

TEST REPORT

Reference No	WTX22X10201274S
Applicant :	GlobTek, Inc.
Address :	186 Veterans Dr. Northvale, NJ 07647 USA
Manufacturer :	GlobTek, Inc.
Address	186 Veterans Dr. Northvale, NJ 07647 USA
Product Name :	Power supply
Model No	GT*46402-*** (See page 5 for details)
Test specification :	Safety of household and similar electrical appliances Part I: general requirements Measurement methods for electromagnetic fields of household appliances and similar apparatus with regard to human exposure EN 60335-1:2012+A11:2014+A13:2017+A1:2019+A14:2019+A2:2019 EN 62233:2008
Date of Receipt sample :	2022-10-18
Date of Test	2022-10-18 to 2022-10-31
Date of Issue	2022-11-15
Test Report Form No :	WTX_EN60335_1_2012F
Test Result	Pass the set of the se

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of approver.

Prepared By: Waltek Testing Group (Shenzhen) Co., Ltd.

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Tested by:

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Approved by:

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Harvid Wei

Page 2 of 116



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Test item description	Power supply
Trademark:	GlobTek, Inc.
Model and/or type reference:	GT*46402-*** (See page 5 for details)
Rating(s):	Input: 100-240V~, 50-60Hz, 1.0A;
NUTER WAITE WAITE WAIT WATE -	Output: 5-24VDC, 6A MAX , 40W MAX
at at let let whet a	(See page 5 for details)
☐ Yes ⊠ No If Yes, list the related test items and lab i Test items: Lab information:	information:
Summary of testing:	not we will be at at at the tot
 Tests performed (name of test and test - EN 60335-1:2012+A11:2014+A13:20 +A14:2019+A2:2019 EN 62233:2008 The submitted samples were found to co requirements of above specification. 	017+A1:2019 Waltek Testing Group (Shenzhen) Co., Ltd. Address: 1/F., Room 101, Building 1, Hongwei Industrial Park, Liuxian 2nd Road, Block 70 Bao'an District, Shenzhen, Guangdong, China

Page 3 of 116



2





Test item particulars:	
Classification of installation and use	Portable appliance and indoor used only
Supply Connection:	Direct plug-in
Class of equipment:	Class II
Possible test case verdicts:	with with all all all and
- test case does not apply to the test object:	N/A (Not Applicable)
- test object does meet the requirement	P (Pass)
- test object does not meet the requirement:	F (Fail)
Name and address of factory (ies):	1. GlobTek, Inc. 186 Veterans Dr. Northvale, NJ 07647 USA
	2. GlobTek (Suzhou) Co., Ltd Building 4, No. 76, Jin Ling East Rd., Suzhou Industrial Park, Suzhou,JiangSu 215021, China
	3. Shenzhen ENG Electronics Co., Ltd. Block B, Nuclear Group Industrial District, Baishixia Fuyun Town, Bao'an, Shenzhen, China
General remarks:	TTE MALT WALL WALL WALL WALL
The test result presented in this report relate only to th	e object(s) tested.
This report shall not be reproduced, except in full, withc	
"(see Enclosure #)" refers to additional information app	pended to the report.

"(see appended table)" refers to a table appended to the report.

Throughout this report a \square comma / \square point is used as the decimal separator.



General product information:

- 1. The appliance is intended for household and indoor use only.
- 2. Transformers used in all models are with same construction. The turns of secondary winding may be added or reduced according different output voltage.
- All models have same circuit diagram, PCB layout and enclosure size, but some non-critical components may be adjusted according different output voltage. The parameters of these components depend on output voltage.
- 4. All the types are designed for continuous operation.
- 5. The product top enclosure is secured to bottom enclosure by ultra sonic welding.
- 6. Plug should be evaluated when marketed into the country.

Model similarity:

GT*46402-***,

The 1st "*" part can be 'M' or '-' or 'H' for market identification and not related to safety.

The 2nd "*" denotes the rated output wattage designation, which can be "01" to "40", with interval of 1. The 3rd "*" denotes the standard rated output voltage designation, which can be "05" to "24" or "5.0" to "24.0", with interval of 0.1.

The last * denote any six character = 0-9 or A-Z or ()[] or – or blank for marketing purposes.

Model list:

Model	Input	Output voltage	Max. output current	Max. output power
GT*46402-***	100-240V~,	5.0-8.9VDC	6.0A	40W
		9.0-14.9VDC	4.44A	40W
	50-60Hz, 1.0A	15.0-24.0VDC	2.66A	40W

Page 6 of 116



Clause	Requirement – Test	Result – Remark	Verdict
5	GENERAL CONDITIONS FOR THE TESTS	WALLS WALLS WAITE	Р
WALTER N	Tests performed according to Clause 5, e.g. nature of supply, sequence of testing, etc.	MITER WAITER WAITER W	P
6,1	CLASSIFICATION	s at at a	dr _dP _
6.1	Protection against electric shock: Class 0, 0I, I, II, III:	Class II	Р
White white	For a class III construction with a detachable power supply part the appliance is classified according to the detachable power supply part	white white white	N/A
6.2	Protection against harmful ingress of water	IPX0	N/A
7.5	MARKING AND INSTRUCTIONS	at set set a	S P
7.1	Rated voltage or voltage range (V):	See marking label	Р
The West	Symbol for nature of supply, or:	See marking label	SUP BU
6 18	Rated frequency (Hz)	See marking label	P
me	Rated power input (W), or:	- mitter smile south	N/A
A	Rated current (A):	See marking label	e P
wer v	Manufacturer's or responsible vendor's name, trademark or identification mark	See page 1	Р
in m	Model or type reference	See page 5	P √
Et watte	Symbol IEC 60417-5172, for class II appliances	United water	P
NUTE	IP number, other than IPX0	IPX0	N/A
strek .	Symbol IEC 60417-5180, for class III appliances, unless	the set of	N/A
1. 2.	the appliance is operated by batteries only, or	we no no n	N/A
LIER WAL	for appliances powered by rechargeable batteries recharged in the appliance	set while while whi	N/A
ex white	Symbol IEC 60417-5018, for class II and class III appliances incorporating a functional earth	t milet milet while	N/A
MULTER N	Symbol IEC 60417-5036, for the enclosure of electrically-operated water valves in external hose-sets for connection of an appliance to the water mains, if the working voltage exceeds extra-low voltage	whitek whitek whitek	N/A
7.2	Warning for stationary appliances for multiple supply	- 10 A	N/A
- wints	Warning placed in vicinity of terminal cover	et mile while while	N/A
7.3	Range of rated values marked with the lower and upper limits separated by a hyphen	100-240V	STATE Pre
			and the second se

Page 7 of 116



Clause	Requirement – Test	Result – Remark	Verdict
S. S. S.	and and some some so	the set state state	and the
at the	Different rated values marked with the values separated by an oblique stroke	white white white white	N/A
7.4	Appliances adjustable for different rated voltages or rated frequencies, the voltage or the frequency setting is clearly discernible	No adjustable device	N/A
et white	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	and some some some some	N/A
7.5	Appliances with more than one rated voltage or one or more rated voltage ranges, marked with rated input or rated current for each rated voltage or range, unless	whitek whitek whitek white	WAR P
Jet J	the power input or current are related to the arithmetic mean value of the rated voltage range	it at not the	N/A
t sumiret	Relation between marking for upper and lower limits of rated power input or rated current and voltage is clear	t state with any and	P
7.6	Correct symbols used	when we we we with	P
which a	Symbol for nature of supply placed next to rated voltage	uniter white white white	₩P
NITE WAY	Symbol for class II appliances placed unlikely to be confused with other marking	The suntre suntre s	N. P.N
EX WALTE	Units of physical quantities and their symbols according to international standardized system	antite white white wh	P.C
7.7	Connection diagram fixed to appliances to be connected to more than two supply conductors and appliances for multiple supply, unless	Single supply voltage range	N/A
INLIER N	correct mode of connection is obvious	at set set with	N/A
7.8	Except for type Z attachment, terminals for connection as follows:	on to the supply mains indicated	N/A
et set	- marking of terminals exclusively for the neutral conductor (letter N)	which where we are	N/A
MA	- marking of protective earthing terminals (symbol IEC 60417-5019)	WALT WALL WALL WALL	N/A
when y	- marking of functional earthing terminals (symbol IEC 60417-5018)	water water water water	N/A
NUTE OF	- marking not placed on removable parts	at the state when	N/A
7.9	Marking or placing of switches which may cause a hazard	No switch used	N/A
7.10	Indications of switches on stationary appliances and controls on all appliances by use of figures, letters or other visual means	No switch used	N/A

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Page 8 of 116



Clause	Requirement – Test	Result – Remark	Verdict
White White	This applies also to switches which are part of a control	WALLS WALLS WALLS	N/A
NALL N	If figures are used, the OFF position indicated by the figure 0	WITE MAILE MALLER MA	N/A
ine war	The figure 0 indicates only OFF position, unless no confusion with the OFF position	LIET WALTER WALTE WALTE	N/A
7.11	Indication for direction of adjustment of controls	t let set sure	N/A
7.12	Instructions for safe use provided	Refer to user manual	Р
MULTE	Details concerning precautions during user maintenance	White white white w	S P
NUTER AN	The instructions state that:	let the state of	P
ret anti	- the appliance is not to be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction	int white white white	P
Nº LET	- children being supervised not to play with the appliance	white white white	Р
whe w	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	unite somet some som	N/A
EX WALLE	Instructions for class III appliances state that it must only be supplied at SELV, unless	a state white source	N/A
- unifier	it is a battery-operated appliance, the battery being charged outside the appliance	Tet the milet	N/A
	For appliances for altitudes exceeding 2 000 m, the maximum altitude is stated:	when we we we we	N/A
Tet whi	The instructions for appliances incorporating a functional earth states that the appliance incorporates an earth connection for functional purposes only	The write writer write	N/A
7.12.1	Sufficient details for installation supplied	t set set set	N/A
WALTER	For an appliance intended to be permanently connected to the water mains and not connected by a hose-set, this is stated	surface surface and and	N/A
NUSEK WA	If different rated voltages or different rated frequencies are marked, the instructions state what action to be taken to adjust the appliance	wret wattet wattet wat	N/A

Page 9 of 116



Clause	Requirement – Test	Result – Remark	Verdict
7.12.2	Stationary appliances not fitted with means for disconnection from the supply mains having a contact separation in all poles that provide full disconnection under overvoltage category III, the instructions state that means for disconnection must be incorporated in the fixed wiring in accordance with the wiring rules	anticet anticet anticet a	N/A
7.12.3	Insulation of the fixed wiring in contact with parts exceeding 50 K during clause 11; instructions stating that the fixed wiring must be protected	a wanter water water	N/A
7.12.4	Instructions for built-in appliances:	JEK NUEL MUE	N/A
*	- dimensions of space	Jun sur in	N/A
Wr W	- dimensions and position of supporting and fixing	NUTER UNITED WALTER W	N/A
ret whit	- minimum distances between parts and surrounding structure	set miset miset whi	N/A
+ minet	- minimum dimensions of ventilating openings and arrangement	t the the state	N/A
	- connection to supply mains and interconnection of separate components	which with the	N/A
	- allow disconnection of the appliance after installation, by accessible plug or a switch in the fixed wiring, unless	and and and a	N/A
te de	a switch complying with 24.3		N/A
7.12.5	Replacement cord instructions, type X attachment with a specially prepared cord	WALTE WALTE MALT	N/A
MALTE	Replacement cord instructions, type Y attachment	Tet with with	N/A
đ	Replacement cord instructions, type Z attachment	me me	N/A
7.12.6	Caution in the instructions for appliances incorporating a non-self-resetting thermal cut-out that is reset by disconnection of the supply mains, if this cut-out is required to comply with the standard	ALTER WALTER WALTER WAL	N/A
7.12.7	Instructions for fixed appliances stating how the appliance is to be fixed	t ret net with	N/A
7.12.8	Instructions for appliances connected to the water m	ains:	N/A
white y	- max. inlet water pressure (Pa)	allet milet with	N/A
dit.	- min. inlet water pressure, if necessary (Pa):	all me a	N/A
14 - 140 164 - 176	Instructions concerning new and old hose-sets for appliances connected to the water mains by detachable hose-sets	are write write w	N/A
7.12.9	Instructions specified in 7.12 and from 7.12.1 to 7.12.8 appear together before any other instructions supplied with the appliance	which which which	P

Page 10 of 116



Clause	Requirement – Test	Result – Remark	Verdic
NI LIE	and		
	These instructions may be supplied with the appliance separately from any functional use booklet	whe whe when we	P
when w	They may follow the description of the appliance that identifies parts, or follow the drawings/sketches	unite sunite sunite sur	Р
et ire	In addition, instructions are also available in an alternative format such as on a website or on request from the user in a format such as a DVD	Tet white white white	P
MUTER	In addition, instructions are also available in an alternative format such as on a website or in a format such as a DVD	Available on website	P
7.13	Instructions and other texts in an official language	English	Р
7.14 🔊	Markings clearly legible and durable:	ister aliter aliter and	P
set mis	Signal words WARNING, CAUTION, DANGER in uppercase having a height as specified :	et tet stet site	N/A
t stek	Uppercase letter of the text explaining the signal word not smaller than 1.6 mm	white with the	N/A
WILLER W	Moulded in, engraved, or stamped markings either raised above or have a depth below the surface of at least 0.25 mm, unless	white white white	N/A
A	contrasting colours are used	Nr. 30 June 1	Р
in an	Markings checked by inspection, measurement and rubbing test as specified	and white white	P
7.15	Marking on a main part	On body	P
Jet	Marking clearly discernible from the outside, if necessary after removal of a cover	it it jet	Р
su	For portable appliances, cover can be removed or opened without a tool	which which which is	N/A
un wi	For stationary appliances, name, trademark or identification mark and model or type reference visible after installation	net stat states with	N/A
at white	For fixed appliances, name, trademark or identification mark and model or type reference visible after installation according to the instructions	* white white	N/A
whitek a	Indications for switches and controls placed on or near the components. Marking not on parts which can be positioned or repositioned in such a way that the marking is misleading	white white white w	N/A
nt wh	The symbol IEC 60417-5018 placed next to the symbol IEC 60417-5172 or IEC 60417-5180	stre white white white	N/A
7.16	Marking of a possible replaceable thermal link or fuse link clearly visible with regard to replacing the link	et watter watter waite	N/A
B ~ ^N	PROTECTION AGAINST ACCESS TO LIVE PARTS	inter white white	P P

Page 11 of 116



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8.1	Adequate protection against accidental contact with live parts	while while while wh	Р
8.1.1	Requirement applies for all positions, detachable parts removed	white white white white	Р
VILLE WALL	Lamps behind a detachable cover not removed, if conditions met	Liet white white white	N/A
er white	Insertion or removal of lamps, protection against contact with live parts of the lamp cap	A MALER MALER WALES	N/A
WALTER W	Use of test probe B of IEC 61032, with a force not exceeding 1 N: no contact with live parts	martet anartet anartet wat	P
INITEX UNI	Use of test probe B of IEC 61032 through openings, with a force of 20N: no contact with live parts	Tet and wind wind	P
8.1.2	Use of test probe 13 of IEC 61032, with a force not exceeding 1 N, through openings in class 0 appliances and class II appliances/constructions: no contact with live parts	set whilet whilet whilet	P
white state	Test probe 13 also applied through openings in earthed metal enclosures having a non-conductive coating: no contact with live parts	white white white wh	N/A
8.1.3	For appliances other than class II, use of test probe 41 of IEC 61032, with a force not exceeding 1 N: no contact with live parts of visible glowing heating elements	No visible glowing heating elements	N/A
IEK WALTER	For a single switching action obtained by a switching device, requirements as specified	and the writer writer w	N/A
shurek s	For appliances with a supply cord and without a switching device, the single switching action may be obtained by the withdrawal of the plug from a socket-outlet	white white white whi	N/A
8.1.4	Accessible part not considered live if:	Intite MALL WALL WALL	P
inet white	- safety extra-low a.c. voltage: peak value not exceeding 42.4 V	ret wret whilet whilet	N/A
of the	- safety extra-low d.c. voltage: not exceeding 42.4 V	Max. 24.12V d.c.	P .
w.	- or separated from live parts by protective impedance	white white white wi	Р
mer m	If protective impedance: d.c. current not exceeding 2 mA, and	suntrest suntres suntre sunt	N/A
NUTE MIL	a.c. peak value not exceeding 0.7 mA	Max. 0.17mA	P
Jet NJE	- for peak values over 42.4 V up to and including 450 V, capacitance not exceeding 0.1 μF	at not not whet	N/A
t stet	- for peak values over 450 V up to and including 15 kV, discharge not exceeding 45 μC	what what when a	N/A
20. 1	- for peak values over 15kV, the energy in the discharge not exceeding 350 mJ	Mart Mart Mart M	N/A

Page 12 of 116



EN 60335-1

Clause	Requirement – Test	Result – Remark	Verdic
8.1.5	Live parts protected at least by basic insulation before	re installation or assembly:	N/A
Set.	- built-in appliances	1 1 1 1 5	N/A
10 41	- fixed appliances	Intro Martin Martin	N/A
LIEX AND	- appliances delivered in separate units	at the set with	N/A
8.2	Class II appliances and constructions constructed so that there is adequate protection against accidental contact with basic insulation and metal parts separated from live parts by basic insulation only	at while while while ou	P
Set.	Only possible to touch parts separated from live parts by double or reinforced insulation	within with with an	Р
÷	STARTING OF MOTOR-OPERATED APPLIANCES	unit whit whit whe	N/A
ret wait	Requirements and tests are specified in part 2 when necessary	Set mare while while	N/A
10 🦽	POWER INPUT AND CURRENT	i i it it .	. 🖈 P. <
10.1	Power input at normal operating temperature, rated voltage and normal operation not deviating from rated power input by more than shown in table 1	white white white with	N/A
ex white	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
MULTE	Otherwise the power input is the arithmetic mean value	MALLER MALLER MALLE MAL	N/A
intifet out	Test carried out at upper and lower limits of the ranges for appliances with one or more rated voltage ranges, unless	ALTER MALTER MALTER MALTE	N/A
in write	the rated power input is related to the arithmetic mean value	Tet water water water	N/A
10.2	Current at normal operating temperature, rated voltage and normal operation not deviating from rated current by more than shown in table 2	(see appended table)	Р
	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	at at all set	N/A
20	Otherwise the current is the arithmetic mean value	my my my s	N/A
MALTE	Test carried out at upper and lower limits of the ranges for appliances with one or more rated voltage ranges, unless	whitek whitek whitek wh	Р

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Page 13 of 116



Clause	Requirement – Test	Result – Remark	Verdic
W. CT.	the rated current is related to the arithmetic mean	MILLER WALLER WALLE WILL	N/A
- fit-	value of the range	the state of	* 564
11 🗠	HEATING	mile white white whe	P
11.1	No excessive temperatures in normal use	at at let let	∕°₽
11.2	The appliance is held, placed or fixed in position as described:	Plugged into socket in wall	P
11.3	Temperature rises, other than of windings, determined by thermocouples	By thermocouples	Р
WALTE	Temperature rises of windings determined by resistance method, unless	WALTER WALTER WALTER WALT	N/A
NUTER W	the windings makes it difficult to make the necessary connections	NITEX MAILEX MAILEX MAILES	UNI P
11.4	Heating appliances operated under normal operation at 1.15 times rated power input (W):	set milet milet milet	N/A
11.5	Motor-operated appliances operated under normal operation at most unfavourable voltage between 0.94 and 1.06 times rated voltage (V)	(see appended table)	P
11.6	Combined appliances operated under normal operation at most unfavourable voltage between 0.94 and 1.06 times rated voltage (V)	WILLEY WALTER WALTER WALT	N/A
11.7	Operation duration corresponding to the most unfavourable conditions of normal use	The worth worth	N PS
11.8	Temperature rises monitored continuously and not exceeding the values in Table 3	(see appended table)	N ST PAS
WALTER	If the temperature rise of a motor winding exceeds the value of Table 3, or	wifet whitet whitet whi	N/A
UNLIEK .N	if there is doubt with regard to classification of insulation,	the with which while	N/A
	tests of Annex C are carried out	n m n t	N/A
	Sealing compound does not flow out	ret miles white white	N/A
× 18	Protective devices do not operate, except	the the the	P S
when	components in protective electronic circuits tested for the number of cycles specified in 24.1.4	WALTE WALL WALL WA	N/A
13	LEAKAGE CURRENT AND ELECTRIC STRENGTH TEMPERATURE	AT OPERATING	JUL P
13.1	Leakage current not excessive and electric strength adequate	NITER WALTER WALTER WALTER	P
ret unit	Heating appliances operated at 1.15 times the rated power input (W)	et antiet antiet antiet a	N/A
MULEY	Motor-operated appliances and combined appliances supplied at 1.06 times the rated voltage	(see appended table)	Pri

Page 14 of 116



Clause	Requirement – Test	Result – Remark	Verdict
. MILTE	Desks shire increasing and an disciple states of a second state of the second states states states of the second s	the state state of the	
j.t.	Protective impedance and radio interference filters disconnected before carrying out the tests	when when the st	P
13.2	The leakage current is measured by means of the circuit described in Figure 4 of IEC 60990:1999	MUTE WALT WHIT WAS	Р
er whi et is el	For class 0I appliances and class I appliances, except parts of class II construction, C may be replaced by a low impedance ammeter	and white white white	N/A
	Leakage current measurements:	(see appended table)	P
13.3	The appliance is disconnected from the supply	at let set	P
-un -	Electric strength tests according to Table 4	(see appended table)	Р
See .	No breakdown during the tests	10 10 50 5	Ϋ́Ρ
14	TRANSIENT OVERVOLTAGES	un me me m	N/A
IC WAL	Appliances withstand the transient over-voltages to which they may be subjected	SEX WALLEY WALLEY WALLE	N/A
NUNLIER SUNLIER	Clearances having a value less than specified in table 16 subjected to an impulse voltage test, the test voltage specified in table 6 :	Whitek whitek whitek	N/A
mer 1	No flashover during the test, unless	NUTER INLIER WALTE WA	N/A
ITTEX WAY	of functional insulation if the appliance complies with Clause 19 with the clearance short-circuited	at a state mit	N/A
15	MOISTURE RESISTANCE		Р
15.1	Enclosure provides the degree of moisture protection according to classification of the appliance	white white white	N/A
when when	Compliance checked as specified in 15.1.1, taking into account 15.1.2, followed by the electric strength test of 16.3	white white white we	N/A
ret whi	No trace of water on insulation which can result in a reduction of clearances and creepage distances below values specified in clause 29	Tet martet warret warre	N/A
15.1.1	Appliances, other than IPX0, subjected to tests as specified in IEC 60529	IPX0	N/A
MALTER S	Water valves containing live parts in external hoses for connection of an appliance to the water mains tested as specified for IPX7 appliances	WALTER WALTER WALTER 38	N/A
15.1.2	Hand-held appliance turned continuously through the most unfavourable positions during the test	stat strat satisfic satisf	N/A
iet antif	Built-in appliances installed according to the instructions	et the state with	N/A
t st	Appliances placed or used on the floor or table placed on a horizontal unperforated support	with the state	N/A

Page 15 of 116



Clause	Requirement – Test	Result – Remark	Verdic
5	white inter whe whe will be	t at at the	and the state
WALTER W	Appliances normally fixed to a wall and appliances with pins for insertion into socket-outlets are mounted on a wooden board	white white white	N/A
iset was	For IPX3 appliances, the base of wall mounted appliances is placed at the same level as the pivot axis of the oscillating tube	and sale shares and	N/A
* white	For IPX4 appliances, the horizontal centre line of the appliance is aligned with the pivot axis of the oscillating tube, and	at white white white	N/A
White.	for appliances normally used on the floor or table, the movement is limited to two times 90° for a period of 5 min, the support being placed at the level of the pivot axis of the oscillating tube	whitek whitek whitek	N/A
iett	Wall-mounted appliances, take into account the distance to the floor stated in the instructions	at at at a	N/A
WALTER	Appliances normally fixed to a ceiling are mounted underneath a horizontal unperforated support, the pivot axis of the oscillating tube located at the level of the underside of the support, and	white white white	N/A
WALTER V	for IPX4 appliances, the movement of the tube is limited to two times 90° from the vertical for a period of 5 min	united whited whited y	N/A
in m	Appliances with type X attachment fitted with a flexible cord as described	and write wr	N/A
WALT	Detachable parts subjected to the relevant treatment with the main part	WALTER WALTER MALTE	N/A
white	However, if a part has to be removed for user maintenance and a tool is needed, this part is not removed	white white white	N/A
15.2	Spillage of liquid does not affect the electrical insulation	white white white w	N/A
ier whi	Spillage solution comprising water containing approximately 1 % NaCl and 0.6 % rinsing agent	set while while whi	N/A
WALTER	Appliances with type X attachment fitted with a flexible cord as described	t maret whitet white	N/A
whitek.	Appliances incorporating an appliance inlet tested with or without an connector, whichever is most unfavourable	whitet whitet whitet	N/A
J. The	Detachable parts removed	let let set	N/A
et .5	Overfilling test with additional amount of the solution, over a period of 1 min (I)	at the set of	N/A
-m	The appliance withstands the electric strength test of 16.3	wat wat was	N/A

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Page 16 of 116



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Clause	Requirement – Test	Result – Remark	Verdict
- Life	and the second and the second se	the state state with	
	No trace of water on insulation that can result in a reduction of clearances and creepage distances below values specified in clause 29	whit whit white white	N/A
15.3	Appliances proof against humid conditions	no m m m	Р
ine m	Checked by test Cab: Damp heat steady state in IEC 60068-2-78	Liet watter waite waite	P
WALTE	Detachable parts removed and subjected, if necessary, to the humidity test with the main part	at white white white whi	P
STA	Humidity test for 48 h in a humidity cabinet	25°C, 93% R.H.	Р
	Reassembly of those parts that may have been removed	white white white white	N/A
ler al	The appliance withstands the tests of clause 16	NUTE MALTE WALL WALL	P 1
16	LEAKAGE CURRENT AND ELECTRIC STRENGTH	a at at st .	್
16.1	Leakage current not excessive and electric strength adequate	white white with the	Р
whit	Protective impedance disconnected from live parts before carrying out the tests	white white white white	P
white a	Tests carried out at room temperature and not connected to the supply	united sumifer uniter unite	, ° Р
16.2	Single-phase appliances: test voltage 1.06 times rated voltage (V)	(see appended table)	Р
EX WALTE	Three-phase appliances: test voltage 1.06 times rated voltage divided by $\sqrt{3}$ (V)	antite watter swatter way	N/A
- J.	Leakage current measurements:	(see appended table)	P
w.	Limit values doubled if:	whit with whit whe	N/A
STER .	- all controls have an off position in all poles, or	at let set soft	N/A
	- the appliance has no control other than a thermal cut-out, or	and wat wat at	N/A
y	- all thermostats, temperature limiters and energy regulators do not have an off position, or	TE wait wat and w	N/A
Jure	- the appliance has radio interference filters	t intre- intre unit with	N/A
whitek w	With the radio interference filters disconnected, the leakage current do not exceed limits specified:	inet minet minet aminet	N/A
16.3	Electric strength tests according to Table 7:	(see appended table)	Р
nti un tet ur	Test voltage applied between the supply cord and inlet bushing and cord guard and cord anchorage as specified:	street white white white y	N/A
ap.	No breakdown during the tests	mer mer mer m	Р
17 5	OVERLOAD PROTECTION OF TRANSFORMERS A	AND ASSOCIATED CIRCUITS	Р

