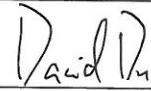
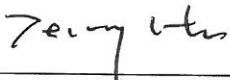




TEST REPORT IEC 60335-2-2 Household and similar electrical appliances – Safety – Part 2-2: Particular requirements for vacuum cleaners and water- suction cleaning appliances	
Report Number	EFSH15040492-IE-01-L01-A4
Date of issue	2015-06-01, Amendment 1:2019-12-18
Total number of pages	39 pages
Name of Testing Laboratory preparing the Report	Eurofins Product Testing Service (Shanghai) Co., Ltd. No.395, No.399 West Jiangchang Road, Jing'an District, Shanghai, China
Applicant's name	Suzhou Maijun Electric Appliance Co., Ltd.
Address	Room 1172, 7# Building, No. 51# Suli Road, Wuzhong District, Suzhou, China
Test specification:	
Standard	<input checked="" type="checkbox"/> EN 60335-2-2:2010 + A11:2012 + A1:2013 <input checked="" type="checkbox"/> EN 60335-1:2012 + A11:2014 + A13:2017 + A1:2019 + A14:2019 + A2:2019 <input checked="" type="checkbox"/> EN 62233:2008 <input type="checkbox"/> IEC 60335-2-2:2009 (Sixth Edition) + A1:2012 in conjunction with IEC 60335-1:2010 (Fifth Edition) (incl. Corrigendum 1:2010) and Corr. 2:2011 + A1:2013
Test procedure	CE-LVD
Non-standard test method	N/A
Test Report Form No.	IEC60335_2_2H
Test Report Form(s) Originator	LCIE
Master TRF	Dated 2016-03
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This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.	
General disclaimer:	
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 CB Testing Laboratory. The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.	

Test item description	Vacuum Cleaner	
Trade Mark	--	
Manufacturer	Same as the applicant	
Model/Type reference	MJ1402, MJ1402B	
Ratings	Class III, IPX4; MJ1402: DC 3,7V; MJ1402B: DC 7,4V	
Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):		
<input checked="" type="checkbox"/> Testing Laboratory:	Eurofins Product Testing Service (Shanghai) Co., Ltd.	
Testing location/ address	No.395, No.399 West Jiangchang Road, Jing'an District, Shanghai, China	
<input type="checkbox"/> Associated CB Testing Laboratory:	N/A	
Testing location/ address	N/A	
Tested by (name, function, signature)	David Du /Project Engineer	
Approved by (name, function, signature) ..	Jerry Hu /Project Engineer	
<input type="checkbox"/> Testing procedure: CTF Stage 1:	N/A	
Testing location/ address	N/A	
Tested by (name, function, signature)	N/A	
Approved by (name, function, signature) ..	N/A	
<input type="checkbox"/> Testing procedure: CTF Stage 2:	N/A	
Testing location/ address	N/A	
Tested by (name + signature)	N/A	
Witnessed by (name, function, signature) ..	N/A	
Approved by (name, function, signature) ..	N/A	
<input type="checkbox"/> Testing procedure: CTF Stage 3:	N/A	
<input type="checkbox"/> Testing procedure: CTF Stage 4:	N/A	
Testing location/ address	N/A	
Tested by (name, function, signature)	N/A	
Witnessed by (name, function, signature) ..	N/A	
Approved by (name, function, signature) ..	N/A	
Supervised by (name, function, signature) :	N/A	

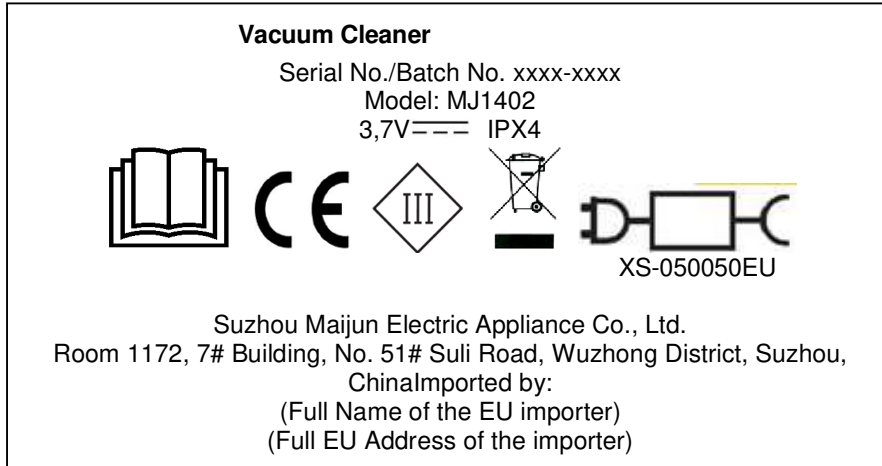
List of Attachments (including a total number of pages in each attachment): None.	
Summary of testing: From the result of our inspection and tests on the submitted samples, we conclude they comply with requirements of the standard.	
Tests performed (name of test and test clause): None.	Testing location: Eurofins Product Testing Service (Shanghai) Co., Ltd. No.395, No.399 West Jiangchang Road, Jing'an District, Shanghai, China
Summary of compliance with National Differences (List of countries addressed): National differences of U.K. were checked.	

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.

(Representative, may differ in model name and rating)

For Appliance:



Copy of adaptor marking plate (For MJ1402):



Alternative adaptor (For MJ1402):



Copy of adapter marking plate (For MJ1402B):



Test item particulars: Wet/Dry Vacuum Cleaner	
Classification of installation and use: Vacuum Cleaner Class III, Adapter Class II Handheld and Household use	
Supply Connection: Battery operated: --	
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 : -- Date (s) of performance of tests : --	
General remarks:	
<p>The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory. "(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report. Determination of the test result includes consideration of measurement uncertainty from the test equipment and methods. The related applicable CTL/OSM decisions have been considered and the requirements found fulfilled.</p>	
Throughout this report a <input checked="" type="checkbox"/> comma / <input type="checkbox"/> point is used as the decimal separator.	
Manufacturer's Declaration per sub-clause 4.2.5 of IEC60335-2-29:	
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided :	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> Not applicable
When differences exist; they shall be identified in the General product information section.	
Name and address of factory (ies) : Suzhou Xinwei Electric Co., Ltd. No.299, Chang'an Road, Xukou Town, Wuzhong District, 215156, Suzhou ,China	
General product information:	
The appliances covered by this report are hand-held vacuum cleaners with adaptors, rechargeable batteries for household and indoor use. It can alternatively incorporate adaptors HYND-0500170EUA, input (230-240 V~, 50 Hz, 0,2 A) and output (5 VDC, 170Ma), and XS-050050EU, input (100-240 V~, 50/60 Hz, 0,3 A) and output (5 VDC, 500Ma).	

It also can alternatively incorporate motors GRS-380PH-6514/57 and MJ-380P.

