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		N/A
	c) short circuit of capacitors, unless		N/A
	they comply with IEC 60384-14		N/A
	d) short circuit of any two terminals of an electronic component, other than integrated circuits		N/A
	This fault condition is not applied between the two circuits of an optocoupler		N/A
	e) failure of triacs in the diode mode		N/A
	f) failure of microprocessors and integrated circuits		N/A
	g) failure of an electronic power switching device		N/A
	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

IEC 60335-2-8			
Clause	Requirement + Test	Result - Remark	Verdict
19.11.3	If the appliance incorporates a protective electronic circuit which operates to ensure compliance with clause 19, the relevant test is repeated with a single fault simulated, as indicated in a) to g) of 19.11.2		N/A
19.11.4	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

IEC 60335-2-8			
Clause	Requirement + Test	Result - Remark	Verdict
19.11.4.7	The appliance is subjected to mains signals in accordance with IEC 61000-4-13, test level class 2		N/A
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		P
	Insulation, other than of class III appliances or class III constructions that do not contain live parts, withstands the electric strength test of 16.3, the test voltage as specified in table 4:		—
	- basic insulation (V).....:		N/A
	- supplementary insulation (V) .....:		N/A
	- reinforced insulation (V) .....:	3000 V	P
	After operation or interruption of a control, clearances and creepage distances across the functional insulation withstand the electric strength test of 16.3, the test voltage being twice the working voltage		~~P~~N/A
	The appliance does not undergo a dangerous malfunction, and		P
	no failure of protective electronic circuits, if the appliance is still operable		N/A
	Appliances tested with an electronic switch in the off position, or in the stand-by mode:		—
	- do not become operational, or		N/A

IEC 60335-2-8			
Clause	Requirement + Test	Result - Remark	Verdict
	- 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	Hand-held appliances are placed on a soft-wood board in the most unfavourable position. They are supplied at rated voltage and operated until steady conditions are established. (IEC 60335-2-8)	(see appended table)	P
B	ANNEX B (NORMATIVE) APPLIANCES POWERED BY RECHARGEABLE BATTERIES		—
	The following modifications to this standard are applicable for appliances powered by batteries that are recharged in the appliance		P
	This annex does not apply to battery chargers		P
3.1.9	Appliance operated under the following conditions:		—
	- the appliance, supplied by its fully charged battery, operated as specified in relevant part 2		P
	- the battery is charged, the battery being initially discharged to such an extent that the appliance cannot operate		P

IEC 60335-2-8			
Clause	Requirement + Test	Result - Remark	Verdict
	-if possible, the appliance is supplied from the supply mains through its battery charger, the battery being initially discharged to such an extent that the appliance cannot operate. The appliance is operated as specified in relevant part 2		P
	- if the appliance incorporates inductive coupling between two parts that are detachable from each other, the appliance is supplied from the supply mains with the detachable part removed		N/A
3.6.2	Part to be removed in order to discard the battery is not considered to be detachable		P
5.B.101	Appliances supplied from the supply mains tested as specified for motor-operated appliances		P
7.1	Battery compartment for batteries intended to be replaced by the user, marked with battery voltage and polarity of the terminals		N/A
	The positive terminal indicated by symbol IEC 60417-5005 and the negative terminal by symbol IEC 60417-5006		N/A
7.6	Symbols 60417-5005 and IEC 60417-5006		N/A
7.12	The instructions give information regarding charging		P
	The instructions for appliances incorporating batteries intended to be replaced by the user includes required information		N/A
	Details about how to remove batteries containing materials hazardous to the environment given		P
7.15	Markings placed on the part of the appliance connected to the supply mains		P
8.2	Appliances having batteries that according to the instruction may be replaced by the user need only have basic insulation between live parts and the inner surface of the battery compartment		N/A
	If the appliance can be operated without batteries, double or reinforced insulation required		N/A
11.7	The battery is charged for the period stated in the instructions or 24 h.....:	24 h	P
19.1	Appliances subjected to tests of 19.B.101, 19.B.102 and 19.B.103		P
19.10	Not applicable		N/A
19.B.101	Appliances supplied at rated voltage for 168 h, the battery being continually charged		P

IEC 60335-2-8			
Clause	Requirement + Test	Result - Remark	Verdict
19.B.102	For appliances having batteries that can be removed without the aid of a tool, short-circuit of the terminals of the battery, the battery being fully charged,		N/A
19.B.103	Appliances having batteries replaceable by the user supplied at rated voltage under normal operation with the battery removed or in any position allowed by the construction		N/A
21.B.101	Appliances having pins for insertion into socket-outlets have adequate mechanical strength		P
	Part of the appliance incorporating the pins subjected to the free fall test, procedure 2, of IEC 60068-2-31, the number of falls being:		—
	- 100, if the mass of the part does not exceed 250 g (g) .....:	80 g	P
	- 50, if the mass of the part exceeds 250 g .....:		N/A
	After the test, the requirements of 8.1, 15.1.1, 16.3 and clause 29 are met		P
22.3	Appliances having pins for insertion into socket-outlets tested as fully assembled as possible		P
25.13	An additional lining or bushing not required for interconnection cords in class III appliances or class III constructions operating at safety extra-low voltage not containing live parts		P
30.2	For parts of the appliance connected to the supply mains during the charging period, 30.2.3 applies	During charging period	P
	For other parts, 30.2.2 applies		N/A