Page 17 of 116



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Clause	Requirement – Test	Result – Remark	Verdict
L. L.L.	with white all all all all	t at at the	NUT NOUT
	No excessive temperatures in transformer or associated circuits in event of short-circuits likely to occur in normal use	(see appended table)	P
ister what	Appliance supplied with 1.06 or 0.94 times rated voltage under the most unfavourable short-circuit or overload likely to occur in normal use (V)	1.06x240V=254.4V	P P
t 1	Basic insulation is not short-circuited	i it it it	Ø PS
Whitek.	Temperature rise of insulation of the conductors of safety extra-low voltage circuits not exceeding the relevant value specified in table 3 by more than 15 K	while while while	SV P
Set .	Temperature of the winding not exceeding the value specified in table 8,	and all set is	P
let s	However, limits do not apply to fail-safe transformers complying with sub-clause 15.5 of IEC 61558-1	ne wat was all	N/A
18	ENDURANCE	The world's world work	N/A
* WALLER	Requirements and tests are specified in part 2 when necessary	t wiret whitet whitet	N/A
19 🦽	ABNORMAL OPERATION	s a th	A P
19.1	The risk of fire, mechanical damage or electric shock under abnormal or careless operation obviated	unite sunite sunt sun	AN P
et .54	Electronic circuits so designed and applied that a fault will not render the appliance unsafe	(see appended table)	P
- vir	Appliances incorporating heating elements subjected to the tests of 19.2 and 19.3, and	wall wal wat	N/A
	if the appliance also has a control that limit the temperature during clause 11 it is subjected to the test of 19.4, and	white white white	N/A
n n	if applicable, to the test of 19.5	with must mar me	N/A
LIEK WAL	Appliances incorporating PTC heating elements are also subjected to the test of 19.6	Set while while while	N/A
et white	Appliances incorporating motors subjected to the tests of 19.7 to 19.10, as applicable	t milet milet martet	N/A
whitek v	Appliances incorporating electronic circuits subjected to the tests of 19.11 and 19.12, as applicable	white white white w	P.K
NUTER WY	Appliances incorporating contactors or relays subjected to the test of 19.14, being carried out before the tests of 19.11	stret wattet wattet watt	N/A
I WILL	Appliances incorporating voltage selector switches subjected to the test of 19.15	et watter watter watter	N/A
white	Unless otherwise specified, the tests are continued until a non-self-resetting thermal cut-out operates, or	WALTER WALTER WALTER	N/A
15	until steady conditions are established	a state	Р

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Page 18 of 116



Clause	Requirement – Test	Result – Remark	Verdict
WILLEY	If a heating element or intentionally weak part becomes open-circuited, the relevant test is repeated on a second sample	while while while	N/A
19.2	Test of appliances with heating elements with restricted heat dissipation; test voltage (V), power input of 0.85 times rated power input (W)	and with white whi	N/A
19.3	Test of 19.2 repeated; test voltage (V), power input of 1.24 times rated power input (W)	a such as the same	N/A
19.4	Test conditions as in cl. 11, any control limiting the temperature during tests of cl. 11 short-circuited	the set set	N/A
19.5	Test of 19.4 repeated on Class 0I and I appliances with tubular sheathed or embedded heating elements. No short-circuiting, but one end of the element connected to the elements sheath	NUTER WALLER WALLER WA	N/A
in main t ret	The test repeated with reversed polarity and the other end of the heating element connected to the sheath	set would would would	N/A
whitek a	The test is not carried out on appliances intended to be permanently connected to fixed wiring and on appliances where an all-pole disconnection occurs during the test of 19.4	WALTER MALTER WALTER	N/A
19.6	Appliances with PTC heating elements tested at rated voltage, establishing steady conditions	of mind we	N/A
WALTER WALTER	The working voltage of the PTC heating element is increased by 5 % and the appliance is operated until steady conditions are re-established. The voltage is then increased in similar steps until 1.5 times working voltage or until the PTC heating element ruptures (V)	a wontree wontree wontree	N/A
19.7	Stalling test by locking the rotor if the locked rotor torque is smaller than the full load torque, or	white and a second as	N/A
de d	locking moving parts of other appliances	s st at a	مN/A
-m.	Locked rotor, capacitors open-circuited one at a time	The world white white	N/A
* WALTER	Test repeated with capacitors short-circuited one at a time, unless	t miret multet white	N/A
1ª	the capacitor is of class S2 or S3 of IEC 60252-1	a at at	N/A
NITER IN	Appliances with timer or programmer supplied with rated voltage for each of the tests, for a period equal to the maximum period allowed:	white white white w	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	et whilet whilet while	N/A
white	Other appliances supplied with rated voltage for a period as specified	white white white	N/A
			at the

Page 19 of 116



Clause	Requirement – Test Result – Remark	Verdic
a state	and and and an an at the star of	and the
St.	Winding temperatures not exceeding values specified in Table 8	N/A
9.8	Multi-phase motors operated at rated voltage with one phase disconnected	N/A
19.9	Running overload test on appliances incorporating motors intended to be remotely or automatically controlled or liable to be operated continuously	N/A
whitek.	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
NUTER ON	Winding temperatures not exceeding values as specified	N/A
9.10	Series motor operated at 1.3 times rated voltage for 1 min (V):	N/A
+ white	During the test, parts not being ejected from the appliance	N/A
19.11	Electronic circuits, compliance checked by evaluation of the fault conditions specified in 19.11.2 for all circuits or parts of circuits, unless	P
d.	they comply with the conditions specified in 19.11.1	N/A
67 JUN 64 JUN	Appliances incorporating an electronic circuit that relies upon a programmable component to function correctly, subjected to the test of 19.11.4.8, unless	N/A
- 24	restarting does not result in a hazard	N/A
white .	Appliances having a device with an off position obtained by electronic disconnection, or a device placing the appliance in a stand-by mode, subjected to the tests of 19.11.4	N/A
Set whit	If the safety of the appliance under any of the fault conditions depends on the operation of a miniature fuse-link complying with IEC 60127, the test of 19.12 is carried out	P
	During and after each test the following is checked:	P
whitek .	- the temperature of the windings do not exceed the values specified in table 8	Pat
Set .	- the appliance complies with the conditions specified in 19.13	P
10 - 40 10 - 10 10 - 10 - 10 1 - 10 - 10	- any current flowing through protective impedance not exceeding the limits specified in 8.1.4	Р
	If a conductor of a printed board becomes open-circuited, the appliance is considered to have withstood the particular test, provided both of the following conditions are met:	N/A
5° +	- the base material of the printed circuit board withstands the test of Annex E	N/A

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Page 20 of 116



Clause	Requirement – Test	Result – Remark	Verdic
NULTEX N	- any loosened conductor does not reduce clearance or creepage distances between live parts and accessible metal parts below the values specified in clause 29	white white white white	N/A
19.11.1	Fault conditions a) to g) in 19.11.2 are not applied to meeting both of the following conditions:	circuits or parts of circuits	N/A
et white	- the electronic circuit is a low-power circuit, that is, the maximum power at low-power points does not exceed 15 W according to the tests specified	and white white white whi	N/A
MALTER N	- the protection against electric shock, fire hazard, mechanical hazard or dangerous malfunction in other parts of the appliance does not rely on the correct functioning of the electronic circuit	whitek whitek whitek white	N/A
19.11.2	Fault conditions applied one at a time, the appliance specified in cl. 11, but supplied at rated voltage, the d		P
t whitek	a) short circuit of functional insulation if clearances or creepage distances are less than the values specified in 29	t stat with mittet whit	P
d.	b) open circuit at the terminals of any component	Mr. m. r. A	P, -
in any	c) short circuit of capacitors, unless	white white white white	N° P
de l	they comply with IEC 60384-14		N/A
r yr	d) short circuit of any two terminals of an electronic component, other than integrated circuits.	a construction of	P
white	This fault condition is not applied between the two circuits of an optocoupler	white white white wh	P
Maile .	e) failure of triacs in the diode mode	stet stet with white	N/A
	f) failure of an integrated circuit	m m n	P
mer m	g) failure of an electronic power switching device	with a state white white	N P
Tet whit	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	The wanter wanter water a	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 specified	white white white white	P
19.11.4	Appliances having a device with an off position obtained by electronic disconnection, or	and any and an	N/A
in m	a device that can be placed in the stand-by mode	still while while while a	N/A
SEX WALT	subjected to the tests of 19.11.4.1 to 19.11.4.7, the device being set in the off position or in the stand-by mode	et wattet wattet wattet wa	N/A

15

Page 21 of 116



Clause	Requirement – Test	Result – Remark	Verdict
- J.W	and which which which we are	1 1 5	STE STR
NALTEX AN	Appliances incorporating a protective electronic circuit subjected to the tests of 19.11.4.1 to 19.11.4.7, the tests being carried out after the protective electronic circuit has operated, except that	while white white	N/A
	appliances operated for 30 s or 5 min during the test of 19.7 are not subjected to the tests for electromagnetic phenomena	and white white whi	N/A
20	Surge protective devices disconnected, unless	were were with	N/A
INLIER .	They incorporate spark gaps	tet stet stet	N/A
19.11.4.1	The appliance is subjected to electrostatic discharges in accordance with IEC 61000-4-2, test level 4	where while while a	N/A
19.11.4.2	The appliance is subjected to radiated fields in accordance with IEC 61000-4-3, at frequency ranges specified	set anifet anifet and	N/A
19.11.4.3	The appliance is subjected to fast transient bursts in accordance with IEC 61000-4-4, test level 3 or 4 as specified	whitek whitek white	N/A
19.11.4.4	The power supply terminals of the appliance subjected to voltage surges in accordance with IEC 61000-4-5, test level 3 or 4 as specified	white white white	N/A
at sa	An open circuit test voltage of 2 kV is applicable for the line-to-line coupling mode	a furt we	N/A
whit	An open circuit test voltage of 4 kV is applicable for the line-to-earth coupling	white white white	N/A
white	Earthed heating elements in class I appliances disconnected	watter watter waite	N/A
19.11.4.5	The appliance is subjected to injected currents in accordance with IEC 61000-4-6, test level 3	MITEL WAITEL WAITEL W	N/A
19.11.4.6	Appliances having a rated current not exceeding 16 A are subjected to the Class 3 voltage dips and interruptions in accordance with IEC 61000-4-11	TEX WALLEX WALTER WAL	N/A
WALL	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	VINITE VINITE WAITE	N/A
19.11.4.7	The appliance is subjected to mains signals in accordance with IEC 61000-4-13, test level class 2	watthe watth watthe	N/A
19.11.4.8	The appliance is supplied at rated voltage and operated under normal operation. After 60s the power supply is reduced to a level such that the appliance ceases to respond or parts controlled by the programmable component cease to operate	et water water water wat	N/A
MALTE	The appliance continues to operate normally, or	- Att State State	N/A
	requires a manual operation to restart	The she in	N/A

Page 22 of 116



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Clause	Requirement – Test	Result – Remark	Verdic
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)	White white white white	P
19.13	During the tests the appliance does not emit flames, molten metal, poisonous or ignitable gas in hazardous amounts	A MALIER MALIER WALLER WAL	FF P
Whitek	Temperature rises not exceeding the values shown in Table 9:	(see appended table)	PE
st	Compliance with clause 8 not impaired	sur sur at at	P
ne un	If the appliance can still be operated it complies with 20.2	MITE WALTS WALTS WALT	N/A
in whi t stek	Insulation, other than of class III appliances or class contain live parts, withstands the electric strength tes specified in table 4:		P
m	- basic insulation (V):	1000	P
Set	- supplementary insulation (V):	1750	Р
m 1	- reinforced insulation (V):	3000	Р
et white	After operation or interruption of a control, clearances and creepage distances across the functional insulation withstand the electric strength test of 16.3, the test voltage being twice the working voltage	et antite antitet antitet an	N/A
WALTER	The appliance does not undergo a dangerous malfunction, and	wiret waret waret war	P.*
INITEK	no failure of protective electronic circuits, if the appliance is still operable	the state with miller	NNLIP.
Tet al	Appliances tested with an electronic switch in the off mode:	position, or in the stand-by	N/A
	- do not become operational, or	S. Mur. Mur. Mr. 20	N/A
White	- if they become operational, do not result in a dangerous malfunction during or after the tests of 19.11.4	A MALIER MALIER MALIER MAL	N/A
MALE M	If the appliance contains lids or doors that are contro one of the interlocks may be released provided that:	lled by one or more interlocks,	N/A
	- the lid or door does not move automatically to an open position when the interlock is released, and	writer wanter wanter water	N/A
ier white	- the appliance does not start after the cycle in which the interlock was released	et aniret aniret aniret an	N/A
19.14	Appliances operated under the conditions of clause 11, any contactor or relay contact operating under the conditions of clause 11 being short-circuited	WALTER WALTER WALTER WALT	N/A

Page 23 of 116



Clause	Requirement – Test	Result – Remark	Verdict
The second second	whit was war war w	t at at at	LIE MILE
- SN:	For a relay or contactor with more than one contact, all contacts are short-circuited at the same time	white where where we	N/A
when w	A relay or contactor operating only to ensure the appliance is energized for normal use is not short-circuited	and and and and	N/A
	If more than one relay or contactor operates in clause 11, they are short-circuited in turn	a share when when	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	AND THE SET ALL A	N/A
20	STABILITY AND MECHANICAL HAZARDS	me me me	N/A
20.1 📣	Appliances having adequate stability	Direct plug-in appliance	N/A
stet _{punis} i tt	Tilting test through an angle of 10°, appliance placed on an inclined plane/horizontal support, not connected to the supply mains; appliance does not overturn	The water water water	N/A
white	Tilting test repeated on appliances with heating elements, angle of inclination increased to 15°	surfice surfice surfice of	N/A
MALIN V	Possible heating test in overturned position; temperature rise does not exceed values shown in table 9	untret water water wat	N/A
20.2	Moving parts adequately arranged or enclosed as to provide protection against personal injury	No moving part	N/A
white	Protective enclosures, guards and similar parts are non-detachable, and	WALTE WALTE	N/A
	have adequate mechanical strength	Tet allet milet at	N/A
allet .	Enclosures that can be opened by overriding an interlock are considered to be detachable parts	at set set as	N/A
Tet whi	Self-resetting thermal cut-outs and overcurrent protective devices not causing a hazard by unexpected closure	and when when when the	N/A
at white	Not possible to touch dangerous moving parts with the test probe described	t tot the whet	N/A
21	MECHANICAL STRENGTH	me ru m	Р
21.1	Appliance has adequate mechanical strength and is constructed as to withstand rough handling	white white white wh	P
niter wi	Checked by applying 3 blows to every point of the enclosure like to be weak, in accordance with test Ehb of IEC 60068-2-75, spring hammer test, with an impact energy of 0.5 J.	(see appended table)	P
- Jieł	The appliance shows no damage impairing compliance with this standard, and	all all all	Р
w.	compliance with 8.1, 15.1 and clause 29 not impaired	which which are set	Р

15

Page 24 of 116



Clause	Requirement – Test	Result – Remark	Verdict
- Lite	and		- North
jit.	If doubt, supplementary or reinforced insulation subjected to the electric strength test of 16.3	white white white white	N/A
	If necessary, repetition of groups of three blows on a new sample	INTER MOTT MUST WAT	N/A
21.2	Accessible parts of solid insulation having strength to prevent penetration by sharp implements	LIEK WALTER WALTER WALTER W	P
WALTE	Test not applicable if the thickness of supplementary insulation is at least 1 mm and reinforced insulation at least 2 mm	white white white whi	P
when	The insulation is tested as specified, and does withstand the electric strength test of 16.3	white white white white	N/A
22	CONSTRUCTION	the state strate shutes	л ¹² Р .,
22.1	Appliance marked with the first numeral of the IP system, relevant requirements of IEC 60529 are fulfilled	IPX0	N/A
22.2	Stationary appliance: means to ensure all-pole disco provided:	nnection from the supply being	N/A
WALLEY V	- a supply cord fitted with a plug, or	Not stationary appliance	N/A
	- a switch complying with 24.3, or	white white white white	N/A
white whi	- a statement in the instruction sheet that a disconnection incorporated in the fixed wiring is to be provided, or	et white white	N/A
ET INLIE	- an appliance inlet	a the sale sale of	N/A
whitet	Singe-pole switches and single-pole protective devices for the disconnection of heating elements in single-phase, permanently connected class 0I and class I appliances, connected to the phase conductor	while while while while	N/A
22.3	Appliance provided with pins: no undue strain on socket-outlets	mit was war war	Р
- an	Applied torque not exceeding 0.25 Nm	Max. 0.024Nm	P
et would	Pull force of 50 N to each pin after the appliance has being placed in the heating cabinet; when cooled to room temperature the pins are not displaced by more than 1 mm	t watter watter watter watt	P
Nº 1	Each pin subjected to a torque of 0.4 Nm; the pins are not rotating, unless	unter unter anne unter	Р
n yn	rotating does not impair compliance with this standard	still while while show a	N/A
22.4	Appliance for heating liquids and appliance causing undue vibration not provided with pins for insertion into socket-outlets	er watter watte watte wa	N/A

Page 25 of 116



Clause	Requirement – Test	Result – Remark	Verdict
		the state	10 . S
22.5	No risk of electric shock when touching pins, for appliances having a capacitor with rated capacitance equal to or greater than 0.1μ F, the appliance being disconnected from the supply at the instant of voltage peak	white white white white	at summer
r m	Voltage not exceeding 34 V (V):	Max. 32V measured	P ⁴⁰
ex white	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	No such electronic circuit	N/A
white	The discharge test is then repeated three times, voltage not exceeding 34 V (V)	white white white whi	N/A
22.6	Electrical insulation not affected by condensing water or leaking liquid	antet antifet antifet antife	N/A
JEK WALT	Electrical insulation of Class II appliances not affected in case of a hose rupture or seal leak	set what while while	N/A
6 10	In case of doubt, test as described	The second second	N/A
22.7	Adequate safeguards against the risk of excessive pressure in appliances provided with steam-producing devices	white white white w	N/A
22.8	Electrical connections not subject to pulling during cleaning of compartments to which access can be gained without the aid of a tool, and that are likely to be cleaned in normal use	and whe where where	N/A
22.9	Insulation, internal wiring, windings, commutators and slip rings not exposed to oil, grease or similar substances, unless	No oil, grease or similar substances	Р
WALT	the substance has adequate insulating properties	white white white wh	N/A
22.10	Not possible to reset voltage-maintained non-self resetting thermal cut-outs by the operation of an automatic switching device incorporated within the appliance, if:	No such device	N/A
the show	- a non-self-resetting thermal cut-out is required by the standard, and	TER WALTE WALT WALL	N/A
white	- a voltage maintained non-self-resetting thermal cut-out is used to meet it	WALTER MAILE WALT W	N/A
white	Non-self-resetting thermal motor protectors have a trip-free action, unless	whitet whitet whitet whi	N/A
Set .	they are voltage maintained	at at set set	N/A
State Martin	Reset buttons of non-self-resetting controls so located or protected that accidental resetting is unlikely	et and some sub-	N/A
22.11	Reliable fixing of non-detachable parts that provide the necessary degree of protection against electric shock, moisture or contact with moving parts	which which which we	

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Page 26 of 116



Clause	Requirement – Test	Result – Remark	Verdict
	Obvious locked position of snap-in devices used for fixing such parts	white white white white	N/A
when we	No deterioration of the fixing properties of snap-in devices used in parts that are likely to be removed during installation or servicing	intite white white white	N/A
	Tests as described	50N, 10s applied on enclosure	Р
22.12	Handles, knobs etc. fixed in a reliable manner, if loosening result in a hazard	at white white white whi	N/A
WALTER	Removing or fixing in wrong position of handles, knobs etc. indicating position of switches or similar components not possible, if resulting in a hazard	Whitek whitek whitek white	N/A
mere on	A choking hazard does not apply to appliances for commercial use	MITER WAITER WAITER WAITE	N/A
JEE WALT	Axial force 15 N applied to parts, the shape being so that an axial pull is unlikely to be applied	Let white white white w	N/A
* WALTER	Axial force 30 N applied to parts, the shape being so that an axial pull is likely to be applied	t suret instate instate mouth	N/A
WALTER W	If the part is removed and can be contained within the small parts cylinder, it is considered to be a choking hazard	anitet antiet antiet antiet	N/A
22.13	Unlikely that handles, when gripped as in normal use, make the operators hand touch parts having a temperature rise exceeding the value specified for handles which are held for short periods only	at a surface where a	N/A
22.14	No ragged or sharp edges creating a hazard for the user in normal use, or during user maintenance	No ragged or sharp edges	Р
where .	No exposed pointed ends of self tapping screws etc., liable to be touched by the user in normal use or during user maintenance	sumit until and and	P
22.15	Storage hooks and the like for flexible cords smooth and well rounded	int when we we we	N/A
22.16	Automatic cord reels cause no undue abrasion or damage to the sheath of the flexible cord, no breakage of conductors strands, no undue wear of contacts	t white white white	N/A
NUTER	Cord reel tested with 6000 operations, as specified	at the state state	N/A
Jet a	Electric strength test of 16.3, voltage of 1000 V applied	whe whe all sur	N/A
22.17	Spacers not removable from the outside by hand or by means of a screwdriver or a spanner	white white white white w	N/A
22.18	Current-carrying parts and other metal parts resistant to corrosion	and and an and an	Р
22.19	Driving belts not relied upon to provide the required level of insulation, unless	MUTER WALTER WALTE WALT	N/A

Page 27 of 116



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Clause	Requirement – Test	Result – Remark	Verdic
NUTE	and all all all all	at the state of the	I SALIN
	constructed to prevent inappropriate replacement	Mrs. Mr. m. m.	N/A
22.20	Direct contact between live parts and thermal insulation effectively prevented, unless	MUTER MALTER MALTER WALTE	ount P
iset whi	material used is non-corrosive, non-hygroscopic and non-combustible	LIFE MITER MAILER WALTER	N LITE P
22.21	Wood, cotton, silk, ordinary paper and fibrous or hygroscopic material not used as insulation, unless	No such materials used as insulation	P P
	impregnated	an in m	N/A
WALL V	This requirement does not apply to magnesium oxide and mineral ceramic fibres used for the electrical insulation of heating elements	anifet anife anife ani	N/A
22.22	Appliances not containing asbestos	Not containing asbestos	Р
22.23	Oils containing polychlorinated biphenyl (PCB) not used	Not such parts	P
22.24	Bare heating elements, except in class III appliances or class III constructions that do not contain live parts, adequately supported	MALIER WALLER WALLER WA	N/A
WULLER W	In case of rupture, the heating conductor is unlikely to come in contact with accessible metal parts	WHITE WALTER WALTER WALTE	N/A
22.25	Sagging heating conductors, except in class III appliances or class III constructions that do not contain live parts, cannot come into contact with accessible metal parts	et antet water	N/A
22.26	For class III constructions the insulation between parts operating at safety extra-low voltage and other live parts complies with the requirements for double or reinforced insulation	while while while whi	P
22.27	Parts connected by protective impedance separated by double or reinforced insulation	NUTER WATER WATER WATE	NULL P
22.28	Metal parts of Class II appliances conductively connected to gas pipes or in contact with water: separated from live parts by double or reinforced insulation	Tet wantet wantet wantet	N/A
22.29	Class II appliances permanently connected to fixed wiring so constructed that the required degree of access to live parts is maintained after installation	south south south and	N/A
22.30	Parts serving as supplementary or reinforced insulation fixed so that they cannot be removed without being seriously damaged, or	No parts can be omitted	P
	so constructed that they cannot be replaced in an incorrect position, and so that if they are omitted, the appliance is rendered inoperable or manifestly incomplete	et waitet waitet waitet s	P

Page 28 of 116



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Clause	Requirement – Test	Result – Remark	Verdict
22.31	Neither clearances nor creepage distances over supplementary and reinforced insulation reduced below values specified in clause 29 as a result of wear	Souther Souther Souther St	P
eret _v uni et _{ni} ret	Neither clearances nor creepage distances between live parts and accessible parts reduced below values for supplementary insulation if wires, screws etc. become loose	ster water water wat	P.
22.32	Supplementary and reinforced insulation constructed or protected against pollution so that clearances or creepage distances are not reduced below the values in clause 29	antifet antifet antifet	P
ntret whit	Supplementary insulation of natural or synthetic rubber resistant to ageing, or arranged and dimensioned so that creepage distances are not reduced below values specified in 29.2	NUTER WALTER WALTER WA	N/A
* white	Ceramic material not tightly sintered, similar material or beads alone not used as supplementary or reinforced insulation	when white white	N/A
WALTER S	Ceramic and similar porous material in which heating conductors are embedded is considered to be basic insulation, not reinforced insulation	whitek whitek whitek w	N/A
NUTER WAY	Oxygen bomb test at 70°C for 96 h and 16 h at room temperature	et and white an	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	white white white	N/A
. N	unearthed metal parts separated from live parts by basic insulation only	water water water	N/A
	Electrodes not used for heating liquids	MITER WALTE WALT W	N/A
ret white	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	Tet waitet waitet waite	Set Set
dt.	the reinforced insulation consists of at least 3 layers	in the state	N/A
when y	For class II constructions, conductive liquids which are in contact with live parts, not in direct contact with reinforced insulation, unless	white white white	N/A
24	the reinforced insulation consists of at least 3 layers	in my me m	N/A
ret white	An air layer not used as basic or supplementary insulation in a double insulation system if likely to be bridged by leaking liquid	et whilet whilet while	N/A
22.34	Shafts of operating knobs, handles, levers etc. not live, unless	white white white	N/A

Page 29 of 116



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Clause	Requirement – Test	Result – Remark	Verdict
White White	the shaft is not accessible when the part is removed	and and and and the	N/A
22.35	For other than class III constructions, handles, levers and knobs, held or actuated in normal use, not becoming live in the event of a failure of basic insulation	AND	N/A
et watte	Such parts being of metal, and their shafts or fixings are likely to become live in the event of an insulation fault, they are either adequately covered by insulation material, or their accessible parts are separated from their shafts or fixings by supplementary insulation	A ANTICE MALIER AND	N/A
Intrest with	This requirement does not apply to handles, levers and knobs on stationary appliances other than those of electrical components, provided they are either reliably connected to an earthing terminal or earthing contact, or separated from live parts by earthed metal	NUTER WRITER WRITER WR	N/A
* WALTER	Insulating material covering metal handles, levers and knobs withstand the electric strength test of 16.3 for supplementary insulation	whilet whilet while	N/A
22.36	For appliances other than class III, handles continuously held in the hand in normal use so constructed that when gripped as in normal use, the operators hand is not likely to touch metal parts, unless	antifek antifek antifek an	N/A
iet white	they are separated from live parts by double or reinforced insulation	er worther worther worthe	N/A
22.37	Capacitors in Class II appliances not connected to accessible metal parts and their casings, if of metal, separated from accessible metal parts by supplementary insulation, unless	No such capacitor	N/A
m n	the capacitors comply with 22.42	min which which which	N/A
22.38	Capacitors not connected between the contacts of a thermal cut-out	set milet whilet whi	N/A
22.39	Lamp holders used only for the connection of lamps	No lamp holder	N/A
22.40	Motor-operated appliances and combined appliances intended to be moved while in operation, or having accessible moving parts, fitted with a switch to control the motor. The actuating member of the switch being easily visible and accessible	white white white	N/A
nt white Jet white Mitet	If the appliance cannot operate continuously, automatically or remotely without giving rise to a hazard, appliances for remote operation being fitted with a switch for stopping the operation. The actuating member of the switch being easily visible and accessible	et white white white	N/A
22.41	No components, other than lamps, containing mercury	mer mer me	Р

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Page 30 of 116



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Clause	Requirement – Test	Result – Remark	Verdict
550	with white white white white white	the state state state	- Nett
22.42	Protective impedance consisting of at least two separate components	Two Y capacitors used	P
ner w	Values specified in 8.1.4 not exceeded if any one of the components are short-circuited or open-circuited	See 8.1.4	Р
the sume	Resistors checked by the test of 14.1 a) in IEC 60065	ster white white white w	N/A
MALLE	Capacitors checked by the tests for class Y capacitors in IEC 60384-14	Approved Y capacitors	Ρ
22.43	Appliances adjustable for different voltages, accidental changing of the setting of the voltage unlikely to occur	No adjustable device	N/A
22.44	Appliances not having an enclosure that is shaped or decorated like a toy	The appliance is not likely to be treated as a toy	ул ¹⁰ Р ₋
22.45	When air is used as reinforced insulation, clearances not reduced below the values specified in 29.1.3 due to deformation as a result of an external force applied to the enclosure	the while while while we	P.N
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	white white white white	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	tet and white white a	N/A
whitek	These requirements are not applicable to software used for functional purpose or compliance with clause 11	with white white white	N/A
22.47	Appliances connected to the water mains withstand the water pressure expected in normal use.	whet maret maret would	N/A
LIEK MAIS	No leakage from any part, including any inlet water hose	and that what what a	N/A
22.48	Appliances connected to the water mains constructed to prevent backsiphonage of non potable water	t martet martet would wonly	N/A
22.49	For remote operation, the duration of operation is to be set before the appliance can be started, unless	the street suiter south	N/A
Stat . IN	the appliance switches off automatically or can operate continuously without hazard	and the test with	N/A
22.50	Controls incorporated in the appliance take priority over controls actuated by remote operation	and the set of the	N/A
22.51	There is a control on the appliance manually adjusted to the setting for remote operation before the appliance can be operated in this mode	which which which will will a street which	N/A
	There is a visual indication showing that the appliance is adjusted for remote operation	the state of the	N/A