Amendment 1:

The original test report ref. No. EFSH15040492-IE-01-L01, dated 2015-06-01 was modified on 2015-08-10 to include the following changes and/or additions:

1. Add a new model "MJ1402B" with Li-ion battery "ICR 18650-2000mAh 7.4V".

MJ1402 and MJ1402B have same construction except different adaptors, batteries, main motors and PCB.

2. For MJ1402B, add "ZD5C090050EUE " adaptor manufactured by E-TEK Electronics Manufactory LTD.

3. For GS approval, EK1 decision was updated from EK1 601-15 to EK1 601-15e Rev1.

Amendment 2:

The original test report ref. No. EFSH15040492-IE-01-L01, dated 2015-06-01 and ref. No. EFSH15040492-IE-01-L01-A1, dated 2015-08-10 were modified on 2015-08-19 to include the following changes and/or additions:

1. Add the photo of battery: ICR 18650-2000mAh 7.4V;
2. Add an alternative internal wire.

Amendment 3:

The original test report ref. No. EFSH15040492-IE-01-L01, dated 2015-06-01, ref. No. EFSH15040492-IE-01-L01-A1, dated 2015-08-10 and ref. No. EFSH15040492-IE-01-L01-A2, dated 2015-08-19 were modified on 2019-02-22 to include the following changes and/or additions:

1. Update the standard to EN 60335 1:2012 + A11:2014 + A13:2017.
2. Update EK decisions.

After review, no tests need to be done.

This report is only valid in conjunction with the original Eurofins report ref. No.EFSH15040492-IE-01-L01, and the related amendment/modification reports.

Amendment 4:

The original test report ref. No. EFSH15040492-IE-01-L01, dated 2015-06-01 was additionally modified on 2019-12-18 to include the following changes and/or additions:

1. Update the standard to EN 60335-1:2012 + A11:2014 + A13:2017 + A1:2019 + A14:2019 + A2:2019

After review, no tests need to be done.

This report is only valid in conjunction with the original Eurofins report ref. No.EFSH15040492-IE-01-L01, and the related amendment/modification reports.

IEC 60335-1:2010/A2:2016 - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict

ATTACHMENT TO TEST REPORT IEC 60335-1 Household and similar electrical appliances – Safety – Part 1: GENERAL REQUIREMENTS	
Differences according to	: IEC 60335-1:2010
Attachment Form No.	: IEC 60335-1:2010/A1:2013
Attachment Originator	: Eurofins
Master Attachment	: 2015-03

7	MARKING AND INSTRUCTIONS		--
7.1	Symbol IEC 60417-5018, for class II and class III appliances incorporating a functional earth		N/A
7.4	Appliances adjustable for different rated voltages or rated frequencies, the voltage or the frequency setting is clearly discernible		N/A
	Requirement met if frequent changes are not required and the rated voltage or rated frequency to which the appliance is to be adjusted is determined from a wiring diagram		N/A
7.8	Except for type Z attachment, terminals for connection to the supply mains indicated as follows:		N/A
	- marking of functional earthing terminals (symbol IEC 60417-5018)		N/A
7.11	Indication for direction of adjustment of controls		N/A
7.12	The instructions state that:		
	For appliances for altitudes exceeding 2000 m, the maximum altitude is stated		N/A
	The instructions for appliances incorporating a functional earth states that the appliance incorporates an earth connection for functional purposes only		N/A
7.12.1	If different rated voltages or different rated frequencies are marked, the instructions state what action to be taken to adjust the appliance		N/A
7.15	The symbol IEC 60417-5018 placed next to the symbol IEC 60417-5172 or IEC 60417-5180		N/A
10	POWER INPUT AND CURRENT		--

IEC 60335-1:2010/A2:2016 - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict
10.1	If the power input varies throughout the operating cycle and the maximum value of the power input exceeds, by a factor greater than two, the arithmetic mean value of the power input occurring during a representative period, the power input is the maximum value that is exceeded for more than 10 % of the representative period		N/A
	Otherwise the power input is the arithmetic mean value		N/A
10.2	If the current varies throughout the operating cycle and the maximum value of the current exceeds, by a factor greater than two, the arithmetic mean value of the current occurring during a representative period, the current is the maximum value that is exceeded for more than 10 % of the representative period		N/A
	Otherwise the current is the arithmetic mean value		N/A
13	LEAKAGE CURRENT AND ELECTRIC STRENGTH AT OPERATING TEMPERATURE		--
13.2	For class 0, class II and class III appliances, and class II constructions, leakage current measured by means of the circuit described in figure 4 of IEC 60990		P
	For class 0I and class I appliances, a low impedance ammeter may be used		N/A
	Leakage current measurements		P
15	MOISTURE RESISTANCE		--
15.2	Spillage solution comprising water containing approximately 1 % NaCl and 0,6 % rinsing agent		N/A
19	ABNORMAL OPERATION		--
19.7	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
	An electronic timer or programmer that operates to ensure compliance with the test before the maximum period under the conditions of Clause 11 is reached, is a protective electronic circuit		N/A
19.11 .4.4	An open circuit test voltage of 2 kV is applicable for the line-to-line coupling mode		N/A
	An open circuit test voltage of 4 kV is applicable for the line-to-earth coupling		N/A
22	CONSTRUCTION		--

IEC 60335-1:2010/A2:2016 - ATTACHMENT			
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 equal to or greater than 0,1 μ F, the appliance being disconnected from the supply at the instant of voltage peak		N/A
	If compliance relies on the operation of an electronic circuit, the electromagnetic phenomena tests of 19.11.4.3 and 19.11.4.4 are applied		N/A
	The discharge test is then repeated three times, voltage not exceeding 34 V (V) :		N/A
22.32	Ceramic and similar porous material in which heating conductors are embedded is considered to be basic insulation, not reinforced insulation		N/A
22.33	Conductive liquids that are or may become accessible in normal use and conductive liquids that are in contact with unearthed accessible metal parts are not in direct contact with live parts, or		N/A
	unearthed metal parts separated from live parts by basic insulation only		N/A
22.35	This requirement does not apply to handles, levers and knobs on stationary appliances and cordless appliances, other than those of electrical components, provided they are reliably connected to an earthing terminal or earthing contact, or separated from live parts by earthed metal		N/A
	Insulating material covering metal handles, levers and knobs withstand the electric strength test of 16.3 for supplementary insulation		N/A
	Insulating material covering metal handles, levers and knobs withstand the electric strength test of 16.3 for supplementary insulation		N/A
22.53	Class II appliances and class III appliances that incorporate functionally earthed parts have at least double insulation or reinforced insulation between live parts and the functionally earthed parts		N/A
22.54	Button cells and batteries designated R1 not accessible without the aid of a tool, unless		N/A
	the cover of their compartment can only be opened after at least two independent movements have been applied simultaneously		N/A
23	INTERNAL WIRING		--
23.5	For class II construction, the requirements for supplementary insulation and reinforced insulation apply,		N/A

