



**TEST REPORT**

**IEC 60950-1: 2005 (2nd Edition) and/or EN 60950-1:2006  
Information technology equipment – Safety –**

**Part 1: General requirements**

<b>Report Reference No</b> .....	: CEPREI1009CB0804
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<b>CB/CCA Testing Laboratory</b> .....	: <b>China CEPREI Laboratory</b>
Address.....	: No.110 Dongguanzhuang Rd., Tianhe District,Guangzhou, Guangdong, 510610, China
<b>Applicant's name</b> .....	: GlobTek,Inc.
Address.....	: 186 Veterans Dr. Northvale, NJ 07647,USA
<b>Manufacturer's name</b> .....	: <b>Same as applicant</b>
Address.....	: Same as applicant
<b>Factory's name</b> .....	: <b>See page 5</b>
Address.....	: See page 5
<b>Test specification:</b>	
Standard.....	: <input checked="" type="checkbox"/> IEC 60950-1:2005 (2nd Edition) and/or <input checked="" type="checkbox"/> EN 60950-1:2006
Test procedure.....	: CB
Non-standard test method.....	: N/A
<b>Test Report Form No</b> .....	: IECEN60950_1C
Test Report Form(s) Originator.....	: SGS Fimko Ltd
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<b>This report is not valid as a CCA Test Report unless signed by an approved CCA Testing Laboratory and appended to a CCA Test Certificate issued by an NCB in accordance with CCA</b>	
<b>Test item description</b> .....	: I.T.E Power Supply
Trade Mark.....	: GlobTek
Manufacturer.....	: GlobTek,Inc.
Model/Type reference.....	: GTM91092-110-M
Ratings.....	: AC 100-240V, 50Hz-60Hz, 3.0A

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<b>Testing procedure and testing location:</b>	
<input checked="" type="checkbox"/> <b>CB/CCA Testing Laboratory:</b> Testing location/ address..... : <input type="checkbox"/> <b>Associated CB Laboratory:</b> Testing location/ address..... : Tested by (name + signature)..... :  Approved by (+ signature)..... :	<b>China CEPREI Laboratory</b> No.110 Dongguanzhuang Rd., Tianhe District,Guangzhou, Guangdong, 510610, China N/A N/A Pang Xiao  Yang Lin
<input type="checkbox"/> Testing procedure: TMP Tested by (name + signature)..... : Approved by (+ signature)..... : Testing location/ address..... :	N/A   N/A
<input type="checkbox"/> Testing procedure: WMT Tested by (name + signature)..... : Witnessed by (+ signature)..... : Approved by (+ signature)..... : Testing location/ address..... :	N/A    N/A
<input type="checkbox"/> Testing procedure: SMT Tested by (name + signature)..... : Approved by (+ signature)..... : Supervised by (+ signature)..... : Testing location/ address..... :	N/A    N/A
<input type="checkbox"/> Testing procedure: RMT Tested by (name + signature)..... : Approved by (+ signature)..... : Supervised by (+ signature)..... : Testing location/ address..... :	N/A    N/A
<b>Summary of testing:</b>	

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<p><b>Tests performed (name of test and test clause):</b></p> <ul style="list-style-type: none"> <li>1.6.2 Input Current Test</li> <li>1.7.11 Durability of Marking Test</li> <li>2.1.1.1 Access to Energized Parts Test</li> <li>2.1.1.5 Energy Hazards Test</li> <li>2.2.2 SELV Limits under Normal Conditions</li> <li>2.2.3 SELV Limits under Fault Conditions</li> <li>2.6.3.4 Resistance of Earthing Conductors Measurement</li> <li>2.9.2 Humidity Conditioning Test</li> <li>2.10 Clearances and Creepage Distances Measurement</li> <li>4.1 Angle of 10 Test</li> <li>4.2.2 Steady Force Test, 10 N</li> <li>4.2.3 Steady Force Test, 30 N</li> <li>4.2.4 Steady Force Test, 250 N</li> <li>4.2.5 Impact Test</li> <li>4.2.7 Stress Relief Test</li> <li>4.5.2 Temperature Test</li> <li>4.5.5 Ball Pressure Test</li> <li>5.1 Touch Current Measurement</li> <li>5.2 Electric Strength Test</li> <li>5.3 Abnormal Operating and Fault Conditions Test</li> <li>ANNEX B Motor Tests under Abnormal Conditions</li> <li>ANNEX C Transformers</li> </ul>	<p><b>Testing location:</b></p> <p>China CEPREI Laboratory  No.110 Dongguanzhuang Rd., Tianhe District,Guangzhou, Guangdong, 510610, China</p>
<p><b>Summary of compliance with National Differences:</b></p> <p><b>Group Differences, AT, BE, CH, CZ, FI, FR, GR, HU, IT, NL, PL, SI, SK;</b></p> <p>At the time of issuing this report, only limited countries are listed in CB bulletin 112A for IEC 60065:2001 + Amd 1:2005, therefore for reference the National Differences for IEC 60065:1998 and IEC 60065:1985 + Amd 1:1989 + Amd 2:1989 + Amd 3:1992 are included.</p> <p>- IEC 60065, 7th edition (2001) + Amendment 1 (2005):</p> <p>( AT= Austria, BE= Belgium, CH= Switzerland, CZ= Czech Republic, FI= Finland, FR= France, GR= Greece, HU= Hungary, IT= Italy,NL= Netherlands,PL= Poland, SI= Slovenia, SK= Slovakia)</p>	

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**Copy of marking plate**

	<b>GlobTek, Inc.</b>	OUTPUT(输出): 5VDC @ 6A	
	I.T.E POWER SUPPLY 电源供应器	5VDC @ 3A	
	MODEL (型号) :GTM91092-110-M	-5VDC @ 1A	
	INPUT (输入) :100-240VAC, 50-60Hz, 3A	13.5VDC @ 2.5A	
		0-130VDC @ 0.1A	
			
IEC 60601-1			
RoHS	MADE IN CHINA	中国制造	

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<b>Test item particulars</b> .....:	
Equipment mobility.....:	<input type="checkbox"/> movable <input type="checkbox"/> hand-held <input type="checkbox"/> transportable <input type="checkbox"/> stationary <input checked="" type="checkbox"/> for building-in <input type="checkbox"/> direct plug-in
Connection to the mains.....:	<input checked="" type="checkbox"/> pluggable equipment <input checked="" type="checkbox"/> type A <input type="checkbox"/> type B <input type="checkbox"/> permanent connection <input checked="" type="checkbox"/> detachable power supply cord <input type="checkbox"/> non-detachable power supply cord <input type="checkbox"/> not directly connected to the mains
Operating condition.....:	<input checked="" type="checkbox"/> continuous <input type="checkbox"/> rated operating / resting time:
Access location .....	<input checked="" type="checkbox"/> operator accessible <input type="checkbox"/> restricted access location
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:
Mains supply tolerance (%) or absolute mains supply values .....	+10% / -10%
Tested for IT power systems .....	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
IT testing, phase-phase voltage (V) .....	N/A
Class of equipment .....	<input checked="" type="checkbox"/> Class I <input type="checkbox"/> Class II <input type="checkbox"/> Class III <input type="checkbox"/> Not classified
Considered current rating (A) .....	3.0A
Pollution degree (PD) .....	<input type="checkbox"/> PD 1 <input checked="" type="checkbox"/> PD 2 <input type="checkbox"/> PD 3
IP protection class .....	IPX0
Altitude during operation (m) .....	Under 2000
Altitude of test laboratory (m) .....	Under 2000
Mass of equipment (kg) .....	1.3kg.
<b>Possible test case verdicts:</b>	
- 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)
<b>Testing</b> .....:	
Date of receipt of test item.....:	2011.03.08
Date(s) of performance of tests.....:	2010.11.27 –2011.03.08
<b>General remarks:</b>	
The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory. "(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report.	
<b>Note: This TRF includes EN Group Differences together with National Differences and Special National Conditions, if any. All Differences are located in the Appendix to the main body of this TRF.</b>	
Throughout this report a point is used as the decimal separator.	

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**General product information:****Factory(ies):**

GlobTek(Suzhou) Co., Ltd.

Building 4, No.76 JinLing East Road, Suzhou Industrial Park, Suzhou, JiangSu, 215021, China.

**Comments:**

The Sample model GTM91092-110-M, is Computer Power Supply intended to built-in information technology apparatus.

All tests were performed with model GTM91092-110-M.

The test samples are pre-production without serial number.

**Ratings are as follow:**

Input: 100-240V~, 50Hz-60Hz, 3.0A

Output: DC1:5Vdc/6A; DC2:5Vdc/3A; DC3:-5Vdc/1A; DC4:0-130Vdc/0.1A; DC5:13.5Vdc/2.5A。

IEC/EN 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
1	GENERAL		<b>P</b>
1.5	Components		<b>P</b>
1.5.1	General	See below	<b>P</b>
	Comply with IEC 60950-1 or relevant component standard	(see appended table 1.5.1) Components which were found to affect safety aspects, comply with the requirements of this standard or within the safety aspects of the relevant IEC component standards.	<b>P</b>
1.5.2	Evaluation and testing of components	Certified components are used in accordance with their ratings, certifications and they comply with applicable parts of this standard.  Components not certified are used in accordance with their ratings and they comply with applicable parts of IEC 60950-1 and the relevant component standard.  Components for which no relevant IEC standards exist have been tested under the conditions occurring in the equipment, using applicable parts of IEC 60950-1.	<b>P</b>
1.5.3	Thermal controls	No thermal controls	<b>N/A</b>
1.5.4	Transformers	Transformer used is suitable for its intended application and comply with relevant parts of this standard and particularly Annex C.	<b>P</b>
1.5.5	Interconnecting cables	Interconnecting cables fulfils the requirements of this standard.	<b>P</b>
1.5.6	Capacitors bridging insulation	Between lines: X2 capacitor, Between line and PE: Y2 capacitor.	<b>P</b>
1.5.7	Resistors bridging insulation		<b>P</b>
1.5.7.1	Resistors bridging functional, basic or supplementary insulation	Between lines : Varistor VAR1	<b>P</b>
1.5.7.2	Resistors bridging double or reinforced insulation		<b>N/A</b>

IEC/EN 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
	between a.c. mains and other circuits		
1.5.7.3	Resistors bridging double or reinforced insulation between a.c. mains and antenna or coaxial cable		<b>N/A</b>
1.5.8	Components in equipment for IT power systems		<b>N/A</b>
1.5.9	Surge suppressors	No such component.	<b>N/A</b>
1.5.9.1	General		<b>N/A</b>
1.5.9.2	Protection of VDRs		<b>N/A</b>
1.5.9.3	Bridging of functional insulation by a VDR		<b>N/A</b>
1.5.9.4	Bridging of basic insulation by a VDR		<b>N/A</b>
1.5.9.5	Bridging of supplementary, double or reinforced insulation by a VDR		<b>N/A</b>

1.6	Power interface		<b>P</b>
1.6.1	AC power distribution systems	TN Power System	<b>P</b>
1.6.2	Input current	(see appended table 1.6.2) The steady state input current of the equipment did not exceed the rated current by more than 10% under normal load.	<b>P</b>
1.6.3	Voltage limit of hand-held equipment		<b>N/A</b>
1.6.4	Neutral conductor	Neutral conductor is insulated from earth by basic insulation.	<b>P</b>

1.7	Marking and instructions		<b>P</b>
1.7.1	Power rating		<b>P</b>
	Rated voltage(s) or voltage range(s) (V) .....	100-240V	<b>P</b>
	Symbol for nature of supply, for d.c. only.....		<b>N/A</b>
	Rated frequency or rated frequency range (Hz) ....	50-60Hz	<b>P</b>
	Rated current (mA or A) .....	3.0A	<b>P</b>
	Manufacturer's name or trade-mark or identification mark .....	GlobTek, Inc.	<b>P</b>
	Model identification or type reference .....	GTM91092-110-M	<b>P</b>
	Symbol for Class II equipment only .....	Class I equipment.	<b>N/A</b>
	Other markings and symbols .....	Refer to copy of marking plate	<b>P</b>
1.7.2	Safety instructions and marking	Provided in the manual	<b>P</b>
1.7.2.1	General		<b>P</b>



IEC/EN 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.7.2.2	Disconnect devices	Appliance inlet is regarded as disconnect device.	<b>N/A</b>
1.7.2.3	Overcurrent protective device	Not such equipment.	<b>N/A</b>
1.7.2.4	IT power distribution systems		<b>N/A</b>
1.7.2.5	Operator access with a tool	No operator accessible area that needs to be accessed by the use of a tool.	<b>N/A</b>
1.2.7.6	Ozone	Not such equipment.	<b>N/A</b>
1.7.3	Short duty cycles	Equipment is designed for continuous operation.	<b>N/A</b>
1.7.4	Supply voltage adjustment .....	No voltage selector.	<b>N/A</b>
	Methods and means of adjustment; reference to installation instructions .....		<b>N/A</b>
1.7.5	Power outlets on the equipment .....	No power outlets provided.	<b>N/A</b>
1.7.6	Fuse identification (marking, special fusing characteristics, cross-reference) .....	Locations and markings nearby fuse: Primary F1/F2: T4.0A 250V~	<b>P</b>
1.7.7	Wiring terminals	See below	<b>P</b>
1.7.7.1	Protective earthing and bonding terminals .....	Appliance Inlet is used	<b>P</b>
1.7.7.2	Terminals for a.c. mains supply conductors	Appliance Inlet is used	<b>N/A</b>
1.7.7.3	Terminals for d.c. mains supply conductors		<b>N/A</b>
1.7.8	Controls and indicators	See below	<b>P</b>
1.7.8.1	Identification, location and marking .....	Marked symbols, "I" and "O" on the main switch.	<b>P</b>
1.7.8.2	Colours .....	No safety factors related to colours.	<b>N/A</b>
1.7.8.3	Symbols according to IEC 60417.....	On/Off switch is marked with IEC 60417-5007 and 5008: IEC 60417-5007 for I IEC 60417-5008 for O	<b>P</b>
1.7.8.4	Markings using figures .....		<b>N/A</b>
1.7.9	Isolation of multiple power sources .....		<b>N/A</b>
1.7.10	Thermostats and other regulating devices .....		<b>N/A</b>
1.7.11	Durability	The marking withstands required tests, 15 sec with water, 15 sec with petroleum spirit.	<b>P</b>

IEC/EN 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.7.12	Removable parts	No marking on removable parts	<b>P</b>
1.7.13	Replaceable batteries .....	No replaceable batteries	<b>N/A</b>
	Language(s) .....		<b>3/4</b>
1.7.14	Equipment for restricted access locations.....	The equipment not intended for installation in restricted access location.	<b>N/A</b>

