



Test Report issued under the responsibility of:



TEST REPORT
IEC 62368-1
Audio/video, information and communication technology equipment
Part 1: Safety requirements

Report Number : 200802265SHA-001
Date of issue : 2020-11-10
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Applicant's name : GlobTek, Inc.
Address : 186 Veterans Dr. Northvale, NJ 07647 USA

Test specification:
Standard..... : IEC 62368-1:2014 (Second Edition)
Test procedure : CB Scheme
Non-standard test method : N/A

Test Report Form No. : IEC62368_1B
Test Report Form(s) Originator..... : UL(US)
Master TRF : 2014-03

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
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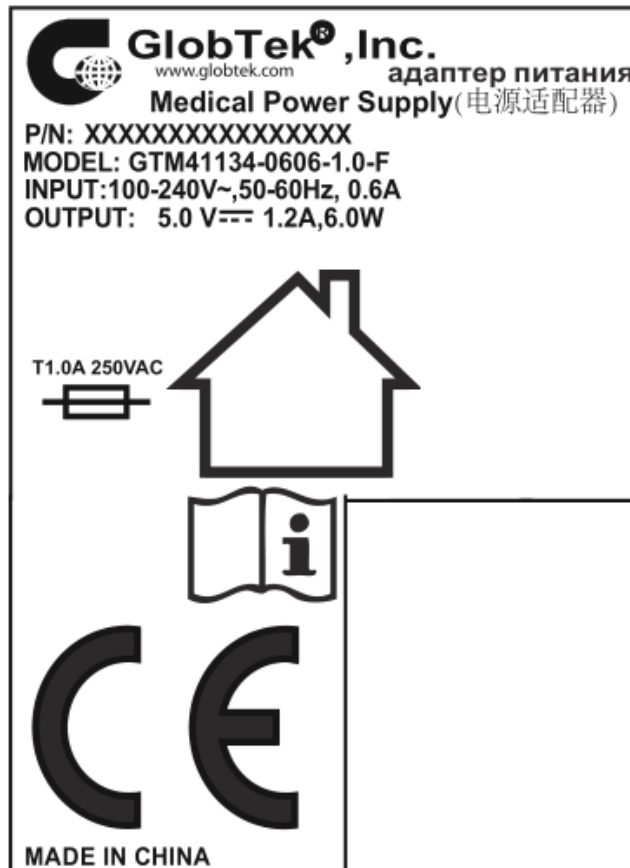
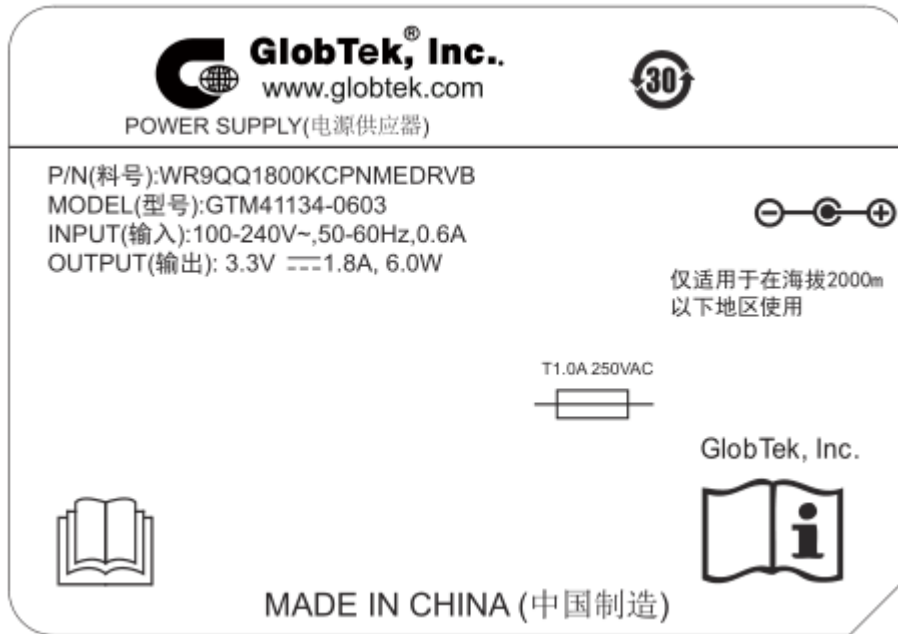


Test Item description	ITE Power Supply	
Trade Mark		
Manufacturer	Same as applicant	
Model/Type reference	GT*41134*****, GT*96060*****, (Refer to Model Differences table for details) and GT-41134-0606-W2-TAB, GTM96060-0706-1.0	
Ratings	Input: 100-240V~, 50-60Hz, 0.3A or 0.6A for GT*41134*****, GT*96060*****, and GTM96060-0706-1.0 120V~, 60Hz, 0.3A for GT-41134-0606-W2-TAB Output: Refer to pages 7 and 8 for details	
Testing procedure and testing location:		
<input checked="" type="checkbox"/> CB Testing Laboratory:	Intertek Testing Services Shanghai	
Testing location/ address	Building No.86, 1198 Qinzhou Road (North), 200233 Shanghai, China	
<input type="checkbox"/> Associated CB Testing Laboratory:		
Testing location/ address		
Tested by (name + signature)	Gio Li	
Approved by (name + signature)	Susanna Xu	
Testing procedure: TMP/CTF Stage 1		
Testing location/ address		
Tested by (name + signature)		
Approved by (name + signature)		
Testing procedure: WMT/CTF Stage 2		
Testing location/ address		
Tested by (name + signature)		
Witnessed by (name + signature)		
Approved by (name + signature)		
Testing procedure: SMT/CTF Stage 3 or 4		
Testing location/ address		
Tested by (name + signature)		
Approved by (name + signature)		
Supervised by (name + signature)		


<p>List of Attachments (including a total number of pages in each attachment):</p> <p>Appendix 1: Photographs (Page 69-81)</p> <p>Appendix 2: EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES (Page 82-91)</p> <p>Appendix 3: AUSTRALIA and NEW ZEALAND NATIONAL DIFFERENCES (Page 92-102)</p> <p>Appendix 4: JAPAN NATIONAL DIFFERENCES (Page 103-106)</p> <p>Appendix 5-18: Evaluation sheet for plug portion (Page 107-127)</p>	
<p>Summary of testing:</p> <p>From the result of our examination and tests in the submitted samples, conclude they comply with the requirements of the standard IEC 62368-1:2014 (Second Edition) & EN 62368-1:2014+A11:2017.</p>	
<p>Tests performed (name of test and test clause):</p> <p>5.2 Classification and limits of electrical energy sources</p> <p>5.4.1.8 Determination of working voltage</p> <p>5.4.1.10.3 Ball pressure test</p> <p>5.4.2 Clearances</p> <p>5.4.3 Creepage distances</p> <p>5.4.8 Humidity conditioning</p> <p>5.4.9 Electric strength test</p> <p>5.7.2.1 Measurement of touch current</p> <p>6.2.2.2 Power measurement for worst-case load fault</p> <p>6.2.2.3 Power measurement for worst-case source fault</p> <p>6.4.3.3 Single Fault Conditions test</p> <p>B.2.5 Input test</p> <p>B.3.5 Maximum load at output terminals</p> <p>F.3.10 Permanence of markings</p> <p>G.5.3.3 Overload test of Transformers</p> <p>T.2 Steady force test, 10 N</p> <p>T.3 Steady force test, 30 N</p> <p>T.4 Steady force test, 100 N</p> <p>T.7 Drop test</p> <p>T.8 Stress relief test</p>	<p>Testing location:</p> <p>Intertek Testing Services Shanghai Building No.86, 1198 Qinzhou Road (North), 200233 Shanghai, China</p>
<p>Summary of compliance with National Differences:</p> <p>List of countries addressed</p> <p>Group difference for CENELEC countries and national differences for Australia, New Zealand, Japan were considered.</p> <p><input checked="" type="checkbox"/> The product fulfils the requirements of IEC 62368-1:2014 (Second Edition) & EN 62368-1:2014 + A11:2017.</p>	


Copy of marking plate (representative):


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




GlobTek® ,Inc.
 www.globtek.com
POWER SUPPLY
CLASS 2 POWER SUPPLY

PART NO(料号):WR91A1000KR9RVBG2723
MODEL(型号):GT-41134-0606-W2-TAB
INPUT(输入):120V~,60Hz, 0.3A
OUTPUT(输出): 6.0 V  1.0A,6.0W

  **LPS**

 **MADE IN CHINA** **WWYY**

  **Ta: 50°C** 

This device complies with Part 15 of the FCC Rules.
 Operation is subject to the following two conditions:
 (1) This device may not cause harmful interference, and
 (2) This device must accept any interference recieved,
 including interference that may cause undesired operation

GlobTek® ,Inc.
 186 Veterans Dr.
 Northvale, NJ 07647 USA
 www.globtek.com

адаптер питания
CAN ICES-3 (B)/NMB-3(B) 

Power Supply (电源供应器)

REF P/N/номер/料号: WR9QA1500USBC-CIMR6B
MODEL/модель/型号: GTM96060-0706-1.0
INPUT/вводить/输入:100-240V~,50-60Hz, 0.6A
OUTPUT/экспорт/输出: 5.0V  1.5A,7.5W

LPS


 +V: A4, A9, B4, B9
 GND: A1, A12, B1, B12
 CC1: A5, 22K to +V
 D+: A6
 D-: A7

MADE IN CHINA/Китай Производство/中国制造

Note: The marking for other models are the same as above except for model numbers and ratings.

TEST ITEM PARTICULARS:	
Classification of use by	<input checked="" type="checkbox"/> Ordinary person <input type="checkbox"/> Instructed person <input type="checkbox"/> Skilled person <input type="checkbox"/> Children likely to be present
Supply Connection.....	<input checked="" type="checkbox"/> AC Mains <input type="checkbox"/> DC Mains <input type="checkbox"/> External Circuit - not Mains connected - <input type="checkbox"/> ES1 <input type="checkbox"/> ES2 <input type="checkbox"/> ES3
Supply % Tolerance	<input checked="" type="checkbox"/> +10%/-10% <input type="checkbox"/> +20%/-15% <input type="checkbox"/> +____%/ -____% <input type="checkbox"/> None
Supply Connection – Type	<input checked="" type="checkbox"/> pluggable equipment type A - <input type="checkbox"/> non-detachable supply cord <input checked="" type="checkbox"/> appliance coupler (Note: Appliance coupler for one type of open frame model series. Final determination in end product evaluation for other types of open frame model series.) <input checked="" type="checkbox"/> direct plug-in <input type="checkbox"/> mating connector <input type="checkbox"/> pluggable equipment type B - <input type="checkbox"/> non-detachable supply cord <input type="checkbox"/> appliance coupler <input type="checkbox"/> permanent connection <input type="checkbox"/> mating connector <input type="checkbox"/> other:_____
Considered current rating of protective device as part of building or equipment installation	16A; Installation location: <input checked="" type="checkbox"/> building; <input type="checkbox"/> equipment
Equipment mobility	<input type="checkbox"/> movable <input type="checkbox"/> hand-held <input type="checkbox"/> transportable <input type="checkbox"/> stationary <input type="checkbox"/> for building-in <input checked="" type="checkbox"/> direct plug-in <input type="checkbox"/> rack-mounting <input type="checkbox"/> wall-mounted
Over voltage category (OVC)	<input type="checkbox"/> OVC I <input checked="" type="checkbox"/> OVC II <input type="checkbox"/> OVC III <input type="checkbox"/> OVC IV <input type="checkbox"/> other: _____
Class of equipment	<input checked="" type="checkbox"/> Class I (only for open frame model series) <input checked="" type="checkbox"/> Class II <input type="checkbox"/> Class III
Access location	<input type="checkbox"/> restricted access location <input checked="" type="checkbox"/> N/A
Pollution degree (PD)	<input type="checkbox"/> PD 1 <input checked="" type="checkbox"/> PD 2 <input type="checkbox"/> PD 3
Manufacturer's specified maximum operating ambient:	50 °C
IP protection class	<input checked="" type="checkbox"/> IPX0 <input type="checkbox"/> IP20
Power Systems	<input checked="" type="checkbox"/> TN <input checked="" type="checkbox"/> TT <input type="checkbox"/> IT - ____ V _{L-L}
Altitude during operation (m)	<input type="checkbox"/> 2000 m or less <input checked="" type="checkbox"/> <5000 m
Altitude of test laboratory (m)	<input type="checkbox"/> 2000 m or less <input checked="" type="checkbox"/> <50 m
Mass of equipment (kg)	<input checked="" type="checkbox"/> Approx. 0.14 kg

POSSIBLE TEST CASE VERDICTS:	
- test case does not apply to the test object..... :	N/A
- test object does meet the requirement :	P (Pass)
- test object does not meet the requirement :	F (Fail)
TESTING:	
Date of receipt of test item..... :	2020-09-01
Date (s) of performance of tests..... :	2020-09-01 ~ 2020-09-30
GENERAL REMARKS:	
<p>"(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report.</p> <p>Throughout this report a <input type="checkbox"/> comma / <input checked="" type="checkbox"/> point is used as the decimal separator.</p> <p>Determination of the test result includes consideration of measurement uncertainty from the test equipment and methods.</p> <p><i>This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.</i></p>	
Manufacturer's Declaration per sub-clause 4.2.5 of IEC62368-1:	
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> Not applicable
When differences exist; they shall be identified in the General product information section.	
Name and address of factory (ies)	<p>Factory 1: GlobTek, Inc. 186 Veterans Dr. Northvale, NJ 07647 USA</p> <p>Factory 2: GlobTek (Suzhou) Co., Ltd Building 4, No. 76, Jin Ling East Rd., Suzhou Industrial Park, Suzhou, JiangSu 215021, China</p>

GENERAL PRODUCT INFORMATION:

Product Description – Product covered by this report is ITE power supply module. The different models are corresponding to four structure types respectively.

One is direct plug-in power adapter with interchangeable plug portion, which is Class II apparatus. It can be used with different plug types. The evaluation reports of the different plug types are also attached with this report. Two pieces of outer enclosure are enclosed with ultrasonic welding without screw.

The other one is open frame type which also provides a protective earth bonding terminal on the PCB. Interchangeable appliance inlets can be mounted on the device, which can provide earthing connection or not. The installation and use for the insulation construction shall be finally determined in the end product.

Model GT-41134-0606-W2-TAB is special direct plug-in type for North America market, with particular housing, varistor and fixed NEMA 1-15P plug.

One structure type only use F1 fuse in primary circuit and a LED indicator (optional) used in secondary circuit.

GT*96060***** is identify with GT*41134***** except for model name.

GT*96060***** and GT*41134***** were evaluated for maximum manufacturer’s recommended ambient of 50 °C.

GT-41134-0606-W2-TAB was evaluated for maximum manufacturer’s recommended ambient of 50 °C.

All the types are designed for continuous operation.

Model Differences –

GT*41134***** and GT*96060*****

The 1st “*” part can be ‘M’ or ‘-’ or ‘H’ for market identification and not related to safety.

The 2nd “*” part can be “-” or “CC”, “-” = Constant Voltage Model, CC = Constant Current Model.

The 3rd “*” denotes the rated output wattage designation, which can be “01” to “07”, with interval of 1.

The 4th “*” denotes the standard rated output voltage designation, which can be “03”, “04”, “06”, “12”, “15”, “18”, “24”, “36” or “48”. These standard rated output voltage designations correspond to seven isolated transformer models (See the appended table 4.1.2 for details). Each transformer model is identical in insulation construction including clearance and creepage except number of turns per coil.

The 5th “*” is optional deviation, subtracted from standard output voltage, which can be “-0.1” to “-11.9” with interval of 0.1, or blank to indicate no voltage different.

The 4th “*” and 5th “*” together denote the output voltage, with a range of 3.3 - 48 volts.

The 6th “*” =Blank means directly plug in model series,

= “-F” means Class I open frame model with connector which is fixing on the PCB,

= “-FW” means Class II open frame model with connector which is fixing on the PCB.

= “-FWT2” means open frame model with appliance inlet with Class II inlet C8 respectively,

= “-FT3A” means open frame model with appliance inlet with Class I inlet C6 respectively,

= “-FT3” means open frame model with appliance inlet with Class I inlet C14 respectively,

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

Test performed on 3.3V, 5V, 9V and 48V output model as representative, and also performed on model GT-41134-0606-W2-TAB for reference. Test performed on 3.3V, 5V and 48V output model as representative for new added structure type.

Model list:

Model	voltage	Max. current	Max. power
GT*41134**03*** GT*96060**03***	3.3V	1.8A	6.0W
GT*41134**04*** GT*96060**04***	3.4-4V	1.76A	6.0W
GT*41134**06*** GT*96060**06***	4.1-6V	1.46A	6.0W

GT*41134**12*** GT*96060**12***	6.1-12V	0.98A	6.0W
GT*41134**15*** GT*96060**15***	12.1-15V	0.50A	6.0W
GT*41134**18*** GT*96060**18***	15.1-18V	0.40A	6.0W
GT*41134**24*** GT*96060**24***	18.1-24V	0.33A	6.0W
GT*41134**36*** GT*96060**36***	24.1-36V	0.25A	6.0W
GT*41134**48*** GT*96060**48***	36.1-48V	0.16A	6.0W
GT-41134-0606-W2-TAB	6.0V	1.0A	6.0W
GTM96060**06-1.0	5.0V	1.5A	7.5W

Additional application considerations –

- normal conditions **N.C.**
- functional insulation **FI**
- double insulation **DI**
- between parts of opposite polarity **BOP**
- short circuit **SC**
- overload **O/L**
- single fault conditions **S.F.C**
- basic insulation **BI**
- supplementary insulation **SI**
- reinforced insulation **RI**
- open circuit **OC**

Indicate used abbreviations (if any)

N/A

ENERGY SOURCE IDENTIFICATION AND CLASSIFICATION TABLE:	
(Note 1: Identify the following six (6) energy source forms based on the origin of the energy.) (Note 2: The identified classification e.g., ES2, TS1, should be with respect to its ability to cause pain or injury on the body or its ability to ignite a combustible material. Any energy source can be declared Class 3 as a worse case classification e.g. PS3, ES3.	
Electrically-caused injury (Clause 5): (Note: Identify type of source, list sub-assembly or circuit designation and corresponding energy source classification) Example: +5 V dc input ES1	
Source of electrical energy	Corresponding classification (ES)
Internal primary circuit of built-in power supply	ES3
Internal secondary circuit after T1 sec. output or C5 of built-in power supply	ES1
Electrically-caused fire (Clause 6): (Note: List sub-assembly or circuit designation and corresponding energy source classification) Example: Battery pack (maximum 85 watts): PS2	
Source of power or PIS	Corresponding classification (PS)
All primary circuits and secondary circuits inside the equipment enclosure	PS3
Secondary output connector	PS1
Injury caused by hazardous substances (Clause 7) (Note: Specify hazardous chemicals, whether produces ozone or other chemical construction not addressed as part of the component evaluation.) Example: Liquid in filled component Glycol	
Source of hazardous substances	Corresponding chemical
N/A	N/A
N/A	N/A
Mechanically-caused injury (Clause 8) (Note: List moving part(s), fan, special installations, etc. & corresponding MS classification based on Table 35.) Example: Wall mount unit MS2	
Source of kinetic/mechanical energy	Corresponding classification (MS)
Sharp edges and corners	MS1
Equipment mass	MS1
Thermal burn injury (Clause 9) (Note: Identify the surface or support, and corresponding energy source classification based on type of part, location, operating temperature and contact time in Table 38.) Example: Hand-held scanner – thermoplastic enclosure TS1	
Source of thermal energy	Corresponding classification (TS)
Accessible surfaces which is touched occasionally for very short periods	TS1
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ENERGY SOURCE IDENTIFICATION AND CLASSIFICATION TABLE:	
Radiation (Clause 10) (Note: List the types of radiation present in the product and the corresponding energy source classification.) Example: DVD – Class 1 Laser Product RS1	
Type of radiation	Corresponding classification (RS)
LED indicator	RS1
N/A	N/A

ENERGY SOURCE DIAGRAM
Indicate which energy sources are included in the energy source diagram. Insert diagram below
<input type="checkbox"/> ES <input type="checkbox"/> PS <input type="checkbox"/> MS <input type="checkbox"/> TS <input type="checkbox"/> RS

OVERVIEW OF EMPLOYED SAFEGUARDS				
Clause	Possible Hazard			
5.1	Electrically-caused injury			
Body Part (e.g. Ordinary)	Energy Source (ES3: Primary Filter circuit)	Safeguards		
		Basic	Supplementary	Reinforced (Enclosure)
Ordinary	ES3: Internal primary circuit of built-in power supply	N/A	N/A	Enclosure
Ordinary	ES1: Internal secondary circuit after T1 sec. output or C5 of built-in power supply	N/A	N/A	N/A
6.1	Electrically-caused fire			
Material part (e.g. mouse enclosure)	Energy Source (PS2: 100 Watt circuit)	Safeguards		
		Basic	Supplementary	Reinforced
All combustible materials within equipment fire enclosure	PS3: All primary circuits and secondary circuits inside the equipment enclosure	No excessive temperature	Suitable Material	N/A
All external wiring materials	PS1: Secondary output wire	N/A	N/A	N/A
7.1	Injury caused by hazardous substances			
Body Part (e.g., skilled)	Energy Source (hazardous material)	Safeguards		
		Basic	Supplementary	Reinforced
N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A
8.1	Mechanically-caused injury			
Body Part (e.g. Ordinary)	Energy Source (MS3:High Pressure Lamp)	Safeguards		
		Basic	Supplementary	Reinforced (Enclosure)
Ordinary	MS1: Sharp edges and corners	N/A	N/A	N/A
Ordinary	MS1: Equipment mass	N/A	N/A	N/A
9.1	Thermal Burn			
Body Part (e.g., Ordinary)	Energy Source (TS2)	Safeguards		
		Basic	Supplementary	Reinforced
Ordinary	TS1: Accessible surfaces	N/A	N/A	N/A
--	--	--	--	--
10.1	Radiation			
Body Part	Energy Source	Safeguards		

(e.g., Ordinary)	(Output from audio port)	Basic	Supplementary	Reinforced
Ordinary	RS1: LED indicator	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A
<p>Supplementary Information:</p> <p>(1) See attached energy source diagram for additional details.</p> <p>(2) "N" – Normal Condition; "A" – Abnormal Condition; "S" Single Fault</p>				

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

4	GENERAL REQUIREMENTS		P
4.1.1	Acceptance of materials, components and subassemblies	(See appended table 4.1.2)	P
4.1.2	Use of components	(See appended table 4.1.2)	P
4.1.3	Equipment design and construction		P
4.1.15	Markings and instructions.....:	(See Annex F)	P
4.4.4	Safeguard robustness		P
4.4.4.2	Steady force tests.....:	(See Annex T.4, T.5)	P
4.4.4.3	Drop tests.....:	(See Annex T.7)	P
4.4.4.4	Impact tests.....:	Only for Direct plug-in type model series. For open frame model series shall be evaluated at end product level.	N/A
4.4.4.5	Internal accessible safeguard enclosure and barrier tests.....:	No such parts	N/A
4.4.4.6	Glass Impact tests.....:	No glass	N/A
4.4.4.74	Thermoplastic material tests.....:	(See Annex T.8)	P
4.4.4.8	Air comprising a safeguard.....:	(See Annex T)	P
4.4.4.9	Accessibility and safeguard effectiveness		P
4.5	Explosion		P
4.6	Fixing of conductors		P
4.6.1	Fix conductors not to defeat a safeguard		P
4.6.2	10 N force test applied to.....:	Internal wire or components	P
4.7	Equipment for direct insertion into mains socket - outlets		P
4.7.2	Mains plug part complies with the relevant standard.....:	(See Evaluation sheet for plug portion)	P
4.7.3	Torque (Nm).....:	Max. 0.07 Nm for direct plug-in models.	P
4.8	Products containing coin/button cell batteries		N/A
4.8.2	Instructional safeguard		N/A
4.8.3	Battery Compartment Construction	No battery	N/A
	Means to reduce the possibility of children removing the battery.....:		—
4.8.4	Battery Compartment Mechanical Tests.....:		N/A
4.8.5	Battery Accessibility		N/A
4.9	Likelihood of fire or shock due to entry of conductive object.....:	No openings. Can't be entry. For Open frame models shall be	N/A

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
		evaluated in end products.	
5	ELECTRICALLY-CAUSED INJURY		P
5.2.1	Electrical energy source classifications..... :	ES3: Internal primary circuit of built-in power supply ES1: Internal secondary circuit after T1 sec. output or C5 of built-in power supply	P
5.2.2	ES1, ES2 and ES3 limits		P
5.2.2.2	Steady-state voltage and current..... :	(See appended table 5.2)	P
5.2.2.3	Capacitance limits :		N/A
5.2.2.4	Single pulse limits :		N/A
5.2.2.5	Limits for repetitive pulses :		N/A
5.2.2.6	Ringling signals :		N/A
5.2.2.7	Audio signals :		N/A
5.3	Protection against electrical energy sources	See table "OVERVIEW OF EMPLOYED SAFEGUARDS"	P
5.3.1	General Requirements for accessible parts to ordinary, instructed and skilled persons		P
5.3.2.1	Accessibility to electrical energy sources and safeguards		P
5.3.2.2	Contact requirements		P
	a) Test with test probe from Annex V :	ES3 voltages less than 420 V peak	P
	b) Electric strength test potential (V) :		N/A
	c) Air gap (mm) :		N/A
5.3.2.4	Terminals for connecting stripped wire		P
5.4	Insulation materials and requirements		P
5.4.1.2	Properties of insulating material		P
5.4.1.3	Humidity conditioning :	No hygroscopic material	N/A
5.4.1.4	Maximum operating temperature for insulating materials :	Considered to be class 130 (B)	P
5.4.1.5	Pollution degree :	Pollution degree 2	—
5.4.1.5.2	Test for pollution degree 1 environment and for an insulating compound		N/A
5.4.1.5.3	Thermal cycling		N/A
5.4.1.6	Insulation in transformers with varying dimensions		N/A
5.4.1.7	Insulation in circuits generating starting pulses		N/A
5.4.1.8	Determination of working voltage		P
5.4.1.9	Insulating surfaces		P

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Clause	Requirement + Test	Result - Remark	Verdict
5.4.1.10	Thermoplastic parts on which conductive metallic parts are directly mounted		P
5.4.1.10.2	Vicat softening temperature..... :		N/A
5.4.1.10.3	Ball pressure :	(See appended table 5.4.1.10.3)	P
5.4.2	Clearances		P
5.4.2.2	Determining clearance using peak working voltage	(See appended table 5.4.2.2)	P
5.4.2.3	Determining clearance using required withstand voltage :	(See appended table 5.4.2.3)	P
	a) a.c. mains transient voltage :	2500Vpeak	—
	b) d.c. mains transient voltage :		—
	c) external circuit transient voltage :		—
	d) transient voltage determined by measurement ... :		—
5.4.2.4	Determining the adequacy of a clearance using an electric strength test	(See appended table 5.4.2.4)	N/A
5.4.2.5	Multiplication factors for clearances and test voltages :	1.48 for clearances	P
5.4.3	Creepage distances :	(See appended table 5.4.3)	P
5.4.3.1	General		P
5.4.3.3	Material Group :	Material group IIIb is used	—
5.4.4	Solid insulation		P
5.4.4.2	Minimum distance through insulation :	(See appended table 5.4.4.2)	P
5.4.4.3	Insulation compound forming solid insulation		N/A
5.4.4.4	Solid insulation in semiconductor devices		N/A
5.4.4.5	Cemented joints		N/A
5.4.4.6	Thin sheet material	The thin sheet materials of polyester tape used in transformers.	P
5.4.4.6.1	General requirements		P
5.4.4.6.2	Separable thin sheet material		P
	Number of layers (pcs) :	3 layers	P
5.4.4.6.3	Non-separable thin sheet material	Triple-insulating winding	P
5.4.4.6.4	Standard test procedure for non-separable thin sheet material :	Approved TIW used	N/A
5.4.4.6.5	Mandrel test		N/A
5.4.4.7	Solid insulation in wound components		N/A
5.4.4.9	Solid insulation at frequencies >30 kHz :		N/A
5.4.5	Antenna terminal insulation		N/A
5.4.5.1	General		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
5.4.5.2	Voltage surge test		N/A
	Insulation resistance (MΩ).....:		—
5.4.6	Insulation of internal wire as part of supplementary safeguard.....:	(See appended table 5.4.4.2)	N/A
5.4.7	Tests for semiconductor components and for cemented joints		N/A
5.4.8	Humidity conditioning		P
	Relative humidity (%).....:	93	—
	Temperature (°C)	40	—
	Duration (h)	120	—
5.4.9	Electric strength test.....:	(See appended table 5.4.9)	P
5.4.9.1	Test procedure for a solid insulation type test		P
5.4.9.2	Test procedure for routine tests		P
5.4.10	Protection against transient voltages between external circuit		N/A
5.4.10.1	Parts and circuits separated from external circuits		N/A
5.4.10.2	Test methods		N/A
5.4.10.2.1	General		N/A
5.4.10.2.2	Impulse test		N/A
5.4.10.2.3	Steady-state test.....:		N/A
5.4.11	Insulation between external circuits and earthed circuitry		N/A
5.4.11.1	Exceptions to separation between external circuits and earth		N/A
5.4.11.2	Requirements		N/A
	Rated operating voltage U_{op} (V).....:		—
	Nominal voltage U_{peak} (V).....:		—
	Max increase due to variation U_{sp}		—
	Max increase due to ageing ΔU_{sa}		—
	$U_{op} = U_{peak} + \Delta U_{sp} + \Delta U_{sa}$		—
5.5	Components as safeguards		
5.5.1	General		P
5.5.2	Capacitors and RC units		P
5.5.2.1	General requirement		P
5.5.2.2	Safeguards against capacitor discharge after disconnection of a connector.....:		N/A
5.5.3	Transformers	(See Annex G.5.3)	P