IEC 60335-1:2010/A2:2016 - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict
	except that the sheath of a cord complying with IEC 60227 or IEC 60245 may provide supplementary insulation.		N/A
	A single layer of internal wiring insulation does not provide reinforced insulation		N/A
24	COMPONENTS		--
24.1	Components comply with safety requirements in relevant IEC standards		P
	List of components :	(see appended table)	--
	Motors not required to comply with IEC 60034-1, they are tested as part of the appliance		P
	Relays tested as part of the appliance, or		N/A
	alternatively acc. to IEC 60730-1, and meeting the additional requirements in IEC 60335-1		N/A
	The requirements of Clause 29 apply between live parts of components and accessible parts of the appliance		N/A
	Components can comply with the requirements for clearances and creepage distances for functional insulation in the relevant component standard		P
	30.2 of this standard apply to parts of non-metallic material in components including parts of non-metallic material supporting current-carrying connections		P
	Components that have not been previously tested to comply with the IEC standard for the relevant component are tested according to the requirements of 30.2		P
	Components that have been previously tested to comply with the resistance to fire requirements in the IEC standard for the relevant component need not be retested provided the specified conditions are met		P
	If these conditions are not satisfied, the component is tested as part of the appliance.		P
	Power electronic converter circuits not required to comply with IEC 62477-1, they are tested as part of the appliance		N/A
24.1.2	Transformers in associated switch mode power supplies comply with Annex BB of IEC 61558-2-16		N/A
	Safety isolating transformers comply with IEC 61558-2-6		P
24.1.4	Thermal cut-outs of the capillary type comply with the requirements for type 2.K controls in IEC 60730-2-9		N/A

IEC 60335-1:2010/A2:2016 - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict
24.1.5	Appliance couplers comply with IEC 60320-1		
	However, for class II appliances classified higher than IPX0, the appliance couplers comply with IEC 60320-2-3		N/A
25	SUPPLY CONNECTION AND EXTERNAL FLEXIBLE CORDS		N/A
25.1	Appliance not intended for permanent connection to fixed wiring, means for connection to the supply:		--
	- fixed appliances: pull 100 N; torque (not on automatic cord reel) (Nm) :		N/A
	- other appliances: values shown in table 12: mass (kg); pull (N); torque (not on automatic cord reel) (Nm) :		N/A
	Pull and torque test of supply cord, values shown in table 12: mass (kg); pull (N); torque (not on automatic cord reel) (Nm) :		N/A
27	PROVISION FOR EARTHING		N/A
27.1	Class II appliances and class III appliances can incorporate an earth for functional purposes		N/A
27.2	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes		N/A
27.3	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes		N/A
27.4	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes		N/A
27.5	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes		N/A
27.6	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes		N/A
29	CLEARANCES, CREEPAGE DISTANCES AND SOLID INSULATION		--
29.1	For appliances intended for use at altitudes exceeding 2 000 m, the clearances in Table 16 is increased according to the relevant multiplier values in Table A.2 of IEC 60664-1		N/A
	Impulse voltage test is not applicable:		--

IEC 60335-1:2010/A2:2016 - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict
	- to appliances intended for use at altitudes exceeding 2 000 m		N/A
29.3	Compliance checked:		
	- for insulation, other than single layer internal wiring insulation, by an assessment of the thermal quality of the material combined with an electric strength test, in accordance with 29.3.3, and		N/A
	- by an assessment of the thermal quality of the material according to 29.3.3 combined with an electric strength test in accordance with 23.5, for each single layer internal wiring insulation touching each other, or		N/A
B	ANNEX B (NORMATIVE) APPLIANCES POWERED BY RECHARGEABLE BATTERIES THAT ARE RECHARGED IN THE APPLIANCE		--
	Three forms of construction covered:		--
	a) Appliance supplied directly from the supply mains or a renewable energy source, the battery charging circuitry and other supply unit circuitry incorporated within the appliance		P
	b) The part of the appliance incorporating the battery is supplied from the supply mains or a renewable energy source, via a detachable supply unit. The battery charging circuitry is incorporated within the part of the appliance containing the battery		N/A
	c) The part of the appliance incorporating the battery is supplied from the supply mains or a renewable energy source, via a detachable supply unit. The battery charging circuitry is incorporated within the detachable supply unit		N/A
7.1	Appliances intending to be supplied from a detachable supply unit marked with symbol IEC 60417-6181 and its type reference along with symbol ISO 7000-0790 (2004-01), or		P
	use only with <model designation> supply unit :		P
7.6	Additional symbols		P
7.12	For appliances intending to be supplied from a detachable supply unit for the purposes of recharging the battery, the type reference of the detachable supply unit is stated along with the following:		--
	WARNING: For the purposes of recharging the battery, only use the detachable supply unit provided with this appliance		P

IEC 60335-1:2010/A2:2016 - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict
	If the symbol for detachable supply unit is used, its meaning is explained		P
7.15	The type reference of the detachable supply unit is placed in close proximity to the symbol		P
11.8	Temperature rise of the battery surface does not exceed the limit in the battery manufacturer's specification; measured (K); limit (K) :	Measured:24,0K Limited: 25K	P
	If no limit specified, the temperature rise does not exceed 20 K; measured (K) :		N/A
19.13	The battery does not rupture or ignite		P
H	ANNEX H (NORMATIVE) SWITCHES		--
20	Clause 20 is applicable to clearances across full disconnection and micro-disconnection		N/A
	It is also applicable to creepage distances for functional insulation, across full disconnection and micro-disconnection, as stated in Table 24		N/A
S	ANNEX S (NORMATIVE) BATTERY OPERATED APPLIANCES POWERED BY BATTERIES THAT ARE NON-RECHARGEABLE OR NOT RECHARGED IN THE APPLIANCE		--
	The following modifications to this standard are applicable for battery-operated appliances where the batteries are either non-rechargeable (primary batteries), or		N/A
	rechargeable batteries (secondary batteries) that are not recharged in the appliance		N/A
5.8.1	If the supply terminals for the connection of the battery have no indication of polarity, the more unfavourable polarity is applied		P
5.S.1 01	Appliances intended for use with a battery box are tested with the battery box supplied with the appliance or with the battery box recommended in the instructions		N/A
5.S.1 02	Appliances are tested as motor-operated appliances.		--
7.1	Appliances marked with the battery voltage (V) and the polarity of the terminals, unless :		P
	the polarity is irrelevant		N/A
	Appliances also marked with:		--
	– name, trade mark or identification mark of the manufacturer or responsible vendor :		P
	– model or type reference :		P