10.1	TABLE: Power input deviation				P
Input deviation of/at:	**P rated (W)**	**P measured (W)**	**Δ P**	**Required Δ P**	**Remark**
Fully charged battery	3	1,73	-42,3 %	+ 20 %	HC-001
	3	2,54	-15,3 %	+ 20 %	HC-005
	3	1,91	-36,3 %	+ 20 %	HC-006
	3	1,23	-59,0 %	+ 20 %	HC-008
235 V	3	1,75	-41,6 %	+ 20 %	HC-001 with KHG030030D-2
	3	0,87	-71,0 %	+ 20 %	HC-008 with KHG030015D-2
100 V	3	1,29	-57,0 %	+ 20 %	HC-005 ~~witch~~ with LY045-030-0600E
240 V	3	1,21	-59,6 %	+ 20 %	

11.8 (1)	TABLE: Heating test, thermocouples (HC-001 with FF-180PA-2955V and adaptor KHG030030D-2)		P
	Test voltage (V):	1): 1,06x240=254,4 V 2): Fully charged battery 3): 1,06x240=254,4 V	—
	Ambient (°C):	1): T1=22,8 °C T2=22,2 °C 2): T1=22,7 °C T2=23,0 °C 3): T1=22,5 °C T2=22,1 °C	—

Thermocouple locations	dT (K)			Max. dT (K)
	1	2	3	
Power switch button	3,7	1,4	3,2	50
Ambient of power switch	5,9	2,7	4,5	Ref.
External enclosure/ Handle surface	3,1	1,6	3,0	75/50
Internal enclosure	13,8	2,6	4,4	Ref.
Cutting teeth	0,2	3,9	4,7	30
PCB	22,4	4,8	7,1	120
Internal wire	11,9	4,9	7,5	50
Battery surface	23,7	5,3	8,5	Ref.
Motor housing	4,7	7,0	8,7	65 (Class 105)
Adaptor surface	9,7	0,7	5,7	60
Charge base enclosure	4,7	--	3,4	60
Test corner	1,6	0,2	1,3	65

Remark: test conditions: 1) Battery charged for 24 h, the battery was being initially discharged to such an extent that the appliance cannot operate, motor did not work. 2) supplied by its fully charged battery, operated for 10 min. 3) supplied by adaptor, operated for 10 min.

11.8 (2)	TABLE: Heating test, thermocouples (HC-005 with FF-180PA-2757V and adaptor LY045-030-0600E)		P
	Test voltage (V):	1): 1,06x240=254,4 V 2): Fully charged battery 3): 1,06x240=254,4 V	—
	Ambient (°C):	1): T1=22,4 °C T2=21,8 °C 2): T1=21,5 °C T2=21,7 °C 3): T1=22,5 °C T2=22,4 °C	—

Thermocouple locations	dT (K)			Max. dT (K)
	1	2	3	
Power switch button	4,1	2,6	2,6	50
Ambient of power switch	6,5	4,0	3,9	30
External enclosure/ Handle surface	3,3	2,9	2,3	75/50
Internal enclosure	14,2	3,6	3,8	Ref.
Cutting teeth	0,7	5,2	4,0	30
PCB	23,0	5,7	6,3	120
Internal wire	12,3	6,2	6,8	50
Battery surface	24,1	6,4	7,8	Ref.
Motor housing	5,0	8,3	7,8	65 (Class 105)
Adaptor surface	10,3	--	5,0	60
Test corner	2,0	1,5	0,6	65

Remark: test conditions: 1) Battery charged for 24 h, the battery was being initially discharged to such an extent that the appliance cannot operate, motor did not work. 2) supplied by its fully charged battery, operated for 10 min. 3) supplied by adaptor, operated for 10 min.