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Clause	Requirement + Test	Result - Remark	Verdict
5.5.4	Optocouplers		N/A
5.5.5	Relays		N/A
5.5.6	Resistors		N/A
5.5.7	SPD's	(See Annex G.8)	P
5.5.7.1	Use of an SPD connected to reliable earthing		N/A
5.5.7.2	Use of an SPD between mains and protective earth		N/A
5.5.8	Insulation between the mains and external circuit consisting of a coaxial cable.....:	(See Annex G.10.3)	N/A
5.6	Protective conductor		N/A
5.6.2	Requirement for protective conductors	Open frame model series shall be evaluated at end product level.	N/A
5.6.2.1	General requirements		N/A
5.6.2.2	Colour of insulation		N/A
5.6.3	Requirement for protective earthing conductors		N/A
	Protective earthing conductor size (mm ²)		—
5.6.4	Requirement for protective bonding conductors		N/A
5.6.4.1	Protective bonding conductors		N/A
	Protective bonding conductor size (mm ²).		—
	Protective current rating (A)		—
5.6.4.3	Current limiting and overcurrent protective devices		N/A
5.6.5	Terminals for protective conductors		N/A
5.6.5.1	Requirement		N/A
	Conductor size (mm ²), nominal thread diameter (mm).		N/A
5.6.5.2	Corrosion		N/A
5.6.6	Resistance of the protective system		N/A
5.6.6.1	Requirements		N/A
5.6.6.2	Test Method Resistance (Ω).....:		N/A
5.6.7	Reliable earthing		N/A
5.7	Prospective touch voltage, touch current and protective conductor current		P
5.7.2	Measuring devices and networks		P
5.7.2.1	Measurement of touch current	L/N – terminal: U2=0.054mA, U3=0.072mA Max L/N – plastic enclosure: U2=0.024mA, U3=0.025mA Max	P

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Clause	Requirement + Test	Result - Remark	Verdict
5.7.2.2	Measurement of prospective touch voltage	Open frame model series shall be evaluated at end product level.	N/A
5.7.3	Equipment set-up, supply connections and earth connections		N/A
	System of interconnected equipment (separate connections/single connection)		—
	Multiple connections to mains (one connection at a time/simultaneous connections)		—
5.7.4	Earthed conductive accessible parts	(See appended Table 5.7.4)	N/A
5.7.5	Protective conductor current		N/A
	Supply Voltage (V).....		—
	Measured current (mA).....		—
	Instructional Safeguard.....	(See F.4 and F.5)	N/A
5.7.6	Prospective touch voltage and touch current due to external circuits		N/A
5.7.6.1	Touch current from coaxial cables		N/A
5.7.6.2	Prospective touch voltage and touch current from external circuits		N/A
5.7.7	Summation of touch currents from external circuits		N/A
	a) Equipment with earthed external circuits Measured current (mA).....		N/A
	b) Equipment whose external circuits are not referenced to earth. Measured current (mA)		N/A

6	ELECTRICALLY- CAUSED FIRE		P
6.2	Classification of power sources (PS) and potential ignition sources (PIS)		P
6.2.2	Power source circuit classifications		P
6.2.2.1	General		P
6.2.2.2	Power measurement for worst-case load fault ... :	(See appended table 6.2.2)	P
6.2.2.3	Power measurement for worst-case power source fault	(See appended table 6.2.2)	P
6.2.2.4	PS1	Secondary output connector	P
6.2.2.5	PS2	No such circuit	N/A
6.2.2.6	PS3	All primary circuits and secondary circuits inside the equipment enclosure	P
6.2.3	Classification of potential ignition sources		P
6.2.3.1	Arcing PIS	All PS3 parts or circuit in the fire enclosure	P

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Clause	Requirement + Test	Result - Remark	Verdict
6.2.3.2	Resistive PIS	All PS3 parts or circuit in the fire enclosure	P
6.3	Safeguards against fire under normal operating and abnormal operating conditions		P
6.3.1 (a)	No ignition and attainable temperature value less than 90 % defined by ISO 871 or less than 300 °C for unknown materials	(See appended table 5.4.1.5, 6.3.2, 9.0, B.2.6)	P
6.3.1 (b)	Combustible materials outside fire enclosure		P
6.4	Safeguards against fire under single fault conditions		P
6.4.1	Safeguard Method		P
6.4.2	Reduction of the likelihood of ignition under single fault conditions in PS1 circuits		P
6.4.3	Reduction of the likelihood of ignition under single fault conditions in PS2 and PS3 circuits		P
6.4.3.1	General		P
6.4.3.2	Supplementary Safeguards		P
	Special conditions if conductors on printed boards are opened or peeled		P
6.4.3.3	Single Fault Conditions	(See appended table 6.4.3)	P
	Special conditions for temperature limited by fuse		N/A
6.4.4	Control of fire spread in PS1 circuits		P
6.4.5	Control of fire spread in PS2 circuits		N/A
6.4.5.2	Supplementary safeguards	(See appended tables 4.1.2 and Annex G)	N/A
6.4.6	Control of fire spread in PS3 circuit		P
6.4.7	Separation of combustible materials from a PIS		P
6.4.7.1	General	(See tables 6.2.3.1 and 6.2.3.2)	P
6.4.7.2	Separation by distance		N/A
6.4.7.3	Separation by a fire barrier		N/A
6.4.8	Fire enclosures and fire barriers		P
6.4.8.1	Fire enclosure and fire barrier material properties		P
6.4.8.2.1	Requirements for a fire barrier		N/A
6.4.8.2.2	Requirements for a fire enclosure	Min. V-1	P
6.4.8.3	Constructional requirements for a fire enclosure and a fire barrier		P
6.4.8.3.1	Fire enclosure and fire barrier openings		P
6.4.8.3.2	Fire barrier dimensions		N/A
6.4.8.3.3	Top Openings in Fire Enclosure: dimensions (mm)	For open frame model series, shall be evaluated at end product level. For other models, no opening.	P

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Clause	Requirement + Test	Result - Remark	Verdict
	Needle Flame test		N/A
6.4.8.3.4	Bottom Openings in Fire Enclosure, condition met a), b) and/or c) dimensions (mm)	For open frame model series, shall be evaluated at end product level. For other models, no opening.	P
	Flammability tests for the bottom of a fire enclosure		N/A
6.4.8.3.5	Integrity of the fire enclosure, condition met: a), b) or c)		N/A
6.4.8.4	Separation of PIS from fire enclosure and fire barrier distance (mm) or flammability rating		N/A
6.5	Internal and external wiring		P
6.5.1	Requirements		P
6.5.2	Cross-sectional area (mm ²)	18AWG=0.75 mm ²	—
6.5.3	Requirements for interconnection to building wiring	(See Annex Q.)	N/A
6.6	Safeguards against fire due to connection to additional equipment		N/A
	External port limited to PS2 or complies with Clause Q.1		N/A

7	INJURY CAUSED BY HAZARDOUS SUBSTANCES		N/A
7.2	Reduction of exposure to hazardous substances		N/A
7.3	Ozone exposure		N/A
7.4	Use of personal safeguards (PPE)		N/A
	Personal safeguards and instructions		—
7.5	Use of instructional safeguards and instructions		N/A
	Instructional safeguard (ISO 7010)		—
7.6	Batteries.....		N/A

8	MECHANICALLY-CAUSED INJURY		P
8.1	General		P
8.2	Mechanical energy source classifications		P
8.3	Safeguards against mechanical energy sources		P
8.4	Safeguards against parts with sharp edges and corners		P
8.4.1	Safeguards	MS1	N/A
8.5	Safeguards against moving parts	No moving parts	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
8.5.1	MS2 or MS3 part required to be accessible for the function of the equipment		N/A
8.5.2	Instructional Safeguard..... :		—
8.5.4	Special categories of equipment comprising moving parts		N/A
8.5.4.1	Large data storage equipment		N/A
8.5.4.2	Equipment having electromechanical device for destruction of media		N/A
8.5.4.2.1	Safeguards and Safety Interlocks		N/A
8.5.4.2.2	Instructional safeguards against moving parts		N/A
	Instructional Safeguard.....:		—
8.5.4.2.3	Disconnection from the supply		N/A
8.5.4.2.4	Probe type and force (N)		N/A
8.5.5	High Pressure Lamps		N/A
8.5.5.1	Energy Source Classification		N/A
8.5.5.2	High Pressure Lamp Explosion Test.....:		N/A
8.6	Stability	Approx. 0.14 kg, MS1	N/A
8.6.1	Product classification		N/A
	Instructional Safeguard.....:		—
8.6.2	Static stability		N/A
8.6.2.2	Static stability test		N/A
	Applied Force		—
8.6.2.3	Downward Force Test		N/A
8.6.3	Relocation stability test		N/A
	Unit configuration during 10° tilt.....:		—
8.6.4	Glass slide test		N/A
8.6.5	Horizontal force test (Applied Force).....:		N/A
	Position of feet or movable parts.....:		—
8.7	Equipment mounted to wall or ceiling		N/A
8.7.1	Mounting Means (Length of screws (mm) and mounting surface)		N/A
8.7.2	Direction and applied force.....:		N/A
8.8	Handles strength		N/A
8.8.1	Classification		N/A
8.8.2	Applied Force		N/A
8.9	Wheels or casters attachment requirements		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
8.9.1	Classification		N/A
8.9.2	Applied force		—
8.10	Carts, stands and similar carriers		N/A
8.10.1	General		N/A
8.10.2	Marking and instructions		N/A
	Instructional Safeguard.....		—
8.10.3	Cart, stand or carrier loading test and compliance		N/A
	Applied force		—
8.10.4	Cart, stand or carrier impact test		N/A
8.10.5	Mechanical stability		N/A
	Applied horizontal force (N)		—
8.10.6	Thermoplastic temperature stability (°C).....		N/A
8.11	Mounting means for rack mounted equipment		N/A
8.11.1	General		N/A
8.11.2	Product Classification		N/A
8.11.3	Mechanical strength test, variable N		N/A
8.11.4	Mechanical strength test 250N, including end stops		N/A
8.12	Telescoping or rod antennas		N/A
	Button/Ball diameter (mm)		—

9	THERMAL BURN INJURY		P
9.2	Thermal energy source classifications	TS1 for Accessible surfaces.	P
9.3	Safeguard against thermal energy sources		N/A
9.4	Requirements for safeguards		N/A
9.4.1	Equipment safeguard		N/A
9.4.2	Instructional safeguard		N/A

10	RADIATION		P
10.2	Radiation energy source classification	RS1: LED indicator	P
10.2.1	General classification		P
10.3	Protection against laser radiation		N/A
	Laser radiation that exists equipment:		—
	Normal, abnormal, single-fault.....		N/A
	Instructional safeguard		—
	Tool.....		—

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Clause	Requirement + Test	Result - Remark	Verdict
10.4	Protection against visible, infrared, and UV radiation		N/A
10.4.1	General		N/A
10.4.1.a)	RS3 for Ordinary and instructed persons		N/A
10.4.1.b)	RS3 accessible to a skilled person.....		N/A
	Personal safeguard (PPE) instructional safeguard.....		—
10.4.1.c)	Equipment visible, IR, UV does not exceed RS1 . :		N/A
10.4.1.d)	Normal, abnormal, single-fault conditions		N/A
10.4.1.e)	Enclosure material employed as safeguard is opaque.....		N/A
10.4.1.f)	UV attenuation.....		N/A
10.4.1.g)	Materials resistant to degradation UV		N/A
10.4.1.h)	Enclosure containment of optical radiation.....		N/A
10.4.1.i)	Exempt Group under normal operating conditions.....		N/A
10.4.2	Instructional safeguard		N/A
10.5	Protection against x-radiation		N/A
10.5.1	X- radiation energy source that exists equipment :		N/A
	Normal, abnormal, single fault conditions		N/A
	Equipment safeguards.....		N/A
	Instructional safeguard for skilled person..... :		N/A
10.5.3	Most unfavourable supply voltage to give maximum radiation		—
	Abnormal and single-fault condition		N/A
	Maximum radiation (pA/kg).....		N/A
10.6	Protection against acoustic energy sources		N/A
10.6.1	General		N/A
10.6.2	Classification		N/A
	Acoustic output, dB(A).....		N/A
	Output voltage, unweighted r.m.s.....		N/A
10.6.4	Protection of persons		N/A
	Instructional safeguards		N/A
	Equipment safeguard prevent ordinary person to RS2.....		—
	Means to actively inform user of increase sound pressure.....		—
	Equipment safeguard prevent ordinary person to		—

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Clause	Requirement + Test	Result - Remark	Verdict
	RS2..... :		
10.6.5	Requirements for listening devices (headphones, earphones, etc.)		N/A
10.6.5.1	Corded passive listening devices with analog input		N/A
	Input voltage with 94 dB(A) L_{Aeq} acoustic pressure output..... :		—
10.6.5.2	Corded listening devices with digital input		N/A
	Maximum dB(A)..... :		—
10.6.5.3	Cordless listening device		N/A
	Maximum dB(A)..... :		—

B	NORMAL OPERATING CONDITION TESTS, ABNORMAL OPERATING CONDITION TESTS AND SINGLE FAULT CONDITION TESTS		P
B.2	Normal Operating Conditions		P
B.2.1	General requirements..... :	(See Test Item Particulars and appended test tables)	P
	Audio Amplifiers and equipment with audio amplifiers		N/A
B.2.3	Supply voltage and tolerances		P
B.2.5	Input test..... :	(See appended table B.2.5)	P
B.3	Simulated abnormal operating conditions		P
B.3.1	General requirements..... :	(See appended table B.3)	P
B.3.2	Covering of ventilation openings		N/A
B.3.3	D.C. mains polarity test		N/A
B.3.4	Setting of voltage selector	No such parts	N/A
B.3.5	Maximum load at output terminals	(See appended table B.3)	P
B.3.6	Reverse battery polarity		N/A
B.3.7	Abnormal operating conditions as specified in Clause E.2.		N/A
B.3.8	Safeguards functional during and after abnormal operating conditions		P
B.4	Simulated single fault conditions		P
B.4.2	Temperature controlling device open or short-circuited		N/A
B.4.3	Motor tests		N/A
B.4.3.1	Motor blocked or rotor locked increasing the internal ambient temperature	(See Clause G.5)	N/A
B.4.4	Short circuit of functional insulation		P

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Clause	Requirement + Test	Result - Remark	Verdict
B.4.4.1	Short circuit of clearances for functional insulation		P
B.4.4.2	Short circuit of creepage distances for functional insulation		P
B.4.4.3	Short circuit of functional insulation on coated printed boards		N/A
B.4.5	Short circuit and interruption of electrodes in tubes and semiconductors		P
B.4.6	Short circuit or disconnect of passive components		P
B.4.7	Continuous operation of components		N/A
B.4.8	Class 1 and Class 2 energy sources within limits during and after single fault conditions		P
B.4.9	Battery charging under single fault conditions ... :		N/A
C	UV RADIATION		N/A
C.1	Protection of materials in equipment from UV radiation		N/A
C.1.2	Requirements		N/A
C.1.3	Test method		N/A
C.2	UV light conditioning test		N/A
C.2.1	Test apparatus		N/A
C.2.2	Mounting of test samples		N/A
C.2.3	Carbon-arc light-exposure apparatus		N/A
C.2.4	Xenon-arc light exposure apparatus		N/A
D	TEST GENERATORS		N/A
D.1	Impulse test generators		N/A
D.2	Antenna interface test generator		N/A
D.3	Electronic pulse generator		N/A
E	TEST CONDITIONS FOR EQUIPMENT CONTAINING AUDIO AMPLIFIERS		N/A
E.1	Audio amplifier normal operating conditions		N/A
	Audio signal voltage (V)		—
	Rated load impedance (Ω)		—
E.2	Audio amplifier abnormal operating conditions		N/A
F	EQUIPMENT MARKINGS, INSTRUCTIONS, AND INSTRUCTIONAL SAFEGUARDS		P
F.1	General requirements		P
	Instructions – Language	English	—
F.2	Letter symbols and graphical symbols		P
F.2.1	Letter symbols according to IEC60027-1		P
F.2.2	Graphic symbols IEC, ISO or manufacturer specific		P

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Clause	Requirement + Test	Result - Remark	Verdict
F.3	Equipment markings		P
F.3.1	Equipment marking locations		P
F.3.2	Equipment identification markings		P
F.3.2.1	Manufacturer identification	See marking plate	—
F.3.2.2	Model identification	See marking plate	—
F.3.3	Equipment rating markings		P
F.3.3.1	Equipment with direct connection to mains		P
F.3.3.2	Equipment without direct connection to mains		N/A
F.3.3.3	Nature of supply voltage.....	See marking plate	—
F.3.3.4	Rated voltage	See marking plate	—
F.3.3.4	Rated frequency	See marking plate	—
F.3.3.6	Rated current or rated power	See marking plate	—
F.3.3.7	Equipment with multiple supply connections		N/A
F.3.4	Voltage setting device		N/A
F.3.5	Terminals and operating devices		N/A
F.3.5.1	Mains appliance outlet and socket-outlet markings		N/A
F.3.5.2	Switch position identification marking		N/A
F.3.5.3	Replacement fuse identification and rating markings	F1 & F2, T1A/250V for general model F1, T6.3A/250V for North America model	P
F.3.5.4	Replacement battery identification marking		N/A
F.3.5.5	Terminal marking location		N/A
F.3.6	Equipment markings related to equipment classification		N/A
F.3.6.1	Class I Equipment	Open frame model series shall be evaluated at end product level.	N/A
F.3.6.1.1	Protective earthing conductor terminal		N/A
F.3.6.1.2	Neutral conductor terminal		N/A
F.3.6.1.3	Protective bonding conductor terminals		N/A
F.3.6.2	Class II equipment (IEC60417-5172)		P
F.3.6.2.1	Class II equipment with or without functional earth		P
F.3.6.2.2	Class II equipment with functional earth terminal marking		N/A
F.3.7	Equipment IP rating marking		—
F.3.8	External power supply output marking	See marking plate	P

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Clause	Requirement + Test	Result - Remark	Verdict
F.3.9	Durability, legibility and permanence of marking		P
F.3.10	Test for permanence of markings		P
F.4	Instructions		P
	a) Equipment for use in locations where children not likely to be present - marking		N/A
	b) Instructions given for installation or initial use		P
	c) Equipment intended to be fastened in place		N/A
	d) Equipment intended for use only in restricted access area		N/A
	e) Audio equipment terminals classified as ES3 and other equipment with terminals marked in accordance F.3.6.1		N/A
	f) Protective earthing employed as safeguard		N/A
	g) Protective earthing conductor current exceeding ES 2 limits		N/A
	h) Symbols used on equipment		P
	i) Permanently connected equipment not provided with all-pole mains switch		N/A
j)	j) Replaceable components or modules providing safeguard function		N/A
F.5	Instructional safeguards		N/A
	Where "instructional safeguard" is referenced in the test report it specifies the required elements, location of marking and/or instruction		N/A
G	COMPONENTS		P
G.1	Switches		N/A
G.1.1	General requirements		N/A
G.1.2	Ratings, endurance, spacing, maximum load		N/A
G.2	Relays		N/A
G.2.1	General requirements		N/A
G.2.2	Overload test		N/A
G.2.3	Relay controlling connectors supply power		N/A
G.2.4	Mains relay, modified as stated in G.2		N/A
G.3	Protection Devices		P
G.3.1	Thermal cut-offs		N/A
G.3.1.1a) &b)	Thermal cut-outs separately approved according to IEC 60730 with conditions indicated in a) & b)		N/A
G.3.1.1c)	Thermal cut-outs tested as part of the equipment as indicated in c)		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
G.3.1.2	Thermal cut-off connections maintained and secure		N/A
G.3.2	Thermal links		N/A
G.3.2.1a)	Thermal links separately tested with IEC 60691		N/A
G.3.2.1b)	Thermal links tested as part of the equipment		N/A
	Aging hours (H)		—
	Single Fault Condition		—
	Test Voltage (V) and Insulation Resistance (Ω) . :		—
G.3.3	PTC Thermistors		N/A
G.3.4	Overcurrent protection devices		P
G.3.5	Safeguards components not mentioned in G.3.1 to G.3.5		N/A
G.3.5.1	Non-resettable devices suitably rated and marking provided		N/A
G.3.5.2	Single faults conditions.....	(See appended Table B.4)	N/A
G.4	Connectors		N/A
G.4.1	Spacings		N/A
G.4.2	Mains connector configuration	Compliance with standard IEC 60083 & IEC 60320	P
G.4.3	Plug is shaped that insertion into mains socket-outlets or appliance coupler is unlikely		N/A
G.5	Wound Components		P
G.5.1	Wire insulation in wound components.....	Approved TIW used	P
G.5.1.2 a)	Two wires in contact inside wound component, angle between 45° and 90°		N/A
G.5.1.2 b)	Construction subject to routine testing		N/A
G.5.2	Endurance test on wound components		N/A
G.5.2.1	General test requirements		N/A
G.5.2.2	Heat run test		N/A
	Time (s)		—
	Temperature (°C)		—
G.5.2.3	Wound Components supplied by mains		N/A
G.5.3	Transformers		P
G.5.3.1	Requirements applied (IEC61204-7, IEC61558-1/-2, and/or IEC62368-1).....	Tested with appliance	P
	Position.....		—
	Method of protection		—
G.5.3.2	Insulation		P

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Protection from displacement of windings.....:	The end turns are reliably fixed by tape, the whole transformer varnished	—
G.5.3.3	Overload test	(See appended table B.3)	P
G.5.3.3.1	Test conditions		P
G.5.3.3.2	Winding Temperatures testing in the unit		P
G.5.3.3.3	Winding Temperatures - Alternative test method		N/A
G.5.4	Motors		N/A
G.5.4.1	General requirements		N/A
	Position		—
G.5.4.2	Test conditions		N/A
G.5.4.3	Running overload test		N/A
G.5.4.4	Locked-rotor overload test		N/A
	Test duration (days)		—
G.5.4.5	Running overload test for d.c. motors in secondary circuits		N/A
G.5.4.5.2	Tested in the unit		N/A
	Electric strength test (V)		—
G.5.4.5.3	Tested on the Bench - Alternative test method; test time (h)		N/A
	Electric strength test (V)		—
G.5.4.6	Locked-rotor overload test for d.c. motors in secondary circuits		N/A
G.5.4.6.2	Tested in the unit		N/A
	Maximum Temperature		N/A
	Electric strength test (V)		N/A
G.5.4.6.3	Tested on the bench - Alternative test method; test time (h)		N/A
	Electric strength test (V)		N/A
G.5.4.7	Motors with capacitors		N/A
G.5.4.8	Three-phase motors		N/A
G.5.4.9	Series motors		N/A
	Operating voltage		—
G.6	Wire Insulation		N/A
G.6.1	General		N/A
G.6.2	Solvent-based enamel wiring insulation		N/A
G.7	Mains supply cords		N/A

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
G.7.1	General requirements		N/A
	Type.....:		—
	Rated current (A).....:		—
	Cross-sectional area (mm ²), (AWG).....:		—
G.7.2	Compliance and test method		N/A
G.7.3	Cord anchorages and strain relief for non-detachable power supply cords		N/A
G.7.3.2	Cord strain relief		N/A
G.7.3.2.1	Requirements		N/A
	Strain relief test force (N)		—
G.7.3.2.2	Strain relief mechanism failure		N/A
G.7.3.2.3	Cord sheath or jacket position, distance (mm).....:		—
G.7.3.2.4	Strain relief comprised of polymeric material		N/A
G.7.4	Cord Entry	(See appended table 5.4.11.1)	N/A
G.7.5	Non-detachable cord bend protection		N/A
G.7.5.1	Requirements		N/A
G.7.5.2	Mass (g)		—
	Diameter (m)		—
	Temperature (°C)		—
G.7.6	Supply wiring space		N/A
G.7.6.2	Stranded wire		N/A
G.7.6.2.1	Test with 8 mm strand		N/A
G.8	Varistors		P
G.8.1	General requirements	Approved varistors used	P
G.8.2	Safeguard against shock		P
G.8.3	Safeguard against fire		N/A
G.8.3.2	Varistor overload test		N/A
G.8.3.3	Temporary overvoltage		N/A
G.9	Integrated Circuit (IC) Current Limiters		N/A
G.9.1 a)	Manufacturer defines limit at max. 5A.		N/A
G.9.1 b)	Limiters do not have manual operator or reset		N/A
G.9.1 c)	Supply source does not exceed 250 VA		—
G.9.1 d)	IC limiter output current (max. 5A)		—
G.9.1 e)	Manufacturers' defined drift		—
G.9.2	Test Program 1		N/A

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
G.9.3	Test Program 2		N/A
G.9.4	Test Program 3		N/A
G.10	Resistors		N/A
G.10.1	General requirements		N/A
G.10.2	Resistor test		N/A
G.10.3	Test for resistors serving as safeguards between the mains and an external circuit consisting of a coaxial cable		N/A
G.10.3.1	General requirements		N/A
G.10.3.2	Voltage surge test		N/A
G.10.3.3	Impulse test		N/A
G.11	Capacitor and RC units		P
G.11.1	General requirements	Approved Y1 capacitors used	P
G.11.2	Conditioning of capacitors and RC units		P
G.11.3	Rules for selecting capacitors		P
G.12	Optocouplers		N/A
	Optocouplers comply with IEC 60747-5-5:2007 Spacing or Electric Strength Test (specify option and test results)		N/A
	Type test voltage Vini		—
	Routine test voltage, Vini,b		—
G.13	Printed boards		P
G.13.1	General requirements		P
G.13.2	Uncoated printed boards		P
G.13.3	Coated printed boards		N/A
G.13.4	Insulation between conductors on the same inner surface		N/A
	Compliance with cemented joint requirements (Specify construction)		—
G.13.5	Insulation between conductors on different surfaces		N/A
	Distance through insulation		N/A
	Number of insulation layers (pcs)		—
G.13.6	Tests on coated printed boards		N/A
G.13.6.1	Sample preparation and preliminary inspection		N/A
G.13.6.2a)	Thermal conditioning		N/A
G.13.6.2b)	Electric strength test		N/A
G.13.6.2c)	Abrasion resistance test		N/A

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
G.14	Coating on components terminals		N/A
G.14.1	Requirements	(See G.13)	N/A
G.15	Liquid filled components		N/A
G.15.1	General requirements		N/A
G.15.2	Requirements		N/A
G.15.3	Compliance and test methods		N/A
G.15.3.1	Hydrostatic pressure test		N/A
G.15.3.2	Creep resistance test		N/A
G.15.3.3	Tubing and fittings compatibility test		N/A
G.15.3.4	Vibration test		N/A
G.15.3.5	Thermal cycling test		N/A
G.15.3.6	Force test		N/A
G.15.4	Compliance		N/A
G.16	IC including capacitor discharge function (ICX)		N/A
a)	Humidity treatment in accordance with sc5.4.8 – 120 hours		N/A
b)	Impulse test using circuit 2 with $U_c =$ to transient voltage		N/A
C1)	Application of ac voltage at 110% of rated voltage for 2.5 minutes		N/A
C2)	Test voltage		—
D1)	10,000 cycles on and off using capacitor with smallest capacitance resistor with largest resistance specified by manufacturer		N/A
D2)	Capacitance		—
D3)	Resistance		—
H	CRITERIA FOR TELEPHONE RINGING SIGNALS		N/A
H.1	General		N/A
H.2	Method A		N/A
H.3	Method B		N/A
H.3.1	Ringling signal		N/A
H.3.1.1	Frequency (Hz)		—
H.3.1.2	Voltage (V)		—
H.3.1.3	Cadence; time (s) and voltage (V)		—
H.3.1.4	Single fault current (mA):.....		—
H.3.2	Tripping device and monitoring voltage		N/A