IEC 60335-1:2010/A2:2016 - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict
	– IP number according to degree of protection against ingress of water, other than IPX0 :		P
	– type reference of battery or batteries :		P
	If relevant, the positive terminal is indicated by the symbol IEC 60417-5005 and the negative terminal by the symbol IEC 60417-5006		P
	If appliances use more than one battery, they are marked to indicate correct polarity connection of the batteries		N/A
7.6	Additional symbols		N/A
7.12	The instructions contain the following, as applicable:		--
	– the types of batteries that may be used :		P
	– how to remove and insert the batteries		N/A
	– non-rechargeable batteries are not to be recharged		N/A
	– rechargeable batteries are to be removed from the appliance before being charged		N/A
	– different types of batteries or new and used batteries are not to be mixed		P
	– batteries are to be inserted with the correct polarity		N/A
	– exhausted batteries are to be removed from the appliance and safely disposed of		N/A
	– if the appliance is to be stored unused for a long period, the batteries are removed		N/A
	– the supply terminals are not to be short-circuited		N/A
11.5	Appliances are supplied with the most unfavourable supply voltage between		--
	– 0,55 and 1,0 times the battery voltage, if the appliance can be used with non-rechargeable batteries		N/A
	– 0,75 and 1,0 times battery voltage, if the appliance is designed for use with rechargeable batteries only		P
	The values specified in Table S.101 for the internal resistance per cell of the battery is taken into account		N/A
19.1	The tests are carried out with the battery fully charged unless otherwise specified		P
19.13	The battery does not rupture or ignite		P
19.S.101	Appliances are supplied with the voltage specified in 11.5. The supply terminals having an indication of polarity are connected to the opposite polarity, unless		N/A

IEC 60335-1:2010/A2:2016 - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict
	such a connection is unlikely to occur due to the construction of the appliance		P
19.S.102	For appliances with provision for multiple batteries, one or more of the batteries are reversed and the appliance is operated, if reversal of batteries is allowed by the construction		N/A
25.5	The flexible leads or flexible cord used to connect an external battery or battery box in is connected to the appliance by a type X attachment		N/A
25.13	This requirement is not applicable to the flexible leads or flexible cord connecting external batteries or a battery box with an appliance		N/A
25.S.101	Appliances have suitable means for connection of the battery. If the type of battery is marked on the appliance, the means of connection is suitable for this type of battery		P
26.5	Terminal devices in an appliance for the connection of the flexible leads or flexible cord connecting an external battery or battery box are so located or shielded that there is no risk of accidental connection between supply terminals		N/A
30.2.3.2	There is no battery in the area of the vertical cylinder used for the consequential needle flame test, unless		N/A
	the battery is shielded by a barrier that meets the needle flame test of Annex E, or		N/A
	that comprises material classified as V-0 or V-1 according to IEC 60695-11-10		N/A

IEC 60335-1:2010/A2:2016 - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict

ATTACHMENT TO TEST REPORT IEC 60335-1 Household and similar electrical appliances – Safety – Part 1: GENERAL REQUIREMENTS	
Differences according to :	IEC 60335-1:2010 /A2:2016
Attachment Form No. :	TRF_IEC 60335-1_2010_AM2_A
Attachment Originator :	Eurofins
Master Attachment :	2017-12-22

IEC 60335-1:2010/A2:2016 - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict

7	MARKING AND INSTRUCTIONS		--
7.1	Appliances shall be marked with the		--
	- symbol IEC 60417-5180 (2003-02), for class III appliances. This marking is not necessary for appliances operated only by batteries (primary batteries or secondary batteries recharged outside of the appliance) or appliances powered by rechargeable batteries recharged in the appliance.		P
7.12.9	For each language, the instructions specified in 7.12 and from 7.12.1 to 7.12.8 shall appear together before any other instructions supplied with the appliance. Alternatively, these instructions may be supplied with the appliance separately from any functional use booklet. They may follow the description of the appliance that identifies parts, or follow the drawings/sketches common to the languages of the instructions.		P
	In addition, instructions shall also be available in an alternative format such as on a website or on request from the user in a format such as a DVD.	On a website	P
7.14	The signal words WARNING, CAUTION, DANGER if in the Latin alphabet shall be in uppercase having a height not less than		--
	- 3,5 mm for appliances normally used on the floor;		N/A
	- 2,0 mm for portable appliances with a printable surface of less than 10 cm ² ; and		N/A
	- 3,0 mm for other appliances.		N/A
	Uppercase letter of the text explaining the signal word shall be no smaller than 1,6 mm, with other letters according to the font size of the uppercase letter.		N/A
	Countries that do not use the Latin alphabet need to specify the minimum size of the script to be used taking into account what is specified for the Latin alphabet.		N/A
	Unless contrasting colours are used, moulded in, engraved, or stamped markings shall be either raised above or have a depth below the surface of at least 0,25 mm.		N/A

IEC 60335-1:2010/A2:2016 - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict
	Compliance is checked by inspection, by measurement and by rubbing the marking by hand for 15 s with a piece of cloth soaked with water and again for 15 s with a piece of cloth soaked with petroleum spirit. The petroleum spirit to be used for the test is aliphatic solvent hexane.		N/A
8	Protection against access to live parts		--
8.1.3	If a single switching action is obtained by a switching device, the switching device shall provide full disconnection and the clearances for full disconnection specified in 20.1.5.3 of IEC 61058-1:2000 shall be obtained from Table 22 of IEC 61058-1:2000 using the next higher step for rated impulse withstand voltage		N/A
	For appliances provided with a supply cord and without a switching device in their supply circuit, a single switching action may be obtained by the withdrawal of the plug from a socket-outlet.		N/A
13	LEAKAGE CURRENT AND ELECTRIC STRENGTH AT OPERATING TEMPERATURE		--
13.2	The leakage current is measured by means of the circuit described in Figure 4 of IEC 60990:1999. For class 0I appliances and class I appliances, except parts of class II construction, C may be replaced by a low impedance ammeter responding to the rated frequency of the appliance.		P
19	ABNORMAL OPERATION		--
19.1	If the control performs more than one function, only that aspect of the control under consideration is rendered inoperative. Other functions of the control may continue to operate normally.		N/A
19.7	Replace "class P2" by "class S2 or S3".		N/A
19.11.3	If the appliance incorporates a protective electronic circuit that operates to ensure compliance with Clause 19, the appliance is tested as follows:		N/A
	A fault as indicated in a) to g) of 19.11.2 shall be incorporated in the protective electronic circuit either before the appliance is started or at any point in time after the appliance is started so that the most unfavourable conditions of the test are applied.		N/A
	If the appliance is able to operate after the fault in the protective electronic circuit is incorporated, then the appliance is further tested as follows.		N/A