11.8 (3)	TABLE: Heating test, thermocouples (HC-006 with FF-141PA-3148V and adaptor KHG030015D-2)		P
	Test voltage (V):	1): 1,06x240=254,4 V 2): Fully charged battery	—
	Ambient (°C):	1): T1=22,7 °C T2=22,1 °C 2): T1=22,8 °C T2=23,0 °C	—

Thermocouple locations	dT (K)		Max. dT (K)
	1	2	
Power switch button	3,9	1,1	50
Ambient of power switch	6,1	2,4	30
External enclosure/ Handle surface	3,0	1,3	75/50
Internal enclosure	13,6	2,3	Ref.
Cutting teeth	0,3	3,7	30

PCB	22,4	4,5	120
Internal wire	11,8	4,4	50
Battery surface	23,9	5,0	Ref.
Motor housing	4,6	6,7	65 (Class 105)
Adaptor surface	9,5	--	60
Charge base enclosure	2,0	--	60
Test corner	1,4	0,1	65
Remark: test conditions: 1) Battery charged for 24 h, the battery was being initially discharged to such an extent that the appliance cannot operate, motor did not work. 2) supplied by its fully charged battery, operated for 10 min.			

11.8 (4)	TABLE: Heating test, thermocouples (HC-008 with FF-180PA-2952V and adaptor KHG030015D-2)		P
	Test voltage (V):	1): 1,06x240=254,4 V 2): Fully charged battery 3): 1,06x240=254,4 V	—
	Ambient (°C):	1): T1=22,4 °C T2=21,8 °C 2): T1=21,8 °C T2=22,0 °C 3): T1=22,5 °C T2=22,1 °C	—

Thermocouple locations	dT (K)			Max. dT (K)
	1	2	3	
Power switch button	4,2	2,4	2,8	50
Ambient of power switch	6,5	3,7	4,1	30
External enclosure/ Handle surface	3,3	2,6	2,6	75/50
Internal enclosure	14,0	3,6	4,1	Ref.
Cutting teeth	0,4	4,9	4,2	30
PCB	22,6	5,8	6,6	120
Internal wire	12,1	5,9	7,1	50
Battery surface	23,9	6,3	8,1	Ref.
Motor housing	4,9	8,0	8,1	65 (Class 105)
Adaptor surface	9,9	--	5,3	60
Test corner	1,8	1,2	0,9	65
Remark: test conditions: 1) Battery charged for 24 h, the battery was being initially discharged to such an extent that the appliance cannot operate, motor did not work. 2) supplied by its fully charged battery, operated for 10 min. 3) supplied by adaptor, operated for 10 min.				

13.2	**TABLE: Leakage current**		P
	Heating appliances: 1.15 x rated input (W)...:	1,06x240=254,4 V	—

	Motor-operated and combined appliances: 1.06 x rated voltage (V).....:	—	—

Leakage current between	**I (mA)**	**Max. allowed I (mA)**
L/N of adaptor and up enclosure (HC-001)	0,02	0,35 peak
L/N of adaptor and up enclosure (HC-005)	0,02	0,35 peak
L/N of adaptor and up enclosure (HC-006)	0,02	0,35 peak
L/N of adaptor and up enclosure (HC-008)	0,02	0,35 peak

13.3	**TABLE: Dielectric strength**	P

Test voltage applied between:	**Test potential applied (V)**	**Breakdown / flashover (Yes/No)**
L/N of adaptor and accessible parts (for all models)	3000	No

19.13 (1)	TABLE: Abnormal operation (HC-001 with FF-180PA-2955V and adaptor KHG030030D-2)	P

Thermocouple locations	dT (K)			Max. dT (K)
	19.7	19.101	19.101 of Annex B	
Battery surface	1,1	13,3	24,3	For reference
Motor housing	24,0 °C	36,5 °C	26,8 °C	200 °C / 150 °C
Adapter enclosure	1,4	12,4	10,6	For reference
Test corner	0,2	5,3	1,9	150

19.13 (2)	TABLE: Abnormal operation (HC-005 with FF-180PA-2757V and adaptor LY045-030-0600E)	P

Thermocouple locations	dT (K)			Max. dT (K)
	19.7	19.101	19.101 of Annex B	
Battery surface	1,6	13,7	26,1	For reference
Motor housing	24,0 °C	36,4 °C	27,1 °C	200 °C / 150 °C
Adapter enclosure	1,5	13,3	11,4	For reference
Test corner	0,7	4,0	1,5	150

19.13 (3)	TABLE: Abnormal operation (HC-006 with FF-141PA-3148V and adaptor KHG030015D-2)	P

Thermocouple locations	dT (K)	Max. dT (K)

	19.7	19.101 of Annex B	
Battery surface	1,3	21,7	For reference
Motor housing	23,7 °C	27,0 °C	200 °C / 150 °C
Adapter enclosure	1,3	8,1	For reference
Test corner	0,8	1,7	150

19.13 (4)	TABLE: Abnormal operation (HC-008 with FF-180PA-2952V and adaptor KHG030015D-2)	P

Thermocouple locations	dT (K)			Max. dT (K)
	19.7	19.101	19.101 of Annex B	
Battery surface	1,5	13,3	24,0	For reference
Motor housing	24,0 °C	36,4 °C	26,7 °C	200 °C / 150 °C
Adapter enclosure	1,8	12,9	10,1	For reference
Test corner	0,5	3,6	1,9	150