Page 31 of 116



Clause	Requirement – Test	Result – Remark	Verdict
WILTER	Shir white all all all all		- and the
, th	These requirements not necessary on appliances tha giving rise to a hazard:	t can operate as follows, without	N/A
me n	- continuously, or	MITE MAIL MALL MALL	N/A
st is	- automatically, or	a at at at	N/A
	- remotely	the works when when w	N/A
22.52	Socket-outlets on appliances accessible to the user in accordance with the socket-outlet system used in the country in which the appliance is sold	A MALIER MALIER MALIER MAI	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	whitek white white white	N/A
22.54	Button cells and batteries designated R1 not accessible without the aid of a tool, unless	at the the states	N/A
	the cover of their compartment can only be opened after at least two independent movements have been applied simultaneously	when when when the when	N/A
22.55	Devices operated to stop the intended function of the appliance, if any, are be distinguished from other manual devices by means of shape, size, surface texture or position	whitek whitek whitek whitek	N/A
in the	The requirement concerning position does not preclude use of a push on push off switch	a function of the	N/A
	An indication when the device has been operated is	given by:	N/A
MUTER	 tactile feedback from the actuator or from the appliance, or 	Tet are wret with	N/A
	- reduction in heat output; or	me me me	N/A
W. The	– audible and visible feedback	ret wret mile while	N/A
22.56	Detachable power supply part provided with the part of class III construction	at the sale water	N/A
22.57	The properties of non-metallic materials do not degrade from exposure to UV-C radiation, as specified in Annex T	t stret source white whi	N/A
Whitek v	This requirement does not apply to glass, ceramics or similar materials	The suret waret ware	N/A
23	INTERNAL WIRING	when we we at	Р
23.1 🔊	Wireways smooth and free from sharp edges	stret mile white white	P - 1
set white	Wires protected against contact with burrs, cooling fins etc.	of the state whet an	Set P
+ ninet	Wire holes in metal well rounded or provided with bushings		N/A
St.	Wiring effectively prevented from coming into contact with moving parts	No moving parts	N/A

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Page 32 of 116



EN 60335-1

Clause	Requirement – Test	Result – Remark	Verdict
- Liter	and	the start start is	LIE NUT
23.2	Beads etc. on live wires cannot change their position, and are not resting on sharp edges	white white on the	N/A
in w	Beads inside flexible metal conduits contained within an insulating sleeve	Intite suptile suptile and	N/A
23.3	Electrical connections and internal conductors movable relatively to each other not exposed to undue stress	No movable conductors	N/A
with	Flexible metallic tubes not causing damage to insulation of conductors	water water where a	N/A
me	Open-coil springs not used	white white white w	N/A
NUTEX M	Adequate insulating lining provided inside a coiled spring, the turns of which touch one another	The state mark spirit	N/A
Jet MIT	No damage after 10 000 flexings for conductors flexed during normal use or	at the set and	N/A
t set	100 flexings for conductors flexed during user maintenance	when we we	N/A
ANT IN	Electric strength test of 16.3, 1000 V between live parts and accessible metal parts	whit will and w	N/A
sunt s	Not more than 10% of the strands of any conductor broken, and	white white white whi	N/A
the ma	not more than 30% for wiring supplying circuits that consume no more than 15W	and white white	N/A
23.4	Bare internal wiring sufficiently rigid and fixed		N/A
23.5	The insulation of internal wiring subjected to the supply mains voltage withstanding the electrical stress likely to occur in normal use	white white white wh	N/A
untited w	Basic insulation electrically equivalent to the basic insulation of cords complying with IEC 60227 or IEC 60245, or	NUTER WALTER WALTER WALT	N/A
Jet whi	no breakdown when a voltage of 2 000 V is applied for 15 min between the conductor and metal foil wrapped around the insulation	Tet wattet wattet wattet	N/A
white TEX	For class II construction, the requirements for supplementary insulation and reinforced insulation apply, except	waite waite waite	N/A
with a	that the sheath of a cord complying with IEC 60227 or IEC 60245 may provide supplementary insulation	white white white white	N/A
ne ne	A single layer of internal wiring insulation does not provide reinforced insulation	stree mouth water water	N/A
23.6	Sleeving used as supplementary insulation on internal wiring retained in position by clamping at both ends, or	et white white white.	N/A
m	be such that it can only be removed by breaking or cutting	white white white all	N/A

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Page 33 of 116



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Clause	Requirement – Test	Result – Remark	Verdict
00.7	The colour combination are as / allow used as to fee		N1/A
23.7	The colour combination green/yellow used only for earthing conductors	Class II	N/A
23.8 📣	Aluminium wires not used for internal wiring	Not used	N P
23.9	Stranded conductors not consolidated by soldering where they are subjected to contact pressure, unless	Not subject to contact pressure	P
	the contact pressure is provided by spring terminals	at what what while whi	N/A
23.10	The insulation and sheath of internal wiring, incorporated in external hoses for the connection of an appliance to the water mains, at least equivalent to that of light polyvinyl chloride sheathed flexible cord (60227 IEC 52)	whitek whitek whitek white	N/A
24	COMPONENTS	we we we we	Р
24.1	Components comply with safety requirements in relevant IEC standards	LEK WALTER WALTER WALTER WA	P
t stet	List of components:	(see appended table)	P
ANT ANT	Motors not required to comply with IEC 60034-1, they are tested as part of the appliance	which which which which	N/A
m a	Relays tested as part of the appliance, or	untits white white white	N/A
inter whi	alternatively acc. to IEC 60730-1, and meeting the additional requirements in IEC 60335-1	and white white	N/A
et white	The requirements of Clause 29 apply between live parts of components and accessible parts of the appliance	a water water water was	Set P
	Components can comply with the requirements for clearances and creepage distances for functional insulation in the relevant component standard	white white white white	Ρ
unit wi	30.2 of this standard apply to parts of non-metallic material in components including parts of non metallic material supporting current-carrying connections	ALTER WALTER WALTER WALTER	or P
et whitek	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	t let set site as	
white wh	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	white white white white	WP Mint w
IL WALL	If these conditions are not satisfied, the component is tested as part of the appliance.	et watter watter watter wa	P
WALTER	Power electronic converter circuits not required to comply with IEC 62477-1, they are tested as part of the appliance	watter while white white	N/A

Page 34 of 116



Clause	Requirement – Test	Result – Remark	Verdict
WALTER W	If components have not been tested and found to comply with relevant IEC standard for the number of cycles specified, they are tested in accordance with 24.1.1 to 24.1.9	while while while while	P
et are	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	and services services and	Р
Whitek	Components not tested and found to comply with relevant IEC standard and components not marked or not used in accordance with its marking, tested under the conditions occurring in the appliance	white white white white	P
97170 - 581 2704 - 587 5 - 704	Lampholders and starterholders that have not being tested and found to comply with the relevant IEC standard, tested as a part of the appliance and additionally according to the gauging and interchangeability requirements of the relevant IEC standard	puret positet positet positet	N/A
whitek w	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	WALTER WALTER WALTER WALTER	P
24.1.1	Capacitors likely to be permanently subjected to the supply voltage and used for radio interference suppression or for voltage dividing, complying with IEC 60384-14	Approved	P
where the second	If the capacitors have to be tested, they are tested according to Annex F	white white where wh	N/A
24.1.2	Transformers in associated switch mode power supplies comply with Annex BB of IEC 61558-2-16	white white white white	N/A
white w	Safety isolating transformers complying with IEC 61558-2-6	NUTER WALTER WALTER WALTER	N/A
ister whit	If they have to be tested, they are tested according to Annex G	The surply white white w	ST P.
24.1.3	Switches complying with IEC 61058-1, the number of cycles of operation being at least 10 000	t set sind with mi	N/A
	If they have to be tested, they are tested according to Annex H	at the set will	N/A
at .	If the switch operates a relay or contactor, the complete switching system is subjected to the test	and and and the	N/A
SEX WALL	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	et united united united un	N/A
24.1.4	Automatic controls comply with IEC 60730-1 with the cycles of operation being at least:	relevant part 2. The number of	N/A
det -	- thermostats: 10 000	a the tot tot	N/A

Page 35 of 116



Clause	Requirement – Test	- m	Result – Remark	Verdic
NULLE.	and which which which we	+ 1		- ILLE MILLE
	- temperature limiters:	1 000	an an in	N/A
In The st	- self-resetting thermal cut-outs:	300	set set set	N/A
	- voltage-maintained non-self-resetting thermal cut-outs	000	inter such and a	N/A
	- other non-self-resetting thermal cut-outs	30	the write prote our	N/A
et alle	- timers:	3 000	the test of the	N/A
	- energy regulators:	10 000	mur mur m	N/A
WALTER N	The number of cycles for controls operating clause 11 need not be declared, if the applia meets the requirements of this standard wh are short-circuited	ance	white white white	N/A
ret whit	Thermal motor protectors are tested in com with their motor under the conditions specifi Annex D.		ret intret antifet whi	N/A
WALTER W	For water valves containing live parts and the incorporated in external hoses for connection appliance to the water mains, the degree of protection provided by enclosures against he ingress of water declared for subclause 6.5. 60730-2-8 shall be IPX7	on of an armful	white white white	N/A
ute whi	Thermal cut-outs of the capillary type complete the requirements for type 2.K controls in IEC 60730-2-9		att a summer wo	N/A
24.1.5	Appliance couplers complying with IEC 603	20-1	and a state of the second	N/A
whitek	However, for class II appliances classified h than IPX0, the appliance couplers comply w 60320-2-3		white white white	N/A
UNITER WI	Interconnection couplers complying with IEC 60320-2-2	C	NUTER AND IS AND SALLER S	N/A
24.1.6	Small lamp holders similar to E10 lamphold complying with IEC 60238, the requirements lampholders being applicable		No lampholders	N/A
24.1.7	If the remote operation of the appliance is v telecommunication network, the relevant sta for the telecommunication interface circuitry appliance is IEC 62151	andard	A ANTER MALIER MALE	N/A
24.1.8	The relevant standard for thermal links is IE	C 60691	me m m	N/A
111 - 110 164 - 116	Thermal links not complying with IEC 60691 considered to be an intentionally weak part purposes of Clause 19		NITER WAITER WAITER WA	N/A
24.1.9	Contactors and relays, other than motor sta relays, tested as part of the appliance	rting	white white whe	N/A

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Page 36 of 116



EN 60335-1

Clause	Requirement – Test	Result – Remark	Verdict
- JIE	and	h at at at	The stre
WALTER W	They are also tested in accordance with Clause 17 of IEC 60730-1, the number of cycles of operations in 24.1.4 selected according to the contactor or relay function in the appliance:	while white white	N/A
24.2	Appliances not fitted with:	let let set at	P S
et St	- switches, automatic controls or power supplies in flexible cords	a at at at	Р
Whitek	- devices causing the protective device in the fixed wiring to operate in the event of a fault in the appliance	white white white	P
inet .	- thermal cut-outs that can be reset by soldering, unless	when when we we	P
h. 24	the solder has a melding point of at least 230 °C	we want and an	N/A
24.3	Switches intended for all-pole disconnection of stationary appliances are directly connected to the supply terminals and having a contact separation in all poles, providing full disconnection under overvoltage category III conditions	Set whitet whitet white	N/A
24.4	Plugs and socket-outlets for extra-low voltage circuits and heating elements, not interchangeable with plugs and socket-outlets listed in IEC/TR 60083 or IEC 60906-1 or with connectors and appliance inlets complying with the standard sheets of IEC 60320-1	untret sentret sentret se	N/A
24.5	Capacitors in auxiliary windings of motors marked with their rated voltage and capacitance and used accordingly	while while while	N/A
whitek w	Voltage across capacitors in series with a motor winding does not exceed 1.1 times rated voltage, when the appliance is supplied at 1.1 times rated voltage under minimum load	white white white	N/A
24.6	Working voltage of motors connected to the supply mains and having basic insulation that is inadequate for the rated voltage of the appliance, not exceeding 42V		N/A
wh.	In addition, the motors are complying with the requirements of Annex I	and white and	N/A
24.7	Detachable hose-sets for connection of appliances to the water mains comply with IEC 61770	WALTER WAITE WALTE V	N/A
Ner W	They are supplied with the appliance	ster atter atter and	N/A
iet antis	Appliances intended to be permanently connected to the water mains not connected by a detachable hose-set	et maret water water	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	white white white	N/A

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Page 37 of 116



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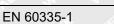
Clause	Requirement – Test Result – Remark	Verdict
. NILLE		
	One or more of the following conditions are to be met:	N/A
watter w	- the capacitors are of class S2 or S3 according to IEC 60252-1;	N/A
	- the capacitors are housed within a metallic or ceramic enclosure	N/A
et antre	- the distance of separation 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
N. C.	- 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	• ¹ Р ⁻¹
25.1	Appliance not intended for permanent connection to fixed wiring, means for connection to the supply:	STE P
* white	- supply cord fitted with a plug, the current rating and voltage rating of the plug being not less than the corresponding ratings of its associated appliance;	N/A
WALTER S	- an appliance inlet having at least the same degree of protection against moisture as required for the appliance, or	N/A
ner with	- pins for insertion into socket-outlets	P V
25.2	Appliance not provided with more than one means of connection to the supply mains	Set P
whitek	Stationary appliance for multiple supply may be provided with more than one means of connection, provided electric strength test of 1250 V for 1 min between each means of connection causes no breakdown	N/A
25.3	Appliance intended to be permanently connected to fixed wiring provided with one of the following means for connection to the supply mains:	N/A
in when	- a set of terminals allowing the connection of a flexible cord	N/A
when	- a fitted supply cord	N/A
MALTER	- a set of supply leads accommodated in a suitable compartment	N/A
NUTER W	- a set of terminals for the connection of cables of fixed wiring, cross-sectional areas specified in 26.6, and the appliance allows the connection of the supply conductors after the appliance has been fixed to its support	N/A

Page 38 of 116



Claures	Dequirement Test	Manding
Clause	Requirement – Test Result – Remark	Verdict
WALLS	- a set of terminals and cable entries, conduit entries, knock-outs or glands, allowing connection of appropriate types of cable or conduit, and the appliance allows the connection of the supply conductors after the appliance has been fixed to its support	N/A
et wourd	For a fixed appliance constructed so that parts can be removed to facilitate easy installation, this requirement is met if it is possible to connect the fixed wiring without difficulty after a part of the appliance has been fixed to its support	N/A
25.4	Cable and conduit entries, rated current of appliance not exceeding 16 A, dimension according to Table 10 (mm):	N/A
ret whit	Introduction of conduit or cable does not reduce clearances or creepage distances below values specified in Clause 29	N/A
25.5	Method for assemble supply cord with the appliance:	N/A
44	- type X attachment	N/A
WILLEY .	- type Y attachment	N/A
A	- type Z attachment, if allowed in part 2	N/A
NETE WAY	Type X attachment, other than those with a specially prepared cord, not used for flat twin tinsel cords	N/A
ret yoniri Vonirit	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
25.6	Plugs fitted with only one flexible cord	N/A
25.7	Supply cords, other than for class III appliances, being one of the following types:	N/A
	- rubber sheathed (at least 60245 IEC 53)	N/A
ar we	- polychloroprene sheathed (at least 60245 IEC 57)	N/A
et miret	- polyvinyl chloride sheathed. Not used if they are likely to touch metal parts having a temperature rise exceeding 75 K during the test of clause 11	N/A
NUTEK	light polyvinyl chloride sheathed cord (60227 IEC 52), for appliances not exceeding 3 kg	N/A
. fet	ordinary polyvinyl chloride sheathed cord (60227 IEC 53), for other appliances	N/A
nt se	- heat resistant polyvinyl chloride sheathed. Not used for type X attachment other than specially prepared cords	N/A
t when	 heat-resistant light polyvinyl chloride sheathed cord (60227 IEC 56), for appliances not exceeding 3 kg 	N/A
.et	heat-resistant polyvinyl chloride sheathed cord (60227 IEC 57), for other appliances	N/A

Page 39 of 116



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Clause	Requirement – Test	Result – Remark	Verdict
with the	- halogen-free, low smoke, thermoplastic insulated an	d sheathed	N/A
WALTER N	Light duty halogen-free low smoke flexible cable (62821 IEC 101) for circular cable and (62821 IEC 101f) for flat cable	mulet anulet aniset anise	N/A
et ste	Ordinary duty halogen-free low smoke flexible cable (62821 IEC 102) for circular cable and (62821 IEC 102f) for flat cable	Tet white white white	N/A
et	Supply cords for class III appliances adequately insulated	white white where whe	N/A
when y	Test with 500 V for 2 min for supply cords of class III appliances that contain live parts	white white white wh	N/A
25.8	Nominal cross-sectional area of supply cords not less than table 11; rated current (A); cross-sectional area (mm ²) :	MITT WATE WATE WATE	N/A
25.9	Supply cord not in contact with sharp points or edges	the water which which is	N/A
25.10	Supply cord of class I appliances have a green/yellow core for earthing	maret united whited we	N/A
MALLER W	In multi-phase appliances, the colour of the neutral conductor of the supply cord is blue.	and and want with	N/A
d.	Where additional neutral conductors are provided in	the supply cord:	N/A
ne un	 other colours may be used for these additional neutral conductors; 	and white white	N/A
ie white	 – all of the neutral conductors and line conductors are identified by marking using the alpha numeric notation specified in IEC 60445 	watte watter watter w	N/A
m	- the supply cord is fitted to the appliance	until water water water	N/A
25.11	Conductors of supply cords not consolidated by lead-tin soldering where they are subject to contact pressure, unless	minet aniret aniret anire	N/A
LIER WAL	the contact pressure is provided by spring terminals	Tet uset suret suret	N/A
25.12	Insulation of the supply cord not damaged when moulding the cord to part of the enclosure	t let let set	N/A
25.13	Inlet opening so shaped as to prevent damage to the supply cord	while while while we	N/A
where where	If it is not evident that the supply cord can be introduced without risk of damage, a non-detachable lining or bushing complying with 29.3 for supplementary insulation provided	and white and and and	N/A
JEX WALT	If unsheathed supply cord, a similar additional bushing or lining is required, unless the appliance is	et milet spillet south	N/A
t st	class 0, or	1 1 14	N/A
aller	a class III appliance not containing live parts	with white white wh	N/A

Page 40 of 116



Clause	Requirement – Test	Result – Remark	Verdict
554	and any any any and	the state of the	alle alle
25.14	Supply cords moved while in operation adequately protected against excessive flexing	white white white	N/A
	Flexing test, as described:		N/A
de s	- applied force (N):	a a to to	. N/А
m.	- number of flexings:	it was was way	N/A
et ste	The test does not result in:	a stat St	N/A
. Let	- short-circuit between the conductors, such that the current exceeds a value of twice the rated current	white white white	N/A
wh .	- breakage of more than 10% of the strands of any conductor	white white where	N/A
no m	- separation of the conductor from its terminal	NUTER WALTE WALT W	N/A
dr d	- loosening of any cord guard	i stat a	<i>⊘</i> ∽⊘N/A
w.	- damage to the cord or the cord guard	it white white white	N/A
+ WALTER	- broken strands piercing the insulation and becoming accessible	t minet anarot anarot	N/A
25.15	For appliances with supply cord and appliances to be permanently connected to fixed wiring by a flexible cord, conductors of the supply cord relieved from strain, twisting and abrasion by use of cord anchorage	whitek whitek whitek w	N/A
	The cord cannot be pushed into the appliance to such an extent that the cord or internal parts of the appliance can be damaged	a sector service service	N/A
- At	Pull and torque test of supply cord:	A St St	N/A
with the	- fixed appliances: pull 100 N; torque (not on automatic cord reel) (Nm):	water water water	N/A
int wi	- other appliances: values shown in Table 12: mass (kg); pull (N); torque (not on automatic cord reel) (Nm)	ALLE WALL WALL W	N/A
y 50	Cord not damaged and max. 2 mm displacement of the cord	a wat was at all	N/A
25.16	Cord anchorages for type X attachments constructed	d and located so that:	N/A
Tex	- replacement of the cord is easily possible	at set set	N/A
n s	- it is clear how the relief from strain and the prevention of twisting are obtained	which which where a	N/A
n w	- they are suitable for different types of supply cord;	MITE WALL WALL WA	N/A
Jet while	- cord cannot touch the clamping screws of cord anchorage if these screws are accessible, unless	et minet whilet while	N/A
+ minet	they are separated from accessible metal parts by supplementary insulation	- let set set	N/A

Page 41 of 116



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Clause	Requirement – Test	Result – Remark	Verdict
- Life	white white whe whe will be at	t the the the	LIE MALLE
SN.	- the cord is not clamped by a metal screw which bears directly on the cord	water ware ware w	N/A
when w	- at least one part of the cord anchorage securely fixed to the appliance, unless	Martin Suntine South Sunt	N/A
	it is part of a specially prepared cord	ret allet intre white	N/A
et intre	- screws which have to be operated when replacing the cord do not fix any other component, if applicable	at that they work	N/A
	the appliance becomes inoperative or incomplete or the parts cannot be removed without a tool	and the test	N/A
, with the second secon	- if labyrinths can be bypassed the test of 25.15 is nevertheless withstood	and whe are su	N/A
nt wi	- for Class 0, 0I and I appliances: they are of insulating material or are provided with an insulating lining, unless	oute wout wou wou	N/A
* stek	failure of the insulation of the cord does not make accessible metal parts live	and she we	N/A
W.	- for Class II appliances: they are of insulating material, or	white white white w	N/A
sunt s	if of metal, they are insulated from accessible metal parts by supplementary insulation	watter water water wat	N/A
NIT 311	After the test of 25.15, under the conditions specified, the conductors have not moved by more than 1 mm in the terminals	and another water	N/A
25.17	Adequate cord anchorages for type Y and Z attachment, test with the cord supplied with the appliance	white white white	N/A
25.18	Cord anchorages only accessible with the aid of a tool, or	when when we we we	N/A
no su	so constructed that the cord can only be fitted with the aid of a tool	with some some soll	N/A
25.19	Type X attachment, glands not used as cord anchorage in portable appliances	Ster would would would	N/A
white	Tying the cord into a knot or tying the cord with string not used	WINTER SMITTER MAILER	N/A
25.20	The conductors of the supply cord for type Y and Z attachment insulated from accessible metal parts	white white white wh	N/A
25.21	Space for supply cord for type X attachment or for co constructed:	onnection of fixed wiring	N/A
SEX WALT	- to permit checking of conductors with respect to correct positioning and connection before fitting any cover	et wantet water water	N/A
white	- so there is no risk of damage to the conductors or their insulation when fitting the cover	INTER WATER WATER W	N/A

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Page 42 of 116



EN 60335-1

Clause	Requirement – Test	Result – Remark	Verdic
- Life	and	the start start	
Souther and	- for portable appliances, so that the uninsulated end of a conductor, if it becomes free from the terminal, prevented from contact with accessible metal parts	whit white white	N/A
inet mi	2 N test to the conductor for portable appliances; no contact with accessible metal parts	not set soft s	N/A
25.22	Appliance inlet:	re me me m	N/A
et antie	- live parts not accessible during insertion or removal	at what what while	N/A
NI Et	Requirement not applicable to appliance inlets complying with IEC 60320-1	when we not not	N/A
In .	- connector can be inserted without difficulty	white whe whe	N/A
NITER N	- the appliance is not supported by the connector	set set set a	N/A
set at	- is not for cold conditions if temp. rise of external metal parts exceeds 75 K, unless	in which we want	N/A
-20	the supply cord is not likely to touch such metal parts	in mine when when	N/A
25.23	Interconnection cords comply with the requirements for the supply cord, except that:	Output cord	P
suntifek a	- the cross-sectional area of the conductors is determined on the basis of the maximum current during clause 11	white white white	NUTER NO.
LITE WAY	- the thickness of the insulation may be reduced	at any state	P.
	- for class I or class II appliance with class III construction, the cross sectional areas of the conductors need not comply with 25.8 if specified conditions are met	and which which	Р
MALL	If necessary, electric strength test of 16.3	whet whet white	N/A
25.24	Interconnection cords not detachable without the aid of a tool if compliance with the standard is impaired when they are disconnected	NUTE WALTE WALTER W	N/A
25.25	Dimensions of pins that are inserted into socket-outlets compatible with the dimensions of the relevant socket-outlet.	Tet waine waine wai	N/A
White	Dimensions of pins and engagement face in accordance with the dimensions of the relevant plug in IEC/TR 60083	A MALTER WALTER WALTE	N/A
26	TERMINALS FOR EXTERNAL CONDUCTORS	white white white	N/A
26.1	Appliances provided with terminals or equally effective devices for connection of external conductors	NUTER WALTER WALTER W	N/A
ie white	Terminals only accessible after removal of a non-detachable cover, except	et white white whi	N/A
500	for class III appliances that do not contain live parts	- 18 18 18 18	N/A

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Page 43 of 116



Clause	Requirement – Test	Result – Remark	Verdic
5 56	white some water water and	the fit fit	and the second
MALTEK W	Earthing terminals may be accessible if a tool is required to make the connections and means are provided to clamp the wire independently from its connection	white white white wh	N/A
26.2	Appliances with type X attachment and appliances for connection to fixed wiring provided with terminals in which connections are made by means of screws, nuts or similar devices, unless		N/A
194	the connections are soldered	mur mur m	N/A
white	Screws and nuts serve only to clamp supply conductors, except	Whitek whitek whitek w	N/A
NUTER W	internal conductors, if so arranged that they are unlikely to be displaced when fitting the supply conductors	uset whitet whitet whi	N/A
res All and	If soldered connections used, the conductor so positioned or fixed that reliance is not placed on soldering alone, unless	et white white white	N/A
where a	barriers provided so that neither clearances nor creepage distances between live parts and other metal parts reduced below the values for supplementary insulation if the conductor becomes free at the soldered joint	white white white w	N/A
26.3	Terminals for type X attachment and for connection to fixed wiring so constructed that the conductor is clamped between metal surfaces with sufficient contact pressure and without damaging the conductor		N/A
MALTE	Terminals fixed so that when the clamping means is t	ightened or loosened:	N/A
4	- the terminal does not become loosen	the star and a	N/A
mer w	- internal wiring is not subjected to stress	white miles white whi	N/A
Jet Mi	- neither clearances nor creepage distances are reduced below the values in Clause 29	let the tree will	N/A
* WALTER	Compliance checked by inspection and by the test of subclause 9.6 of IEC 60999-1, the torque applied being equal to two-thirds of the torque specified (Nm)	while while while	N/A
white a	No deep or sharp indentations of the conductors	atter atter with and	N/A
26.4	Terminals for type X attachment, except those having a specially prepared cord and those for the connection of cables of fixed wiring, no special preparation of conductors such as by soldering, use of cable lugs, eyelets or similar, and	er of the subject white	N/A
+ white	so constructed or placed that conductors prevented from slipping out when clamping screws or nuts are tightened	when when white	N/A