IEC 60335-1:2010/A2:2016 - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict
	For appliances for continuous operation the appliance is operated until steady conditions are reached. Then the relevant test of Clause 19 is repeated.		N/A
	Other appliances are operated for one cycle of operation. Then the relevant test of Clause 19 is repeated.		N/A
19.11.4.2	The appliance is subjected to radiated fields in accordance with IEC 61000-4-3.		--
	The frequency ranges tested shall be:		N/A
	- 80 MHz to 1 000 MHz, test level 3;		N/A
	- 1,4 GHz to 2,0 GHz, test level 3;		N/A
	- 2,0 GHz to 2,7 GHz, test level 2.		N/A
22	CONSTRUCTION		--
22.5	Appliances intended to be connected to the supply mains by means of a plug or pins for insertion into socket-outlets shall be constructed so that in normal use, when pins are touched, there is no risk of electric shock from charged capacitors having a rated capacitance equal to or greater than 0,1 μ F.		N/A
22.12	Handles, knobs, grips, levers and parts providing a similar function shall be fixed in a reliable manner so that they will not work loose in normal use if loosening could result in a hazard, including a choking hazard. If these parts are used to indicate the position of switches or similar components, it shall not be possible to remove or fix them incorrectly if this could result in a hazard. The requirement concerning the choking hazard does not apply to appliances intended for commercial use.		P
	If the part is removed and can be contained within the small parts cylinder in Figure 13, its loosening is considered to result in a choking hazard.		P
22.55	Devices that are operated by the user to stop the intended function of the appliance, if any, shall be distinguished from other manual devices by means of shape, or size, or surface texture, or position. This requirement concerning position does not preclude use of a push on push off switch.		P
	An indication when the device has been operated shall be given by:		--

IEC 60335-1:2010/A2:2016 - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict
	- tactile feedback from the actuator or tactile feedback from the appliance such as stopping of the vibration on the body of the appliance or of a part of it; or		N/A
	- reduction in heat output; or		N/A
	- audible and visible feedback.		N/A
	The sound of the motor or sound of an actuator switching from on to off is considered as an audible feedback. A switch with a stable off-position different from the on-position is considered visual and tactile feedback. The force feedback from the actuator when operating it is considered to be tactile feedback.		N/A
22.56	Detachable power supply part shall be provided with the part of class III construction of the appliance.		N/A
22.57	The properties of non-metallic materials shall not degrade from exposure to UV-C radiation generated from UV sources provided for microbiological control within the appliance such that they no longer comply with this standard. This requirement does not apply to glass, ceramics or similar materials.		N/A
	Compliance is checked by the conditioning and tests of Annex T.		N/A
24	COMPONENTS		--
24.2	Appliances shall not be fitted with		--
	- switches, automatic controls, power supplies and the like in flexible cords;		P
24.8	The requirement is considered to be met by one or more of the following conditions:		
	- the capacitors are of class of safety protection S2 or S3 according to IEC 60252-1;		N/A
25	SUPPLY CONNECTION AND EXTERNAL FLEXIBLE CORDS		--
25.7	Supply cords for appliances other than class III appliances shall be one of the following types:		N/A
	- Halogen-free, low smoke, thermoplastic insulated and sheathed		N/A
	Their properties should at least be those of:		N/A
	• Light duty halogen-free low smoke flexible cable (code designation 62821 IEC 101 for circular cable and code designation 62821 IEC 101f for flat cable);		N/A

IEC 60335-1:2010/A2:2016 - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict
	<ul style="list-style-type: none"> • Ordinary duty halogen-free, low smoke flexible cable (code designation 62821 IEC 102 for circular cable and code designation 62821 IEC 102f for flat cable). 		N/A
25.10	Where additional neutral conductors are provided in the supply cord		N/A
	<ul style="list-style-type: none"> - other colours may be used for these additional neutral conductors; 		N/A
	<ul style="list-style-type: none"> - all of the neutral conductors and line conductors shall be identified by marking using the alpha numeric notation specified in IEC 60445; 		N/A
	<ul style="list-style-type: none"> - the supply cord shall be fitted to the appliance. 		N/A
25.23	Interconnection cords shall comply with the requirements for the supply cord, except that		N/A
	<ul style="list-style-type: none"> - for class III construction, interconnection cords of a class I appliance or class II appliance, the cross sectional areas of the conductors need not comply with 25.8 if the temperature of the cord insulation specified in Table 3 and Table 9 are not exceeded during the tests of Clause 11 and Clause 19, respectively. 		N/A
B	ANNEX B (NORMATIVE) APPLIANCES POWERED BY RECHARGEABLE BATTERIES THAT ARE RECHARGED IN THE APPLIANCE		--
7.12	Instructions for appliances containing non user-replaceable batteries shall state the substance of the following:		--
	This appliance contains batteries that are only replaceable by skilled persons.		N/A
	Instructions for appliances containing non-replaceable batteries shall state the substance of the following:		-
	This appliance contains batteries that are non-replaceable.		P
P	ANNEX P (INFORMATIVE) GUIDANCE FOR THE APPLICATION OF THIS STANDARD TO APPLIANCES USED IN WARM DAMP EQUABLE CLIMATES		N/A
	Throughout the text of the annex including the title, replace "warm damp equable" by "tropical"		N/A

IEC 60335-1:2010/A2:2016 - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict
	Replace "WDaE" by "with symbol IEC 60417-6332 (2015-06)".		N/A
7	Marking and instructions		--
7.1	Replace "the letters WDaE" with "symbol IEC 60417-6332 (2015-06)".		N/A
7.6	symbol IEC 60417-6332 (2015-06) tropical climate		N/A
7.12	If symbol IEC 60417-6332 (2015-06) is used, its meaning shall be explained.		N/A
T	ANNEX T (NORMATIVE) UV-C RADIATION EFFECT ON NON-METALLIC MATERIALS		
	Annex T provides requirements for non-metallic materials subject to direct or reflected UV-C radiation (100 nm to 280 nm) exposure and whose mechanical and electrical properties are relied upon for compliance with this standard. This annex does not apply to glass, ceramic and similar materials.		N/A
	The UV-C radiation effect on non-metallic materials is determined by measuring selected non-metallic material properties before and after UV-C radiation conditioning. The conditioning and tests are carried out on non-metallic material specimens prepared according to the relevant standard for the test method. The standards and compliance criteria for parts providing mechanical support or impact resistance are specified in Table T.1. The standard and compliance criteria for electrical insulation of internal wiring are specified in Table T.2.		N/A
	The conditioning apparatus and test procedure are as specified in ISO 4892-1 and ISO 4892-2, with the following modifications.		N/A
	Modifications to ISO 4892-1:		N/A
5.1	Light source		N/A
5.1.6	The UV-C emitter shall be a low pressure mercury lamp with a quartz envelope having a continuous spectral irradiance of 10 W/m ² at 254 nm.	N/A	N/A
	Subclause 5.1.6.1 and Table 1 are not applicable.	N/A	N/A
5.2	Temperature		N/A
5.2.4	The black-panel temperature shall be 63 °C ± 3 °C.		N/A
5.3	Humidity and wetting		N/A
5.3.1	Humidification of the chamber air is specified in part 2 when necessary.		N/A
9	Test report		N/A
	This clause is not applicable.		N/A