24.1	**TABLE: Critical components information**				P
Object / part No.	**Manufacturer/ trademark**	**Type / model**	**Technical data**	**Standard**	**Mark(s) of conformity[1])**
Adaptor (for HC-001, HC-002, HC-2011, HC-006 and HC-008)	Ningbo KAM HOI Electronic Appliance Co., Ltd.	KHG030030D-2	Input: 230-240 V~, 50 Hz Output: 3,0 V d.c. 300 mA	IEC 61558-2-16 IEC 61558-1 EN 61558-1 (2009) EN 61558-2-16 (2013)	TUV* (S1 50258019)
(Alternative) (for HC-001, HC-002, HC-2011, HC-006 and HC-008)	Ningbo KAM HOI Electronic Appliance Co., Ltd.	KHG030015D-2	Input: 230-240 V~, 50 Hz Output: 3,0 V d.c. 150 mA	IEC 61558-2-16 IEC 61558-1 EN 61558-1 (2009) EN 61558-2-16 (2013)	TUV* (S1 50258019)
Adaptor (for all models)	Yuyao Lianye Electronic Co., Ltd.	LY045-030-0600E	Input: 100-240 V~, 50/60 Hz, 0,2 A Max Output: 3,0 V d.c. 600 mA	IEC 61558-2-16 IEC 61558-1 EN 61558-1 (2009) EN 61558-2-16 (2013)	Intertek* (SG ITS-5297M1)

Adaptor only for UK (for HC-001, HC-002, HC-2011, HC-006 and HC-008)	Ningbo KAM HOI Electronic Appliance Co., Ltd.	KHB030030D-2	Input: 230-240 V~, 50 Hz Output: 3,0 V d.c. 300 mA	IEC 61558-2-16 IEC 61558-1 EN 61558-1 (2009) EN 61558-2-16 (2013)	TUV* (S1 50258019)
Adaptor only for UK (for all models)	Yuyao Lianye Electronic Co., Ltd.	LY045-030-0600B	Input: 100-240 V~, 50/60 Hz, 0,2 A Max Output: 3,0 V d.c. 600 mA	IEC 61558-2-16 IEC 61558-1 EN 61558-1 (2009) EN 61558-2-16 (2013)	Intertek* (SG ITS-5297M1)
Motor (for all models)	Douchang Changlong Micromotor Co., Ltd.	FF-180PA-2952V	2,4 V d.c.	IEC 60335-2-8 IEC 60335-1 EN 60335-2-8(2015) EN 60335-1(2014)	Tested with appliance
Motor (for HC-001, HC-002, HC-008, HC-2011)	Zhoushan Jieshilin Micromotor Co., Ltd.	FF-180PA-2955V	2,4 V d.c.	IEC 60335-2-8 IEC 60335-1 EN 60335-2-8(2015) EN 60335-1(2014)	Tested with appliance
Motor (for HC-005)	Zhoushan Jieshilin Micromotor Co., Ltd.	FF-180PA-2757V	2,4 V d.c.	IEC 60335-2-8 IEC 60335-1 EN 60335-2-8(2015) EN 60335-1(2014)	Tested with appliance
Motor (for HC-006)	Douchang Changlong Micromotor Co., Ltd.	FF-141PA-3148V	2,4 V d.c.	IEC 60335-2-8 IEC 60335-1 EN 60335-2-8(2015) EN 60335-1(2014)	Tested with appliance
Internal wire	Ruian Huanqiu Cables And Wires Co.,Ltd.	**06(RV)**	0,2 mm^2	IEC 60335-2-8 IEC 60335-1 EN 60335-2-8(2015) EN 60335-1(2014)	Tested with appliance
PCB	Yongjia Tengke Circuit Board Co., Ltd.	--	Min. thickness: 0,8 mm	IEC 60335-2-8 IEC 60335-1 EN 60335-2-8(2015) EN 60335-1(2014)	Tested with appliance
Battery (for HC-001,HC-002, HC-005，HC-2011)	Liaoning WKF R.E. New Energy Co., Ltd.	AA, Ni-Mh	1,2 V x 2, 600 mAh	IEC 62133 EN 62133 (2012)	Dekra* (NL-27856)