Page 44 of 116



Clause	Pequirement Test	Result – Remark	Verdict
Clause	Requirement – Test	Result - Remark	veralci
26.5	Terminals for type X attachment so located or shielded that if a wire of a stranded conductor escapes, no risk of accidental connection to other parts that result in a hazard	While while while	N/A
UTER IN	Stranded conductor test, 8 mm insulation removed	it it set is	N/A
et 5th	No contact between live parts and accessible metal parts and,	s at at at	N/A
SUNLINE .	for class II constructions, between live parts and metal parts separated from accessible metal parts by supplementary insulation only	white white white	N/A
26.6	Terminals for type X attachment and for connection of cables of fixed wiring suitable for connection of conductors with cross-sectional area according to Table 13; rated current (A); nominal cross-sectional area (mm ²):	stret stret whitet an	N/A
t set	If a specially prepared cord is used, terminals need only be suitable for that cord	with with with	N/A
26.7	Terminals for type X attachment, except in class III appliances not containing live parts, accessible after removal of a cover or part of the enclosure	white white white	N/A
26.8	Terminals for the connection to fixed wiring, including the earthing terminal, located close to each other	water source and a	N/A
26.9	Terminals of the pillar type constructed and located as specified		N/A
26.10	Terminals with screw clamping and screwless terminals not used for flat twin tinsel cords, unless	with we we with	N/A
. Let	conductors ends fitted with a device suitable for screw terminals	with with with	N/A
m. n	Pull test of 5 N to the connection	mint whit whit w	N/A
26.11	For type Y and Z attachment: soldered, welded, crimped and similar connections may be used	JEX MIJEL MALIER WAL	N/A
et white	For Class II appliances: the conductor so positioned or fixed that reliance is not placed on soldering, welding or crimping alone	t white white white	N/A
Martine S	If soldering, welding or crimping alone used, barriers provided so that clearances and creepage distances between live parts and other metal parts are not reduced below the values for supplementary insulation if the conductor becomes free		N/A
27	PROVISION FOR EARTHING	A do do h	N/A
27.1	Accessible metal parts of Class 0I and I appliances permanently and reliably connected to an earthing terminal or earthing contact of the appliance inlet	which which which	N/A

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Page 45 of 116



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Clause	Requirement – Test	Result – Remark	Verdict
NALTE.	The second secon		MUTE MUT
	Earthing terminals and earthing contacts not connected to the neutral terminal	white white white	N/A
we w	Class 0, II and III appliances have no provision for earthing	Class II	Р
	Class II appliances and class III appliances can incorporate an earth for functional purposes	Tet suntres suntres sunt	N/A
et antre	Safety extra-low voltage circuits not earthed, unless	at set set with	N/A
	protective extra-low voltage circuits	mur mur m	N/A
27.2	Clamping means adequately secured against accidental loosening	white white white.	N/A
Intree w	Terminals used for the connection of external equipotential bonding conductors allow connection of conductors of 2.5 to 6 mm ² , and	NITER SOUTER WAITER SU	N/A
June .	do not provide earthing continuity between ifferent parts of the appliance, and	ARE WALTER WALTE WAT	N/A
watte	conductors cannot be loosened without the aid of tool	waiter waiter waite	N/A
WALTER S	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes	whitek whitek whitek	N/A
27.3	For a detachable part having an earth connection and being plugged into another part of the appliance, the earth connection is made before and separated after current-carrying connections when removing the part	er anne ante ante	N/A
white	For appliances with supply cord, current-carrying conductors become taut before earthing conductor, if the cord slips out of the cord anchorage	somilet somilet somilet	N/A
white w	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes	ALTER WALTE WALTE W	N/A
27.4	No risk of corrosion resulting from contact between parts of the earthing terminal and the copper of the earthing conductor or other metal	t set write with	N/A
whitek	Parts providing earthing continuity, other than parts of a metal frame or enclosure, have adequate resistance to corrosion	whitek whitek whitek	N/A
nitek wh	If of steel, these parts provided with an electroplated coating with a thickness at least 5 µm	uset suret sourcet an	N/A
Set MALI	Adequate protection against rusting of parts of coated or uncoated steel, only intended to provide or transmit contact pressure	et whilet whilet while	N/A
WALTER	In the body of the earthing terminal is a part of a frame or enclosure of aluminium or aluminium alloys, precautions taken to avoid risk of corrosion	whitek whitek whitek	N/A

Page 46 of 116



Clause	Requirement – Test	Result – Remark	Verdic
MILLER W	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes	when the white white	N/A
27.5	Low resistance of connection between earthing terminal and earthed metal parts	at the test	N/A
et waite	This requirement does not apply to connections providing earthing continuity in the protective extra-low voltage circuit, provided that clearances of basic insulation are based on the rated voltage of the appliance		N/A
where the sur	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes	which which which a	N/A
Set al	Resistance not exceeding 0.1 Ω at the specified low-resistance test (Ω)	at at at a	N/A
27.6	The printed conductors of printed circuit boards not used to provide earthing continuity in hand held appliances.	which which will be	N/A
whitek a	They may be used to provide earthing continuity in other appliances if at least two tracks are used with independent soldering points and the appliance complies with 27.5 for each circuit	whitet whitet whitet	N/A
nin was	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes	and a second second	N/A
28	SCREWS AND CONNECTIONS	and me me	→ P
28.1	Fixings, electrical connections and connections providing earthing continuity withstand mechanical stresses	For fixing heatsink	NULL P
write w	Screws not of soft metal liable to creep, such as zinc or aluminium	NITER WHITE WAITE W	P
area whi	Diameter of screws of insulating material min. 3 mm	at the way and	N/A
et white	Screws of insulating material not used for any electrical connection or connections providing earthing continuity	A COLTEX MALTER MALTER	N/A
WALTER V	Screws used for electrical connections or connections providing earthing continuity screw into metal	watter watter watter	N/A
INLIER WI	Screws not of insulating material if their replacement by a metal screw can impair supplementary or reinforced insulation	NUTER WHITER WAITER WA	N/A
white	For type X attachment, screws to be removed for replacement of supply cord or for user maintenance, not of insulating material if their replacement by a metal screw impairs basic insulation	et while while while	N/A

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Page 47 of 116



Clause	Requirement – Test Resu	llt – Remark	Verdict
- waller - sailt	For screws and nuts; torque-test as specified in Table 14	White white white	N/A
28.2	Electrical connections and connections providing earthing continuity constructed so that contact pressure is not transmitted through non-ceramic insulating material liable to shrink or distort, unless	Martin Martin Martin	N/A
et watte	there is resiliency in the metallic parts to compensate for shrinkage or distortion of the insulating material	stet white white whi	N/A
white	This requirement does not apply to electrical connections i which:	n circuits of appliances for	N/A
MUTER W	30.2.2 is applicable and that carry a current not exceeding 0.5 A	white white white	N/A
Tex whit	30.2.3 is applicable and that carry a current not exceeding 0.2 A	whet milet white we	N/A
28.3	Space-threaded (sheet metal) screws only used for electrical connections if they clamp the parts together	Tex waiter waiter wait	N/A
united a	Thread-cutting (self-tapping) screws and thread rolling screws only used for electrical connections if they generate a full form standard machine screw thread	writer writer writer	N/A
5 50° 15 50	Thread-cutting (self-tapping) screws not used if they are likely to be operated by the user or installer	a part and a	N/A
whitek	Thread-cutting, thread rolling and space threaded screws connections providing earthing continuity provided it is not connection:		N/A
24	- in normal use,	m. m. m.	N/A
IN STREET, NI	- during user maintenance,	- stret stret white	N/A
Set al	- when replacing a supply cord having a type X attachment, or	the set set	N/A
	- during installation	ner me me	N/A
WALTE	At least two screws being used for each connection providing earthing continuity, unless	white white white	N/A
WALTER V	the screw forms a thread having a length of at least half the diameter of the screw	et aniret aniret anires	N/A
28.4	Screws and nuts that make mechanical connection secured against loosening if they also make electrical connections or connections providing earthing continuity	would would would would .	N/A
win-	This requirement does not apply to screws in the earthing circuit if at least two screws are used, or	ALL MALL WALL WA	N/A
St. Car	if an alternative earthing circuit is provided	THE MITE WITE WALL	N/A

15

Page 48 of 116



Clause	Requirement – Test	Result – Remark	Verdict
WALTER N	Rivets for electrical connections or connections providing earthing continuity secured against loosening if the connections are subjected to torsion	Martin Martin Martin W	N/A
29	CLEARANCES, CREEPAGE DISTANCES AND SOL		Р
ine me	Clearances, creepage distances and solid insulation withstand electrical stress	LIEK WALTER WALTE WALT	P
er would	For coatings used on printed circuits boards to protect the microenvironment (type 1) or to provide basic insulation (type 2), Annex J applies	at white white white.	N/A
with .	The microenvironment is pollution degree 1 under type 1 protection	white white white w	N/A
Intre our	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	ALTER WATER WATER WATER	N/A
*	These values apply to functional, basic, supplementary and reinforced insulation:	t ret stet stet	N/A
29.1	Clearances not less than the values specified in Table 16, taking into account the rated impulse voltage for the overvoltage categories of Table 15, unless	(see appended table)	P
NETER WIN	for basic insulation and functional insulation they comply with the impulse voltage test of Clause 14	and white white	N/A
	However, if the distances are affected by wear, distortion, movement of the parts or during assembly, the clearances for rated impulse voltages of 1 500 V and above are increased by 0.5 mm and the impulse voltage test is not applicable	white white white	P.C.
whitek w	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	MITTER WALTER WAL	N/A
in m	Impulse voltage test is not applicable:	ist moust work work	N/A
et white	- when the microenvironment is pollution degree 3, or	t mint mint while	N/A
WALTER	- for basic insulation of class 0 and class 0 appliances, or	Tet still suitet and	N/A
uset in	- to appliances intended for use at altitudes exceeding 2 000 m	at the set of	N/A
	Appliances are in overvoltage category II	it. Mr. M. M.	Р
ie mult	A force of 2 N is applied to bare conductors, other than heating elements	et water water water	N Pr
- 1	A force of 30 N is applied to accessible surfaces	1 15 15	S P

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Page 49 of 116



Clause	Requirement – Test	Result – Remark	Verdic
- III	and the sheet she we at the	the set start with	
29.1.1	Clearances of basic insulation withstand the overvoltages, taking into account the rated impulse voltage	white white white	P
	The values of Table 16 or the impulse voltage test of Clause 14 are applicable:	(see appended table)	J. P.
	Clearance at the terminals of tubular sheathed heating elements may be reduced to 1.0 mm if the microenvironment is pollution degree 1	the south south south south	N/A
Millet	Lacquered conductors of windings considered to be bare conductors	Tet stat stat with	- Pak
29.1.2	Clearances of supplementary insulation not less than those specified for basic insulation in Table 16	(see appended table)	P
29.1.3	Clearances of reinforced insulation not less than those specified for basic insulation in Table 16, using the next higher step for rated impulse voltage	(see appended table)	See P
whitek w	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	while while while while	SP WILTER
29.1.4	Clearances for functional insulation are the largest va	alues determined from:	N P√
d	- Table 16 based on the rated impulse voltage:	(see appended table)	<i>"</i> р .
with	- Table F.7a in IEC 60664-1, frequency not exceeding 30 kHz;	white white white with	N/A
water	- Clause 4 of IEC 60664-4, frequency exceeding 30 kHz	white white white shit	vР
untite w	If values of Table 16 are largest, the impulse voltage test of Clause 14 may be applied instead, unless	1.5mm is the largest	ν ^{ης Ρ}
50	the microenvironment is pollution degree 3, or	at at let set	N/A
y	the distances can be affected by wear, distortion, movement of the parts or during assembly	your on at at	N/A
where the	However, clearances are not specified if the appliance complies with Clause 19 with the functional insulation short-circuited	The components and circuits after current fuse	P
Set .	Lacquered conductors of windings considered to be bare conductors	when when when when when when when when	P
et at	However, clearances at crossover points are not measured	white white white	Р
whit	Clearance between surfaces of PTC heating elements may be reduced to 1mm	and and and and an	N/A
29.1.5	Appliances having higher working voltages than rate insulation are the largest values determined from:	d voltage, clearances for basic	.√P

Page 50 of 116





Clause	Requirement – Test	Result – Remark	Verdic
- Liter	and the start of the start of the	the set set	
	- Table 16 based on the rated impulse voltage:	when the strength	P
NUTE N	- Table F.7a in IEC 60664-1, frequency not exceeding 30 kHz;	MITER WALTER WALTER WAL	N/A
ister whi	- Clause 4 of IEC 60664-4, frequency exceeding 30 kHz	LICK MITCH MAITCH MAITC	P STOP
et watte	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	A while while while	P
NLITER AND	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	and an and an an an	N/A
* WALTER	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	t white white white	NI P
antifet a safet anni	If the secondary winding of a step-down transformer is earthed, or if there is an earthed screen between the primary and secondary windings, clearances of basic insulation on the secondary side not less than those specified in Table 16, but using the next lower step for rated impulse voltage	white white white wh	N/A
whitek	Circuits supplied with a voltage lower than rated voltage, clearances of functional insulation are based on the working voltage used as the rated voltage in Table 15	white white white	N/A
29.2	Creepage distances not less than those appropriate for the working voltage, taking into account the material group and the pollution degree	(see appended table)	et ent P.
5 ⁰⁵	Pollution degree 2 applies, unless	at at at at	P
y 504	- precautions taken to protect the insulation; pollution degree 1;	with the state	N/A
- White	- insulation subjected to conductive pollution; pollution degree 3	soft our soft	N/A
white is	A force of 2 N is applied to bare conductors, other than heating elements	MULTER WALTER MALL	Р
in the	A force of 30 N is applied to accessible surfaces	The state strate with	P
TEX JUNUT	In a double insulation system, the working voltage for both the basic and supplementary insulation is taken as the working voltage across the complete double insulation system	et sourcet sourcet sourcet	- P
29.2.1	Creepage distances of basic insulation not less than specified in Table 17	(see appended table)	N ^N NP
100			10 10

Page 51 of 116



Clause	Requirement – Test	Result – Remark	Verdict
NALTEX N	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	white white white wh	P
et white	Except for pollution degree 1, corresponding creepage distance not less than the minimum specified for the clearance in Table 16, if the clearance has been checked according to the test of Clause 14	A WALLEY WALLEY WALLEY	N/A
29.2.2	Creepage distances of supplementary insulation at least those specified for basic insulation in Table 17, or	(see appended table)	P
w w	Table 2 of IEC 60664-4, as applicable	NET WALT WAL WAL	N/A
29.2.3	Creepage distances of reinforced insulation at least double those specified for basic insulation in Table 17, or	(see appended table)	P
WALL	Table 2 of IEC 60664-4, as applicable:	t with mile with a	N/A
29.2.4	Creepage distances of functional insulation not less than specified in Table 18:	(see appended table)	P
nitet wh	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	art and must we with	N/A
- NALTER	Creepage distances may be reduced if the appliance complies with Clause 19 with the functional insulation short-circuited	which which which we	
29.3	Supplementary and reinforced insulation have adequate thickness, or a sufficient number of layers, to withstand the electrical stresses	with white white whi	P.
St 5	Compliance checked:	s s it it it	P
- m	- by measurement, in accordance with 29.3.1, or	The water water water	N P
et white	- by an electric strength test in accordance with 29.3.2, or	* anitet anitet waitet	unt of PLT
SUNJIEK S	- 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	WALTER WALTER WALTER WA	N/A
	for accessible parts of reinforced insulation consisting of a single layer, by measurement in accordance with 29.3.4, or	at the state of the	N/A
WALTER .	- 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	Marinet Marinet Marinet S	N/A

Page 52 of 116



Clause	Requirement – Test	Result – Remark	Verdic
	- 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	while while while w	N/A
29.3.1	Supplementary insulation have a thickness of at least 1 mm	and and and and and	Sur P
et d	Reinforced insulation have a thickness of at least 2 mm	and which which which	Р
29.3.2	Each layer of material withstand the electric strength test of 16.3 for supplementary insulation	White white white	P
me	Supplementary insulation consist of at least 2 layers	MITER WALTER WALTE W	N P
de la	Reinforced insulation consist of at least 3 layers	a state	, Р
29.3.3	The insulation is subjected to the dry heat test Bb of IEC 60068-2-2, followed by	ALL MALL MALL MAR	N/A
me	the electric strength test of 16.3	set outer outer white	N/A
* white	If the temperature rise during the tests of Clause 19 does not exceed the value specified in Table 3, the test of IEC 60068-2-2 is not carried out	MALTER WALTER WALTER	UNIT AF Prov
29.3.4	Thickness of accessible parts of reinforced insulation consisting of a single layer not less than specified in Table 19	WALTER WALTER WALTER WA	N/A
30 📣	RESISTANCE TO HEAT AND FIRE	at anti-	S P S
30.1	External parts of non-metallic material,		P .
m	parts supporting live parts, and	en inter white white	V P
Whitek	thermoplastic material providing supplementary or reinforced insulation,	start marter sources as	NUTE - PIE
, et	sufficiently resistant to heat	She was at	P
nr m	Ball-pressure test according to IEC 60695-10-2	NUTER WALTE WALT WAT	Р
inet whi	External parts tested at 40 °C plus the maximum temperature rise determined during the test of Clause 11, or at 75 °C, whichever is the higher; temperature (°C)	(see appended table)	P
whitek	Parts supporting live parts tested at 40 °C plus the maximum temperature rise determined during the test of Clause 11, or at 125 °C, whichever is the higher; temperature (°C):	(see appended table)	P
itter win fet wintif	Parts of thermoplastic material providing supplementary or reinforced insulation tested at 25 °C plus the maximum temperature rise determined during Clause 19, if higher; temperature (°C)	et waitet waitet waitet	N/A
30.2	Parts of non-metallic material resistant to ignition and spread of fire	wither anited amited a	In Contraction Pro-
st	This requirement does not apply to:	and the second	

Page 53 of 116



Clause	Requirement – Test	Result – Remark	Verdict
Whitek W	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	which which which which	P
ister whi	decorative trims, knobs and other parts unlikely to be ignited or to propagate flames that originate inside the appliance	Tet would would would	N/A
white	Compliance checked by the test of 30.2.1, and in addition:	White white white w	Р
NULLER .	- for attended appliances, 30.2.2 applies	set set set as	N/A
	- for unattended appliances, 30.2.3 applies	me me me	Р
NITE N	For appliances for remote operation, 30.2.3 applies	ster ster when when	N/A
Jet mil	For base material of printed circuit boards, 30.2.4 applies	at the sat with	THE P
30.2.1	Parts of non-metallic material subjected to the glow-wire test of IEC 60695-2-11 at 550 °C	(see appended table)	Р
NUTER .	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	white white white white	N/A
Stat	the material is classified at least HB40 according to IEC 60695-11-10	at an internet	N/A
Et white	Parts for which the glow-wire test cannot be carried out need to meet the requirements in ISO 9772 for material classified HBF	a mile milet would be	N/A
30.2.2	Appliances operated while attended, parts of non-metallic material supporting current-carrying connections, and	whitet whitet whitet whi	N/A
WALTER W	parts of non-metallic material within a distance of 3mm of such connections,	with anitet antifet anite	N/A
iset whi	subjected to the glow-wire test of IEC 60695-2-11 with appropriate severity level:	stet suret minet aminet	N/A
ex antrex	- 750 °C, for connections carrying a current exceeding 0.5 A during normal operation	t the state what a	N/A
.t.	- 650 °C, for other connections	Mr. M. M. M.	N/A
white a	Glow-wire applied to an interposed shielding material, if relevant	watter watter waite wat	N/A
NUTER W	The glow-wire test is not carried out on parts of mate glow-wire flammability index according to IEC 60695		N/A
set white	- 750 °C, for connections carrying a current exceeding 0.5 A during normal operation	et milet whilet whilet	N/A
- A+	- 650 °C, for other connections	a de de	N/A
- sur-	The glow-wire test is also not carried out on small pa	arts. These parts are to:	N/A

Page 54 of 116



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Clause	Requirement – Test	Result – Remark	Verdict
- JIE	and white white white white white	L AL AL AL 50	- ALLE
- San	- comprise material having a glow-wire flammability index of at least 750 °C, or 650 °C as appropriate, or	white white white white	N/A
	- comply with the needle-flame test of Annex E, or	INTERNATION MUT MAL	N/A
LIEK WAL	- comprise material classified as V-0 or V-1 according to IEC 60695-11-10	ret wret milet warret	N/A
et unitet	Glow-wire test not applicable to conditions as specified	the state state with	N/A
30.2.3	Appliances operated while unattended, tested as specified in 30.2.3.1 and 30.2.3.2	at not not all	Pet
20 0	Test not applicable to conditions as specified	mun mu mu m	N/A
30.2.3.1	Parts of non-metallic material supporting connections carrying a current exceeding 0.2 A during normal operation, and	NITEX MAILER MAILER MAILER	N ^{LY} P ,
unt	parts of non-metallic material, other than small parts, within a distance of 3 mm,	set while while while we	P
weite	subjected to the glow-wire test of IEC 60695-2-11 with a test severity of 850 °C	(see appended table)	Р
WALLER N	Glow-wire applied to an interposed shielding material, if relevant	maret sourcet sources sources	N/A
NITER WAL	The glow-wire test is not carried out on parts of material classified as having a glow-wire flammability index according to IEC 60695-2-12 of at least 850 °C	the second second second	N/A
30.2.3.2	Parts of non-metallic material supporting connections, and	which which which which	Ρ
with	parts of non-metallic material within a distance of 3 mm,	suntile suntile suntile suntile	Р
were we	subjected to the glow-wire test of IEC 60695-2-11 with appropriate severity level:	(see appended table)	л ^ю Р
LIER WILL	- 750 °C, for connections carrying a current exceeding 0.2 A during normal operation,	Tet white white white w	P
4 .5th	- 650 °C, for other connections	L at at at 5	N/A
- with	Glow-wire applied to an interposed shielding material, if relevant	service survey and survey	N/A
son s	However, the glow-wire test of 750 °C or 650 °C as a parts of material fulfilling both or either of the followir		N/A
ner sur	- a glow-wire ignition temperature according to IEC 60695-2-13 of at least:	MITER WAITE WAITE WAITE	N/A
IE WALT	• 775 °C, for connections carrying a current exceeding 0.2 A during normal operation,	at white white white wh	N/A
- Jet	675 °C, for other connections	- 10 10 50 5	N/A
	- a glow-wire flammability index according to IEC 60695-2-12 of at least:	me me me me	N/A

Page 55 of 116



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Clause	Requirement – Test	Result – Remark	Verdic
- Life	and share when we are the	t the set star st	Sec. 1
S.	- 750 °C, for connections carrying a current exceeding 0,2 A during normal operation,	white white white white	N/A
me a	- 650 °C, for other connections	mark white white whe	N/A
det is	The glow-wire test is also not carried out on small pa	arts. These parts are to:	N/A
et white	- comprise material having a glow-wire ignition temperature of at least 775 °C or 675 °C as appropriate, or	and which wh	N/A
nuret	- comprise material having a glow-wire flammability index of at least 750 °C or 650 °C as appropriate, or	and the state with	N/A
- See	- comply with the needle-flame test of Annex E, or	mur mur mur mu	N/A
NITER M	- comprise material classified as V-0 or V-1 according to IEC 60695-11-10	Marter Marter Marter Marter	N/A
ret white	The consequential needle-flame test of Annex E app encroach within the vertical cylinder placed above th and on top of the non-metallic parts supporting curre parts of non-metallic material within a distance of 3 r parts are those:	e centre of the connection zone ent-carrying connections, and	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	WALTER WALTER WALTER WALTER	N/A
LIE WA	- parts that comprised material having a glow-wire flammability index of at least 750 °C or 650 °C as appropriate, or	et a funite write s	N/A
where	- small parts, that comprised material having a glow-wire flammability index of at least 750 °C or 650 °C as appropriate, or	white white white wh	N/A
t	- small parts for which the needle-flame test of Annex E was applied, or	when when the state	N/A
n n	- small parts for which a material classification of V-0 or V-1 was applied	and when when when	N/A
nu K	However, the consequential needle-flame test is not parts, including small parts, within the cylinder that a	t carried out on non-metallic re:	N/A
WALT	- parts having a glow-wire ignition temperature of at least 775 °C or 675 °C as appropriate, or	MALTER WALTER WALTE MAL	N/A
WALTER V	- parts comprising material classified as V-0 or V-1 according to IEC 60695-11-10, or	WALTER WALTER WALTER WALTE	N/A
ititet wir	- 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	stret would would would .	N/A
30.2.4	Base material of printed circuit boards subjected to the needle-flame test of Annex E	white white white	N/A
m	Test not applicable to conditions as specified:	PCB: V-0	Ч
B1 🖉	RESISTANCE TO RUSTING	i i i i i	Р

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Page 56 of 116

Clause	Requirement Test	Popult Pomark	Vardiat
Clause	Requirement – Test	Result – Remark	Verdict
- WILL JEt	Relevant ferrous parts adequately protected against rusting	Mart Mart Mart	P
me n	Tests specified in part 2 when necessary	NUTER MALTE MALT	N/A
32	RADIATION, TOXICITY AND SIMILAR HAZARDS	L A A	
et antre	Appliance does not emit harmful radiation or present a toxic or similar hazard due to their operation in normal use	at which which wh	Р
Allek	Compliance is checked by the limits or tests specified in part 2, if relevant	when we we we	N/A
A	ANNEX A (INFORMATIVE) ROUTINE TESTS	white white white	N/A
in su	Description of routine tests to be carried out by the manufacturer	MIT MAIL MALL W	N/A
B white	ANNEX B (NORMATIVE) APPLIANCES POWERED BY RECHARGEABLE BA	ATTERIES	N/A
white	The following modifications to this standard are applicable for appliances powered by batteries that are recharged in the appliance	white white white	N/A
m i	Three forms of construction covered:	white white white	me m-
NUTER WAY	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	et a waret w	N/A
Whitek Tek	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	White white white	N/A
un whi they whi at the	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	ALTER MALTER MALTER MAL	N/A
3.1.9	Appliance operated under the following conditions:	et wiret white white	me me
Whitek a	- the appliance, supplied by its fully charged battery, operated as specified in relevant part 2;	stat what what	N/A
MUTER W	- the battery is charged, the battery being initially discharged to such an extent that the appliance cannot operate;	when the second second	N/A
Set whise	- if possible, the appliance is supplied from the supply mains through its battery charger, the battery being initially discharged to such an extent that the appliance cannot operate. The appliance is operated as specified in relevant part 2;	The Mr. W.	N/A

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EN 60225 1

Page 57 of 116



EN 60335-1

Clause	Requirement – Test Result – Remark	Verdict
WILLER N	- if the appliance incorporates inductive coupling between two parts that are detachable from each other, the appliance is supplied from the supply mains with the detachable part removed	N/A
3.6.2	Part to be removed in order to discard the battery is not considered to be detachable	N/A
5.B.101	Appliances supplied from the supply mains tested as specified for motor-operated appliances	N/A
7.1	Battery compartment for batteries intended to be replaced by the user, marked with battery voltage V (V) and polarity of the terminals	N/A
nitet w	The positive terminal indicated by symbol IEC 60417-5005 and the negative terminal by symbol IEC 60417-5006	N/A
TE WALTER	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	N/A
de la	use only with <model designation=""> supply unit</model>	N/A
7.6	Additional symbols	.√N/A
7.12	The instructions give information regarding charging	N/A
nt wh Et atte	Instructions for appliances incorporating batteries intended to be replaced by the user include required information	N/A
- Jet	Details about how to remove batteries containing materials hazardous to the environment given	N/A
where the second	Instructions for appliances containing non-user-replaceable batteries state the substance of the following:	N.
unt w	This appliance contains batteries that are only replaceable by skilled persons	N/A
The WAL	Instructions for appliances containing non-replaceable batteries shall state the substance of the following:	171-201
A WALLEY	This appliance contains batteries that are non-replaceable	N/A
SUNLIFEK V	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:	WALTER
nere an	WARNING: For the purposes of recharging the battery, only use the detachable supply unit provided with this appliance	N/A
whit	If the symbol for detachable supply unit is used, its meaning is explained	N/A
7.15	Markings placed on the part of the appliance connected to the supply mains	N/A

