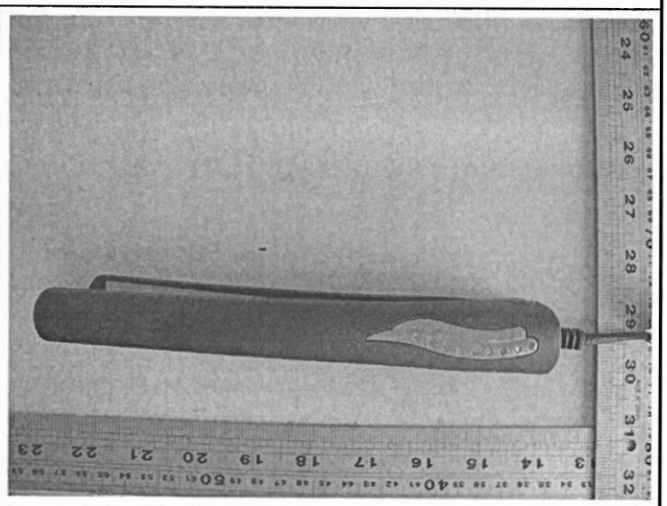
Prüfbericht-Nr.: *Test Report No.:*	**14708015 003**	**Auftrags-Nr.:** *Order No.:*	1160009692	Seite 1 von 40 *Page 1 of 40*
Kunden-Referenz-Nr.: *Client Reference No.:*	N/A	**Auftragsdatum:** *Order date:*	27.06.2014	
Auftraggeber: *Client:*	WENZHOU COTINI ELECTRICAL CO., LTD. NO.479-11 Xia Yang block,Yong Xing street,Longwan District Wenzhou City,Zhejiang province 325024 P.R. China			
Prüfgegenstand: *Test item:*	Hair Straightener			
Bezeichnung / Typ-Nr.: *Identification / Type No.:*	CTN-01, CTN-01B, CTN-02, CTN-03, CTN-04, CTN-05, CTN-05B, CTN-06, CTN-07, CTN-08, CTN-09, CTN-09-1, CTN-10, CTN-10-1			
Auftrags-Inhalt: *Order content:*	Type test			
Prüfgrundlage: *Test specification:*	EN 60335-1:2012 EN 60335-2-23:2003+A1:2008+A11:2010 EN 62233:2008			

Wareneingangsdatum: *Date of receipt:*	30.06.2014
Prüfmuster-Nr.: *Test sample No.:*	A000088213
Prüfzeitraum: *Testing period:*	28.07.2014 – 29.07.2014
Ort der Prüfung: *Place of testing:*	TÜV Rheinland /CCIC (Ningbo) Co., Ltd.
Prüflaboratorium: *Testing laboratory:*	TÜV Rheinland /CCIC (Ningbo) Co., Ltd.
Prüfergebnis*: *Test result*:*	Pass



geprüft von / *tested by:*

Datum *Date*	Name / Stellung *Name / Position*	Unterschrift *Signature*
08-07-2014	Sagan Sheng/PE	Sagan

kontrolliert von / *reviewed by:*

Datum *Date*	Name / Stellung *Name / Position*	Unterschrift *Signature*
08-07-2014	Liwei Lang/ TC	Liwei Lang

Sonstiges / *Other:*
N/A

Zustand des Prüfgegenstandes bei Anlieferung: Prüfmuster vollständig und unbeschädigt
Condition of the test item at delivery: *Test item complete and undamaged*

* Legende:	1 = sehr gut	2 = gut	3 = befriedigend	4 = ausreichend	5 = mangelhaft
	P(ass) = entspricht o.g. Prüfgrundlage(n)		F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
Legend:	*1 = very good*	*2 = good*	*3 = satisfactory*	*4 = sufficient*	*5 = poor*
	P(ass) = passed a.m. test specification(s)		*F(ail) = failed a.m. test specification(s)*	*N/A = not applicable*	*N/T = not tested*

TEST REPORT
IEC/EN 60335-2-23
Part 1: Safety of household and similar electrical appliances
Part 2: Particular requirements for appliances for skin or hair care

Report Number. .....:	14708015 003
Date of issue.....:	See cover page
Total number of pages	See cover page
Applicant's name.....:	
Address .....:	
Test specification:	
Standard.....:	EN 60335-2-23:2003 + A1:2008 + A11:2010 EN 60335-1:2012 EN 62233:2008
Test procedure .....:	CE LVD
Non-standard test method……..:	N/A
Test Report Form No.....:	IEC60335_2_23G
Test Report Form(s) Originator .....:	VDE
Master TRF .....:	Dated 2012-07

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.

Item description……:	Hair Straightener
Trade Mark……..:	N/A
Manufacturer……..:	Same as applicant
Model/Type reference……:	CTN-01, CTN-01B, CTN-02, CTN-03, CTN-04, CTN-05, CTN-05B, CTN-06, CTN-07, CTN-08, CTN-09, CTN-09-1, CTN-10, CTN-10-1
Ratings……..:	AC 220-240V for CTN-01, CTN-05, CTN-09, CTN-09-1; AC 110-240V for CTN-01B, CTN-02, CTN-03, CTN-04, CTN-05B, CTN-06, CTN-07, CTN-08, CTN-10, CTN-10-1; 50/60Hz; 45W for CTN-01; 35-38W for CTN-03; 16-18W for CTN-06; 26-30W for CTN-01B, CTN-02, CTN-04, CTN-05B, CTN-07, CTN-08, CTN-10, CTN-10-1; 38W for CTN-05, CTN-09, CTN-09-1

Testing procedure and testing location:			
☒	**Testing Laboratory:**	TŰV Rheinland /CCIC (Ningbo) Co., Ltd.	
Testing location/ address ..... :		3F Building C13, R&D Park, No.32 , Lane 299 Guanghua Road, National Hi-Tech Zone, Ningbo, 315048, P. R. China	
☐	**Associated Laboratory:**	N/A	
Testing location/ address ..... :			
	Tested by (name + signature) ..... :	See cover page	
	Approved by (name + signature) . :	See cover page	
☐	Testing procedure: TMP	N/A	
Testing location/ address ..... :			
	Tested by (name + signature) ..... :		
	Approved by (name + signature) . :		
☐	Testing procedure: WMT	N/A	
Testing location/ address ..... :			
	Tested by (name + signature) ..... :		
	Witnessed by (name + signature) :		
	Approved by (name + signature) . :		
☐	Testing procedure: SMT	N/A	
Testing location/ address ..... :			
	Tested by (name + signature) ..... :		
	Approved by (name + signature) . :		
	Supervised by (name + signature):		
☐	Testing procedure: RMT	N/A	
Testing location/ address ..... :			
	Tested by (name + signature) ..... :		
	Approved by (name + signature) . :		
	Supervised by (name + signature):		

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

See cover page

Summary of testing: Pass

Test of clause 13.2 was performed on CTN-01, CTN-03, CTN-06, CTN-07, CTN-09 and CTN-11, tests of 19.11.2 and 19.12 were performed on CTN-01, CTN-05, CTN-09 and CTN-09-1.

Tests performed (name of test and test clause):	**Testing location:**
All the tests mentioned above	**TŰV Rheinland /CCIC (Ningbo) Co., Ltd.** 3F Building C13, R&D Park, No.32 , Lane 299 Guanghua Road, National Hi-Tech Zone, Ningbo, 315048, P. R. China

Summary of compliance with National Differences

List of countries addressed: EU DIFFERENCES CONSIDERED.

☐ **The product fulfils the requirements of _____ (insert standard number and edition and delete the text in parenthesis or delete the whole sentence if not applicable)**

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.