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
H.3.2.1	Conditions for use of a tripping device or a monitoring voltage complied with		N/A
H.3.2.2	Tripping device		N/A
H.3.2.3	Monitoring voltage (V)		—
J	INSULATED WINDING WIRES FOR USE WITHOUT INTERLEAVED INSULATION		P
	General requirements	UL approved	P
K	SAFETY INTERLOCKS		N/A
K.1	General requirements		N/A
K.2	Components of safety interlock safeguard mechanism		N/A
K.3	Inadvertent change of operating mode		N/A
K.4	Interlock safeguard override		N/A
K.5	Fail-safe		N/A
	Compliance		N/A
K.6	Mechanically operated safety interlocks		N/A
K.6.1	Endurance requirement		N/A
K.6.2	Compliance and Test method		N/A
K.7	Interlock circuit isolation		N/A
K.7.1	Separation distance for contact gaps & interlock circuit elements (type and circuit location)		N/A
K.7.2	Overload test, Current (A)		N/A
K.7.3	Endurance test		N/A
K.7.4	Electric strength test		N/A
L	DISCONNECT DEVICES		P
L.1	General requirements	Appliance coupler for one type of open frame model series. Direct plug-in for other models.	P
L.2	Permanently connected equipment		N/A
L.3	Parts that remain energized		N/A
L.4	Single phase equipment		P
L.5	Three-phase equipment		N/A
L.6	Switches as disconnect devices		N/A
L.7	Plugs as disconnect devices		P
L.8	Multiple power sources		N/A
M	EQUIPMENT CONTAINING BATTERIES AND THEIR PROTECTION CIRCUITS		N/A
M.1	General requirements		N/A

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
M.2	Safety of batteries and their cells		N/A
M.2.1	Requirements		N/A
M.2.2	Compliance and test method (identify method) .. :		N/A
M.3	Protection circuits		N/A
M.3.1	Requirements		N/A
M.3.2	Tests		N/A
	- Overcharging of a rechargeable battery		N/A
	- Unintentional charging of a non-rechargeable battery		N/A
	- Reverse charging of a rechargeable battery		N/A
	- Excessive discharging rate for any battery		N/A
M.3.3	Compliance		N/A
M.4	Additional safeguards for equipment containing secondary lithium battery		N/A
M.4.1	General		N/A
M.4.2	Charging safeguards		N/A
M.4.2.1	Charging operating limits		N/A
M.4.2.2a)	Charging voltage, current and temperature		—
M.4.2.2 b)	Single faults in charging circuitry		—
M.4.3	Fire Enclosure		N/A
M.4.4	Endurance of equipment containing a secondary lithium battery		N/A
M.4.4.2	Preparation		N/A
M.4.4.3	Drop and charge/discharge function tests		N/A
	Drop		N/A
	Charge		N/A
	Discharge		N/A
M.4.4.4	Charge-discharge cycle test		N/A
M.4.4.5	Result of charge-discharge cycle test		N/A
M.5	Risk of burn due to short circuit during carrying		N/A
M.5.1	Requirement		N/A
M.5.2	Compliance and Test Method (Test of P.2.3)		N/A
M.6	Prevention of short circuits and protection from other effects of electric current		N/A
M.6.1	Short circuits		N/A
M.6.1.1	General requirements		N/A
M.6.1.2	Test method to simulate an internal fault		N/A

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
M.6.1.3	Compliance (Specify M.6.1.2 or alternative method)		N/A
M.6.2	Leakage current (mA)		N/A
M.7	Risk of explosion from lead acid and NiCd batteries		N/A
M.7.1	Ventilation preventing explosive gas concentration		N/A
M.7.2	Compliance and test method		N/A
M.8	Protection against internal ignition from external spark sources of lead acid batteries		N/A
M.8.1	General requirements		N/A
M.8.2	Test method		N/A
M.8.2.1	General requirements		N/A
M.8.2.2	Estimation of hypothetical volume V_z (m ³ /s).....		—
M.8.2.3	Correction factors		—
M.8.2.4	Calculation of distance d (mm)		—
M.9	Preventing electrolyte spillage		N/A
M.9.1	Protection from electrolyte spillage		N/A
M.9.2	Tray for preventing electrolyte spillage		N/A
M.10	Instructions to prevent reasonably foreseeable misuse (Determination of compliance: inspection, data review; or abnormal testing)		N/A
N	ELECTROCHEMICAL POTENTIALS		N/A
	Metal(s) used		—
O	MEASUREMENT OF CREEPAGE DISTANCES AND CLEARANCES		P
	Figures O.1 to O.20 of this Annex applied	O.5	—
P	SAFEGUARDS AGAINST ENTRY OF FOREIGN OBJECTS AND SPILLAGE OF INTERNAL LIQUIDS		P
P.1	General requirements		P
P.2.2	Safeguards against entry of foreign object		P
	Location and Dimensions (mm)	No openings	—
P.2.3	Safeguard against the consequences of entry of foreign object		N/A
P.2.3.1	Safeguards against the entry of a foreign object		N/A
	Openings in transportable equipment		N/A
	Transportable equipment with metalized plastic parts		N/A

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
P.2.3.2	Openings in transportable equipment in relation to metallized parts of a barrier or enclosure (identification of supplementary safeguard)		N/A
P.3	Safeguards against spillage of internal liquids	No internal liquids	N/A
P.3.1	General requirements		N/A
P.3.2	Determination of spillage consequences		N/A
P.3.3	Spillage safeguards		N/A
P.3.4	Safeguards effectiveness		N/A
P.4	Metallized coatings and adhesive securing parts		N/A
P.4.2 a)	Conditioning testing		N/A
	Tc (°C)		—
	Tr (°C)		—
	Ta (°C)		—
P.4.2 b)	Abrasion testing	(See G.13.6.2)	N/A
P.4.2 c)	Mechanical strength testing	(See Annex T)	N/A
Q	CIRCUITS INTENDED FOR INTERCONNECTION WITH BUILDING WIRING		N/A
Q.1	Limited power sources		N/A
Q.1.1 a)	Inherently limited output		N/A
Q.1.1 b)	Impedance limited output		N/A
	- Regulating network limited output under normal operating and simulated single fault condition		N/A
Q.1.1 c)	Overcurrent protective device limited output		N/A
Q.1.1 d)	IC current limiter complying with G.9		N/A
Q.1.2	Compliance and test method		N/A
Q.2	Test for external circuits – paired conductor cable		N/A
	Maximum output current (A)		—
	Current limiting method		—
R	LIMITED SHORT CIRCUIT TEST		N/A
R.1	General requirements		N/A
R.2	Determination of the overcurrent protective device and circuit		N/A
R.3	Test method Supply voltage (V) and short-circuit current (A).		N/A
S	TESTS FOR RESISTANCE TO HEAT AND FIRE		N/A
S.1	Flammability test for fire enclosures and fire barrier materials of equipment where the steady state power does not exceed 4 000 W	Approved materials used	N/A
	Samples, material		—

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Wall thickness (mm).....:		—
	Conditioning (°C).....:		—
	Test flame according to IEC 60695-11-5 with conditions as set out		N/A
	- Material not consumed completely		N/A
	- Material extinguishes within 30s		N/A
	- No burning of layer or wrapping tissue		N/A
S.2	Flammability test for fire enclosure and fire barrier integrity		N/A
	Samples, material		—
	Wall thickness (mm).....:		—
	Conditioning (°C).....:		—
	Test flame according to IEC 60695-11-5 with conditions as set out		N/A
	Test specimen does not show any additional hole		N/A
S.3	Flammability test for the bottom of a fire enclosure		N/A
	Samples, material		—
	Wall thickness (mm).....:		—
	Cheesecloth did not ignite		N/A
S.4	Flammability classification of materials		N/A
S.5	Flammability test for fire enclosures and fire barrier materials of equipment where the steady state power does not exceed 4 000 W		N/A
	Samples, material		—
	Wall thickness (mm).....:		—
	Conditioning (test condition), (°C).....:		—
	Test flame according to IEC 60695-11-20 with conditions as set out		N/A
	After every test specimen was not consumed completely		N/A
	After fifth flame application, flame extinguished within 1 min		N/A
T	MECHANICAL STRENGTH TESTS		P
T.1	General requirements		P
T.2	Steady force test, 10 N	(See appended table T.2)	P
T.3	Steady force test, 30 N	(See appended table T3)	P
T.4	Steady force test, 100 N	(See appended table T4)	P

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
T.5	Steady force test, 250 N		N/A
T.6	Enclosure impact test		N/A
	Fall test		N/A
	Swing test		N/A
T.7	Drop test	(See appended table T7)	P
T.8	Stress relief test	(See appended table T8)	P
T.9	Impact Test (glass)		N/A
T.9.1	General requirements		N/A
T.9.2	Impact test and compliance		N/A
	Impact energy (J).....		—
	Height (m)		—
T.10	Glass fragmentation test	(See sub-clause 4.4.4.9)	N/A
T.11	Test for telescoping or rod antennas		N/A
	Torque value (Nm)		—
U	MECHANICAL STRENGTH OF CATHODE RAY TUBES (CRT) AND PROTECTION AGAINST THE EFFECTS OF IMPLOSION		N/A
U.1	General requirements		N/A
U.2	Compliance and test method for non-intrinsically protected CRTs		N/A
U.3	Protective Screen.....	(See Annex T)	N/A
V	DETERMINATION OF ACCESSIBLE PARTS (FINGERS, PROBES AND WEDGES)		P
V.1	Accessible parts of equipment	External enclosure & output wire	P
V.2	Accessible part criterion		P

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

4.1.2	TABLE: List of critical components					P
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹	
Enclosure & Blade holder	SABIC INNOVATIVE PLASTICS B V	SE1X SE1 945	Min. V-1 at 1.5 mm thickness	IEC/EN 62368-1 UL 94 UL 746 A/B/C/D	Tested with appliance UL E45329	
Alt.	SABIC INNOVATIVE PLASTICS B V	SE100	Min. V-1 at 2.0 mm thickness	IEC/EN 62368-1 UL 94 UL 746 A/B/C/D	Tested with appliance UL E45329	
Alt.	SABIC INNOVATIVE PLASTICS B V	C2950 CX7211 EXCY0098 940	Min. V-0 at 2.0 mm thickness	IEC/EN 62368-1 UL 94 UL 746 A/B/C/D	Tested with appliance UL E45329	
Alt.	TEIJIN CHEMICALS LTD	LN-1250P LN-1250G	Min. V-0 at 2.0 mm thickness	IEC/EN 62368-1 UL 94 UL 746 A/B/C/D	Tested with appliance UL E50075	
Alt.	CHI MEI Corporation	PA-765A	Min. V-1 at 2.0 mm thickness	IEC/EN 62368-1 UL 94 UL 746 A/B/C/D	Tested with appliance UL E56070	
Alt.	CHI MEI Corporation	PC-540	Min. V-0 at 2.0 mm thickness	IEC/EN 62368-1 UL 94 UL 746 A/B/C/D	Tested with appliance UL E56070	
Alt. use	SABIC JAPAN L L C	SE1X, SE1	PPE+PS, Min. V-1, Min. thickness: 2.0mm, 105°C	IEC/EN 62368-1 UL 94 UL 746 A/B/C/D	Tested with appliance UL E207780	
Alt. use	SABIC JAPAN L L C	C2950	PC/ABS, Min. V-0, Min. thickness: 2.0mm, 105°C	IEC/EN 62368-1 UL 94 UL 746 A/B/C/D	Tested with appliance UL E207780	
Alt. use	SABIC JAPAN L L C	CX7211	PC/ABS, Min. V-0, Min. thickness: 2.0mm, 90°C	IEC/EN 62368-1 UL 94 UL 746 A/B/C/D	Tested with appliance UL E207780	
Alt. use	SABIC JAPAN L L C	945 940	PC, Min. V-0, Min. thickness: 2.0mm, 120°C	IEC/EN 62368-1 UL 94 UL 746 A/B/C/D	Tested with appliance UL E207780	
Alt. use	SABIC JAPAN L L C	HF500R	PC, V-0, Min. thickness: 2.0mm, 125°C	IEC/EN 62368-1 UL 94 UL 746 A/B/C/D	Tested with appliance UL E207780	
AC inlet for Class I model	Zhejiang LECI Electronics Co., Ltd.	DB-6	2.5A, 250Vac Standard sheet: C6	IEC/EN 60320-1 UL 498	VDE 40032465 UL E302229	
Alt.	Rich Bay Co., Ltd.	R-30790 R-307	2.5A, 250Vac Standard sheet: C6	IEC/EN 60320-1 UL 498	VDE 40030381 UL E184638	
Alt.	Sun Fair Electric Wire & Cable (HK)Co. Ltd.	S-02	2.5A, 250Vac Standard sheet: C6	IEC/EN 60320-1 UL 498	VDE 40034448 UL E226643	

IEC 62368-1					
Clause	Requirement + Test		Result - Remark		Verdict
Alt.	TECX-UNIONS Technology Corporation	TU-333 series	2.5A, 250Vac Standard sheet: C6	IEC/EN 60320-1 UL 498	VDE 40005430 UL E100004
Alt.	Rong Feng Industrial Co., Ltd.	RF-190	2.5A, 250Vac Standard sheet: C6	IEC/EN 60320-1 UL 498	VDE 40030379 UL E102641
Alt.	Inalways Corporation	0724	2.5A, 250Vac Standard sheet: C6	IEC/EN 60320-1 UL 498	ENEC 2010080 UL E94191
Alt.	Kunshan Dlk Electronics Technology Co., Ltd	CDJ-2	2.5A, 250Vac Standard sheet: C6	IEC/EN 60320-1 UL 498	VDE 40022871 UL E317189
Alt.	Zhejiang LECI Electronics Co., Ltd.	DB-14	10A, 250Vac Standard sheet: C14	IEC/EN 60320-1 UL 498	VDE 40032137 UL E302229
Alt.	Rich Bay Co., Ltd.	R-301SN	10A, 250Vac Standard sheet: C14	IEC/EN 60320-1 UL 498	VDE 40030228 UL E184638
Alt.	Sun Fair Electric Wire & Cable (HK)Co. Ltd.	S-03	10A, 250Vac Standard sheet: C14	IEC/EN 60320-1 UL 498	VDE 40034447 UL E226643
Alt.	TECX-UNIONS Technology Corporation	TU-301-S TU-301-SP	10A, 250Vac Standard sheet: C14	IEC/EN 60320-1 UL 498	VDE 40025582 UL E220004
Alt.	Rong Feng Industrial Co., Ltd.	SS-120	10A, 250Vac Standard sheet: C14	IEC/EN 60320-1 UL 498	VDE 40028101 UL E102641
Alt.	Inalways Corporation	0711 series	10A, 250Vac Standard sheet: C14	IEC/EN 60320-1 UL 498	ENEC 2010084 UL E94191
AC inlet for Class II model	Zhejiang LECI Electronics Co., Ltd.	DB-8	2.5A, 250Vac Standard sheet: C8	IEC/EN 60320-1 UL 498	VDE 40032028 UL E302229
Alt.	Rich Bay Co., Ltd.	R-201SN90	2.5A, 250Vac Standard sheet: C8	IEC/EN 60320-1 UL 498	VDE 40030384 UL E184638
Alt.	Sun Fair Electric Wire & Cable (HK)Co. Ltd.	S-01	2.5A, 250Vac Standard sheet: C8	IEC/EN 60320-1 UL 498	VDE 40034449 UL E226643
Alt.	TECX-UNIONS Technology Corporation	SO-222 series	2.5A, 250Vac Standard sheet: C8	IEC/EN 60320-1 UL 498	VDE 40020337 UL E100004
Alt.	Rong Feng Industrial Co., Ltd.	RF-180	2.5A, 250Vac Standard sheet: C8	IEC/EN 60320-1 UL 498	VDE 40030168 UL E102641
Alt.	Inalways Corporation	0721 series	2.5A, 250Vac Standard sheet: C8	IEC/EN 60320-1 UL 498	ENEC 2010087 UL E94191

IEC 62368-1					
Clause	Requirement + Test		Result - Remark		Verdict
Alt.	Kunshan Dik Electronics Technology Co., Ltd	CDJ-8	2.5A, 250Vac Standard sheet: C8	IEC/EN 60320-1 UL 498	VDE 40025531 UL E317189
Insulating tube used on appliance inlet	SHENZHEN WOER HEAT-SHRINKABLE MATERIAL CO LTD	RSFR RSFR-H RSFR-HPF	600V, 125°C, VW-1	IEC/EN 62368-1 UL 224	Tested within appliance UL E203950
Alt.	QIFURUI ELECTRONICS CO	QFR-h	600V, 125°C, VW-1	IEC/EN 62368-1 UL 224	Tested within appliance UL E225897
Alt.	DONGGUAN SALIPT CO LTD	SALIPT S-901-300 SALIPT S-901-600	Min. 300V, 125°C, VW-1	IEC/EN 62368-1 UL 224	Tested within appliance UL E209436
Alt.	GUANGZHOU KAIHENG ENTERPRISE GROUP	K-2 (+) K-2 (CB)	Min. 300V, 125°C, VW-1	IEC/EN 62368-1 UL 224	Tested within appliance UL E214175
Alt.	CHANGYUAN ELECTRONICS (SHENZHEN) CO LTD	CB-HFT	Min. 300V, 125°C, VW-1	IEC/EN 62368-1 UL 224	Tested within appliance UL E180908
Alt.	SHENZHEN WOLIDA TRADING CO LTD	RSFR-H	600V, 125°C, VW-1	IEC/EN 62368-1 UL 224	Tested within appliance E329530
Internal primary wiring	DONGGUAN YUE YANG WIRE & CABLE CO LTD	1007, 1015, 1185, 2464, 2468	Min. 18AWG, min. 300Vac, min. 80°C, VW-1	IEC/EN 62368-1 UL 758	Tested with appliance UL E230810
Alt.	YONG HAO ELECTRICAL INDUSTRY CO LTD	1007, 1015, 1185, 2464, 2468	Min. 18AWG, min. 300Vac, min. 80°C, VW-1	IEC/EN 62368-1 UL 758	Tested with appliance UL E240426
Alt.	HIP TAI ELECTRIC WIRE CO	1007, 1015, 1185, 2464, 2468	Min. 18AWG, min. 300Vac, min. 80°C, VW-1	IEC/EN 62368-1 UL 758	Tested with appliance UL E225804
Alt.	KUNSHAN NEW ZHICHENG ELECTRONICS TECHNOLOGIES CO LTD	1007, 1015, 1185, 2464, 2468	Min. 18AWG, min. 300Vac, min. 80°C, VW-1	IEC/EN 62368-1 UL 758	Tested with appliance UL E237831
Alt.	SHENG YU ENTERPRISE CO LTD	1007, 1015, 2464, 2468	Min. 18AWG, min. 300Vac, min. 80°C, VW-1	IEC/EN 62368-1 UL 758	Tested with appliance UL E219726
Alt.	SUZHOU YEMAO ELECTRONIC CO LTD	1007, 1015, 1185, 2464, 2468	Min. 18AWG, min. 300Vac, min. 80°C, VW-1	IEC/EN 62368-1 UL 758	Tested with appliance UL E353532

IEC 62368-1					
Clause	Requirement + Test		Result - Remark		Verdict
Alt.	SUZHOU HONGMENG ELECTRONIC CO LTD	1007, 1015, 1185, 2464, 2468	Min. 18AWG, min. 300Vac, min. 80°C, VW-1	IEC/EN 62368-1 UL 758	Tested with appliance UL E315421
Alt.	ZHUANG SHAN CHUAN ELECTRICAL PRODUCTS (KUNSHAN) CO LTD	1007, 1015, 1185, 2464, 2468	Min. 18AWG, min. 300Vac, min. 80°C, VW-1	IEC/EN 62368-1 UL 758	Tested with appliance UL E333601
Alt.	SUZHOU QCTECH CO LTD	1007, 1015, 1185, 2464, 2468	Min. 18AWG, min. 300Vac, min. 80°C, VW-1	IEC/EN 62368-1 UL 758	Tested with appliance E322968
Insulating sheet only for GT-41134-0606-W2-TAB	FORMEX, DIV OF IL TOOL WORKS INC, FRMRLY FASTEX, DIV OF IL TOOL WORKS INC	FORMEX GK series	V-0, min. 0.4 mm thickness, 115°C	IEC/EN 62368-1 UL 94 UL 746 A/B/C/D	Tested with appliance UL E121855
Alt.	MIANYANG LONGHUA FILM CO LTD	PP-WT-20	VTM-0, min. 0.4 mm thickness, 65°C	IEC/EN 62368-1 UL 94 UL 746 A/B/C/D	Tested with appliance UL E254551
Alt.	SABIC INNOVATIVE PLASTICS US L L C	FR60 series FR63 series FR65 series FR7 series FR700 series	V-0, min. 0.4 mm thickness, 130°C	IEC/EN 62368-1 UL 94 UL 746 A/B/C/D	Tested with appliance UL E121562
Alt.	MIANYANG LONGHUA FILM CO LTD	PP-BK series PP-WT series	V-0, min. 0.4 mm thickness, 80°C	IEC/EN 62368-1 UL 94 UL 746 A/B/C/D	Tested with appliance UL E254551
Alt.	ITW ELECTRONICS COMPONENTS/ PRODUCTS (SHANGHAI) CO LTD	FORMEX-18 FORMEX-17	V-0, min. 0.4 mm thickness, 100°C	IEC/EN 62368-1 UL 94 UL 746 A/B/C/D	Tested within appliance UL E256266
PCB	WALEX ELECTRONIC (WUXI) CO LTD	T2A T2B T4 T2	Min. V-0, min 1.6 mm thickness, 130°C	IEC/EN 62368-1 UL 796	Tested with appliance UL E154355
Alt.	DONGGUAN HE TONG ELECTRONICS CO LTD	CEM1 2V0 FR4	Min. V-0, min 1.6 mm thickness, 130°C	IEC/EN 62368-1 UL 796	Tested with appliance UL E243157
Alt.	CHEERFUL ELECTRONIC	03 03A	Min. V-0, min 1.6 mm thickness, 130°C	IEC/EN 62368-1 UL 796	Tested with appliance UL E199724

IEC 62368-1					
Clause	Requirement + Test		Result - Remark		Verdict
Alt.	DONGGUAN DAYSUN ELECTRONIC CO LTD	DS2	Min. V-0, min 1.6 mm thickness, 130°C	IEC/EN 62368-1 UL 796	Tested with appliance UL E251754
Alt.	SUZHOU CITY YILIHUA ELECTRONICS CO LTD	YLH-1	Min. V-0, min 1.6 mm thickness, 130°C	IEC/EN 62368-1 UL 796	Tested with appliance UL E251781
Alt.	SHANGHAI AREX PRECISION ELECTRONIC CO LTD	02V0 03V0 04V0	Min. V-0, min 1.6 mm thickness, 130°C	IEC/EN 62368-1 UL 796	Tested with appliance UL E186016
Alt.	BRITE PLUS ELECTRONICS (SUZHOU) CO LTD	DKV0-3A DGV0-3A	Min. V-0, min 1.6 mm thickness, 130°C	IEC/EN 62368-1 UL 796	Tested with appliance UL E177671
Alt.	KUOTIANG ENT LTD	C-2 C-2A	Min. V-0, min 1.6 mm thickness, 130°C	IEC/EN 62368-1 UL 796	Tested with appliance UL E227299
Alt.	PACIFIC WIN INDUSTRIAL LTD	PW-02 PW-03	Min. V-0, min 1.6 mm thickness, 130°C	IEC/EN 62368-1 UL 796	Tested with appliance UL E228070
Alt.	SHENZHEN TONGCHUANGXIN ELECTRONICS CO LTD	TCX	Min. V-0, min 1.6 mm thickness, 130°C	IEC/EN 62368-1 UL 796	Tested with appliance UL E250336
Alt.	Interchangeable	Interchangeable	Min. V-0, min 1.6 mm thickness, 130°C	IEC/EN 62368-1 UL 796: 2010	Tested with appliance UL Approved.
Fuse (F1, F2) ³ (F2 is optional.)	Conquer Electronics Co., Ltd.	MST	T1A or T6.3A, 250V, Rated breaking capacity 100A	IEC/EN 60127-2 UL 248-1 UL 248-14	VDE 40017118 UL E82636
Alt.	Ever Island Electric Co., Ltd. and Walter Electric	2010	T1A or T6.3A, 250V, Rated breaking capacity 130A	IEC/EN 60127-2 UL 248-1 UL 248-14	VDE 40018781 UL E220181
Alt.	Bel Fuse Ltd.	RST	T1A or T6.3A, 250V, Rated breaking capacity 100A	IEC/EN 60127-2 UL 248-1 UL 248-14	VDE 40011144 UL E20624
Alt.	Cooper Bussmann LLC	SS-5	T1A or T6.3A, 250V, Rated breaking capacity 35A	IEC/EN 60127-2 UL 248-1 UL 248-14	VDE 40015513 UL E19180

IEC 62368-1					
Clause	Requirement + Test		Result - Remark		Verdict
Alt.	Das & Sons International Ltd.	385T series	T1A or T6.3A, 250V, Rated breaking capacity 35A	IEC/EN 60127-2 UL 248-1 UL 248-14	VDE 40008524 UL E205718
Alt.	Shenzhen Lanson Electronics Co. Ltd.	SMT	T1A or T6.3A, 250V, Rated breaking capacity 35A	IEC/EN 60127-2 UL 248-1 UL 248-14	VDE 40012592 UL E221465
Alt.	Walter Electronic Co. Ltd.	ICP series	T1A or T6.3A, 250V, Rated breaking capacity 50A.	IEC/EN 60127-2 UL 248-1 UL 248-14	VDE 40012824 UL E56092
Alt.	Zhongshan Lanbao Electrical Appliances Co., Ltd.	RTI-10 series	T1A or T6.3A, 250V, Rated breaking capacity 50A	IEC/EN 60127-2 UL 248-1 UL 248-14	VDE 40017009 UL E213695
Alt.	Sun Electric Co.	5T	T1A or T6.3A, 250V, Rated breaking capacity 100A	IEC/EN 60127-2 UL 248-1 UL 248-14	VDE 40027241 UL E166522
Alt.	Bel Fuse Ltd.	5ST	T1A or T6.3A, 250V, Rated breaking capacity 35A	IEC/EN 60127-2 UL 248-1 UL 248-14	VDE 40000507 UL E20624
Y-Capacitor (CY1, CY2) (optional)	SUCCESS ELECTRONICS CO LTD	SE SB	Type Y1, max. 4700pF, min. 250V, 125°C	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40037221 VDE 40037211 UL E114280
Alt.	MURATA MFG CO LTD	KX	Type Y1, max. 4700pF, min. 250V, 125°C	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40002831 UL E37921
Alt.	WALSIN TECHNOLOGY CORP	AH	Type Y1, max. 4700pF, min. 250V, 125°C	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40001804 UL E146544
Alt.	JYA-NAY CO LTD	JN	Type Y1, max. 4700pF, min. 250V, 125°C	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40001831 UL E201384
Alt.	HAOHUA ELECTRONIC CO	CT7	Type Y1, max. 4700pF, min. 250V, 125°C	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40003902 UL E233106
Alt.	JERRO ELECTRONICS CORP	JX-series	Type Y1, max. 4700pF, min. 250V, 125°C	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40032158 UL E333001
Alt.	TDK CORP	CD	Type Y1, max. 4700pF, min. 250V, 125°C	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 124321 UL E37861