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Page 58 of 116



Clause	Requirement – Test Result – Remark	Verdic
Will .	The type reference of the detachable supply unit is placed in close proximity to the symbol	N/A
8.2	Appliances having batteries that according to the instruction may be replaced by the user need only have basic insulation between live parts and the inner surface of the battery compartment	N/A
et whitet	If the appliance can be operated without batteries, double or reinforced insulation required	N/A
11.7	The battery is charged for the period stated in the instructions or 24 h	N/A
11.8	Temperature rise of the battery surface does not exceed the limit in the battery manufacturer's specification; measured (K); limit (K)	N/A
JEK WALTE	If no limit specified, the temperature rise does not exceed 20 K; measured (K)	N/A
19.1	Appliances subjected to tests of 19.B101, 19.B102 and 19.B103	N/A
19.10	Not applicable	N/A
19.B.101	Appliances supplied at rated voltage for 168 h, the battery being continually charged	N/A
19.B.102	For appliances having batteries that can be removed without the aid of a tool, short-circuit of the terminals of the battery, the battery being fully charged,	N/A
19.B.103	Appliances having batteries replaceable by the user supplied at rated voltage under normal operation with the battery removed or in any position allowed by the construction	N/A
19.13	The battery does not rupture or ignite	N/A
21.B.101	Appliances having pins for insertion into socket-outlets have adequate mechanical strength	N/A
LIC WALL	Part of the appliance incorporating the pins subjected to the free fall test, procedure 2, of IEC 60068-2-31, the number of falls being:	n - au
et intret	- 100, the mass of part does not exceed 250 g	N/A
	- 50, the mass of part exceeds 250 g	N/A
white w	After the test, the requirements of 8.1, 15.1.1, 16.3 and clause 29 are met	N/A
22.3	Appliances having pins for insertion into socket-outlets tested as fully assembled as possible	N/A
25.13	An additional lining or bushing not required for interconnection cords in class III appliances or class III constructions operating at safety extra-low voltage not containing live parts	N/A
30.2	For parts of the appliance connected to the supply	N/A

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Page 59 of 116



Clause	Requirement – Test	Result – Remark	Verdict
Anto.	For other parts, 30.2.2 applies	White white white	N/A
C C C	ANNEX C (NORMATIVE) AGEING TEST ON MOTORS	stret aniret mouret woures	N/A
inex wou	Tests, as described, carried out when doubt with regard to the temperature classification of the insulation of a motor winding	Tet woutet woutet woutet a	N/A
er antre	Test conditions as specified	at what what while whi	N/A
D	ANNEX D (NORMATIVE) THERMAL MOTOR PROTECTORS	and the state state	N/A
INLIEK W	Applicable to appliances having motors that incorporate thermal motor protectors necessary for compliance with the standard	and when when when the	N/A
de la	Test conditions as specified	i i t t	N/A
E SIL	ANNEX E (NORMATIVE) NEEDLE-FLAME TEST	and which which when wh	N/A
mer	Needle-flame test carried out in accordance with IEC modifications:	C 60695-11-5, with the following	1 <u>11</u> 77
7	Severities	Tot with aller mile	White
Ster N	The duration of application of the test flame is $30 \text{ s} \pm 1 \text{ s}$	at the same	N/A
9	Test procedure		
9.1	The specimen so arranged that the flame can be applied to a vertical or horizontal edge as shown in the examples of figure 1	white white white wh	N/A
9.2	The first paragraph does not apply	white white white white	N/A
Whitek W	If possible, the flame is applied at least 10 mm from a corner	int what wind white	N/A
9.3	The test is carried out on one specimen		N/A
er vorer	If the specimen does not withstand the test, the test may be repeated on two further specimens, both withstanding the test	A Start AND	N/A
11	Evaluation of test results	with the the the	~~
NUTER	The duration of burning not exceeding 30 s	tet set set set	N/A
de la	However, for printed circuit boards, the duration of burning not exceeding 15 s	when when the set	N/A
F S	ANNEX F (NORMATIVE) CAPACITORS	net wat wat wat	N/A
whitek	Capacitors likely to be permanently subjected to the radio interference suppression or voltage dividing, co of IEC 60384-14, with the following modifications:		<u>-2</u> 4 5
1.5	Terms and definitions	we we we we	

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Page 60 of 116



Clause	Requirement – Test	Result – Remark	Verdict
1.5.3	Class X capacitors tested according to subclass X2	White white white w	N/A
1.5.4	This subclause is applicable	× & & & 5	N/A
1.6	Marking	Net mit with we	
in the	Items a) and b) are applicable	at set set set	N/A
3.4	Approval testing	D. Mir Mor Mir	
3.4.3.2	Table II is applicable as described	t the wild will a	N/A
4.1	Visual examination and check of dimensions	with the second	11
m	This subclause is applicable	white white white wi	N/A
4.2	Electrical tests	1 1 1 1 1	N/A
4.2.1	This subclause is applicable	nere mere more more	N/A
4.2.5	This subclause is applicable	at at set set	N/A
4.2.5.2	Only table IX is applicable	me me m	N/A
	Values for test A apply	t the state when	N/A
	However, for capacitors in heating appliances the values for test B or C apply	all she the	N/A
4.12	Damp heat, steady state		
NUTER ON	This subclause is applicable	the state state	N/A
et	Only insulation resistance and voltage proof are checked		N/A
4.13	Impulse voltage	write write write	en -
NUTER	This subclause is applicable	let set set a	N/A
4.14	Endurance		1 7
where w	Subclauses 4.14.1, 4.14.3, 4.14.4 and 4.14.7 applicable	MITEL MAITEL MAITEL MAIT	N/A
4.14.7	Only insulation resistance and voltage proof are checked	Tet white white white	N/A
et 550	Visual examination, no visible damage	e at at at	N/A
4.17	Passive flammability test	white white white a	3-
NUTER	This subclause is applicable	at set set a	N/A
4.18	Active flammability test	mer when we we	-
Mr. The	This subclause is applicable	ster ster when whe	N/A
G	ANNEX G (NORMATIVE) SAFETY ISOLATING TRANSFORMERS		Р
t set	The following modifications to this standard are appli transformers:	icable for safety isolating	
7	Marking and instructions	with white white w	P

Page 61 of 116



EN 60335-1

Clause	Requirement – Test	Result – Remark	Verdic
- III	with super s	the fit fit	LITE MAIN
7.1	Transformers for specific use marked with:	with me me a	P
white wh	- name, trademark or identification mark of the manufacturer or responsible vendor	(see appended table)	JER NILP
15 5	- model or type reference:	(see appended table)	⊱ _∕P
17	Overload protection of transformers and associated	circuits	P
et white	Fail-safe transformers comply with subclause 15.5 of IEC 61558-1	A unifet white white	N/A
22 🖉	Construction	t at at	P
Wr W	Subclauses 19.1 and 19.1.2 of IEC 61558-2-6 are applicable	we show that we show	Р
29	Clearances, creepage distances and solid insulation	NUTER WITE WALT WAT	P
29.1, 29.2 and 29.3	The distances specified in items 2a, 2c and 3 in table 13 of IEC 61558-1 apply	set and another marely	P
* whitek	For insulated winding wires complying with subclause 19.12.3 of IEC 61558-1 there are no requirements for clearances or creepage distances	t white white white	P
whitek w	For windings providing reinforced insulation, the distance specified in item 2c of table 13 of IEC 61558-1 is not assessed	WINTER WITTER WITTER WIT	ICH WILP'
NUTE SUNIT	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	e water water water	P
Hur v	ANNEX H (NORMATIVE) SWITCHES	white white white w	N/A
me m	Switches comply with the following clauses of IEC 61	058-1, as modified:	
LIEK WALTE	The tests of IEC 61058-1 carried out under the conditions occurring in the appliance	Tet allet milet with	N/A
et miret	Before being tested, switches are operated 20 times without load	t set set set	N/A
8	Marking and documentation	when the star	
WALTE W	Switches are not required to be marked	JEX STER STER OF	. N/А
NUTER WINE	However, switches that can be tested separately from the appliance marked with the manufacturer's name or trade mark and the type reference	where white white white	N/A
13 🖉	Mechanism	a at at at	
- an-	The tests may be carried out on a separate sample	white white whe	N/A
15	Insulation resistance and dielectric strength	- & & A	
15.1	Not applicable	with which which is	N/A

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Page 62 of 116



all'	EN 60335-1		-sh
Clause	Requirement – Test	Result – Remark	Verdic
15.2	Not applicable	WILL'S WALLES WALLS WALL	N/A
15.3	Applicable for full disconnection and micro-disconnection	wifet anifet anifet anifet	N/A
17	Endurance	a a at at	
et de	Compliance is checked on three separate appliances or switches	in white white white we	N/A
white	For 17.2.4.4, the number of cycles declared according to 7.1.4 is 10 000, unless	watte watte wate wate	N/A
white	otherwise specified in 24.1.3 of the relevant part 2 of EN 60335	WALTER WALTER WALTE WALTE	N/A
INLIER WI	Switches for operation under no load and which can be operated only by a tool and	NIEK WAITER WAITER WAITER	N/A
JEK WALT	switches operated by hand that are interlocked so that they cannot be operated under load,	ret miret miret whitet w	N/A
+ _0+	are not subjected to the tests		N/A
whitek	However, switches without this interlock are subjected to the test of 17.2.4.4 for 100 cycles of operation	white suntil white white	N/A
a	Sub-clauses 17.2.2 and 17.2.5.2 not applicable	were and the way	N/A
NUTE WAS	The ambient temperature during the test is that occurring in the appliance during the test of Clause 11 in EN 60335-1	at white white a	N/A
whitek	Temperature rise of the terminals not more than 30 K above the temperature rise measured in clause 11 of EN 60335-1 (K)	white white white whi	N/A
20	Clearances, creepage distances, solid insulation and coatings of rigid printed board assemblies		Jet.
un u	Clause 20 is applicable to clearances across full disconnection and micro-disconnection	mile while while white	N/A
er sure	It is also applicable to creepage distances for functional insulation, across full disconnection and micro-disconnection, as stated in Table 24	The write write write w	N/A
WALTER	ANNEX I (NORMATIVE) MOTORS HAVING BASIC INSULATION THAT IS IN VOLTAGE OF THE APPLIANCE	ADEQUATE FOR THE RATED	N/A
stret wh	The following modifications to this standard are appli insulation that is inadequate for the rated voltage of t		MUTER IN
8	Protection against access to live parts	un mu m m	
8.1	Metal parts of the motor are considered to be bare live parts	ex watter watter waite wa	N/A
11 5	Heating		

Page 63 of 116



Clause	Requirement – Test Result – Remark	Verdict		
11.3	Temperature rise of the body of the motor is determined instead of the temperature rise of the windings	N/A		
11.8	Temperature rise of the body of the motor, where in contact with insulating material, not exceeding values in table 3 for the relevant insulating material			
16	Leakage current and electric strength	d - 5		
16.3	Insulation between live parts of the motor and its other metal parts not subjected to the test			
19	Abnormal operation	2m-		
19.1	The tests of 19.7 to 19.9 not carried out	N/A		
19.1.101	Appliance operated at rated voltage with each of the following fault conditions:	N/A		
Tek Whit	- short circuit of the terminals of the motor, including any capacitor incorporated in the motor circuit	N/A		
t set	- short circuit of each diode of the rectifier	N/A		
m	- open circuit of the supply to the motor	N/A		
WALLEK S	- open circuit of any parallel resistor, the motor being in operation	N/A		
NUTER MA	Only one fault simulated at a time, the tests carried out consecutively	N/A		
22	Construction	÷		
22.1.101	For class I appliances incorporating a motor supplied by a rectifier circuit, the d.c. circuit being insulated from accessible parts of the appliance by double or reinforced insulation	N/A		
WLIEK	Compliance checked by the tests specified for double and reinforced insulation	N/A		
j S ^{er} "si	ANNEX J (NORMATIVE) COATED PRINTED CIRCUIT BOARDS	N/A		
et set	Testing of protective coatings of printed circuit boards carried out in accordance with IEC 60664-3 with the following modifications:	* 5		
5.7	Climatic sequence	20		
WALTER S	When production samples are used, three samples of the printed circuit board are tested	N/A		
5.7.1	Cold	N/A		
in m	The test is carried out at -25°C	N/A		
5.7.3	Rapid change of temperature	N/A		
24	Severity 1 is specified	N/A		
5.9	Additional tests	NITE NO		
S. 1	This subclause is not applicable	N/A		



Relefenc	e No.: WTX22X10201274S Page 64 of 116	h the the state	U
I'm Main	EN 60335-1	it it it it.	mere an
Clause	Requirement – Test	Result – Remark	Verdic
к	ANNEX K (NORMATIVE) OVERVOLTAGE CATEGORIES	WALL WALL WALL	Р
an a	The information on overvoltage categories is extracted from IEC 60664-1	mill white white white	Р
ine we	Overvoltage category is a numeral defining a transient overvoltage condition	LIER WALTER WALTE WALTE	P
er white	Equipment of overvoltage category IV is for use at the origin of the installation	A WHITE WALTER WALTER W	N/A
WALLER .	Equipment of overvoltage category III is equipment in fixed installations and for cases where the reliability and the availability of the equipment is subject to special requirements	white white white whi	N/A
Tet whit	Equipment of overvoltage category II is energy consuming equipment to be supplied from the fixed installation	Category II	P
t white	If such equipment is subjected to special requirements with regard to reliability and availability, overvoltage category III applies	white white white a	N/A
WALLER V	Equipment of overvoltage category I is equipment for connection to circuits in which measures are taken to limit transient overvoltages to an appropriate low level	whitek whitek whitek white	N/A
E suntre	ANNEX L (INFORMATIVE) GUIDANCE FOR THE MEASUREMENT OF CLEAR DISTANCES	ANCES AND CREEPAGE	P
- NUTER	Sequences for the determination of clearances and creepage distances	the state with an	P
M	ANNEX M (NORMATIVE) POLLUTION DEGREE	when when you we get	P
	The information on pollution degrees is extracted from IEC 60664-1	all whit whit with	Р
e m	Pollution	it's white white white	24 - 241
8 .5th	The microenvironment determines the effect of	t at at at	S PS

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N/A

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111	For evaluating creepage distances, the following degrees of pollution in t microenvironment are established:		
JEK	- pollution degree 1: no pollution or only dry, non-conductive pollution occurs. The pollution has no influence		

pollution on the insulation, taking into account the microenvironment

Means may be provided to reduce pollution at the insulation by effective enclosures or similar

Minimum clearances specified where pollution may

Page 65 of 116



8

- No	EN 60335-1		- 4h.
Clause	Requirement – Test	Result – Remark	Verdic
WALTER W	- pollution degree 2: only non-conductive pollution occurs, except that occasionally a temporary conductivity caused by condensation is to be expected	Pollution degree 2	P
uret whi	- pollution degree 3: conductive pollution occurs or dry non-conductive pollution occurs that becomes conductive due to condensation that is to be expected	Tex white white white a	N/A
WALLEY	- pollution degree 4: the pollution generates persistent conductivity caused by conductive dust or by rain or snow	white white we we	N/A
N	ANNEX N (NORMATIVE) PROOF TRACKING TEST	Tet and water maret	N/A
5 ⁴⁴	The proof tracking test is carried out in accordance with IEC 60112 with the following modifications:		
7	Test apparatus	a me we we we	
7.3	Test solutions	t tot set whet wit	S. S
	Test solution A is used	m m m	N/A
10	Determination of proof tracking index (PTI)	the state with white	white
10.1	Procedure		
ver an	The proof voltage is 100V, 175V, 400V or 600V :	and white white a	N/A
at d	The test is carried out on five specimens		−N/A</td
wither wither	In case of doubt, additional test with proof voltage reduced by 25V, the number of drops increased to 100	white white white white	N/A
10.2	Report	me me me	7
WULLE W	The report stating if the PTI value was based on a test using 100 drops with a test voltage of (PTI-25) V	INTER MATTER MATER MATER	N/A
0	ANNEX O (INFORMATIVE) SELECTION AND SEQUENCE OF THE TESTS OF	CLAUSE 30	LTE P
et white	Description of tests for determination of resistance to heat and fire	t whet miret waited was	P
P	ANNEX P (INFORMATIVE) GUIDANCE FOR THE APPLICATION OF THIS STATUSED IN WARM DAMP EQUABLE CLIMATES	NDARD TO APPLIANCES	N/A
NUTER M	Modifications applicable for class 0 and 01 appliance exceeding 150V, intended to be used in countries ha are marked with symbol IEC 60417-6332		N ¹¹⁴ - 3
t minet	Modifications may also be applied to class 1 appliant exceeding 150V, intended to be used in countries ha are marked with symbol IEC 60417-6332, if liable mains that excludes the protective earthing conductor	aving a tropical climate and that to be connected to a supply	s nur

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Page 66 of 116



EN 60335-1

Clause	Requirement – Test	Result – Remark	Verdic
5.7	The ambient temperature for the tests of clauses 11 and 13 is 40 +3/0 °C	while while while wh	N/A
7.1	The appliance marked with symbol IEC 60417-6332	WITE WITE WITE WITE	N/A
7.12	The instructions state that the appliance is to be supplied through a residual current device (RCD) having a rated residual operating current not exceeding 30 mA	Tet white white white	N/A
WALTER	The instructions state that the appliance is considered to be suitable for use in countries having a warm damp equable climate, but may also be used in other countries	whitek whitek whitek whi	N/A
ne m	If symbol IEC 60417-6332 is used, its meaning is explained	MITER WALTE WALT WALL	N/A
11.8	The values of Table 3 are reduced by 15 K	set allet allet and	N/A
13.2	The leakage current for class I appliances not exceeding 0.5 mA (mA)	t ret stat stat a	N/A
15.3	The value of t is 37 °C	m. m. n. r.	N/A
16.2	The leakage current for class I appliances not exceeding 0.5 mA (mA)	MALTER MUNITER MALTER MALT	N/A
19.13	The leakage current test of 16.2 is applied in addition to the electric strength test of 16.3	et white white	N/A
Q ^L which	ANNEX Q (INFORMATIVE) SEQUENCE OF TESTS FOR THE EVALUATION OF ELECTRONIC CIRCUITS		
t st	Description of tests for appliances incorporating electronic circuits		
R	ANNEX R (NORMATIVE) SOFTWARE EVALUATION	white white white wh	N/A
nnts - wi tstek wints	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	and white white white	N/A
R.1	Programmable electronic circuits using software	a stat	10 - 5
WALTER V	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	MALTER MALTER MALTER MAL	N/A
R.2 🔊	Requirements for the architecture	THE NUTER WHITE WALTE	1 m - 1
Tex white	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	et would would would w	N/A

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Page 67 of 116



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Clause	Requirement – Test	Result – Remark	Verdio
			Vordie
R.2.1.1	Programmable electronic circuits requiring software i control the fault/error conditions specified in table R.2 structures:	incorporating measures to 2 have one of the following	x Muret
flat of	- single channel with periodic self-test and monitoring	and the state state	N/A
	- dual channel (homogenous) with comparison	in mur mur mur	N/A
er intre	- dual channel (diverse) with comparison	t set set with a	N/A
whitek	Programmable electronic circuits requiring software i control the fault/error conditions specified in table R. structures:		re- white
det .	- single channel with functional test		N/A
n n	- single channel with periodic self-test	NUTE MALT WALL WAL	N/A
5 5	- dual channel without comparison	s a to to	N/A
R.2.2	Measures to control faults/errors	se white white when y	m -m
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	WALLER WALLER WALLER WA	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	and white where where	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	WALLER WALLER WALLER WAL	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	Tet waitet waitet waitet	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	white white white white	N/A
R.2.2.6	The software is referenced to relevant parts of the operating sequence and the associated hardware functions	white white white is	N/A
R.2.2.7	Labels used for memory locations are unique	in the second	N/A

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Page 68 of 116



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				
R.3	Measures to avoid errors				
R.3.1	General	er			
WALTER W	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	watter			
NUTEX WA	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	- 74.			
R.3.2.1	Software safety requirements:	N/A			
Mr.	The specification of the software safety requirements includes the descriptions listed	N/A			
R.3.2.2	Software architecture				
R.3.2.2.1	The specification of the software architecture includes the aspects listed	N/A			
	- 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;				
vent	- time-based dependencies of sequences and data	ma			
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	, - ¹ 1.			
R.3.2.3.1	Based on the architecture design, software is suitably refined into modules	N/A			
Whitek	Software module design and coding is implemented in a way that is traceable to the software architecture and requirements	N/A			
R.3.2.3.2	Software code is structured	N/A			

Page 69 of 116

EN 60335-1

Clause	Requirement – Test	Result – Remark	Verdict
R.3.2.3.3	Coded software is validated against the module specification by static analysis	while while white	N/A
m in	The module specification is validated against the architecture specification by static analysis	WITE WAIT WALL W	N/A
R.3.3.3	Software validation	ifet allet alle and	in white w
et white	The software is validated with reference to the requirements of the software safety requirements specification	St white white white	N/A
Set	Compliance is checked by simulation of:	e at at at	N/A
24. 2	- input signals present during normal operation	white white white	N/A
JIE .N	- anticipated occurrences	10 10 50	N/A
	- undesired conditions requiring system action	an m m m	N/A

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20	Т	ABLE R.1 ° – GENERAL FAUL	T/ERROR CO	NDITIONS	40. A.	
Component ^a	Fault/error	Acceptable measures ^{b, c}	Definitions	Document reference for applied measure	Document reference for applied test	Verdict
1 CPU	20	a at at St	atter with	mer in	m	N/A
1.1 8					L 15	
Registers	Stuck at	Functional test, or	H.2.16.5	NUT NUT	when we	
		periodic self-test using either:	H.2.16.6	1.1	4	
	n - n	- static memory test, or	H.2.19.6	10 A.	STEL IN	
	set sitet	 word protection with single bit redundancy 	H.2.19.8.2	L AL	an an	
1.2 VOID	20	and the state	STE MIT	when w	er mer	∽ [®] N/A
1.3	Stuck at	Functional test, or	H.2.16.5		t st	N/A
Programme	man	Periodic self-test, or	H.2.16.6	MITER MI	when y	
counter	Whitek whi	Independent time-slot monitoring, or	H.2.18.10. 4	10 - 50	Just of	
	NITEY WALTE	Logical monitoring of the programme sequence	H.2.18.10. 2	et whet	NUTER WALT	
2	No interrupt	Functional test, or	H.2.16.5	20.	d at	N/A
Interrupt handling and execution	or too frequent interrupt	time-slot monitoring	H.2.18.10. 4	white wh	Ster white	

Page 70 of 116



Verdict

EN 60335-1

Clause Requirement – Test

Result – Remark

	Т	ABLE R.1 ° – GENERAL FAULT	/ERROR CO	NDITIONS	h 25	- 555-61
Component ^a	Fault/error	Acceptable measures ^{b, c}	Definitions	Document reference for applied measure	Document reference for applied test	Verdict
3 Clock	Wrong frequency (for quartz synchroniz ed clock: harmonics/ sub-harmo nics only)	Frequency monitoring, or time slot monitoring	H.2.18.10. 1 H.2.18.10. 4	Set whitet	NATER MALE	N/A
4. Memory	m. n	the second second	et 5th	NUTER INL	where a	N/A
4.1		Periodic modified checksum, or	H.2.19.3.1	en 2.	4	
Invariable	faults	multiple checksum, or	H.2.19.3.2	50 .50	miller m	
memory	Let Mile	word protection with single bit redundancy	H.2.19.8.2	t st	10 - 5ª	+
4.2	DC fault	Periodic static memory test, or	H.2.19.6	white a	in m	N/A
Variable memory	et white	word protection with single bit redundancy	H.2.19.8.2	whitek wh	Set white	
4.3 Addressing (relevant to variable and invariable memory)	Stuck at	Word protection with single bit redundancy including the address	H.2.19.8.2	St. Janut	WALL AN	N/A
5 Internal data path	Stuck at	Word protection with single bit redundancy	H.2.19.8.2	white N	et stet	N/A
5.1 VOID		at let state with at	IC MALLE	me me	10 1	N/A
5.2 Addressing	Wrong address	Word protection with single bit redundancy including the address	H.2.19.8.2	aret white	would wo	N/A
6 External communicat	Hamming distance 3	Word protection with multi-bit	H.2.19.8.1	et 50	INTE WALL	N/A
		redundancy, or	an an	20. 1		whitek
ion		CRC – single work, or	H.2.19.4.1	Set .	JET NITER	
	t at	Transfer redundancy, or	H.2.18.2.2	me m	24	
All All All	and all	Protocol test	H.2.18.14	10 1	F CH	10
6.1 VOID		the state of the state of	No. Com	me an	242 24	N/A
6.2 VOID	55 5	and when an an		de de	15	<∕∽N/A <

Page 71 of 116



Verdict

EN 60335-1

Clause Requirement – Test

Result – Remark

Component ^a	Fault/error	Acceptable measures ^{b, c}	Definitions	Document reference for applied measure	Document reference for applied test	Verdict
6.3 Timing	Wrong point in time Wrong sequence	Time-slot monitoring, or scheduled transmission Time-slot and logical monitoring, or comparison of redundant communication channels by either: - reciprocal comparison - independent hardware comparator Logical monitoring, or time-slot monitoring, or Scheduled transmission	H.2.18.10. 4 H.2.18.18 H.2.18.10. 3 H.2.18.15 H.2.18.3 H.2.18.10. 2 H.2.18.10. 4 H.2.18.10.	NITE WALTER	WALLER WALTER	N/A
7 Input/output periphery	Fault conditions specified in 19.11.2	Plausibility check	H.2.18.13	and and the	white w	N/A
7.1 VOID	A St	all all white white	me m	14		N/A
7.2 Analog I/O 7.2.1 A/D and D/A-convert er	Fault conditions specified in 19.11.2	Plausibility check	H.2.18.13	WALLEY WAL	et white	N/A
7.2.2 Analog multiplexer	Wrong addressing	Plausibility check	H.2.18.13	et ret	when when	N/A
8 VOID	+ A	set set mine mine	me me	m. 1	6 G.	N/A
9 Custom chips ^d e.g. ASIC, GAL, gate array	Any output outside the static and dynamic functional specificatio n	Periodic self-test	H.2.16.6	whitek whi	Tet souther so	N/A

Page 72 of 116

EN 60335-1



Verdict

Requirement - Test Clause

Result

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Component ^a Fault/error	Acceptable measures ^{b, c}	Definitions	Document reference for applied measure	Document reference for applied test	Verdict

gi ^{d)} To be divided as necessary by the manufacturer into sub-functions.

e) Table R.1 is applied according to the requirements of R.1 to R.2.2.9 inclusive.