2	PROTECTION FROM HAZARDS		<b>P</b>
2.1	Protection from electric shock and energy hazards		<b>P</b>
2.1.1	Protection in operator access areas	See below	<b>P</b>
2.1.1.1	Access to energized parts	No hazardous parts in operator accessible area.	<b>P</b>
	Test by inspection .....	Operator cannot contact any parts at ELV circuits or hazardous voltages.	<b>P</b>
	Test with test finger (Figure 2A) .....	No access with test finger to any parts having ELV circuits or hazardous voltages.	<b>P</b>
	Test with test pin (Figure 2B) .....	Test pin cannot touch hazardous voltage through any enclosure openings.	<b>P</b>
	Test with test probe (Figure 2C) .....	Test probe cannot touch hazardous voltage through any enclosure openings.	<b>P</b>
2.1.1.2	Battery compartments	No battery compartments	<b>N/A</b>
2.1.1.3	Access to ELV wiring	No accessible ELV wiring	<b>N/A</b>
	Working voltage (V <sub>peak</sub> or V <sub>rms</sub> ); minimum distance through insulation (mm)		<b>—</b>
2.1.1.4	Access to hazardous voltage circuit wiring	No accessible hazardous voltage circuit wiring	<b>N/A</b>
2.1.1.5	Energy hazards .....	No energy hazards in operator access area.	<b>P</b>
2.1.1.6	Manual controls	No manual controls	<b>N/A</b>
2.1.1.7	Discharge of capacitors in equipment		<b>P</b>
	Measured voltage (V); time-constant (s).....	144V, 2ms;	<b>—</b>
2.1.1.8	Energy hazards – d.c. mains supply	Connected to a.c. mains.	<b>N/A</b>
	a) Capacitor connected to the d.c. mains supply ...:		<b>N/A</b>
	b) Internal battery connected to the d.c. mains		<b>N/A</b>

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Clause	Requirement + Test	Result - Remark	Verdict
	supply .....		
2.1.1.9	Audio amplifiers .....	Not such equipment.	<b>N/A</b>
2.1.2	Protection in service access areas	Hazardous bare parts are guarded and unintentional contact with such parts is unlikely during servicing operations involving other parts of the equipment.	<b>P</b>
2.1.3	Protection in restricted access locations	The equipment not intended to be used in restricted access locations.	<b>N/A</b>

2.2	SELV circuits		<b>P</b>
2.2.1	General requirements	SELV limits are not exceeded under normal conditions and single fault conditions	<b>P</b>
2.2.2	Voltages under normal conditions (V) .....	All accessible voltages are below 42.4 Vpeak or 60 Vdc and classified as SELV.	<b>P</b>
2.2.3	Voltages under fault conditions (V) .....	Under fault conditions voltages never exceed 71 Vpeak and 120 Vdc and do not exceed 42.4 Vpeak or 60 Vdc for more than 0.2 sec.	<b>P</b>
2.2.4	Connection of SELV circuits to other circuits .....	Only connected to SELV circuits or protective earthing.	<b>P</b>

2.3	TNV circuits		<b>N/A</b>
2.3.1	Limits	No TNV circuit.	<b>N/A</b>
	Type of TNV circuits.....		
2.3.2	Separation from other circuits and from accessible parts		<b>N/A</b>
2.3.2.1	General requirements		<b>N/A</b>
2.3.2.2	Protection by basic insulation		<b>N/A</b>
2.3.2.3	Protection by earthing		<b>N/A</b>
2.3.2.4	Protection by other constructions .....		<b>N/A</b>
2.3.3	Separation from hazardous voltages		<b>N/A</b>
	Insulation employed.....		
2.3.4	Connection of TNV circuits to other circuits		<b>N/A</b>
	Insulation employed.....		

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Clause	Requirement + Test	Result - Remark	Verdict
2.3.5	Test for operating voltages generated externally		<b>N/A</b>
2.4	Limited current circuits		<b>N/A</b>
2.4.1	General requirements	No limited current circuits.	<b>N/A</b>
2.4.2	Limit values		<b>N/A</b>
	Frequency (Hz)..... :		—
	Measured current (mA)..... :		—
	Measured voltage (V)..... :		—
	Measured circuit capacitance (nF or $\mu$ F)..... :		—
2.4.3	Connection of limited current circuits to other circuits		<b>N/A</b>
2.5	Limited power sources		<b>N/A</b>
	a) Inherently limited output	Not limited power source.	<b>N/A</b>
	b) Impedance limited output		<b>N/A</b>
	c) Regulating network limited output under normal operating and single fault condition		<b>N/A</b>
	d) Overcurrent protective device limited output		<b>N/A</b>
	Max. output voltage (V), max. output current (A), max. apparent power (VA)..... :		—
	Current rating of overcurrent protective device (A) .:		—
2.6	Provisions for earthing and bonding		<b>P</b>
2.6.1	Protective earthing	Accessible conductive parts are reliably connected to protective earth.	<b>P</b>
2.6.2	Functional earthing	Functional earthing is separated from hazardous voltages by basic insulation and protective earth.	<b>P</b>
2.6.3	Protective earthing and protective bonding conductors		<b>P</b>
2.6.3.1	General	Protective earthing (grounding conductor) and protective bonding conductors are of adequate size for the current under normal operating conditions.	<b>P</b>

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Clause	Requirement + Test	Result - Remark	Verdict
2.6.3.2	Size of protective earthing conductors		<b>N/A</b>
	Rated current (A), cross-sectional area (mm <sup>2</sup> ), AWG..... :	Appliance Inlet is used	—
2.6.3.3	Size of protective bonding conductors		<b>P</b>
	Rated current (A), cross-sectional area (mm <sup>2</sup> ), AWG..... :		—
	Protective current rating (A), cross-sectional area (mm <sup>2</sup> ), AWG..... :	3.0A, 1.5 mm <sup>2</sup>	—
2.6.3.4	Resistance of earthing conductors and their terminations; resistance ( $\Omega$ ), voltage drop (V), test current (A), duration (min)..... :	Inlet to parallel port: 0.88V, 0.035 $\Omega$ , 25A, 1 min;	<b>P</b>
2.6.3.5	Colour of insulation..... :	Green/Yellow	<b>P</b>
2.6.4	Terminals		<b>P</b>
2.6.4.1	General	See below	<b>P</b>
2.6.4.2	Protective earthing and bonding terminals	The earthing terminal in the appliance inlet is regarded as the main protective earthing terminal.	<b>P</b>
	Rated current (A), type, nominal thread diameter (mm)..... :	3.0A, Screw Type, 3.0 mm	—
2.6.4.3	Separation of the protective earthing conductor from protective bonding conductors		<b>N/A</b>
2.6.5	Integrity of protective earthing		<b>P</b>
2.6.5.1	Interconnection of equipment		<b>N/A</b>
2.6.5.2	Components in protective earthing conductors and protective bonding conductors	There are no switches or overcurrent protective devices in the protective earthing/ bonding conductors.	<b>N/A</b>
2.6.5.3	Disconnection of protective earth	Disconnection of the protective earth at one assembly removes connection of hazardous voltages from the other assemblies at the same time.	<b>P</b>
2.6.5.4	Parts that can be removed by an operator	Appliance inlet used.	<b>P</b>
2.6.5.5	Parts removed during servicing	Connections to protective earthing cannot be removed unless hazardous voltage is removed from the part simultaneously.	<b>P</b>
2.6.5.6	Corrosion resistance	(see Annex J) No risk of corrosion.	<b>P</b>

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Clause	Requirement + Test	Result - Remark	Verdict
2.6.5.7	Screws for protective bonding	Adequate connection of protective bonding.	<b>P</b>
2.6.5.8	Reliance on telecommunication network or cable distribution system	Protective earthing shall not rely on a telecommunication network or cable distribution system.	<b>N/A</b>
2.7	Overcurrent and earth fault protection in primary circuits		<b>P</b>
2.7.1	Basic requirements	(see appended table 5.3)	<b>P</b>
	Instructions when protection relies on building installation	Protection does not rely on building installation.	<b>N/A</b>
2.7.2	Faults not simulated in 5.3.7	Considered	<b>P</b>
2.7.3	Short-circuit backup protection	Considered	<b>P</b>
2.7.4	Number and location of protective devices .....	See Clause 1.7.6	<b>P</b>
2.7.5	Protection by several devices		<b>N/A</b>
2.7.6	Warning to service personnel.....		<b>N/A</b>
2.8	Safety interlocks		<b>N/A</b>
2.8.1	General principles	No safety interlocks.	<b>N/A</b>
2.8.2	Protection requirements		<b>N/A</b>
2.8.3	Inadvertent reactivation		<b>N/A</b>
2.8.4	Fail-safe operation		<b>N/A</b>
2.8.5	Moving parts		<b>N/A</b>
2.8.6	Overriding		<b>N/A</b>
2.8.7	Switches and relays		<b>N/A</b>
2.8.7.1	Contact gaps (mm) .....		<b>N/A</b>
2.8.7.2	Overload test		<b>N/A</b>
2.8.7.3	Endurance test		<b>N/A</b>
2.8.7.4	Electric strength test		<b>N/A</b>
2.8.8	Mechanical actuators		<b>N/A</b>
2.9	Electrical insulation		<b>P</b>
2.9.1	Properties of insulating materials	Natural rubber, hygroscopic materials and materials containing asbestos shall not be used as insulation.	<b>P</b>

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Clause	Requirement + Test	Result - Remark	Verdict
2.9.2	Humidity conditioning	Humidity test performed for 48h	<b>P</b>
	Relative humidity (%), temperature (°C) .....	95% R.H., 30°C	¾
2.9.3	Grade of insulation	Insulation is considered to be functional, basic, supplementary, reinforced or double insulation.	<b>P</b>
2.9.4	Separation from hazardous voltages	Reinforced insulation.	<b>P</b>
	Method(s) used .....	1	¾

2.10	Clearances, creepage distances and distances through insulation		<b>P</b>
2.10.1	General		<b>P</b>
2.10.1.1	Frequency .....	50-60Hz	<b>P</b>
2.10.1.2	Pollution degrees .....	2	<b>P</b>
2.10.1.3	Reduced values for functional insulation	See 5.3.4.	<b>N/A</b>
2.10.1.4	Intervening unconnected conductive parts	No such part.	<b>N/A</b>
2.10.1.5	Insulation with varying dimensions	No such transformer used.	<b>N/A</b>
2.10.1.6	Special separation requirements	No TNV.	<b>N/A</b>
2.10.1.7	Insulation in circuits generating starting pulses	No such circuit.	<b>N/A</b>
2.10.2	Determination of working voltage	(see appended table 2.10.3 and 2.10.4)	<b>P</b>
2.10.2.1	General		<b>P</b>
2.10.2.2	RMS working voltage	(see appended table 2.10.3 and 2.10.4)	<b>P</b>
2.10.2.3	Peak working voltage	(see appended table 2.10.3 and 2.10.4)	<b>P</b>
2.10.3	Clearances		<b>P</b>
2.10.3.1	General		<b>P</b>
2.10.3.2	Mains transient voltages		<b>N/A</b>
	a) AC mains supply .....		<b>N/A</b>
	b) Earthed d.c. mains supplies .....		<b>N/A</b>
	c) Unearthed d.c. mains supplies .....		<b>N/A</b>
	d) Battery operation .....		<b>N/A</b>
2.10.3.3	Clearances in primary circuits	(see appended table 2.10.3 and 2.10.4)	<b>P</b>
2.10.3.4	Clearances in secondary circuits	(see appended table 5.3)	<b>P</b>

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Clause	Requirement + Test	Result - Remark	Verdict
2.10.3.5	Clearances in circuits having starting pulses	No such circuit.	<b>N/A</b>
2.10.3.6	Transients from a.c. mains supply .....		<b>N/A</b>
2.10.3.7	Transients from d.c. mains supply .....		<b>N/A</b>
2.10.3.8	Transients from telecommunication networks and cable distribution systems .....	No TNV.	<b>N/A</b>
2.10.3.9	Measurement of transient voltage levels		<b>N/A</b>
	a) Transients from a mains supply		<b>N/A</b>
	For an a.c. mains supply .....		<b>N/A</b>
	For a d.c. mains supply .....		<b>N/A</b>
	b) Transients from a telecommunication network :		<b>N/A</b>
2.10.4	Creepage distances	(see appended table 2.10.3 and 2.10.4)	<b>P</b>
2.10.4.1	General		<b>P</b>
2.10.4.2	Material group and comparative tracking index		<b>P</b>
	CTI tests.....	CTI for all materials is <175.	<b>3/4</b>
2.10.4.3	Minimum creepage distances	(see appended table 2.10.3 and 2.10.4)	<b>P</b>
2.10.5	Solid insulation	Solid insulation used in the approved transformer.	<b>P</b>
2.10.5.1	General		<b>P</b>
2.10.5.2	Distances through insulation	T2 Framework: 0.9mm;	<b>P</b>
2.10.5.3	Insulating compound as solid insulation	Optical insulator separately approved	<b>P</b>
2.10.5.4	Semiconductor devices		<b>N/A</b>
2.10.5.5.	Cemented joints		<b>N/A</b>
2.10.5.6	Thin sheet material – General	Anyone thin sheet tested in the 3000ac.	<b>P</b>
2.10.5.7	Separable thin sheet material		<b>N/A</b>
	Number of layers (pcs).....		<b>3/4</b>
2.10.5.8	Non-separable thin sheet material		<b>N/A</b>
2.10.5.9	Thin sheet material – standard test procedure		<b>N/A</b>
	Electric strength test		<b>3/4</b>
2.10.5.10	Thin sheet material – alternative test procedure		<b>N/A</b>
	Electric strength test		<b>3/4</b>
2.10.5.11	Insulation in wound components		<b>N/A</b>
2.10.5.12	Wire in wound components		<b>N/A</b>



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Clause	Requirement + Test	Result - Remark	Verdict
	Working voltage .....		<b>N/A</b>
	a) Basic insulation not under stress .....		<b>N/A</b>
	b) Basic, supplementary, reinforced insulation .....		<b>N/A</b>
	c) Compliance with Annex U .....		<b>N/A</b>
	Two wires in contact inside wound component; angle between 45° and 90° .....		<b>N/A</b>
2.10.5.13	Wire with solvent-based enamel in wound components		<b>N/A</b>
	Electric strength test		<b>3/A</b>
	Routine test		<b>N/A</b>
2.10.5.14	Additional insulation in wound components		<b>N/A</b>
	Working voltage .....		<b>N/A</b>
	- Basic insulation not under stress .....		<b>N/A</b>
	- Supplementary, reinforced insulation .....		<b>N/A</b>
2.10.6	Construction of printed boards		<b>P</b>
2.10.6.1	Uncoated printed boards	(see appended table 2.10.3 and 2.10.4)	<b>P</b>
2.10.6.2	Coated printed boards	Uncoated printed boards.	<b>N/A</b>
2.10.6.3	Insulation between conductors on the same inner surface of a printed board		<b>N/A</b>
2.10.6.4	Insulation between conductors on different layers of a printed board		<b>N/A</b>
	Distance through insulation		<b>N/A</b>
	Number of insulation layers (pcs).....		<b>N/A</b>
2.10.7	Component external terminations		<b>N/A</b>
2.10.8	Tests on coated printed boards and coated components	No such boards and components.	<b>N/A</b>
2.10.8.1	Sample preparation and preliminary inspection		<b>N/A</b>
2.10.8.2	Thermal conditioning		<b>N/A</b>
2.10.8.3	Electric strength test		<b>N/A</b>
2.10.8.4	Abrasion resistance test		<b>N/A</b>
2.10.9	Thermal cycling		<b>N/A</b>
2.10.10	Test for Pollution Degree 1 environment and insulating compound		<b>N/A</b>
2.10.11	Tests for semiconductor devices and cemented joints		<b>N/A</b>