IEC 62368-1					
Clause	Requirement + Test		Result - Remark		Verdict
Alt.	JYH CHUNG ELECTRONICS CO LTD	JD	Type Y1, max. 4700pF, min. 250V, 125°C	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 137027 UL E187963
Alt.	WELSON INDUSTRIAL CO LTD	WD	Type Y1, max. 4700pF, min. 250V, 125°C	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 115455 UL E104572
Varistor (MOV1) (optional)	JOYIN CO LTD	10N471K 14N471K	Max continuous voltage: 300VAC, 6kV/3kA, 40/85/56	IEC 61051-2 UL 1449	VDE 005937 UL E325508
Alt.	CENTRA SCIENCE CORP	10D471K 14D471K	Max continuous voltage: 300VAC, 6kV/3kA, 40/85/56	IEC 61051-2 UL 1449	VDE 40008220 UL E316325
Alt.	THINKING ELECTRONIC INDUSTRIAL CO LTD	TVR10471K TVR14471K	Max continuous voltage: 300VAC, 6kV/3kA, 40/85/56	IEC 61051-2 UL 1449	VDE 005944 UL E314979
Alt.	SUCCESS ELECTRONICS CO LTD	SVR10D471K SVR14D471K	Max continuous voltage: 300VAC, 6kV/3kA, 40/85/56	IEC 61051-2 UL 1449	VDE 40030401 UL E330256
Alt.	CERAMATE TECHNICAL CO LTD	GNR10D471K GND14D471K	Max continuous voltage: 300VAC, 6kV/3kA, 40/85/56	IEC 61051-2 UL 1449	VDE 40031745 UL E315429
Alt.	BRIGHTKING (SHENZHEN) CO LTD	10D471K 14D471K	Max continuous voltage: 300VAC, 6kV/3kA, 40/85/56	IEC 61051-2 UL 1449	VDE 40027827 UL E327997
Alt.	LIEN SHUN ELECTRONICS CO LTD	10D471K 14D471K	Max continuous voltage: 300VAC, 6kV/3kA, 40/85/56	IEC 61051-2 UL 1449	VDE 40005858 UL E315524
Alt.	HONGZHI ENTERPRISES LTD	HEL-10D471K HEL-14D471K	Max continuous voltage: 300VAC, 6kV/3kA, 40/85/56	IEC 61051-2 UL 1449	VDE 40008621 UL E324904
Alt.	GUANGXI NEW FUTURE INFORMATION INDUSTRY CO LTD	10D471K 14D471K	Max continuous voltage: 300VAC, 6kV/3kA, 40/85/56	IEC 61051-2 UL 1449	VDE 40030322 UL E323753
Varistor (MOV1) (optional) (only for GT-41134-0606-W2-TAB)	Panasonic Corporation	ERZV20D241 (V20241U)	Max continuous voltage: 150VAC, 6kV/3kA, 40/85/56	IEC 61051-2 UL 1449	VDE 40018677 UL E321499
Alt.	Brightking (Shenzhen) Co., Ltd.	241KD20J	Max continuous voltage: 150VAC, 6kV/3kA, 40/85/56	IEC 61051-2 UL 1449	VDE 40027827 UL E327997
Alt.	EPCOS	S20K150	Max continuous voltage: 150VAC, 6kV/3kA, 40/85/56	IEC 61051-2 UL 1449	VDE 40027582 UL E321126

IEC 62368-1					
Clause	Requirement + Test		Result - Remark		Verdict
Alt.	Thinking Electronic Industrial Co., Ltd.	TVR20241K	Max continuous voltage: 150VAC, 6kV/3kA, 40/85/56	IEC 61051-2 UL 1449	VDE 005944 UL E314979
Alt.	Success Electronics Co., Ltd.	SVR20D241K	Max continuous voltage: 150VAC, 6kV/3kA, 40/85/56	IEC 61051-2 UL 1449	VDE 40030401 UL E330256
Transformer (T1)	GlobTek/ENG/BOAM/HAOPUWEI	XF00716I for 3.3-4.9V XF00714I for 5-8.9V XF00717 for 9-14.9V XF00718 for 15-18.9V XF00719 for 19-24V XF00814 for 24.1-36V XF00841 for 36.1-48V TF032 for 5-8.9V TF033 for 9-14.9V TF034 for 15-18.9V TF035 for 19-24V	Class B, with critical component listed below	IEC/EN 62368-1	Tested with appliance
-Insulation system	GLOBTEK INC	GTX-130-TM	Class 130(B)	IEC/EN 62368-1 UL 1446	Tested with appliance UL E243347
-Alt.	ENG ELECTRIC CO LTD	ENG130-1	Class 130(B)	IEC/EN 62368-1 UL 1446	Tested with appliance UL E308897
-Alt.	SHAN DONG BOAM ELECTRIC CO LTD	BOAM-01	Class 130(B)	IEC/EN 62368-1 UL 1446	Tested with appliance UL E252329
-Alt.	WUXI HAOPUWEI ELECTRONICS CO LTD	ZT-130	Class 130(B)	IEC/EN 62368-1 UL 1446	Tested with appliance UL E315275
-Magnet wire (Primary)	PACIFIC ELECTRIC WIRE & CABLE (SHENZHEN) CO LTD	UEWN/U	130°C	IEC/EN 62368-1 UL 1446	Tested with appliance UL E201757

IEC 62368-1					
Clause	Requirement + Test		Result - Remark		Verdict
-Alt.	JUNG SHING WIRE CO LTD	UEW-4 UEY-2	130°C	IEC/EN 62368-1 UL 1446	Tested with appliance UL E174837
-Alt.	JIANGSU HONGLIU MAGNET WIRE TECHNOLOGY CO LTD	2UEW/130	130°C	IEC/EN 62368-1 UL 1446	Tested with appliance UL E335065
-Alt.	CHANGZHOU DAYANG WIRE & CABLE CO LTD	2UEW/130	130°C	IEC/EN 62368-1 UL 1446	Tested with appliance UL E158909
-Alt.	WUXI JUFENG COMPOUND LINE CO LTD	2UEWB	130°C	IEC/EN 62368-1 UL 1446	Tested with appliance UL E206882
-Alt.	JIANGSU DARTONG M & E CO LTD	UEW	130°C	IEC/EN 62368-1 UL 1446	Tested with appliance UL E237377
-Alt.	SHANDONG SAINT ELECTRIC CO LTD	UEW/130	130°C	IEC/EN 62368-1 UL 1446	Tested with appliance UL E194410
-Alt.	ZHEJIANG LANGLI ELECTRIC EQUIPMENTS CO LTD	UEW	130°C	IEC/EN 62368-1 UL 1446	Tested with appliance UL E222214
-Secondary wire of T1 (TIW)	GREAT LEONFLON INDUSTRIAL CO LTD	TRW (B)	Min.130°C	IEC/EN 62368-1 UL 2353	Tested with appliance UL E211989
-Alt.	COSMOLINK CO LTD	TIW-M	Min.130°C	IEC/EN 62368-1 UL 2353	Tested with appliance UL E213764
-Alt.	FURUKAWA ELECTRIC CO LTD	TEX-E	Min.130°C	IEC/EN 62368-1 UL 2353	Tested with appliance UL E206440
-Alt.	TOTOKU ELECTRIC CO LTD	TIW-2	Min.130°C	IEC/EN 62368-1 UL 2353	Tested with appliance UL E166483
-Alt.	E&B TECHNOLOGY CO LTD	E&B-XXXB E&B-XXXB-1	Min.130°C	IEC/EN 62368-1 UL 2353	Tested with appliance UL E315265
-Bobbin	CHANG CHUN PLASTICS CO LTD	T375J T375HF	V-0, 150°C, min thickness: 0.6mm	IEC/EN 62368-1 UL 94 UL 746 A/B/C/D	Tested with appliance UL E59481
-Alt.	SUMITOMO BAKELITE CO LTD	PM-9820	V-0, 150°C, min thickness: 0.6mm	IEC/EN 62368-1 UL 94 UL 746 A/B/C/D	Tested with appliance UL E41429

IEC 62368-1					
Clause	Requirement + Test		Result - Remark		Verdict
-Alt.	HITACHI CHEMICAL CO LTD	CP-J-8800	V-0, 150°C, min thickness: 0.6mm	IEC/EN 62368-1 UL 94 UL 746 A/B/C/D	Tested with appliance UL E42956
-Insulating tape	3M COMPANY ELECTRICAL MARKETS DIV (EMD)	1350F-1 1350T-1	130°C	IEC/EN 62368-1 UL 510	Tested with appliance UL E17385
-Alt.	BONDTEC PACIFIC CO LTD	370S	130°C	IEC/EN 62368-1 UL 510	Tested with appliance UL E175868
-Alt.	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	PZ CT WF	130°C	IEC/EN 62368-1 UL 510	Tested with appliance UL E165111
-Alt.	JINGJIANG JINGYI ADHESIVE PRODUCT CO LTD	JY25-A	130°C	IEC/EN 62368-1 UL 510	Tested with appliance UL E246950
-Alt.	CHANG SHU LIANG YI TAPE INDUSTRY CO LTD	LY-XX	130°C	IEC/EN 62368-1 UL 510	Tested with appliance UL E246820
Output cord	Interchangeable	Interchangeable	Min. 24AWG, min. 300Vac, min. 80°C	UL 758: 2010	UL approved

Supplementary information:

- 1) Provided evidence ensures the agreed level of compliance. See OD-CB2039.
- 2) Description line content is optional. Main line description needs to clearly detail the component used for testing
- 3) For GT-41134-0606-W2-TAB, the fuse rating is T6.3A and evaluated separately. For the structure type only use F1 fuse, the fuse rating is T1A.

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

5.2		Table: Classification of electrical energy sources					P
5.2.2.2 – Steady State Voltage and Current conditions							
No.	Supply Voltage	Location (e.g. circuit designation)	Test conditions	Parameters			ES Class
				U (Vrms or Vpk or Vdc)	I (A _{pk} or A _{rms})	Hz	
1 model: GTM41 134- 0603	264	T1 sec. output	Normal	28.4Vp	--	<1kHz	ES1
			Abnormal	28.4Vp	--	<1kHz	
			Single fault – SC/OC	--	--	--	
2 model: GTM41 134- 0606- 1.0	264	C5	Normal	5.0Vdc	--	--	ES1
			Abnormal	5.0Vdc	--	--	
			Single fault – C5 (OC)	5.0Vdc	--	--	
			Single fault – D6 (SC)	0.2Vdc	--	--	
3 model: GTM41 134- 0612- 3.0	264	C5	Normal	9.0Vdc	--	--	ES1
			Abnormal	9.0Vdc	--	--	
			Single fault – C5 (OC)	9.0Vdc	--	--	
			Single fault – D6 (SC)	0.3Vdc	--	--	
4 model: GTM41 134- 0648	264	C5	Normal	49.0Vdc	--	--	ES1
			Abnormal	49.0Vdc	--	--	
			Single fault – C5 (OC)	49.0Vdc	--	--	
			Single fault – D6 (SC)	0.2Vdc	--	--	
5 model: GTM96 060- 0603	264	T1 sec. output	Normal	28.4Vp	--	<1kHz	ES1
			Abnormal	28.4Vp	--	<1kHz	
			Single fault – SC/OC	--	--	--	

IEC 62368-1							
Clause	Requirement + Test			Result - Remark		Verdict	
6 model: GTM96 060- 0606- 1.0	264	C5	Normal	5.0Vdc	--	--	ES1
			Abnormal	5.0Vdc	--	--	
			Single fault – C5 (OC)	5.0Vdc	--	--	
			Single fault – D6 (SC)	0.2Vdc	--	--	
7 model: GTM96 060- 0648	264	C5	Normal	49.0Vdc	--	--	ES1
			Abnormal	49.0Vdc	--	--	
			Single fault – C5 (OC)	49.0Vdc	--	--	
			Single fault – D6 (SC)	0.3Vdc	--	--	
7 model: GTM96 060- 0706- 1.0	264	C5	Normal	5.01Vdc	--	--	ES1
			Abnormal	5.01Vdc	--	--	
			Single fault – C5 (OC)	5.01Vdc	--	--	
			Single fault – D6 (SC)	0.2Vdc	--	--	

5.2.2.3 - Capacitance Limits

No.	Supply Voltage	Location (e.g. circuit designation)	Test conditions	Parameters		ES Class
				Capacitance, nF	Upk (V)	
--	--	--	Normal	--	--	--
			Abnormal	--	--	
			Single fault – SC/OC	--	--	

5.2.2.4 - Single Pulses

No.	Supply Voltage	Location (e.g. circuit designation)	Test conditions	Parameters			ES Class
				Duration (ms)	Upk (V)	lpk (mA)	
--	--	--	Normal	--	--	--	--
			Abnormal	--	--	--	
			Single fault – SC/OC	--	--	--	

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

5.2.2.5 - Repetitive Pulses

No.	Supply Voltage	Location (e.g. circuit designation)	Test conditions	Parameters			ES Class
				Off time (ms)	Upk (V)	Ipk (mA)	
--	--	--	Normal	--	--	--	--
			Abnormal	--	--	--	
			Single fault – SC/OC	--	--	--	

Test Conditions:

Normal – Test with rated output current.

Abnormal – Test with max. output current.

Supplementary information: SC=Short Circuit, OC=Short Circuit

IEC 62368-1						
Clause	Requirement + Test	Result - Remark				Verdict
5.4.1.4, 6.3.2, 9.0, B.2.6	TABLE: Temperature measurements					P
	Supply voltage (V)	90Vac	264Vac	108Vac	132Vac	—
	Ambient T _{min} (°C)	50	50	50	50	—
	Ambient T _{max} (°C)	50	50	50	50	—
	T _{ma} (°C)	50	50	50	50	—
Maximum measured temperature T of part/at:		T (°C)				Allowed T _{max} (°C)
Model GTM41134-0603 (Horizontal) due to highest measured power consumption						
Enclosure (external surface)		57.3	56.8	--	--	77
Enclosure (internal surface)		75.2	74.5	--	--	--
Fuse nearby PCB		50.8	50.2	--	--	130
PCB near D1		60.0	59.6	--	--	130
C1 body		69.4	68.7	--	--	105
PCB near Q1		91.5	91.0	--	--	130
T1 winding		83.7	83.1	--	--	*110
PCB near U1		67.6	66.9	--	--	130
Enclosure (external surface)		57.3	56.8	--	--	77
Model GTM41134-0606-1.0-F						
PCB near D1		60.0	56.5	--	--	130
C1		56.8	51.4	--	--	105
PCB near Q1		63.5	62.0	--	--	130
T1 winding		71.7	69.2	--	--	*110
T1 bobbin		74.7	72.0	--	--	*110
PCB near U1		55.4	53.5	--	--	130
Model GT-41134-0606-W2-TAB (Horizontal) due to worst position						
T1 winding		--	--	105.3	104.3	*110
T1 core		--	--	102.3	101.1	*110
C2		--	--	89.9	88.1	105
C6		--	--	82.0	82.0	105
PCB near F1		--	--	56.2	55.5	130
PCB near Q1		--	--	89.0	87.8	130
Enclosure (external surface)		--	--	65.3	65.6	77
Model GTM96060-0603						
T1 winding		93.1	93.0	--	--	*110

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Clause	Requirement + Test			Result - Remark		Verdict	
T1 core	95.3	97.4	--	--	*110		
Varistor	76.5	73.1	--	--	85		
CY1	79.3	78.3	--	--	85		
PCB	89.7	88.2	--	--	130		
External enclosure	67.8	66.3	--	--	77		
Output cord	64.9	63.4	--	--	80		
Model GTM96060-0606-1.0							
T1 winding	96.1	97.5	--	--	*110		
T1 core	95.2	97.7	--	--	*110		
Varistor	72.0	69.3	--	--	85		
CY1	75.5	74.8	--	--	85		
PCB	79.7	78.9	--	--	130		
External enclosure	68.8	68.0	--	--	77		
Output cord	64.6	63.2	--	--	80		
Model GTM96060-0648							
T1 winding	94.4	95.1	--	--	*110		
T1 core	91.3	93.2	--	--	*110		
Varistor	69.5	66.6	--	--	85		
CY1	71.7	70.3	--	--	85		
PCB	78.5	78.5	--	--	130		
External enclosure	65.8	65.4	--	--	77		
Output cord	64.9	63.1	--	--	80		
Model GTM96060-0706-1.0							
T1 winding	107	103	--	--	*110		
T1 core	107	101	--	--	*110		
Varistor	76.5	73.1	--	--	85		
CY1	82	79	--	--	85		
PCB	88	81	--	--	130		
External enclosure	72	70	--	--	77		
Internal enclosure	79	77			For reference		
Output cord	59	58	--	--	80		
Supplementary information:							
*: as the temperature of winding was measured by thermocouples, the limit value was reduced by 10°C.							
Temperature T of winding:	t ₁ (°C)	R ₁ (Ω)	t ₂ (°C)	R ₂ (Ω)	T (°C)	Allowed T _{max} (°C)	Insulation class

IEC 62368-1							
Clause	Requirement + Test				Result - Remark		Verdict
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--
Supplementary information: Note 1: Tma should be considered as directed by applicable requirement Note 2: Tma is not included in assessment of Touch Temperatures (Clause 9)							

5.4.1.10.3 TABLE: Ball pressure test of thermoplastics				P
Allowed impression diameter (mm)			≤ 2 mm	—
Object/Part No./Material	Manufacturer/trademark	Test temperature (°C)	Impression diameter (mm)	
Blade holder				
SE1X	SABIC	125	1.6	
SE1	SABIC	125	1.6	
SE100	SABIC	125	1.5	
C2950	SABIC	125	1.4	
CX7211	SABIC	125	1.4	
EXCY0098	SABIC	125	1.3	
940	SABIC	125	1.6	
LN-1250P	TEIJIN CHEMICALS LTD	125	1.3	
LN-1250G	TEIJIN CHEMICALS LTD	125	1.4	
PA-765A	CHI MEI Corporation	125	1.3	
PC-540	CHI MEI Corporation	125	1.3	
Bobbin of T1				
T375J	CHANG CHUN PLASTICS CO LTD	125	1.3	
T375HF	CHANG CHUN PLASTICS CO LTD	125	1.3	
PM-9820	SUMITOMO BAKELITE CO LTD	125	1.3	
CP-J-8800	HITACHI CHEMICAL CO LTD	125	1.4	
Supplementary information:--				

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Clause	Requirement + Test			Result - Remark			Verdict
5.4.2.2, 5.4.2.4 and 5.4.3	TABLE: Minimum Clearances/Creepage distance						P
Clearance (cl) and creepage distance (cr) at/of/between:	Up (V)	U r.m.s. (V)	Frequenc y (kHz) ¹	Required cl (mm)	cl (mm) ²	Required ³ cr (mm)	cr (mm)
For GT-41134-0606-W2-TAB							
Line and Neutral before and after current fuse (F1 or F2) (BI)	2000	120	<30kHz	1.88 (1.27 x 1.48)	3.0	1.88	3.0
Two ends of the current fuse (F1 or F2) (BI)	2000	120	<30kHz	1.88 (1.27 x 1.48)	3.0	1.88	3.0
Primary and secondary (two sides of CY1 & CY2) (DI)	2000	120	<30kHz	3.76 (2.54 x 1.48)	4.0+4.0	3.76	4.0+4.0
Primary to secondary on PCB solder side under T1 (RI)	2000	123	<30kHz	3.76 (2.54 x 1.48)	8.0	3.76	8.0
For GT*41134*****							
Line and Neutral before and after current fuse (F1 or F2) (BI)	2000	240	<30kHz	1.88 (1.27 x 1.48)	3.4	2.4	3.4
Two ends of the current fuse (F1 or F2) (BI)	2000	240	<30kHz	1.88 (1.27 x 1.48)	3.0	2.4	3.0
Live parts to PE bonding terminal (On PCB trace) (for open frame model only) (BI)	2000	240	<30kHz	1.88 (1.27 x 1.48)	3.6	2.4	3.6
Primary and secondary (two sides of CY1 & CY2) (DI)	2000	240	<30kHz	3.76 (2.54 x 1.48)	4.0+4.0	4.8	4.0+4.0
Primary to secondary on PCB solder side under T1 (RI)	2000	270	<30kHz	3.76 (2.54 x 1.48)	8.0	5.4	8.0
Internal live parts to accessible outer enclosure (for adapter model only) (RI)	2000	240	<30kHz	3.76 (2.54 x 1.48)	5.4	4.8	5.4
Plug pin-out on the connector side to accessible part when the plug portion is plugged in the socket without the power supply correctly attached.2(for adapter model only) (RI)	2000	240	<30kHz	3.76 (2.54 x 1.48)	5.6	4.8	5.6
Line and Neutral before and after current fuse (F1 or F2) (BI)	2000	240	<30kHz	1.88 (1.27 x 1.48)	3.4	2.4	3.4

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Clause	Requirement + Test		Result - Remark	Verdict

For GT*96060*****							
L to N before fuse(BI)	2000	240	<30kHz	1.88 (1.27 x 1.48)	3.6	2.4	3.6
Two poles of fuse(BI)	2000	240	<30kHz	1.88 (1.27 x 1.48)	2.5	2.4	2.5
Live parts to accessible parts(RI)	2000	240	<30kHz	3.76 (2.54 x 1.48)	7.2	4.8	7.2
Primary circuits to secondary circuits(RI)	2000	240	<30kHz	3.76 (2.54 x 1.48)	8.0	4.8	8.0
Primary winding to secondary winding(RI)	2000	204	<30kHz	3.76 (2.54 x 1.48)	8.5	4.8	8.5
Secondary winding to core(RI)	2000	204	<30kHz	3.76 (2.54 x 1.48)	8.8	4.8	8.8
Core to secondary parts(RI)	2000	204	<30kHz	3.76 (2.54 x 1.48)	9.6	4.8	9.6
Supplementary information: Note 1: Only for frequency above 30 kHz Note 2: See table 5.4.2.4 if this is based on electric strength test Note 3: Provide Material group IIIb Note 4: Multiplication factors for Clearances is 1.48							

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Clause	Requirement + Test	Result - Remark	Verdict

5.4.2.3	TABLE: Minimum Clearances distances using required withstand voltage			P
	Overtoltage Category (OV):		II	
	Pollution Degree:		2	
Clearance distanced between:	Required withstand voltage	Required cl (mm)	Measured cl (mm)	
For GT-41134-0606-W2-TAB				
Line and Neutral before and after current fuse (F1 or F2) (BI)	2500	2.22 (1.5 x 1.48)	3.0	
Two ends of the current fuse (F1 or F2) (BI)	2500	2.22 (1.5 x 1.48)	3.0	
Primary and secondary (two sides of CY1 & CY2) (DI)	2500	4.44 (3.0 x 1.48)	4.0+4.0	
Primary to secondary on PCB solder side under T1 (RI)	2500	4.44 (3.0 x 1.48)	8.0	
For GT*41134*****				
Line and Neutral before and after current fuse (F1 or F2) (BI)	2500	2.22 (1.5 x 1.48)	3.4	
Two ends of the current fuse (F1 or F2) (BI)	2500	2.22 (1.5 x 1.48)	3.0	
Live parts to PE bonding terminal (On PCB trace) (for open frame model only) (BI)	2500	2.22 (1.5 x 1.48)	3.6	
Primary and secondary (two sides of CY1 & CY2) (DI)	2500	4.44 (3.0 x 1.48)	4.0+4.0	
Primary to secondary on PCB solder side under T1 (RI)	2500	4.44 (3.0 x 1.48)	8.0	
Internal live parts to accessible outer enclosure (for adapter model only) (RI)	2500	4.44 (3.0 x 1.48)	5.4	
Plug pin-out on the connector side to accessible part when the plug portion is plugged in the socket without the power supply correctly attached.2(for adapter model only) (RI)	2500	4.44 (3.0 x 1.48)	5.6	
Line and Neutral before and after current fuse (F1 or F2) (BI)	2500	2.22 (1.5 x 1.48)	3.4	

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Clause	Requirement + Test	Result - Remark	Verdict

For GT*96060*****			
L to N before fuse(BI)	2500	2.22 (1.5 x 1.48)	3.6
Two poles of fuse(BI)	2500	2.22 (1.5 x 1.48)	2.5
Live parts to accessible parts(RI)	2500	4.44 (3.0 x 1.48)	7.2
Primary circuits to secondary circuits(RI)	2500	4.44 (3.0 x 1.48)	8.0
Primary winding to secondary winding(RI)	2500	4.44 (3.0 x 1.48)	8.5
Secondary winding to core(RI)	2500	4.44 (3.0 x 1.48)	8.8
Core to secondary parts(RI)	2500	4.44 (3.0 x 1.48)	9.6
Supplementary information: Multiplication factors for Clearances is 1.48			

5.4.4.2, 5.4.4.5 c) 5.4.4.9	TABLE: Distance through insulation measurements					P
Distance through insulation di at/of:	Peak voltage (V)	Frequency (kHz)	Material	Required DTI (mm)	DTI (mm)	
T1 transformer bobbin (RI)	476	<100kHz	Phenolic	0.40	0.60	
Insulating tapes in transformer T1 (RI)	476	<100kHz	Polyethylene	0.07	3 layers x 0.05	
Supplementary information: Multiplication factors for test voltages is 1.24						

5.4.9	TABLE: Electric strength tests			P
Test voltage applied between:	Voltage shape (AC, DC)	Test voltage (V)	Breakdown Yes / No	
Basic/supplementary:				
Fuse two end (When fuse breaks down)	DC	3224 (2600 x 1.24)	No	
Reinforced:				
Primary circuit to body	DC	4960 (4000 x 1.24)	No	
Primary circuit to secondary circuit	DC	4960 (4000 x 1.24)	No	
Primary winding to secondary winding of T1	DC	4960 (4000 x 1.24)	No	
Secondary winding to core	DC	4960 (4000 x 1.24)	No	
Insulation tape around transformer per layer	DC	4960 (4000 x 1.24)	No	
Primary and secondary of Y1 capacitor	DC	4960 (4000 x 1.24)	No	
Supplementary information: Multiplication factors for test voltages is 1.24				

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Clause	Requirement + Test	Result - Remark	Verdict

6.2.2		Table: Electrical power sources (PS) measurements for classification				P
Source	Description	Measurement	Max Power after 3 s	Max Power after 5 s*)	PS Classification	
A	Model GTM41134-0603 output	Power (W) :	7.71	--	PS1	
		V _A (V) :	3.30	--		
		I _A (A) :	2.55	--		
B	Model GTM41134-0606-1.0output	Power (W) :	7.58	--	PS1	
		V _A (V) :	5.01	--		
		I _A (A) :	1.51	--		
C	Model GT-41134-0606-W2-TAB output	Power (W) :	7.62	--	PS1	
		V _A (V) :	6.10	--		
		I _A (A) :	1.27	--		
D	Model GTM41134-0612-3.0 output	Power (W) :	7.66	--	PS1	
		V _A (V) :	8.99	--		
		I _A (A) :	0.85	--		
E	Model GTM41134-0648 output	Power (W) :	7.68	--	PS1	
		V _A (V) :	47.97	--		
		I _A (A) :	0.16	--		
F	Model GTM96060-0706-1.0 output	Power (W) :	7.72	--	PS1	
		V _A (V) :	5.15	--		
		I _A (A) :	1.5	--		

Supplementary Information:
 (*) Measurement taken only when limits at 3 seconds exceed PS1 limits

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Clause	Requirement + Test	Result - Remark	Verdict

B.2.5	TABLE: Input test						P
U (V)	I (A)	I rated (A)	P (W)	P rated (W)	Fuse No	I fuse (A)	Condition/status
Model GTM41134-0603							
90Vac	0.174	0.6	10.2	--	F1, F2	0.174	Normal operation with 3.3Vdc / 1.8A output.
100Vac	0.161	0.6	10.0	--	F1, F2	0.161	
240Vac	0.089	0.6	10.1	--	F1, F2	0.089	
264Vac	0.084	0.3	10.1	--	F1, F2	0.084	
Model GTM41134-0606-1.0							
90Vac	0.154	0.6	8.70	--	F1, F2	0.154	Normal operation with 5Vdc / 1.2A output.
100Vac	0.141	0.6	8.50	--	F1, F2	0.141	
240Vac	0.077	0.6	8.40	--	F1, F2	0.077	
264Vac	0.072	0.6	8.40	--	F1, F2	0.072	
Model GTM41134-0612-3.0							
90Vac	0.155	0.6	9.30	--	F1, F2	0.155	Normal operation with 9Vdc / 0.66A output.
100Vac	0.143	0.6	9.30	--	F1, F2	0.143	
240Vac	0.083	0.6	8.70	--	F1, F2	0.083	
264Vac	0.076	0.6	8.50	--	F1, F2	0.076	
Model GTM41134-0648							
90Vac	0.149	0.6	8.90	--	F1, F2	0.149	Normal operation with 48Vdc / 0.125A output.
100Vac	0.137	0.6	8.70	--	F1, F2	0.137	
240Vac	0.080	0.6	7.90	--	F1, F2	0.080	
264Vac	0.076	0.6	8.10	--	F1, F2	0.076	
Model GT-41134-0606-W2-TAB							
108Vac	0.124	0.6	8.90	--	F1	0.124	Normal operation with 6Vdc / 1.0A output.
120Vac	0.136	0.6	9.30	--	F1	0.136	
132Vac	0.145	0.6	9.20	--	F1	0.145	
Model GTM96060-0603							
90Vac	0.174	0.6 / 0.3	10.2	--	F1	0.174	Normal operation with 3.3Vdc / 1.8A output.
100Vac	0.161	0.6 / 0.3	10.0	--	F1	0.161	
240Vac	0.089	0.6 / 0.3	10.1	--	F1	0.089	
264Vac	0.084	0.6 / 0.3	10.1	--	F1	0.084	
Model GTM96060-0606-1.0							

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Clause	Requirement + Test				Result - Remark		Verdict
B.2.5	TABLE: Input test						P
U (V)	I (A)	I rated (A)	P (W)	P rated (W)	Fuse No	I fuse (A)	Condition/status
90Vac	0.153	0.6 / 0.3	7.982	--	F1	0.153	Normal operation with 5.0Vdc / 1.2A output.
100Vac	0.139	0.6 / 0.3	7.873	--	F1	0.139	
240Vac	0.081	0.6 / 0.3	7.988	--	F1	0.081	
264Vac	0.076	0.6 / 0.3	8.096	--	F1	0.076	
Model GTM96060-0648							
90Vac	0.149	0.6 / 0.3	8.90	--	F1	0.149	Normal operation with 48Vdc / 0.125A output.
100Vac	0.137	0.6 / 0.3	8.70	--	F1	0.137	
240Vac	0.080	0.6 / 0.3	7.90	--	F1	0.080	
264Vac	0.076	0.6 / 0.3	8.10	--	F1	0.076	
Model GTM96060-0706-1.0							
90Vac	0.190	0.6	10.2	--	F1	0.190	Normal operation with 5Vdc / 1.5A output.
100Vac	0.169	0.6	10.0	--	F1	0.169	
240Vac	0.099	0.6	10.0	--	F1	0.099	
264Vac	0.095	0.6	10.1	--	F1	0.095	
Supplementary information: Equipment may be have rated current or rated power or both. Both should be measured							

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Clause	Requirement + Test	Result - Remark	Verdict

B.3		TABLE: Abnormal operating condition tests							P
Ambient temperature (°C)					25		—		
Power source for EUT: Manufacturer, model/type, output rating ..					See below		—		
Component No.	Abnormal Condition	Supply voltage, (V)	Test time (hour)	Fuse no.	Fuse current, (A)	T-couple	Temp. (°C)	Observation	
Model GT-41134-0648 output	O/L	264	4	F1, F2	0.059→0.077	T1 winding	107.0	No hazards	
Model GT-41134-0606-W2-TAB output	O/L	132	4	F1	0.145→0.152	T1 winding	108.1	No hazards	
Model GTM96060-0606-1.0 output	O/L	264	1	F1	0.088	T1 winding	75.0	No hazards	
Model GTM96060-0648 output	O/L	264	4	F1	0.106	T1 c winding oil	109.0	No hazards	
Model GTM96060-0603 output	O/L	264	4	F1	0.095	T1 winding	85.0	No hazards	
Model GTM96060-0706-1.0 output	O/L	264	4	F1	0.082	T1 winding	108.1	No hazards	
Supplementary information: Test table is provided to record abnormal and fault conditions for all applicable energy sources including Thermal burn injury. Column "Abnormal/Fault." Specify if test condition by indicating "Abnormal" then the condition for a Clause B.3 test or "Single Fault" then the condition for Clause B.4.									