Refer to test report No. 14708015 001

Test item particulars ..... :	
Classification of installation and use ..... :	Hand-held appliance
Supply Connection..... :	Type Y attachment (non-detachable cord with plug)
..... :	
Possible test case verdicts:	
- test case does not apply to the test object..... :	N/A
- test object does meet the requirement ..... :	P (Pass)
- test object does not meet the requirement ..... :	F (Fail)
Testing .....:	
Date of receipt of test item ..... :	See cover page
Date (s) of performance of tests ..... :	See cover page

General remarks:

The test results presented in this report relate only to the object tested.
This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.
"(see Enclosure #)" refers to additional information appended to the report.
"(see appended table)" refers to a table appended to the report.

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

Manufacturer's Declaration per sub-clause 6.2.5 of IECEE 02:

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

☐ Yes

☒ Not applicable

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

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

General product information:

1. The hair straightener used only for indoor use.

2. The Hair Straightener belongs to hand-held appliances;

3.The Hair Straightener incorporates a swivel connection;

4. It is enclosure made of plastic and using PTC heating element inside,ceramic and Aluminum working plat;

5. CTN-01,CTN-05,CTN-09,CTN-09-1 with electronic circuit control, they use AC220-240V voltage,they use the same power plug, power cord, PTC heating element,internal wire and switch basically,and CTN-09,CTN-09-1 have digital display ,while the others don't have;

6.CTN-09 and CTN-09-1 have same shape of the products ,PCB and negative ion generator,the only difference between them is:CTN-09 have startup and shutdown music to remind function,CTN-09-1 don't have;

7.CTN-01B,CTN-02,CTN-03,CTN-04,CTN-05B,CTN-07,CTN-08,CTN-10,CTN-10-1 with mechanical control;they use AC110-240V voltage,they use the same power plug, power cord, PTC heating

element,internal wire; The difference between them shape of the products;

8. CTN-06 with mechanical control, it's have different heating element and shape of the products,compared to other model.

Amendment 1:

The original Test Report Ref. No. 14708015 001, dated 2012-07-13 was additionally modified on 2014-05-28 to issue OEM license.

Amendment 2:

The original Test Report No. 14708015 001 dated 2012-07-13 was modified to on 2014-08-07.

1. Standard update (from EN 60335-1:2002+A1+A11+A12+A2+A13+A14+A15, EN 60335-2-23:2003+A1+A11, EN 62233:2008 to EN 60335-1:2012, EN 60335-2-23:2003+A1+A11, EN 62233:2008)
2. Added approved fuse link to PCB of models CTN-01, CTN-05, CTN-09 and CTN-09-1.
3. Photodocument was updated for all models.
4. Approved fuse link(Walter Electronic, ICP-Series) was added to table 24.1.
   Certificate of negative ion generator(Shenzhen Sunyou: SY-F-X) was cancelled.
   Certificate number of negative ion generator(Shenzhen Sunyou: SY-H-1A) was changed.
   All modifications as above were showed in Table 24.1 in Bold type.

IEC 60335-2-23			
Clause	Requirement - Test	Result - Remark	Verdict
13	LEAKAGE CURRENT AND ELECTRIC STRENGTH AT OPERATING TEMPERATURE		P
13.1	Leakage current not excessive and electric strength adequate		P
	Heating appliances operated at 1,15 times the rated power input (W) .....:	(see appended table)	P
	Motor-operated appliances and combined appliances supplied at 1,06 times the rated voltage (V).....:	(see appended table)	N/A
	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
19	ABNORMAL OPERATION		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:		P
	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	Varistor	P
	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		P
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).....:	Measured current>16A	P

IEC 60335-2-23			
Clause	Requirement - Test	Result - Remark	Verdict
24	COMPONENTS		P
24.1	Components comply with safety requirements in relevant IEC standards		P
	List of components .....:	(see appended table)	P
29	CLEARANCES, CREEPAGE DISTANCES AND SOLID INSULATION		P
29.1.4	Clearances for functional insulation are the largest values determined from:		P
	- .....table 16 based on the rated impulse voltage :	(see appended table)	P
	- .....table F.7a in IEC 60664-1, frequency not exceeding 30 kHz		N/A
	- ....clause 4 of IEC 60664-4, frequency exceeding 30 kHz		N/A
	If values of table 16 are largest, the impulse voltage test of clause 14 may be applied instead, unless		N/A
	the microenvironment is pollution degree 3, or		N/A
	the distances can be affected by wear, distortion, movement of the parts or during assembly		N/A
	However, clearances are not specified if the appliance complies with clause 19 with the functional insulation short-circuited		N/A
	Lacquered conductors of windings considered to be bare conductors		N/A
	However, clearances at crossover points are not measured		N/A
	Clearance between surfaces of PTC heating elements may be reduced to 1mm		N/A
29.2.4	Creepage distances of functional insulation not less than specified in table 18.....:	(see appended table)	P
	However, if the working voltage is periodic and has a frequency exceeding 30 kHz, the creepage distances are also determined from table 2 of IEC 60664-4, these values being used if exceeding the values in table 18.....:		N/A
	Creepage distances may be reduced if the appliance complies with clause 19 with the functional insulation short-circuited		N/A

IEC 60335-2-23			
Clause	Requirement - Test	Result - Remark	Verdict

24.1	TABLE: Components information				P
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity
Power plug	WenZhou JiuTian Electronic & Electricity Co., Ltd.	JT-501	AC 250V; 2,5A	DIN VDE 0620-1	VDE 40016872
Alternative	Zhejiang Sendiao Electrical Appliances Co., Ltd.	SD01	AC 250V; 2,5A	DIN VDE 0620-1	VDE 40035911
Alternative	Ningbo Qiaopu Electric Co., Ltd.	D01	AC 250V; 2,5A	DIN VDE 0620-1	VDE 40001746
Alternative	SHANGYU JINTAO ELECTRON CO., LTD	JT001	AC 250V; 2,5A	DIN VDE 0620-1	VDE 40020667
Power cord	WenZhou JiuTian Electronic & Electricity Co., Ltd.	H03VVH2-F H03VV-F	2x0,5mm² (Length≤2,0m) 2x0,75mm²	EN 50525-2-11	VDE 40008590
Alternative	Zhejiang Sendiao Electrical Appliances Co., Ltd.	H03VVH2-F H03VV-F	2x0,5mm² (Length≤2,0m) 2x0,75mm²	EN 50525-2-11	VDE 40034762
Alternative	Ningbo Qiaopu Electric Co., Ltd.	H03VVH2-F H03VV-F	2x0,5mm² (Length≤2,0m) 2x0,75mm²	EN 50525-2-11	VDE 40035976
Alternative	WenZhou JiuTian Electronic & Electricity Co., Ltd.	H05VV-F	2x0,75mm²	EN 50525-2-11	VDE 40008590
Alternative	Zhejiang Sendiao Electrical Appliances Co., Ltd.	H05VV-F	2x0,75mm²	EN 50525-2-11	VDE 40034762
Alternative	SHANGYU JINTAO ELECTRON CO., LTD.	H05RR-F H05RN-F	2x0,75mm²	EN 50525-2-21	VDE 40018106
Internal wiring	ZHEJIANG WRLONG HIGH-TEMPERATURE WIRE&CABLE CO LTD	1332	30-22AWG; 200°C;300V	EN 60335-1 EN 60335-2-23	UL E306784 +tested with appliance
Alternative	ZHEJIANG CHENG BAO MIRE CABLE CO LTD	10362	30-22AWG; 250°C; 600V	EN 60335-1 EN 60335-2-23	UL E315651 +tested with appliance
Alternative	HAIYAN AD SSPECIAL CABLE CO LTD	1332	30-22AWG; 200°C;300V	EN 60335-1 EN 60335-2-23	UL E363968 +tested with appliance