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Clause	Requirement + Test	Result - Remark	Verdict

2.10.12	Enclosed and sealed parts		<b>N/A</b>
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3	WIRING, CONNECTIONS AND SUPPLY		<b>P</b>
3.1	General		<b>P</b>
3.1.1	Current rating and overcurrent protection	Adequate cross sectional areas on internal wires and interconnecting cables.	<b>P</b>
3.1.2	Protection against mechanical damage	Wireways are smooth and free from edges	<b>P</b>
3.1.3	Securing of internal wiring	Internal wirings are secured by connector type terminal.	<b>P</b>
3.1.4	Insulation of conductors	(see appended table 5.2)	<b>P</b>
3.1.5	Beads and ceramic insulators	No beads or similar insulators	<b>N/A</b>
3.1.6	Screws for electrical contact pressure	All of contact pressure by screw in considered.	<b>P</b>
3.1.7	Insulating materials in electrical connections	No contact pressure through insulating material.	<b>N/A</b>
3.1.8	Self-tapping and spaced thread screws	Screw is not used for the connection of the current carrying parts.	<b>N/A</b>
3.1.9	Termination of conductors	The conductors are reliably fixed to the connector.	<b>P</b>
	10 N pull test	10 N applied to relevant conductors.	<b>P</b>
3.1.10	Sleeving on wiring	Relevant sleeving reliably kept in position.	<b>N/A</b>

3.2	Connection to a mains supply		<b>P</b>
3.2.1	Means of connection	See below	<b>P</b>
3.2.1.1	Connection to an a.c. mains supply	Appliance inlet used.	<b>P</b>
3.2.1.2	Connection to a d.c. mains supply		<b>N/A</b>
3.2.2	Multiple supply connections		<b>N/A</b>
3.2.3	Permanently connected equipment		<b>N/A</b>
	Number of conductors, diameter of cable and conduits (mm) .....		<b>3/A</b>
3.2.4	Appliance inlets	(see appended table 1.5.1)	<b>P</b>
3.2.5	Power supply cords	No supply	<b>N/A</b>
3.2.5.1	AC power supply cords		<b>N/A</b>

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Clause	Requirement + Test	Result - Remark	Verdict
	Type .....		3/4
	Rated current (A), cross-sectional area (mm <sup>2</sup> ), AWG .....		3/4
3.2.5.2	DC power supply cords		<b>N/A</b>
3.2.6	Cord anchorages and strain relief	Appliance inlet used.	<b>N/A</b>
	Mass of equipment (kg), pull (N) .....		3/4
	Longitudinal displacement (mm) .....		3/4
3.2.7	Protection against mechanical damage		<b>N/A</b>
3.2.8	Cord guards		<b>N/A</b>
	Diameter or minor dimension D (mm); test mass (g) .....		3/4
	Radius of curvature of cord (mm).....		3/4
3.2.9	Supply wiring space		<b>N/A</b>
3.3	Wiring terminals for connection of external conductors		<b>N/A</b>
3.3.1	Wiring terminals	Appliance inlet used.	<b>N/A</b>
3.3.2	Connection of non-detachable power supply cords		<b>N/A</b>
3.3.3	Screw terminals		<b>N/A</b>
3.3.4	Conductor sizes to be connected		<b>N/A</b>
	Rated current (A), cord/cable type, cross-sectional area (mm <sup>2</sup> ).....		3/4
3.3.5	Wiring terminal sizes		<b>N/A</b>
	Rated current (A), type, nominal thread diameter (mm) .....		3/4
3.3.6	Wiring terminal design		<b>N/A</b>
3.3.7	Grouping of wiring terminals		<b>N/A</b>
3.3.8	Stranded wire		<b>N/A</b>
3.4	Disconnection from the mains supply		<b>P</b>
3.4.1	General requirement		<b>P</b>
3.4.2	Disconnect devices	Appliance coupler	<b>P</b>
3.4.3	Permanently connected equipment	The equipment is not intended for permanently connection to the mains.	<b>N/A</b>
3.4.4	Parts which remain energized	No remain hazardous energy when disconnect an appliance	<b>N/A</b>

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Clause	Requirement + Test	Result - Remark	Verdict
		coupler.	
3.4.5	Switches in flexible cords		<b>N/A</b>
3.4.6	Number of poles - single-phase and d.c. equipment	Appliance coupler disconnects both poles simultaneously.	<b>P</b>
3.4.7	Number of poles - three-phase equipment	Single-phase equipment.	<b>N/A</b>
3.4.8	Switches as disconnect devices	Appliance coupler used.	<b>N/A</b>
3.4.9	Plugs as disconnect devices	Appliance coupler used.	<b>N/A</b>
3.4.10	Interconnected equipment	No interconnections using hazardous voltages or hazardous energy levels	<b>N/A</b>
3.4.11	Multiple power sources	The equipment use only one power source	<b>N/A</b>
3.5	Interconnection of equipment		<b>P</b>
3.5.1	General requirements	Interconnection of SELV circuits complies with Clause 2.2.	<b>P</b>
3.5.2	Types of interconnection circuits .....	SELV - SELV	<b>P</b>
3.5.3	ELV circuits as interconnection circuits	No ELV interconnections	<b>N/A</b>
3.5.4	Data ports for additional equipment		<b>N/A</b>
4	PHYSICAL REQUIREMENTS		<b>P</b>
4.1	Stability		<b>P</b>
	Angle of 10°	No tip	<b>P</b>
	Test force (N) .....	The equipment is not floor-standing.	<b>N/A</b>
4.2	Mechanical strength		<b>P</b>
4.2.1	General	See below	<b>P</b>
4.2.2	Steady force test, 10 N	No hazards as a result of the 10 N test.	<b>P</b>
4.2.3	Steady force test, 30 N	No hazards as a result of the 30 N test.	<b>P</b>
4.2.4	Steady force test, 250 N	No hazards as a result of the 250 N test.	<b>P</b>
4.2.5	Impact test		<b>P</b>

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Clause	Requirement + Test	Result - Remark	Verdict
	Fall test	No hazards as a result of the Fall test.	<b>N/A</b>
	Swing test	No hazards as a result of the Swing test.	<b>N/A</b>
4.2.6	Drop test; height (mm) .....		<b>N/A</b>
4.2.7	Stress relief test	Metal enclosure	<b>N/A</b>
4.2.8	Cathode ray tubes		<b>N/A</b>
	Picture tube separately certified .....		<b>N/A</b>
4.2.9	High pressure lamps	No high pressure lamps in the equipment.	<b>N/A</b>
4.2.10	Wall or ceiling mounted equipment; force (N) .....		<b>N/A</b>
4.3	Design and construction		<b>P</b>
4.3.1	Edges and corners	All edges and corners are judged to be sufficiently well rounded so as not to constitute a hazard.	<b>P</b>
4.3.2	Handles and manual controls; force (N).....	No handles, knobs, grips and levers	<b>N/A</b>
4.3.3	Adjustable controls	No adjustable controls	<b>N/A</b>
4.3.4	Securing of parts	No loosening of parts impairing creepage distance or clearances is likely to occur.	<b>P</b>
4.3.5	Connection by plugs and sockets		<b>P</b>
4.3.6	Direct plug-in equipment		<b>N/A</b>
	Torque .....		<b>3/4</b>
	Compliance with the relevant mains plug standard .....		<b>N/A</b>
4.3.7	Heating elements in earthed equipment		<b>N/A</b>
4.3.8	Batteries	No batteries.	<b>N/A</b>
	- Overcharging of a rechargeable battery		<b>N/A</b>
	- Unintentional charging of a non-rechargeable battery		<b>N/A</b>
	- Reverse charging of a rechargeable battery		<b>N/A</b>
	- Excessive discharging rate for any battery		<b>N/A</b>
4.3.9	Oil and grease		<b>N/A</b>
4.3.10	Dust, powders, liquids and gases		<b>N/A</b>

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Clause	Requirement + Test	Result - Remark	Verdict
4.3.11	Containers for liquids or gases		<b>N/A</b>
4.3.12	Flammable liquids .....		<b>N/A</b>
	Quantity of liquid (l) .....		<b>N/A</b>
	Flash point (°C) .....		<b>N/A</b>
4.3.13	Radiation		<b>N/A</b>
4.3.13.1	General		<b>N/A</b>
4.3.13.2	Ionizing radiation		<b>N/A</b>
	Measured radiation (pA/kg) .....		—
	Measured high-voltage (kV) .....		—
	Measured focus voltage (kV) .....		—
	CRT markings .....		—
4.3.13.3	Effect of ultraviolet (UV) radiation on materials		<b>N/A</b>
	Part, property, retention after test, flammability classification .....		<b>N/A</b>
4.3.13.4	Human exposure to ultraviolet (UV) radiation .....		<b>N/A</b>
4.3.13.5	Laser (including LEDs)		<b>N/A</b>
	Laser class .....		$\frac{3}{4}$
4.3.13.6	Other types .....		<b>N/A</b>
4.4	Protection against hazardous moving parts		<b>N/A</b>
4.4.1	General	No hazardous moving parts.	<b>N/A</b>
4.4.2	Protection in operator access areas .....		<b>N/A</b>
4.4.3	Protection in restricted access locations .....		<b>N/A</b>
4.4.4	Protection in service access areas		<b>N/A</b>
4.5	Thermal requirements		<b>P</b>
4.5.1	General		<b>P</b>
4.5.2	Temperature tests	(see appended table 4.5)	<b>P</b>
	Normal load condition per Annex L .....	(see appended table 1.6.2)	$\frac{3}{4}$
4.5.3	Temperature limits for materials	(see appended table 4.5)	<b>P</b>
4.5.4	Touch temperature limits	(see appended table 4.5)	<b>P</b>
4.5.5	Resistance to abnormal heat .....	(see appended table 4.5.5)	<b>P</b>
4.6	Openings in enclosures	No openings at AC inlete side	<b>P</b>

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Clause	Requirement + Test	Result - Remark	Verdict
4.6.1	Top and side openings	side openings, evaluate by end product.	<b>N/A</b>
	Dimensions (mm) ..... :		3/4
4.6.2	Bottoms of fire enclosures		<b>N/A</b>
	Construction of the bottom, dimensions (mm) ...:		3/4
4.6.3	Doors or covers in fire enclosures		<b>N/A</b>
4.6.4	Openings in transportable equipment	Not transportable equipment.	<b>N/A</b>
4.6.4.1	Constructional design measures		<b>N/A</b>
	Dimensions (mm) ..... :		3/4
4.6.4.2	Evaluation measures for larger openings		<b>N/A</b>
4.6.4.3	Use of metallized parts		<b>N/A</b>
4.6.5	Adhesives for constructional purposes		<b>N/A</b>
	Conditioning temperature (°C), time (weeks)..... :		3/4

4.7	Resistance to fire		<b>P</b>
4.7.1	Reducing the risk of ignition and spread of flame	Appropriate of components and suitable construction.	<b>P</b>
	Method 1, selection and application of components wiring and materials	(see appended table 4.7)	<b>P</b>
	Method 2, application of all of simulated fault condition tests		<b>N/A</b>
4.7.2	Conditions for a fire enclosure	(see appended table 4.7) Fire enclosure is provided.	<b>P</b>
4.7.2.1	Parts requiring a fire enclosure	Components in primary circuits.	<b>P</b>
4.7.2.2	Parts not requiring a fire enclosure		<b>N/A</b>
4.7.3	Materials		<b>P</b>
4.7.3.1	General	The propagation of fire is minimized through the fire enclosure construction.	<b>P</b>
4.7.3.2	Materials for fire enclosures	Metal enclosure	<b>P</b>
4.7.3.3	Materials for components and other parts outside fire enclosures	No components and other parts outside fire enclosures	<b>N/A</b>
4.7.3.4	Materials for components and other parts inside fire enclosures	(see appended table 1.5.1)	<b>P</b>
4.7.3.5	Materials for air filter assemblies		<b>N/A</b>
4.7.3.6	Materials used in high-voltage components		<b>N/A</b>

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Clause	Requirement + Test	Result - Remark	Verdict
5	ELECTRICAL REQUIREMENTS AND SIMULATED ABNORMAL CONDITIONS		<b>P</b>
5.1	Touch current and protective conductor current		<b>P</b>
5.1.1	General	Equipment intended to be connected to TN power distribution system.	<b>P</b>
5.1.2	Configuration of equipment under test (EUT)	Complete unit.	<b>P</b>
5.1.2.1	Single connection to an a.c. mains supply		<b>P</b>
5.1.2.2	Redundant multiple connections to an a.c. mains supply		<b>N/A</b>
5.1.2.3	Simultaneous multiple connections to an a.c. mains supply		<b>N/A</b>
5.1.3	Test circuit	Tested using circuit in Figure 5A for TN Power distribution system.	<b>P</b>
5.1.4	Application of measuring instrument	Test performed per Annex D.	<b>P</b>
5.1.5	Test procedure	Test procedure used per Clause 5.1.5.	<b>P</b>
5.1.6	Test measurements	Annex D.	<b>P</b>
	Supply voltage (V) .....	264V	3/4
	Measured touch current (mA) .....	Output terminals:0.010, Enclosure (metal):0.336mA;	3/4
	Max. allowed touch current (mA) .....	Output terminals:0.25, Enclosure (metal):3.5mA;	3/4
	Measured protective conductor current (mA) .....		3/4
	Max. allowed protective conductor current (mA)...		3/4
5.1.7	Equipment with touch current exceeding 3,5 mA	The touch current does not exceed 3.5 mA.	<b>N/A</b>
5.1.7.1	General .....		<b>N/A</b>
5.1.7.2	Simultaneous multiple connections to the supply		<b>N/A</b>
5.1.8	Touch currents to telecommunication networks and cable distribution systems and from telecommunication networks		<b>N/A</b>
5.1.8.1	Limitation of the touch current to a telecommunication network or to a cable distribution system		<b>N/A</b>
	Supply voltage (V) .....		3/4
	Measured touch current (mA) .....		3/4



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Clause	Requirement + Test	Result - Remark	Verdict

	Max. allowed touch current (mA) .....		$\frac{3}{A}$
5.1.8.2	Summation of touch currents from telecommunication networks		<b>N/A</b>
	a) EUT with earthed telecommunication ports .....		<b>N/A</b>
	b) EUT whose telecommunication ports have no reference to protective earth		<b>N/A</b>