Alternative	**Zouping Mingbo Power Supply Co., Ltd.**	**AA, Ni-Mh**	**1,2V x 2, 600 mAh**	**IEC 62133 EN 62133 (2012)**	**CB* (ZPI-17MA0359Y CSP)**
Battery (for HC-006)	Liaoning WKF R.E. New Energy Co., Ltd.	2/3AA, Ni-Mh	2,4 V, 600 mAh	IEC 62133 EN 62133 (2012)	Dekra* (NL-27856)
Alternative	**Zouping Mingbo Power Supply Co., Ltd.**	**2/3AA, Ni-Mh**	**2,4 V, 600 mAh**	**IEC 62133 EN 62133 (2012)**	**CB* (ZPI-17MA0359Y CSP)**
Battery (for HC-008)	Liaoning WKF R.E. New Energy Co., Ltd.	AAA, Ni-Mh	1,2 V x 2, 600 mAh	IEC 62133 EN 62133 (2012)	Dekra* (NL-27859)
Alternative	**Zouping Mingbo Power Supply Co., Ltd.**	**AAA, Ni-Mh**	**1,2V x 2, 600 mAh**	**IEC 62133 EN 62133 (2012)**	**CB* (ZPI-17MA0359Y CSP)**
Power switch (for HC-001, HC-002, HC-008, HC-2011)	Wenzhou Kairui Electrical Appliance Co., Ltd.	--	Copper	IEC 60335-2-8 IEC 60335-1 EN 60335-2-8(2015) EN 60335-1(2014)	Tested with appliance
Indicator cover	Wenzhou Kairui Electrical Appliance Co., Ltd.	AS	Min. thickness: 1,0 mm	IEC 60335-2-8 IEC 60335-1 EN 60335-2-8(2015) EN 60335-1(2014)	Tested with appliance
Enclosure/Power switch button	Wenzhou Kairui Electrical Appliance Co., Ltd.	ABS	Min. thickness: 1,0 mm	IEC 60335-2-8 IEC 60335-1 EN 60335-2-8(2015) EN 60335-1(2014)	Tested with appliance
Supplementary information: [1]) Provided evidence ensures the agreed level of compliance. See OD-2039.					

<End of report>

IEC60335_2_8G – Annex I			
Clause	Requirement - Test	Result - Remark	Verdict

ATTACHMENT TO TEST REPORT IEC 60335-2-8
EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES

Household and similar electrical appliances – Safety –
Part 2: particular requirements for shavers, hair clippers and similar appliances

Differences according to:	EN 60335-2-8:2015 in conjunction with EN 60335-1:2012 + AC:2014 + A11:2014 EN 62233:2008
Attachment Form No.:	EU_GD_IEC60335_2_8G
Attachment Originator:	DEKRA Certification B.V.
Master Attachment:	2017-02

IEC60335_2_8G - Annex I			
Clause	Requirement - Test	Result - Remark	Verdict

	CENELEC COMMON MODIFICATIONS		
6.1	Delete “class 0” and “class 01”		N/A
7.1	Single-phase appliances to be connected to the supply mains: 230 V covered		P
	Multi-phase appliances to be connected to the supply mains: 400 V covered		N/A
7.10	Devices, except for those on animal shearers, used to start/stop operational functions of the appliance, if any, shall be distinguished from other manual devices by means of shape, or size, or surface texture, or position, etc. (EN 60335-2-8)		P
	An indication that the device has been operated is given by:		—
	• a tactile feedback, or		P
	• an audible and visual feedback		N/A
7.12	The instructions include the substance of the following:		—
	Animal clipper, hair clipper, and appliances for manicure and pedicure can be used by children aged from 3 years under supervision (EN 60335-2-8)		P
	Shaver, wet shaver, animal clipper, hair clipper, and appliances for manicure and pedicure 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. (EN 60335-2-8)		P
	Animal shearers can only be used by trained personnel. (EN 60335-2-8)		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
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

IEC60335_2_8G - Annex I			
Clause	Requirement - Test	Result - Remark	Verdict
	The appliance being in every possible position during the test, except that		P
	appliances normally used on the floor and having a mass exceeding 40 kg are not tilted		N/A
	The force on the probe in the straight position is increased to 10 N when probe 18 is used		P
	When using test probe 18 the appliance is fully assembled as in normal use without any parts removed, and		P
	parts intended to be removed for user maintenance are also not removed		N/A
	Test probe 18 is not applied to animal shearers. (EN 60335-2-8)		N/A
8.2	Compliance is checked by applying the test probes of EN 61032		P
	For built-in appliances and fixed appliances, the test probe B and probe 18 of EN 61032 are applied only after installation		N/A
	Test probe 18 is not applied to animal shearers. (EN 60335-2-8)		N/A
11.8	Footnotes to “External enclosure of motor-operated appliances” to be taken into account	Covered by tests of clause 11.8	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 18 is not applied to animal shearers. (EN 60335-2-8)		N/A
22.12	*Add to Note Z1.* This is not applicable to animal shearers. (EN 60335-2-8)		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

IEC60335_2_8G - Annex I			
Clause	Requirement - Test	Result - Remark	Verdict
	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		P
	- 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		P
	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
	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		N/A

IEC60335_2_8G - Annex I			
Clause	Requirement - Test	Result - Remark	Verdict
	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
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: standard sheet C2b, C3b or C4.....:		N/A
	- for Class II appliances: 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