IEC 60335-2-23			
Clause	Requirement - Test	Result - Remark	Verdict

Switch use in CTN-01B, CTN-03, CTN-04, CTN-05B CTN-06 CTN-08 CTN-10, CTN-10-1	China Zhejiang Jialong Electron Co., Ltd.	SS-12J02	3A; 250V; 6A ;125V; 1E4;T85	EN 60335-1 EN 60335-2-23	Tested with appliance
Alternative	DEFOND COMPONENTS LTD	CSJ-1206	3A;250V; 6A;125V; 5E4; T85	EN 60335-1 EN 60335-2-23	ENEC 147266-02-A1 +tested with appliance
Switch use in CTN-02, CTN-07	China Zhejiang Jialong Electron Co., Ltd.	SS-12E09	3A; 250V 6A;125V 1E4;T85	EN 60335-1 EN 60335-2-23	Tested with appliance
Switch use in CTN-01, CTN-05	Hungyun Electronics (Ning Bo) Co,. Ltd.	RV12S-V-B103	B10K	EN 60335-1 EN 60335-2-23	Tested with appliance
PTC heating element	Zhejiang Xintong Electronic Co., Ltd	XTMZ01	110-240V; 50/60Hz	EN 60335-1 EN 60335-2-23	UL E310341 +tested with appliance
Alternative	HAINING YONGLI ELECTRONIC CERAMIC CO LTD	MZF	110/220V; 50/60Hz	EN 60335-1 EN 60335-2-23	UL E320447 +tested with appliance
Negative ion generator used in CTN-10-1 CTN-09-1	Shenzhen Sunyou Electric Appliance Co., Ltd.	SY-H-1A	AC100-240V; 50/60Hz;1W; T55	EN 60335-1 EN 60335-2-23	**TUV R 50251053**
PCB	ZHEJIANG WENZHOU TIANCHEN ELECTRONICS CO LTD	TC-1	Thickness: 1,0-1,5mm; V-0	EN 60335-1 EN 60335-2-23	UL E249496 +tested with appliance
Alternative	WENZHOU HENGXING ELECTRONICS CO LTD	HX-1	Thickness: 1,0-1,5mm; V-0	EN 60335-1 EN 60335-2-23	UL E254930 +tested with appliance
Alternative	SHEN ZHEN ZHONG XIN HUA ELECTRONCO LTD	ZXH	Epoxy Resin Thickness: 0,8-1,5mm; V-0	EN 60335-1 EN 60335-2-23	UL E331298 +tested with appliance

IEC 60335-2-23			
Clause	Requirement - Test	Result - Remark	Verdict

Polyamide insulation paper	SHANGHAI JINSHAN QIANFENG INSULATION MATERIAL CO LTD	6050, 6051	V-0; 0,051mm; 130°C More than 3 layers overlap	EN 60335-1 EN 60335-2-23	UL E249751 +tested with appliance
Alternative	CHANGSHU SHI LIANTANG JUEYUAN CAILIAO CHANG	6051	V-0; 0,051mm; 130°C More than 3 layers overlap	EN 60335-1 EN 60335-2-23	UL E236441 +tested with appliance
Alternative	E I DUPONT	200HN	V-0; 0,051mm; 240°C More than 3 layers overlap	EN 60335-1 EN 60335-2-23	UL E39505 +tested with appliance
Silicone tube	SHENZHEN WAHCHANGWEI INDUSTRIAL CO LTD	SRS-70	600V; 200ºC; VW-1	EN 60335-1 EN 60335-2-23	UL E233803 +tested with appliance
Heat shrinkable tube	DONGGUAN SALIPT CO LTD	SALIPT S-901-600	125°C; 600V; VW-1	EN 60335-1 EN 60335-2-23	UL E209436 +tested with appliance
Alternative	ZHEJIANG YONGLI HEAT SHRINKABLE MATERIAL CO LTD	DRS	125°C; 600V; VW-1	EN 60335-1 EN 60335-2-23	UL E330120 +tested with appliance
X2 Capacitors (used in CTN-01, CTN-05, CTN-09, CTN-09-1)	RUGAO SHUANGCHENG ELECTRONIC CO LTD	MKP	AC 275V; 0,22 µF; 40/100/21/C	DIN EN 60384-14	VDE 40025673
Alternative	Winday Electronic industrial Co., Ltd.	MPX	AC 275V; 0,22 µF; 40/100/21/C	DIN EN 60384-14	VDE 40030283
Alternative	Dain Electronics Co., Ltd.	MEX, MPX, NPX	AC 275V; 0,22 µF; 40/110/21/C	DIN EN 60384-14	VDE 40018798
Alternative	Cixi Sanbei Electronic Co., Ltd.	MPX	AC 275V; 0,22 µF; 40/100/21/C	DIN EN 60384-14	VDE 134381
Alternative	Tenta Electric Industrial Co., Ltd.	MEX	AC 275V; 0,22 µF; 40/100/21/C	DIN EN 60384-14	VDE 119119
Fuse link (used in CTN-01, CTN-05, CTN-09, CTN-09-1)	**Walter Electronic Co. Ltd.**	**ICP-Series**	**AC 250V; 5A**	**EN 60127-1 EN 60127-3**	**VDE 40012824**

IEC 60335-2-23			
Clause	Requirement - Test	Result - Remark	Verdict

Thermistor (used in CTN-01, CTN-05, CTN-09, CTN-09-1)	SHENZHEN KEPENDA ELECTRONIC CO LTD	MF58-204	200℃; Class C3	EN 60335-1; EN 60335-2-23	UL E256966 +tested with appliance
Varistor (used in CTN-01, CTN-05, CTN-09, CTN-09-1)	Lien Shun Electronics Co., Ltd.	05D561K	AC 2500V; 40/85/56	EN 61051-1 EN 61051-2	VDE 40005858
Alternative	LIEN SHUN ELECTRONICS CO LTD	05D471K	--	--	UL E315524 +tested with appliance
Switch button	WENZHOU COTINI ELECTRICAL CO., LTD.	ABS	PA-757	EN 60335-1 EN 60335-2-23	Tested with appliance
Swivel connection	IDEMITSU KOSAN CO LTD	G-2530(+)	Min.thickness: 3,0mm; PC; V-0	EN 60335-1 EN 60335-2-23	Tested with appliance
Enclosure	WENZHOU COTINI ELECTRICAL CO., LTD.	--	Min thickness: 2,0mm; PA66	EN 60335-1 EN 60335-2-23	Tested with appliance

IEC 60335-2-23			
Clause	Requirement - Test	Result - Remark	Verdict

29.1	**TABLE: Clearances**		P
	Overvoltage category..... ... .:	II	—

		Type of insulation:				
Rated impulse voltage (V):	Min. cl (mm)	Basic (mm)	Supplementary (mm)	Reinforced (mm)	Functional (mm)	Verdict / Remark
330	0,2* / 0,5 / 0,8**	—	—	—	—	N/A
500	0,2* / 0,5 / 0,8**	—	—	—	—	N/A
800	0,2* / 0,5 / 0,8**	—	—	—	—	N/A
1 500	0,5 / 0,8** / 1,0***	—	—	—	—	N/A
2 500	1,5 / 2,0***	—	—	—	Note1	P
4 000	3,0 / 3,5***	—	—	—	—	N/A
6 000	5,5 / 6,0***	—	—	—	—	N/A
8 000	8,0 / 8,5***	—	—	—	—	N/A
10 000	11,0 / 11,5***	—	—	—	—	N/A

Supplementary information:

*) For tracks on printed circuit boards if pollution degree 1 and 2
**) For pollution degree 3
***) If the construction is affected by wear, distortion, movement of the parts or during assembly