IEC 62368-1								
Clause	Requirement + Test				Result - Remark			Verdict
B.4	TABLE: Fault condition tests							P
Ambient temperature (°C)					25		—	
Power source for EUT: Manufacturer, model/type, output rating ..					See below		—	
Component No.	Fault Condition	Supply voltage, (V)	Test time (min)	Fuse no.	Fuse current, (A)	T-couple	Temp. (°C)	Observation
Model GT-41134-0648 is chosen as the evaluation model.								
C1	SC	264	30	F1, F2	0.059→>2.1	--	--	Fuse (F1) opened. No hazards.
D1	SC	264	30	F1, F2	0.059→>2.1	--	--	Fuse (F1) opened. No hazards.
D5	SC	264	30	F1, F2	0.059→0.003	--	--	Unit shut down. No hazards.
C3	SC	264	30	F1, F2	0.059→0.003	--	--	Unit shut down. No hazards.
U1 pin 1 to pin 2	SC	264	30	F1, F2	0.059→0.012	--	--	Unit shut down. No hazards.
U1 pin 2 to pin 3	SC	264	30	F1, F2	0.059→0.013	--	--	Unit shut down. No hazards.
U1 pin4 to pin 5	SC	264	30	F1, F2	0.059→0.011	--	--	Unit shut down. No hazards.
U1 pin 5 to pin 6	SC	264	30	F1, F2	0.059→0.012	--	--	Unit shut down. No hazards.
CS4	SC	264	30	F1, F2	0.059→0.023	--	--	Unit shut down. No hazards.
RS12	SC	264	30	F1, F2	0.059→0.014	--	--	Unit shut down. No hazards.
CS2	SC	264	30	F1, F2	0.059→0.026	--	--	Unit shut down. No hazards.
CS4	SC	264	30	F1, F2	0.059→0.007	--	--	Unit shut down. No hazards.
Q1 pin C to pin E	SC	264	30	F1, F2	0.059A→0.009	--	--	Unit shut down. No hazards.

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Clause	Requirement + Test				Result - Remark			Verdict
Q1 pin B to pin E	SC	264	30	F1, F2	0.059→>2.1	--	--	Fuse (F1) opened. No hazards.
Q1 pin C to pin E	SC	264	30	F1, F2	0.059→>2.1	--	--	Fuse (F1) opened. No hazards.
T1 pin 10 to pin 8	SC	264	30	F1, F2	0.059→0.015	--	--	Unit shut down. No hazards.
Output	SC	264	30	F1, F2	0.059→0.009	--	--	Unit shut down. No hazards.
Model GT-41134-0606-W2-TAB								
C1	SC	132	30	F1	0.145→>13.3	--	--	Fuse (F1) opened. No hazards.
MOV1	SC	132	30	F1	0.145→>13.3	--	--	Fuse (F1) opened. No hazards.
Output	SC	132	30	F1	0.145→0.002	--	--	Unit shut down. No hazards.
Model GTM96060-0603								
Output	SC	264	10	F1	0.084→0.003	--	--	Unit shut down. No hazards.
C5	SC	264	10	F1	0.084→0.003	--	--	Unit shut down. No hazards.
Q1 pinD-S	SC	264	10	F1	0.084→>2.1	--	--	Fuse (F1) opened. No hazards.
Q1 pinG-S	SC	264	10	F1	0.084→0.003	--	--	Unit shut down. No hazards.
T1 pin10-pin8	SC	264	10	F1	0.084→0.003	--	--	Unit shut down. No hazards.
C1	SC	264	10	F1	0.084→>2.1	--	--	Fuse (F1) opened. No hazards.
D1	SC	264	10	F1	0.084→>2.1	--	--	Fuse (F1) opened. No hazards.
Model GTM96060-0606-1.0								

IEC 62368-1								
Clause	Requirement + Test				Result - Remark			Verdict
Output	SC	264	10	F1	0.076→ 0.003	--	--	Unit shut down. No hazards.
C5	SC	264	10	F1	0.076→ 0.003	--	--	Unit shut down. No hazards.
Q1 pinD-S	SC	264	10	F1	0.076→ >2.1	--	--	Fuse (F1) opened. No hazards.
Q1 pinG-S	SC	264	10	F1	0.076→ 0.003	--	--	Unit shut down. No hazards.
T1 pin10-pin8	SC	264	10	F1	0.076→ 0.003	--	--	Unit shut down. No hazards.
C1	SC	264	10	F1	0.076→ >2.1	--	--	Fuse (F1) opened. No hazards.
D1	SC	264	10	F1	0.076→ >2.1	--	--	Fuse (F1) opened. No hazards.
Model GTM96060-0648								
Output	SC	264	10	F1	0.076→ 0.003	--	--	Unit shut down. No hazards.
C5	SC	264	10	F1	0.076→ 0.003	--	--	Unit shut down. No hazards.
Q1 pinD-S	SC	264	10	F1	0.076→ >2.1	--	--	Fuse (F1) opened. No hazards.
Q1 pinG-S	SC	264	10	F1	0.076→ 0.003	--	--	Unit shut down. No hazards.
T1 pin10-pin8	SC	264	10	F1	0.076→ 0.003	--	--	Unit shut down. No hazards.
C1	SC	264	10	F1	0.076→ >2.1	--	--	Fuse (F1) opened. No hazards.
D1	SC	264	10	F1	0.076→ >2.1	--	--	Fuse (F1) opened. No hazards.
Model GTM96060-0606-1.0								

IEC 62368-1								
Clause	Requirement + Test				Result - Remark			Verdict
Output	SC	264	10	F1	0.076→ 0.003	--	--	Unit shut down. No hazards.
D1	SC	264	10	F1	0.076→ 0.003	--	--	Fuse (F1) opened. No hazards.
C2	SC	264	10	F1	0.076→ >2.1	--	--	Fuse (F1) opened. No hazards.
Q1	SC	264	10	F1	0.076→ 0.003	--	--	Unit shut down. No hazards.
C6	SC	264	10	F1	0.076→ 0.003	--	--	Unit shut down. No hazards.
D6	SC	264	10	F1	0.076→ >2.1	--	--	Unit shut down. No hazards.
Supplementary information: - short circuit SC; - open circuit OC; - overload O/L								

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

T.2, T.3, T.4, T.5	TABLE: Steady force test					P
Part/Location	Material	Thickness (mm)	Force (N)	Test Duration (sec)	Observation	
Internal wire	PVC	--	10	5	No hazards	
Enclosure	Plastic	Min. 1.5	30	5	No hazards	
Enclosure	Plastic	Min. 1.5	100	5	No hazards	
Supplementary information:--						

T.7	TABLE: Drop tests				P
Part/Location	Material	Thickness (mm)	Drop Height (mm)	Observation	
Whole product	Plastic enclosure	Min. 1.5	1000	No hazards	
Supplementary information:--					

T.8	TABLE: Stress relief test					P
Part/Location	Material	Thickness (mm)	Oven Temperature (°C)	Duration (h)	Observation	
Whole product	Plastic enclosure	Min. 1.5	89.2	7	No hazards	
Supplementary information:--						

Appendix 1: Photographs

PHOTO 1: EXTERNAL VIEW – 1 OF ADAPTER MODEL GT*41134-***



PHOTO 2: EXTERNAL VIEW – 2 OF ADAPTER MODEL GT*41134-***



PHOTO 3: EXTERNAL VIEW – 3 OF ADAPTER MODEL GT*41134-***

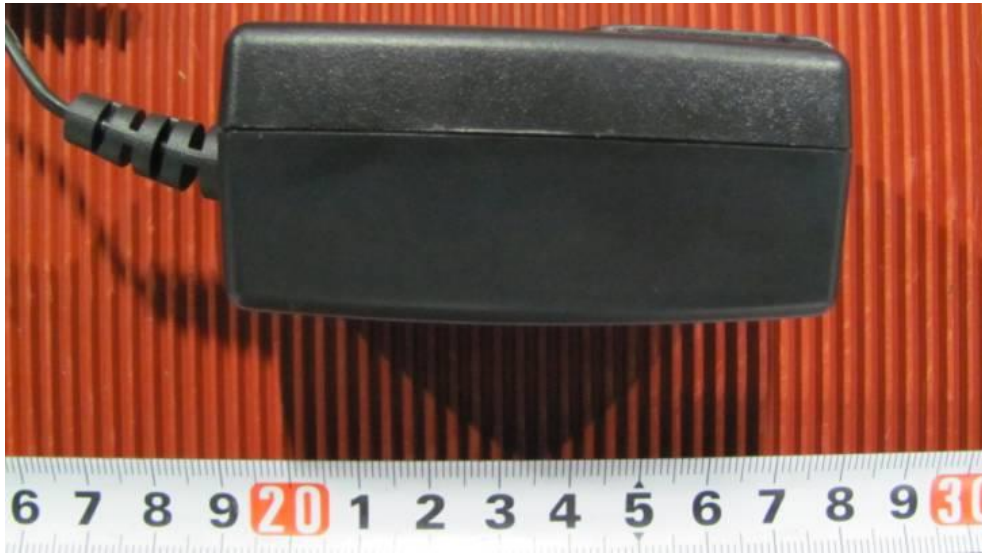


PHOTO 4: INTERNAL VIEW OF ADAPTER MODEL GT*41134-***



PHOTO 5: COMPONENT SIDE VIEW OF PCB OF ADAPTER MODEL GT*41134-***



PHOTO 6: SOLDERING SIDE VIEW OF PCB OF ADAPTER MODEL GT*41134-***

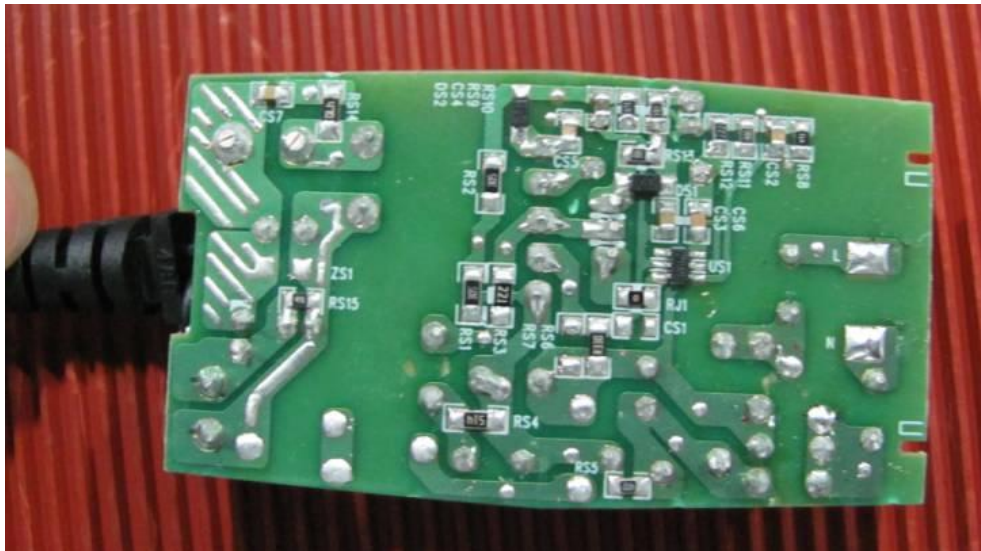


PHOTO 7: COMPONENT SIDE VIEW OF OPEN FRAME MODEL



PHOTO 8: SOLDERING SIDE VIEW OF OPEN FRAME MODEL

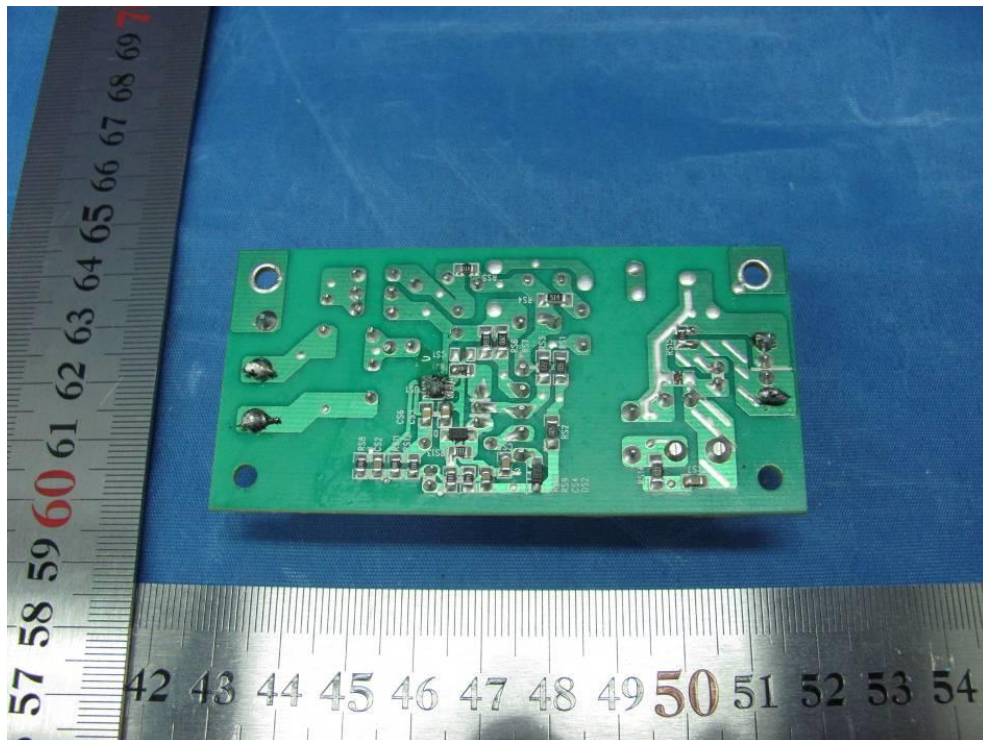


PHOTO 9: COMPONENT SIDE OF OPEN FRAME MODEL WITH APPLIANCE INLET

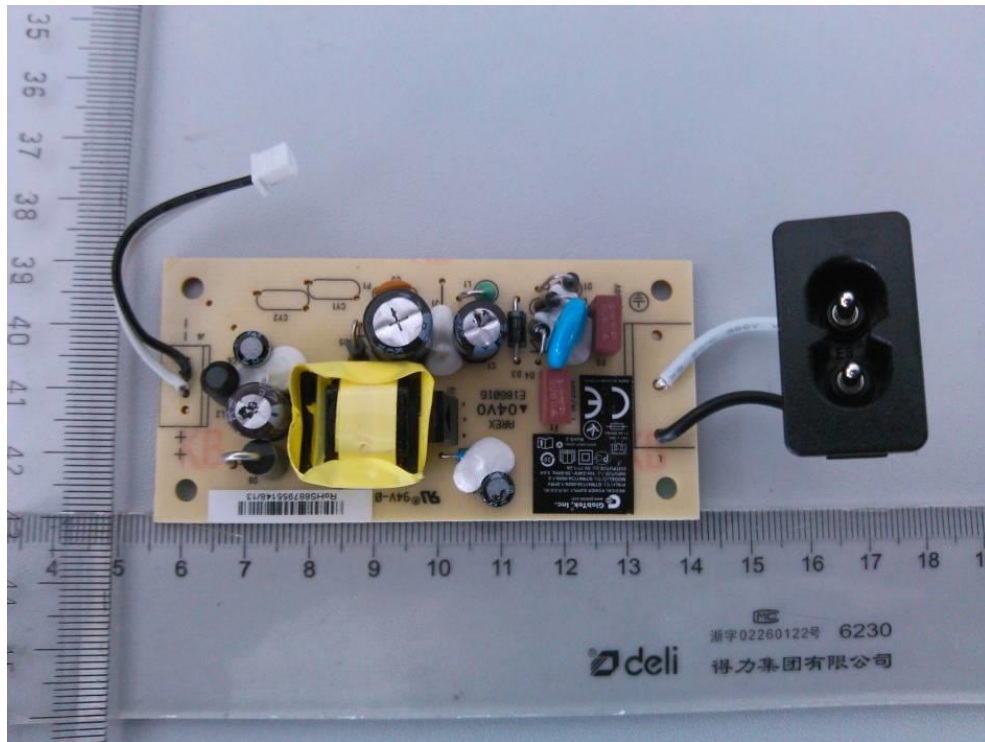


PHOTO 10: SOLDERING SIDE OF OPEN FRAME MODEL WITH APPLIANCE INLET

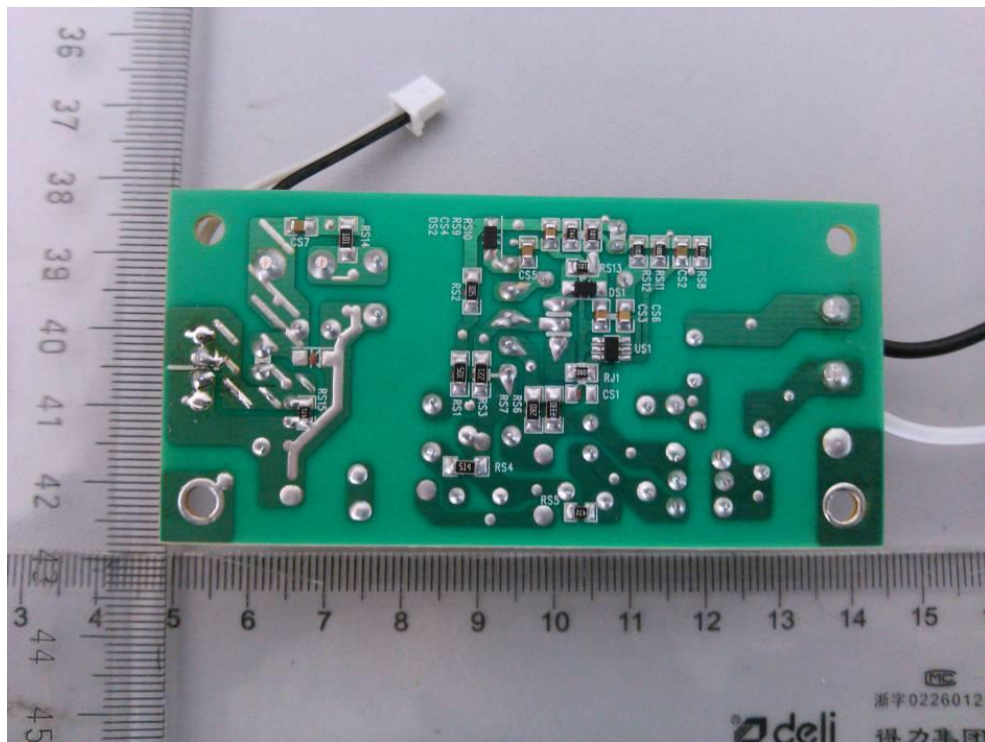


PHOTO 11: EXTERNAL VIEW - 1 OF MODEL GT-41134-0606-W2-TAB



PHOTO 12: EXTERNAL VIEW - 2 OF MODEL GT-41134-0606-W2-TAB



Photo 13: Component side view of PCB of model GT-41134-0606-W2-TAB

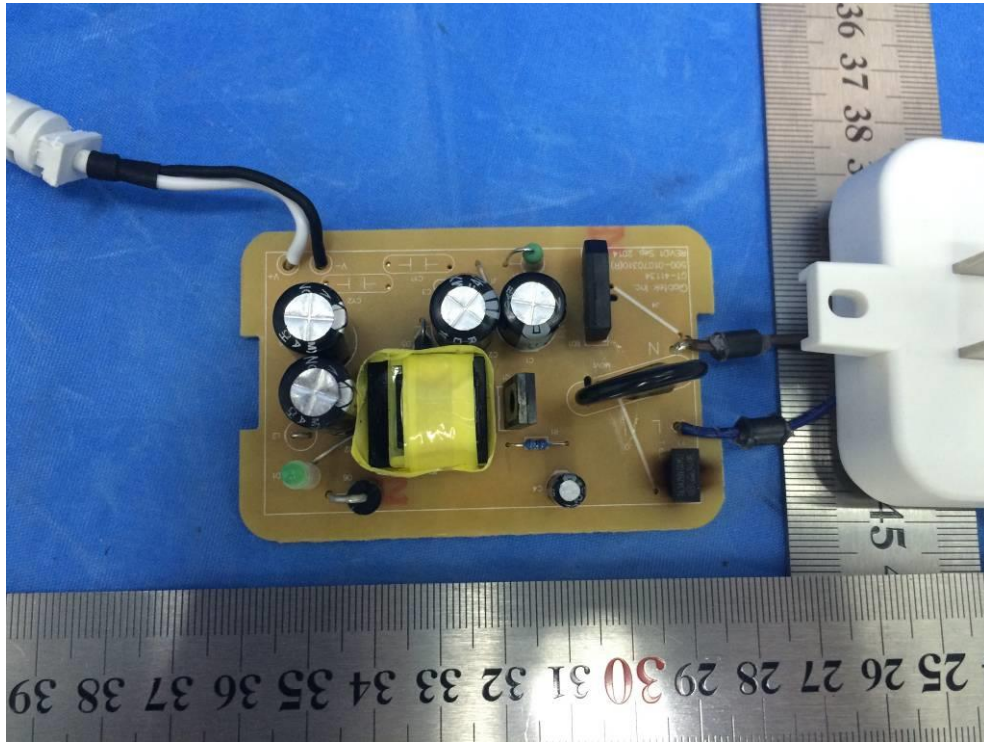


Photo 14: Soldering side view of PCB of model GT-41134-0606-W2-TAB

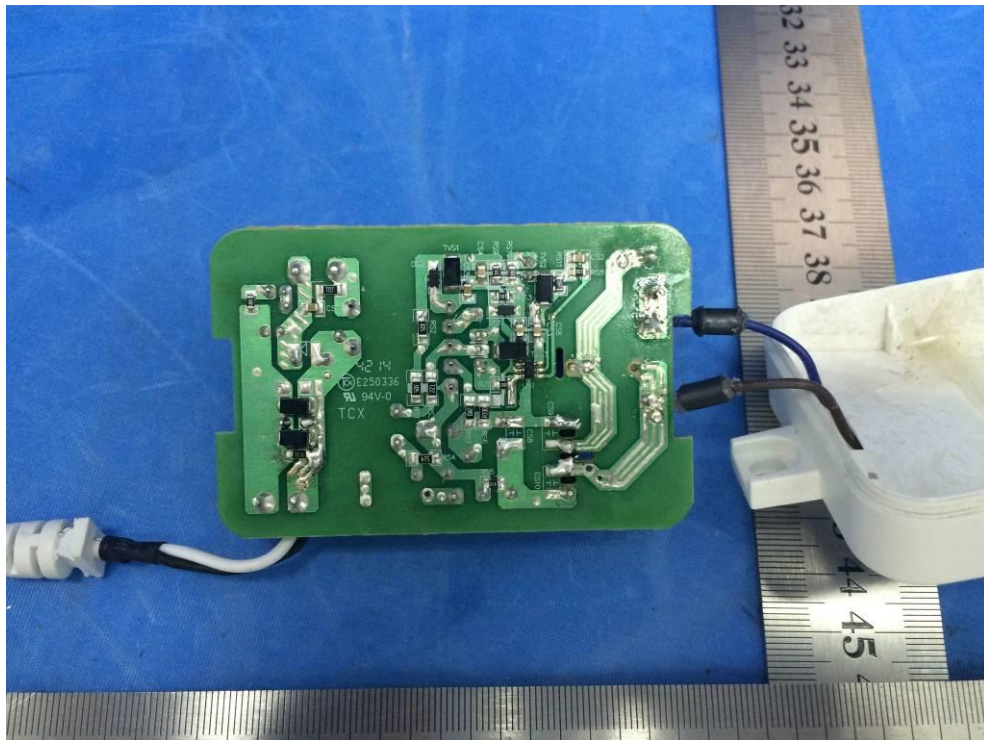


PHOTO 15: Overall view for the structure type only use F1 and a LED indicator (optional)



PHOTO 16: Overall view for the structure type only use F1 and a LED indicator (optional)