5.2	Electric strength		<b>P</b>
5.2.1	General	(see appended table 5.2)	<b>P</b>
5.2.2	Test procedure		<b>P</b>

5.3	Abnormal operating and fault conditions		<b>P</b>
5.3.1	Protection against overload and abnormal operation	(see appended table 5.3)	<b>P</b>
5.3.2	Motors	(see Annex B and appended table 5.3)	<b>P</b>
5.3.3	Transformers	(see Annex C)	<b>P</b>
5.3.4	Functional insulation..... :	Method c) used	<b>P</b>
5.3.5	Electromechanical components	No such components.	<b>N/A</b>
5.3.6	Audio amplifiers in ITE .....		<b>N/A</b>
5.3.7	Simulation of faults	(see appended table 5.3)	<b>P</b>
5.3.8	Unattended equipment	Not a unattended equipment	<b>N/A</b>
5.3.9	Compliance criteria for abnormal operating and fault conditions	(see appended table 5.2 and 5.3) No fire, emission of molten metal or deformation was noted during the tests. Electric Strength tests performed after abnormal and fault tests.	<b>P</b>
5.3.9.1	During the tests		<b>P</b>
5.3.9.2	After the tests		<b>P</b>

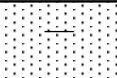
6	CONNECTION TO TELECOMMUNICATION NETWORKS		<b>N/A</b>
6.1	Protection of telecommunication network service persons, and users of other equipment connected to the network, from hazards in the equipment		<b>N/A</b>
6.1.1	Protection from hazardous voltages		<b>N/A</b>

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Clause	Requirement + Test	Result - Remark	Verdict
6.1.2	Separation of the telecommunication network from earth		<b>N/A</b>
6.1.2.1	Requirements	No TNV.	<b>N/A</b>
	Supply voltage (V) .....		—
	Current in the test circuit (mA) .....		—
6.1.2.2	Exclusions .....		<b>N/A</b>
6.2	Protection of equipment users from overvoltages on telecommunication networks		<b>N/A</b>
6.2.1	Separation requirements	No TNV.	<b>N/A</b>
6.2.2	Electric strength test procedure		<b>N/A</b>
6.2.2.1	Impulse test		<b>N/A</b>
6.2.2.2	Steady-state test		<b>N/A</b>
6.2.2.3	Compliance criteria		<b>N/A</b>
6.3	Protection of the telecommunication wiring system from overheating		<b>N/A</b>
	Max. output current (A) .....	No TNV.	—
	Current limiting method .....		—
7	CONNECTION TO CABLE DISTRIBUTION SYSTEMS		<b>N/A</b>
7.1	General	Not connected to cable distribution systems.	<b>N/A</b>
7.2	Protection of cable distribution system service persons, and users of other equipment connected to the system, from hazardous voltages in the equipment		<b>N/A</b>
7.3	Protection of equipment users from overvoltages on the cable distribution system		<b>N/A</b>
7.4	Insulation between primary circuits and cable distribution systems		<b>N/A</b>
7.4.1	General		<b>N/A</b>
7.4.2	Voltage surge test		<b>N/A</b>
7.4.3	Impulse test		<b>N/A</b>

IEC/EN 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
A	ANNEX A, TESTS FOR RESISTANCE TO HEAT AND FIRE		<b>N/A</b>
A.1	Flammability test for fire enclosures of movable equipment having a total mass exceeding 18 kg, and of stationary equipment (see 4.7.3.2)		<b>N/A</b>
A.1.1	Samples.....:		$\frac{3}{4}$
	Wall thickness (mm).....:		$\frac{3}{4}$
A.1.2	Conditioning of samples; temperature (°C) .....		<b>N/A</b>
A.1.3	Mounting of samples .....		<b>N/A</b>
A.1.4	Test flame (see IEC 60695-11-3)		<b>N/A</b>
	Flame A, B, C or D .....		$\frac{3}{4}$
A.1.5	Test procedure		<b>N/A</b>
A.1.6	Compliance criteria		<b>N/A</b>
	Sample 1 burning time (s).....:		$\frac{3}{4}$
	Sample 2 burning time (s).....:		$\frac{3}{4}$
	Sample 3 burning time (s).....:		$\frac{3}{4}$
A.2	Flammability test for fire enclosures of movable equipment having a total mass not exceeding 18 kg, and for material and components located inside fire enclosures (see 4.7.3.2 and 4.7.3.4)		<b>N/A</b>
A.2.1	Samples, material.....:	Metal enclosure	$\frac{3}{4}$
	Wall thickness (mm).....:	1.0mm	$\frac{3}{4}$
A.2.2	Conditioning of samples; temperature (°C) .....		<b>N/A</b>
A.2.3	Mounting of samples .....		<b>N/A</b>
A.2.4	Test flame (see IEC 60695-11-4)		<b>N/A</b>
	Flame A, B or C .....		$\frac{3}{4}$
A.2.5	Test procedure		<b>N/A</b>
A.2.6	Compliance criteria		<b>N/A</b>
	Sample 1 burning time (s).....:		$\frac{3}{4}$
	Sample 2 burning time (s).....:		$\frac{3}{4}$
	Sample 3 burning time (s).....:		$\frac{3}{4}$
A.2.7	Alternative test acc. to IEC 60695-11-5, cl. 5 and 9		<b>N/A</b>
	Sample 1 burning time (s).....:		$\frac{3}{4}$
	Sample 2 burning time (s).....:		$\frac{3}{4}$
	Sample 3 burning time (s).....:		$\frac{3}{4}$
A.3	Hot flaming oil test (see 4.6.2)		<b>N/A</b>

IEC/EN 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
A.3.1	Mounting of samples		<b>N/A</b>
A.3.2	Test procedure		<b>N/A</b>
A.3.3	Compliance criterion		<b>N/A</b>
B	ANNEX B, MOTOR TESTS UNDER ABNORMAL CONDITIONS (see 4.7.2.2 and 5.3.2)		<b>P</b>
B.1	General requirements	DC motors in secondary tested in accordance with B.7.	<b>P</b>
	Position .....	Leaf's Roller Motor	$\frac{3}{4}$
	Manufacturer .....	(see appended table 1.5.1)	$\frac{3}{4}$
	Type .....	(see appended table 1.5.1)	$\frac{3}{4}$
	Rated values .....	(see appended table 1.5.1)	$\frac{3}{4}$
B.2	Test conditions	Considered	<b>P</b>
B.3	Maximum temperatures	(see appended table 5.3) Temperatures did not exceed Class A limits of 150 °C.	<b>P</b>
B.4	Running overload test		<b>N/A</b>
B.5	Locked-rotor overload test		<b>N/A</b>
	Test duration (days) .....		$\frac{3}{4}$
	Electric strength test: test voltage (V) .....		$\frac{3}{4}$
B.6	Running overload test for d.c. motors in secondary circuits		<b>N/A</b>
B.6.1	General		<b>N/A</b>
B.6.2	Test procedure		<b>N/A</b>
B.6.3	Alternative test procedure		<b>N/A</b>
B.6.4	Electric strength test; test voltage (V) .....		<b>N/A</b>
B.7	Locked-rotor overload test for d.c. motors in secondary circuits		<b>P</b>
B.7.1	General		<b>P</b>
B.7.2	Test procedure	(see appended table 5.3)	<b>P</b>
B.7.3	Alternative test procedure		<b>N/A</b>
B.7.4	Electric strength test; test voltage (V) .....		<b>N/A</b>
B.8	Test for motors with capacitors		<b>N/A</b>
B.9	Test for three-phase motors		<b>N/A</b>
B.10	Test for series motors		<b>N/A</b>

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Clause	Requirement + Test	Result - Remark	Verdict
	Operating voltage (V) .....		$\frac{3}{4}$
C	ANNEX C, TRANSFORMERS (see 1.5.4 and 5.3.3)		<b>P</b>
	Position .....	During Pri. And Sec.	—
	Manufacturer .....	(see appended table 1.5.1)	—
	Type .....	(see appended table 1.5.1)	—
	Rated values .....	(see appended table 1.5.1)	—
	Method of protection.....		$\frac{3}{4}$
C.1	Overload test	(see appended table 5.3)	<b>P</b>
C.2	Insulation		<b>P</b>
	Protection from displacement of windings.....	Use sheet insulation of prevent displacement	<b>P</b>
D	ANNEX D, MEASURING INSTRUMENTS FOR TOUCH-CURRENT TESTS (see 5.1.4)		<b>P</b>
D.1	Measuring instrument	D.1	<b>P</b>
D.2	Alternative measuring instrument		<b>N/A</b>
E	ANNEX E, TEMPERATURE RISE OF A WINDING (see 1.4.13)		<b>N/A</b>
F	ANNEX F, MEASUREMENT OF CLEARANCES AND CREEPAGE DISTANCES (see 2.10 and Annex G)		<b>P</b>
G	ANNEX G, ALTERNATIVE METHOD FOR DETERMINING MINIMUM CLEARANCES		<b>N/A</b>
G.1	Clearances		<b>N/A</b>
G.1.1	General		<b>N/A</b>
G.1.2	Summary of the procedure for determining minimum clearances		<b>N/A</b>
G.2	Determination of mains transient voltage (V)		<b>N/A</b>
G.2.1	AC mains supply .....		<b>N/A</b>
G.2.2	Earthed d.c. mains supplies .....		<b>N/A</b>
G.2.3	Unearthed d.c. mains supplies .....		<b>N/A</b>
G.2.4	Battery operation .....		<b>N/A</b>
G.3	Determination of telecommunication network transient voltage (V) .....		<b>N/A</b>

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Clause	Requirement + Test	Result - Remark	Verdict
G.4	Determination of required withstand voltage (V)		<b>N/A</b>
G.4.1	Mains transients and internal repetitive peaks .....		<b>N/A</b>
G.4.2	Transients from telecommunication networks .....		<b>N/A</b>
G.4.3	Combination of transients		<b>N/A</b>
G.4.4	Transients from cable distribution systems		<b>N/A</b>
G.5	Measurement of transient voltages (V)		<b>N/A</b>
	a) Transients from a mains supply		<b>N/A</b>
	For an a.c. mains supply		<b>N/A</b>
	For a d.c. mains supply		<b>N/A</b>
	b) Transients from a telecommunication network		<b>N/A</b>
G.6	Determination of minimum clearances .....		<b>N/A</b>
H	ANNEX H, IONIZING RADIATION (see 4.3.13)		<b>N/A</b>
J	ANNEX J, TABLE OF ELECTROCHEMICAL POTENTIALS (see 2.6.5.6)		<b>P</b>
	Metal(s) used .....	Provided with suitable plating or coating.	
K	ANNEX K, THERMAL CONTROLS (see 1.5.3 and 5.3.8)		<b>N/A</b>
K.1	Making and breaking capacity		<b>N/A</b>
K.2	Thermostat reliability; operating voltage (V) .....		<b>N/A</b>
K.3	Thermostat endurance test; operating voltage (V) .....		<b>N/A</b>
K.4	Temperature limiter endurance; operating voltage (V) .....		<b>N/A</b>
K.5	Thermal cut-out reliability		<b>N/A</b>
K.6	Stability of operation		<b>N/A</b>
L	ANNEX L, NORMAL LOAD CONDITIONS FOR SOME TYPES OF ELECTRICAL BUSINESS EQUIPMENT (see 1.2.2.1 and 4.5.2)		<b>P</b>
L.1	Typewriters		<b>N/A</b>
L.2	Adding machines and cash registers		<b>N/A</b>
L.3	Erasers		<b>N/A</b>
L.4	Pencil sharpeners		<b>N/A</b>
L.5	Duplicators and copy machines		<b>N/A</b>

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Clause	Requirement + Test	Result - Remark	Verdict
L.6	Motor-operated files		<b>N/A</b>
L.7	Other business equipment	Continuous counting is most unfavourable way of operation.	<b>P</b>

M	ANNEX M, CRITERIA FOR TELEPHONE RINGING SIGNALS (see 2.3.1)		<b>N/A</b>
M.1	Introduction		
M.2	Method A		
M.3	Method B		<b>N/A</b>
M.3.1	Ringling signal		<b>N/A</b>
M.3.1.1	Frequency (Hz) .....		—
M.3.1.2	Voltage (V) .....		—
M.3.1.3	Cadence; time (s), voltage (V) .....		—
M.3.1.4	Single fault current (mA) .....		—
M.3.2	Tripping device and monitoring voltage .....		<b>N/A</b>
M.3.2.1	Conditions for use of a tripping device or a monitoring voltage		<b>N/A</b>
M.3.2.2	Tripping device		<b>N/A</b>
M.3.2.3	Monitoring voltage (V) .....		<b>N/A</b>

N	ANNEX N, IMPULSE TEST GENERATORS (see 1.5.7.2, 1.5.7.3, 2.10.3.9, 6.2.2.1, 7.3.2, 7.4.3 and Clause G.5)		<b>N/A</b>
N.1	ITU-T impulse test generators		<b>N/A</b>
N.2	IEC 60065 impulse test generator		<b>N/A</b>

P	ANNEX P, NORMATIVE REFERENCES		—
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Q	ANNEX Q, Voltage dependent resistors (VDRs) (see 1.5.9.1)		<b>N/A</b>
	a) Preferred climatic categories .....		<b>N/A</b>
	b) Maximum continuous voltage .....		<b>N/A</b>
	c) Pulse current .....		<b>N/A</b>

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Clause	Requirement + Test	Result - Remark	Verdict
R	ANNEX R, EXAMPLES OF REQUIREMENTS FOR QUALITY CONTROL PROGRAMMES		<b>N/A</b>
R.1	Minimum separation distances for unpopulated coated printed boards (see 2.10.6.2)		<b>N/A</b>
R.2	Reduced clearances (see 2.10.3)		<b>N/A</b>
S	ANNEX S, PROCEDURE FOR IMPULSE TESTING (see 6.2.2.3)		<b>N/A</b>
S.1	Test equipment		<b>N/A</b>
S.2	Test procedure		<b>N/A</b>
S.3	Examples of waveforms during impulse testing		<b>N/A</b>
T	ANNEX T, GUIDANCE ON PROTECTION AGAINST INGRESS OF WATER (see 1.1.2)		<b>P</b>
		IPX0	
U	ANNEX U, INSULATED WINDING WIRES FOR USE WITHOUT INTERLEAVED INSULATION (see 2.10.5.4)		<b>N/A</b>
V	ANNEX V, AC POWER DISTRIBUTION SYSTEMS (see 1.6.1)		<b>P</b>
V.1	Introduction	Single-phase, 2 wire	<b>P</b>
V.2	TN power distribution systems	TN-S power distribution system	<b>P</b>
W	ANNEX W, SUMMATION OF TOUCH CURRENTS		<b>N/A</b>
W.1	Touch current from electronic circuits		<b>N/A</b>
W.1.1	Floating circuits		<b>N/A</b>
W.1.2	Earthed circuits		<b>N/A</b>
W.2	Interconnection of several equipments		<b>N/A</b>
W.2.1	Isolation		<b>N/A</b>
W.2.2	Common return, isolated from earth		<b>N/A</b>
W.2.3	Common return, connected to protective earth		<b>N/A</b>
X	ANNEX X, MAXIMUM HEATING EFFECT IN TRANSFORMER TESTS (see clause C.1)		<b>N/A</b>