Remark:
Note 1: Functional insulation: L-N of surface of PCB board: Cl.=2,0mm

IEC 60335-2-23			
Clause	Requirement - Test	Result - Remark	Verdict

29.2	TABLE: Creepage distances, functional insulation							P
Working voltage (V)	Creepage distance (mm) Pollution degree							
	1	2			3			
		Material group			Material group			
		I	II	IIIa/IIIb	I	II	IIIa/IIIb*)	Verdict / Remark
≤10	0,08	0,4	0,4	0,4	1,0	1,0	1,0	N/A
50	0,16	0,56	0,8	1,0	1,4	1,6	1,8	N/A
125	0,25	0,71	1,0	1,4	1,8	2,0	2,2	N/A
250	0,42	1,0	1,4	**2,0** Note 1	2,5	2,8	3,2	P
400	0,75	1,6	2,2	3,2	4,0	4,5	5,0	N/A
500	1,0	2,0	2,8	4,0	5,0	5,6	6,3	N/A
>630 and ≤800	1,8	3,2	4,5	6,3	8,0	9,0	10,0	N/A
>800 and ≤1000	2,4	4,0	5,6	8,0	10,0	11,0	12,5	N/A
>1000 and ≤1250	3,2	5,0	7,1	10,0	12,5	14,0	16,0	N/A
>1250 and ≤1600	4,2	6,3	9,0	12,5	16,0	18,0	20,0	N/A
>1600 and ≤2000	5,6	8,0	11,0	16,0	20,0	22,0	25,0	N/A
>2000 and ≤2500	7,5	10,0	14,0	20,0	25,0	28,0	32,0	N/A
>2500 and ≤3200	10,0	12,5	18,0	25,0	32,0	36,0	40,0	N/A
>3200 and ≤4000	12,5	16,0	22,0	32,0	40,0	45,0	50,0	N/A
>4000 and ≤5000	16,0	20,0	28,0	40,0	50,0	56,0	63,0	N/A
>5000 and ≤6300	20,0	25,0	36,0	50,0	63,0	71,0	80,0	N/A
>6300 and ≤8000	25,0	32,0	45,0	63,0	80,0	90,0	100,0	N/A
>8000 and ≤10000	32,0	40,0	56,0	80,0	100,0	110,0	125,0	N/A
>10000 and ≤12500	40,0	50,0	71,0	100,0	125,0	140,0	160,0	N/A

Supplementary information:

*) Material group IIIb is allowed if the working voltage does not exceed 50 V

Note 1: Functional insulation: L-N of surface of PCB board: Cr.=2,0mm

Deviation Report of IEC 60335-1:2010 from IEC 60335-1:2001+ A1:2004 + A2:2006			
Clause	Requirement - Test	Result - Remark	Verdict
5	General conditions for the tests		P
5.19	If a component or part of the appliance has both a self resetting feature and a non self-resetting feature and if the non-self-resetting feature is not required in order to comply with the standard, then appliances incorporating such a component or part shall be tested with the non-self-resetting feature rendered inoperative.		N/A
7	MARKING AND INSTRUCTIONS		P
7.1	Symbol IEC 60417-5180, for class III appliances, unless		N/A
	the appliance is operated by batteries only		N/A
7.4	Requirement met if frequent changes are not required and the rated voltage to which the appliance is to be adjusted is determined from a wiring diagram		N/A
7.6	Correct symbols used		P
	Symbol for nature of supply placed next to rated voltage		N/A
	Symbol for class II appliances placed unlikely to be confused with other marking		P
	Units of physical quantities and their symbols according to international standardized system		P
7.7	Connection diagram fixed to appliances to be connected to more than two supply conductors and appliances for multiple supply, unless		N/A
	correct mode of connection is obvious		N/A
7.10	This applies also to switches which are part of a control		P
	If figures are used, the off position indicated by the figure 0		N/A
7.12	Details concerning precautions during user maintenance		P
	For a part of class III construction supplied from a detachable power supply unit, the instructions state that the appliance is only to be used with the unit provided		N/A
	Instructions for class III appliances state that it must only be supplied at SELV, unless		N/A
	it is a battery-operated appliance, the battery being charged outside the appliance		N/A
7.12.1	Sufficient details for installation supplied		N/A

Deviation Report of IEC 60335-1:2010 from IEC 60335-1:2001+ A1:2004 + A2:2006			
Clause	Requirement - Test	Result - Remark	Verdict
	For an appliance intended to be permanently connected to the water mains and not connected by a hose-set, this is stated		N/A
7.12.6	If a non-self-resetting thermal cut-out is required in order to comply with the standard then the instructions for appliances incorporating a non-self-resetting thermal cut-out that is reset by disconnection of the supply mains shall contain the substance of the following:		N/A
	CAUTION: In order to avoid a hazard due to inadvertent resetting of the thermal cut-out, this appliance must not be supplied through an external switching device, such as a timer, or connected to a circuit that is regularly switched on and off by the utility.		N/A
8	PROTECTION AGAINST ACCESS TO LIVE PARTS		N/A
8.2	Test probe B of IEC 61032 is applied to built-in appliances and fixed appliances only after installation.		N/A
11	HEATING		N/A
11.8	The temperature rise limit for metal applies to parts having a metal coating at least 0,1 mm thick and to metal parts having a plastic coating less than 0,3 mm thick.	(see appended table)	N/A
13	LEAKAGE CURRENT AND ELECTRIC STRENGTH AT OPERATING TEMPERATURE		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. For other appliances, a low impedance ammeter may be used.	Class II	P
17	OVERLOAD PROTECTION OF TRANSFORMERS AND ASSOCIATED CIRCUITS		N/A
	Basic insulation is not short-circuited		N/A
19	ABNORMAL OPERATION		N/A
19.1	Appliances incorporating voltage selector switches subjected to the test of 19.15		N/A
19.9	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

Deviation Report of IEC 60335-1:2010 from IEC 60335-1:2001+ A1:2004 + A2:2006			
Clause	Requirement - Test	Result - Remark	Verdict
19.11.4.6	Appliances having a rated current exceeding 16 A are subjected to the Class 3 voltage dips and interruptions in accordance with IEC 61000-4-34		N/A
19.13	If the appliance contains lids or doors that are controlled by one or more interlocks, one of the interlocks may be released provided that:		N/A
	- the lid or door does not move automatically to an open position when the interlock is released, and		N/A
	- the appliance does not start after the cycle in which the interlock was released		N/A
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
20	STABILITY AND MECHANICAL HAZARDS		N/A
20.2	Enclosures that can be opened by overriding an interlock are considered to be detachable parts		N/A
22	CONSTRUCTION		P
22.24	Bare heating elements, other than those in class III appliances or class III constructions that do not contain live parts, shall be supported so that the heating conductor is unlikely to come into contact with accessible metal parts if they rupture.		N/A
22.25	Appliances shall be constructed so that sagging heating conductors cannot come into contact with accessible metal parts. This requirement does not apply to class III appliances or class III constructions that do not contain live parts.		N/A
22.33	For class II constructions, conductive liquids that are or may become accessible in normal use and conductive liquids that are in contact with unearthed accessible metal parts, not in direct contact with basic or reinforced insulation, unless		N/A
	the reinforced insulation consists of at least 3 layers		N/A
	For class II constructions, conductive liquids which are in contact with live parts, not in direct contact with reinforced insulation, unless		N/A
	the reinforced insulation consists of at least 3 layers		N/A
	An air layer not used as basic or supplementary insulation in a double insulation system if likely to be bridged by leaking liquid		N/A
22.35	Insulating material covering metal handles, levers and knobs withstand the electric strength test of 16.3 for supplementary insulation		P

Deviation Report of IEC 60335-1:2010 from IEC 60335-1:2001+ A1:2004 + A2:2006			
Clause	Requirement - Test	Result - Remark	Verdict
22.42	Resistors checked by the test of 14.1 a) in IEC 60065		N/A
	Capacitors checked by the tests for class Y capacitors in IEC 60384-14		N/A
22.46	For programmable protective electronic circuits used to ensure compliance with the standard, the software contains measures to control the fault/error conditions in table R.1		N/A
	Software that contains measures to control the fault/error conditions specified in table R.2 is to be specified in parts 2 for particular constructions or to address specific hazards		N/A
	These requirements are not applicable to software used for functional purpose or compliance with clause 11		N/A
23	INTERNAL WIRING		P
23.3	Electric strength test of 16.3, 1000 V between live parts and accessible metal parts		P
	Not more than 10% of the strands of any conductor broken, and		P
	not more than 30% for wiring supplying circuits that consume no more than 15W		N/A
23.5	Basic insulation electrically equivalent to the basic insulation of cords complying with IEC 60227 or IEC 60245, or		P
23.6	Sleeving used as supplementary insulation on internal wiring retained in position by clamping at both ends, or		N/A
	be such that it can only be removed by breaking or cutting		N/A
24	COMPONENTS		P
24.1	For components mentioned in 24.1.1 to 24.1.9 no additional tests specified in the relevant component standard are necessary other than those specified in 24.1.1 to 24.1.9		P
	No additional tests specified for nationally standardized plugs such as those detailed in IEC/TR 60083 or connectors complying with the standard sheets of IEC 60320-1 and IEC 60309		P