Street of	ANNEX S (NORMATIVE) BATTERY OPERATED APPLIANCES POWERED BY BATTERIES THAT ARE NON-RECHARGEABLE OR NOT RECHARGED IN THE APPLIANCE			
iret _{suni} r t iret	The following modifications to this standard are applicable for battery-operated appliances where the batteries are either non-rechargeable (primary batteries), or	N/A		
m	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	N/A		
5.S.101	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.102	Appliances are tested as motor-operated appliances.	N/A		
7.1	Appliances marked with the battery voltage (V) and the polarity of the terminals, unless:	N/A		
	the polarity is irrelevant	N/A		
	Appliances also marked with:			
et united	– name, trade mark or identification mark of the manufacturer or responsible vendor:	N/A		
	– model or type reference:	N/A		
mer 4	 – IP number according to degree of protection against ingress of water, other than IPX0 	N/A		
NUT NI	- type reference of battery or batteries:	́ N/А		
Tet white	If relevant, the positive terminal is indicated by the symbol IEC 60417-5005 and the negative terminal by the symbol IEC 60417-5006	N/A		
t whitek	If appliances use more than one battery, they are marked to indicate correct polarity connection of the batteries	N/A		

Page 73 of 116



EN 60335-1

Clause	Requirement – Test	Result – Remark	Verdict
7.6	Additional symbols	while while while w	N/A
7.12	The instructions contain the following, as applicable:	at let let is	er <u>19</u>
w w	- the types of batteries that may be used:	ne me me m	N/A
the set	- how to remove and insert the batteries	it it is an	N/A
et stet	 non-rechargeable batteries are not to be recharged 	a the set of	N/A
N. Alt	– rechargeable batteries are to be removed from the appliance before being charged	wants water water	N/A
when a	 different types of batteries or new and used batteries are not to be mixed 	omite whit omit ou	N/A
iner an	- batteries are to be inserted with the correct polarity	stret stret untre whit	N/As
Tet MIT	 – exhausted batteries are to be removed from the appliance and safely disposed of 	at the the state	N/A
* wret	 – if the appliance is to be stored unused for a long period, the batteries are removed 	WAT WAT THE STAT	N/A
20	- the supply terminals are not to be short-circuited	white white white a	N/A
11.5	Appliances are supplied with the most unfavourable	supply voltage between	SER MAINTE
NUTER WAL	 – 0.55 and 1,0 times the battery voltage, if the appliance can be used with non-rechargeable batteries 	and serve and server	N/A
ex white	-0.75 and 1,0 times battery voltage, if the appliance is designed for use with rechargeable batteries only	and the sures	N/A
whitek	The values specified in Table S.101 for the internal resistance per cell of the battery is taken into account	where we waited an	N/A
19.1	The tests are carried out with the battery fully charged unless otherwise specified	whet with marter was	N/A
19.13	The battery does not rupture or ignite	and the second second	N/A
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	and another and and a	N/A
UNLIEK N	such a connection is unlikely to occur due to the construction of the appliance	the state street and	N/A
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	and white white white	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

Page 74 of 116



EN 60335-1

Clause	Requirement – Test	Result – Remark	Verdict
05.40		the state of the second state	
25.13	This requirement is not applicable to the flexible leads or flexible cord connecting external batteries or a battery box with an appliance	when when we wanted	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	and white white white w	N/A
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	antifet antifet antifet antifet	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	NIET WHIEK WAITER WAITER	N/A
LIEK WILL	the battery is shielded by a barrier that meets the needle flame test of Annex E, or	ret miret aniret waitet va	N/A
et would	that comprises material classified as V-0 or V-1 according to IEC 60695-11-10	- strek marge marge want	N/A
T	ANNEX T (NORMATIVE) UV-C RADIATION EFFECT ON NON-METALLIC M	ATERIALS	N/A
nitet whi	Requirements for non-metallic materials subject to direct or reflected UV-C radiation exposure and whose mechanical and electrical properties are relied upon for compliance with the	and survey and survey and the	N/A
SEA WALT	Does not apply to glass, ceramic and similar materials	white white white white	N/A
t stift	Tested as specified in ISO 4892-1 and ISO 4892-2, v	with the following modifications:	مرجع الم
	Modifications to ISO 4892-1:	mer mer me me	-
5.1	Light source	at the set with	
5.1.6	The UV-C emitter is a low pressure mercury lamp with a quartz envelope having a continuous spectral irradiance of 10 W/m2 at 254 nm	The marter sources sources all	N/A
at the	Subclause 5.1.6.1 and Table 1 are not applicable		⊳ N/A
5.2	Temperature	and marine wat wat	2m
5.2.4	The black-panel temperature shall be 63 °C ± 3 °C	the set set set	N/A
5.3	Humidity and wetting	white white white white	
5.3.1	Humidification of the chamber air is specified in part 2 when necessary	stret white white white	N/A
9	Test report	at let let stat is	5 ⁶⁶ - 61
24	This clause is not applicable	we me me m	N/A
* INLIET	Modifications to ISO 4892-2:	t set set set and	S NATE
7	Procedure	Mr. M. M. M.	

Page 75 of 116



Verdict

EN 60335-1

Clause	Requirement – Test	Result – Remark

7.1	General	mun mun m
Ster	At least three test specimens are tested	N/A
u.	Ten samples of internal wiring is tested	N/A
7.2	Mounting the test specimens	et when when -
et s	The specimens are attached to the specimen holders such that they are not subject to any stress	N/A
7.3	Exposure	m. m. m.
	Apparatus prepared as specified	N/A
UNLIEK .	The test specimens and, if used, the irradiance-measuring instrument are exposed for 1 000 h	N/A
7.4	Measurement of radiant exposure	L A A
er yn St sit	If used, a radiometer is 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	m m
WALLER .	Material properties and test methods for parts providing mechanical support or impact resistance as specified in Table T.1	N/A
N	Material properties and test method for electrical insulation of internal wiring as specified in Table T.2	N/A
8	Exposure report	MUTER AND THE STUD
	This clause is not applicable	N/A

Page 76 of 116

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EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES

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+A11:2014+A13:2017+A1:2019+A14:2019+A2:2019 EN 62233:2008

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	CENELEC COMMON MODIFICATIONS		
6.1,5	Delete "class 0" and "class 01"	Class II	P
7.1	Single-phase appliances to be connected to the supply mains: 230 V covered	100-240V	P
. m	Multi-phase appliances to be connected to the supply mains: 400 V covered	Set while while a	N/A
7.12	The instructions include the substance of the followir	ng:	Р
watter.	- 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	whe wanted water	P.
d 3	- children shall not play with the appliance		A P
- Juli-	- cleaning and user maintenance shall not be made by children without supervision	water water wa	P
8.1.1	Also test probe 18 of EN 61032 is applied	MUTER WALTER WALT	JULY VP
INLIEK .	The appliance being in every possible position during the test, except that	and and antes	P.
Jet	appliances normally used on the floor and having a mass exceeding 40 kg are not tilted	no with soft	N/A
* 5	The force on the probe in the straight position is increased to 10 N when probe 18 is used	when when a	P
NUT EX	When using test probe 18 the appliance is fully assembled as in normal use without any parts removed, and	sonit sont son	P
Jet .	parts intended to be removed for user maintenance are also not removed	and we get	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	et wattet wattet w	N/A

Page 77 of 116



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Reference		N. N. N. A.	
Se anci	EUROPEAN GROUP DIFFERENCES AND NA		and and
Clause	Requirement – Test	Result – Remark	Verdict
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	which when when we	Р
inet whi	Test probe B and probe 18 of EN 61032 are applied to built-in appliances and fixed appliances only after installation	Tet maret water water	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	at white white white	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		N/A
* white	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	white white white	N/A
white a	When using test probe 18 it is applied with a force of 2.5N on the appliance fully assembled	unifer while while whi	N/A
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	et and white white	N/A
22.17	The requirement is not applicable to built-in appliances	suret intret united w	N/A
24.1	Components comply with the safety requirements specified in the relevant standards as far as they reasonably apply	NUTER WALTER WALTER WALT	et P
inet whi	Motors are not required to comply with EN 60034-1, but tested as part of the appliance according to this standard	and would would would	N/A
main	Relays are tested as part of the appliance according to this standard	Marter source sources	N/A
WALTER V	Relays may be alternatively tested to EN 60730-1 and the additional requirements in EN 60335-1	whitet whitet whitet wh	N/A
Millet wh	The requirements of Clause 29 of this standard apply between live parts of components and accessible parts of the appliance.	stret white white white	Р
t ret	Components may comply with the requirements for clearances and creepage distances for functional insulation as specified in the relevant component	white white white.	P

standard



Xp /

Str. N	EUROPEAN GROUP DIFFERENCES AND NA	TIONAL DIFFERENCES	
Clause	Requirement – Test	Result – Remark	Verdic
WALTER W	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	white white white white	P
et whi	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	white white white white	Ρ
Whitek	Components that have been tested and shown to con requirements in the EN standard for the relevant con provided that:		P
NITEX ST	- the severity specified in the component standard is not less than the severity specified in 30.2, and	ret ret wret wret	P
A 5	- the test report for the component states the values of te and ti acc. to EN 60695-2-11	to when when some state	Р
t	If the above two conditions are not satisfied, the component is tested as part of the appliance	white white white white	Р
WALLER	Power electronic converter circuits are not required to comply with EN 62477-1, but tested as part of the appliance according to this standard	while while while while	N/A
NITEX WAY	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	and white white white	Р
WALTER WALTER	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	while while while whi	P
Jet .	Components that have not been separately tested and found to comply with the relevant standard, and	at let let let	P
10 5	components that are not marked or not used in accordance with their marking,	and wat wat with	P
et united	are tested in accordance with the conditions occurring in the appliance, the number of samples being that required by the relevant standard	the world world world with	Ρ
whitek wh	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	antiet antiet antiet antiet	N/A
t whit	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	The watter watter white wh	P

Page 79 of 116



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all'	EUROPEAN GROUP DIFFERENCES AND NA	TONAL DIFFERENCES	no in
Clause	Requirement – Test	Result – Remark	Verdic
antiet au	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	mutet anutet anitet a	N/A
et white	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	A STATE AND AND AND	P
MULTER	with connectors and appliance inlets complying with the standard sheets of IEC 60320-1, if	ster user whet	UNLIFE PER
white all	direct supply to these parts from the supply mains gives rise to a hazard	at not not	N/A
1.00 .5	For plugs used in CENELEC countries Annex ZH applies	n we we w	P
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	WALLEY WALLEY WALLEY	N/A
WALTER S	Compliance with Clause 8 of this standard is not impaired by connecting the appliance to a device covered by EN 41003	water water water	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	at a function out	N/A
25.1	Plugs and pins for insertion into socket outlets follow the relevant standards sheets in Annex ZH	wait wat wat	Р
25.7	Rubber sheathed cords (60245 IEC 53) are not suitable for appliances intended to be used outdoors, or	watte wait wait	N/A
10 5	When they are liable to be exposed to significant amount of ultraviolet radiation	net unt unt si	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	AND MALE MALE MALE	N/A
WALTER	Common plugs and socket-outlets types in CENELEC countries as shown in Annex ZH	suret multit whilet	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 tomaintain them in position,	where white white an	N/A
when	unless they are held in place near the terminals independently of the solder	ANTI WALL WAL	N/A

Page 80 of 116



Clause	Requirement – Test	Result – Remark	Verdict
Clause		Robait Romain	Verdio
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	anist anist anist	N/A
32	Compliance regarding electromagnetic fields is checked according to EN 62233	Liet white white wh	State P S
Annex I, 19.I.101	The appliance is supplied at rated voltage and operated under normal operation with each of the fault conditions specified	an and an area and	N/A
watters	The duration of any of the tests is as specified in 19.7	MALTER MALTER MALTER	N/A
Store of	C C MALE MALE MALE MARE AND A	at at set	LIEK NUTER
ZA	ANNEX ZA (NORMATIVE) SPECIAL NATIONAL CONDITIONS	inter water water wa	e P
-241	the set of the set white white	in which which all	201 2
5 50	Denmark, Sweden, Norway and Finland	1 at at all	5 ⁰⁰ _5 ¹⁰
7.12.8	The maximum inlet water pressure is at least 1,0 MPa:	white white white	N/A
Set of	Norway		and the set
19.5	The test is also applicable to appliances intended to be permanently connected to fixed wiring	s furt sur	N/A
m	and an a start with	in the write write	m m
- At	Norway	s at at	10 - 5 ⁰
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
ate and	Denmark	Set what when	CET UT M
22.47	The maximum inlet water pressure is at least 1,0 MPa	t shirt white white	N/A
đ	TEX STEP NITE MUT WANT WIT	t at	1.15
10 - 1	Ireland and United Kingdom	White white white	m m
25.8	In the table, the lines for 10 A and 16 A are replaced	by:	
es no	> 10 and ≤ 13 1,25	with more more with	N/A
Set on the	> 13 and ≤ 16 1,5	at the set is	N/A
	at set set mile mile white white	me me m	
ZB	ANNEX ZB (INFORMATIVE) A-DEVIATIONS	t whet maret anaret	P

Page 81 of 116



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EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES

Clause	Requirement – Test	Result – Remark	Verdict
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dit .	Ireland	15
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	N/A
et alle	which which when when the state state with	and and
	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.	N/A
TEX MILE	It also allows plugs to BS 4573 and EN 50075 to be fitted to shavers and toothbrushes	N/A
	at the feet the white white whe whe whe way we	4
zc	ANNEX ZC (NORMATIVE) NORMATIVE REFERENCES TO INTERNATIONAL PUBLICATIONS WITH THEIR CORRESPONDING EUROPEAN PUBLICATIONS	Ρ
NAL N NITER INT	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	Р
WALTER	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	N/A
7.1	Business name and full address of the manufacturer and, where applicable, his authorized representative:	N/A
dit.	Model or type reference	N/A
me n	Serial number, if any	N/A
Set 5	Production year	N/A
in m	Designation of the appliance:	N/A
7.12	Instructions provided with the appliance so that the appliance can be used safely	N/A
t st	The instructions contain at least the following information:	N/A

Page 82 of 116



EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES

Clause	Requirement – Test	Result – Remark	Verdic
55	with which which will be a set of the set of	1 18 18 18 18 18 18 18 18 18 18 18 18 18	and an
Whitek M	- the business name and full address of the manufacturer and, where applicable, his authorized representative	while white where a	N/A
	- model or type reference of the appliance as marked on the appliance itself, except for the serial number	and an and an and	N/A
WALTER	- the designation of the appliance together with its explanation in case it is given by a combination of letters and/or numbers		N/A
white v	- the general description of the appliance, when needed due to the complexity of the appliance	sources wourses wourses	N/A
nifet win	- specific precautions if required during installation, operation, adjusting, user maintenance, cleaning, repairing or moving	NUTER WALLER MALTER MAN	N/A
NUNET SUNT	- when needed drawings, diagrams, descriptions and explanations necessary for the safe use and user maintenance of the appliance	int white white white	N/A
where 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
in and	The words "Original instructions" appear on the language version(s) verified by the manufacturer or by the authorized representative	and an and an an	N/A
et would	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	which which which	N/A
NUTER SU	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	Miret Miret Miret M	N/A
* WALTER	The instructions indicate the type and frequency of inspections and maintenance required for safe operation including the preventive maintenance measures	t white white white	N/A
7.12.ZE1	If needed for specific appliances, the following inform	nation to be given:	N/A
neret was	- 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	and an an an an and	N/A

Page 83 of 116



Clause	Requirement – Test	Result – Remark	Verdic
Jiause		Result Remark	Verdie
WALTER W	- on how to maintain adequate mechanical stability when in use, during transportation, assembly, dismantling, scrapping and any other action involving the appliance	and and and and and	N/A
LIEK WINK	- on the protective measures to be taken by the user, including, where appropriate, the personal protective equipment to be provided		N/A
whitek	- 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	WALTER WATER WALTER	N/A
NLTEX JUN	- on the specifications on the spare parts to be used, when these affect the health and safety of the operator	NUTER AND THE AND THE AND THE	N/A
ret whit	- on airborne noise emissions, determined and decla relevant Part 2, which includes:	ared in accordance with the	N/A
MALTER	- the A-weighted emission sound pressure level at workstations, where this exceeds 70 dB(A);	white white white w	N/A
WALTER V	- where this level does not exceed 70 dB(A), this fact is indicated	maret white white white	N/A
eret whi	- the peak C-weighted instantaneous sound pressure value at workstations, where this exceeds 63 Pa (130 dB in relation to 20 μPa)	et a funtret wattet	N/A
Whitek	- the A-weighted sound power level emitted by the machinery, where the A-weighted emission sound pressure level at workstations exceeds 80 dB(A)	ANTER ANTER ANTER ANT	N/A
7.12.ZE2	The instructions includes a warning to disconnect the appliance from its power source during service and when replacing parts	white souther souther south	N/A
Y WAL	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	. I A A	N/A
whitek 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	white white white white	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	white wanted wanted wanted	N/A
Jun -	a manual operation is required to restart it	the set of the set	N/A

Page 84 of 116



Clause	Requirement – Test	Result – Remark	Verdict			
54			- 54			
20.1	Appliances and their components and fittings have adequate mechanical stability during transportation, assembly, dismantling and any other action involving the appliance	White white white white	N/A			
20.2	Dangerous moving transmission parts safeguarded either by design or guards	Tex writer whiter whiter a	N/A			
ex whitek	When guards are used, they are fixed guards, interlocking movable guards or protective devices	a street maret and and	N/A			
Shirek .	Moving parts directly involved in the function of the appliance which cannot be made completely inaccessible fitted with:					
NITEK WN	- fixed guards or interlocking movable guards preventing access to those sections of the parts that are not used in the work, and	and and and and and the	N/A			
Tex waits	- adjustable guards restricting access to those sections of the moving parts where access is necessary	set white white white w	N/A			
* WALTER	Interlocking movable guards used where frequent access is required	- Intifet antifet antifet anti	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	AND WALTE WALTE WA	N/A			
WALTER	The distance between the seat and the control devices capable of being adapted to the operator	white white white white	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	ALTER WALTER WALTER WALTER	N/A			
* white	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	TE WALTER WALTER WALTER WALT	N/A			
22.ZE.3	Appliances designed in such a way that incorrect mounting is avoided, if this can lead to an unsafe situation	water water water water	N/A			
nure wai	If this is not possible, information on the correct mounting is given directly on the part and/or the enclosure	stret water water water	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	and white white white wh	N/A			
	so designed that they can be fitted with such attachments, or	mur mur mur mu	N/A			

Page 85 of 116



in the	EUROPEAN GROUP DIFFERENCES AND NA	ATIONAL DIFFERENCES	an'
Clause	Requirement – Test	Result – Remark	Verdic
NU CIT	be shaped in such a way that standard lifting gear can easily be used	white white white white	N/A
when when	Appliances to be moved manually are constructed or equipped so that they can be moved easily and safely	white would would wond	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	A SUPE SUPE WITH SUPE	N/A
whitek .	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	whitek whitek white	N/A
in in	Where possible, guards are incapable of remaining in place without their fixings	ATTE WATE WATE WATE	N/A
ere mer	This does not apply if, after removal of the screws, or if the component is incorrectly repositioned, the appliance becomes inoperative	white white white w	N/A
m	Movable guards are interlocked	white white white white	N/A
WALLER W	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	white white white white	N/A
NY WY	Where it is possible for an operator to reach the dan hazardous appliance functions has ceased, movable locking device in addition to an interlocking device th	guards associated with a guard	N/A
t stat	- prevents the start of hazardous appliance functions until the guard is closed and locked, and	when the state of	N/A
whitet w	- keeps the guard closed and locked until the risk of injury from the hazardous appliance functions has ceased	Tet and when we	N/A
inet and	Interlocking movable guards remain attached to the appliance when open, and	let let set with	N/A
et white	they are designed and constructed in such a way that they can be adjusted only by means of an intentional action	t suret suret assuret ways	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	sourcet aniset sourcet anise	N/A
TEX WAIT	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	et miret aniret aniret an	N/A
t whitet	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	white white white whit	N/A

Page 86 of 116



	EUROPEAN GROUP DIFFERENCES AND NA						
Clause	Requirement – Test	Result – Remark	Verdict				
- sures 	After these tests the interlock system is fit for further use	White white white white	N/A				
22.ZE.7	Adjustable guards restricting access to areas of the for the work are:	Adjustable guards restricting access to areas of the moving parts strictly necessary for the work are:					
ere whe	- adjustable manually or automatically, depending on the type of work involved, and	LIFE WALTER WALTER WALTER OF	N/A				
et intre	- readily adjustable without the use of tools	the set and as an	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	white white white	N/A				
Intrest with	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	ALTER MALTER MALTER MALTER	N/A				
22.ZE.9	Appliances fitted with means to isolate them from all energy sources	t ret ret stat and	N/A				
	Such isolators are clearly identified, and	mer mer we we	N/A				
NUNLITER W	they are capable of being locked if reconnection endanger persons	WALTER WALTER WALTER WALTER	N/A				
NUTER WAY	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				
I MALLA	we all an interest of	er ute nitte mute un	at whit				
ZF	ANNEX ZF (INFORMATIVE) CRITERIA APPLIED FOR THE ALLOCATION OF F STANDARDS IN THE EN 60335 SERIES UNDER L		P P				
unties wi	List of standards under CENELEC/TC61 with the allocation under the LVD (Low Voltage Directive) or the MD (Machinery Directive)	ALTER WALTER WALTER WALTER	P				
in whit	when when we get get	The miles white white w	in m				
ZG	ANNEX ZG (NORMATIVE) UV APPLIANCES	at that that what while	N/A				
J.Et	The following modifications to this standard apply to appliances having UV emitters	the set of	N/A				
NI D	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	white white white white	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	et white white white	N/A				

Page 87 of 116



Clause	Denvironment Teeth	Deput Demerly	Vardia				
Clause	Requirement – Test	Result – Remark	Verdic				
32	For appliances incorporating UV emitters the manufacturer delivers a declaration providing evidence that the plastic material exposed to the radiation is UV resistant	AND AND AND AND AND	N/A				
	it white white white white white	at let set set	N/A				
ZH	ANNEX ZH (INFORMATIVE) Common plug and socket-outlet types in CENELEC countries						
with	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:						
WAL .	- for class I appliances or class II appliances with functional earth, standard sheet EU2, EU3 or EU4	white white white white	N/A				
n n Let L	- for class II appliances, standard sheet EU5, EU6 or EU7:	not when when when	Р				
y super	There are exemptions or differences in certain CENELEC countries	VIT WALL WALL WITH WI	Р				
mer	and the set of	- alter white white whi	m				
ZI SULLER	ANNEX ZI (INFORMATIVE) Information on the application of A11:2014 to EN 60335-1:2012 CENELEC CLC/TC 61(SEC)2096A						
NUTER WAS	Clarification of the application of parts 2 in conjunction with the 2002 or 2012 version of EN 60335-1	at a write writer	Р				
	when when the set is	and white and a manufact white	and an				
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						
nn m	This standard provides one means of conforming to safety objectives of Directive 2014/35/EU	NUT WALL WALL WAL	Р				
et white	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	The work would would work	P				
white s	Compliance with this Part 1 when used together with the relevant Part 2 provides one means of conformity with the safety objectives	white white white white	JUN P				
in m	with the set set	street while while while .	n. 1				
ZZB	ANNEX ZZB (INFORMATIVE) RELATIONSHIP BETWEEN THIS EUROPEAN STANDARD AND THE ESSENTIAL REQUIREMENTS OF DIRECTIVE 2006/42/EC AIMED TO BE COVERED						
-m	This standard provides one means of conforming to essential requirements of EU Directive 2006/42/EC	while while while while	N/A				

Page 88 of 116



EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES

Clause	Requirement – Test	Result – Remark	Verdict
5 55	and a share and and and a share a shar	the state of the second s	Str. Str.
WALTER W	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	while while while whi	N/A
et white	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	et wartet wartet wartet	N/A
Mr.	all with the set of the	aller with white wi	in man
	ANNEX EN 62233:2008 EMF- ELECTROMAGNETICS FIELDS	ret stet stret with	A P
	The tested product also complies with the requireme	ents of EN 62233:2008	Р
The Mart	Limit100%	Measured max.: 0.84%	I P But

Page 89 of 116



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10.1	TABLE: Pow	TABLE: Power input deviation							
Input devi	ation of/at:	P rated (W)	P measured (W)	ΔP (%)	Required ΔP (%)	Remark			
56	JULY MALL N	u n n		+ - x	15 - 15	5 ⁶⁷			

10.2	TABLE: Curre	TABLE: Current deviation					
Current de	viation of/at:	I rated (A)	I measured (A)	ΔI (%)	Required ΔI (%)	Remark	
100V/50Hz	ALT WALL V	1.0	0.532	-46.8	+20	Tested with	
100V/60Hz	A A	1.0	0.518	-48.2	+20	model GTM46402-30	
240V/50Hz	s me m	1.0	0.253	-74.7	+20	05	
240V/60Hz	+ WALTER WALTE	1.0	0.248	-75.2	+20	Output: 5VDC, 6A	
100V/50Hz	x x	<u></u> 1.0	0.668	-33.2	+20	Tested with	
100V/60Hz	where where	1.0	0.650	-35.0	+20	model GTM46402-40	
240V/50Hz	8 15	1.0	0.314	-68.6	+20	24	
240V/60Hz	the way w	1.0	0.307	-69.3	+20	Output: 24VDC, 1.66A	
Supplemen	tary information:	ne i		1	de la companya de la comp	Tet ster w	

11.8 💉	TABLE: Heating tes	st, thermocouple	s			STER NO	P	
	Test voltage (V) See below							
MALT	Ambient (°C)	Ambient (°C) See below						
Thermocouple locations		Max. tem	perature ri	se measure	ed, ΔT (K)		. temperature	
		94V/	94V/60Hz		254.4V/50Hz		rise limit, ΔT (K)	
		Horizont		Horizont al	Vertical			
Plug holder		13.0	12.5	11.8	11.3	For cl.3	30.1	
MOV1 body		29.7	33.0	26.7	29.6	T85-25=60		
LF1 windi	ng chi shi shi	47.5	47.6	42.7	43.6	T130-25	=105	
CX1 body	the second second	51.3	52.7	46.2	47.2	T100-25	=75	
LF2 windi	ng	56.7	61.3	51.1	54.8	T130-25	=105	
C1 body	i i i itali	66.0	67.8	59.4	60.6	T105-25	=80	
C2 body	white white wh	67.2	69.2	60.5	62.0	T105-25	=80	
PCB near	Q1 and T1	55.5	57.2	50.0	51.3	T130-25	=105	
T1 windin	gin' with with	80.4	81.6	72.4	73.1	85, class	130	
T1 bobbin		62.0	66.0	55.8	59.0	For cl.3	0.1	

Page 90 of 116



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CY1 body	47.0	45.0	42.3	40.3	T125-25=100
US2 body	64.3	64.4	57.9	57.8	T100-25=75
C3 body	56.6	55.1	51.0	49.3	T105-25=80
Output lead wire	37.9	39.9	34.2	36.5	T80-25=55
Plastic enclosure inside near T1,	28.4	29.7	25.4	27.8	For cl.30.1
Plastic enclosure outside near T1	19.8	21.0	17.9	19.2	74
Support	20.0	20.3	18.0	18.7	65
Ambient	24.6°C	24.5°C	24.4°C	24.3°C	m m
Supplementary information: Tested w	ith model GT	M46402-30	005	- 15	St 5 5

Supplementary information: Tested with model GTM46402-3005

11.8	TABLE: Heating test, t	hermocouple	t st	55 5	ier nure	P N	
	Test voltage (V)		See	e below	h. 2,	4	*-
The Will	Ambient (°C)			e below	Jet NJe	WALTE WAY	14 - Pr
Thermocouple locations		Max. tem	perature r	ise measure	ed, ΔT (K)	Max. temp	
		94V/	60Hz	254.4	//50Hz	rise limit,	ΔΤ (Κ)
		Horizont al	Vertical	Horizont al	Vertical	LIEK MULIEK	WALTER
Plug holde		10.8	10.4	.4 9.7	9.2	For cl.30.1	
MOV1 boo	ły	24.6	27.4	22.1	24.4	T85-25	=60
LF1 windir	ng	39.3	41.4	35.2	36.8	T130-25	=105
CX1 body	su e et	42.6	43.8	38.3	39.0	T100-25=75	
LF2 windir	ng chi and an	47.1	50.9	42.4	45.4	T130-25	=105
C1 body	+ + A A	54.8	56.3	49.3	50.2	T105-25	5=80
C2 body	the most work way	55.8	57.6	50.2	51.3	T105-25	5=80
PCB near	Q1 and T1	46.1	47.7	41.5	42.4	T130-25	=105
T1 winding	a nu nu nu	66.8	67.9	60.0	60.5	85, class	130
T1 bobbin	the state what	59.0	58.7	53.1	52.0	For cl.3	80.1
CY1 body	m. m. w.	39.0	37.4	35.1	33.3	T125-25	=100
US2 body	auter auter and the ast	53.4	53.7	48.0	47.8	T100-25	5=75
C3 body		47.0	45.8	42.3	40.8	T105-25	5=80
Output lea	id wire	31.5	33.8	28.3	30.2	T80-25	=55
Plastic en	closure inside near T1,	23.6	25.8	21.0	22.9	For cl.3	30.1
Plastic en	closure outside near T1	16.5	17.7	14.8	15.8	74	and and
Support	at at set	16.6	17.3	14.9	15.4	65	6 2
Ambient	with the sure of	24.4°C	24.3°C	24.3°C	24.3°C	NUTE NUTE	white
Suppleme	ntary information: Tested v	vith model GT	M46402-4	024	21. 1		A.