IEC 60335-1:2010/A2:2016 - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict
	Modifications to ISO 4892-2:		N/A
7	Procedure		N/A
7.1	General		N/A
	At least three test specimens of each non-metallic material providing mechanical support or impact resistance shall be exposed in each run to allow statistical evaluation of the results.		N/A
	Ten samples of the insulated internal wiring shall be exposed in each run. When the internal wiring is provided in more than one colour, the colour having the heaviest organic pigment loading is used.		N/A
	In determining the samples for testing, consideration should be given to samples coloured red or yellow which are known to have particular critical effects.		N/A
7.2	Mounting the test specimens		N/A
	The specimens shall be attached to the specimen holders such that they are not subject to any applied stress.		N/A
7.3	Exposure		--
	Before placing the specimens in the test chamber, the apparatus shall be operating under the specified exposure conditions. It shall be programmed to operate continuously and the conditions shall be maintained throughout the exposure, keeping any interruptions to service the apparatus and to inspect the specimens to a minimum.		N/A
	The test specimens and, if used, the irradiance-measuring instrument are exposed for 1 000 h.		N/A
	If it is necessary to remove a test specimen for periodic inspection, care should be taken to avoid touching the exposed surface or altering it in any way.		N/A
7.4	Measurement of radiant exposure		--
	If used, a radiometer shall be mounted and calibrated such that it measures the irradiance at the exposed surface of the test specimen.		N/A
7.5	Determination of changes in properties after exposure		--
	The non-metallic material properties and test methods for parts providing mechanical support or impact resistance are specified in Table T.1.		N/A

IEC 60335-1:2010/A2:2016 - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict
	The non-metallic material properties and test method for electrical insulation of internal wiring are specified in Table T.2.		N/A
8	Exposure report		--
	This clause is not applicable.		N/A

IEC 60335_1X ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

ATTACHMENT TO TEST REPORT
IEC 60335-1
EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES
HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –
PART 1: GENERAL REQUIREMENTS

Differences according to : EN 60335-1:2012 + AC:2014 + A11:2014 + A13:2017 + A1:2019 + A14:2019 + A2:2019
EN 62233:2008 + AC:2008

Attachment Form No. : EU_GD_IEC60335_1X

Attachment Originator : Nemko AS

Master Attachment : 2019-09-24

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	CENELEC COMMON MODIFICATIONS (EN)	--
6.1	Delete "class 0" and "class 01"	N/A
7.1	Single-phase appliances to be connected to the supply mains: 230 V covered	P
	Multi-phase appliances to be connected to the supply mains: 400 V covered	N/A
7.12	The instructions include the substance of the following:	--
	- this appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved	P
	- children shall not play with the appliance	P
	- cleaning and user maintenance shall not be made by children without supervision	P
8.1.1	Also test probe 18 of EN 61032 is applied	N/A
	The appliance being in every possible position during the test, except that	N/A
	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	N/A
	When using test probe 18 the appliance is fully assembled as in normal use without any parts removed, and	N/A

IEC 60335_1X ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	parts intended to be removed for user maintenance are also not removed		N/A
8.1.3	Instead of test probe B, test probe 18 and test probe 13, for appliances other than those of class II, test probe 41 of IEC 61032 is applied with a force not exceeding 1 N to live parts of visibly glowing heating elements, all poles of which can be disconnected by a single switching action		N/A
8.2	Compliance is checked by inspection and by applying the test probes of EN 61032 in accordance with the conditions specified in 8.1.1		N/A
	Test probe B and probe 18 of EN 61032 are applied to built-in appliances and fixed appliances only after installation		N/A
15.1.2	Appliances with an automatic cord reel tested with the cord in the most unfavourable position so that the reeling of the wet cord may affect electrical insulation during operation, the cord not being dried before reeling		N/A
20.2	For appliances having dangerous moving parts, due to their working function, e.g. the needle of a sewing machine, tools of kitchen machines or the blade of an electrical knife, full protection is not possible for performing their intended use		P
	When using a test probe similar to test probe B of EN 61032, having a circular stop face and applied with a force of 5N, the accessories and detachable covers are removed		P
	When using test probe 18 it is applied with a force of 2,5N on the appliance fully assembled		P
22.12	Other parts intended to be detached during use, maintenance or cleaning (e.g. batteries, battery covers, lids, attachments, steam nozzles) are not considered as parts providing a similar function as handles, knobs, grips, levers		P
22.17	The requirement is not applicable to built-in appliances		N/A
24.1	Components comply with the safety requirements specified in the relevant EN standards as far as they reasonably apply		P
	Motors are not required to comply with EN 60034-1, but tested as part of the appliance according to this standard		P
	Relays are tested as part of the appliance according to this standard		N/A
	Relays may be alternatively tested to EN 60730-1 and the additional requirements in EN 60335-1		N/A

IEC 60335_1X ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	The requirements of Clause 29 of this standard apply between live parts of components and accessible parts of the appliance		P
	Components may comply with the requirements for clearances and creepage distances for functional insulation as specified in the relevant component standard		P
	The requirements of 30.2 of this standard apply to parts of non-metallic material in components including parts of non-metallic material supporting current-carrying connections inside components		P
	Components that have not been tested and shown to comply with the EN standard for the relevant component are tested according to the requirements of 30.2 of this standard		P
	Components that have been tested and shown to comply with the resistance to fire requirements in the EN standard for the relevant component need not be retested provided that:		--
	- the severity specified in the component standard is not less than the severity specified in 30.2, and		P
	- the test report for the component states the values of t_e and t_i acc. to EN 60695-2-11		N/A
	If the above two conditions are not satisfied, the component is tested as part of the appliance		N/A
	Power electronic converter circuits are not required to comply with EN 62477-1, but tested as part of the appliance according to this standard		N/A
	Unless components have been tested and found to comply with the relevant EN standard for the number of cycles specified, they are tested in accordance with 24.1.1 to 24.1.9		N/A
	For components mentioned in 24.1.1 to 24.1.9, no additional tests specified in the relevant EN standard for the component are necessary other than those specified in 24.1.1 to 24.1.9		P
	Components that have not been tested and found to comply with the relevant EN standard, and		P
	components that are not marked or not used in accordance with their marking,		P
	are tested in accordance with the conditions occurring in the appliance, the number of samples being that required by the relevant standard		P

IEC 60335_1X ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	Lamp-holders and starter-holders that have not been tested and found to comply with the relevant EN standard are tested as a part of the appliance and additionally comply with the gauging and interchangeability requirements of the relevant EN standard under the conditions occurring in the appliance		N/A
	Where the relevant EN standard specifies these gauging and interchangeability requirements at elevated temperatures, the temperatures measured during the tests of Clause 11 are used		P
	There are no additional tests specified for nationally standardized plugs such as those detailed in IEC/TR 60083 or connectors complying with the standard sheets of EN 60320-1 and EN 60309, unless they are specifically mentioned in the text of this standard		N/A
	Plugs and socket-outlets and other connecting devices of interconnection cords are not interchangeable with plugs and socket-outlets listed in IEC/TR 60083 or IEC 60906-1, or		N/A
	with connectors and appliance inlets complying with the standard sheets of EN 60320-1, if		N/A
	direct supply to these parts from the supply mains gives rise to a hazard		N/A
	For plugs used in CENELEC countries Annex ZH applies		N/A
24.1.7	When 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	Type S2 and S3 capacitors according to EN 60252-1 are not required to undergo the testing as required by 30.2.2 and 30.2.3.1		N/A
25.1	Plugs and pins for insertion into socket outlets follow the relevant standards sheets in Annex ZH		N/A
25.7	Rubber sheathed cords (60245 IEC 53) are not suitable for appliances intended to be used outdoors, or		N/A
	when they are liable to be exposed to significant amount of ultraviolet radiation		N/A
25.25	Instead of IEC/TR 60083, dimensions of the pins and engagement face of plugs of appliances that are inserted into socket-outlets are in accordance with the dimensions of the relevant plug standard		N/A