Deviation Report of IEC 60335-1:2010 from IEC 60335-1:2001+ A1:2004 + A2:2006			
Clause	Requirement - Test	Result - Remark	Verdict
24.1.3	If the switch only operates a motor staring relay complying with IEC 60730-2-10 with the number of cycles of a least 10 000 as specified, the complete switching system need not be tested		N/A
24.1.4	The number of cycles for controls operating during clause 11 need not be declared, if the appliance meets the requirements of this standard when they are short-circuited		N/A
24.2	Appliances not fitted with:		P
	- thermal cut-outs that can be reset by soldering, unless		P
	the solder has a melding point of at least 230 ˚C		N/A
24.7	Appliances intended to be permanently connected to the water mains shall not be connected by a detachable hose-set		N/A
24.8	Motor running capacitors in appliances for which 30.2.3 is applicable and that are permanently connected in series with a motor winding, not causing a hazard in event of a failure		N/A
	One or more of the following conditions are to be met:		N/A
	- the capacitors are of class P2 according to IEC 60252-1		N/A
	- the capacitors are housed within a metallic or ceramic enclosure		N/A
	- the distance of separation of the outer surface to adjacent non-metallic parts exceeds 50 mm		N/A
	- adjacent non-metallic parts within 50 mm withstand the needle-flame test of Annex E		N/A
	- adjacent non-metallic parts within 50 mm classified as at least V-1 according to IEC 60695-11-10		N/A
25	SUPPLY CONNECTION AND EXTERNAL FLEXIBLE CORDS		P
25.3	Appliance intended to be permanently connected to fixed wiring provided with one of the following means for connection to the supply mains:		N/A
	- a set of terminals allowing the connection of a flexible cord		N/A
	- a fitted supply cord		N/A
	- a set of supply leads accommodated in a suitable compartment		N/A
	Appliances intended to be permanently connected to fixed wiring that are provided with		N/A

Deviation Report of IEC 60335-1:2010 from IEC 60335-1:2001+ A1:2004 + A2:2006			
Clause	Requirement - Test	Result - Remark	Verdict
	a set of terminals allowing the connection of cables of fixed wiring having the nominal cross-sectional areas specified in 26.6, or		N/A
	a set of terminals and cable entries, conduit entries, knock-outs or glands, which allow the connection of the appropriate types of cable or conduit,		N/A
	shall allow the connection of the supply conductors after the appliance has been fixed to its support.		N/A
	If a fixed appliance is constructed so that parts can be removed to facilitate easy installation, this requirement is considered to be met if it is possible to connect the fixed wiring without difficulty after a part of the appliance has been fixed to its support. In this case, removable parts are to be constructed for ease of reassembly without risk of incorrect assembly or damage to the wiring or terminals.		N/A
25.5	Method for assembling the supply cord to the appliance:		P
	For multi-phase appliances supplied with a supply cord and that are intended to be permanently connected to fixed wiring, the supply cord is assembled to the appliance by type Y attachment		N/A
25.7	Supply cords, other than for class III appliances, being one of the following types:		N/A
	Supply cords for class III appliances adequately insulated		N/A
	A voltage of 500 V is applied for 2 min between the conductor and metal foil wrapped around the insulation, the insulation being at the temperature measured during the test of Clause 11. There shall be no breakdown during this test.		N/A
25.13	If unsheathed supply cord, a similar additional bushing or lining is required, unless the appliance is		P
	class 0, or		N/A
	a class III appliance not containing live parts		N/A
25.22	Appliance inlets:		N/A
	- live parts not accessible during insertion or removal		N/A
	Requirement not applicable to appliance inlets complying with IEC 60320-1		N/A
26	TERMINALS FOR EXTERNAL CONDUCTORS		P
26.1	Terminals only accessible after removal of a non-detachable cover, except		P
	for class III appliances that do not contain live parts		N/A
26.2	Change “connection to fixed wiring” to “connection of cables of fixed wiring”		N/A

Deviation Report of IEC 60335-1:2010 from IEC 60335-1:2001+ A1:2004 + A2:2006			
Clause	Requirement - Test	Result - Remark	Verdict
26.3	Change “connection to fixed wiring” to “connection of cables of fixed wiring”		N/A
26.4	Change “connection to fixed wiring” to “connection of cables of fixed wiring”		N/A
26.6	Change “connection to fixed wiring” to “connection of cables of fixed wiring”		N/A
28	SCREWS AND CONNECTIONS		N/A
28.2	This requirement does not apply to electrical connections in circuits of appliances for which:		N/A
	• 30.2.2 is applicable and that carry a current not exceeding 0,5 A		N/A
	• 30.2.3 is applicable and that carry a current not exceeding 0,2 A		N/A
29	CLEARANCES, CREEPAGE DISTANCES AND SOLID INSULATION		P
	For type 2 protection, the spacing between the conductors before the protection is applied is not less than the values specified in Table 1 of IEC 60664-3		N/A
	These values apply to functional, basic, supplementary and reinforced insulation ..... :		P
29.1.3	For double insulation, with no intermediate conductive part between basic and supplementary insulation, clearances are measured between live parts and the accessible surface, and the insulation system is treated as reinforced insulation		P
29.1.4	Clearances for functional insulation are the largest values determined from:		P
	- table 16 based on the rated impulse voltage ..... :	Refer to test report 14708015 001	P
	- table F.7a in IEC 60664-1, frequency not exceeding 30 kHz		N/A
	- clause 4 of IEC 60664-4, frequency exceeding 30 kHz		N/A
	If values of table 16 are largest, the impulse voltage test of clause 14 may be applied instead, unless		N/A
	the microenvironment is pollution degree 3, or		P
	the distances can be affected by wear, distortion, movement of the parts or during assembly		P
29.1.5	Appliances having higher working voltages than rated voltage, clearances for basic insulation are the largest values determined from:		N/A
	- table 16 based on the rated impulse voltage ..... :		N/A

Deviation Report of IEC 60335-1:2010 from IEC 60335-1:2001+ A1:2004 + A2:2006			
Clause	Requirement - Test	Result - Remark	Verdict
	- table F.7a in IEC 60664-1, frequency not exceeding 30 kHz		N/A
	- clause 4 of IEC 60664-4, frequency exceeding 30 kHz		N/A
	If clearances for basic insulation are selected from Table F.7a of IEC 60664-1 or Clause 4 of IEC 60664-4, the clearances of supplementary insulation are not less than those specified for basic insulation		N/A
	If clearances for basic insulation are selected from Table F.7a of IEC 60664-1, the clearances of reinforced insulation dimensioned as specified in Table F.7a are to withstand 160% of the withstand voltage required for basic insulation		N/A
	If clearances for basic insulation are selected from Clause 4 of IEC 60664-4, the clearances of reinforced insulation are twice the value required for basic insulation		N/A
29.2.1	Creepage distances of basic insulation not less than specified in table 17 ..... :	Refer to test report 14708015 001	P
	However, if the working voltage is periodic and has a frequency exceeding 30 kHz, the creepage distances are also determined from table 2 of IEC 60664-4, these values being used if exceeding the values in table 17 ..... :		N/A
29.2.2	Creepage distances of supplementary insulation at least those specified for basic insulation in table 17, or ..... :	Refer to test report 14708015 001	P
	Table 2 of IEC 60664-4, as applicable ..... :		P
29.2.3	Creepage distances of reinforced insulation at least double those specified for basic insulation in table 17, or ..... :	Refer to test report 14708015 001	P
	Table 2 of IEC 60664-4, as applicable ..... :		P
29.2.4	Creepage distances of functional insulation not less than specified in table 18 ..... :	Refer to test report 14708015 001	P
	However, if the working voltage is periodic and has a frequency exceeding 30 kHz, the creepage distances are also determined from table 2 of IEC 60664-4, these values being used if exceeding the values in table 18 ..... :		N/A
29.3	Compliance checked:		N/A
	- by an assessment of the thermal quality of the material combined with an electric strength test, in accordance with 29.3.3, and		N/A