11.8	TABLE: Heating test, resistance method							
5.	Test voltage (V)	n min i	MUT MUT - MU . M.					
NN116 V	Ambient, t ₁ (°C)				LIER - NUTER NO	5	m ⁱⁿ	
d.	Ambient, t ₂ (°C)			···: ?	-	*		
Tempera	Temperature rise of winding		R ₂ (Ω)	ΔΤ(Κ)	Мах. Δ Т (К)		ulation lass	
E min	mer mer me	20 - a	, - ,#	J= J	ALTER - MITE	MALIN	- 12	
Supplem	entary information:	5 5	and a	ne m	in n			

13.2	TABLE: Leakage current		t at	Р
in the	Heating appliances: 1.15 x rated input (W):	- Jie mile .	mit whit y	un - m
LIEK WIT	Motor-operated and combined appliances: 1.06 x rated voltage (V)	254.4		ret-
Leakage current between		I (mA)	Max. allowe	d I (mA)
Tested w	ith model GTM46402-3005	Jet Nilet while	white white	m
L/N to pla	stic enclosure	0.03	0.35 pe	ak 🖉
L/N to ou	tput connector	0.10	0.35 peak	
Tested w	ith model GTM46402-4024		10 10	Str. 3
L/N to pla	stic enclosure	0.04	0.35 pe	eak
L/N to output connector		0.12	0.12 0.35 peak	
Supplem	entary information:	with which which	me me	-20°

13.3	TABLE: Dielectric strength		- ¹ P
Test vol	tage applied between:	Test potential applied (V)	Breakdown / flashover (Yes/No)
Tested w	ith model GTM46402-4024	we we at at	alt alt all a
L/N to pla	astic enclosure	3020	No
L/N to ou	tput connector	3020	No
Primary a	and secondary of T1	3020	No
Seconda	ry and iron core of T1	3020	No
One laye	r of insulation tape	3020	No
Supplem	entary information: Max. RMS voltage	ge: 258V for T1.	with all south and

16.2	TABLE: Leakage current	what while mark white whi	P
ret united	Single phase appliances: 1.06 x rated voltage (V):	254.4	whitek



	Three phase appliances 1.06 x rated voltage divided by $\sqrt{3}$ (V):	- when when	t stat ward mark
Leakage	current between	(mA)	Max. allowed I (mA)
Tested w	ith model GTM46402-3005	St St	white white white
L/N to pla	astic enclosure	0.03	0.25
L/N to ou	tput connector	0.10	0.25
Tested w	ith model GTM46402-4024	e in in	a star to de
L/N to pla	astic enclosure	0.04	0.25
L/N to ou	tput connector	0.12	0.25
Supplem	entary information:	NUTER MUTE	white white white

L/N to output connector3020NoPrimary and secondary of T13020NoSecondary and iron core of T13020No	• P • •			TABLE: Dielectric strength	16.3
L/N to plastic enclosure3020NoL/N to output connector3020NoPrimary and secondary of T13020NoSecondary and iron core of T13020No			Te	e applied between:	Test voltag
L/N to output connector3020NoPrimary and secondary of T13020NoSecondary and iron core of T13020No	10 10	with the state	when when	model GTM46402-4024	Tested with
Primary and secondary of T13020NoSecondary and iron core of T13020No	No	3020 No	at set	ic enclosure	L/N to plasti
Secondary and iron core of T1 3020 No	No	3020 No	men and	it connector	L/N to output
	No	3020 No	at the	I secondary of T1	Primary and
	No	3020 No	-1	and iron core of T1	Secondary a
One layer of insulation tape 3020 No	No	3020 No		f insulation tape	One layer of
Supplementary information: Max. RMS voltage: 258V for T1.	wifes wife	r T1.	age: 258V for T ²	tary information: Max. RMS voltage:	Supplement

17	TABLE: Overload protection, thermocouple method P					
Temperatu	ure rise of part/at:	Max. temperature rise measured, ΔT (K)	Max. temperature rise limit, ΔT (K)			
Tested with	n model GTM46402-3005	Tet with white white white	mur mur m			
T1 winding	et intre white white we	89.6	150			
T1 bobbin		71.4	For cl.30.1			
Output lead	d wire	42.0	55			
Tested with	n model GTM46402-4024	white white white when whe	AN AN AN			
T1 winding	ALT WALL WALL WALL	74.0	150			
T1 bobbin	at at at at	64.4	For cl.30.1			
Output lead	d wire	34.7	55			
Supplemer	ntary information:	a mur mu m	i it it			

19.7	TABLE: Abnormal operation, locked rotor/moving parts					
m	Test voltage (V):	res white white white	-m_			
1ª	Ambient, t ₁ (°C):	6 15 15 1St	54			

Page 93 of 116



- 101

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			·	10
R ₁ (Ω)	R ₂ (Ω)	ΔΤ(Κ)	T (°C)	Max. T (°C)
m -m			* 5	3 at . 3 at
	R ₁ (Ω)	and the second second	R_1 (Ω) R_2 (Ω) Δ T (K)	R_1 (Ω) R_2 (Ω) Δ T (K) T (°C)

19.13 TABLE: Abnormal operation, temperature rises				
Thermo	couple locations	Max. temperature rise measured, ΔT (K)	Max. temperature rise limit, ΔT (K)	
- 5	atter atter water water	m m	1 10 - 10 St	
Supplem	entary information:	at the mark mark mark wh	when when when	

21.1	TABLE: Impac	t resistance	in she is	Р	
Impact	s per surface	Surface tested	Impact energy (Nm)	Commen	its
Thi	ree blows	Enclosure	0.5J	No hazar	ds
Supplem	entary information:	which which which	it at at set	50 .50	. N. L.

24.1 TA	BLE: Component	s			P
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾
Plug holder & Enclosure	SABIC INNOVATIVE PLASTICS B V	SE1X(GG)(f1), SE1	PPE+PS, Min. V-1, Min. thickness: 2.0mm, 105°C	IEC/EN 60335-1 UL 94 UL 746 A/B/C/D	Tested with appliance & UL E45329
(Alternative)	SABIC INNOVATIVE PLASTICS B V	SE100	PPE+PS, Min. V-1, Min. thickness: 2.0mm, 95°C	IEC/EN 60335-1 UL 94 UL 746 A/B/C/D	Tested with appliance & UL E45329
(Alternative)	SABIC INNOVATIVE PLASTI Alt. use CS B V	C2950	PC/ABS, Min. V-0, Min. thickness: 2.0mm, 85°C	IEC/EN 60335-1 UL 94 UL 746 A/B/C/D	Tested with appliance & UL E45329
(Alternative)	SABIC INNOVATIVE PLASTICS B V	CX7211(GG)	PC/ABS, Min. V-0, Min. thickness: 2.0mm, 90°C	IEC/EN 60335-1 UL 94 UL 746 A/B/C/D	Tested with appliance & UL E45329
(Alternative)	SABIC INNOVATIVE PLASTICS B V	945(GG)	PC, Min. V-0, Min. thickness: 2.0mm, 120°C	IEC/EN 60335-1 UL 94 UL 746 A/B/C/D	Tested with appliance & UL E45329
(Alternative)	SABIC INNOVATIVE PLASTICS B V	HF500R(f2)	PC, V-0, Min. thickness: 2.0mm, 125°C	IEC/EN 60335-1 UL 94 UL 746 A/B/C/D	Tested with appliance & UL E45329

Page 94 of 116



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24.1	TA	BLE: Component	S JER NIE S			Р
Object / par No.	rt	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹
(Alternative)) + 	SABIC JAPAN L L C	SE1X(GG)(c)(f1), SE1	PPE+PS, Min. V-1, Min. thickness: 2.0mm, 105°C	IEC/EN 60335-1 UL 94 UL 746 A/B/C/D	Tested with appliance & UL E207780
(Alternative)) vní	SABIC JAPAN L L C	SE100	PPE+PS, Min. V-1, Min. thickness: 2.0mm, 95°C	IEC/EN 60335-1 UL 94 UL 746 A/B/C/D	Tested with appliance & UL E207780
(Alternative)) et	SABIC JAPAN L L C	C2950(GG)(c)	PC/ABS, Min. V-0, Min. thickness: 2.0mm, 105°C	IEC/EN 60335-1 UL 94 UL 746 A/B/C/D	Tested with appliance & UL E207780
(Alternative)	na- 1	SABIC JAPAN L L C	CX7211(GG)	PC/ABS, Min. V-0, Min. thickness: 2.0mm, 90°C	IEC/EN 60335-1 UL 94 UL 746 A/B/C/D	Tested with appliance & UL E207780
(Alternative))ner	SABIC JAPAN L L C	945(GG)	PC, Min. V-0, Min. thickness: 2.0mm, 120°C	IEC/EN 60335-1 UL 94 UL 746 A/B/C/D	Tested with appliance & UL E207780
(Alternative))	TEIJIN CHEMICALS LTD	LN-1250G	PC, Min. V-0, Min. thickness: 2.0mm, 115°C	IEC/EN 60335-1 UL 94 UL 746 A/B/C/D	Tested with appliance & UL E50075
(Alternative))	CHI MEI CORPORATIO N	PA-765A	ABS, Min. V-0, Min. thickness: 2.0mm, 85°C	IEC/EN 60335-1 UL 94 UL 746 A/B/C/D	Tested with appliance & UL E56070
(Alternative)		CHI MEI CORPORATIO N	PC-540(Y)(a)	PC/ABS, Min. V-0, Min. thickness: 2.0mm, 85°C	IEC/EN 60335-1 UL 94 UL 746 A/B/C/D	Tested with appliance & UL E56070
PCB	الم. تاريم	DAFENG AREX ELECTRONICS TECHNOLOGY CO LTD	02V0, 03V0, 04V0	Min. 1.6 mm, thickness, min. V-0, 130°C	UL 796, UL 94 (Flammability test equivalent to IEC 60695-11-10)	UL E186016
(Alternative)) SCON	WALEX ELECTRONIC (WUXI) CO LTD	T2, T2A, T2B, T4	Min. 1.6 mm, thickness, min. V-0, 130°C	UL 796, UL 94 (Flammability test equivalent to IEC 60695-11-10)	UL E154355
(Alternative)	, (, , , , , , , , , , , , , , , , , ,	YUANMAN PRINTED CIRCUIT CO LTD	1V0	Min. 1.6 mm, thickness, min. V-0, 130°C	UL 796, UL 94 (Flammability test equivalent to IEC 60695-11-10)	UL E74757



24.1	TABLE: Com	ponents				Р
Object / par No.	t Manufac tradema		Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾
(Alternative)	GUANGI XINKE ELECTR CO LTD	4	XK2	Min. 1.6 mm, thickness, min. V-0, 130°C	UL 796, UL 94 (Flammability test equivalent to IEC 60695-11-10)	UL E231590
(Alternative)	GUANGI XINKE ELECTR CO LTD	-2m	XK1	Min. 1.6 mm, thickness, min. V-1, 130°C	UL 796, UL 94 (Flammability test equivalent to IEC 60695-11-10)	UL E231590
(Alternative)	Guangdo Hetong Technolo Ltd	5	CEM1, 2V0, FR4	Min. 1.6 mm, thickness, min. V-0, 130°C	UL 796, UL 94 (Flammability test equivalent to IEC 60695-11-10)	UL E243157
(Alternative)	CHEERF ELECTR (HK) LTE	ONIC	02, 03, 03A	Min. 1.6 mm, thickness, min. V-0, 130°C	UL 796, UL 94 (Flammability test equivalent to IEC 60695-11-10)	UL E199724
(Alternative)	JIANGSU DIFEIDA ELECTR CO LTD		DFD-1	Min. 1.6 mm, thickness, min. V-0, 130°C	UL 796, UL 94 (Flammability test equivalent to IEC 60695-11-10)	UL E213009
(Alternative)	DONGG DAYSUN ELECTR CO LTD	1 4.4	DS2	Min. 1.6 mm, thickness, min. V-0, 130°C	UL 796, UL 94 (Flammability test equivalent to IEC 60695-11-10)	UL E251754
(Alternative)	SUZHOL YILIHUA ELECTR CO LTD	500	YLH-1	Min. 1.6 mm, thickness, min. V-0, 130°C	UL 796, UL 94 (Flammability test equivalent to IEC 60695-11-10)	UL E251781
(Alternative)	BRITE P ELECTR (SUZHO LTD	ONICS	DKV0-3A, DGV0-3A	Min. 1.6 mm, thickness, min. V-0, 130°C	UL 796, UL 94 (Flammability test equivalent to IEC 60695-11-10)	UL E177671
(Alternative)	KUOTIAI ENT LTE		C-2, C-2A	Min. 1.6 mm, thickness, min. V-0, 130°C	UL 796, UL 94 (Flammability test equivalent to IEC 60695-11-10)	UL E227299
(Alternative)	PACIFIC INDUSTI LTD		PW-02, PW-03	Min. 1.6 mm, thickness, min. V-0, 130°C	UL 796, UL 94 (Flammability test equivalent to IEC 60695-11-10)	UL E228070



24.1	TA	BLE: Components	S JEE JEE			Р
Object / pa No.	rt	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾
(Alternative	;) ;/	SHENZHEN TONGCHUAN GXIN ELECTRONICS CO LTD	тсх	Min. 1.6 mm, thickness, min. V-0, 130°C	UL 796, UL 94 (Flammability test equivalent to IEC 60695-11-10)	UL E250336
(Alternative		KUNSHAN CITY QIANDENG WUQIAO ELECTRICAL APPLIANCE FACTORY	WQ-A, WQ-B, WQ-C	Min. 1.6 mm, thickness, min. V-0, 130°C	UL 796, UL 94 (Flammability test equivalent to IEC 60695-11-10)	UL E492425
(Alternative	;)	Jiangxi ZHONG XIN HUA Electronics Industry Co Ltd	ZXH-2	Min. 1.6 mm, thickness, min. V-0, 130°C	UL 796, UL 94 (Flammability test equivalent to IEC 60695-11-10)	UL E331298
(Alternative	;) ^`` 	Shenzhen Jia Li Chuang Technology Development Co LTD	JLC-2	Min. 1.6 mm, thickness, min. V-0, 130°C	UL 796, UL 94 (Flammability test equivalent to IEC 60695-11-10)	UL E479892
Fuse (FS1) (optional)	nr.	Conquer ElectronicsCo., Ltd.	MST series	T2A, 250V	IEC 60127-1 IEC 60127-3 UL 248-1 UL 248-14	VDE 40017118 UL E82636
(Alternative		Suzhou Walter Electronic Co. Ltd.	2010	T2A, 250V	IEC 60127-1 IEC 60127-3 UL 248-1 UL 248-14	VDE 40018781 UL E220181
(Alternative	e)	Suzhou Walter Electronic Co. Ltd.	ICP	T2A, 250V	IEC 60127-1 IEC 60127-3 UL 248-1 UL 248-14	VDE 40012824 UL E56092
(Alternative		Bel Fuse Ltd.	RST(For VDE), RSTA(For UL)	T2A, 250V	IEC 60127-1 IEC 60127-3 UL 248-1 UL 248-14	VDE 40011144 UL E506667
(Alternative	;) 	Bel Fuse Ltd.	MRT	T2A, 250V	IEC 60127-1 IEC 60127-3 UL 248-1 UL 248-14	VDE 139937
(Alternative		Cooper Bussmann LLC	SS-5	T2A, 250V	IEC 60127-1 IEC 60127-3 UL 248-1 UL 248-14	VDE 40015513 UL E19180



24.1	TABLE: Component	S JE JE.			Р
Object / parl No.	t Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹
(Alternative)	Dongguan Better	932	T2A, 250V	IEC 60127-1 IEC 60127-3	VDE 40033369
	What white wh	white white	Jet Jet	UL 248-1 UL 248-14	UL E300003
(Alternative)	Hollyland Company	5ET	T2A, 250V	IEC 60127-1 IEC 60127-3	VDE 40015669
	Limited	MUTER WALTER V	in the work with	UL 248-1 UL 248-14	UL E156471
(Alternative)	Hollyland Company	32S-020H	T2A, 250V	IEC 60127-1 IEC 60127-3	VDE 40011830
	Limited	et milet while	A WALTER WALTER	UL 248-1 UL 248-14	UL E156471
(Alternative)	Conquer Electronics Co.,	MET series	T2A, 250V	IEC 60127-1 IEC 60127-3	VDE 40017157
	Ltd.	wat wat	wet must whit	UL 248-1 UL 248-14	UL E82636
(Alternative)	Shenzhen Lanson	SMT	T2A, 250V	IEC 60127-1 IEC 60127-3	VDE 40012592
	Electronics Co. Ltd.			UL 248-1 UL 248-14	UL E221465
(Alternative)	ZhongshanLan bao Electrical	RTI-10 Serie(s)	T2A, 250V	IEC 60127-1 IEC 60127-3	VDE 40017009
	Appliances Co., Ltd.	whitek whiter	of the suntry of	UL 248-1 UL 248-14	UL E213695
X capacitor (CX1)	Cheng Tung Industrial Co.,	СТХ	Max. 0.33µF, Min.250V,	IEC/EN 60384-14	ENEC-0267
(optional)	Ltd.	a at a	100°C, X1 or X2	UL 60384-14 UL 1414	UL E193049
(Alternative)		MEX	Max. 0.33µF,	IEC/EN 60384-14	VDE 119119
	Industrial Co. Ltd.	whet white	Min.250V, 100°C, X1 or X2	UL 60384-14 UL 1414	UL E222911
(Alternative)	JOEY ELECTRONICS	MPX	Max. 0.33µF, Min.250V,	IEC/EN 60384-14	VDE 40032481
	(DONG GUAN) CO LTD	untite white w	100°C, X1 or X2	UL 60384-14 UL 1414	UL E216807
(Alternative)	Ultra Tech Xiphi Enterprise Co.	HQX	Max. 0.33µF, Min.250V,	IEC/EN 60384-14	VDE 40015608
nt junt	Ltd.	A INLIER WALTE	100°C, X1 or X2	UL 60384-14 UL 1414	UL E183780
(Alternative)	Xiangtai Electronic (Shenzhen) Co., Ltd.	MKP/MPX	Max. 0.33µF, Min.250V, 100°C, X1 or X2	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40036065 UL E357475

Page 98 of 116



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24.1	TABLE: Component	s strange			Р
Object / parl No.	t Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾
(Alternative)	Carli Electronics Co., Ltd.	MPX	Max. 0.33µF, Min.250V, 100°C, X1 or X2	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40008520 UL E120045
(Alternative)	Dain Electronics Co., Ltd.	MEX, MPX, NPX	Max. 0.33µF, Min.250V, 100°C, X1 or X2	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40018798 UL E147776
(Alternative)	Yuon Yu Electronics Co. Ltd.	MPX	Max. 0.33µF, Min.250V, 100°C, X1 or X2	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40032392 UL E200119
(Alternative)	Sinhua Electronics (Huzhou) Co., Ltd.	MPX	Max. 0.33µF, Min.250V, 100°C, X1 or X2	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40014686 UL E237560
(Alternative)	Jiangsu XinghuaHuayu Electronics Co., Ltd.	MPX - Series	Max. 0.33µF, Min.250V, 100°C, X1 or X2	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40022417 UL E311166
(Alternative)	Carli Electronics Co., Ltd.	MPX	Max. 0.47µF, Min.250V, 100°C, X2	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40008520 UL E120045
Y capacitor (CY1, CY2) (optional)	TDK Corporation	CD	Y1, AC250V, max. 2200pF. 125°C	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40029780 UL E37861
(Alternative)	Success Electronics Co., Ltd.	SE	Y1, AC250V, max. 2200pF. 125°C	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40037211 VDE 40020002 UL E114280
(Alternative)	Success Electronics Co., Ltd.	SB	Y1, AC250V, max. 2200pF. 125°C	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40037221 VDE 40020001 UL E114280
(Alternative)	Walsin Technology Corp.	АН	Y1, AC250V, max. 2200pF. 125°C	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40001804 UL E146544
(Alternative)	Haohua Electronic Co.	СТ7	Y1, AC250V, max. 2200pF. 125°C	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40003902 UL E233106

Page 99 of 116



24.1 TA	BLE: Components	S JE NIE			Р
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾
(Alternative)	Xiangtai Electronic (Shenzhen) Co., Ltd.	YO-series	Y1, AC250V, max. 2200pF. 125°C	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40036880 UL E319473
(Alternative)	JUHONG ELECTRONICS LTD	JB- series	Y1, AC250V, max. 2200pF. 125°C	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40035339 UL E253194
(Alternative)	Murata Mfg. Co., Ltd.	KX	Y1, AC250V, max. 2200pF. 125°C	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40002831 UL E37921
(Alternative)	Jyh Chung Electronic Co., Ltd.	JD	Y1, AC250V, max. 2200pF. 125°C	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 137027 UL E187963
(Alternative)	WELSON INDUSTRIAL CO LT D	WD	Y1, AC250V, max. 2200pF. 125°C	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40016157 UL E104572
(Alternative)	Walsin Technology Corp.	AC	Y1, AC250V, max. 2200pF. 125°C	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40001829 UL E146544
(Alternative)	TDK-EPC Corporation, Capacitors Group Circuit Devices Business Group	CS	Y1, AC250V, max. 2200pF. 125°C	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40029781 UL E37861
(Alternative)	Murata Mfg. Co., Ltd.	KY	Y1, AC250V, max. 2200pF. 125°C	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40006273 UL E37921
(Alternative)	Success Electronics Co., Ltd.	SF WILLIN	Y1, AC250V, max. 2200pF. 125°C	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40016665 UL E114280
(Alternative)	Shantou High-New Technology Dev. Zone Songtian Enterprise Co., Ltd.	CD, CE	Y1, AC250V, max. 2200pF	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40025754 UL E208107
Varistor (MOV1 (optional)) Thinking Electronic Industrial Co., Ltd.	TVR10471K, TVR14471K	Max. Continuous voltage: min 300Vac(rms), 85°C, The coating is V-0	IEC 61051-1 IEC 61051-2	VDE 005944 UL E314979



24.1 T	ABLE: Component	s 5° .5° .			Р
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾
(Alternative)	CENTRA SCIENCE CORP	CNR-10D471K, CNR-14D471K	Max. Continuous voltage: min 300Vac(rms), 85°C, The coating is V-0	IEC 61051-1 IEC 61051-2	VDE 40008220 UL E316325
(Alternative)	SUCCESS ELECTRONICS CO LTD	SVR10D471K, SVR14D471K	Max. Continuous voltage: min 300Vac(rms), 85°C, The coating is V-0	IEC 61051-1 IEC 61051-2	VDE 40030401 UL E330256
(Alternative)	WALSIN TECHNOLOGY CORP	VZ10D471K, VZ14D471K	Max. Continuous voltage: min 300Vac(rms), 85°C, The coating is V-0	IEC 61051-1 IEC 61051-2	VDE 40010090 UL E309297
(Alternative)	BestBright Electronics Co. Ltd	10D471K, 14D471K	Max. Continuous voltage: min 300Vac(rms), 85°C, The coating is V-0	IEC 61051-1 IEC 61051-2	VDE 40005858 UL E315524
(Alternative)	CERAMATE TECHNICAL CO LTD	GNR10D471K, GNR14D471K	Max. Continuous voltage: min 300Vac(rms), 85°C, The coating is V-0	IEC 61051-1 IEC 61051-2	VDE 40031745 UL E315429
(Alternative)	BRIGHTKING (SHENZHEN) CO LTD	10D471K, 14D471K	Max. Continuous voltage: min 300Vac(rms), 85°C, The coating is V-0	IEC 61051-1 IEC 61051-2	VDE 40027827 UL E327997
(Alternative)	JOYIN CO LTD	JVT10N471K, JVT14N471K	Max. Continuous voltage: min 300Vac(rms), 125°C, The coating is V-0	IEC 61051-1 IEC 61051-2	VDE 005937 UL E325508
Photo coupler (US2)	Everlight Electronics Co., Ltd.	EL1018	Dti=0.5mm, Int. dcr=6.0mm, Ext. dcr=7.7mm, thermal cycling test, 110°C	IEC/EN 60747-5-2	VDE 40028391
(Alternative)	COSMO Electronics Corporation	KT1018	Dti=0.6mm , Int. dcr=8.0mm, Ext. dcr=8.0mm, thermal cycling test, 115°C	IEC/EN 60747-5-2	VDE 40031267
Inductor (LF1)	SHEN ZHEN ZHI JIE ELECTRONIC CO.,LTD	NF00025	Min. 88uH, Ф0.4*1Р*9.0TS	IEC/EN 60335-1	Tested with appliance



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24.1 TA	BLE: Component	S JEE STELLS			Р
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾
-Magnet wire	Boluo County Pengcheng Copper Co., Ltd	UEW	MW75-C, 130°C	UL 1446	UL E229423
(Alternative)	Heyuan Koshen Insulator Co Ltd	TILW-B	130°C	UL 1446	UL E365580
-Teflon tube	SHENZHEN JDD TECH NEW MATERIAL CO LTD	MTFL	600V, 200°C	UL 224	UL E345553
Inductor (LF2)	SHENZHEN QUNYI ELECTRON CO., LTD.	NF00131	Min. 9mH, Φ0.4*1P*40.5TS	IEC/EN 60335-1	Tested with appliance
-Magnet wire	JUNG SHING WIRE CO LTD	UEW	130°C	UL 1446	UL E174837
-PCB	KINGBOARD LAMINATES HOLDINGS LTD	KB-3152	V-0, 130°C	UL 796	UL E123995
-Insulating tape	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	PZ-280	130°C	UL 510	UL E165111
-Ероху	DONG GUAN SHI PAI HUA CHUANG MATERIAL FTY	H907-HF	V-1	UL 94	UL E304477
-Varnish	HANG CHEUNG COATINGS (HUIYANG) LTD	8562*	155°C	UL 1446	UL E200154
Transformer (T1)	GlobTek	XF01032(5-8.9V), XF01033(9-14.9V) XF01034(15-24V)	Class B, with critical component listed below	IEC/EN 60335-1	Tested with appliance
-Magnet wire	PACIFIC ELECTRIC WIRE & CABLE (SHENZHEN) CO LTD	UEWN/U	MW28-C, 130°C	UL 1446	UL E201757



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24.1 7	ABLE: Component	s Strates			Р
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾
(Alternative)	BOLUO COUNTY XIN LONG ELECTRICIAN DATA CO LTD	2UEW-F	MW 79-C, 155°C	UL 1446	UL E229423
-Triple-insulat wire (Secondary)	ed Great Leoflon IndustrialCo., Ltd.	TRW (B) Series	Class B, reinforced insulation	IEC/EN 60335-1 UL 2353	VDE 136581 UL E211989
(Alternative)	KBI COSMOLINK CO.,LTD	TIW-M Series	Class B, reinforced insulation	IEC/EN 60335-1 UL 2353	VDE 138053 UL E213764
(Alternative)	Furukawa Electric Co., Ltd.Electronics & Automotive Systems CompanyGloba I Business Development Division	TEX-E	Class B, reinforced insulation	IEC/EN 60335-1 UL 2353	VDE 006735 UL E206440
(Alternative)	TOTOKU ELECTRIC CO LTD	TIW-2 Series	Reinforced insulation, rated 130° C (Class B)	IEC/EN 60335-1 UL 2353	VDE 40044910 UL E166483
(Alternative)	E&B TECHNOLOGY CO LTD	E&B-XXXB, E&B-XXXB-1	Reinforced insulation, Class B	IEC/EN 60335-1 UL 2353	VDE 40023473 UL E315265
(Alternative)	SHENZHEN JIUDING NEW MATERIAL CO LTD	DTIW-B	Reinforced insulation, Class B	IEC/EN 60335-1 UL 2353	VDE 40037495 UL E357999
-Bobbin	CHANG CHUN PLASTICS CO LTD	T375J(G5)(G6), T373J, T375HF	V-0, 150°C, thickness 0.45 mm min.	IEC/EN 60335-1	Tested with appliance & UL E59481
(Alternative)	CHANG CHUN PLASTICS CO LTD	4130	V-0, 140°C, thickness 0.74 mm min.	IEC/EN 60335-1	Tested with appliance & UL E59481
(Alternative)	SUMITOMO BAKELITE CO LTD	PM-9820, PM-9823, PM-9630	V-0, 150°C, thickness 0.45 mm min.	IEC/EN 60335-1	Tested with appliance & UL E41429
(Alternative)	SHOWA DENKO MATERIALS TECHNO SERVICE CO., LTD.	CP-J-8800	V-0, 150°C, thickness 0.45 mm min.	IEC/EN 60335-1	Tested with appliance & UL E514814



24.1 TA	BLE: Component	s 50 50	mer me m	In In	Р
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾
-Insulating tape	3M COMPANY ELECTRICAL MARKETS DIV (EMD)	1350F-1 (b), 1350T-1, 44	Min.130°C	IEC/EN 60335-1 UL 510	Tested with appliance & ULE17385
(Alternative)	BONDTEC PACIFIC CO LTD	370S(b)	Min.130°C	IEC/EN 60335-1 UL 510	Tested with appliance & UL E175868
(Alternative)	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	PZ, CT, WF	Min.130°C	IEC/EN 60335-1 UL 510	Tested with appliance 7 UL E165111
(Alternative)	JINGJIANG JINGYI ADHESIVE PRODUCT CO LTD	JY25-A(b)	Min.130°C	IEC/EN 60335-1 UL 510	Tested with appliance & UL E246950
(Alternative)	CHANG SHU LIANG YI TAPE INDUSTRY CO LTD	LY-XX(a)(b)	Min.130°C	IEC/EN 60335-1 UL 510	Tested with appliance & UL E246820
-Teflon tube	GREAT HOLDING INDUSTRIAL CO LTD	TFT, TFS, TFL	Min. 300V, 200°C	UL 224	UL E156256
(Alternative)	SHENZHEN WOER HEAT-SHRINK ABLE MATERIAL CO LTD	WF	600V, 200°C	UL 224	UL E203950
(Alternative)	CHANGYUAN ELECTRONICS (SHENZHEN) CO LTD	CB-TT-T, CB-TT-S	Min. 300V, 200°C	UL 224	UL E180908
-Varnish	SUZHOU TAIHU ELECTRIC ADVANCED MATERIAL CO LTD	T-4260(a)	130°C	UL 1446	UL E228349
Output lead wire	KUNSHAN NEWZHICHEN GELECTRONI CSTECHNOLO GIES CO LTD	1185, 2464, 2468, 1015	Min. 20AWG, min. 300Vac, min. 80°C	IEC/EN 60335-1	Tested with appliance & UL E237831



24.1	TABLE: Component	s se se			P
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹
(Alternative)	ZHUANG SHANCHUANE LECTRICALPR ODUCTS(KUN SHAN) COLTD	1185, 2464, 2468, 1015	Min. 20AWG, min. 300Vac, min. 80°C	IEC/EN 60335-1	Tested with appliance & UL E333601
(Alternative)	ZHUANG SHANCHUANE LECTRICALPR ODUCTS(KUN SHAN) COLTD	SPT-1, SPT-2	Min. 20AWG, min. 300Vac, min. 80°C	IEC/EN 60335-1	Tested with appliance & UL E333536
(Alternative)	SUZHOU JIAHUISHU ELECTRONIC CO LTD	1185, 2464, 2468, 1015	Min. 20AWG, min. 300Vac, min. 80°C	IEC/EN 60335-1	Tested with appliance & UL E353532
(Alternative)	SUZHOUDIOU DEELECTRONI CSCO LTD	SPT-1, SPT-2	Min. 20AWG, min. 300Vac, min. 80°C	IEC/EN 60335-1	Tested with appliance & UL E336192
Material of qu connector	iick Suzhou RLH Electronics Technology Co. ,Ltd	Bress H65	PBT	IEC/EN 60335-1	Tested with appliance
(Alternative)	Suzhou xianlede Electronics Co.,Ltd	Bress H65	РВТ	IEC/EN 60335-1	Tested with appliance
(Alternative)	HUANG JI ME CHANICAL EL ECTRONIC FT Y.	Bress H65	PBT	IEC/EN 60335-1	Tested with appliance

1) Provided evidence ensures the agreed level of compliance. See OD-CB2039.