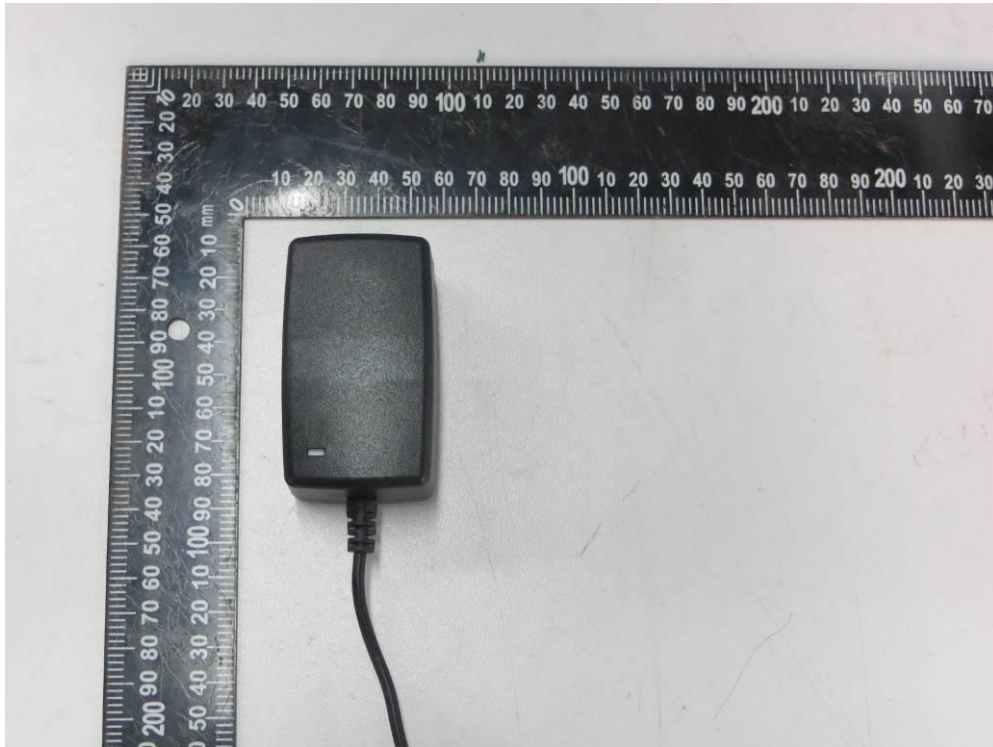


PHOTO 17: Internal view for the structure type only use F1 and a LED indicator (optional)



PHOTO 18: Internal view for the structure type only use F1 and a LED indicator (optional)



PHOTO 19: PCB view for the structure type only use F1 and a LED indicator (optional)

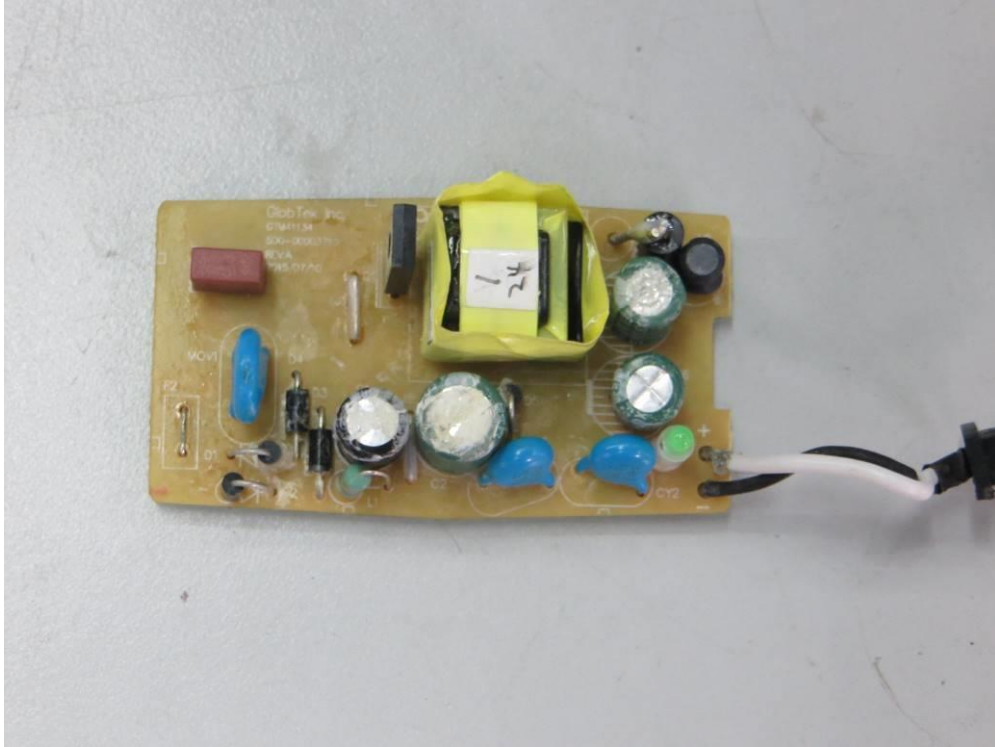


PHOTO 20: PCB view for the structure type only use F1 and a LED indicator (optional)

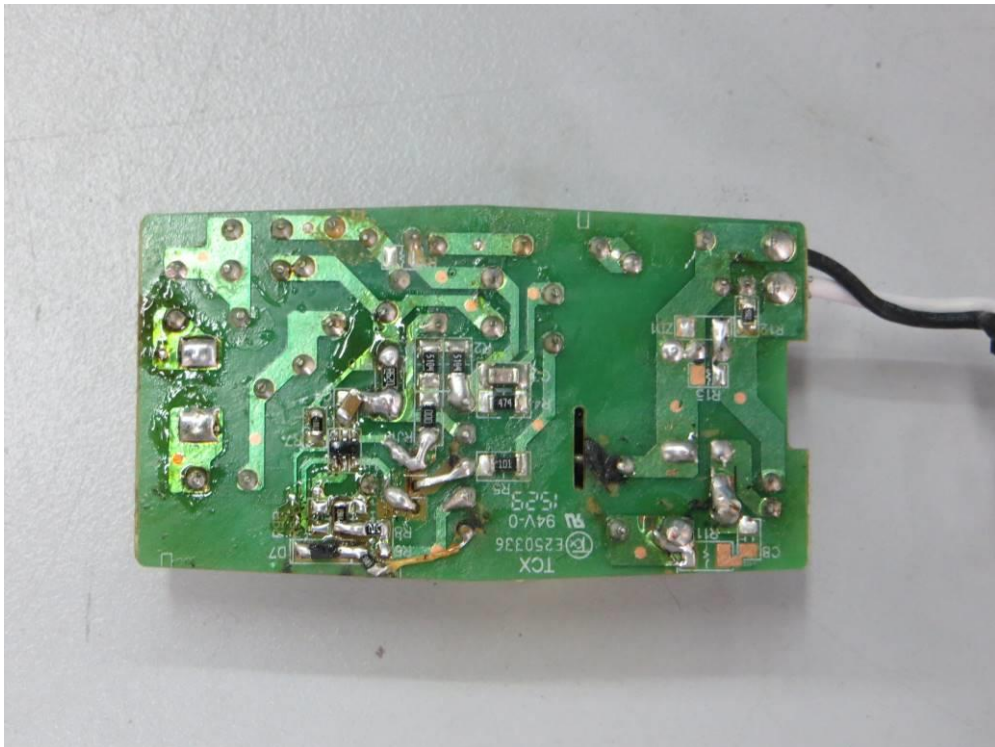


PHOTO 21: Overall View of GTM96060-0706-1.0



PHOTO 22: Overall View of GTM96060-0706-1.0



PHOTO 23: Overall View of GTM96060-0706-1.0



PHOTO 22: Internal View of GTM96060-0706-1.0



PHOTO 23: Overall View of GTM96060-0706-1.0



Appendix 2: EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES

ATTACHMENT TO TEST REPORT IEC 62368-1 EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES (Audio/video, information and communication technology equipment - Part 1: Safety requirements)						
Differences according to : EN 62368-1:2014+A11:2017						
Attachment Form No. : EU_GD_IEC62368_1B_II						
Attachment Originator : Nemko AS						
Master Attachment : Date 2017-09-22						
Copyright © 2017 IEC System for Conformity Testing and Certification of Electrical Equipment (IECEE), Geneva, Switzerland. All rights reserved.						
	CENELEC COMMON MODIFICATIONS (EN)					P
	Clauses, subclauses, notes, tables, figures and annexes which are additional to those in IEC 62368-1:2014 are prefixed “Z”.					--
CONTENTS	Add the following annexes: Annex ZA (normative) Normative references to international publications with their corresponding European publications Annex ZB (normative) Special national conditions Annex ZC (informative) A-deviations Annex ZD (informative) IEC and CENELEC code designations for flexible cords					P
	Delete all the “country” notes in the reference document (IEC 62368-1:2014) according to the following list:					P
	0.2.1	Note	1	Note 3	4.1.15	Note
	4.7.3	Note 1 and 2	5.2.2.2	Note	5.4.2.3.2.2 Table 13	Note c
	5.4.2.3.2.4	Note 1 and 3	5.4.2.5	Note 2	5.4.5.1	Note
	5.5.2.1	Note	5.5.6	Note	5.6.4.2.1	Note 2 and 3
	5.7.5	Note	5.7.6.1	Note 1 and 2	10.2.1 Table 39	Note 2, 3 and 4
	10.5.3	Note 2	10.6.2.1	Note 3	F.3.3.6	Note 3
	For special national conditions, see Annex ZB.					P
1	Add the following note: NOTE Z1 The use of certain substances in electrical and electronic equipment is restricted within the EU: see Directive 2011/65/EU.					P

4.Z1	<p>Add the following new subclause after 4.9:</p> <p>To protect against excessive current, short-circuits and earth faults in circuits connected to an a.c. mains, protective devices shall be included either as integral parts of the equipment or as parts of the building installation, subject to the following, a), b) and c):</p> <p>a) except as detailed in b) and c), protective devices necessary to comply with the requirements of B.3.1 and B.4 shall be included as parts of the equipment;</p> <p>b) for components in series with the mains input to the equipment such as the supply cord, appliance coupler, r.f.i. filter and switch, short-circuit and earth fault protection may be provided by protective devices in the building installation;</p> <p>c) it is permitted for pluggable equipment type B or permanently connected equipment, to rely on dedicated overcurrent and short-circuit protection in the building installation, provided that the means of protection, e.g. fuses or circuit breakers, is fully specified in the installation instructions.</p> <p>If reliance is placed on protection in the building installation, the installation instructions shall so state, except that for pluggable equipment type A the building installation shall be regarded as providing protection in accordance with the rating of the wall socket outlet.</p>	Permanently connected equipment, need double evaluated in end product.	P
5.4.2.3.2.4	<p>Add the following to the end of this subclause:</p> <p>The requirement for interconnection with external circuit is in addition given in EN 50491-3:2009.</p>		N/A
10.2.1	<p>Add the following to ^{c)} and ^{d)} in table 39:</p> <p>For additional requirements, see 10.5.1.</p>		N/A

<p>10.5.1</p>	<p>Add the following after the first paragraph: <i>For RS 1 compliance is checked by measurement under the following conditions:</i> <i>In addition to the normal operating conditions, all controls adjustable from the outside by hand, by any object such as a tool or a coin, and those internal adjustments or presets which are not locked in a reliable manner, are adjusted so as to give maximum radiation whilst maintaining an intelligible picture for 1 h, at the end of which the measurement is made.</i> NOTE Z1 Soldered joints and paint lockings are examples of adequate locking. <i>The dose-rate is determined by means of a radiation monitor with an effective area of 10 cm², at any point 10 cm from the outer surface of the apparatus.</i> <i>Moreover, the measurement shall be made under fault conditions causing an increase of the high-voltage, provided an intelligible picture is maintained for 1 h, at the end of which the measurement is made.</i> <i>For RS1, the dose-rate shall not exceed 1 µSv/h taking account of the background level.</i> NOTE Z2 These values appear in Directive 96/29/Euratom of 13 May 1996.</p>		<p>N/A</p>
<p>10.6.1</p>	<p>Add the following paragraph to the end of the subclause: EN 71-1:2011, 4.20 and the related tests methods and measurement distances apply.</p>		<p>N/A</p>
<p>10.Z1</p>	<p>Add the following new subclause after 10.6.5. 10.Z1 Non-ionizing radiation from radio frequencies in the range 0 to 300 GHz The amount of non-ionizing radiation is regulated by European Council Recommendation 1999/519/EC of 12 July 1999 on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz). For intentional radiators, ICNIRP guidelines should be taken into account for Limiting Exposure to Time-Varying Electric, Magnetic, and Electromagnetic Fields (up to 300 GHz). For hand-held and body-mounted devices, attention is drawn to EN 50360 and EN 50566</p>		<p>N/A</p>
<p>G.7.1</p>	<p>Add the following note: NOTE Z1 The harmonized code designations corresponding to the IEC cord types are given in Annex ZD.</p>		<p>P</p>

Bibliography	<p>Add the following standards:</p> <p>Add the following notes for the standards indicated:</p> <p>IEC 60130-9 NOTE Harmonized as EN 60130-9.</p> <p>IEC 60269-2 NOTE Harmonized as HD 60269-2.</p> <p>IEC 60309-1 NOTE Harmonized as EN 60309-1.</p> <p>IEC 60364 NOTE some parts harmonized in HD 384/HD 60364 series.</p> <p>IEC 60601-2-4 NOTE Harmonized as EN 60601-2-4.</p> <p>IEC 60664-5 NOTE Harmonized as EN 60664-5.</p> <p>IEC 61032:1997 NOTE Harmonized as EN 61032:1998 (not modified).</p> <p>IEC 61508-1 NOTE Harmonized as EN 61508-1.</p> <p>IEC 61558-2-1 NOTE Harmonized as EN 61558-2-1.</p> <p>IEC 61558-2-4 NOTE Harmonized as EN 61558-2-4.</p> <p>IEC 61558-2-6 NOTE Harmonized as EN 61558-2-6.</p> <p>IEC 61643-1 NOTE Harmonized as EN 61643-1.</p> <p>IEC 61643-21 NOTE Harmonized as EN 61643-21.</p> <p>IEC 61643-311 NOTE Harmonized as EN 61643-311.</p> <p>IEC 61643-321 NOTE Harmonized as EN 61643-321.</p> <p>IEC 61643-331 NOTE Harmonized as EN 61643-331.</p>	P
ZB	ANNEX ZB, SPECIAL NATIONAL CONDITIONS (EN)	P
4.1.15	<p>Denmark, Finland, Norway and Sweden</p> <p>To the end of the subclause the following is added:</p> <p>Class I pluggable equipment type A intended for connection to other equipment or a network shall, if safety relies on connection to reliable earthing or if surge suppressors are connected between the network terminals and accessible parts, have a marking stating that the equipment shall be connected to an earthed mains socket-outlet.</p> <p>The marking text in the applicable countries shall be as follows:</p> <p>In Denmark: "Apparatets stikprop skal tilsluttes en stikkontakt med jord som giver forbindelse til stikproppens jord."</p> <p>In Finland: "Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan"</p> <p>In Norway: "Apparatet må tilkoples jordet stikkontakt"</p> <p>In Sweden: "Apparaten skall anslutas till jordat uttag"</p>	N/A
4.7.3	<p>United Kingdom</p> <p>To the end of the subclause the following is added:</p> <p>The torque test is performed using a socket-outlet complying with BS 1363, and the plug part shall be assessed to the relevant clauses of BS 1363. Also see Annex G.4.2 of this annex</p>	P

5.2.2.2	<p>Denmark</p> <p>After the 2nd paragraph add the following: A warning (marking safeguard) for high touch current is required if the touch current exceeds the limits of 3,5 mA a.c. or 10 mA d.c.</p>		N/A
5.4.11.1 and Annex G	<p>Finland and Sweden</p> <p>To the end of the subclause the following is added: For separation of the telecommunication network from earth the following is applicable: If this insulation is solid, including insulation forming part of a component, it shall at least consist of either</p> <ul style="list-style-type: none"> • two layers of thin sheet material, each of which shall pass the electric strength test below, or • one layer having a distance through insulation of at least 0,4 mm, which shall pass the electric strength test below. <p>If this insulation forms part of a semiconductor component (e.g. an optocoupler), there is no distance through insulation requirement for the insulation consisting of an insulating compound completely filling the casing, so that clearances and creepage distances do not exist, if the component passes the electric strength test in accordance with the compliance clause below and in addition</p> <ul style="list-style-type: none"> • passes the tests and inspection criteria of 5.4.8 with an electric strength test of 1,5 kV multiplied by 1,6 (the electric strength test of 5.4.9 shall be performed using 1,5 kV), and • is subject to routine testing for electric strength during manufacturing, using a test voltage of 1,5kV. <p>It is permitted to bridge this insulation with a capacitor complying with EN 60384-14:2005, subclass Y2.</p> <p>A capacitor classified Y3 according to EN 60384-14:2005, may bridge this insulation under the following conditions:</p> <ul style="list-style-type: none"> • the insulation requirements are satisfied by having a capacitor classified Y3 as defined by EN 60384-14, which in addition to the Y3 testing, is tested with an impulse test of 2,5 kV defined in 5.4.11; • the additional testing shall be performed on all the test specimens as described in EN 60384-14; the impulse test of 2,5 kV is to be performed before the endurance test in EN 60384-14, in the sequence of tests as described in EN 60384-14. 		N/A
5.5.2.1	<p>Norway</p> <p>After the 3rd paragraph the following is added: Due to the IT power system used, capacitors are required to be rated for the applicable line-to-line voltage (230 V).</p>		N/A

5.5.6	<p>Finland, Norway and Sweden</p> <p>To the end of the subclause the following is added: Resistors used as basic safeguard or bridging basic insulation in class I pluggable equipment type A shall comply with G.10.1 and the test of G.10.2.</p>		N/A
5.6.1	<p>Denmark</p> <p>Add to the end of the subclause</p> <p>Due to many existing installations where the socket-outlets can be protected with fuses with higher rating than the rating of the socket-outlets the protection for pluggable equipment type A shall be an integral part of the equipment.</p> <p><i>Justification:</i> In Denmark an existing 13 A socket outlet can be protected by a 20 A fuse.</p>		N/A
5.6.4.2.1	<p>Ireland and United Kingdom</p> <p>After the indent for pluggable equipment type A, the following is added:</p> <ul style="list-style-type: none"> – the protective current rating is taken to be 13 A, this being the largest rating of fuse used in the mains plug. 		P
5.6.5.1	<p>To the second paragraph the following is added: The range of conductor sizes of flexible cords to be accepted by terminals for equipment with a rated current over 10 A and up to and including 13 A is: 1,25 mm² to 1,5 mm² in cross-sectional area.</p>	Permanently connected equipment, need double evaluated in end product.	N/A
5.7.5	<p>Denmark</p> <p>To the end of the subclause the following is added: The installation instruction shall be affixed to the equipment if the protective conductor current exceeds the limits of 3,5 mA a.c. or 10 mA d.c.</p>		N/A

<p>5.7.6.1</p>	<p>Norway and Sweden</p> <p>To the end of the subclause the following is added:</p> <p>The screen of the television distribution system is normally not earthed at the entrance of the building and there is normally no equipotential bonding system within the building. Therefore the protective earthing of the building installation needs to be isolated from the screen of a cable distribution system.</p> <p>It is however accepted to provide the insulation external to the equipment by an adapter or an interconnection cable with galvanic isolator, which may be provided by a retailer, for example.</p> <p>The user manual shall then have the following or similar information in Norwegian and Swedish language respectively, depending on in what country the equipment is intended to be used in:</p> <p>“Apparatus connected to the protective earthing of the building installation through the mains connection or through other apparatus with a connection to protective earthing – and to a television distribution system using coaxial cable, may in some circumstances create a fire hazard. Connection to a television distribution system therefore has to be provided through a device providing electrical isolation below a certain frequency range (galvanic isolator, see EN 60728-11)”</p> <p>NOTE In Norway, due to regulation for CATV-installations, and in Sweden, a galvanic isolator shall provide electrical insulation below 5 MHz. The insulation shall withstand a dielectric strength of 1,5 kV r.m.s., 50 Hz or 60 Hz, for 1 min.</p> <p>Translation to Norwegian (the Swedish text will also be accepted in Norway):</p> <p>“Apparater som er koplet til beskyttelsesjord via nettplugg og/eller via annet jordtilkoplede utstyr – og er tilkoplede et koaksialbasert kabel-TV nett, kan forårsake brannfare. For å unngå dette skal det ved tilkopling av apparater til kabel-TV nett installeres en galvanisk isolator mellom apparatet og kabel-TV nettet.”</p> <p>Translation to Swedish:</p> <p>”Apparater som är kopplad till skyddsjord via jordat vägguttag och/eller via annan utrustning och samtidigt är kopplad till kabel-TV nät kan i vissa fall medföra risk för brand. För att undvika detta skall vid anslutning av apparaten till kabel-TV nät galvanisk isolator finnas mellan apparaten och kabel-TV nätet.”.</p>		<p>N/A</p>
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5.7.6.2	<p>Denmark</p> <p>To the end of the subclause the following is added: The warning (marking safeguard) for high touch current is required if the touch current or the protective current exceed the limits of 3,5 mA .</p>		N/A
B.3.1 and B.4	<p>Ireland and United Kingdom</p> <p>The following is applicable: To protect against excessive currents and short-circuits in the primary circuit of direct plug-in equipment, tests according to Annexes B.3.1 and B.4 shall be conducted using an external miniature circuit breaker complying with EN 60898-1, Type B, rated 32A. If the equipment does not pass these tests, suitable protective devices shall be included as an integral part of the direct plug-in equipment, until the requirements of Annexes B.3.1 and B.4 are met</p>		P
G.4.2	<p>Denmark</p> <p>To the end of the subclause the following is added: Supply cords of single phase appliances having a rated current not exceeding 13 A shall be provided with a plug according to DS 60884-2-D1:2011. CLASS I EQUIPMENT provided with socket-outlets with earth contacts or which are intended to be used in locations where protection against indirect contact is required according to the wiring rules shall be provided with a plug in accordance with standard sheet DK 2-1a or DK 2-5a. If a single-phase equipment having a RATED CURRENT exceeding 13 A or if a poly-phase equipment is provided with a supply cord with a plug, this plug shall be in accordance with the standard sheets DK 6-1a in DS 60884-2-D1 or EN 60309-2. Mains socket outlets intended for providing power to Class II apparatus with a rated current of 2,5 A shall be in accordance DS 60884-2-D1:2011 standard sheet DKA 1-4a. Other current rating socket outlets shall be in compliance with Standard Sheet DKA 1-3a or DKA 1-1c. Mains socket-outlets with earth shall be in compliance with DS 60884-2-D1:2011 Standard Sheet DK 1-3a, DK 1-1c, DK1-1d, DK 1-5a or DK 1-7a <i>Justification:</i> Heavy Current Regulations, Section 6c</p>		N/A

G.4.2	<p>United Kingdom</p> <p>To the end of the subclause the following is added: The plug part of direct plug-in equipment shall be assessed to BS 1363: Part 1, 12.1, 12.2, 12.3, 12.9, 12.11, 12.12, 12.13, 12.16, and 12.17, except that the test of 12.17 is performed at not less than 125 °C. Where the metal earth pin is replaced by an Insulated Shutter Opening Device (ISOD), the requirements of clauses 22.2 and 23 also apply.</p>		P
G.7.1	<p>United Kingdom</p> <p>To the first paragraph the following is added: Equipment which is fitted with a flexible cable or cord and is designed to be connected to a mains socket conforming to BS 1363 by means of that flexible cable or cord shall be fitted with a 'standard plug' in accordance with the Plugs and Sockets etc (Safety) Regulations 1994, Statutory Instrument 1994 No. 1768, unless exempted by those regulations.</p> <p>NOTE "Standard plug" is defined in SI 1768:1994 and essentially means an approved plug conforming to BS 1363 or an approved conversion plug.</p>		N/A
G.7.1	<p>Ireland</p> <p>To the first paragraph the following is added: Apparatus which is fitted with a flexible cable or cord shall be provided with a plug in accordance with Statutory Instrument 525: 1997, "13 A Plugs and Conversion Adapters for Domestic Use Regulations: 1997. S.I. 525 provides for the recognition of a standard of another Member State which is equivalent to the relevant Irish Standard</p>		N/A
G.7.2	<p>Ireland and United Kingdom</p> <p>To the first paragraph the following is added: A power supply cord with a conductor of 1,25 mm² is allowed for equipment which is rated over 10 A and up to and including 13 A.</p>		N/A

ZC	ANNEX ZC, NATIONAL DEVIATIONS (EN)		N/A
10.5.2	<p>Germany</p> <p>The following requirement applies:</p> <p>For the operation of any cathode ray tube intended for the display of visual images operating at an acceleration voltage exceeding 40 kV, authorization is required, or application of type approval (Bauartzulassung) and marking.</p> <p><i>Justification:</i></p> <p>German ministerial decree against ionizing radiation (Röntgenverordnung), in force since 2002-07-01, implementing the European Directive 96/29/EURATOM.</p> <p>NOTE Contact address: Physikalisch-Technische Bundesanstalt, Bundesallee 100, D-38116 Braunschweig, Tel.: Int +49-531-592-6320, Internet: http://www.ptb.de</p>		N/A

Appendix 3: AUSTRALIA and NEW ZEALAND NATIONAL DIFFERENCES

ATTACHMENT TO TEST REPORT		
IEC 62368-1 (AUSTRALIA / NEW ZEALAND) NATIONAL DIFFERENCES (Audio/video, information and communication technology equipment)		
Differences according to: AS/NZS 62368.1:2018		
Attachment Form No.: AU_NZ_ND_IEC62368_1B		
Attachment Originator.....: JAS-ANZ		
Master Attachment: 2019-02-04		
Copyright © 2019 IEC System for Conformity Testing and Certification of Electrical Equipment (IECEE), Geneva, Switzerland. All rights reserved.		
	National Differences	—
Appendix ZZ	Variations to IEC 62368-1:2014 (ED. 2.0) for Australia and New Zealand	—
ZZ1 Scope	This Appendix lists the normative variations to IEC 62368-1:2014 (ED. 2.0)	—
ZZ2 Variations	The following modifications are required for Australian/New Zealand conditions:	—
2	<p>Add the following to the list of normative references: The following normative documents are referenced in Appendix ZZ:</p> <ul style="list-style-type: none"> -AS/NZS 3112, <i>Approval and test specification—Plugs and socket-outlets</i> -AS/NZS 3123, <i>Approval and test specification—Plugs, socket-outlets and couplers for general industrial application</i> -AS/NZS 3191, <i>Electric flexible cords</i> -AS/NZS 60065, <i>Audio, video and similar electronic apparatus—Safety requirements (IEC 60065:2015 (ED.8.0) MOD)</i> -AS/NZS 60320.1, <i>Appliance couplers for household and similar general purposes, Part 1: General requirements (IEC 60320-1, Ed.2.1 (2007) MOD)</i> -AS/NZS 60320.2.2, <i>Appliance couplers for household and similar general purposes Part 2.2: Interconnection couplers for household and similar equipment (IEC 60320-2-2, Ed.2.0 (1998) MOD)</i> -AS/NZS 60695.2.11, <i>Fire hazard testing, Part 2.11: Glowing/hot wire based test methods—Glow-wire flammability test method for end-products</i> -AS/NZS 60695.11.5, <i>Fire hazard testing, Part 11.5: Test flames—Needle-flame test method—Apparatus, confirmatory test arrangement and guidance</i> 	—

	<p>-AS/NZS 60695.11.10, <i>Fire hazard testing, Part 11.10: Test flames—50 W horizontal and vertical flame test methods</i></p> <p>-AS/NZS 60884.1, <i>Plugs and socket-outlets for household and similar purposes, Part 1: General requirements</i></p> <p>-AS/NZS 60950.1:2015, <i>Information technology equipment—Safety, Part 1: General requirements (IEC 60950-1, Ed.2.2 (2013), MOD)</i></p> <p>IEC 61032:1997, <i>Protection of persons and equipment by enclosures—Probes for verification</i></p> <p>-AS/NZS 61558.1:2008 (including Amendment 2:2015), <i>Safety of Power Transformers, Power Supplies, Reactors and Similar Products, Part 1: General requirements and tests (IEC 61558-1 Ed 2.1, MOD)</i></p> <p>-AS/NZS 61558.2.16, <i>Safety of transformers, reactors, power supply units and similar products for voltages up to 1 100 V, Part 2.16: Particular requirements and tests for switch mode power supply units and transformers for switch mode power supply units.</i></p>		
4.1.1	<p>Application of requirements and acceptance of materials, components and subassemblies</p> <p>1 <i>Replace</i> the text ‘IEC 60950-1’ with ‘AS/NZS 60950.1:2015’.</p> <p>2 <i>Replace</i> the text ‘IEC 60065’ with ‘AS/NZS 60065’.</p>		—
4.7	Equipment for direct insertion into mains socket-outlets		P
4.7.2	<p>Requirements</p> <p><i>Delete</i> the text of the second paragraph and <i>replace</i> with the following: Equipment with a plug portion, suitable for insertion into a 10 A 3-pin flat-pin socket-outlet complying with AS/NZS 3112 shall comply with the requirements in AS/NZS 3112 for equipment with integral pins for insertion into socket-outlets.</p>		P
4.7.3	<p>Compliance Criteria</p> <p><i>Delete</i> the first paragraph and Note 1 and Note 2 and <i>replace</i> with the following: <i>Compliance is checked by inspection and, if necessary, by the tests in AS/NZS 3112.</i></p>		P
4.8	<p><i>Delete</i> existing clause title and <i>replace</i> with the following: 4.8 Products containing coin/button cell batteries</p>		N/A