Deviation Report of IEC 60335-1:2010 from IEC 60335-1:2001+ A1:2004 + A2:2006			
Clause	Requirement - Test	Result - Remark	Verdict
	for accessible parts of reinforced insulation consisting of a single layer, by measurement in accordance with 29.3.4, or		N/A
	- as specified in subclause 6.3 of IEC 60664-4 for insulation that is subjected to any periodic voltage having a frequency exceeding 30 kHz		N/A
29.3.4	Thickness of accessible parts of reinforced insulation consisting of a single layer not less than specified in table 19 ..... :		N/A
30	RESISTANCE TO HEAT AND FIRE		P
30.2	This requirement does not apply to:		P
	parts having a mass not exceeding 0,5 g, provided the cumulative effect is unlikely to propagate flames that originate inside the appliance by propagating flames from one part to another, or		N/A
30.2.1	Parts of non-metallic material subjected to the glow-wire test of IEC 60695-2-11 at 550 °C		P
	However, test not carried out if the material is classified as having a glow-wire flammability index according to IEC 60695-2-12 of at least 550 °C, or		N/A
30.2.2	The glow-wire test is also not carried out on small parts. These parts are to:		N/A
	- comprise material having a glow-wire flammability index of at least 750 °C, or 650 °C as appropriate, or		N/A
	- comply with the needle-flame test of Annex E, or		N/A
	- comprise material classified as V-0 or V-1 according to IEC 60695-11-10 ..... :		N/A
30.2.3.2	However, the glow-wire test of 750 °C or 650 °C as appropriate, is not carried out on parts of material fulfilling both or either of the following classifications:		N/A
	- a glow-wire ignition temperature according to IEC 60695-2-13 of at least:		N/A
	• 775 °C, for connections carrying a current exceeding 0,2 A during normal operation		N/A
	• 675 °C, for other connections		N/A
	- a glow-wire flammability index according to IEC 60695-2-12 of at least:		N/A
	- 750 °C, for connections carrying a current exceeding 0,2 A during normal operation		N/A
	- 650 °C, for other connections		N/A
	The glow-wire test is also not carried out on small parts. These parts are to:		N/A

Deviation Report of IEC 60335-1:2010 from IEC 60335-1:2001+ A1:2004 + A2:2006			
Clause	Requirement - Test	Result - Remark	Verdict
	- comprise material having a glow-wire ignition temperature of at least 775 °C or 675 °C as appropriate, or		N/A
	- comprise material having a glow-wire flammability index of at least 750 °C or 650 °C as appropriate, or		N/A
	- comply with the needle-flame test of Annex E, or		N/A
	- comprise material classified as V-0 or V-1 according to IEC 60695-11-10		N/A
	The consequential needle-flame test of Annex E applied to non-metallic parts that encroach within the vertical cylinder placed above the centre of the connection zone and on top of the non-metallic parts supporting current-carrying connections, and parts of non-metallic material within a distance of 3 mm of such connections if these parts are those:		N/A
	- parts that withstood the glow-wire test of IEC 60695-2-11 of 750 °C or 650 °C as appropriate, but produce a flame that persist longer than 2 s, or		N/A
	- parts that comprised material having a glow-wire flammability index of at least 750 °C or 650 °C as appropriate, or		N/A
	- small parts, that comprised material having a glow-wire flammability index of at least 750 °C or 650 °C as appropriate, or		N/A
	- small parts for which the needle-flame test of Annex E was applied, or		N/A
	- small parts for which a material classification of V-0 or V-1 was applied		N/A
	However, the consequential needle-flame test is not carried out on non-metallic parts, including small parts, within the cylinder that are:		N/A
	- parts having a glow-wire ignition temperature of at least 775 °C or 675 °C as appropriate, or		N/A
	- parts comprising material classified as V-0 or V-1 according to IEC 60695-11-10, or		N/A
	- parts shielded by a flame barrier that meets the needle-flame test of Annex E or that comprises material classified as V-0 or V-1 according to IEC 60695-11-10		N/A
B	ANNEX B (NORMATIVE) APPLIANCES POWERED BY RECHARGEABLE BATTERIES		N/A
7.1	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

Deviation Report of IEC 60335-1:2010 from IEC 60335-1:2001+ A1:2004 + A2:2006			
Clause	Requirement - Test	Result - Remark	Verdict

F	ANNEX F (NORMATIVE) CAPACITORS		N/A
3.4.3.2	Table 3 is applicable as described		N/A

G	ANNEX G (NORMATIVE) SAFETY ISOLATING TRANSFORMERS		N/A
29.1, 29.2, 29.3	The distances specified in items 2a, 2c and 3 in table 13 of IEC 61558-1 apply		N/A
	For insulated winding wires complying with subclause 19.12.3 of IEC 61558-1 there are no requirements for clearances or creepage distances		N/A
	For windings providing reinforced insulation, the distance specified in item 2c of table 13 of IEC 61558-1 is not assessed		N/A
	For safety isolating transformers subjected to periodic voltages with a frequency exceeding 30 kHz, the clearances, creepage distances and solid insulation values specified in IEC 60664-4 are applicable, if greater than the values specified in items 2a, 2c and 3 in table 13 of IEC 61558-1		N/A

R	ANNEX R (NORMATIVE) SOFTWARE EVALUATION		N/A
	Programmable electronic circuits requiring software incorporating measures to control the fault/error conditions specified in table R.1 or R.2 validated in accordance with the requirements of this annex		N/A
R.1	Programmable electronic circuits using software		N/A
	Programmable electronic circuits requiring software incorporating measures to control the fault/error conditions specified in table R.1 or R.2 constructed so that the software does not impair compliance with the requirements of this standard		N/A
R.2	Requirements for the architecture		N/A
	Programmable electronic circuits requiring software incorporating measures to control the fault/error conditions specified in table R.1 or R.2 use measures to control and avoid software-related faults/errors in safety-related data and safety-related segments of the software		N/A
R.2.1.1	Programmable electronic circuits requiring software incorporating measures to control the fault/error conditions specified in table R.2 have one of the following structures:		N/A

Deviation Report of IEC 60335-1:2010 from IEC 60335-1:2001+ A1:2004 + A2:2006			
Clause	Requirement - Test	Result - Remark	Verdict
	- single channel with periodic self-test and monitoring		N/A
	- dual channel (homogenous) with comparison		N/A
	- dual channel (diverse) with comparison		N/A
	Programmable electronic circuits requiring software incorporating measures to control the fault/error conditions specified in table R.1 have one of the following structures:		N/A
	- single channel with functional test		N/A
	- single channel with periodic self-test		N/A
	- dual channel without comparison		N/A
R.2.2	Measures to control faults/errors		N/A
R.2.2.1	When redundant memory with comparison is provided on two areas of the same component, the data in one area is stored in a different format from that in the other area		N/A
R.2.2.2	Programmable electronic circuits with functions requiring software incorporating measures to control the fault/error conditions specified in table R.2 and that use dual channel structures with comparison, have additional fault/error detection means for any fault/errors not detected by the comparison		N/A
R.2.2.3	For programmable electronic circuits with functions requiring software incorporating measures to control the fault/error conditions specified in table R.1 or R.2, means are provided for the recognition and control of errors in transmissions to external safety-related data paths		N/A
R.2.2.4	For programmable electronic circuits with functions requiring software incorporating measures to control the fault/error conditions specified in table R.1 or R.2, the programmable electronic circuits incorporate measures to address the fault/errors in safety-related segments and data indicated in table R.1 and R.2 as appropriate		N/A
R.2.2.5	For programmable electronic circuits with functions requiring software incorporating measures to control the fault/error conditions specified in table R.1 or R.2, detection of a fault/error occur before compliance with clause 19 is impaired		N/A
R.2.2.6	The software is referenced to relevant parts of the operating sequence and the associated hardware functions		N/A
R.2.2.7	Labels used for memory locations are unique		N/A