28.1	TABLE: Threade	TABLE: Threaded part torque test					
Threaded	part identification	Diameter of thread (mm)	Column number (I, II, or III)	Applied torque (Nm			
- unite a	we we we	- A 0	- 10 - 50 J	and the shirt white			
 Supplemer	ntary information:	The much shirt	Martin Micro Mich	-in- m			

29.1	TABLE: Clearances	int with with the	- P
in me	Overvoltage category.:	Category II	r m
t set	white our on the work of	Type of insulation:	et set

Page 105 of 116



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Rated impulse voltage (V):	Min. cl (mm)	Basic (mm)	Supplementary (mm)	Reinforced (mm)	Functional (mm)	Verdict / Remark
330 0	0,2* / 0,5 / 0,8**	m- n	· · · ·		st - st	Jet - Jet
500	0,2* / 0,5 / 0,8**	at - 1	t att and	in the	<u></u>	L. W. 1
800	0,2* / 0,5 / 0,8**	2 the		5-1		et star s
1 500	0,5 / 0,8** / 1,0***	*	JEt - MUTE	men -men	m. m	m a
2 500	1,5 / <u>2,0</u> ***	>2.0	>2.0	s - st	>2.0	E STP ST
4 000	3,0 / <u>3,5</u> ***	J.	Let of UN	>3.5	n m	Р
6 000	5,5 / 6,0***	m - 11		et tot	500 - 500	WEITE BALLE
8 000	8,0 / 8,5***	5 ⁰⁻	Set ment mer	m. n		1 - A
10 000	11,0 / 11,5***		1+ 15	<u></u>	The state of the s	in name

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

29.2	TABLE:	Creep	age dis	tances,	basic, su	ppleme	entary a	nd reinfor	ced in	sulati	on	P
Working voltage (V):		Junio P	7.7	white Miles	اس. تدرید	EX	tret whi					
iet antif	*	1		2	anter A	, t	3	1.N		Гуре о sulati		X WALTE
	st	, et	́Ma	aterial g	roup	Material group			21. 1.			
MITE	mer m	5 3	1 2	П	IIIa/IIIb	1	<i>_</i> ∦−II	IIIa/IIIb*	B**	S**	R**	Verdict
≤	50	0,18	0,6	0,85	1,2	1,5	1,7	1,9	~	—	T	N/A
2. 11	50	0,18	0,6	0,85	1,2	1,5	- 1,7<	1,9	J. S.	n.	·~	N/A
≤	50 🖉	0,36	1,2	1,7	2,4	3,0	3,4	3,8			Ļ.	N/A
~ v ⁿ 1.	25	0,28	0,75	1,05	1,5	1,9	2,1	2,4	Nº2	and the second	-m	N/A
e _1	25	0,28	0,75	1,05	1,5	1,9	2,1	2,4	÷	1th		N/A
- ³⁰ 1.	25	0,56	1,5	2,1	3,0	3,8	4,2	4,8		<u> </u>	2hr	N/A
2 ئىر	50	0,56	1,25	1,8	<u>2,5</u>	3,2	3,6	4,0	>2.6	19 <u>1-</u>	State -	P
2	50	0,56	1,25	1,8	<u>2,5</u>	3,2	3,6	4,0	-m	>2.6	—	Р
_్_2	50 50	1,12	2,5	3,6	<u>5,0</u>	6,4	7,2	8,0		ني. س	>5.2	P _N
4	00	1,0	2,0	2,8	4,0	5,0	5,6	6,3	27		—	N/A
4	00	1,0	2,0	2,8	4,0	5,0	5,6	6,3	<u>500</u>	MALTE	500	N/A
4	00	2,0	4,0	5,6	8,0 <	10,0	11,2	12,6		7	13	N/A
J 5	00 🔗	1,3	2,5	3,6	5,0	6,3	7,1	8,0	. di	°	n <u>r.</u>	≪N/A
<i>. :</i> 5	00	1,3	2,5	3,6	5,0	6,3	7,1	8,0		d.	, de	N/A



Working (V	-	ext in	Jet w		epage di (mm) ollution d		Trex M	LIEX WAL				white
nr m	et . 68	1	× min	2	ex white	main	3	white		Type o sulatio		et s
er mer	- ne	20.	Ма	iterial g	roup	Ma	terial g	roup	In Law	mer	-sur	. m
of St	55	JUET	. A	. Sull	IIIa/IIIb	24	<u></u> Ц	llla/lllb*	B**	S**	R**	Verdict
50	0	2,6	5,0	7,2	10,0	12,6	14,2	16,0	2_4	<u></u>	2hr	N/A
>630 an	id ≤800	1,8	3,2	4,5	6,3	8,0	9,0	10,0	*	Å.	<u>_</u>	N/A
>630 an	id ≤800	1,8	3,2	4,5	6,3	8,0	9,0	10,0	-m			N/A
>630 an	id ≤800	3,6	6,4	9,0	12,6	16,0	18,0	20,0		د	S.	N/A
>800 and	d ≤1000	2,4	4,0	5,6	8,0	10,0	11,0	12,5	m.	-20	_	N/A
>800 and	d ≤1000	2,4	4,0	5,6	8,0	10,0	11,0	12,5	<u>je</u>	NUTE	-	N/A
>800 and	d ≤1000	4,8	8,0	11,2	16,0	20,0	22,0	25,0	_			N/A
>1000 an	id ≤1250	3,2	5,0	7,1	10,0	12,5	14,0	16,0	Ser al	S	<u>11-12</u>	N/A
>1000 an	id ≤1250	3,2	5,0	7,1	10,0	12,5	14,0	16,0	_	de .	,÷	N/A
>1000 an	id ≤1250	6,4	10,0	14,2	20,0	25,0	28,0	32,0	The second			N/A
>1250 an	id ≤1600	4,2	6,3	9,0	12,5	16,0	18,0	20,0	7.8	<	it	N/A
>1250 an	id ≤1600	4,2	6,3	9,0	12,5	16,0	18,0	20,0	m <u>~</u>	m		N/A
>1250 an	id ≤1600	8,4	12,6	18,0	25,0	32,0	36,0	40,0	1	-	.5	N/A
>1600 an	id ≤2000	5,6	8,0	11,0	16,0	20,0	22,0	25,0		· _	-20-	N/A
>1600 an	id ≤2000	5,6	8,0	11,0	16,0	20,0	22,0	25,0	*	5	1. <u>1. 1. 1.</u>	N/A
>1600 an	id ≤2000	11,2	16,0	22,0	32,0	40,0	44,0	50,0	-20		, de	N/A
>2000 an	id ≤2500	7,5	10,0	14,0	20,0	25,0	28,0	32,0	Nº I		<u></u>	N/A
>2000 an	id ≤2500	7,5	10,0	14,0	20,0	25,0	28,0	32,0			—	N/A
>2000 an	id ≤2500	15,0	20,0	28,0	40,0	50,0	56,0	64,0	NU.	Jon Charles	su	N/A
>2500 an	id ≤3200	10,0	12,5	18,0	25,0	32,0	36,0	40,0	A	-		N/A
>2500 an	id ≤3200	10,0	12,5	18,0	25,0	32,0	36,0	40,0		× .	m.	N/A
>2500 an	nd ≤3200	20,0	25,0	36,0	50,0	64,0	72,0	80,0	Ļ— ,	19 <u>1</u>	SET	N/A
>3200 an	id ≤4000	12,5	16,0	22,0	32,0	40,0	45,0	50,0	m		—	N/A
>3200 an	id ≤4000	12,5	16,0	22,0	32,0	40,0	45,0	50,0		- 5	ø <u>-</u>	N/A
>3200 an	id ≤4000	25,0	32,0	44,0	64,0	80,0	90,0	100,0	211	20		N/A
>4000 an	id ≤5000	16,0	20,0	28,0	40,0	50,0	56,0	63,0	5th	J. S. S. C.		N/A
>4000 an	id ≤5000	16,0	20,0	28,0	40,0	50,0	56,0	63,0	_			N/A
>4000 an	id ≤5000	32,0	40,0	56,0	80,0	100,0	112,0	126,0		<u>ي</u>	W.C.	N/A
>5000 an	id ≤6300	20,0	25,0	36,0	50,0	63,0	71,0	80,0		_	4	N/A



tage	1	ret un		epage di (mm) ollution d			LIEK WAL				
WATER	1	* 5	2								
n.	S. 1				white	3	MULT		Гуре о sulatio		
		Material group			Material group			mer mer m			- m
Str.	STER	. Ale	J.	Illa/IIIb	24	́ Ц	IIIa/IIIb*	B**	S**	R**	Verdict
6300	20,0	25,0	36,0	50,0	63,0	71,0	80,0	~	1	n.	N/A
6300	40,0	50,0	72,0	100,0	126,0	142,0	160,0	*	<u>et</u>	Set	N/A
3000	25,0	32,0	45,0	63,0	80,0	90,0	100,0	m		_	N/A
3000	25,0	32,0	45,0	63,0	80,0	90,0	100,0	(F	<u></u>	N/A
3000	50,0	64,0	90,0	126,0	160,0	180,0	200,0	$\overline{v_{n_{-}}}$	-20		N/A
0000	32,0	40,0	56,0	80,0	100,0	110,0	125,0	Set	10		N/A
0000	32,0	40,0	56,0	80,0	100,0	110,0	125,0				N/A
0000	64,0	80,0	112,0	160,0	200,0	220,0	250,0	~	<u>5 </u>	Mr. Co	N/A
2500	40,0	50,0	71,0	100,0	125,0	140,0	160,0			, de	N/A
2500	40,0	50,0	71,0	100,0	125,0	140,0	160,0	Jun C	ne.	_	N/A
2500	80,0	100,0	142,0	200,0	250,0	280,0	320,0	<u> </u>		*	N/A
	300 000 000 000 0000 0000 2500 2500 2500	300 40,0 000 25,0 000 25,0 000 50,0 0000 32,0 0000 64,0 2500 40,0 2500 40,0	300 20,0 25,0 300 40,0 50,0 300 25,0 32,0 000 25,0 32,0 000 25,0 32,0 000 50,0 64,0 0000 32,0 40,0 0000 32,0 40,0 0000 64,0 80,0 0000 64,0 50,0 2500 40,0 50,0 2500 80,0 100,0	300 20,0 25,0 36,0 300 40,0 50,0 72,0 000 25,0 32,0 45,0 000 25,0 32,0 45,0 000 25,0 32,0 45,0 000 50,0 64,0 90,0 0000 32,0 40,0 56,0 0000 32,0 40,0 56,0 0000 64,0 80,0 112,0 2500 40,0 50,0 71,0	300 20,0 25,0 36,0 50,0 300 40,0 50,0 72,0 100,0 000 25,0 32,0 45,0 63,0 000 25,0 32,0 45,0 63,0 000 25,0 32,0 45,0 63,0 000 50,0 64,0 90,0 126,0 0000 32,0 40,0 56,0 80,0 0000 32,0 40,0 56,0 80,0 0000 64,0 80,0 112,0 160,0 2500 40,0 50,0 71,0 100,0 2500 40,0 50,0 71,0 100,0	300 20,0 25,0 36,0 50,0 63,0 300 40,0 50,0 72,0 100,0 126,0 000 25,0 32,0 45,0 63,0 80,0 000 25,0 32,0 45,0 63,0 80,0 000 25,0 32,0 45,0 63,0 80,0 000 50,0 64,0 90,0 126,0 160,0 0000 32,0 40,0 56,0 80,0 100,0 0000 32,0 40,0 56,0 80,0 100,0 0000 32,0 40,0 56,0 80,0 100,0 0000 64,0 80,0 112,0 160,0 200,0 2500 40,0 50,0 71,0 100,0 125,0 2500 40,0 50,0 71,0 100,0 125,0	300 20,0 25,0 36,0 50,0 63,0 71,0 300 40,0 50,0 72,0 100,0 126,0 142,0 000 25,0 32,0 45,0 63,0 80,0 90,0 000 25,0 32,0 45,0 63,0 80,0 90,0 000 25,0 32,0 45,0 63,0 80,0 90,0 000 25,0 32,0 45,0 63,0 80,0 90,0 000 50,0 64,0 90,0 126,0 160,0 180,0 0000 32,0 40,0 56,0 80,0 100,0 110,0 0000 32,0 40,0 56,0 80,0 100,0 120,0 0000 64,0 80,0 112,0 160,0 200,0 220,0 2500 40,0 50,0 71,0 100,0 125,0 140,0	300 20,0 25,0 36,0 50,0 63,0 71,0 80,0 300 40,0 50,0 72,0 100,0 126,0 142,0 160,0 000 25,0 32,0 45,0 63,0 80,0 90,0 100,0 000 25,0 32,0 45,0 63,0 80,0 90,0 100,0 000 25,0 32,0 45,0 63,0 80,0 90,0 100,0 000 25,0 32,0 45,0 63,0 80,0 90,0 100,0 000 50,0 64,0 90,0 126,0 160,0 180,0 200,0 0000 32,0 40,0 56,0 80,0 100,0 110,0 125,0 0000 32,0 40,0 56,0 80,0 100,0 110,0 125,0 0000 64,0 80,0 112,0 160,0 200,0 220,0 250,0 2500 40,0 50,0	300 20,0 25,0 36,0 50,0 63,0 71,0 80,0 300 40,0 50,0 72,0 100,0 126,0 142,0 160,0 000 25,0 32,0 45,0 63,0 80,0 90,0 100,0 000 25,0 32,0 45,0 63,0 80,0 90,0 100,0 000 25,0 32,0 45,0 63,0 80,0 90,0 100,0 000 50,0 64,0 90,0 126,0 160,0 180,0 200,0 0000 32,0 40,0 56,0 80,0 100,0 110,0 125,0 0000 32,0 40,0 56,0 80,0 100,0 110,0 125,0 0000 64,0 80,0 112,0 160,0 200,0 220,0 250,0 2500 40,0 50,0 <	300 20,0 25,0 36,0 50,0 63,0 71,0 80,0	300 20,0 25,0 36,0 50,0 63,0 71,0 80,0 — — 300 40,0 50,0 72,0 100,0 126,0 142,0 160,0 — — 000 25,0 32,0 45,0 63,0 80,0 90,0 100,0 — — 000 25,0 32,0 45,0 63,0 80,0 90,0 100,0 — — 000 25,0 32,0 45,0 63,0 80,0 90,0 100,0 — — 000 25,0 32,0 45,0 63,0 80,0 90,0 100,0 — — 000 50,0 64,0 90,0 126,0 160,0 180,0 200,0 — — 0000 32,0 40,0 56,0 80,0 100,0 110,0 125,0 — — 0000 32,0 40,0 56,0 80,0 100,0 125,0 250,0 — — 2500 40,0 50,0 71,0 100,0 </td

Supplementary information:

*) Material group IIIb is allowed if the working voltage does not exceed 50 V
 **) B = Basic insulation, S = Supplementary insulation, R = Reinforced insulation

9.2 TABLE	: Creep	age dis	tances	, function	al insula	ation		We we we
Working voltage (V):	int whi	re vini t re	A MULTER	MITER MONTHER MONTH				
ret white white	N1	m	2	A	A	3	det .	JER NUER WHITE
CA A	1th	Ma	terial g	roup	ം Ma	aterial g	Iroup	and the second
white white	n.	$v_{t_{t_{t_{t_{t_{t_{t_{t_{t_{t_{t_{t_{t_$	20 II	Illa/IIIb	Jel-	dt	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	1,1	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	<u>2,0</u>	2,5	2,8	3,2	No Ant B an
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

Page 108 of 116



>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

30.1	TABLE: Ball P	ressure Test of Therm	oplastics	NUTER JAITE MART	Р	
Allowed	impression diame	eter (mm):	2.0	- Alt		
Object/ F	Part No./ Material	Manufacturer/ trademark	Test temperature (°C)	Impression diamet	er (mm)	
Plug hold	er & Enclosure	See appended table 24.1	125	1.2 M	in m	
T1 bobbir	i un in	See appended table 24.1	125	0.6	WALTE	

Supplementary information:

All alternative components listed on table 24.1 were considered and the most unfavourable test result is recorded.

30.2 1	ABLE: Resistan	ce to hea	t and fire	- Glow wi	re tests			P			
Object/	Manufacturer		Glow wire test (GWT); (°C)								
Part No./ Material	55 150 5	L'ERON'	6	50	750		0.50	Verdict			
me m	trademark	550	te	ti	te	tin	850				
Plug holder & Enclosure	See appended table 24.1	P	NUTER .	nitet al	0s	0s	P.	Set P. C			
T1 bobbin	See appended table 24.1	W-	Lint ou	STR. WALS	0s	0s	ST P ST	P			
Output connector	See appended table 24.1	sex wh	Tex-	st <u>-</u> rrs surir	0s	0s	Р	on P vi			
Object/ Part No./	Manufacturer /	Glov		mmability /FI), °C	index	-	ion temp. T), °C	Verdict			

Waltek Testing Group (Shenzhen) Co., Ltd. http://www.waltek.com.cn



Material	trademark	<u></u> 550	650	750	850	675	775	1. 10
men m	mr m	-20	14	- the	1 <u>1</u>	er <u>_</u> 1er	In the set	the Autor
The test spec	imen passed the	e glow wire	e test (GW	/T) with n	o ignition [(te	– ti) ≤ 2s]	(Yes/No):	Yes
If no, then sur	rounding parts p	assed the	needle-fl	ame test	of annex E (`	Yes/No)		N/A
	imen passed the wire (Yes/No)?.							No
Ignition of the	specified layer	placed und	derneath t	he test sp	ecimen (Yes	/No)		No

Supplementary information:

- 550 °C GWT not relevant (or applicable) to parts of material classified at least HB40 or if relevant HBF
 - The GWIT pre-selection option, the 850 °C GWFI pre-selection option, and the 850 °C GWT are not relevant (or applicable) for attended appliances

All alternative components listed on table 24.1 were considered and the most unfavourable test result is recorded.

30.2/30.2.4 TABLE: Needle- flame test (NFT)								
Object/ Part No./ Material	Manufacturer/ trademark	Duration of application of test flame (ta); (s)	Ignition of specified layer Yes/No	Duration of burning (tb) (s)	Verdict			
_5° .5° .5	s_ner wer	20	s_ st	15-15	5			

Supplementary information:

- NFT not relevant (or applicable) for Parts of material classified as V-0 or V-1

- NFT not relevant (or applicable) for Base material of PCBs classified as V-0 or if relevant VTM-0

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Page 110 of 116

Photo Documentation

Model: GTM46402-3005



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Photo 1

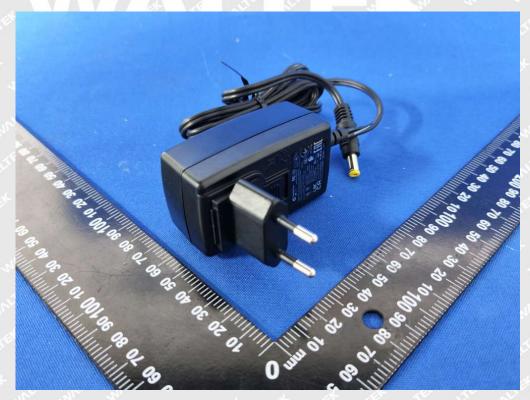


Photo 2

Page 111 of 116



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Photo Documentation



Page 112 of 116



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Photo Documentation

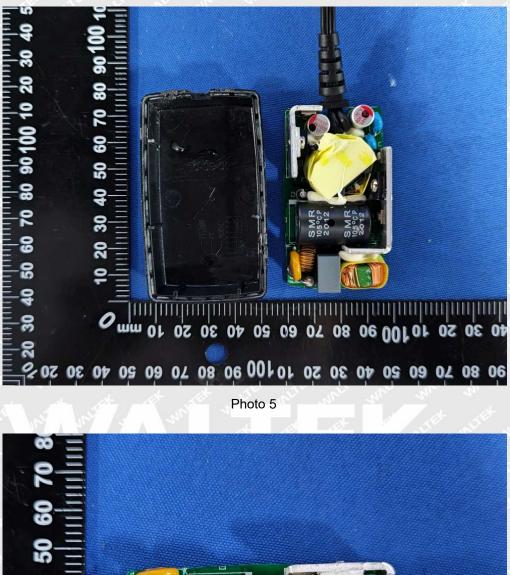




Photo 6

Page 113 of 116

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Photo Documentation

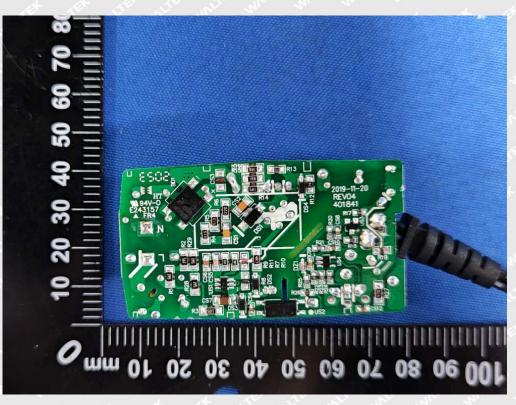


Photo 7

Model: GTM46402-4024



Photo 8

Page 114 of 116



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Photo Documentation



Photo 9



Photo 10

Page 115 of 116



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Photo Documentation

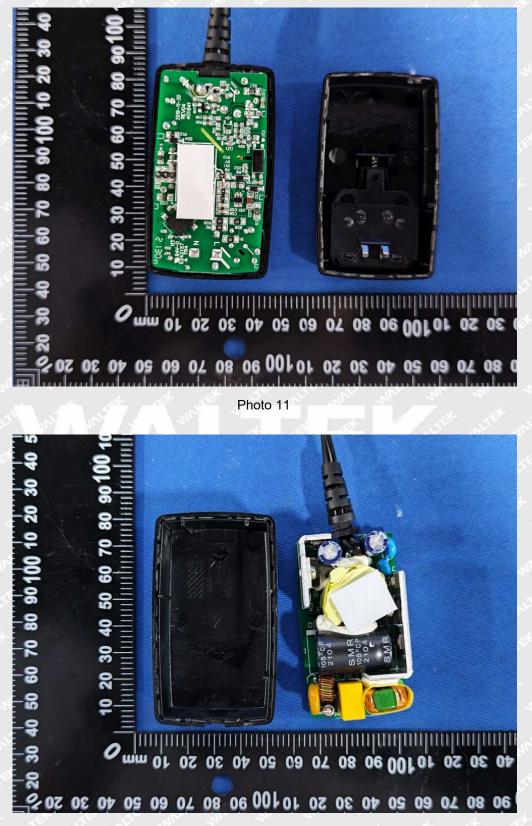


Photo 12

Page 116 of 116



Photo Documentation

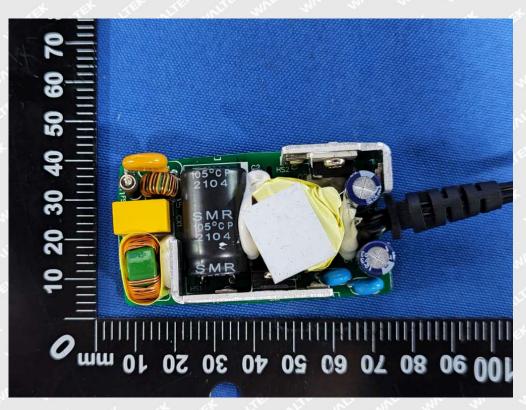


Photo 13

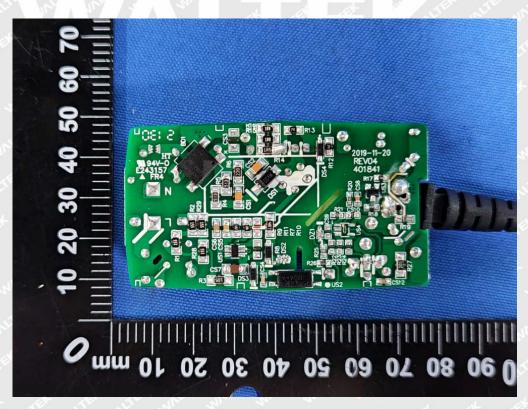


Photo 14

===== End of Report ======