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Clause	Requirement + Test	Result - Remark	Verdict
X.1	Determination of maximum input current		<b>N/A</b>
X.2	Overload test procedure		<b>N/A</b>
Y	ANNEX Y, ULTRAVIOLET LIGHT CONDITIONING TEST (see 4.3.13.3)		<b>N/A</b>
Y.1	Test apparatus .....		<b>N/A</b>
Y.2	Mounting of test samples .....		<b>N/A</b>
Y.3	Carbon-arc light-exposure apparatus .....		<b>N/A</b>
Y.4	Xenon-arc light exposure apparatus .....		<b>N/A</b>
Z	ANNEX Z, OVERVOLTAGE CATEGORIES (see 2.10.3.2 and Clause G.2)		<b>N/A</b>
AA	ANNEX AA, MANDREL TEST (see 2.10.5.8)		<b>N/A</b>
BB	ANNEX BB, CHANGES IN THE SECOND EDITION		

IEC/EN 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

1.5.1	TABLE: List of critical components				P
Object/part No.	Manufacturer/trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s) of conformity <sup>1</sup> )
Fuse (F1 F2)	Ever Island, Walter	2010	T4A250V~	IEC/EN 60127-1	CQC
	Walter	TSC	T4AH250V~	IEC/EN 60127-1	CQC
	Littelfuse	0215004.	T4AH250V~	IEC/EN 60127-1	CQC
	Cooper	S505H(S515)-4-R	T4AH250V~	IEC/EN 60127-1	CQC
	Bel Fuse	5HT/5HTP	T4H250V~	IEC/EN 60127-1	CQC
	Conquer	UDA-A	T4H250V~	IEC/EN 60127-1	CQC
Varistor(V AR1)	Thinking	TVR07471	Max.300Vac,	IEC 61051-1, IEC 61051-2	CQC
	Thinking	TVR07180 ~ TVR07821	Max.300Vac,	IEC 61051-1, IEC 61051-2	CQC
	CeNtRa	CNR-07D471K	Max.300Vac,	IEC 61051-1, IEC 61051-2	CQC
	JOYIN	JVR07N471K65	Max.300Vac,	IEC 61051-1, IEC 61051-2	CQC
	Walsin	VZ07D471K	Max.300Vac,	IEC 61051-1, IEC 61051-2	CQC
X-Capacitor (C21)	ultra tech	HQX	1.0μF 275V~, X2	IEC 60384-14 /1993	CQC
	TONG-CHEN INDUSTRIAL	CTX	1.0μF 275V~, X2	IEC 60384-14 /1993	CQC
	PILKOR	PCX2 335	1.0μF 275V~, X2	IEC 60384-14 /1993	CQC
	RONG CHENG PILKOR	PCX2 335	1.0μF 275V~, X2	IEC 60384-14 /1993	CQC
	Welson	KL	1.0μF 275V~, X2	IEC 60384-14 /1993	CQC
	ARCOTRONICS	R.46MKP	1.0μF 275V~, X2	IEC 60384-14 /1993	CQC
	ARCOTRONICS	R.46MKP	1.0μF 275V~, X2	IEC 60384-14 /1993	CQC
	OKAYA	RE	1.0μF 275V~, X2	IEC 60384-14 /1993	CQC

IEC/EN 60950-1					
Clause	Requirement + Test			Result - Remark	Verdict
	Dain	MPX	1.0 $\mu$ F 275V~, X2	IEC 60384-14 /1993	CQC
X-Capacitor (C43)	ultra tech	HQX	0.47 $\mu$ F 275V~, X2	IEC 60384-14 /1993	CQC
	TONG-CHEN INDUSTRIAL	CTX	0.47 $\mu$ F 275V~, X2	IEC 60384-14 /1993	CQC
	PILKOR	PCX2 335	0.47 $\mu$ F 275V~, X2	IEC 60384-14 /1993	CQC
	RONG CHENG PILKOR	PCX2 335	0.47 $\mu$ F 275V~, X2	IEC 60384-14 /1993	CQC
	Welson	KL	0.47 $\mu$ F 275V~, X2	IEC 60384-14 /1993	CQC
	ARCOTRONICS	R.46MKP	0.47 $\mu$ F 275V~, X2	IEC 60384-14 /1993	CQC
	ARCOTRONICS	R.46MKP	0.47 $\mu$ F 275V~, X2	IEC 60384-14 /1993	CQC
	OKAYA	RE	0.47 $\mu$ F 275V~, X2	IEC 60384-14 /1993	CQC
	Dain	MPX	0.47 $\mu$ F 275V~, X2	IEC 60384-14 /1993	CQC
Y-Capacitor (C50 C52 C44 C45)	TDK	CD系列	470pF 250V~, Y2	IEC 60384-14 /1993	CQC
	Jya-Nay	JN	470pF 250V~, Y2	IEC 60384-14 /1993	CQC
	Jya-Nay	JN	470pF 250V~, Y2	IEC 60384-14 /1993	CQC
	Murata	KX	470pF 250V~, Y2	IEC 60384-14 /1993	CQC
	Murata	KX	470pF 250V~, Y2	IEC 60384-14 /1993	CQC
	Welson	WD	470pF 250V~, Y2	IEC 60384-14 /1993	CQC
	Walsin	AC	470pF 250V~, Y2	IEC 60384-14 /1993	CQC
	Success	SF SB	470pF 250V~, Y2	IEC 60384-14 /1993	CQC
	Welson	KL	470pF 250V~, Y2	IEC 60384-14 /1993	CQC
Inductors (L302)	WuXi City ZhongTong Electronic Co., Ltd.	GTM91092-110-M	Min.130°C Min.400 $\mu$ H	IEC/EN 60950-1	Test in the appliance

IEC/EN 60950-1					
Clause	Requirement + Test			Result - Remark	Verdict
Photo Coupler (U6/U7/U300)	Lite-On Technology Corp.	LTV-817	5000VAC Isolation	IEC60747-5-2, IEC60950-1	VDE40015 248
	COSMO Electronics Corporation	KP1010	5000VAC Isolation	IEC60747-5-2, IEC60950-1	VDE 101347
	Everlight Electronics Co.,LTD	EL817V	5000VAC Isolation	IEC60747-5-2, IEC60950-1	VDE 132249
	Sharp Corp.,Electronic Components Group	PC 817, PC817U, PC123, PC1231	5000VAC Isolation	IEC60747-5-2, IEC60950-1	VDE40080 87
	Fairchild Semiconductor	FOD817C	5000VAC Isolation	IEC60747-5-2, IEC60950-1	VDE40026 857
	Panasonic Corporation	ON 3171	5000VAC Isolation	IEC60747-5-2, IEC60950-1	VDE06569 7
Transformer(T2)	Zhongtong Electronic	GTM91092-110-M-T2	100-240V ~ 50Hz	IEC/EN 60950-1	Test in the appliance
Bobbin	Chang Chun Plastics Co.,LTD.	T375J T373J	130°C 0.9mm V-1	UL 94	UL E59481
Coil	Pacific Electric Wire & Cable Co., Ltd.	UEW	130#	UL 94	UL E201757
	Jung Shing Wire Co., Ltd.	UEW-4	130#	UL 94	UL E174837
Triple Wire	Furukawa Electric Co., Ltd.	TEX-E	130°C	UL 94	UL E206440
	Great Leoflon Industrial Co. Ltd.	TRW-B	130°C	UL 94	UL E211989
Insulation tape	3M Company	1350F-1	130°C 0.025mm	IEC/EN 60950-1,UL 94	UL E17385
Inductors(T1)	Zhongtong Electronic	GTM91092-110-M-T1	Class B 300μH	IEC/EN 60950-1	Test in the appliance
Bobbin	Chang Chun Plastics Co.,LTD.	T375J T373J	130°C 0.9mm V-1	UL 94	UL E59481
Coil	Pacific Electric Wire & Cable Co., Ltd.	UEW	130#	UL 94	UL E201757
	Jung Shing Wire Co., Ltd.	UEW-4	130#	UL 94	UL E174837

IEC/EN 60950-1					
Clause	Requirement + Test			Result - Remark	Verdict
Insulation tape	3M Company	1350F-1	130°C 0.025mm	UL 94	UL E17385
PCB	Yuanman Printed Circuit Co Ltd	1V0	V-0 1.5mm 105°C	IEC 60950-1,UL 94, UL 796	Test in the appliance
Power switch	Tecx-Unions Technology Corporation	RL1-821-C	16A 250V~	IEC/EN 60950-1	Test in the appliance
Appliance inlet	Schurter AG	KEA	10A 250V~	IEC/EN 60320-1	CQC
Thermistor (RT1)	Thinking Electronic Industrial Co., Ltd.	SCK1022R55	∅ 10mm	--	CQC
(Optional)	Thinking Electronic Industrial Co., Ltd.	SCK1022R55	∅ 10mm	--	CQC
Inductors (L2)	WuXi City ZhongTong Electronic Co., Ltd.	GTM91092-110-M	20mH 130 °C	IEC/EN 60950-1	Test in the appliance
Inductors (L3)	WuXi City ZhongTong Electronic Co., Ltd.	GTM91092-110-M	20mH 130 °C	IEC/EN 60950-1	Test in the appliance
DC Fan	NIDEC	W40S12BLA5-51	12VDC 0.1A	IEC/EN 60950-1	Test in the appliance
1) An asterisk indicates a mark which assures the agreed level of surveillance					
Supplementary information:					

IEC/EN 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

1.6.2	TABLE: Electrical data (in normal conditions)						P
U (V)	I (A)	I rated (A)	P (W)	Fuse #	I fuse (A)	Condition/status	
90V 50/60Hz	0.813/0.81 7	--	73.1/73.2	F1	73.1/73.2	Output is ratings	
100V 50/60Hz	0.730/0.72 6	3.0	72.7/72.8	F1	72.7/72.8	Output is ratings	
240V 50/60Hz	0.408/0.37 2	3.0	70.3/71.7	F1	70.3/71.7	Output is ratings	
264V 50/60Hz	0.377/0.35 4	--	72.6/72.5	F1	72.6/72.5	Output is ratings	
Supplementary information: Fuse Rating (F1): T4.0A, 250V							

2.10.3 and 2.10.4	TABLE: Clearance and creepage distance measurements						P
Clearance (cl) and creepage distance (cr) at/of/between:	U peak (V)	U r.m.s (V)	Required cl (mm)	cl (mm)	Required cr (mm)	cr (mm)	
PCB(L-N)	339	240	1.5	3.0	2.5	3.0	
C52	339	240	2.0	4.33	2.5	4.33	
L(PCB)- Enclosure(metal)	339	240	2.0	9.46	2.5	9.46	
U6- Enclosure(metal)	339	240	2.0	7.0	2.5	7.0	
U300(Pri.- Sec.)	339	240	4.0	6.6	5.0	>10	
T2 Pin 8-5	384	183	4.0	4.43	5.0	9.87	
T2 Pin 10-2	600	308	4.6	>10	6.54	>10	
T2 Pin 8-4	520	3.5	4.4	6.43	6.64	>10	
T2Pri.-core	600	308	4.6	5.8	6.54	7.8	
T2Pri.-core	339	240	4.0	6.0	5.0	8.0	
T2Pri.- Sec.	600	308	4.6	>10	6.54	>10	
Between meeting of power switch	339	240	3.0	5.33	3.0	10.0	
Supplementary information: Approved transformer used.							

2.10.5	TABLE: Distance through insulation measurements					P
Distance through insulation (DTI) at/of:	U peak (V)	U rms (V)	Test voltage (V)	Required DTI (mm)	DTI (mm)	
T2 Framework	339	240	3000	≥0.4	0.9	

IEC/EN 60950-1									
Clause	Requirement + Test						Result - Remark		Verdict
2.10.5	TABLE: Distance through insulation measurements								<b>P</b>
Distance through insulation: (DTI) at/of:				U peak (V)	U rms (V)	Test voltage (V)	Required DTI (mm)	DTI (mm)	
4.3.8	TABLE: Batteries								<b>N/A</b>
The tests of 4.3.8 are applicable only when appropriate battery data is not available									
Is it possible to install the battery in a reverse polarity position?									
	Non-rechargeable batteries			Rechargeable batteries					
	Discharging		Un- intentional charging	Charging		Discharging		Reversed charging	
	Meas. current	Manuf. Specs.		Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.
Max. current during normal condition									
Max. current during fault condition									
Test results:								Verdict	
- Chemical leaks									
- Explosion of the battery									
- Emission of flame or expulsion of molten metal									
- Electric strength tests of equipment after completion of tests									
Supplementary information:									

IEC/EN 60950-1								
Clause	Requirement + Test			Result - Remark			Verdict	
4.5	TABLE: Thermal requirements						<b>P</b>	
	Supply voltage (V) .....	90V 60Hz	264V 50Hz				—	
	Ambient T <sub>min</sub> (°C) .....	19.2	19.2				—	
	Ambient T <sub>max</sub> (°C) .....	20.0	20.0				—	
Maximum measured temperature T of part/at:		T (°C)				Allowed T <sub>max</sub> (°C)		
appliance coupler		28.4	27.1				90	
Switch		28.3	27.0				80	
Appliance inlet CON1A		31.3	28.9				70	
inside power cord		25.7	24.3				70	
NTC RT1		47.6	34.5				--	
Varistor VAR1		32.6	30.2				--	
X-Capacitor(C21)		30.5	28.6				--	
Y-Capacitor(C52)		31.8	29.6				--	
Inductor L2 coil		35.9	30.4				95	
Inductor L3 coil		35.9	31.3				95	
Inductor L302 coil		37.6	33.3				95	
Inductor T1 framework		36.6	31.9				105	
Capacitor C3		33.8	32.2				105	
Optical insulator U300		36.2	34.9				120	
Transformer of T2 framework		32.6	31.5				105	
Transformer of T2 coil		38.2	37.0				95	
PCB (under T2)		36.2	35.2				105	
Enclosure (DC FAN)		22.7	22.6				90	
Enclosure (metal)		26.7	26.8				65	
Supplementary information:								
Temperature T of winding:		t <sub>1</sub> (°C)	R <sub>1</sub> (Ω)	t <sub>2</sub> (°C)	R <sub>2</sub> (Ω)	T (°C)	Allowed T <sub>max</sub> (°C)	Insulation class



IEC/EN 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

Supplementary information:

Maximum operating Temperature permitted by the Manufacturer,  $T_{ma} = 25\text{ }^{\circ}\text{C}$ .

Heating test until thermal equilibrium was reached.

If the temperature of a winding is determined by thermocouples, these values are reduced by  $10\text{ }^{\circ}\text{C}$ , except in the case of a motor or a winding with embedded thermocouples.

K-type thermo-couplers have been used.

Allowed  $T_{max}$  ( $^{\circ}\text{C}$ ) is calculated as follows: Considered  $T_{amb}$  to  $21.0\text{ }^{\circ}\text{C}$  which is lower temperature.