IEC 60335_1X ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	Common plugs and socket-outlets types in CENELEC countries as shown in Annex ZH		N/A
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,		P
	unless they are held in place near the terminals independently of the solder		N/A
29.3.Z1	Appliance constructed so that if there is a possibility of damaging the insulation during installation, the insulation withstands the scratch and penetration test of 21.2		N/A
32	Compliance regarding electromagnetic fields is checked according to EN 62233		P
Annex I, 19.I.101	The appliance is supplied at rated voltage and operated under normal operation with each of the fault conditions specified		N/A
	The duration of any of the tests is as specified in 19.7		N/A
ZA	ANNEX ZA (NORMATIVE) SPECIAL NATIONAL CONDITIONS (EN)		--
	Denmark, Sweden, Norway and Finland		--
7.12.8	The maximum inlet water pressure is at least 1,0 MPa		Not checked
	Norway		--
19.5	The test is also applicable to appliances intended to be permanently connected to fixed wiring		Not checked
	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		Not checked
	Denmark		--
22.47	The maximum inlet water pressure is at least 1,0 MPa		Not checked
	Ireland and United Kingdom		

IEC 60335_1X ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
25.8	In the table, the line >10 A and ≤16 A is replaced with:		--
	> 10 and ≤ 13 1,25 (1,0) ^b		Not checked
	> 13 and ≤ 16 1,5 (1,0) ^b		Not checked
ZB	ANNEX ZB (INFORMATIVE) A-DEVIATIONS		--
	Ireland		--
25.1 and 25.25	These regulations apply to all plugs for domestic use at a voltage of not less than 200 V and in general allow only plugs complying with I.S. 401:1997, or equivalent, to be fitted to domestic appliances		Not checked
	United Kingdom		--
25.1 and 25.25	These regulations apply to all plugs for domestic use at a voltage of not less than 200 V and in general allow only plugs to BS 1363 to be fitted to domestic appliances.		Not checked
	It also allows plugs to BS 4573 and EN 50075 to be fitted to shavers and toothbrushes		Not checked
ZC	ANNEX ZC (NORMATIVE) NORMATIVE REFERENCES TO INTERNATIONAL PUBLICATIONS WITH THEIR CORRESPONDING EUROPEAN PUBLICATIONS		--
	A list of documents referred to in the text of this standard in such a way that some or all of their content constitutes requirements of this document		P
ZD	ANNEX ZD (INFORMATIVE) IEC and CENELEC CODE DESIGNATIONS FOR FLEXIBLE CORDS		--
	List of IEC and CENELEC code designations for flexible cords		P
ZE	ANNEX ZE (INFORMATIVE) SPECIFIC ADDITIONAL REQUIREMENTS FOR APPLIANCES AND MACHINES INTENDED FOR COMMERCIAL USE		--
7.1	Business name and full address of the manufacturer and, where applicable, his authorized representative		N/A
	Model or type reference		N/A

IEC 60335_1X ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	Serial number, if any		N/A
	Production year		N/A
	Designation of the appliance.....:		N/A
7.12	Instructions provided with the appliance so that the appliance can be used safely		N/A
	The instructions contain at least the following information:		--
	- the business name and full address of the manufacturer and, where applicable, his authorized representative		N/A
	- model or type reference of the appliance as marked on the appliance itself, except for the serial number		N/A
	- the designation of the appliance together with its explanation in case it is given by a combination of letters and/or numbers		N/A
	- the general description of the appliance, when needed due to the complexity of the appliance		N/A
	- specific precautions required during installation, operation, adjusting, user maintenance, cleaning, repairing or moving		N/A
	- when needed drawings, diagrams, descriptions and explanations necessary for the safe use and user maintenance of the appliance		N/A
	- the possible reasonably foreseeable misuse and, whenever relevant, a warning against the effects it may have on the safe use of the appliance		N/A
	The words "Original instructions" appear on the language version(s) verified by the manufacturer or by the authorized representative		N/A
	When a translation of the original instructions has been provided by a person introducing the appliance on the market; the meaning of the sentence "Translation of the original instructions" appear in the relevant instructions delivered with the appliance		N/A
	The instructions for maintenance/service to be done by specialized personnel, mandated by the manufacturer or the authorized representative may be supplied in only one Community language which the specialized personnel understand		N/A
	The instructions indicate the type and frequency of inspections and maintenance required for safe operation including the preventive maintenance measures		N/A
7.12.ZE1	If needed for specific appliances, the following information to be given:		--

IEC 60335_1X ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	- on use, transportation, assembly, dismantling when out of service, testing or foreseeable breakdowns, if these operations have consequences on stability of the appliance in order to avoid overturning, falling or uncontrolled movements of the appliance or of its component parts		N/A
	- on how to maintain adequate mechanical stability when in use, during transportation, assembly, dismantling, scrapping and any other action involving the appliance		N/A
	- on the protective measures to be taken by the user, including, where appropriate, the personal protective equipment to be provided		N/A
	- on the operating method to be followed in the event of accident or breakdown; if a blockage is likely to occur the operating method to safely unblock the appliance		N/A
	- on the specifications on the spare parts to be used, when these affect the health and safety of the operator		N/A
	- on airborne noise emissions, determined and declared in accordance with the relevant Part 2, which includes:		--
	- the A-weighted emission sound pressure level at workstations, where this exceeds 70 dB(A)		N/A
	- where this level does not exceed 70 dB(A), this fact is indicated		N/A
	- the peak C-weighted instantaneous sound pressure value at workstations, where this exceeds 63 Pa (130 dB in relation to 20 µPa)		N/A
	- the A-weighted sound power level emitted by the machinery, where the A-weighted emission sound pressure level at workstations exceeds 80 dB(A)		N/A
7.12.ZE2	The instructions include a warning to disconnect the appliance from its power source during service and when replacing parts		N/A
	If the removal of the plug is foreseen, it is clearly indicated that the removal of the plug is such that an operator can check from any of the points to which he has access that the plug remains removed		N/A
	If this is not possible, due to the construction of the appliance or its installation, a disconnection with a locking system in the isolated position is provided		N/A