Deviation Report of IEC 60335-1:2010 from IEC 60335-1:2001+ A1:2004 + A2:2006			
Clause	Requirement - Test	Result - Remark	Verdict
R.2.2.8	The software is protected from user alteration of safety-related segments and data		N/A
R.2.2.9	Software and safety-related hardware under its control is initialized and terminates before compliance with clause 19 is impaired		N/A
R.3	Measures to avoid errors		N/A
R.3.1	General		N/A
	For programmable electronic circuits with functions requiring software incorporating measures to control the fault/error conditions specified in table R.1 or R.2, the following measures to avoid systematic fault in the software are applied		N/A
	Software that incorporates measures used to control the fault/error conditions specified in table R.2 is inherently acceptable for software required to control the fault/error conditions specified in table R.1		N/A
R.3.2	Specification		N/A
R.3.2.1	Software safety requirements:	Software Id:	N/A
	The specification of the software safety requirements includes the descriptions listed		N/A
R.3.2.2	Software architecture		N/A
R.3.2.2.1	The specification of the software architecture includes the aspects listed - techniques and measures to control software faults/errors (refer to R.2.2); - interactions between hardware and software; - partitioning into modules and their allocation to the specified safety functions; - hierarchy and call structure of the modules (control flow); - interrupt handling; - data flow and restrictions on data access; - architecture and storage of data; - time-based dependencies of sequences and data	Document ref. No:	N/A
R.3.2.2.2	The architecture specification is validated against the specification of the software safety requirements by static analysis		N/A
R.3.2.3	Module design and coding		N/A
R.3.2.3.1	Based on the architecture design, software is suitably refined into modules		N/A
	Software module design and coding is implemented in a way that is traceable to the software architecture and requirements		N/A

Deviation Report of IEC 60335-1:2010 from IEC 60335-1:2001+ A1:2004 + A2:2006			
Clause	Requirement - Test	Result - Remark	Verdict

R.3.2.3.2	Software code is structured		N/A
R.3.2.3.3	Coded software is validated against the module specification by static analysis		N/A
	The module specification is validated against the architecture specification by static analysis		N/A
R.3.3.3	Software validation		N/A
	The software is validated with reference to the requirements of the software safety requirements specification		N/A
	Compliance is checked by simulation of:		N/A
	- input signals present during normal operation		N/A
	- anticipated occurrences		N/A
	- undesired conditions requiring system action		N/A

13.2	TABLE: Leakage current (CTN-01)		P
	Heating appliances: 1.15 x rated input.....:	$1,15^{1/2}$x240=257,4V	—
	Motor-operated and combined appliances: 1.06 x rated voltage.....:	—	—
Leakage current between		I (mA)	Max. allowed I (mA)
L/N-Enclosure		0,009	0,35 peak
L/N-Working plate		0,018	0,35 peak
L/N-Switch knob		0,009	0,35 peak
Supplementary information: the test records are the max value			

13.2	TABLE: Leakage current (CTN-03)		P
	Heating appliances: 1.15 x rated input.....:	$1,15^{1/2}$x240=257,4V	—
	Motor-operated and combined appliances: 1.06 x rated voltage.....:	—	—
Leakage current between		I (mA)	Max. allowed I (mA)
L/N-Enclosure		0,008	0,35 peak
L/N-Working plate		0,015	0,35 peak
L/N-Switch knob		0,007	0,35 peak
Supplementary information: the test records are the max value			

13.2	TABLE: Leakage current (CTN-06)		P
	Heating appliances: 1.15 x rated input.....:	$1,15^{1/2}$x240=257,4V	—

Deviation Report of IEC 60335-1:2010 from IEC 60335-1:2001+ A1:2004 + A2:2006			
Clause	Requirement - Test	Result - Remark	Verdict

	Motor-operated and combined appliances: 1.06 x rated voltage.....:	—	—
Leakage current between		I (mA)	Max. allowed I (mA)
L/N-Enclosure		0,007	0,35 peak
L/N-Working plate		0,015	0,35 peak
L/N-Switch knob		0,008	0,35 peak
Supplementary information: the test records are the max value			

13.2	TABLE: Leakage current (CTN-07)		P
	Heating appliances: 1.15 x rated input.....:	$1,15^{1/2}$x240=257,4V	—
	Motor-operated and combined appliances: 1.06 x rated voltage.....:	—	—
Leakage current between		I (mA)	Max. allowed I (mA)
L/N-Enclosure		0,008	0,35 peak
L/N-Working plate		0,017	0,35 peak
L/N-Switch knob		0,007	0,35 peak
Supplementary information: the test records are the max value			

13.2	TABLE: Leakage current (CTN-09)		P
	Heating appliances: 1.15 x rated input.....:	$1,15^{1/2}$x240=257,4V	—
	Motor-operated and combined appliances: 1.06 x rated voltage.....:	—	—
Leakage current between		I (mA)	Max. allowed I (mA)
L/N-Enclosure		0,007	0,35 peak
L/N-Working plate		0,019	0,35 peak
L/N-Switch knob		0,007	0,35 peak
Supplementary information: the test records are the max value			

13.2	TABLE: Leakage current (CTN-011)		P
	Heating appliances: 1.15 x rated input.....:	$1,15^{1/2}$x240=257,4V	—
	Motor-operated and combined appliances: 1.06 x rated voltage.....:	—	—
Leakage current between		I (mA)	Max. allowed I (mA)
L/N-Enclosure		0,007	0,35 peak
L/N-Working plate		0,014	0,35 peak
L/N-Switch knob		0,007	0,35 peak
Supplementary information: the test records are the max value			

IEC60335_2_23F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

ATTACHMENT TO TEST REPORT IEC 60335-2-23 **EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES** PART 2-23: PARTICULAR REQUIREMENTS FOR APPLIANCES FOR SKIN OR HAIR CARE	
Differences according to.....:	EN 60335-2-23:2003 + A1:2008 + A11:2010 used in conjunction with EN 60335-1:2012 EN 62233:2008 (incl. Corr.:2008)
Attachment Form No.....:	EU_GD_IEC60335_2_23G
Attachment Originator .....:	VDE
Master Attachment.....:	Date (2012-07)
Copyright © 2012 IEC System for Conformity Testing and Certification of Electrical Equipment (IECEE), Geneva, Switzerland. All rights reserved.	