- Winding components:

Class B (Motor, Transformer)  $\rightarrow T_{max} = 120\text{ }^{\circ}\text{C} + T_{amb} - T_{ma} = 116\text{ }^{\circ}\text{C}$

- Plastic enclosure  $\rightarrow T_{max} = 95\text{ }^{\circ}\text{C} + T_{amb} - T_{ma} = 91.0\text{ }^{\circ}\text{C}$

- Metal enclosure  $\rightarrow T_{max} = 70\text{ }^{\circ}\text{C} + T_{amb} - T_{ma} = 66.0\text{ }^{\circ}\text{C}$

- Handles, knobs, grips, etc., held or touched for short periods only

(Switch)  $\rightarrow T_{max} = 85\text{ }^{\circ}\text{C} + T_{amb} - T_{ma} = 81.0\text{ }^{\circ}\text{C}$

- Synthetic rubber or PVC insulation of internal and external wiring, including power supply

ords: - without temperature marking (Appliance inlet)  $\rightarrow T_{max} = 75\text{ }^{\circ}\text{C} + T_{amb} - T_{ma} = 71.0\text{ }^{\circ}\text{C}$

- PCB  $\rightarrow T_{max} = 130\text{ }^{\circ}\text{C}$

4.5.5	TABLE: Ball pressure test of thermoplastic parts		<b>P</b>
	Allowed impression diameter (mm) .....	$\leq 2\text{ mm}$	—
Part	Test temperature ( $^{\circ}\text{C}$ )	Impression diameter (mm)	
T1 framework	125	0.83	
T2 framework	125	0.77	
Supplementary information: tested on model HM-S600			

4.7	TABLE: Resistance to fire					<b>P</b>
Part	Manufacturer of material	Type of material	Thickness (mm)	Flammability class	Evidence	
Supplementary information: See appended table 1.5.1.						

IEC/EN 60950-1				
Clause	Requirement + Test	Result - Remark	Verdict	
5.2	TABLE: Electric strength tests, impulse tests and voltage surge tests		<b>P</b>	
Test voltage applied between:		Voltage shape (AC, DC, impulse, surge)	Test voltage (V)	Breakdown n Yes / No
Functional:				
Between(L-N)		AC	1500	No
Basic/supplementary:				
A single-pole plug and protective earthing		AC	1500	No
A single-pole plug and enclosure (metal part)		AC	1500	No
Mylar sheet(Power trace- metal enclosure)		AC	1500	No
T2(Sec. winding-core)		AC	1500	No
Reinforced:				
Between a single-pole plug and in/outputs terminal		AC	3000	No
T2(Pri. winding -core)		AC	3000	No
T2(Pri. winding -Sec. winding)		AC	3000	No
Anyone in two layers of insulation tape for T2		AC	3000	No
Supplementary information:tested on model HM-S600				

IEC/EN 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

5.3	TABLE: Fault condition tests					P
	Ambient temperature (°C) .....	20				—
	Power source for EUT: Manufacturer, model/type, output rating .....	--				—
Com- pone nt No.	Fault	Supply vol tag e (V)	Test time	Fuse #	Fuse cur ren t (A)	Observation
Ventilation openings	blocked	90	4 hrs	F1	0.817	Unit normal operation ,No hazard, No flame, Maximum measured temperature T of part/at: Switch:31.8 L2 coil:40.9 L3 coil:41.5 L302coil:40.8 T1 framework:41.7 Transformer of T2 framework:46.3 Transformer of T2 coil:51.9 PCB (near T2):41.7 Enclosure (DC FAN):27.6 Enclosure (metal): 30.3 (°C)
Ventilation openings	blocked	264	4 hrs	F1	0.377	Unit normal operation ,No hazard, No flame, Maximum measured temperature T of part/at: Switch:31.9 L2 coil:35.8 L3 coil:37.0 L302coil:37.6 T1 framework:37.8 Transformer of T2 framework:45.7 Transformer of T2 coil:51.2 PCB (near T2): 41.6 Enclosure (DC FAN):27.4 Enclosure (metal): 30.8 (°C)

IEC/EN 60950-1						
Clause	Requirement + Test				Result - Remark	Verdict
DC Fan	stalled	90	4 hrs	F1	0.822	Unit normal operation ,No hazard, No flame, Maximum measured temperature T of part/at: Switch:30.0 L2 coil:34.2 L3 coil:35.7 L302coil:39.0 T1 framework:37.1 Transformer of T2 framework:45.7 Transformer of T2 coil:51.5 PCB (near T2): 47.5 Enclosure (DC FAN):35.3 Enclosure (metal): 32.7 (°C)
	short circuit	264	15 min.	F1	0.126	Unit shutdown immediately , No hazard, No output
	short circuit	264	15 min.	F1	0.126	Unit shutdown immediately , No hazard, No output
	short circuit	264	15 min.	F1	0.126	Unit shutdown immediately , No hazard, No output
D103	short circuit	264	15 min.	F1	0.126	Unit shutdown immediately , No hazard, No output
C115	short circuit	264	15 min.	F1	0.125	Unit shutdown immediately , No hazard, No output
D106	short circuit	264	30 min.	F1	0.320	+130V No output ,No hazard,
C132	short circuit	264	15 min.	F1	0.125	Unit shutdown immediately , No hazard, No output
D102	short circuit	264	15 min.	F1	0.125	Unit shutdown immediately , No hazard, No output
C101	short circuit	264	15 min.	F1	0.126	Unit shutdown immediately , No hazard, No output
U6(1-2)	Short circuit	264	15 min.	F1	0.150	Unit shutdown immediately , No hazard, No output
U6(3-4)	short circuit	264	15 min.	F1	0.124	Unit shutdown immediately , No hazard, No output
U71-2)	short circuit	264	30 min.	F1	0.377	Normal operation, No hazard,
U73-4)	short circuit	264	15 min.	F1	0.150	Unit shutdown immediately , No hazard, No output

IEC/EN 60950-1						
Clause	Requirement + Test			Result - Remark		Verdict
U300(1-2)	short circuit	264	15 min.	F1	0.150	Unit shutdown immediately , No hazard, No output
U300(3-4)	short circuit	264	30 min.	F1	0.377	Normal operation, No hazard,
Q1(G-D)	short circuit	264	15 min.	F1	10.0→0	F1 opened, No hazard,
Q3(G-D)	short circuit	264	1s	F1	9.8→0	F1 and FB1 opened,Q3 damaged, No hazard
D2	short circuit	264	1s	F1	8.6→0	F1 and FB1 opened, No hazard
BD1(1-2)	short circuit	264	1s	F1	8.8→0	F1 opened, No hazard,
C9	short circuit	264	1s	F1	8.9→0	F1 opened No hazard,
BD1(1-2)	short circuit	90	1s	F1	9.4→0	F1 opened, No hazard,
C9	short circuit	90	1s	F1	9.2→0	F1 opened, No hazard,
Q3(G-D)	short circuit	90	1s	F1	9.6→0	F1 and FB1 opened,Q3 damaged, No hazard
+5V OutPut	Over load	264	4h	F1	0.400	output 2.2A, T2=54.7°C , No hazard
+130V OutPut	Over load	264	4h	F1	0.433	output 0.22A, T2=59.9°C , No hazard azard
+13.5V OutPut	Over load	264	4h	F1	0.418	output 3.2A, T2=57.4°C , No hazard
Supplementary information:						

National Differences																																																																														
Clause	Requirement + Test				Result - Remark	Verdict																																																																								
APPENDIX	<b>GROUP DIFFERENCES</b> according to CB Bulletin No. 112A, December 2006 (IEC Publication 60950-1, 2nd edition 2005)					<b>P</b>																																																																								
<b>COMMON MODIFICATIONS for IEC 60950-1(ed.2)</b>																																																																														
CONTENT S	<p><b>Add</b> the following annexes:</p> <p><b>Annex ZA</b> (normative) Normative references to international publications with their corresponding European publications</p> <p><b>Annex ZB</b> (normative) Special national conditions</p> <p><b>Annex ZC</b> (informative) A-deviations</p>					<b>P</b>																																																																								
	<p><b>Delete</b> all the “country” notes in the reference document according to the following list:</p> <table border="1"> <tr> <td>1.4.8</td> <td>Note 2</td> <td>1.5.1</td> <td>Note 2 &amp; 3</td> <td>1.5.7.1</td> <td>Note</td> </tr> <tr> <td>1.5.8</td> <td>Note 2</td> <td>1.5.9.4</td> <td>Note</td> <td>1.7.2.1</td> <td>Note 4, 5 &amp; 6</td> </tr> <tr> <td>2.2.3</td> <td>Note</td> <td>2.2.4</td> <td>Note</td> <td>2.3.2</td> <td>Note</td> </tr> <tr> <td>2.3.2.1</td> <td>Note 2</td> <td>2.3.4</td> <td>Note 2</td> <td>2.6.3.3</td> <td>Note 2 &amp; 3</td> </tr> <tr> <td>2.7.1</td> <td>Note</td> <td>2.10.3.2</td> <td>Note 2</td> <td>2.10.5.13</td> <td>Note 3</td> </tr> <tr> <td>3.2.1.1</td> <td>Note</td> <td>3.2.4</td> <td>Note</td> <td>3.2.5.1</td> <td>Note 2</td> </tr> <tr> <td>4.3.6</td> <td>Note 1 &amp; 2</td> <td>4.7</td> <td>Note 4</td> <td>4.7.2.2</td> <td>Note</td> </tr> <tr> <td>4.7.3.1</td> <td>Note 2</td> <td>5.1.7.1</td> <td>Note 3 &amp; 4</td> <td>5.3.7</td> <td>Note 1</td> </tr> <tr> <td>6</td> <td>Note 2 &amp; 5</td> <td>6.1.2.1</td> <td>Note 2</td> <td>6.1.2.2</td> <td>Note</td> </tr> <tr> <td>6.2.2</td> <td>Note</td> <td>6.2.2.1</td> <td>Note 2</td> <td>6.2.2.2</td> <td>Note</td> </tr> <tr> <td>7.1</td> <td>Note 3</td> <td>7.2</td> <td>Note</td> <td>7.3</td> <td>Note 1 &amp; 2</td> </tr> <tr> <td>G.2.1</td> <td>Note 2</td> <td>Annex H</td> <td>Note 2</td> <td></td> <td></td> </tr> </table> <p>For special national conditions, see Annex ZB.</p>				1.4.8	Note 2	1.5.1	Note 2 & 3	1.5.7.1	Note	1.5.8	Note 2	1.5.9.4	Note	1.7.2.1	Note 4, 5 & 6	2.2.3	Note	2.2.4	Note	2.3.2	Note	2.3.2.1	Note 2	2.3.4	Note 2	2.6.3.3	Note 2 & 3	2.7.1	Note	2.10.3.2	Note 2	2.10.5.13	Note 3	3.2.1.1	Note	3.2.4	Note	3.2.5.1	Note 2	4.3.6	Note 1 & 2	4.7	Note 4	4.7.2.2	Note	4.7.3.1	Note 2	5.1.7.1	Note 3 & 4	5.3.7	Note 1	6	Note 2 & 5	6.1.2.1	Note 2	6.1.2.2	Note	6.2.2	Note	6.2.2.1	Note 2	6.2.2.2	Note	7.1	Note 3	7.2	Note	7.3	Note 1 & 2	G.2.1	Note 2	Annex H	Note 2			Deleted.	<b>P</b>
1.4.8	Note 2	1.5.1	Note 2 & 3	1.5.7.1	Note																																																																									
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G.2.1	Note 2	Annex H	Note 2																																																																											
1.3.Z1	<p><b>Add</b> the following subclause:</p> <p><b>1.3.Z1 Exposure to excessive sound pressure</b></p> <p>The apparatus shall be so designed and constructed as to present no danger when used for its intended purpose, either in normal operating conditions or under fault conditions, particularly providing protection against exposure to excessive sound pressures from headphones or earphones.</p> <p>NOTE Z1 A new method of measurement is described in EN 50332-1, Sound system equipment: Headphones and earphones associated</p>				Added.	<b>N/A</b>																																																																								

GROUP DIFFERENCES

National Differences			
Clause	Requirement + Test	Result - Remark	Verdict
	with portable audio equipment - Maximum sound pressure level measurement methodology and limit considerations - Part 1: General method for "one package equipment", and in EN 50332-2, Sound system equipment: Headphones and earphones associated with portable audio equipment - Maximum sound pressure level measurement methodology and limit considerations - Part 2: Guidelines to associate sets with headphones coming from different manufacturers.		
1.5.1	<b>Add</b> the following NOTE: NOTE Z1 The use of certain substances in electrical and electronic equipment is restricted within the EU: see Directive 2002/95/EC	Added.	
1.7.2.1	<b>Add</b> the following NOTE: NOTE Z1 In addition, the instructions shall include, as far as applicable, a warning that excessive sound pressure from earphones and headphones can cause hearing loss	Added.	
2.7.1	<b>Replace</b> the subclause as follows: <i>Basic requirements</i> To protect against excessive current, short-circuits and earth faults in PRIMARY CIRCUITS, 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): a) except as detailed in b) and c), protective devices necessary to comply with the requirements of 5.3 shall be included as parts of the equipment; 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; 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.  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	Replaced.	

## GROUP DIFFERENCES

National Differences												
Clause	Requirement + Test	Result - Remark	Verdict									
	rating of the wall socket outlet.											
2.7.2	This subclause has been declared 'void'.											
3.2.3	<b>Delete</b> the NOTE in Table 3A, and <b>delete</b> also in this table the conduit sizes in parentheses.	Deleted.										
3.2.5.1	<p><b>Replace</b> "60245 IEC 53" by "H05 RR-F";  "60227 IEC 52" by "H03 VV-F or H03 VVH2-F";  "60227 IEC 53" by "H05 VV-F or H05 VVH2-F2".</p> <p>In Table 3B, <b>replace</b> the first four lines by the following:</p> <table border="1"> <tr> <td>Up to and including 6</td> <td colspan="2">0,75 <sup>a)</sup></td> </tr> <tr> <td>Over 6 up to and including 10</td> <td>(0,75) <sup>b)</sup></td> <td>1,0</td> </tr> <tr> <td>Over 10 up to and including 16</td> <td>(1,0) <sup>c)</sup></td> <td>1,5</td> </tr> </table> <p>In the Conditions applicable to Table 3B <b>delete</b> the words "in some countries" in condition <sup>a)</sup>.</p> <p>In Note 1, applicable to Table 3B, <b>delete</b> the second sentence.</p>	Up to and including 6	0,75 <sup>a)</sup>		Over 6 up to and including 10	(0,75) <sup>b)</sup>	1,0	Over 10 up to and including 16	(1,0) <sup>c)</sup>	1,5	Replaced.	
Up to and including 6	0,75 <sup>a)</sup>											
Over 6 up to and including 10	(0,75) <sup>b)</sup>	1,0										
Over 10 up to and including 16	(1,0) <sup>c)</sup>	1,5										
3.3.4	<p>In Table 3D, <b>delete</b> the fourth line: conductor sizes for 10 to 13 A, and <b>replace</b> with the following:</p> <table border="1"> <tr> <td>Over 10 up to and including 16</td> <td>1,5 to 2,5</td> <td>1,5 to 4</td> </tr> </table> <p><b>Delete</b> the fifth line: conductor sizes for 13 to 16 A.</p>	Over 10 up to and including 16	1,5 to 2,5	1,5 to 4	Deleted.							
Over 10 up to and including 16	1,5 to 2,5	1,5 to 4										
4.3.13.6	<p><b>Add</b> the following NOTE:</p> <p>NOTE Z1 Attention is drawn to 1999/519/EC: Council Recommendation on the limitation of exposure of the general public to electromagnetic fields 0 Hz to 300 GHz. Standards taking into account this Recommendation which demonstrate compliance with the applicable EU Directive are indicated in the OJEC.</p>	Added.										
Annex H	<p><b>Replace</b> the last paragraph of this annex by:</p> <p>At any point 10 cm from the surface of the OPERATOR ACCESS AREA, the dose rate shall not exceed 1 µSv/h (0,1 mR/h) (see NOTE). Account is taken of the background level.</p> <p><b>Replace</b> the notes as follows:</p> <p>NOTE These values appear in Directive 96/29/Euratom.</p> <p><b>Delete</b> NOTE 2.</p>	Replaced.										
Bibliography	<p><b>Add</b> the following standards:</p> <p>EN 50332-1:2000, <i>Sound system equipment: Headphones and earphones associated with</i></p>	Added.										