IEC 60335_1X ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
19.11.4.8	The appliance continues to operate, without causing any hazard to the user, from the same point in its operating cycle at which the voltage fluctuation occurred, or		N/A
	a manual operation is required to restart it		N/A
20.1	Appliances and their components and fittings have adequate mechanical stability during transportation, assembly, dismantling and any other action involving the appliance		N/A
20.2	Dangerous moving transmission parts safeguarded either by design or guards		N/A
	When guards are used, they are fixed guards, interlocking movable guards or protective devices		N/A
	Moving parts directly involved in the function of the appliance which cannot be made completely inaccessible fitted with:		--
	- fixed guards or interlocking movable guards preventing access to those sections of the parts that are not used in the work, and		N/A
	- adjustable guards restricting access to those sections of the moving parts where access is necessary		N/A
	Interlocking movable guards used where frequent access is required		N/A
21.1	Appliances and their components and fittings have adequate mechanical strength and is constructed to withstand such rough handling that may be expected in normal use, during transportation, assembly, dismantling, scrapping and any other action involving the appliance		N/A
22.ZE.1	For appliances provided with a seat, the seat gives adequate stability		N/A
	The distance between the seat and the control devices capable of being adapted to the operator		N/A
22.ZE.2	For appliances provided with separate devices for the start and the stop functions, the stop function is unambiguously identifiable and does always override the start function		N/A
	For appliances provided with one device performing the start and the stop function, the stop function is unambiguously identifiable and does always override the start function		N/A
22.ZE.3	Appliances designed in such a way that incorrect mounting is avoided, if this can lead to an unsafe situation		N/A
	If this is not possible, information on the correct mounting is given directly on the part and/or the enclosure		N/A

IEC 60335_1X ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
22.ZE.4	Where the weight, size or shape prevents appliances from being moved manually, they are fitted with attachments for lifting gear, or		N/A
	so designed that they can be fitted with such attachments, or		N/A
	be shaped in such a way that standard lifting gear can easily be used		N/A
	Appliances to be moved manually are constructed or equipped so that they can be moved easily and safely		N/A
22.ZE.5	The fixing systems of fixed guards which prevent access to dangerous moving transmission parts only removable with the use of tools		N/A
	If such guards have to be removed by the user for routine cleaning or maintenance their fixing systems remain attached to the fixed guards or to the machine after removal		N/A
	Where possible, guards are incapable of remaining in place without their fixings		N/A
	This does not apply if, after removal of the screws, or if the component is incorrectly repositioned, the appliance becomes inoperative		N/A
	Movable guards are interlocked		N/A
	The interlocking devices prevent the start of hazardous appliance functions until the guards are fixed in their position, and give a stop command whenever they are no longer closed		N/A
	Where it is possible for an operator to reach the danger zone before the risk due to hazardous appliance functions has ceased, movable guards associated with a guard locking device in addition to an interlocking device that:		--
	- prevents the start of hazardous appliance functions until the guard is closed and locked, and		N/A
	- keeps the guard closed and locked until the risk of injury from the hazardous appliance functions has ceased		N/A
	Interlocking movable guards remain attached to the appliance when open, and		N/A
	they are designed and constructed in such a way that they can be adjusted only by means of an intentional action		N/A
22.ZE.6	Interlocking movable guards designed in such a way that the absence or failure of one of their components prevents starting or stops the hazardous appliance functions		N/A

IEC 60335_1X ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	The guard is opened to the extent needed to cause the interlocking to operate and is then closed, the number of operations being defined in the specific Part 2		N/A
	After this test any defect that may be expected in normal use is applied to the interlock system, including interruption of the supply, only one defect being simulated at a time		N/A
	After these tests the interlock system is fit for further use		N/A
22.ZE.7	Adjustable guards restricting access to areas of the moving parts strictly necessary for the work are:		--
	- adjustable manually or automatically, depending on the type of work involved, and		N/A
	- readily adjustable without the use of tools		N/A
22.ZE.8	In case of interruption, re-establishment after an interruption or fluctuation in whatever manner of the power supply, the appliance does not restart		N/A
	However, automatic restarting of the operation is allowed if the appliance may continue to operate, without causing any hazard to the user, from the same point in its operating cycle at which the voltage interruption or fluctuation occurred		N/A
22.ZE.9	Appliances fitted with means to isolate them from all energy sources		N/A
	Such isolators are clearly identified, and		N/A
	they are capable of being locked if reconnection endanger persons		N/A
	After the energy source is disconnected, it is possible to dissipate any energy remaining or stored in the circuits of the appliance without risk to persons		N/A
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

IEC 60335_1X ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	This annex is not applicable to appliances covered by the scopes of IEC 60335-2-27, IEC 60335-2-59 or IEC 60335-2-109		N/A
7.12.ZG	The instructions for appliances incorporating UVC emitters include the substance of the following: WARNING — This appliance contains a UV emitter. Do not stare at the light source		N/A
32	For appliances incorporating UV emitters the manufacturer delivers a declaration providing evidence that the plastic material exposed to the radiation is UV resistant		N/A
ZH	ANNEX ZH (INFORMATIVE) Common plug and socket-outlet types in CENELEC countries		--
	In general, supply cords of single-phase appliances having a rated current not exceeding 16 A are fitted with a plug complying with the following standard sheets:		--
	- for class I appliances or class II appliances with functional earth, standard sheet EU2, EU3 or EU4		N/A
	- for class II appliances, standard sheet EU5, EU6 or EU7		N/A
	There are exemptions or differences in certain CENELEC countries		N/A
ZI	ANNEX ZI (INFORMATIVE) Information on the application of A11:2014 to EN 60335-1:2012 CENELEC CLC/TC 61(SEC)2096A		--
	Clarification of the application of parts 2 in conjunction with the 2002 or 2012 version of EN 60335-1		P
ZZA	ANNEX ZZA (INFORMATIVE) RELATIONSHIP BETWEEN THIS EUROPEAN STANDARD AND THE SAFETY OBJECTIVES OF DIRECTIVE 2014/35/EU [2014 OJ L96] AIMED TO BE COVERED		--
	This standard provides one means of conforming to safety objectives of Directive 2014/35/EU		P
	When cited in the Official Journal under that Directive, compliance with the normative clauses of this standard given in Table ZZA.1 confers a presumption of conformity with the safety objectives of that Directive and associated EFTA regulations		P
	Compliance with this Part 1 when used together with the relevant Part 2 provides one means of conformity with the safety objectives		P

IEC 60335_1X ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
ZZB	ANNEX ZZB (INFORMATIVE) RELATIONSHIP BETWEEN THIS EUROPEAN STANDARD AND THE ESSENTIAL REQUIREMENTS OF DIRECTIVE 2006/42/EC AIMED TO BE COVERED		--
	This standard provides one means of conforming to essential requirements of EU Directive 2006/42/EC		N/A
	When cited in the Official Journal under that Directive, compliance with the normative clauses of this standard given in Table ZZB.1 confers a presumption of conformity with the essential requirements of that Directive and associated EFTA regulations		N/A
	Compliance with this Part 1 when used together with the relevant Part 2 provides one means of conformity with the essential health and safety requirements		N/A
	ANNEX EN 62233:2008 + AC:2008 EMF- ELECTROMAGNETICS FIELDS		--
	The tested product also complies with the requirements of EN 62233:2008		--
	Limit100%	Measured max.: <10%	P