EN 60335-1, EN 60335-2-23			
Clause	Requirement – Test	Result – Remark	Verdict
	Group/CENELEC Common Differences to IEC 60335-1, IEC 60335-2-23		P
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	220-240 V	P
	Multi-phase appliances to be connected to the supply mains: 400 V covered		N/A
7.10	Devices used to start/stop operational functions of the appliance distinguished from other manual devices by means of shape, size, surface texture, position, etc. (EN 60335-1, EN 60335-2-23/A11)		P
	An indication that the device has been operated is given by (EN 60335-1, EN 60335-2-23/A11):		P
	- a tactile feedback, or (EN 60335-1, EN 60335-2-23/A11)		N/A
	- an audible and visual feedback (EN 60335-1, EN 60335-2-23/A11)		P
7.12	Instructions for use are provided with the appliance so that the appliance can be used safely. (EN 60335-2-23/A11)		P
	It is necessary to take precautions during user maintenance, appropriate details shall be given. (EN 60335-2-23/A11)		P
	The instructions include the substance of the following:		P
	- 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 (EN 60335-1, EN 60335-2-23/A11)		P
	- children shall not play with the appliance (EN 60335-1, EN 60335-2-23/A11)		P
	- cleaning and user maintenance shall not be made by children without supervision (EN 60335-1, EN 60335-2-23/A11)		P
	The instructions for portable hairdryers shall include the substance of the following: (EN 60335-2-23/A11)		N/A

IEC60335_2_23F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

EN 60335-1, EN 60335-2-23			
Clause	Requirement – Test	Result – Remark	Verdict
	- when the hairdryer is used in a bathroom, unplug it after use since the proximity of water presents a hazard even when the hairdryer is switched off (EN 60335-2-23/A11)		N/A
	- for additional protection, the installation of a residual current device (RCD) having a rated residual operating current not exceeding 30 mA is advisable in the electrical circuit supplying the bathroom. Ask your installer for advice. (EN 60335-2-23/A11)		N/A
	The instructions for facial saunas state that after use the appliance should be cleaned to avoid the accumulation of grease and other residues. (EN 60335-2-23/A11)		N/A
	If symbol 60417-5582 (2002-10) is used, together with the prohibition sign, the meaning has to be explained. (EN 60335-2-23/A11)		P
	The instructions include the substance of the following: (EN 60335-2-23/A11)		P
	WARNING: Do not use this appliance near bathtubs, showers, basins or other vessels containing water. (EN 60335-2-23/A11)		P
7.12.Z1	The specific instructions related to the safe operation of this appliance is collated together in the front section of the user instructions		P
	The height of the characters, measured on the capital letters, is at least 3 mm		P
	These instructions are also available in an alternative format, e.g. on a website		P
7.12.Z101	The specific instructions related to the safe operation of this appliance (as given in 7.12 of this standard) shall be collated together in the front section of the user instructions. The height of the characters, measured on the capital letters, shall be at least 4 mm. (EN 60335-2-23/A11)	3 mm	P
	These instructions shall also be available in an alternative format, e.g. on a website.		P
	These instructions shall also be available in an alternative format, e.g. on a website. The supplying of the instruction in an alternative format is not required for fixed hand dryers for which the operation is simple and clear.		P
8.1.1	Also test probe 18 of IEC 61032 is applied (EN 60335-2-23/A11)		P
	The appliance being in every possible position during the test (EN 60335-2-23/A11)		P
	The force on the probe in the straight position is increased to 10 N when probe 18 is used (EN 60335-2-23/A11)		P
	When using test probe 18 the appliance is fully assembled as in normal operation without any parts removed, and (EN 60335-2-23/A11)		P

IEC60335_2_23F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

EN 60335-1, EN 60335-2-23			
Clause	Requirement – Test	Result – Remark	Verdict
	parts intended to be removed for user maintenance are also not removed (EN 60335-2-23/A11)		P
8.2	Compliance is checked by applying the test probes of IEC 61032 (EN 60335-2-23/A11)		P
	For built-in appliances and fixed appliances, the test probe B and probe 18 of EN 61032 are applied only after installation	Hand-held appliance	N/A
11.8	In Table 3 delete the row “External enclosure of motor-operated appliancesexcept handles held in normal use". (EN 60335-2-23/A11)		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
19.2	- hand-held appliances are placed on a piece of low density glass-fibre insulation having a coefficient of thermal insulation of approximately 2,5 m² K/W; (EN 60335-2-23/A11)		P
20.2	Appliances are fully assembled as in normal operation without any parts removed. (EN 60335-2-23/A11)		P
	- a test probe that is similar to test probe B of IEC 61032 but having a circular stop face with a diameter of 50 mm, instead of the non circular face, applied with a force of 5 N and (EN 60335-2-23/A11)		P
	- test probe 18 of IEC 61032, applied with a force of 2,5 N. (EN 60335-2-23/A11)		P
21.101	Appliance is placed on a horizontal surface positioned 700 mm above a rigidly supported hardwood board (EN 60335-2-23/A11)		P
	Appliance is supplied at rated voltage and operated (EN 60335-2-23/A11)		P
	- for 30 min, for handheld appliances, (EN 60335-2-23/A11)		P
	- until steady state conditions are reached, for other appliances. (EN 60335-2-23/A11)		N/A
	In particular, the appliance shall not emit flames or molten metal and the requirements of Clauses 8 and 29 shall be fulfilled. (EN 60335-2-23/A11)		P
22.12	Hazard includes ingestion or a choking hazard for vulnerable people. (EN 60335-2-23/A11)		P
22.Z101	Hairdryers are fitted with a grid or similar protection means to limit the risk of hair being sucked into the air intake. (EN 60335-2-23/A11)		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_23F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

EN 60335-1, EN 60335-2-23			
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:		P
	- 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		N/A
	Unless components have been previously tested and found to comply with the relevant standard for the number of cycles specified, they are tested in accordance with 24.1.1 to 24.1.9		P
	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
	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		P
	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

IEC60335_2_23F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

EN 60335-1, EN 60335-2-23			
Clause	Requirement – Test	Result – Remark	Verdict
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:		P
	- for Class I appliances: standard sheet C2b, C3b or C4 :		N/A
	- for Class II appliances: standard sheet C5 or C6 :		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:		N/A
	- 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
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 50366 or EN 62233	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 the test is as specified in 19.7		N/A
ZA	**ANNEX ZA** (NORMATIVE) **SPECIAL NATIONAL CONDITIONS**		P

IEC60335_2_23F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

EN 60335-1, EN 60335-2-23			
Clause	Requirement – Test	Result – Remark	Verdict
	Norway		N/A
19.5	The test is also applicable to appliances intended to be permanently connected to fixed wiring		N/A
	Norway		N/A
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		P
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		N/A
25.8	In the table, the lines for 10 A and 16 A are replaced by:		N/A
	> 10 and ≤ 13 1,25		N/A
	> 13 and ≤ 16 1,5		N/A
ZB	**ANNEX ZB** (INFORMATIVE) **A-DEVIATIONS**		N/A
	Ireland		N/A
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		N/A
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**		P
	A list of referenced documents in this standard		P
ZD	**ANNEX ZD** (INFORMATIVE) **IEC and CENELEC CODE DESIGNATIONS FOR FLEXIBLE CORDS**		P
	A table with IEC and CENELEC code designations for flexible cords		P
ZE	**ANNEX ZE** (INFORMATIVE) **SPECIFIC ADDITIONAL REQUIREMENTS FOR APPLIANCES AND MACHINES INTENDED FOR COMMERCIAL USE**		N/A
7.1	Business name and full address of the manufacturer and, where applicable, his authorized representative..... :		N/A
	Model or type reference..... :		N/A
	Serial number, if any..... :		N/A
	Production year		N/A
	Designation of the appliance ..... :		N/A

IEC60335_2_23F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

EN 60335-1, EN 60335-2-23			
Clause	Requirement – Test	Result – Remark	Verdict
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:		N/A
	- 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 if 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:		N/A
	- 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

IEC60335_2_23F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

EN 60335-1, EN 60335-2-23			
Clause	Requirement – Test	Result – Remark	Verdict
	- 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:		N/A
	- 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 includes 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 has to be 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
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

IEC60335_2_23F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

EN 60335-1, EN 60335-2-23			
Clause	Requirement – Test	Result – Remark	Verdict
	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:		N/A
	- 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
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

IEC60335_2_23F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

EN 60335-1, EN 60335-2-23			
Clause	Requirement – Test	Result – Remark	Verdict
	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:		N/A
	- 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
	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:		N/A
	- 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

IEC60335_2_23F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

EN 60335-1, EN 60335-2-23			
Clause	Requirement – Test	Result – Remark	Verdict
	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**		P
	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**		N/A
	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
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
ZZ	**ANNEX ZZ** (INFORMATIVE) **COVERAGE OF ESSENTIAL REQUIREMENTS OF EC DIRECTIVES**		P
	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)	LVD	P

<End of Test Report>