## GROUP DIFFERENCES



National Differences																																																						
Clause	Requirement + Test	Result - Remark	Verdict																																																			
	<p><i>portable audio equipment - Maximum sound pressure level measurement methodology and limit considerations - Part 1: General method for "one package equipment"</i></p> <p>EN 50332-2:2003, <i>Sound system equipment: Headphones and earphones associated with portable audio equipment - Maximum sound pressure level measurement methodology and limit considerations -Part 2: Matching of sets with headphones if either or both are offered separately</i></p>																																																					
	<p><b>Add</b> the following notes for the standards indicated:</p> <table border="0"> <tr> <td>IEC 60127</td> <td>NOTE</td> <td>Harmonized in EN 60127 Series (not modified).</td> </tr> <tr> <td>IEC 60369-2-1</td> <td>NOTE</td> <td>Harmonized as HD 60369-2-1:2005 (modified).</td> </tr> <tr> <td>IEC 60364-4-41</td> <td>NOTE</td> <td>Harmonized as HD 384.4.41 S2:1996 (modified).</td> </tr> <tr> <td>IEC 60529</td> <td>NOTE</td> <td>Harmonized as EN 60529:1991 (not modified).</td> </tr> <tr> <td>IEC 60664-4</td> <td>NOTE</td> <td>Harmonized as EN 60664-4:2006 (not modified).</td> </tr> <tr> <td>IEC 60728-11</td> <td>NOTE</td> <td>Harmonized as EN 60728-11:2005 (modified).</td> </tr> <tr> <td>IEC 60896-21</td> <td>NOTE</td> <td>Harmonized as EN 60896-21:2004 (not modified).</td> </tr> <tr> <td>IEC 60896-22</td> <td>NOTE</td> <td>Harmonized as EN 60896-22:2004 (not modified).</td> </tr> <tr> <td>IEC 61032</td> <td>NOTE</td> <td>Harmonized as EN 61032:1998 (not modified).</td> </tr> <tr> <td>IEC 61140</td> <td>NOTE</td> <td>Harmonized as EN 61140:2002 (not modified).</td> </tr> <tr> <td>IEC 61558-1</td> <td>NOTE</td> <td>Harmonized as EN 61558-1:2005 (not modified).</td> </tr> <tr> <td>IEC 61643-21</td> <td>NOTE</td> <td>Harmonized as EN 61643-21:2001 (not modified).</td> </tr> <tr> <td>IEC 61643-311</td> <td>NOTE</td> <td>Harmonized as EN 61643-311:2001 (not modified).</td> </tr> <tr> <td>IEC 61643-321</td> <td>NOTE</td> <td>Harmonized as EN 61643-321:2001 (not modified).</td> </tr> <tr> <td>IEC 61643-331</td> <td>NOTE</td> <td>Harmonized as EN 61643-331:2003 (not modified).</td> </tr> <tr> <td>IEC 61965</td> <td>NOTE</td> <td>Harmonized as EN 61965:2003 (not modified).</td> </tr> <tr> <td>ISO 4892</td> <td>NOTE</td> <td>Harmonized as EN ISO 4892 series (not modified).</td> </tr> </table>	IEC 60127	NOTE	Harmonized in EN 60127 Series (not modified).	IEC 60369-2-1	NOTE	Harmonized as HD 60369-2-1:2005 (modified).	IEC 60364-4-41	NOTE	Harmonized as HD 384.4.41 S2:1996 (modified).	IEC 60529	NOTE	Harmonized as EN 60529:1991 (not modified).	IEC 60664-4	NOTE	Harmonized as EN 60664-4:2006 (not modified).	IEC 60728-11	NOTE	Harmonized as EN 60728-11:2005 (modified).	IEC 60896-21	NOTE	Harmonized as EN 60896-21:2004 (not modified).	IEC 60896-22	NOTE	Harmonized as EN 60896-22:2004 (not modified).	IEC 61032	NOTE	Harmonized as EN 61032:1998 (not modified).	IEC 61140	NOTE	Harmonized as EN 61140:2002 (not modified).	IEC 61558-1	NOTE	Harmonized as EN 61558-1:2005 (not modified).	IEC 61643-21	NOTE	Harmonized as EN 61643-21:2001 (not modified).	IEC 61643-311	NOTE	Harmonized as EN 61643-311:2001 (not modified).	IEC 61643-321	NOTE	Harmonized as EN 61643-321:2001 (not modified).	IEC 61643-331	NOTE	Harmonized as EN 61643-331:2003 (not modified).	IEC 61965	NOTE	Harmonized as EN 61965:2003 (not modified).	ISO 4892	NOTE	Harmonized as EN ISO 4892 series (not modified).		<b>P</b>
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	<p align="center"><b>Annex ZA</b> (normative)</p> <p align="center"><b>Normative references to international publications with their relevant European publications</b></p> <p>The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.</p> <p>NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.</p> <table border="0"> <tr> <td><u>Publication</u></td> <td><u>Year</u></td> <td><u>Title</u></td> <td><u>EN/HD</u></td> <td><u>Year</u></td> </tr> </table>	<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>		<b>P</b>																																														
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GROUP DIFFERENCES

National Differences					
Clause	Requirement + Test			Result - Remark	Verdict
	IEC 60065 (mod) A1	2001 2005	Audio, video and similar electronic apparatus - Safety requirements	EN 60065 A1	2002 - <sup>1)</sup>
	IEC 60068-2-78	- <sup>2)</sup>			
	IEC 60073	- <sup>2)</sup>	Basic and safety principles for man-machine interface, marking and identification - Coding principles for indication devices and actuators	EN 60073	2002 3)
	IEC 60083	- <sup>2)</sup>		-	-
	IEC 60085	2004	Electrical insulation - Thermal classification	EN 60085	2004
	IEC 60112	- <sup>2)</sup>	Method for determining the proof and comparative tracking indices of insulating materials	EN 60112	2003 3)
	IEC 60216-4-1	- <sup>2)</sup>	Guide for the determination of thermal endurance properties of electrical insulating materials Part 4: Ageing ovens Section 1: Single-chamber ovens	EN 60216-4-1	- <sup>1)</sup>
	IEC 60227 (mod)	Series	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750V	HD 21 <sup>4)</sup>	Series
	IEC 60245 (mod)	Series	Rubber insulated cables of rated voltages up to and including 450/750V	HD 22 <sup>5)</sup>	Series
	IEC 60309	Series	Plugs, socket-outlets and couplers for industrial purposes	EN 60309	Series
	IEC 60317	Series	Specifications for particular types of winding wires	EN 60317	Series
	IEC 60317-43	- <sup>2)</sup>	Part 43: Aromatic polyimide tape wrapped round copper wire, class 240	EN 60317-43	1997 3)
	IEC 60320 (mod)	Series	Appliance couplers for household and similar general purposes	EN 60320	Series
	IEC 60364-1 (mod)	2001	Electrical installations of buildings Part 1: Fundamental principles, assessment of general characteristics, definitions	HD 384.1 S2	2001
	IEC 60384-14 A1	1993 1995	Fixed capacitors for use in electronic equipment Part 14: Sectional specification: Fixed capacitors for electromagnetic interference suppression and connection to the supply mains	EN 132400 <sup>6)</sup>	1994
	IEC 60417	Data-base	Graphical symbols for use on equipment	-	-
	IEC 60664-1 +A1 +A2	1992 2000 2002	Insulation coordination for equipment within low-voltage systems Part 1: Principles, requirements and tests	HD 625.1 S1 + corr. November	1996 1996
	IEC 60695-2-11	- <sup>2)</sup>	Fire hazard testing Part 2-11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products	EN 60695-2-11	2001 3)
	IEC 60695-2-20	- <sup>2)</sup>	Part 2-20: Glowing/hot-wire based test methods - Hot-wire coil ignitability - Apparatus, test method and guidance	-	-
	IEC 60695-10-2	- <sup>2)</sup>	Part 10-2: Guidance and test methods for the minimization of the effects of abnormal heat on electrotechnical products involved in fires - Method for testing products made from non-metallic materials for resistance to heat using the ball pressure test	EN 60695-10-2	2003 3)

## GROUP DIFFERENCES

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National Differences					
Clause	Requirement + Test		Result - Remark		Verdict
IEC 60695-11-3	_ 2)	Part 11-3: Test flames - 500 W flames - Apparatus and confirmational test methods	-	-	
IEC 60695-11-4	_ 2)	Part 11-4: Test flames - 50 W flames: Apparatus and confirmational test methods	-	-	
IEC 60695-11-10	_ 2)	Part 11-10: Test flames - 50 W horizontal and vertical flame test methods	EN 60695-11-10	1999 3)	
IEC 60695-11-20	_ 2)	Part 11-20: Test flames - 500 W flame test methods	EN 60695-11-20	1999 3)	
IEC 60730-1 (mod) A1	1999 2003	Automatic electrical controls for household and similar use - Part 1: General requirements	EN 60730-1 A1 + A12 + A13 + A1	2000 2004 2003 2004 2005	
IEC 60825-1	_ 2)	Safety of laser products 1: Equipment classification, requirements and user's guide	Part EN 60825-1 + corr. February + A11	1994 3) 1995 1996 1997	
IEC 60825-2	_ 2)	Part 2: Safety of optical fibre communication systems	EN 60825-2	2004 3)	
IEC/TR 60825-9	_ 2)	Part 9: Compilation of maximum permissible exposure to incoherent optical radiation	-	-	
IEC 60825-12	_ 2)	Part 12: Safety of free space optical communication systems used for transmission of information	EN 60825-12	2004 3)	
IEC 60851-3 A1	1996 1997	Winding wires - Test methods 3: Mechanical properties	Part EN 60851-3 A1	1996 1997	
IEC 60851-5 A1 A2	1996 1997 2004	Part 5: Electrical properties	EN 60851-5 A1 A2	1996 1997 2004	
IEC 60851-6	1996	Part 6: Thermal properties	EN 60851-6	1996	
IEC 60885-1	1987	Electrical test methods for electric cables 1: Electrical tests for cables, cords and wires for voltages up to and including 450/750 V	Part -	-	
IEC 60906-1	_ 2)	IEC System of plugs and socket-outlet for household and similar purposes Part 1: Plugs and socket-outlets 16 A 250 V a.c.	-	-	
IEC 60906-2	_ 2)	Part 2: Plugs and socket-outlets 15 A 125 V a.c	-	-	
IEC 60947-1	2004	Low voltage switchgear and control gear Part 1: General rules	EN 60947-1	2004	
IEC 60990	1999	Methods of measurement of touch current and protective conductor current	EN 60990	1999	
IEC 61051-2	1991	Varistors for use in electronic equipment Part 2: Sectional specification for surge suppression varistors	-	-	
IEC 61058-1 (mod)	2000	Switches for appliances 1: General requirements	Part EN 61058-1 7)	2002	
ISO 178	_ 2)	Plastics - Determination of flexural properties	EN ISO 178	1996	
ISO 179	Series	Plastics - Determination of Charpy impact Strength	EN ISO 179	Series	
ISO 180	_ 2)	Plastics - Determination of Izod impact strength	EN ISO 180	2000	

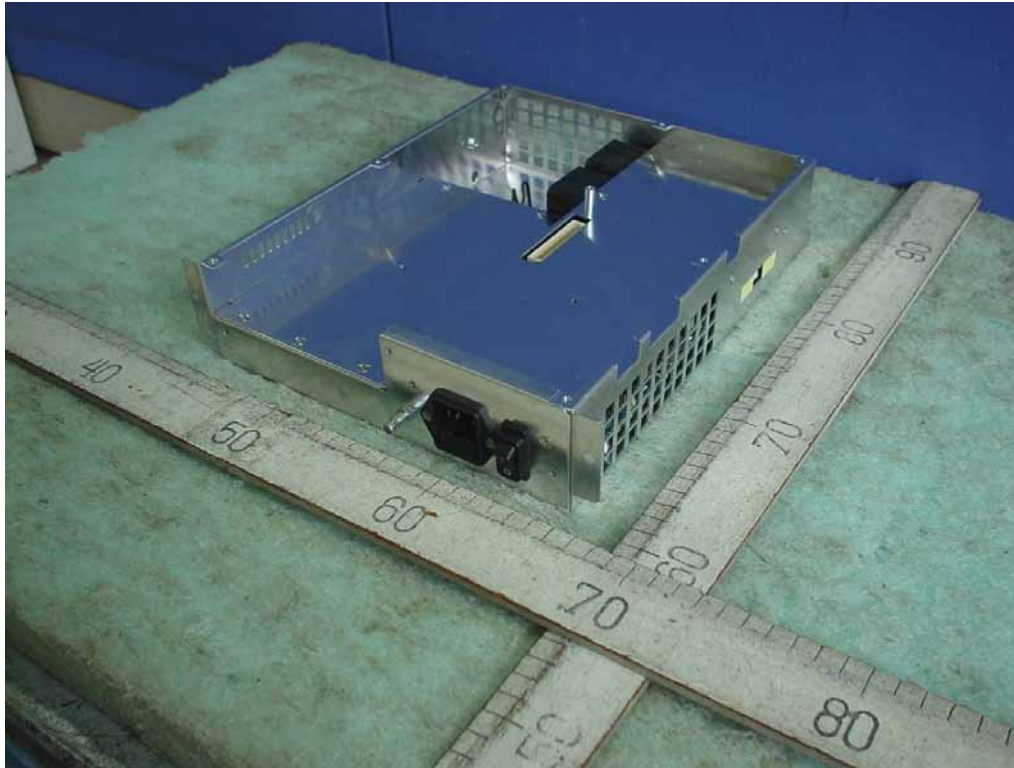
## GROUP DIFFERENCES

National Differences				
Clause	Requirement + Test		Result - Remark	Verdict
	ISO 261	<sub>2)</sub> ISO general-purpose metric screw threads - General plan	-	-
	ISO 262	<sub>2)</sub> ISO general-purpose metric screw threads - Selected sizes for screws, bolts and nuts	-	-
	ISO 527	Series Plastics - Determination of tensile properties	EN ISO 527	Series
	ISO 3864	Series Safety colours and safety signs	-	-
	ISO 4892-1	<sub>2)</sub> Plastics - Methods of exposure to laboratory light sources Part 1: General guidance	EN ISO 4892-1	Series
	ISO 4892-2	<sub>2)</sub> Part 2: Xenon-arc sources	-	-
	ISO 4892-4	<sub>2)</sub> Part 4: Open-flame carbon-arc lamps	EN ISO 4892-2	1999
	ISO 7000	Data-base Graphical symbols for use on equipment - Index and synopsis	-	-
	ISO 8256	<sub>2)</sub> Plastics - Determination of tensile-impact strength	EN ISO 8256	2004
	ISO 9772	<sub>2)</sub> Cellular plastics - Determination of horizontal burning characteristics of small specimens subjected to a small flame	-	-
	ISO 9773	<sub>2)</sub> Plastics - Determination of burning behaviour of thin flexible vertical specimens in contact with a small-flame ignition source	EN ISO 9773	1998 <sup>3)</sup>
	ITU-T Recommendation K.44	<sub>2)</sub> Resistibility tests for telecommunication equipment exposed to overvoltages and overcurrents – Basic Recommendation	-	-
	1) To be published.			
	2) Undated reference.			
	3) Valid edition at date of issue.			
	4) The HD 21 series is related to, but not directly equivalent with IEC 60227 series.			
	5) The HD 21 series is related to, but not directly equivalent with IEC 60245 series.			
	6) EN 132400, Sectional Specification: Fixed capacitors for electromagnetic interference suppression and connection to the supply mains (Assessment level D), and its amendments are related to, but not directly equivalent to IEC 60384-14. They are superseded by EN 60384-14:2005, Which is base on IEC 60384-14:2005.			
	7) EN 61058-1:2002 includes A1:2001 to IEC 61058-1:2000.			