4.8.1	<p>General</p> <p>1 Second dashed point, <i>delete</i> the text and <i>replace</i> with the following: – include coin/button cell batteries with a diameter of 32 mm or less.</p> <p>2 After the second dashed point, <i>insert</i> the following Note: NOTE 1: Batteries are specified in IEC 60086-2.</p> <p>3 After the third dashed point, <i>renumber</i> the existing Note as 'NOTE 2'.</p> <p>4 Fifth dashed point, <i>delete</i> the word 'lithium'.</p>		N/A	
4.8.2	<p>Instructional Safeguard</p> <p>First line, <i>delete</i> the word 'lithium'.</p>		N/A	
4.8.3	<p>Construction</p> <p>First line, after the word 'Equipment' <i>insert</i> the words 'containing one or more coin/button batteries and'</p>		N/A	
4.8.5	<p>Compliance criteria</p> <p><i>Delete</i> the first paragraph and <i>replace</i> with the following: <i>Compliance is checked by applying a force of 30 N +/- 1 N for 10 s to the battery compartment door/cover by a rigid test finger according to test probe 11 of IEC 61032:1997 at the most unfavourable place and in the most unfavourable direction. The force shall be applied in one direction at a time.</i></p>		N/A	
5.4.10.2	Test methods		N/A	
5.4.10.2.1	<p>General</p> <p><i>Delete</i> the first paragraph and <i>replace</i> with the following: In Australia only, the separation is checked by the test of both Clause 5.4.10.2.2 and Clause 5.4.10.2.3. In New Zealand, the separation is checked by the test of either Clause 5.4.10.2.2 or Clause 5.4.10.2.3.</p>		N/A	
Table 29	<i>Replace</i> the table with the following:		N/A	
Parts	Impulse test		Steady state test	
	New Zealand	Australia	New Zealand	Australia
Parts indicated in Clause 5.4.10.1 a) ^a	2.5 kV 10/700 µs	7.0 kV for hand-held telephones and headsets, 2.5 kV for other equipment. 10/700 µs	1.5 kV	3 kV
Parts indicated in Clause 5.4.10.1 b) and c) ^b	1.5 kV 10/700 µs ^c		1.0 kV	1.5 kV
<p>^a Surge suppressors shall not be removed.</p> <p>^b Surge suppressors may be removed, provided that such devices pass the impulse test of Clause 5.4.10.2.2 when tested as components outside the equipment.</p> <p>^c During this test, it is allowed for a surge suppressor to operate and for a sparkover to occur in a GDT.</p>				

5.4.10.2.2	After the first paragraph, <i>insert</i> new Notes 201 and 202 as follows: NOTE 201 For Australia, the 7 kV impulse simulates lightning surges on typical rural and semi-rural network lines. NOTE 202 For Australia, the value of 2.5 kV for Clause 5.4.10.1 a) was chosen to ensure the adequacy of the insulation concerned and does not necessarily simulate likely overvoltages.		N/A
5.4.10.2.3	After the first paragraph, <i>insert</i> new Notes 201 and 202 as follows: NOTE 201 For Australia, where there are capacitors across the insulation under test, it is recommended that d.c. test voltages are used. NOTE 202 The 3 kV and 1.5 kV values for Australia have been determined considering the low frequency induced voltages from the power supply distribution system.		N/A
6	Electrically-caused fire		P
6.1	General After the first paragraph, <i>insert</i> the following new paragraph: Alternatively, the requirements of Clauses 6.2 to 6.5.2 are considered to be fulfilled if the equipment complies with the requirements of Clause 6.202		P
6.6	After Clause 6.6, <i>add</i> the new Clauses 6.201 and 6.202 as follows: 6.201 External power supplies, docking stations and other similar devices and 6.202 Resistance to fire—Alternative tests (see special national conditions)		P
8.5.4	Special categories of equipment comprising moving parts		N/A
8.5.4.1	Large data storage equipment In the first dashed row and the second dashed rows <i>replace</i> 'IEC 60950-1:2005' with 'AS/NZS 60950.1:2015'.		N/A
8.6	Stability of equipment		N/A

<p>8.6.1 and Table 36</p>	<p>Requirements</p> <p>1. Table 36, <i>insert</i> Footnote c at the end of the 'Glass slide' heading, and <i>add</i> a new Footnote c after the text of Footnote b in the last row of Table 36 as follows: ^c The glass slide test is not applicable to floor standing equipment, even though the equipment may have controls or a display.</p> <p>2. Table 36, fifth row, <i>insert</i> ²⁰¹ at the end of 'No stability requirements'</p> <p>3. Table 36, ninth row, <i>insert</i> ²⁰¹ at the end of 'No stability requirements'</p> <p>4. Table 36, <i>add</i> the following new footnote: ²⁰¹ MS2 and MS3 television sets and display devices, designed only for fixing to a wall, ceiling or equipment rack, are not subjected to stability requirements only if the instructional safeguard of Clause 8.6.1.201 is provided. Otherwise, the glass slide requirements of Clause 8.6.4 and horizontal force requirements of Clause 8.6.5 apply.</p> <p>5. Second paragraph beneath Table 36, <i>delete</i> the words 'MS2 and MS3 television sets' and <i>replace</i> with 'MS2 and MS3 television sets and display devices'</p>		<p>N/A</p>
<p>8.6.1</p>	<p>After Clause 8.6.1 <i>add</i> the following new clauses: 8.6.1.201 Instructional safeguard for fixed-mount television sets (see special national conditions)</p>		<p>N/A</p>
<p>Annex F Paragraph F.3.5.1</p>	<p>Mains appliance outlet and socket-outlet markings <i>Replace</i> 'IEC 60320-2-2' with 'AS/NZS 60320.2.2'.</p>		<p>N/A</p>
<p>Annex G Paragraph G.4.2</p>	<p>Mains connectors</p> <p>1 In the second line <i>insert</i> 'or AS/NZS 3123' after 'IEC 60906-1'.</p> <p>2 In the second line <i>insert</i> 'or AS/NZS 60320 series' after 'IEC 60320 series'</p> <p>3 <i>Add</i> the following new paragraph: 10 A or 15 A 250 V flat pin plugs for the connection of equipment to mains-powered socket-outlets for household or similar general use shall comply with AS/NZS 3112 or AS/NZS 60884.1.</p>		<p>N/A</p>
<p>Paragraph G.5.3.1</p>	<p>Transformers, General</p> <p>1 In the third dashed point <i>replace</i> 'IEC 61558-1 and the relevant parts of IEC 61558-2' with 'AS/NZS 61558-1 and the relevant parts of AS/NZS 61558.2'</p> <p>2 In the fourth dashed point <i>replace</i> 'IEC 61558-2-16' with 'AS/NZS 61558.2.16'.</p>		<p>P</p>
<p>Paragraph G.7.1</p>	<p>Mains supply cords, General In the fourth dashed paragraph, <i>replace</i> 'IEC 60320-1' with 'AS/NZS 60320.1'</p>		<p>N/A</p>

<p>Table G.5</p>	<p>Sizes of conductors</p> <p>1 In the second row, first column, <i>delete</i> '6' and <i>replace</i> with '7.5'</p> <p>2 In the second row, second column, <i>delete</i> '0,75' and <i>replace</i> with '0.75^b</p> <p>3 <i>Delete</i> Note 1.</p> <p>4 <i>Replace</i> 'NOTE 2' with 'NOTE:'.</p> <p>5 <i>Delete</i> the text of 'Footnote b' and <i>replace</i> with the following: ^b This nominal cross-sectional area is only allowed for Class II appliances if the length of the power supply cord, measured between the point where the cord, or cord guard, enters the appliance, and the entry to the plug does not exceed 2 m (0.5 mm² three-core supply flexible cords are not permitted; see AS/NZS 3191).</p> <p>6 In Footnote c <i>replace</i> 'IEC 60320-1' with 'AS/NZS 60320.1'</p> <p>7 In Footnote d <i>replace</i> 'IEC 60320-1' with 'AS/NZS 60320.1'</p>		<p>P</p>
<p>Annex M Paragraph M.3.2</p>	<p>Protection circuits for batteries provided within the equipment, Test method</p> <p>After the first dashed point <i>add</i> the following Note: NOTE 201: In cases where the voltage source is provided by power from an unassociated power source, consideration should be given to the effects of possible single fault conditions in the unassociated equipment. If the power source is unknown then it should be assumed that the maximum limit of SELV may be applied to the source input under assumed single fault conditions in the source when assessing the charging circuit in the equipment under test.</p>		<p>N/A</p>
	<p>Special national conditions (if any)</p>		<p>—</p>

<p>6.201</p>	<p>External power supplies, docking stations and other similar devices For external power supplies, docking stations and other similar devices, during and after abnormal operating conditions and during single fault conditions the output voltage— – at all ES1 outlets or connectors shall not increase by more than 10% of its rated output voltage under normal operating condition; and – of a USB outlet or connector shall not increase by more than 3 V or 10% of its rated output voltage under normal operating conditions, whichever is higher. For equipment with multiple rated output voltages, the requirements apply with the equipment configured for each rated output voltage in turn. NOTE: This is intended to reduce the possibility of battery fire or explosion in attached equipment or accessories when charging secondary lithium batteries. <i>Compliance shall be checked by measurement, taking into account the abnormal operating conditions of Annex B.3 and the simulated single-fault conditions of Annex B.4</i></p>	<p>5.2% Max < 10%</p>	<p>P</p>
<p>6.202</p>	<p>Resistance to fire—Alternative tests</p>		<p>N/A</p>
<p>6.202.1</p>	<p>General Parts of non-metallic material shall be resistant to ignition and spread of fire. This requirement does not apply to decorative trims, knobs and other parts unlikely to be ignited or to propagate flames from inside the equipment, or the following: a) Components that are contained in an enclosure having a flammability category of V-0 according to AS/NZS 60695.11.10 and having openings only for the connecting wires filling the openings completely, and for ventilation not exceeding 1 mm in width regardless of length. b) The following parts which would contribute negligible fuel to a fire: – small mechanical parts, the mass of which does not exceed 4 g, such as mounting parts, gears, cams, belts and bearings; – small electrical components, such as capacitors with a volume not exceeding 1 750 mm³, integrated circuits, transistors and optocoupler packages, if these components are mounted on material of flammability category V-1, or better, according to AS/NZS 60695.11.10. NOTE: In considering how to minimize propagation of fire and what 'small parts' are, account should be taken of the cumulative effect of small parts adjacent to each other for the possible effect of propagating the fire from one part to another.</p>		<p>N/A</p>

	<p><i>Compliance shall be checked by the tests of Clauses 6.202.2, 6.202.3 and 6.202.4.</i></p> <p>For the base material of printed boards, compliance shall be checked by the test of Clause 6.202.5.</p> <p>The tests shall be carried out on parts of non-metallic material which have been removed from the equipment. When the glow-wire test is carried out, the parts shall be placed in the same orientation as they would be in normal use.</p> <p>These tests are not carried out on internal wiring.</p>		N/A						
6.202.2	<p>Testing of non-metallic materials</p> <p>Parts of non-metallic material shall be subject to the glow-wire test of AS/NZS 60695.2.11 which shall be carried out at 550°C.</p> <p>Parts for which the glow-wire test cannot be carried out, such as those made of soft or foamy material, shall meet the requirements specified in ISO 9772 for category FH-3 material. The glow-wire test shall be not carried out on parts of material classified at least FH-3 according to ISO 9772 provided that the relevant part is not thinner than the sample tested.</p>		N/A						
6.202.3	<p>Testing of insulating materials</p> <p>Parts of insulating material supporting Potential Ignition Sources shall be subject to the glow-wire test of AS/NZS 60695.2.11 which shall be carried out at 750°C.</p> <p>The test shall be also carried out on other parts of insulating material which are within a distance of 3 mm of the connection.</p> <p>NOTE: Contacts in components such as switch contacts are considered to be connections</p>		N/A						
	<p>For parts which withstand the glow-wire test but produce a flame, other parts above the connection within the envelope of a vertical cylinder having a diameter of 20 mm and a height of 50 mm shall be subjected to the needle-flame test.</p> <p>However, parts shielded by a barrier which meets the needle-flame test need not be tested</p>	No flame	N/A						
	<p>The needle-flame test shall be made in accordance with AS/NZS 60695.11.5 with the following modifications:</p> <table border="1" data-bbox="411 1668 1013 2049"> <tr> <td>Clause of AS/NZS 60695.11.5</td> <td>Change</td> </tr> <tr> <td>9 Test procedure</td> <td></td> </tr> <tr> <td>9.2 Application of needle-flame</td> <td><i>Delete</i> the first and second paragraphs and <i>replace</i> with the following: The specimen shall be arranged so that the</td> </tr> </table>	Clause of AS/NZS 60695.11.5	Change	9 Test procedure		9.2 Application of needle-flame	<i>Delete</i> the first and second paragraphs and <i>replace</i> with the following: The specimen shall be arranged so that the		N/A
Clause of AS/NZS 60695.11.5	Change								
9 Test procedure									
9.2 Application of needle-flame	<i>Delete</i> the first and second paragraphs and <i>replace</i> with the following: The specimen shall be arranged so that the								

		<p>flame can be applied to a vertical or horizontal edge as shown in the examples of Figure 1. If possible the flame shall be applied at least 10 mm from a corner.</p> <p>The duration of application of the test flame shall be 30 s ± 1 s.</p>		
	<p>9.3 Number of test specimens</p>	<p><i>Replace</i> with the following: The test shall be made on one specimen. If the specimen does not withstand the test, the test may be repeated on two further specimens, both of which shall withstand the test.</p>		
	<p>11 Evaluation of test results</p>	<p><i>Replace</i> with the following: The duration of burning (tb) shall not exceed 30 s. However, for printed circuit boards, it shall not exceed 15 s.</p>		
<p>6.202.4</p>	<p>Testing in the event of non-extinguishing material</p> <p>If parts, other than enclosures, do not withstand the glow wire tests of Clause 6.202.3, by failure to extinguish within 30 s after the removal of the glowwire tip, the needle-flame test detailed in Clause 6.202.3 shall be made on all parts of non-metallic material which are within a distance of 50 mm or which are likely to be impinged upon by flame during the tests of Clause 6.202.3. Parts shielded by a separate barrier which meets the needle-flame test need not be tested.</p> <p>NOTE 1: If the enclosure does not withstand the glow-wire test the equipment is considered to have failed to meet the requirements of Clause 6.202 without the need for consequential testing.</p> <p>NOTE 2: If other parts do not withstand the glow-wire test due</p>			<p>N/A</p>

	<p>to ignition of the tissue paper and if this indicates that burning or glowing particles can fall onto an external surface underneath the equipment, the equipment is considered to have failed to meet the requirements of Clause 6.202 without the need for consequential testing.</p> <p>NOTE 3: Parts likely to be impinged upon by the flame are considered to be those within the envelope of a vertical cylinder having a radius of 10 mm and a height equal to the height of the flame, positioned above the point of the material supporting, in contact with, or in close proximity to, connections.</p>		
<p>6.202.5</p>	<p>Testing of printed boards</p> <p>The base material of printed boards shall be subjected to the needle-flame test of Clause 6.202.3. The flame shall be applied to the edge of the board where the heat sink effect is lowest when the board is positioned as in normal use. The flame shall not be applied to an edge, consisting of broken perforations, unless the edge is less than 3 mm from a potential ignition source.</p> <p>The test is not carried out if—</p> <ul style="list-style-type: none"> – the printed board does not carry any potential ignition source; – the base material of printed boards, on which the available apparent power at a connection exceeds 15 VA operating at a voltage exceeding 50 V and equal or less than 400 V (peak) a.c. or d.c. under normal operating conditions, is of flammability category V-1 or better according to AS/NZS 60695.11.10, or the printed boards are protected by an enclosure meeting the flammability category V-0 according to AS/NZS 60695.11.10, or made of metal, having openings only for connecting wires which fill the openings completely; or – the base material of printed boards, on which the available equipment power at a connection exceeds 15 VA operating at a voltage exceeding 400 V (peak) a.c. or d.c. under normal operating conditions, and base material of printed boards supporting spark gaps which provides protection against overvoltages, is of flammability category V-0 according to AS/NZS 60695.11.10 or the printed boards are contained in a metal enclosure, having openings only for connecting wires which fill the openings completely. <p><i>Conformance shall be determined using the smallest thickness of the material.</i></p> <p>NOTE: Available apparent power is the maximum apparent power which can be drawn from the supplying circuit through a resistive load whose value is chosen to maximize the apparent power for more than 2 min when the circuit supplied is disconnected.</p>	<p>V-0</p>	<p>N/A</p>
<p>6.202.6</p>	<p>For open circuit voltages greater than 4 kV</p> <p>Potential ignition sources with open circuit voltages exceeding 4 kV (peak) a.c. or d.c. under normal operating conditions shall be contained in a FIRE ENCLOSURE which shall comply with flammability category V-1 or better according to AS/NZS 60695.11.10.</p>		<p>N/A</p>

<p>8.6.1.201</p>	<p>8.6.1.201 Instructional safeguard for fixed-mount television sets MS2 and MS3 television sets and display devices designed only for fixed mounting to a wall of ceiling or equipment rack shall, where required in Table 36, footnote 201, have an instructional safeguard in accordance with Clause F.5 which may be on the equipment or included in the installation instructions or equivalent document accompanying the equipment. The elements of the instructional safeguard shall be as follows: – element 1a: not available; – element 2: ‘Stability Hazard’ or equivalent wording; – element 3: ‘The television set may fall, causing serious personal injury or death’ or equivalent text; – element 4: the following or equivalent text: To prevent injury, this television set must be securely attached to the floor/wall in accordance with the installation instructions</p>		<p>N/A</p>
<p>8.6.1.202</p>	<p>Restraining device MS2 and MS3 television sets and display devices that are not solely fixed-mounted should be provided with a restraining device such as a fixing point to facilitate restraining the equipment from toppling forward. The restraining device shall be capable of withstanding a pull of 100 N in all directions without damage. Where a restraining device is provided, instructions shall be provided in the instructions for installation or instructions for use to ensure correct and safe installation.</p>		<p>N/A</p>

Appendix 4: JAPAN NATIONAL DIFFERENCES

ATTACHMENT TO TEST REPORT			
IEC 62368-1 (JAPAN) NATIONAL DIFFERENCES (Audio/video, information and communication technology equipment – Part 1: Safety requirements)			
Differences according to: J62368-1 (H30)			
Attachment Form No.: JP_ND_IEC62368_1B			
Attachment Originator: UL (JP)			
Master Attachment: Date 2018-11-22			
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	National Differences		—
4.1.2	Where the component, or a characteristic of a component, is a safeguard or a part of a safeguard, components shall comply with the requirements of this standard or, where specified in a requirements clause, with the safety aspects of the relevant JIS component standards or IEC component standards, or components shall have properties equivalent to or better than these.		P
5.6.1	Mains socket-outlet and appliance outlet shall comply with Clause G.4.2A if they are incorporated as part of the equipment.		N/A
5.6.2.1	Mains connection of class 0I equipment: Instructional safeguard in accordance with Clause F.3.6.1A; Mains plug having a lead wire for protective earthing connection of class 0I equipment; Independent main protective earthing terminal installed by ordinary person.		N/A
5.6.2.2	This requirement does not apply to internal conductor of the cord set that is covered by the sheath of mains cord and is formed together with mains plug and appliance connector.		N/A

5.6.3	<p>In case of class 0I equipment using power supply cord having two conductors (no earthing conductor), the conductor of protective earthing lead wire shall comply with either of the following:</p> <ul style="list-style-type: none"> – use of annealed copper wire with 1.6 mm diameter or corrosion-inhibiting metal wire having size and strength that are equivalent to or more than the above copper wire – single core cord or single core cab tire cable with 1.25 mm² or more cross-sectional area 		N/A
5.7.3	<p>For class 0I equipment that is provided with mains socket-outlet in the configuration as specified in JIS C 8282 series or JIS C 8303, or otherwise being considered to comply with relevant regulations, or that is provided with mains appliance outlet as specified in JIS C 8283-2-2 for the purpose of interconnection, the measurement is conducted on the system of the interconnected equipment having a single connection to the mains.</p>		N/A
5.7.4	<p>In case of class 0I equipment, touch current shall not exceed 1.41 mA peak or for sinusoidal wave, 1.0 mA r.m.s. when measured using the network specified in Figure 4 of IEC 60990.</p>		N/A
6.4.3.3	<p>A fuse complying with JIS C 6575 series or a fuse having equivalent characteristics shall open within 1 s.</p> <p>For Class A fuse of JIS C 6575, replace “2.1 times” by “1.35 times” and in case of Class B fuse of JIS C 6575, replace “2.1 times” by “1.6 times”.</p> <p>A fuse not complying with JIS C 6575 series shall be tested with the breaking capacity taken into account.</p>		P
8.5.4.2.1	<p>Only three-phase stationary equipment rated more than 200 V ac can be considered as being for use in locations where children are not likely to be present, when complying with Clause F.4.</p>		N/A
8.5.4.2.2	<p>For equipment installed where children may be present, an instructional safeguard shall be provided by easily understandable wording in accordance with Clause F.5, except that element 3 is optional.</p>		N/A
8.5.4.2.4	<p>The media destruction device is tested according to Clause V.1.2 with applicable jointed test probes to the opening. And then the wedge probe per Figure V.4 shall not contact any moving part.</p>		N/A

8.5.4.2.5	The wedge probe of Figure V.4 and applicable jointed test probes specified in Clause V.1.2 shall not contact any moving part. Instructional safeguard shall not be used instead of equipment safeguard for preventing access to hazardous moving parts.		N/A
9.2.6, Table 38	Handles, Knobs, grips, etc. and external surfaces either held, touched or worn against the body in normal use (> 1 min) ^{b,c}		N/A
F.3.5.1	Instructional safeguard of class 0I equipment in accordance with Clause F.5 when a mains socket-outlet as specified in JIS C 8282 series, JIS C 8303 or relevant regulation to which class I equipment can be connected is provided in accordance with Clause G.4.2A except for the cases where the socket-outlet is accessible only to skilled persons.		N/A
F.3.5.3	If the fuse is necessary for the safeguard function, the symbols indicating pre-arcing time-current characteristic.		P
F.3.6.1A	Marking for class 0I equipment The requirements of Clauses F.3.6.1.1 and F.3.6.1.3 shall be applied to class 0I equipment. For class 0I equipment, a marking of instructions and instructional safeguard shall be provided regarding the earthing connection.		N/A
F.3.6.2.1	Symbols, IEC 60417-5172 (2003-02) or IEC 60417-6092 (2011-10), shall not be used for class I equipment or class 0I equipment.		N/A
F.4	Instruction for audio equipment with terminals classified as ES3 in accordance with Table E.1, and for other equipment with terminals marked in accordance with F.3.6.1 and F.3.6.1A. Installation instruction for the protective earthing connection for class 0I equipment provided with independent main protective earthing terminal, where the cord for the protective earthing connection is not provided within the package for the equipment.		N/A
G.3.2.1	The thermal link when tested as a separate component, shall comply with the requirements of JIS C 6691 or have properties equivalent to or better than that.		N/A

G.3.4	<p>Except for devices covered by Clause G.3.5, overcurrent protective devices used as a safeguard shall comply with the relevant part of JIS C 6575 (corresponding to IEC60127) or shall have equivalent characteristics.</p> <p>If there are no applicable IEC standards, overcurrent protective devices used as a safeguard shall comply with their applicable IEC standards.</p>		P
G.4.1	This requirement is not applicable to Clauses G.4.2 and G.4.2A.		N/A
G.4.2	<p>Mains connector shall comply with JIS C 8282 series, JIS C 8283 series, JIS C 8285, JIS C 8303 or IEC 60309 series.</p> <p>Mains plugs and socket-outlets shall comply with JIS C 8282 series, JIS C 8303, IEC 60309 series, or have equivalent or better performance.</p> <p>A power supply cord set provided with appliance connector that can fit appliance inlet complying with JIS C 8283-1 shall comply with JIS C 8286.</p> <p>Construction preventing mechanical stress not to transmit to the soldering part of inlet terminal.</p> <p>Consideration for an equipment rated not more than 125 V provided with Type C14 and C18 appliance coupler complying with JIS C 8283 series.</p>		P
G.4.2A	Mains socket-outlet and interconnection coupler provided with the class II, class I and class 0I equipment respectively.		P
G.7.1	A mains supply cord need not include the protective earthing conductor for class 0I equipment provided with independent protective earthing conductor.		N/A
G.8.3.3	Withstand $1,71 \times 1.1 \times U_0$ for 5 s.		N/A

Clause	Requirement + Test	Result - Remark	Verdict
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Appendix 5: Equipment combined with two-pole plug (Class II)

Supplementary tests on plug portion according to EN 50075:1990

1.	Dimensions (Clause 7 of EN 50075)		
	Plugs shall comply with standard size. (Standard sheet 1)		P
2.	Protection Against Electric Shock (Clause 8 of EN 50075)		
2.1	Live parts of plugs with the exception of the bare metal parts of the pins, shall not be accessible. (Clause 8.1 of EN 50075)		P
2.2	It shall not be possible to make connection between a pin of a plug and a live socket contact of a socket-outlet while the other pin is an accessible. (Clause 8.2 of EN 50075)		P
2.3	External parts of plugs, with the exception of pins, shall be of insulating material. (Clause 8.3 of EN 50075)		P
3.	Construction (Clause 9 of EN 50075)		
3.1	The plug cannot be opened by hand or by using a general purpose tool. (Clause 9.1 of EN 50075)		P
3.2	Pins of plugs shall be solid and shall have adequate mechanical strength. (Clause 9.3 of EN 50075)		P
3.3	Pins of plugs shall be locked against rotation and adequately fixed into the body of the plug. (Clause 9.4 of EN 50075)		P
3.4	Plugs shall be provided with soldered, crimped or equally effective permanent connection. (Clause 9.5 of EN 50075)		P
3.5	Plug shall be shaped in such a way and made of such a material that they can easily be withdrawn by hand from a socket-outlet. (by gripping the medical power supply's enclosure, Clause 9.6 of EN 50075)		P
4.	Resistance to Humidity (Clause 10 of EN 50075)		N/A
	The integrated pins were tested together with the medical power supply. (See test report for medical power supply)		

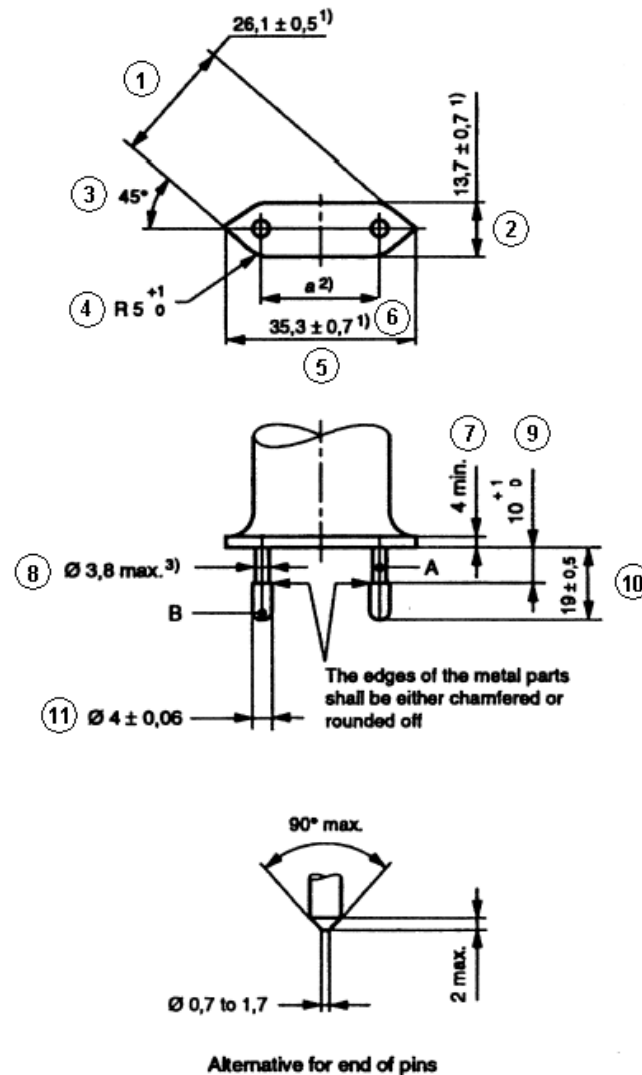
Clause	Requirement + Test	Result - Remark	Verdict
5.	Insulation Resistance and Electric Strength (Clause 11 of EN 50075)		N/A
	(See test report for medical power supply)		
6.	Mechanical Strength (Clause 13 of EN 50075)		
	Plug shall have adequate mechanical strength to withstand the stresses imposed during use.		P
6.1	The plugs are pressed between two flat surfaces with a force of 150N for 5min. 15min after removal of the force, the plug shall not show such deformation as would result in undue alteration of the dimensions which ensure safety. (Clause 13.1 of EN 50075)		P
6.2	The plug is tested in a tumbling barrel. (Clause 13.2 of EN 50075, fall number is shown in test report for medical power supply) After the test, the plug shall show no damage within the meaning of this standard, in particular: --- No part shall become detached or loosened. --- The pin shall not turn when a torque of 0.4Nm is applied. Note: A section of the pin is square constructed for preventing the rotation.		P
6.3	The pins is held in a suitable clamp in such a position that the straight part of a steel wire (D=1+-0.02mm, U-shaped) rests on the plug pin. The plug is caused to move backwards and forwards, so that the wire rubs along the pin. The number of the movements is 20 000, and the rate of the operation is 25 movements per min. (Clause 13.3 of EN 50075) After the test, the pin show no damage which may effect safety or impair the further use of the plug, in particular, the insulating sleeve shall not have punctured or rucked up.		P
6.4	A pull force of 40N is applied for 60s on each pin in turn in the direction of the longitudinal axis of the pin. The pull is applied 60min after the plug has been placed in a heating cabinet of 70°C. After the plug cooling down to ambient temperature, any pin shall not have displaced in the body of the plug more than 1mm. (Clause 13.4 of EN 50075)		P
7.	Resistance to Heat and to Ageing (Clause 14 of EN 50075)		P

Clause	Requirement + Test	Result - Remark	Verdict
8.	Current-carrying Parts and Connections (Clause 15 of EN 50075)		
8.1	Connection, electrical and mechanical, shall withstand the mechanical stresses occurring in normal use, and electrical connections shall be designed that contact pressure is not transmitted through insulating material. (Clause 15.1 & 15.2 of EN 50075)		P
8.2	Current-carrying parts shall be of copper or an alloy containing at least 58% of copper. (Clause 15.3 of EN 50075)		P
9.	Creepage Distance, Clearances, and Distances Through Insulation (Clause 16 of EN 50075)		P
10.	Resistance of Insulating Material to Abnormal Heat and to fire (Clause 17 of EN 50075)		P

Appendix 6: Dimensions of integral plug

Clause	Requirement + Test	Result - Remark	Verdict
	DIMENSIONS		
	Checked by means of measurement according to EN50075 Standard sheet 1		P
Position	Requirement (mm)	Measured (mm)	Verdict
1	25,6 – 26,6	25,84	P
2	13 – 14,4	13,98	P
3	45°	45°	P
4	R5 – 6	R5,4	P
5	34,6 – 36	35,09	P
6	18-19,2 in the plane of the engagement face	18,15	P
	17-18 at the ends of the pins	17,55	P
7	4min	-	N/A
8	φ3,8max	φ3,42	P
9	10-11	10,05	P
10	18,5 – 19,5	19,12	P
11	φ3,94 - φ4,06	φ3,98	P
	Dimensions of position 1, 2 and 3 shall not be exceeded within a distance of 18mm from the engagement face of the plug	19,15	P
	The edges of the metal parts shall be either chamfered or rounded off	Rounded off	P

EN50075: 1990 STANDARD SHEET 1



Dimensions in millimetres

1) These dimensions shall not be exceeded within a distance of 18 mm from the engagement face of the plug.