IEC60335_2_8G - Annex I			
Clause	Requirement - Test	Result - Remark	Verdict
26.11	Conductors connected by soldering are not considered to be positioned or fixed so that reliance is not placed upon the soldering alone to maintain them in position unless they are held in place near the terminals independently of the solder		P
29.3.Z1	Appliance constructed so that if there is a possibility of damaging the insulation during installation, the insulation withstands the scratch and penetration test of 21.2		N/A
32	Compliance regarding electromagnetic fields is checked according to EN 62233		P
Annex I, 19.I.101	The appliance is supplied at rated voltage and operated under normal operation with each of the fault conditions specified		P
	The duration of the test is as specified in 19.7		N/A
ZA	**ANNEX ZA** (NORMATIVE) **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 (1,0)[b]		N/A
	> 13 and ≤ 16 1,5 (1,0)[b]		N/A
ZB	**ANNEX ZB** (INFORMATIVE) **A-DEVIATIONS**		—
	Ireland		—

IEC60335_2_8G - Annex I			
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 complying with I.S. 401:1997, or equivalent, to be fitted to domestic appliances		N/A
	United Kingdom		—
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
ZC	**ANNEX ZC** (NORMATIVE) **NORMATIVE REFERENCES TO INTERNATIONAL PUBLICATIONS WITH THEIR CORRESPONDING EUROPEAN PUBLICATIONS**		—
	A list of referenced documents in this standard		P
ZD	**ANNEX ZD** (INFORMATIVE) **IEC and CENELEC CODE DESIGNATIONS FOR FLEXIBLE CORDS**		—
	A table with IEC and CENELEC code designations for flexible cords		N/A
ZE	**ANNEX ZE** (INFORMATIVE) **SPECIFIC ADDITIONAL REQUIREMENTS FOR APPLIANCES AND MACHINES INTENDED FOR COMMERCIAL USE**		—
	Not for commercial use		N/A
ZF	**ANNEX ZF** (INFORMATIVE) **CRITERIA APPLIED FOR THE ALLOCATION OF PRODUCTS COVERED BY STANDARDS IN THE EN 60335 SERIES UNDER LVD OR MD**		—
	List of standards under CENELEC/TC61 with the allocation under the LVD (Low Voltage Directive) or the MD (Machinery Directive) .....:	LVD	P
ZG	**ANNEX ZG** (NORMATIVE) **UV APPLIANCES**		—
	The following modifications to this standard apply to appliances having UV emitters		N/A
	This annex is not applicable to appliances covered by the scopes of IEC 60335-2-27, IEC 60335-2-59 or IEC 60335-2-109		N/A
7.12.ZG	The instructions for appliances incorporating UVC emitters include the substance of the following: WARNING — This appliance contains a UV emitter. Do not stare at the light source		N/A

IEC60335_2_8G - Annex I			
Clause	Requirement - Test	Result - Remark	Verdict
32	For appliances incorporating UV emitters the manufacturer delivers a declaration providing evidence that the plastic material exposed to the radiation is UV resistant		N/A
ZAA	**ANNEX ZAA** (NORMATIVE) **EMISSION OF ACOUSTICAL NOISE** (EN 60335-2-8)		—
	Not animal shearers		N/A
ZZ	**ANNEX ZZ** (INFORMATIVE) **COVERAGE OF ESSENTIAL REQUIREMENTS OF EC DIRECTIVES**		—
	Description of the relation between this European standard and the LVD (Low Voltage Directive, 2006/95/EC) and the MD (Machinery Directive, 2006/42/EC)		P

IEC60335_2_8G - Annex I			
Clause	Requirement - Test	Result - Remark	Verdict

Annex EN 62233:2008			
EMF- ELECTROMAGNETICS FIELDS			
	The tested product also complies with the requirements of EN 62233:2008		—
HC-001 with adaptor KHG030030D-2	Limit ……100%	Measured max. : 2,13 %	P
HC-005 with adaptor LY045-030-0600E	Limit ……100%	Measured max. : 2,04 %	P
HC-006 with adaptor KHG030015D-2	Limit ……100%	Measured max. : 2,23 %	P
HC-008 with adaptor KHG030015D-2	Limit ……100%	Measured max. : 1,98 %	P

Annex II
Photo documentation
Hair Clipper
HC-001, HC-002, HC-005, HC-006, HC-008, HC-2011

Report No.: NBES170200047802-M1

Detail of: Open view of HC-2011

View:

[ ] general

[ ] front

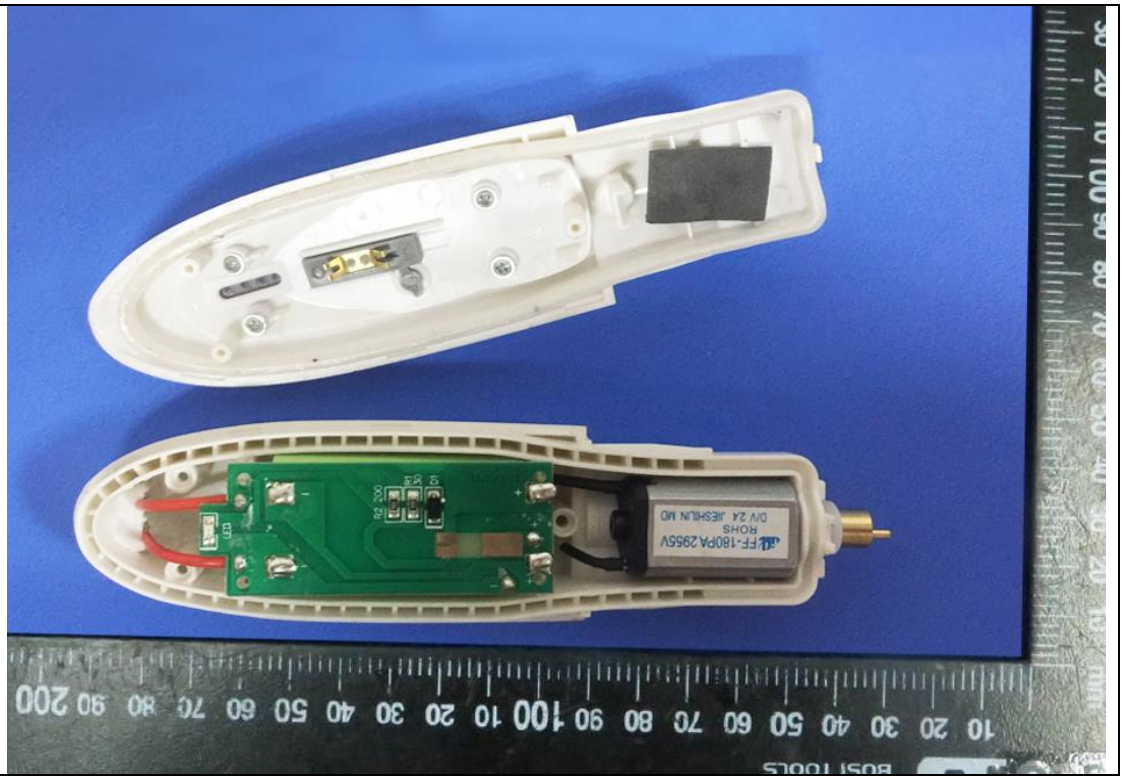
[ ] rear

[ ] right

[ ] left

[ ] top

[ ] bottom



Detail of: Battery for HC-001, HC-002, HC-2011

View:

[ ] general

[ ] front

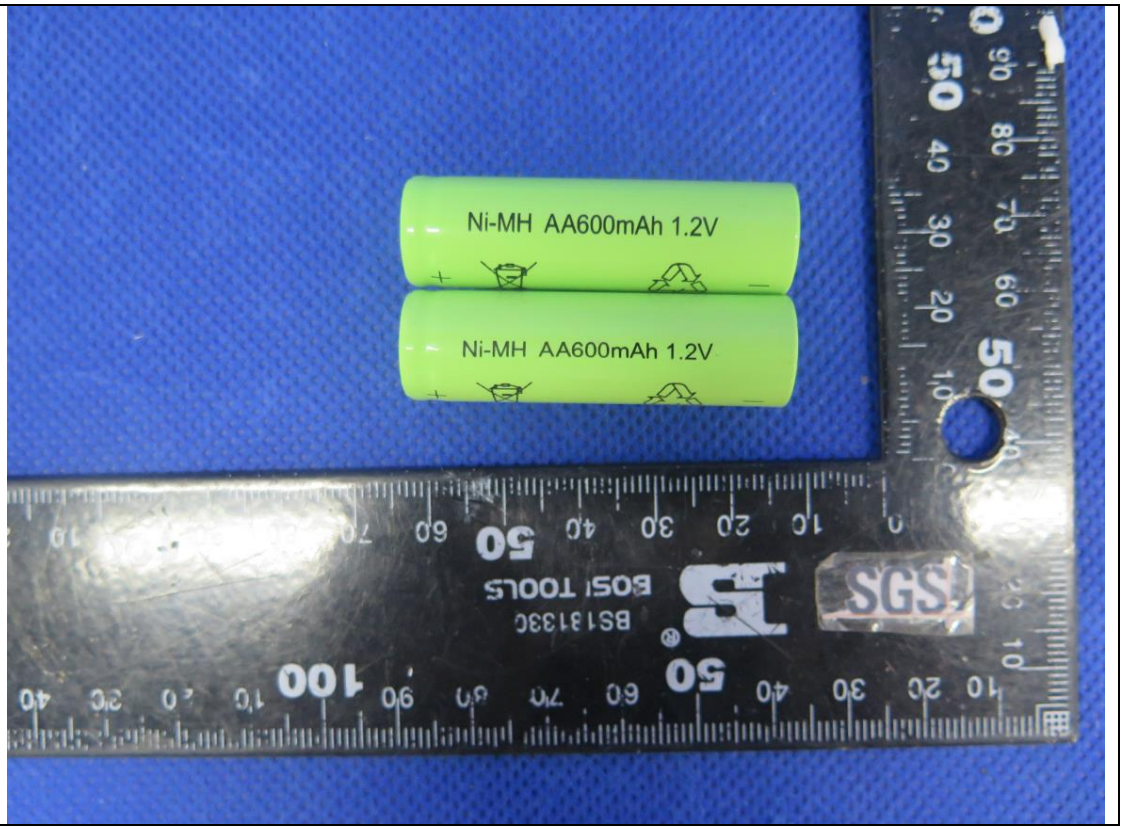
[ ] rear

[ ] right

[ ] left

[ ] top

[ ] bottom



Annex II
Photo documentation
Hair Clipper
HC-001, HC-002, HC-005, HC-006, HC-008, HC-2011

Report No.: NBES170200047802-M1

Detail of: Battery for HC-005 (the same as HC-001 while put together with two cells)

View:

[X] general

[ ] front

[ ] rear

[ ] right

[ ] left

[ ] top

[ ] bottom

Detail of: Battery for HC-006

View:

[ ] general

[ ] front

[ ] rear

[ ] right

[ ] left

[X] top

[ ] bottom

Annex II
Photo documentation
Hair Clipper
HC-001, HC-002, HC-005, HC-006, HC-008, HC-2011

Report No.: NBES170200047802-M1

Detail of: Battery for HC-008

View:

[ ] general

[ ] front

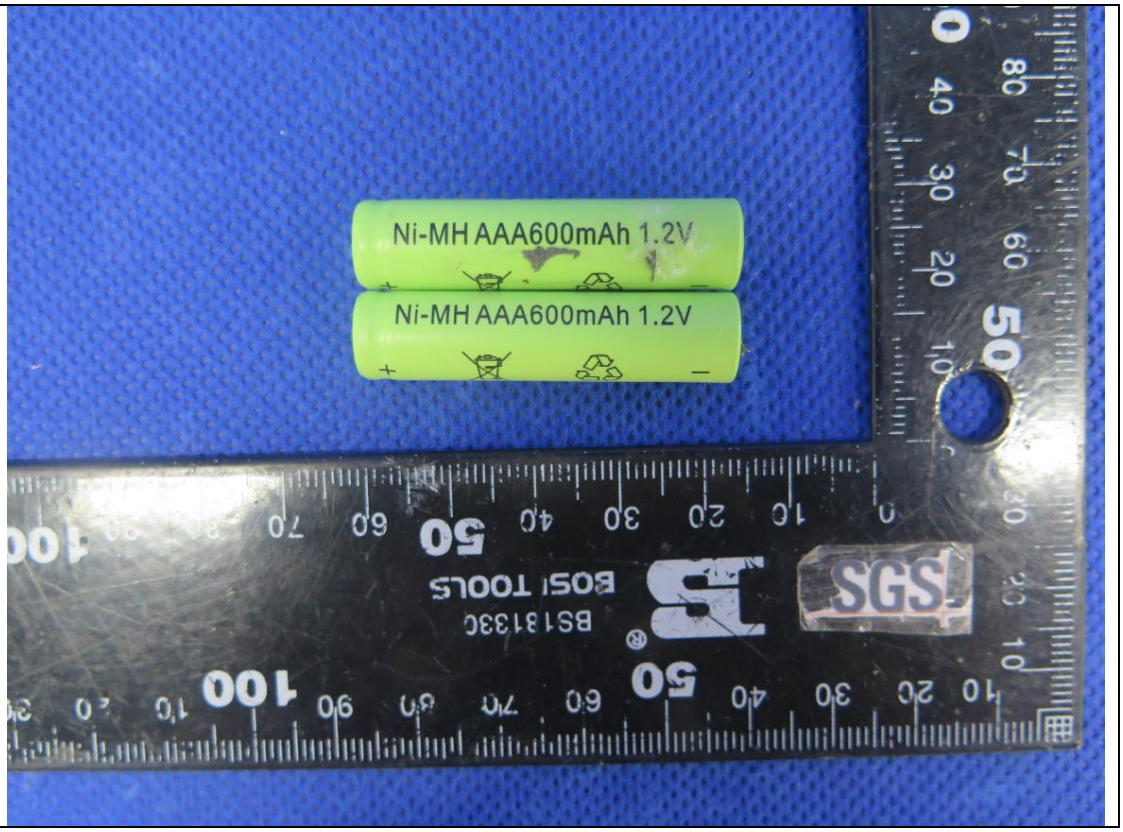
[ ] rear

[ ] right

[ ] left

[X] top

[ ] bottom



<End of Annex II>