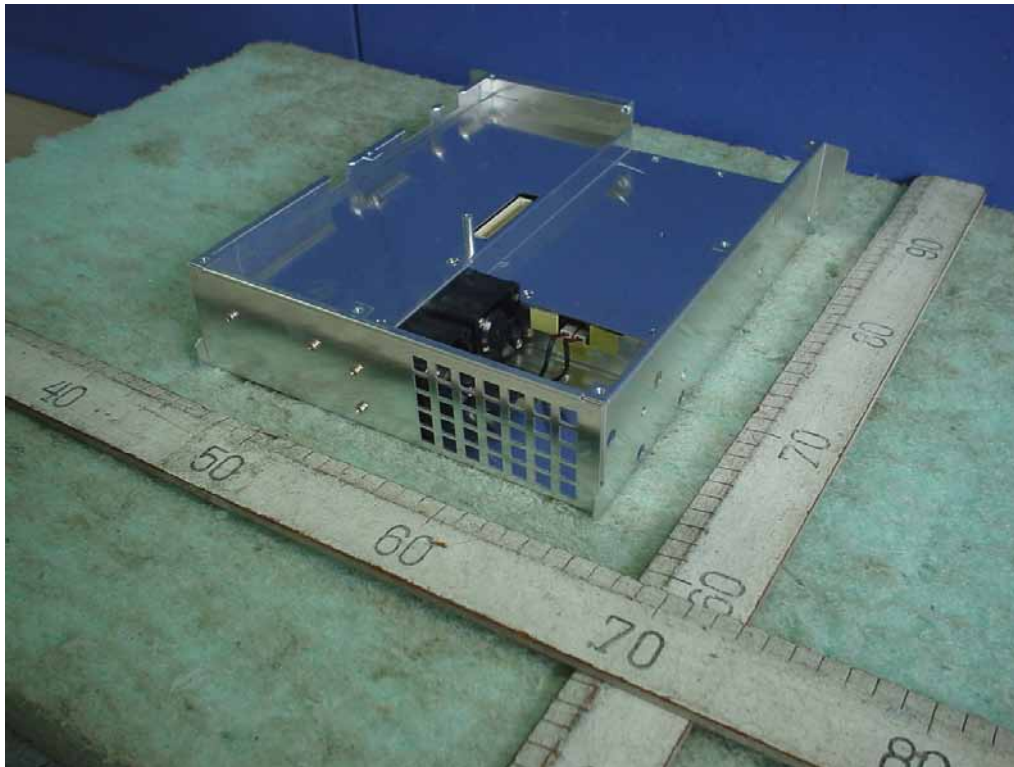
## GROUP DIFFERENCES

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Model: GTM91092-110-M



Model: GTM91092-110-M



Photos

Model: GTM91092-110-M



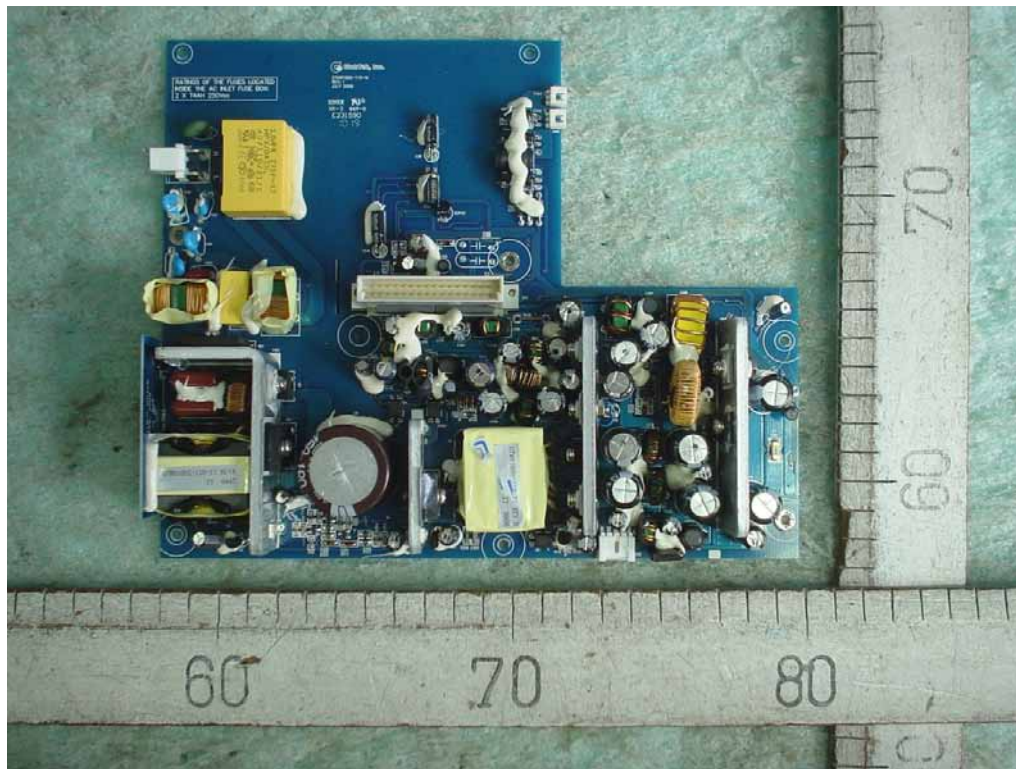
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Photos

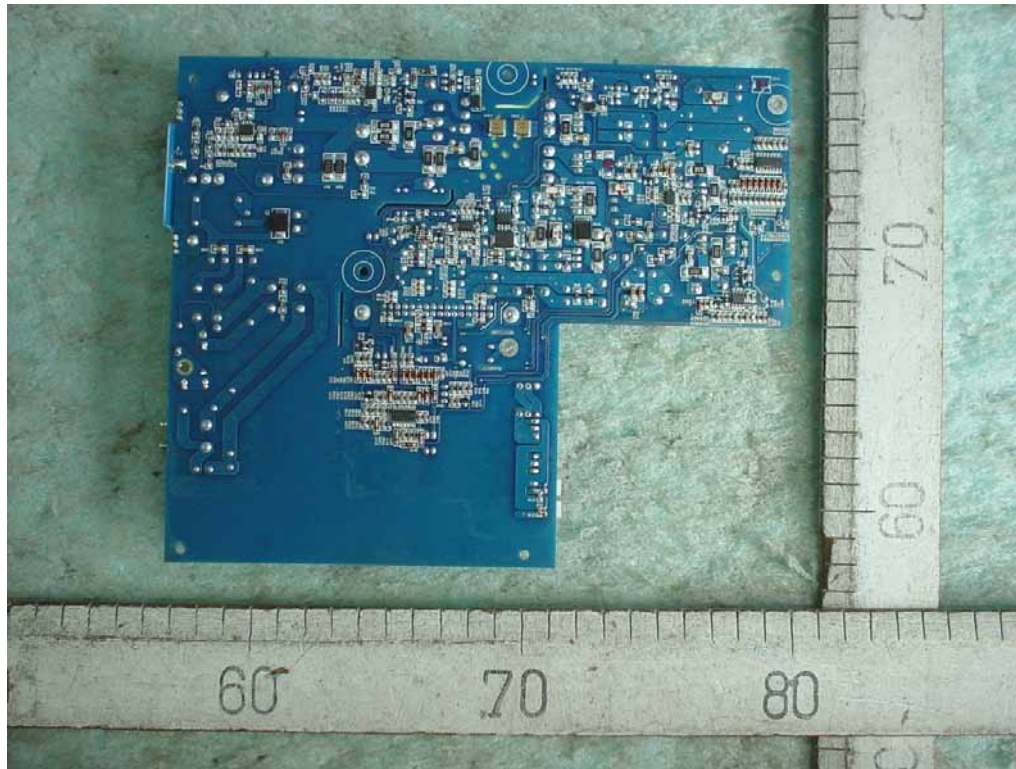
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Model: GTM91092-110-M



Photos

Model: GTM91092-110-M



TRF No. IECEN60950\_1C



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Transformer T2



Photos

Transformer T2



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Transformer T2



Photos

Transformer T2



Transformer T2

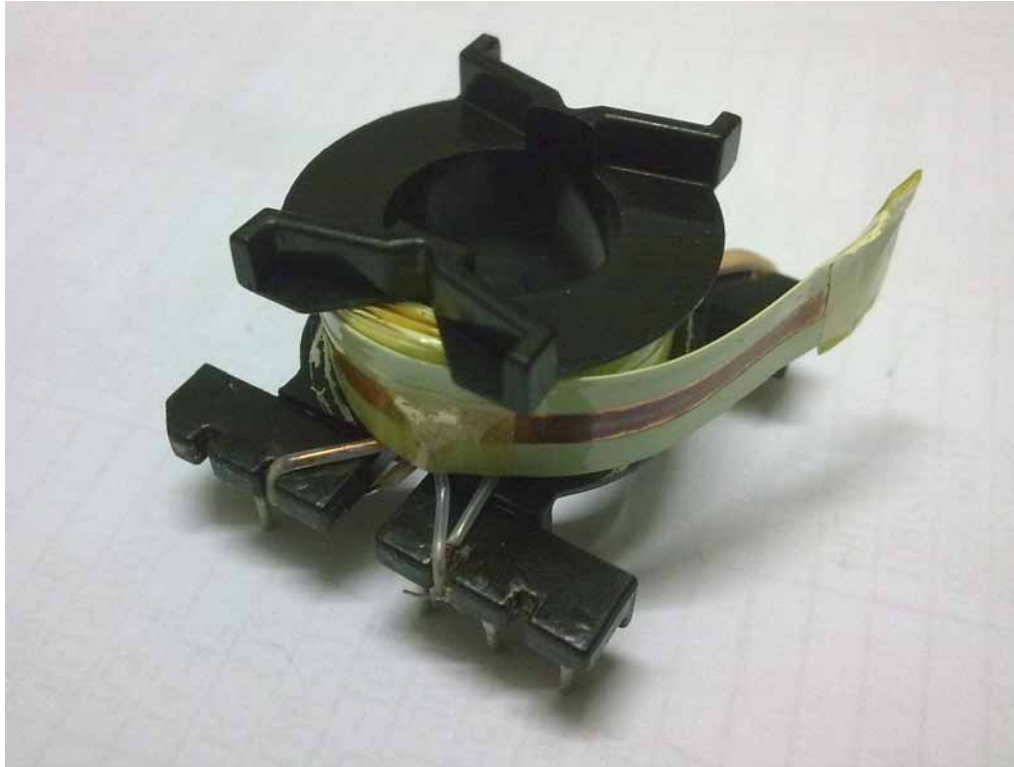


Photos

Transformer T2

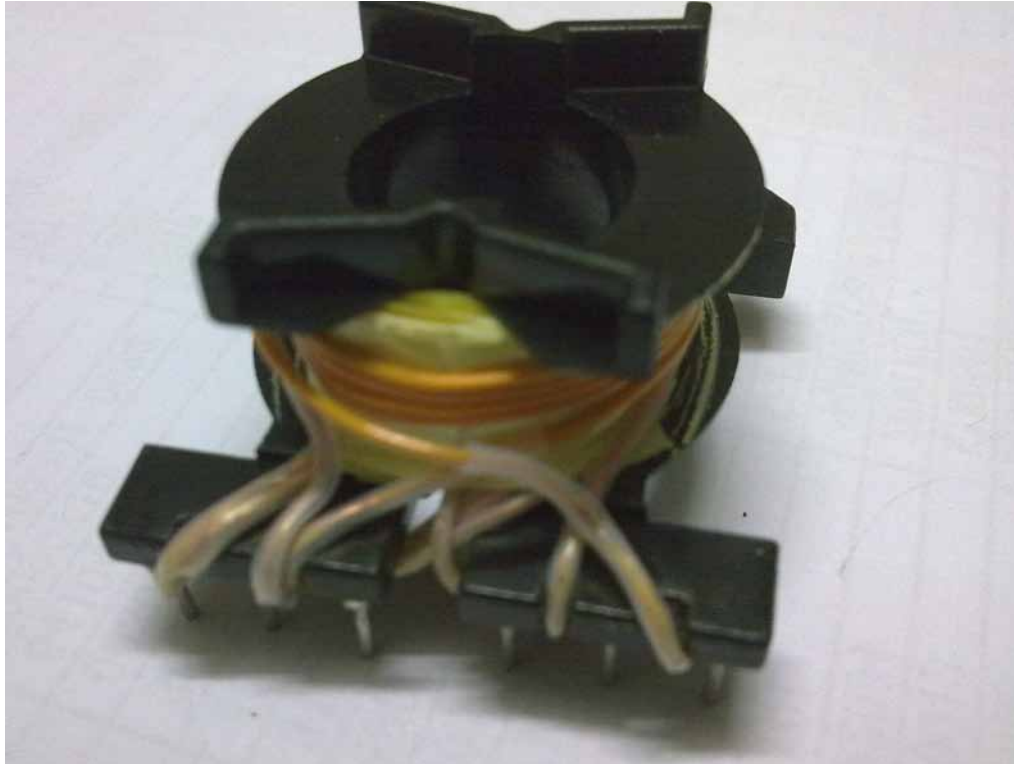


Transformer T2



Photos

Transformer T2



Transformer T2



Photos

Transformer T2