2) Dimension *a* is:

18 mm to 19,2 mm in the plane of the engagement face;

17 mm to 18 mm at the ends of the pins.

3) This dimension may be increased to 4 mm within a distance of 4 mm from the engagement face of the plug.

Pin ends shall be rounded, or conical as shown in detail sketch.

The sketches are not intended to govern design except as regards the dimensions shown.

Appendix 7: Photo for plug portion according to EN 50075:1990



The connector conduct part can't be touched by test finger. CI & CR are measured according to table 2.10.3 & 2.10.4.

Appendix 8: Equipment's combined with Australian plug.

The Australian plug was tested according to Annex J of AS/NZS 3112:2011+A1:2012:

Clause	Requirement – Test	Remark	Verdict
2.2	PLUG PINS		P
2.2.1	MATERIAL FOR PINS: - Copper alloy containing at least 58% copper for parts made from cold rolled sheet		P
2.2.2	ASSEMBLY OF PINS - Assembled in factory and non-rewirable		P
2.2.3	FORM OF PIN		P
2.2.4*	INSULATION OF PLUG PINS - Live parts of insulated pins plug are not exposed when plug is partially or fully engaged with the associated socket.		P
2.3	INSULATING MATERIALS		P
2.3.1	GENERAL		P
2.3.2	PLUG BODY - Consisting of PBT which has properties not inferior to those specified in AS 3121 for insulating mouldings having a temperature class of 80°C		P
2.3.3	PLUG COVER - Consisting of PVC which has properties not inferior to those specified in AS 3121 for insulating mouldings having a temperature class of 60°C		P
2.8	RATINGS AND DIMENSIONS OF LOW VOLTAGE PLUGS - Comply with Figure 2.1 (c), rated 10A 250V~. - Distance between live pin and edge of plug moulding more than 9 mm		P
2.9	INTERNAL CONNECTIONS -No earthing connection		N/A
2.10	ARRANGEMENT OF EARTHING CONNECTIONS -No earthing connection		N/A

Clause	Requirement – Test	Remark	Verdict
2.12	MARKING (No marking is applicable for the integral plug portion. See markings for transformer)		N/A
2.12.6	CONFIGURATION OF PLUGS - Figure 2.1 (c), the pin configuration is neutral and active in a clockwise direction		P
2.13	TESTS ON PLUGS		P
2.13.3	HIGH VOLTAGE TEST		P
2.13.7	TUMBLING BARREL TEST		P
2.13.8	TEMPERATURE RISE TEST		P
2.13.9	SECUREMENT OF PLUG		P
2.13.9.1	MOVEMENT OF PINS		P
2.13.9.2	FIXING OF PINS		P
2.13.13	ADDITIONAL TESTS ON THE INSULATION MATERIAL OF INSULATED PIN PLUGS		P

<u>INSULATING MATERIALS TEST IN ACCORDANCE WITH AS/NZS 3121: 2002</u>			
7.1	General		P
7.2	Resistance to heat test The moulding shall be placed in an oven and maintained for 6 h at the temperature appropriate to its class (see Clause 5) plus 10°C. The temperature of the oven during this period shall not vary by more than ± 5°C. The moulding shall show no physical or chemical change likely to impair the safety of the equipment of which it forms a part.		P
7.3	Water absorption test The complete moulding shall be immersed in water at 20 °C ± 5°C for 48 h. The moulding shall not swell, delaminate, warp or show any physical change to a degree that would be liable to impair the safety of the equipment of which it forms a part.		P
7.4	Resistance to white spirit test Sample shall be immersed in white spirit at room temperature for 2 min.		P

	The moulding shall not blister, warp or show any physical or chemical change to a degree that would be liable to impair the safety of the equipment of which it forms a part.		
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Appendix 9: Photos of Australian plug portion



The connector conduct part can't be touched by test finger. CI & CR are measured according to table 2.10.3 & 2.10.4.

Appendix 10: Equipment combined with BS-plug portion

Supplementary tests on plug portion according to BS1363: Part 3 + Amd 9543 + Amd 14225 + Amd 14540 + Amd 17437 + Amd A4

Clause	Requirement - Test	Result-Remark	Verdict
12.1	Dimensions (Checked according to figure 4)	See appendix no. 1 & 2	P
12.2	Outline of plug shall not exceed the dimension shown in Figure 4 for a distance of not less than 6.35 mm from the engagement surface	8.90 mm	P
	Pin disposition, length and body outline shall be checked by use of the gauge shown in Figure 5		P
12.3	L/N pin was more than 9.5 mm from the periphery of the plug measured along the engagement surface	9.60 mm	P
12.7	The base and cover of rewirable plugs shall be adaptor plugs having the cover fixed by screws shall be firmly secured to each other. It shall not be possible to remove the cover unless the adaptor is completely withdrawn from the socket-outlet. Fixing screws shall be captive. The test is carried out using apparatus similar to that shown in Figure 6		N/A
12.9	After the temperature rise test (clause 16). Use test probe 11 of BS EN 61032:1998 is applied a force 30 -5/0 N. During and after the test, it was not possible to touch the live parts.		P
12.11	Adaptor plug pins shall be constructed of brass, except for sleeves of pins as specified in 12.18		P
	All exposed surfaces of the adaptor plug pins shall be smooth and free from burrs or sharp edges and other irregularities which could cause damage or excessive wear to corresponding socket contacts or shutters.		P
	Those surfaces of the non-solid adaptor plug pins which are visible when the adaptor is correctly assembled shall be free of apertures.		P
	All seams and joints of non-solid adaptor plug pins shall be closed over their entire length.		P
	For solid pins, conformity shall be checked by 12.11.4.1.		P

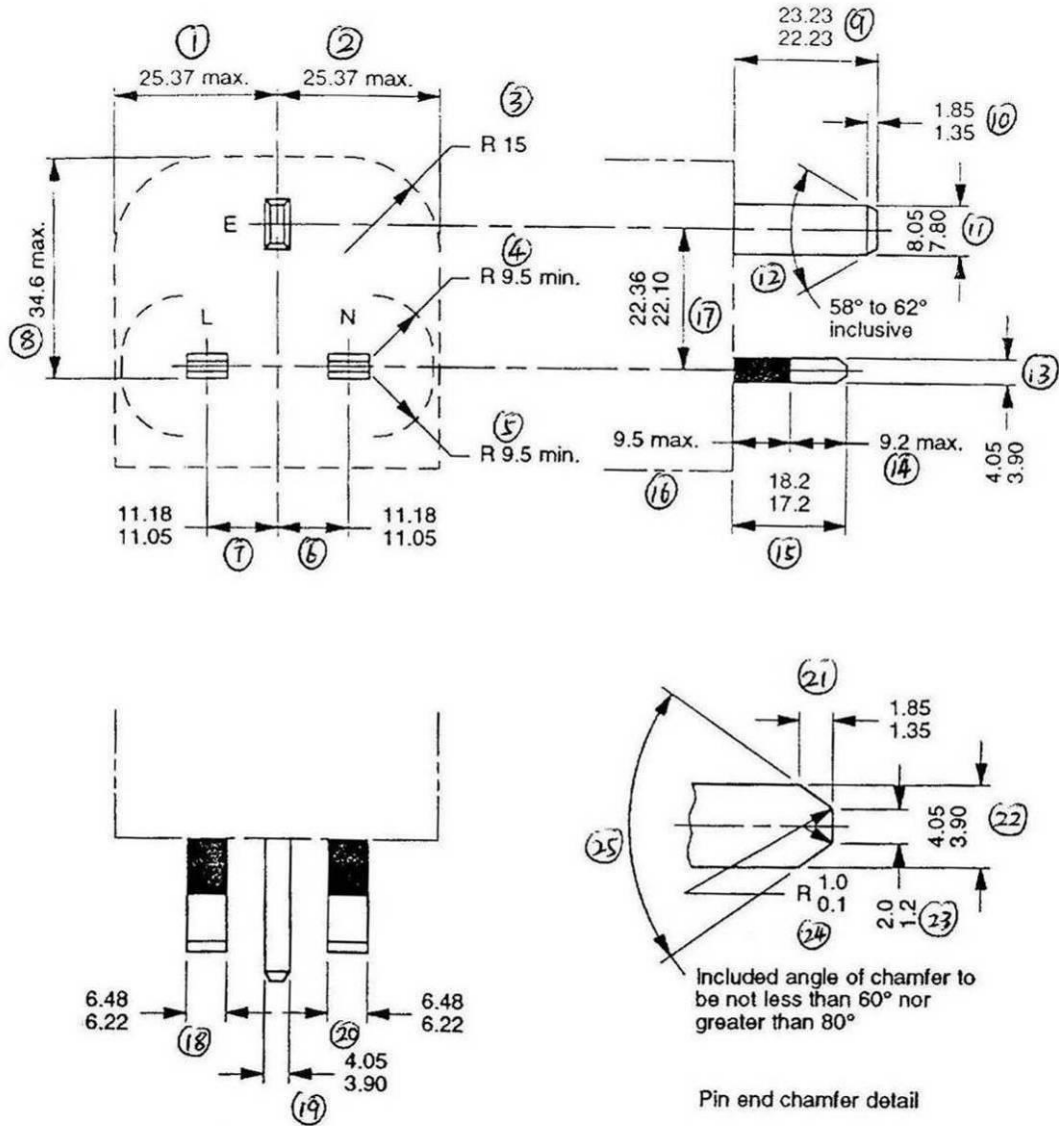
Clause	Requirement - Test	Result-Remark	Verdict
	For non-solid pins, compliance shall be checked by 12.11.4.2.		N/A
	Adaptors with non-solid pins shall not cause excessive wear to socket contacts or shutters of socket-outlets in accordance with BS 1363-2:1995.		N/A
	Adaptor plug pins shall have adequate mechanical strength to ensure that they cannot be distorted by twisting. Apply a torque $1\text{N.m} \pm 10\%$ for $60 +5/0 \text{ S}$. After each pin has been separately twisted, the plug was fit the gauge in fig. 5. Repeated with opposite direction.		P
12.13	Adaptors shall be so designed that when fully assembled the pins are adequately retained in position such that there is no likelihood of them becoming detached from the adaptor during normal use.		P
	Each pin is subjected for $60 +5/0 \text{ S}$ to a pull of $100 -2/0 \text{ N}$ without jerks in the direction of the major axis. The plug is mounted using the steel plate shown in fig.7. The apparatus is placed within an oven and the pull is applied at least 1 h after the plug body has attained the test temperature of $70^{\circ}\text{C} \pm 5^{\circ}\text{C}$ while maintained at this temperature. After the test, the plug pin shall fit into the gauge and comply with 12.2.1.		P
12.14	The degree of flexibility of mounting of the plug pins or the angular movement of the pins in the base shall be not greater than $3^{\circ} 30'$. See fig. 8.		P
	Test procedure refers to standard. During each test, the declination from the horizontal measured on the scale shall not exceed $3^{\circ} 30'$ and comply with 12.2.1.		P
12.18	Live and neutral adaptor plug pins shall be fitted with insulating sleeves. See fig.4. Sleeves shall not be fitted to any earthing adaptor plug pin.		P

Clause	Requirement - Test	Result-Remark	Verdict
12.19.3	Abrasion test – 10 000 times in each direction (20 000 movements) at a rate of 25 movements to 30 movements per min. (fig. 9). After the test, the sleeve shall show no damage and also shall not have been penetrated or creased, satisfy the tests in 12.19.2.		P
13.10	The total mass of the equipment with all specified connectors shall not exceed 800 g. The torque exerted on a socket shall not exceed 0.7 N·m. The test apparatus as Figure 37	Compliance with the main standard	N/A
	Additional: Products with torque exceeding 0.25Nm do not comply with the main standard hence full compliance with the main standard cannot be claimed		N/A
Additional test for ISODs according to BS1363: Part 1 + Amd 9541 + Amd 14539 + Amd 17435 + Amd A4			
12.9.1	All exposed surfaces of plug pins shall be smooth and free from burrs or sharp edges and other irregularities which could cause damage or excessive wear to corresponding socket contacts or shutters.		P
12.9.4	Apply a force of 1100 -10/0N at a rate not exceeding 10 mm/min. After this test the plug should fit the gauge to fig. 5.		P
	Apply a force of 400 +10/0N at a rate 10 ± 2 mm/min. Deflection shall not exceed 1.5 mm. After this test the plug should fit the gauge to fig. 5.		P
12.9.6	ISODs shall have adequate mechanical strength to ensure that they cannot be distorted by twisting. Apply a torque 1N.m ± 10% for 60 +5/0 S. After each pin has been separately twisted, the plug shall fit the gauge in fig. 5. Repeated with opposite direction.		P

Appendix 11: Dimensions of BS1363 plug portion

Dimensions Checked by means of measurement according to BS1363-3 Fig. 4 (see appendix no. 2)			
Position	Requirement (mm)	Measured (mm)	Verdict
1	25.37max	24.02	P
2	25.37max	24.02	P
3	R15min	Measured by gauge	P
4	R9.5min	9.60	P
5	R9.5min	9.60	P
6	11.05-11.18	11.12	P
7	11.05-11.18	11.12	P
8	34.6max	30.50	P
9	22.23-23.23	22.60	P
10	1.35-1.85	1.55	P
11	7.80-8.05	8.03	P
12	58°-62° inclusive	60°	P
13	3.90-4.05	3.99	P
14	9.2max	8.88	P
15	17.2-18.2	18.05	P
16	9.5max	9.17	P
17	22.10-22.36	22.21	P
18	6.22-6.48	6.26	P
19	3.90-4.05	4.03	P
20	6.22-6.48	6.26	P
21	1.35-1.85	1.81	P
22	3.90-4.05	3.98	P
23	1.2-2.0	1.24	P
24	R0.1-R1.0	R0.55	P
25	60°-80° inclusive	68°	P
Outline of the plug not exceed the dimension shown in figure 4 at least 6.35mm from the engagement surface		8.90	P

Appendix 12: BS1363-3 Fig 4

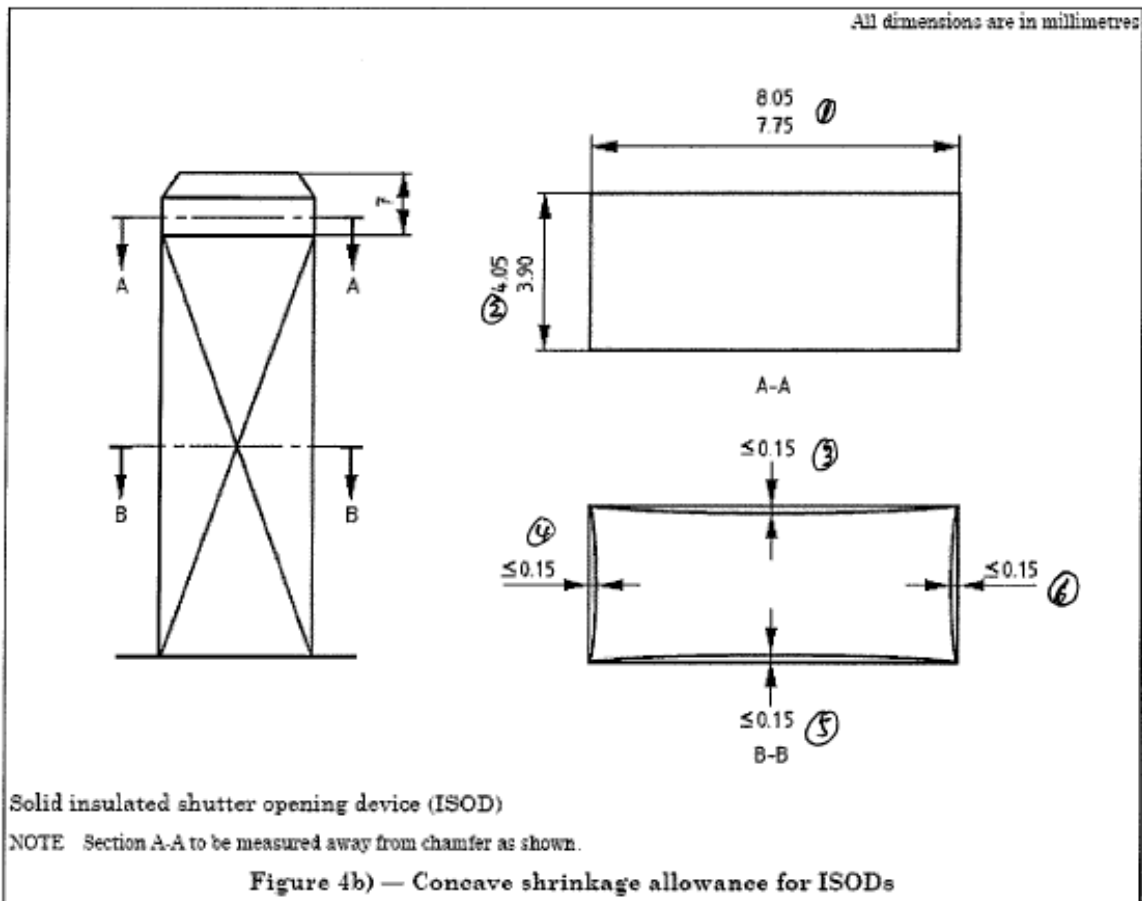


All dimensions are in millimetres.

Figure 4. Dimensions and disposition of pins (see clause 12)

Appendix 13: Concave shrinkable allowance for ISODs

Dimensions Checked by means of measurement according to BS1363-1 Fig. 4b			
Position	Requirement (mm)	Measured (mm)	Verdict
1	7.75-8.05	8.03	P
2	3.90-4.05	3.99	P
3	≤ 0.15	0.01	P
4	≤ 0.15	0.01	P
5	≤ 0.15	0.01	P
6	≤ 0.15	0.01	P

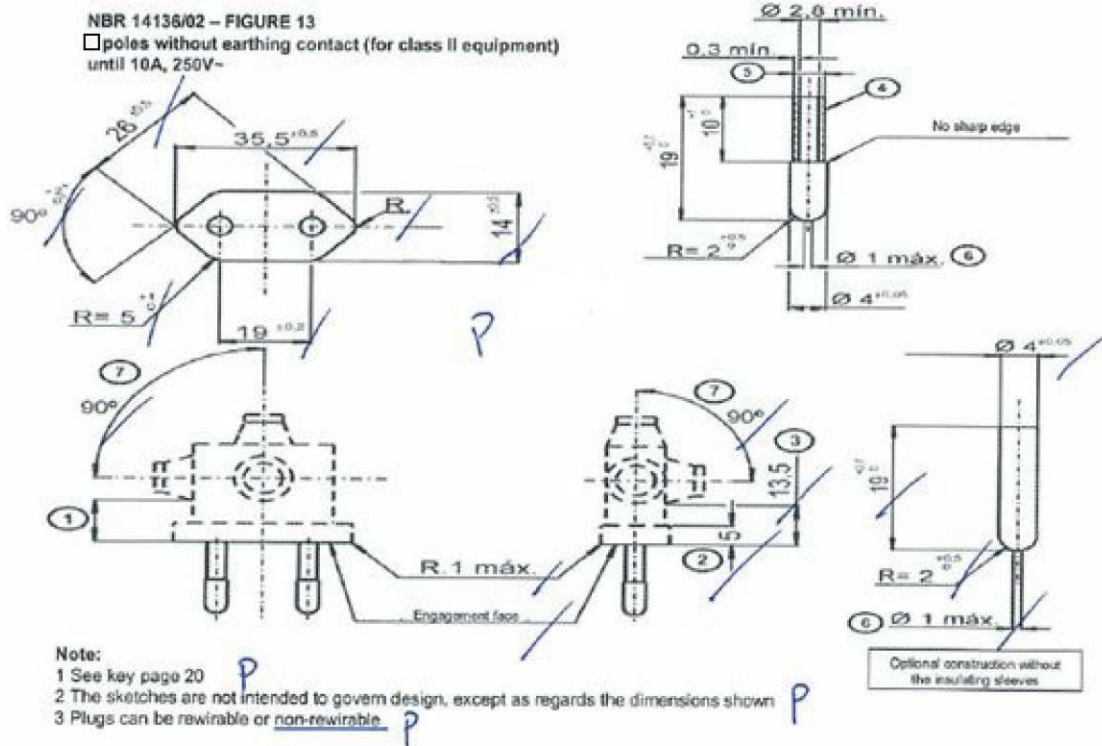


Appendix 14: Photo for BS1363 plug



The connector conduct part can't be touched by test finger. CI & CR are measured according to table 2.10.3 & 2.10.4.

Appendix 16: Evaluation sheet of NBR 14136 Figure 13 plug



Key of page 20:

- 1- The distance between the engagement face and the cord or cord guard, if any, shall be at least 14 mm
- 2- Within this distance, the outline shall be not smaller than the engagement face.
- 3- Within this distance, the outline shall be not larger than the engagement face.
- 4- Insulating sleeves on the current-carrying pins are optional
- If the insulating sleeves are separate parts, they shall enter the plug by at least 3mm measured from the engagement face.
- 5- The external diameter of the insulating sleeves shall not be larger than the diameter of the uninsulated part of the pins.
- 6- To avoid damage to shutters, the ends of the pins shall show neither sharp edges nor burrs. They shall be of rounded shape as shown.
- 7- The angle of 90° represents the maximum permissible area for the orientation of the entry of the flexible cable or cord.

Plug Marking for the 10A 250V~ Plug:

- Cable section of 0.5mm² - 2.5A 250V~
- Cable section of 0.75mm² - 10A 250V~
- Cable section of 1mm² - 10A 250V~
- Cable section of 1.5mm² - 10A 250V~
- Cable section of 2.5mm² - 10A 250V~

Appendix 17: Evaluation sheet of IRAM 2063 plug

25	RESISTANCE TO HEAT		
25.2	Parts of insulating material of fixed socket-outlets necessary to retain current-carrying parts and parts of the earthing circuit in position, as well as parts of the front surface zone of 2 mm wide surrounding the phase and neutral pin entry holes: ball-pressure test at $(125 \pm 2)^\circ\text{C}$ for 1 h		P
	After the test: diameter of impression ≤ 2 mm	0.67 mm	P
25.3	For parts not necessary to retain current-carrying parts and parts of the earthing circuit in position, even though in contact with them: ball-pressure test (1 h)		---
	Test temperature ($^\circ\text{C}$)	$(70 \pm 2)^\circ\text{C}$ / $(40 \pm 2)^\circ\text{C}$ + highest temperature rise determined during the test of clause 19	---
	After the test: diameter of impression ≤ 2 mm		---
28	RESISTANCE OF INSULATING MATERIAL TO ABNORMAL HEAT, TO FIRE AND TO TRACKING		P
28.1	Resistance to abnormal heat and to fire		P
28.1.1	Glow-wire test		
	For parts of fixed accessories necessary to retain current-carrying parts and parts of the earthing circuit in position: test temperature 850°C		P
	No visible flame and no sustained glowing		P
	Flame and glowing extinguish within 30 s		P
	No ignition of the tissue paper		P
	For parts of fixed accessories needed to retain the earth terminal in position in a box: test temperature 650°C		---
	No visible flame and no sustained glowing		---
	Flame and glowing extinguish within 30 s		---
	No ignition of the tissue paper		---
	For parts of portable accessories necessary to retain current-carrying parts and parts of the earthing circuit in position: test temperature 750°C		P
	No visible flame and no sustained glowing		P
	Flame and glowing extinguish within 30 s		P
	No ignition of the tissue paper		P
	For parts not necessary to retain current-carrying parts and parts of the earthing circuit in position, even though in contact with them: test temperature 650°C		---
	No visible flame and no sustained glowing		---
	Flame and glowing extinguish within 30 s		---
	No ignition of the tissue paper		---

28.1	Table: Glow wire		P
	Tested part:	Temperature of test ($^\circ\text{C}$)	Result
	Plug	850	P

Appendix 18: Evaluation sheet of IRAM 2063 plug

6.4	PLUG PINS MEASUREMENT		
	Measured in mm	Allowed in mm	Verdict
- Phase Pin:			
Length:	18.03,18.05,18.04	18,2 ± 0,2 (18.0/18.4)	P
Wide:	6.25,6.26,6.25	6,25 ± 0,1 (6.15/6.35)	P
Thickness:	1.57,1.55,1.56	1,55 ± 0,07 (1.48/1.62)	P
- Neutral Pin:			
Length:	18.10,18.09,18.08	18,2 ± 0,2 (18.0/18.4)	P
Wide:	6.23, 6.25,6.23	6,25 ± 0,1 (6.15/6.35)	P
Thickness:	1.51,1.51,1.52	1,55 ± 0,07 (1.48/1.62)	P
- Pin of earth			
Length:	---	21,4 ± 0,2 (21.2/21.6)	---
Wide:	---	6,25 ± 0,1 (6.15/6.35)	---
Thickness:	---	1,55 ± 0,07 (1.48/1.62)	---
Perimeter:	11.86.11.86, 11.85	≥ 8mm	P
Comments:	-		

Photo:

