

Test Report issued under the responsibility of:



# TEST REPORT IEC 60950-1 Information technology equipment – Safety – Part 1: General requirements

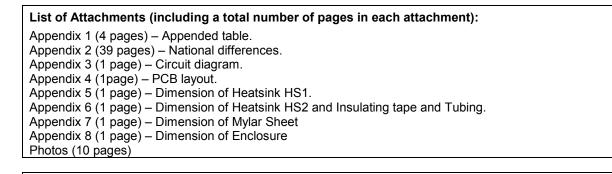
Report Number:	TS11100048-ST
Date of issue	October 26, 2011
Total number of pages	107 pages test report + Appendix 1, 4 pages + Appendix 2, 39 pages + Appendix 3, 1 page + Appendix 4, 1 page + Appendix 5, 1 page + Appendix 6, 1 page + Appendix 7, 1 page + Appendix 8, 1 page + Photos, 10 pages.
CB Testing Laboratory	Intertek Testing Services Taiwan Ltd., Hsinchu Laboratory
Address	No. 11, Lane 275, Ko-Nan 1 Street, Chiang-Tung Li, Shiang-Shan
	District, Hsinchu City, Taiwan
Applicant's name	GlobTek, Inc.
Address	186 Veterans Dr. Northvale, NJ 07647, U.S.A.
Manufacturer's name	Same as the applicant
Address:	Same as the applicant
Test specification:	
Standard	IEC 60950-1:2005 (2nd Edition); Am 1: 2009 and/or
	EN 60950-1:2006 + A11: 2009 + A1: 2010 + A12: 2011
Test procedure:	CB Scheme
Non-standard test method	N/A
Test Report Form No	IEC60950_1B
Test Report Form(s) Originator:	SGS Fimko Ltd
Master TRF	Dated 2010-04
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If this Test Report Form is used by nor Scheme procedure shall be removed.	n-IECEE members, the IECEE/IEC logo and the reference to the CB
	Report unless signed by an approved CB Testing Laboratory te issued by an NCB in accordance with IECEE 02.
Test item description:	Power supply for business machine
Trade Mark	GlobTek
Manufacturer:	Same as applicant
Model/Type reference	GT-43008-WWVV-X.X-TZ
	(see general product information on page 9)
Ratings	Input: 100 – 240 Vac, 50 – 60 Hz, 1.2 A
	Output: 5 – 24 Vdc, 6.5 – 2.08 A, Class I
	(See general product information on page 9)



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Testing procedure and testing location:	
CB Testing Laboratory:	Intertek Testing Services Taiwan Ltd., Hsinchu Laboratory
Testing location/ address:	No. 11, Lane 275, Ko-Nan 1 Street, Chiang-Tung Li, Shiang-Shan District, Hsinchu City, Taiwan
Associated CB Laboratory:	
Testing location/ address:	
Tested by (name + signature)	Daniel Chang Dansel Chang
Approved by (name + signature):	David Huang
Testing procedure: <b>TMP</b>	
Testing location/ address:	
Tested by (name + signature):	
Approved by (name + signature):	
Testing procedure: WMT	
Testing location/ address:	
Tested by (name + signature):	
Witnessed by (name + signature) :	
Approved by (name + signature)	
Testing procedure: SMT	
Testing location/ address:	
Tested by (name + signature):	
Approved by (name + signature):	
Supervised by (name + signature) :	
Testing procedure: <b>RMT</b>	
Testing location/ address:	
Tested by (name + signature):	
Approved by (name + signature):	
Supervised by (name + signature) :	





#### Tests performed (name of test and test clause): **Testing location:** Intertek Testing Services Taiwan Ltd., Hsinchu The sample(s) tested complies with the Laboratory requirements of IEC 60950-1:2005+A1:2009 (2<sup>nd</sup> edition) and EN 60950-1:2006+A11:2009+A1:2010 + A12: 2011. 1.6.2 Input current test 1.7.11 Marking durability test 2.1.1.1 b Finger test 2.1.1.1 c Pin test 2.1.1.5 Energy hazards test 2.1.1.7 Stored discharge on capacitors test 2.2.2 Voltages under normal conditions test 2.2.3 Voltages under fault conditions test 2.4 Limited current circuits test 2.5 Limited power sources test 2.6.3.4 Resistance of Earthing Conductors and Their Terminals Test 2.9.2 Humidity condition test 2.10.2 Determination of working voltage test 2.10.3, 2.10.4 Clearances and creepage distances measurement

Impact test TRF No. IEC60950 1B

test

test

Solid insulation measurement

Mechanical Strength - 10 N Force

Mechanical Strength - 250 N Force

Mechanical Strength - Steel Ball

2.10.5.6

4.2.2

4.2.4

4.2.5

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Summary of testing:



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Tests pe (cont.):	rformed (name of test and test clause)	
4.2.6	Mechanical Strength – drop test	
4.2.7	Mechanical Strength – stress relief test	
4.5.2	Normal operating test	
4.5.5	Ball pressure test	
5.1	Touch current test	
5.2 5.3	Electric strength test Abnormal operating and fault conditions test	
Summar	y of compliance with National Difference	5
Group dif Explanati (CY), Cze Greece (0 (LU), Mal	fferences, special national deviations of all ( ion of CENELEC countries: Austria (AT), Be ech Republic (CZ), Denmark (DK), Estonia GR), Hungary (HU), Iceland (IS), Ireland (IE	lgium (BE), Bulgaria (BG), Croatia (HR), Cyprus EE), Finland (FI), France (FR), Germany (DE), ), Italy (IT), Latvia (LV), Lithuania (LT), Luxembour bland (PL), Portugal (PT), Romania (RO), Spain

Explanation of used codes for National Differences: Korea (KR), Australia (AU).

Additionally evaluated the National Differences for IEC 60950-1:2001 (1<sup>st</sup> edition) by the customer's request: Japan (JP).

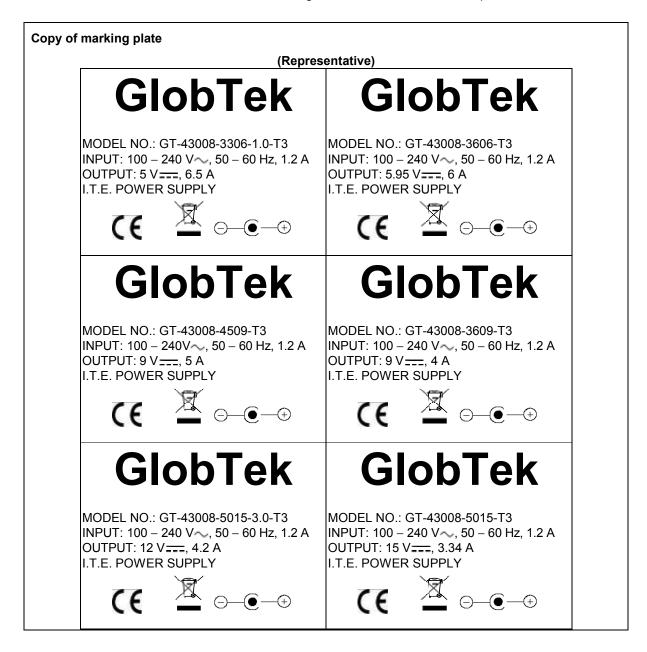
Additionally evaluated the National Differences for IEC 60950:1999 (3<sup>rd</sup> edition) by the customer's request: China (CN).

All country differences listed in the CB Bulletin are covered by the Common Modifications, Special National Conditions, National Deviations, and National Requirements noted above except for the following countries which are documented in Country Differences. Attachments attached to this report: refer to appendix 2 for details.

Compliance with the National requirements of "(countries)" as given in CB Bulletin "(112A)" dated December 2006 and IECEE website dated May 2010 were also confirmed.

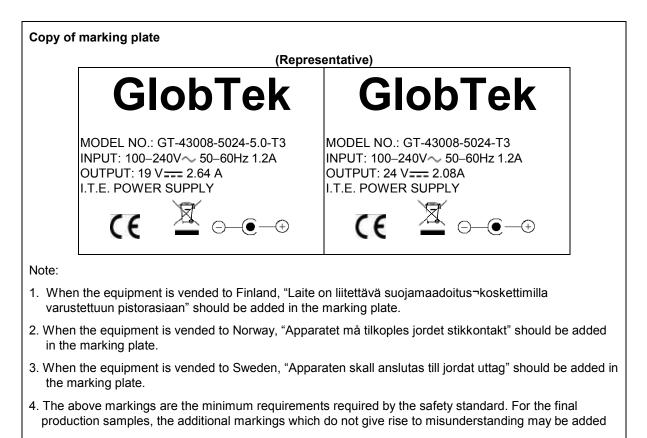


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Test item particulars	
Equipment mobility	[X] movable [] hand-held [X] transportable
	[] stationary [] for building-in [] direct plug-in
Connection to the mains	[X] pluggable equipment [X] type A [] type B
	[] permanent connection
	[X] detachable power supply cord
	[] non-detachable power supply cord
	[] not directly connected to the mains
Operating condition	
	[] rated operating / resting time:
Access location	[] restricted access location
Over voltage category (OVC)	[] other: Not direct connected to the mains
Mains supply tolerance (%) or absolute mains supply	+6%, + 10% and $-10%$ (the test voltage + 10% is
values	
Tested for IT power systems	
IT testing, phase-phase voltage (V)	
Class of equipment	[X] Class I [] Class II [] Class III
	[] Not classified
Considered current rating (A)	16 A or 20 A
Pollution degree (PD)	[] PD 1 [X] PD 2 [] PD 3
IP protection class	IPX0
Altitude during operation (m)	< 2000 m
Altitude of test laboratory (m):	< 2000 m
Mass of equipment (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	October 12, 2011
Date(s) of performance of tests	October 12, 2011 – October 25, 2011



General remarks:		
The test results presented in this report relate only to the This report shall not be reproduced, except in full, without laboratory. "(see Enclosure #)" refers to additional information ap "(see appended table)" refers to a table appended to the	put the written approval of the Issuing testing pended to the report.	
Throughout this report a $\square$ comma / $\boxtimes$ point is used	as the decimal separator.	
This report is for the exclusive use of Intertek's Client Intertek and its Client. Intertek's responsibility and liab agreement. Intertek assumes no liability to any party, agreement, for any loss, expense or damage occasio authorized to permit copying or distribution of this rep. Intertek name or one of its marks for the sale or adve must first be approved in writing by Intertek. The obse only to the sample tested. This report by itself does no ever been under an Intertek certification program.	sility are limited to the terms and conditions of other than to the Client in accordance with the ned by the use of this report. Only the Client is ort and then only in its entirety. Any use of the rtisement of the tested material, product or se ervations and test results in this report are rele	the s ervice evant
When determining the test conclusion, the Measurem	ent Uncertainty of test has been considered.	
Manufacturer's Declaration per sub-clause 6.2.5 of	IECEE 02:	
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided	<ul><li>☑ Yes</li><li>☑ Not applicable</li></ul>	
When differences exist; they shall be identified in the G	eneral product information section.	

Intertek



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### General product information:

The equipment is a switching power adaptor for ITE and indoor use only. The appliance inlet is considered as the disconnect device, and the equipment is considered as movable (transportable) and Class I equipment.

The equipment was submitted and evaluated for maximum manufacturer's recommended ambient of 39 °C.

The equipment intended to be used in tropical conditions.

The enclosures fixed together by ultrasonic welding.

Models GT-43008-WWVV-X.X-T3 and GT-43008-WWVV-X.X-T3A are similar except for the model designation and different appliance inlet.

Explanation of model designation GT-43008-WWVV-X.X-TZ

The WW denotes the watt, Max. 50.4W The VV denotes the output voltage, which can be "05-24".

The "-X.X" denotes the optional deviation, subtracted from standard output voltage in 0.1 volt increments or

blank to indicate the no voltage different.

Z presents different inlets, where "3" presents C14, "3A" presents C6.

The model designations and ratings are detailed as follows:

Model Designation	OU	OUTPUT	
	VOLTAGE(V)	CURRENT(A)	
GT-43008-3306-1.0-TZ	5	6.5	
GT-43008-3606-TZ	5.95	6	
GT-43008-4509-TZ	9	5	
GT-43008-3609-TZ	9	4	
GT-43008-5015-3.0-TZ	12	4.2	
GT-43008-5015-TZ	15	3.34	
GT-43008-5024-5.0-TZ	19	2.64	
GT-43008-5024-TZ	24	2.08	

Models GT-43008-WWVV-X.X-T3 and GT-43008-WWVV-X.X-T3A are identical except different kind of appliance inlet, GT-43008-WWVV-X.X-T3 to indicate the appliance inlet complied with standard sheet C14 of IEC 60320, GT-43008-WWVV-X.X-T3A to indicate the appliance inlet complied with standard sheet C6 of IEC 60320.

Models GT-43008-3306-1.0-T3, GT-43008-3606-T3, GT-43008-4509-T3, GT-43008-5015-3.0-T3, GT-43008-5015-T3, GT-43008-5024-5.0-T3 and GT-43008-5024-T3 are tested as the representatives of these families. Models GT-43008-4509-T3 and GT-43008-3609-T3 are identical except output rating.

All tests are performed on Models GT-43008-3306-1.0-T3, GT-43008-3606-T3, GT-43008-4509-T3, GT-43008-3609-T3, GT-43008-5015-3.0-T3, GT-43008-5015-T3, GT-43008-5024-5.0-T3 and GT-43008-5024-T3 and compliance for sub-clause 2.5 Limit Power Source as the representative of these families, the familial models are based on same circuit diagram, PCB layout and enclosure.



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Abbreviations used in the report:			
<ul> <li>normal conditions</li> <li>functional insulation</li> <li>double insulation</li> <li>between parts of opposite polarity</li> </ul>	N.C. FI DI BOP	<ul> <li>single fault conditions</li> <li>basic insulation</li> <li>supplementary insulation</li> <li>reinforced insulation</li> </ul>	S.F.C BI SI RI
Indicate used abbreviations (if any)			



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IEC 60950-1/Am1			
Clause	Requirement + Test	Result - Remark	Verdict

1 GENERAL

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1.5	Components

1.5	Components		Р
1.5.1	General		Р
	Comply with IEC 60950-1 or relevant component standard	(see appended table 1.5.1)	Ρ
1.5.2	Evaluation and testing of components	Components, which are certified to IEC and/or national standards, are used correctly within their ratings. Components not covered by IEC standards are tested under the conditions present in the equipment	Ρ
1.5.3	Thermal controls	No such component within the EUT	N/A
1.5.4	Transformers	(see also Annex C)	Р
1.5.5	Interconnecting cables	The output is evaluated at the relevant parts of this report	Ρ
1.5.6	Capacitors bridging insulation	Approved X / Y capacitors (see appended table 1.5.1)	Ρ
1.5.7	Resistors bridging insulation	See below	Р
1.5.7.1	Resistors bridging functional, basic or supplementary insulation	Only bridging functional is considered	Ρ
1.5.7.2	Resistors bridging double or reinforced insulation between a.c. mains and other circuits		N/A
1.5.7.3	Resistors bridging double or reinforced insulation between a.c. mains and antenna or coaxial cable		N/A
1.5.8	Components in equipment for IT power systems	AC Power supplies have been evaluated for IT power systems	Ρ
1.5.9	Surge suppressors	(see appended table 1.5.1)	Р
1.5.9.1	General	Approved Varistor comply with Annex Q used in primary circuit (see appended table 1.5.1)	Ρ
1.5.9.2	Protection of VDRs	A fuse is connected in series with VDR	Ρ



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	IEC 60950-1/Am1			
Clause	Requirement + Test	Result - Remark	Verdict	
1.5.9.3	Bridging of functional insulation by a VDR	Approved Varistor locate between mains	Р	
1.5.9.4	Bridging of basic insulation by a VDR		N/A	
1.5.9.5	Bridging of supplementary, double or reinforced insulation by a VDR		N/A	

1.6	Power interface	Power interface	
1.6.1	AC power distribution systems	TN, TT or IT (only for Norway)	Р
1.6.2	Input current	(see appended table 1.6.2)	Р
1.6.3	Voltage limit of hand-held equipment	The EUT is not hand-held equipment	N/A
1.6.4	Neutral conductor		Р

1.7	Marking and instructions		Р
1.7.1	Power rating and identification markings	See below	Р
1.7.1.1	Power rating marking	See below	Р
	Multiple mains supply connections	The EUT is not such type equipment	N/A
	Rated voltage(s) or voltage range(s) (V):	100 – 240 Vac	Р
	Symbol for nature of supply, for d.c. only:	The EUT is supplied by AC mains	Р
	Rated frequency or rated frequency range (Hz):	50 – 60 Hz	Р
	Rated current (mA or A):	1.2 A	Р
1.7.1.2	Identification markings	See below	Р
	Manufacturer's name or trade-mark or identification mark:	GlobTek	Р
	Model identification or type reference:	GT-43008-WWVV-X.X-TZ	Р
	Symbol for Class II equipment only:		N/A
	Other markings and symbols:	Symbols are used according to IEC 60417-1	Р
1.7.2	Safety instructions and marking	The English for "I.T.E. POWER SUPPLY" will be provided with the unit	Р
1.7.2.1	General		Р



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	IEC 60950-1/Am1		
Clause	Requirement + Test	Result - Remark	Verdict
1.7.2.2	Disconnect devices	Approved appliance coupler is provided	Р
1.7.2.3	Overcurrent protective device		N/A
1.7.2.4	IT power distribution systems		Р
1.7.2.5	Operator access with a tool	No such area	N/A
1.2.7.6	Ozone	The EUT does not produce such thing	N/A
1.7.3	Short duty cycles	The EUT is continuous operating type	N/A
1.7.4	Supply voltage adjustment:	Only one power supply voltage range	N/A
	Methods and means of adjustment; reference to installation instructions		N/A
1.7.5	Power outlets on the equipment:	No such component within the EUT	N/A
1.7.6	Fuse identification (marking, special fusing characteristics, cross-reference)	The "FS1" and "T3.15A/250V" are marked adjacent to the main fuse	Р
1.7.7	Wiring terminals		N/A
1.7.7.1	Protective earthing and bonding terminals:		N/A
1.7.7.2	Terminals for a.c. mains supply conductors		N/A
1.7.7.3	Terminals for d.c. mains supply conductors		N/A
1.7.8	Controls and indicators		N/A
1.7.8.1	Identification, location and marking:	No controls and switches within the EUT	N/A
1.7.8.2	Colours:	The LED is illuminated when the EUT is operating and colour is only used for functional indicator	Ρ
1.7.8.3	Symbols according to IEC 60417		N/A
1.7.8.4	Markings using figures	No figures used as marking	N/A
1.7.9	Isolation of multiple power sources:	Only one power supply	N/A
1.7.10	Thermostats and other regulating devices:	No such device within the EUT	N/A



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	IEC 60950-1/Am1			
Clause	Requirement + Test	Result - Remark	Verdict	
1.7.11	Durability	After rubbing test by water and petroleum spirit, the marking still legible; it is not easily possible to remove the marking plate and show no	Р	
1.7.12	Removable parts	curling Marking plate is not placed on removable parts	Р	
1.7.13	Replaceable batteries:	No such device within the EUT	N/A	
	Language(s):			
1.7.14	Equipment for restricted access locations:	The EUT is not such type	N/A	

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Ρ

 IEC 60950-1/Am1

 Clause
 Requirement + Test
 Result - Remark
 Verdict

**PROTECTION FROM HAZARDS** 

2.1	Protection from electric shock and energy haza	rds	Р
2.1.1	Protection in operator access areas		Р
2.1.1.1	Access to energized parts	See comment below	Р
	Test by inspection:	The concerned hazardous parts are not accessible	Р
	Test with test finger (Figure 2A):	The concerned hazardous parts are not accessible	Р
	Test with test pin (Figure 2B):	Hazardous live parts are not accessible	Р
	Test with test probe (Figure 2C):	No TNV circuit within the EUT	N/A
2.1.1.2	Battery compartments	No battery compartment within the EUT	N/A
2.1.1.3	Access to ELV wiring	No internal wiring at ELV	N/A
	Working voltage (Vpeak or Vrms); minimum distance through insulation (mm)		
2.1.1.4	Access to hazardous voltage circuit wiring		N/A
2.1.1.5	Energy hazards:	(see appended table 2.1.1.5)	Р
2.1.1.6	Manual controls	No such devices	N/A
2.1.1.7	Discharge of capacitors in equipment		Р
	Measured voltage (V); time-constant (s):	(see appended table 2.1.1.7)	_
2.1.1.8	Energy hazards – d.c. mains supply	Not direct connected to the d.c. mains	N/A
	a) Capacitor connected to the d.c. mains supply:		N/A
	b) Internal battery connected to the d.c. mains supply:		N/A
2.1.1.9	Audio amplifiers:	No such device within the EUT	N/A
2.1.2	Protection in service access areas		N/A
2.1.3	Protection in restricted access locations		N/A

2.2	SELV circuits		Р
2.2.1	General requirements	See below	Р



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	IEC 60950-1/Am1				
Clause	Requirement + Test	Result - Remark	Verdict		
0.0.0					
2.2.2	Voltages under normal conditions (V):	All accessible voltages are less 42.4 Vpeak or 60 Vdc and are classified as SELV circuits	Р		
2.2.3	Voltages under fault conditions (V):	Single fault did not cause excessive voltage in accessible SELV circuits. Limits of 71 Vpeak and 120 Vdc were not exceeded within 0.2 s and limits 42.4 Vpeak and 60 Vdc were not exceeded for longer than 0.2 s	Ρ		
2.2.4	Connection of SELV circuits to other circuits:	SELV circuits are only connected to other SELV circuits	Р		

2.3	TNV circuits		N/A
2.3.1	Limits	No TNV circuit within the EUT	N/A
	Type of TNV circuits:		
2.3.2	Separation from other circuits and from accessible parts		N/A
2.3.2.1	General requirements		N/A
2.3.2.2	Protection by basic insulation		N/A
2.3.2.3	Protection by earthing		N/A
2.3.2.4	Protection by other constructions		N/A
2.3.3	Separation from hazardous voltages		N/A
-	Insulation employed		
2.3.4	Connection of TNV circuits to other circuits		N/A
	Insulation employed		_
2.3.5	Test for operating voltages generated externally		N/A

2.4	Limited current circuits		Р
2.4.1	General requirements		Р
2.4.2	Limit values		Р
	Frequency (Hz)	(see appended table 2.4.2)	
	Measured current (mA):	(see appended table 2.4.2)	



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	IEC 60950-1/Am1			
Clause	Requirement + Test	Result - Remark	Verdict	
	Measured voltage (V):	(see appended table 2.4.2)		
	Measured circuit capacitance (nF or µF):	(see appended table 2.4.2)		
2.4.3	Connection of limited current circuits to other circuits	Output cirucit as limited current circuits to other cirucits	Р	

2.5	Limited power sources	
	a) Inherently limited output	Р
	b) Impedance limited output	N/A
	c) Regulating network limited output under normal operating and single fault condition	Р
	d) Overcurrent protective device limited output	N/A
	Max. output voltage (V), max. output current (A), max. apparent power (VA): (see appended table 2.5)	
	Current rating of overcurrent protective device (A) .:	
	Use of integrated circuit (IC) current limiters	

2.6	Provisions for earthing and bonding		Р
2.6.1	Protective earthing	Approved Appliance inlet used	Р
2.6.2	Functional earthing		Р
2.6.3	Protective earthing and protective bonding conductors	Protective earting conductor only in approved appliance inlet	Р
2.6.3.1	General		Р
2.6.3.2	Size of protective earthing conductors	Provided by separate approved detachable power supply cord	N/A
	Rated current (A), cross-sectional area (mm <sup>2</sup> ), AWG:		—
2.6.3.3	Size of protective bonding conductors		Р
	Rated current (A), cross-sectional area (mm <sup>2</sup> ), AWG	Complying with the test in 2.6.3.4	_
	Protective current rating (A), cross-sectional area (mm <sup>2</sup> ), AWG:	Resistance from the earth pin of appliance inlet to earthed GND was measured (see appended table 2.6.3.4)	Ρ



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Clause	Requirement + Test	Result - Remark	Verdict
2.6.3.4	Resistance of earthing conductors and their terminations; resistance ( $\Omega$ ), voltage drop (V), test current (A), duration (min):	(see appended table 2.6.3.4)	Ρ
2.6.3.5	Colour of insulation:	After appliance inlet, the insulation of protective bonding conductor is EMI Shield	N/A
2.6.4	Terminals		Р
2.6.4.1	General	The earthing terminal in the appliance inlet is considered as protective earthing terminal	Ρ
2.6.4.2	Protective earthing and bonding terminals		Р
	Rated current (A), type, nominal thread diameter (mm):	Complying with the test in 2.6.3.4	—
2.6.4.3	Separation of the protective earthing conductor from protective bonding conductors		N/A
2.6.5	Integrity of protective earthing		Р
2.6.5.1	Interconnection of equipment	This unit has its own earthing connection. Any other units connected via the output shall be provided SELV only	N/A
2.6.5.2	Components in protective earthing conductors and protective bonding conductors	No switches or overcurrent protective devices in protective earthing / bonding conductors	Ρ
2.6.5.3	Disconnection of protective earth	Approved appliance coupler is provided	Р
2.6.5.4	Parts that can be removed by an operator	No user servicing area	Р
2.6.5.5	Parts removed during servicing		N/A
2.6.5.6	Corrosion resistance	No screws used for portecitve bonding	Р
2.6.5.7	Screws for protective bonding	No TNV circuits	N/A
2.6.5.8	Reliance on telecommunication network or cable distribution system		N/A

2.7	Overcurrent and earth fault protection in primary circuits		Р
2.7.1	Basic requirements Integral part of equipment		Р
	Instructions when protection relies on building installation		N/A



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	IEC 60950-1/Am1			
Clause	Requirement + Test	Result - Remark	Verdict	
2.7.2	Faults not simulated in 5.3.7		N/A	
2.7.3	Short-circuit backup protection	Building installation is considered as the short-circuit backup protection	Р	
2.7.4	Number and location of protective devices:	One current fuse (FS1) is located in the Line pole of primary circuit	Р	
2.7.5	Protection by several devices	Only one protection device	N/A	
2.7.6	Warning to service personnel:	The EUT is not such kinds of design	N/A	

2.8	Safety interlocks		N/A
2.8.1	General principles	No safety interlock or similar devices used within the EUT	N/A
2.8.2	Protection requirements		N/A
2.8.3	Inadvertent reactivation		N/A
2.8.4	Fail-safe operation		N/A
	Protection against extreme hazard		N/A
2.8.5	Moving parts		N/A
2.8.6	Overriding		N/A
2.8.7	Switches, relays and their related circuits		N/A
2.8.7.1	Separation distances for contact gaps and their related circuits (mm):		N/A
2.8.7.2	Overload test		N/A
2.8.7.3	Endurance test		N/A
2.8.7.4	Electric strength test		N/A
2.8.8	Mechanical actuators		N/A

2.9	9 Electrical insulation		Р
2.9.1	Properties of insulating materials	No natural rubber, hygroscopic materials or asbestos are used as insulation	Р
2.9.2	Humidity conditioning	120 hours (considered the tropical conditions)	Р
	Relative humidity (%), temperature ( $\mathbb{C}$ ):	95 %, 40 °C	



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Clause	Requirement + Test	Result - Remark	Verdict	
2.9.3	Grade of insulation	Considered	Р	
2.9.4	Separation from hazardous voltages	SELV circuits separated from primary by double / reinforce insulation	Р	
	Method(s) used	Method 1		

2.10	Clearances, creepage distances and distances through insulation		Р
2.10.1	General		Р
2.10.1.1	Frequency:	The frequency does not exceting 30 k Hz	Р
2.10.1.2	Pollution degrees:	Pollution degree 2	Р
2.10.1.3	Reduced values for functional insualtion	Refer sub-clause 5.3.4	Р
2.10.1.4	Intervening unconnected conductive parts	No such conductive parts	Р
2.10.1.5	Insulation with varying dimensions	Not applicable	N/A
2.10.1.6	Special separation requirements	No TNV circuit	N/A
2.10.1.7	Insulation in circuits generating starting pulses	No lamps	N/A
2.10.2	Determination of working voltage		Р
2.10.2.1	General		Р
2.10.2.2	RMS working voltage	(see appended table 2.10.2)	Р
2.10.2.3	Peak working voltage	(see appended table 2.10.2)	Р
2.10.3	Clearances		Р
2.10.3.1	General		Р
2.10.3.2	Mains transient voltages		Р
	a) AC mains supply:	Overvoltage Category II	Р
	b) Earthed d.c. mains supplies:		N/A
	c) Unearthed d.c. mains supplies:		N/A
	d) Battery operation		N/A
2.10.3.3	Clearances in primary circuits	(see appended tables 2.10.3 and 2.10.4)	Р
2.10.3.4	Clearances in secondary circuits	See sub-clause 5.3.4	Р
2.10.3.5	Clearances in circuits having starting pulses	No such device within the EUT	N/A



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Clause	Requirement + Test	Result - Remark	Verdict	
2.10.3.6	Transients from a.c. mains supply	2500 Vpeak	Р	
2.10.3.7	Transients from d.c. mains supply		N/A	
2.10.3.8	Transients from telecommunication networks and cable distribution systems:		N/A	
2.10.3.9	Measurement of transient voltage levels		N/A	
	a) Transients from a mains suplply		N/A	
	For an a.c. mains supply		N/A	
	For a d.c. mains supply		N/A	
	b) Transients from a telecommunication network :		N/A	
2.10.4	Creepage distances		Р	
2.10.4.1	General		Р	
2.10.4.2	Material group and caomparative tracking index		Р	
	CTI tests:	Considered as Material Group	_	
2.10.4.3	Minimum creepage distances	(see appended tables 2.10.3 and 2.10.4)	Р	
2.10.5	Solid insulation	,	Р	
2.10.5.1	General		Р	
2.10.5.2	Distances through insulation		Р	
2.10.5.3	Insulating compound as solid insulation	No insulation compound	N/A	
2.10.5.4	Semiconductor devices	Approved optocouplers (U1) (see also appended table 1.5.1)	Ρ	
2.10.5.5.	Cemented joints	,	N/A	
2.10.5.6	Thin sheet material – General	Insulation tapes provided reinforced insulation on the core of transformer	Ρ	
2.10.5.7	Separable thin sheet material	(see appended table 2.10.5)	Р	
	Number of layers (pcs):	(see appended table 2.10.5)		
2.10.5.8	Non-separable thin sheet material	See sub-clause 2.10.5.10	Р	
2.10.5.9	Thin sheet material – standard test procedure	See sub-clause 2.10.5.10	Р	
	Electric strength test			
2.10.5.10	Thin sheet material – alternative test procedure		Р	

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Clause	Requirement + Test	Result - Remark	Verdict	
	Electric strength test	(see appended table 2.10.5)		
2.10.5.11	Insulation in wound components	(see Annex U)	Р	
2.10.5.12	Wire in wound components	Approved triple insulation wire for T1 secondary winding	Р	
	Working voltage:	(see appended table 2.10.2)	Р	
	a) Basic insulation not under stress:		N/A	
	b) Basic, supplemetary, reinforced insulation:	(see Annex U)	N/A	
	c) Compliance with Annex U:	3 layers	Р	
	Two wires in contact inside wound component; angle between 45° and 90°:	Physical separation in the form of insulating sleeving provided to relieve mechanical stress at the crossover point	Ρ	
2.10.5.13	Wire with solvent-based enamel in wound components	No such device within the EUT	N/A	
	Electric strength test			
	Routine test		N/A	
2.10.5.14	Additional insulation in wound components		N/A	
	Working voltage:		N/A	
	- Basic insulation not under stress:		N/A	
	- Supplemetary, reinforced insulation		N/A	
2.10.6	Construction of printed boards		Р	
2.10.6.1	Uncoated printed boards	(see appended table 2.10.3 and 2.10.4)	Р	
2.10.6.2	Coated printed boards		N/A	
2.10.6.3	Insulation between conductors on the same inner surface of a printed board		N/A	
2.10.6.4	Insulation between conductors on different layers of a printed board		N/A	
	Distance through insulation		N/A	
	Number of insulation layers (pcs):		N/A	
2.10.7	Component external terminations		N/A	
2.10.8	Tests on coated printed boards and coated components		N/A	



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Clause	Requirement + Test	Result - Remark	Verdict
			ſ
2.10.8.1	Sample preparation and preliminary inspection		N/A
2.10.8.2	Thermal conditioning		N/A
2.10.8.3	Electric strength test		N/A
2.10.8.4	Abrasion resistance test		N/A
2.10.9	Thermal cycling		N/A
2.10.10	Test for Pollution Degree 1 environment and insulating compound		N/A
2.10.11	Tests for semiconductor devices and cemented joints	Approved optocouplers (U1) (see also appended table 1.5.1)	Р
2.10.12	Enclosed and sealed parts		N/A



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3	WIRING, CONNECTIONS AND SUPPLY	Р
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3.1	General		Р
3.1.1	Current rating and overcurrent protection	(see appended table 1.5.1)	Р
3.1.2	Protection against mechanical damage	Smooth wireways	Р
3.1.3	Securing of internal wiring	All internal wirings are suitable fixed	Ρ
3.1.4	Insulation of conductors		N/A
3.1.5	Beads and ceramic insulators		N/A
3.1.6	Screws for electrical contact pressure	No screws are used as electrical connections	N/A
3.1.7	Insulating materials in electrical connections		N/A
3.1.8	Self-tapping and spaced thread screws	No such screws are used	N/A
3.1.9	Termination of conductors	considered	Р
	10 N pull test		Р
3.1.10	Sleeving on wiring	No sleeving used as supplementary insulation	N/A

3.2	Connection to a mains supply		Р
3.2.1	Means of connection	Approved appliance inlet is provided	Р
3.2.1.1	Connection to an a.c. mains supply	An appliance inlet for connection of a detachable power supply cord	Р
3.2.1.2	Connection to a d.c. mains supply		N/A
3.2.2	Multiple supply connections	There is only one supply connection for the EUT	N/A
3.2.3	Permanently connected equipment	The EUT is not such types	N/A
	Number of conductors, diameter of cable and conduits (mm):		—
3.2.4	Appliance inlets	Approved appliance inlet is provided (see appended table 1.5.1)	Р
3.2.5	Power supply cords	See the Note in appended table 1.5.1	N/A
3.2.5.1	AC power supply cords		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
		1	
	Туре		
	Rated current (A), cross-sectional area (mm <sup>2</sup> ), AWG:		
3.2.5.2	DC power supply cords		N/A
3.2.6	Cord anchorages and strain relief		N/A
	Mass of equipment (kg), pull (N)		_
	Longitudinal displacement (mm):		_
3.2.7	Protection against mechanical damage		N/A
3.2.8	Cord guards		N/A
	Diameter or minor dimension D (mm); test mass (g)		
	Radius of curvature of cord (mm):		
3.2.9	Supply wiring space		N/A

3.3	Wiring terminals for connection of external conductors		N/A
3.3.1	Wiring terminals	No wiring terminal	N/A
3.3.2	Connection of non-detachable power supply cords		N/A
3.3.3	Screw terminals		N/A
3.3.4	Conductor sizes to be connected		N/A
	Rated current (A), cord/cable type, cross-sectional area (mm <sup>2</sup> ):		—
3.3.5	Wiring terminal sizes		N/A
	Rated current (A), type, nominal thread diameter (mm):		—
3.3.6	Wiring terminal design		N/A
3.3.7	Grouping of wiring terminals		N/A
3.3.8	Stranded wire		N/A

3.4	Disconnection from the mains supply		Р
3.4.1	General requirement		Р
3.4.2	Disconnect devices	The appliance coupler is considered as the disconnect devices	Р



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Clause	Requirement + Test	Result - Remark	Verdict	
3.4.3	Permanently connected equipment	The EUT is not such	N/A	
		equipment		
3.4.4	Parts which remain energized		N/A	
3.4.5	Switches in flexible cords		N/A	
3.4.6	Number of poles – single-phase and d.c. equipment	Approved appliance coupler is provided	Р	
3.4.7	Number of poles – three-phase equipment		N/A	
3.4.8	Switches as disconnect devices		N/A	
3.4.9	Plugs as disconnect devices		N/A	
3.4.10	Interconnected equipment		N/A	
3.4.11	Multiple power sources	Only one supply source	N/A	

3.5	Interconnection of equipment		Р
3.5.1	General requirements		Р
3.5.2	Types of interconnection circuits:	SELV to SELV	Р
3.5.3	ELV circuits as interconnection circuits	No ELV interconnection circuits	N/A
3.5.4	Data ports for additional equipment		N/A



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## 4 PHYSICAL REQUIREMENTS

4.1	Stability		Р
	Angle of 10°	The mass of EUT is less than 7 kg	N/A
	Test force (N):	The mass of EUT is less than 25 kg and it is not floor- standing unit	N/A

4.2	Mechanical strength		Р
4.2.1	General		Р
	Rack-mounted equipment.	The EUT is not such type equipment	N/A
4.2.2	Steady force test, 10 N	The EUT is still complying with relevant requirements of this standard after 10 N force is applied to the components	Ρ
4.2.3	Steady force test, 30 N		N/A
4.2.4	Steady force test, 250 N	The EUT is still complying with relevant requirements of this standard	Р
4.2.5	Impact test	The EUT is still complying with relevant requirements of this standard	Р
	Fall test	The EUT is still complying with relevant requirements of this standard	Ρ
	Swing test		N/A
4.2.6	Drop test; height (mm):	The EUT is still complying with relevant requirements of this standard	Р
4.2.7	Stress relief test	90 °C, all the enclosure materials listed in the table 1.5.1 are tested	Р
4.2.8	Cathode ray tubes	No such devices within the EUT	N/A
	Picture tube separately certified:		N/A



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Clause	Requirement + Test	Result - Remark	Verdict	
4.2.9	High pressure lamps	No such devices within the EUT	N/A	
4.2.10	Wall or ceiling mounted equipment; force (N):	The EUT is not such equipment	N/A	
4.2.11	Rotating solid media	No such device within the EUT	N/A	
	Test to cover on the door		N/A	

4.3	Design and construction		Р
4.3.1	Edges and corners	The outer surface of the EUT is smoothed	Ρ
4.3.2	Handles and manual controls; force (N)	No such device within the EUT	N/A
4.3.3	Adjustable controls	No such device within the EUT	N/A
4.3.4	Securing of parts	All parts are suitable fixed	Р
4.3.5	Connection by plugs and sockets	No such devices within the EUT	N/A
4.3.6	Direct plug-in equipment		N/A
	Torque:		_
	Compliance with the relevant mains plug standard		N/A
4.3.7	Heating elements in earthed equipment	No such device within the EUT	N/A
4.3.8	Batteries	No such device within the EUT	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
4.3.9	Oil and grease	No such material within the EUT	N/A
4.3.10	Dust, powders, liquids and gases	The EUT does not produce such thing	N/A



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Clause	Requirement + Test	Result - Remark	Verdict
4.3.11	Containers for liquids or gases	No such device within the EUT	N/A
4.3.12	Flammable liquids	No such material is used	N/A
	Quantity of liquid (I)		N/A
	Flash point (°C):		N/A
4.3.13	Radiation		N/A
4.3.13.1	General		N/A
4.3.13.2	Ionizing radiation	The EUT does not generate ionizing radiation	N/A
	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	The EUT does not produce significant UV radiation	N/A
	Part, property, retention after test, flammability classification		N/A
4.3.13.4	Human exposure to ultraviolet (UV) radiation:	The EUT does not produce significant UV radiation	N/A
4.3.13.5	Lasers (including laser diodes) and LEDs		N/A
4.3.13.5.1	Lasers (including laser laser diodes)	No such device within the EUT	N/A
	Laser class		—
4.3.13.5.2	Light emitting diodes (LEDs)		—
4.3.13.6	Other types:	No such device within the EUT	N/A

4.4	.4 Protection against hazardous moving parts		Р
4.4.1	General	See below	Р
4.4.2	Protection in operator access areas:	No hazardous moving parts within the EUT	N/A
	Household and home/office document/media shredders	The EUT is not such type equipment	N/A
4.4.3	Protection in restricted access locations:	No hazardous moving parts within the EUT	N/A



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4.4.4	Protection in service access areas	No hazardous moving parts within the EUT	N/A	
4.4.5	Protection against moving fan blades	No hazardous moving parts within the EUT	N/A	
4.4.5.1	General		N/A	
	Not considered to cause pain or injury. A)		N/A	
	Is considered to cause pain, not injury. B)		N/A	
	Considered to cause injury. C):		N/A	
4.4.5.2	Protection for users		N/A	
	Use of symbol or warning		N/A	
4.4.5.3	Protection for service persons		N/A	
	Use of symbol or warning		N/A	

4.5	Thermal requirements		Р
4.5.1	General	Considered	Р
4.5.2	Temperature tests	(see appended table 4.5.2)	Р
	Normal load condition per Annex L	See Annex L.7	
4.5.3	Temperature limits for materials	(see appended table 4.5.2)	Р
4.5.4	Touch temperature limits	(see appended table 4.5.2)	Р
4.5.5	Resistance to abnormal heat:	(see appended table 4.5.5)	Р

4.6	Openings in enclosures		Р
4.6.1	Top and side openings		N/A
	Dimensions (mm)	No opening at all	
4.6.2	Bottoms of fire enclosures		Р
	Construction of the bottomm, dimensions (mm):	No opening at all	
4.6.3	Doors or covers in fire enclosures	No door or cover is provided	N/A
4.6.4	Openings in transportable equipment	No opening at all	N/A
4.6.4.1	Constructional design measures		N/A
	Dimensions (mm):		
4.6.4.2	Evaluation measures for larger openings		N/A
4.6.4.3	Use of metallized parts		N/A

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No such assembly within the

No such component within the

EUT

EUT

N/A

N/A

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4.6.5	Adhesives for constructional purposes	No barriers or screen provided to complying with the relevant requirements of sub- clause 4.6.1, 4.6.2 or 4.6.4	N/A
	Conditioning temperature (°C), time (weeks):		_
4.7	Resistance to fire		Р
4.7.1	Reducing the risk of ignition and spread of flame		Р
	Method 1, selection and application of components wiring and materials	(see appended table 4.7)	Р
	Method 2, application of all of simulated fault condition tests	(see appended table 5.3)	N/A
4.7.2	Conditions for a fire enclosure	Fire enclosure is provided	Р
4.7.2.1	Parts requiring a fire enclosure		Р
4.7.2.2	Parts not requiring a fire enclosure		N/A
4.7.3	Materials		Р
4.7.3.1	General	Components and materials have adequate flammability classification	Р
4.7.3.2	Materials for fire enclosures	(see appended table 1.5.1)	Р
4.7.3.3	Materials for components and other parts outside fire enclosures	No parts outside the fire enclosure	N/A
4.7.3.4	Materials for components and other parts inside fire enclosures	(see appended table 1.5.1)	Р

enclosures

Materials for air filter assemblies

Materials used in high-voltage components

4.7.3.5

4.7.3.6



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5

### ELECTRICAL REQUIREMENTS AND SIMULATED ABNORMAL CONDITIONS

5.1	Touch current and protective conductor current		Р
5.1.1	General		Р
5.1.2	Configuration of equipment under test (EUT)	Equipment designed for connection to only one power surce	Р
5.1.2.1	Single connection to an a.c. mains supply		Р
5.1.2.2	Redundant multiple connections to an a.c. mains supply	Single connection to a.c. mains supply	N/A
5.1.2.3	Simultaneous multiple connections to an a.c. mains supply	Single connection to a.c. mains supply	N/A
5.1.3	Test circuit	Test circuit as in figure 5A is used	Р
5.1.4	Application of measuring instrument	Measuring instrument as in annex D.1 is used	Р
5.1.5	Test procedure		Р
5.1.6	Test measurements		Р
	Supply voltage (V)	(see appended table 5.1)	
	Measured touch current (mA):	(see appended table 5.1)	_
	Max. allowed touch current (mA)	(see appended table 5.1)	_
	Measured protective conductor current (mA):		
	Max. allowed protective conductor current (mA):		
5.1.7	Equipment with touch current exceeding 3,5 mA	The EUT is not such equipment	N/A
5.1.7.1	General		N/A
5.1.7.2	Simultaneous multiple connections to the supply		N/A
5.1.8	Touch currents to telecommunication networks and cable distribution systems and from telecommunication networks	No TNV circuit within the EUT	N/A
5.1.8.1	Limitation of the touch current to a telecommunication network or to a cable distribution system	No TNV circuit within the EUT	N/A
	Supply voltage (V)		
	Measured touch current (mA):		



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	Max. allowed touch current (mA):		_	
5.1.8.2	Summation of touch currents from telecommunication networks	No TNV circuit within the EUT	N/A	
	a) EUT with earthed telecommunication ports:		N/A	
	b) EUT whose telecommunication ports have no reference to protective earth		N/A	

5.2	Electric strength		Р
5.2.1	General	(see appended table 5.2)	Р
5.2.2	Test procedure	(see appended table 5.2)	Р

5.3	Abnormal operating and fault conditions		Р
5.3.1	Protection against overload and abnormal operation	(see appended table 5.3)	Р
5.3.2	Motors		N/A
5.3.3	Transformers	(see appended table 5.3 and Annex C)	Р
5.3.4	Functional insulation:	Methods a), b) or c)	Р
5.3.5	Electromechanical components	No such component within EUT	N/A
5.3.6	Audio amplifiers in ITE:	No such component within EUT	N/A
5.3.7	Simulation of faults	(see appended table 5.3)	Р
5.3.8	Unattended equipment	There are no thermostats and similar components within the EUT	N/A
5.3.9	Compliance criteria for abnormal operating and fault conditions	No fire propagated beyond the equipment, no molten metal was emitted and the enclosures no deformed	Р
5.3.9.1	During the tests		Р
5.3.9.2	After the tests	After test, the EUT still complies with relevant requirements of this standard	Р



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#### 6 CONNECTION TO TELECOMMUNICATION NETWORKS

N/A

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6.1	Protection of telecommunication network service persons, and users of other equipment connected to the network, from hazards in the equipment		N/A
6.1.1	Protection from hazardous voltages		N/A
6.1.2	Separation of the telecommunication network from e	earth	N/A
6.1.2.1	Requirements	No TNV circuit within the EUT	N/A
	Supply voltage (V):		
	Current in the test circuit (mA):		
6.1.2.2	Exclusions:		N/A
6.2	Protection of equipment users from overvoltages on telecommunication networks		N/A
6.2.1	Separation requirements	No TNV circuit within the EUT	N/A
6.2.2	Electric strength test procedure		N/A
6.2.2.1	Impulse test		N/A
6.2.2.2	Steady-state test		N/A
6.2.2.3	Compliance criteria		N/A

6.3	Protection of the telecommunication wiring system from overheating		N/A
	Max. output current (A):	The EUT is not connected to telecommunication network	_
	Current limiting method:		



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7	CONNECTION TO CABLE DISTRIBUTION SYSTEMS		N/A
7.1	General		N/A
7.2	Protection of cable distribution system service persons, and users of other equipment connected to the system, from hazardous voltages in the equipment	The EUT is not connected to cable distribution system	N/A
7.3	Protection of equipment users from overvoltages on the cable distribution system		N/A
7.4	Insulation between primary circuits and cable distribution systems		N/A
7.4.1	General		N/A
7.4.2	Voltage surge test		N/A
7.4.3	Impulse test		N/A



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Clause	Requirement + Test	Result - Remark	Verdict		
•			N1/A		
A	ANNEX A, TESTS FOR RESISTANCE TO HEAT AND FIRE		N/A		
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)	The EUT is not such equipment	N/A		
A.1.1	Samples:				
	Wall thickness (mm):				
A.1.2	Conditioning of samples; temperature (°C):		N/A		
A.1.3	Mounting of samples		N/A		
A.1.4	Test flame (see IEC 60695-11-3)		N/A		
	Flame A, B, C or D				
A.1.5	Test procedure		N/A		
A.1.6	Compliance criteria		N/A		
	Sample 1 burning time (s)				
	Sample 2 burning time (s)				
	Sample 3 burning time (s)		_		
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)				
A.2.1	Samples, material:		—		
	Wall thickness (mm):				
A.2.2	Conditioning of samples; temperature ( $\mathfrak{C}$ ):		N/A		
A.2.3	Mounting of samples:		N/A		
A.2.4	Test flame (see IEC 60695-11-4)		N/A		
	Flame A, B or C				
A.2.5	Test procedure		N/A		
A.2.6	Compliance criteria		N/A		
	Sample 1 burning time (s)				
	Sample 2 burning time (s)				
	Sample 3 burning time (s)		—		
A.2.7	Alternative test acc. to IEC 60695-11-5, cl. 5 and 9		N/A		
	Sample 1 burning time (s):				
	Sample 2 burning time (s):				
	Sample 3 burning time (s):		—		
A.3	Hot flaming oil test (see 4.6.2)		N/A		

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A.3.1	Mounting of samples		N/A
A.3.2	Test procedure		N/A
A.3.3	Compliance criterion		N/A

В	ANNEX B, MOTOR TESTS UNDER ABNORMAL CONDITIONS (see 4.7.2.2 and 5.3.2)		N/A
B.1	General requirements	No such device within EUT	N/A
	Position:		
	Manufacturer:		
	Туре:		
	Rated values:		
B.2	Test conditions		N/A
B.3	Maximum temperatures		N/A
B.4	Running overload test		N/A
B.5	Locked-rotor overload test		N/A
	Test duration (days)		_
	Electric strength test: test voltage (V):		_
B.6	Running overload test for d.c. motors in secondary circuits		N/A
B.6.1	General		N/A
B.6.2	Test procedure		N/A
B.6.3	Alternative test procedure		N/A
B.6.4	Electric strength test; test voltage (V):		N/A
B.7	Locked-rotor overload test for d.c. motors in secondary circuits		N/A
B.7.1	General		N/A
B.7.2	Test procedure		N/A
B.7.3	Alternative test procedure		N/A
B.7.4	Electric strength test; test voltage (V):		N/A
B.8	Test for motors with capacitors		N/A
B.9	Test for three-phase motors		N/A
B.10	Test for series motors		N/A
	Operating voltage (V):		



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Clause	Requirement + Test	Result - Remark	Verdict

C	ANNEX C, TRANSFORMERS (see 1.5.4 and 5.3.3)		Р
	Position:	T1 (see the illustration on table C.2 for physical construction)	_
	Manufacturer:	GlobTek	
	Туре:	See appended table 1.5.1	_
	Rated values:	Class B	_
	Method of protection	With external overcurrent protection	—
C.1	Overload test	(see appended table 5.3)	Р
C.2	Insulation	(see appended table 5.2)	Р
	Protection from displacement of windings:	The end-turn of each winding is fixed by insulating tape	Р

D	ANNEX D, MEASURING INSTRUMENTS FOR TOUCH-CURRENT TESTS (see 5.1.4)		Р
D.1	Measuring instrument		Р
D.2	Alternative measuring instrument		N/A

ANNEX E, TEMPERATURE RISE OF A WINDING (see 1.4.13)

N/A

F	ANNEX F, MEASUREMENT OF CLEARANCES AND CREEPAGE DISTANCES	Р
	(see 2.10 and Annex G)	

G	ANNEX G, ALTERNATIVE METHOD FOR DETERMINING MINIMUM CLEARANCES	N/A
G.1	Clearances	N/A
G.1.1	General	N/A
G.1.2	Summary of the procedure for determining minimum clearances	N/A
G.2	Determination of mains transient voltage (V)	N/A
G.2.1	AC mains supply	N/A
G.2.2	Earthed d.c. mains supplies	N/A
G.2.3	Unearthed d.c. mains supplies	N/A
G.2.4	Battery operation	N/A



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Clause	Requirement + Test	Result - Remark	Verdict
G.3	Determination of telecommunication network transient voltage (V)		N/A
G.4	Determination of required withstand voltage (V)		N/A
G.4.1	Mains transients and internal repetitive peaks:		N/A
G.4.2	Transients from telecommunication networks:		N/A
G.4.3	Combination of transients		N/A
G.4.4	Transients from cable distribution systems		N/A
G.5	Measurement of transient voltages (V)		N/A
	a) Transients from a mains supply		N/A
	For an a.c. mains supply		N/A
	For a d.c. mains supply		N/A
	b) Transients from a telecommunication network		N/A
G.6	Determination of minimum clearances:		N/A

Н	ANNEX H, IONIZING RADIATION (see 4.3.13)	N/A
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J	ANNEX J, TABLE OF ELECTROCHEMICAL POTENTIALS (see 2.6.5.6)	
	Metal(s) used	

К	ANNEX K, THERMAL CONTROLS (see 1.5.3 and 5.3.8)	N/A
K.1	Making and breaking capacity	N/A
K.2	Thermostat reliability; operating voltage (V):	N/A
K.3	Thermostat endurance test; operating voltage (V)	N/A
K.4	Temperature limiter endurance; operating voltage (V):	N/A
K.5	Thermal cut-out reliability	N/A
K.6	Stability of operation	N/A

L	ANNEX L, NORMAL LOAD CONDITIONS FOR SOME TYPES OF ELECTRICAL BUSINESS EQUIPMENT (see 1.2.2.1 and 4.5.2)	
L.1	Typewriters	N/A
L.2	Adding machines and cash registers	N/A
L.3	Erasers	N/A
L.4	Pencil sharpeners	N/A

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L.5	Duplicators and copy machines		N/A	
L.6	Motor-operated files		N/A	
L.7	Other business equipment	Maximum normal operation	Р	

М	ANNEX M, CRITERIA FOR TELEPHONE RINGING SIGNALS (see 2.3.1)	N/A
M.1	Introduction	N/A
M.2	Method A	N/A
M.3	Method B	N/A
M.3.1	Ringing signal	N/A
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:	N/A
M.3.2.1	Conditions for use of a tripping device or a monitoring voltage	N/A
M.3.2.2	Tripping device	N/A
M.3.2.3	Monitoring voltage (V)	N/A

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)		N/A
N.1	ITU-T impulse test generators		N/A
N.2	IEC 60065 impulse test generator		N/A

Р	ANNEX

# X P, NORMATIVE REFERENCES

Q	ANNEX Q, Voltage dependent resistors (VDRs) (	ANNEX Q, Voltage dependent resistors (VDRs) (see 1.5.9.1)	
	a) Preferred climatic categories:	Approved varistor is used	Р
	b) Maximum continuous voltage:	See appended table 1.5.1	Р
	c) Pulse current:	6 kV/3kA, 1.2/50 μs for voltage and 8/20 μs for current	Р



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Clause	ause Requirement + Test Result - Remark Verd			
R       ANNEX R, EXAMPLES OF REQUIREMENTS FOR QUALITY CONTROL       N/A				

IX .	PROGRAMMES	IN/A
R.1	Minimum separation distances for unpopulated coated printed boards (see 2.10.6.2)	N/A
R.2	Reduced clearances (see 2.10.3)	N/A

S	ANNEX S, PROCEDURE FOR IMPULSE TESTING	(see 6.2.2.3)	N/A
S.1	Test equipment		N/A
S.2	Test procedure		N/A
S.3	Examples of waveforms during impulse testing		N/A

Т	ANNEX T, GUIDANCE ON PROTECTION AGAINST INGRESS OF WATER (see 1.1.2)	
U	ANNEX U, INSULATED WINDING WIRES FOR USE WITHOUT INTERLEAVED INSULATION (see 2.10.5.4)	Р
	Used of three layers of extruded insulation wire and passes the tests of annex U	

V	ANNEX V, AC POWER DISTRIBUTION SYSTEMS (see 1.6.1)		Р
V.1	Introduction		Р
V.2	TN power distribution systems		Р

w	ANNEX W, SUMMATION OF TOUCH CURRENTS	N/A
W.1	Touch current from electronic circuits	N/A
W.1.1	Floating circuits	N/A
W.1.2	Earthed circuits	N/A
W.2	Interconnection of several equipments	N/A
W.2.1	Isolation	N/A
W.2.2	Common return, isolated from earth	N/A
W.2.3	Common return, connected to protective earth	N/A

	ANNEX X, MAXIMUM HEATING EFFECT IN TRANSFORMER TESTS (see clause C.1)	N/A
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Clause	Requirement + Test	Result - Remark	Verdict	
X.1	Determination of maximum input current		N/A	
X.2	Overload test procedure		N/A	

Y	ANNEX Y, ULTRAVIOLET LIGHT CONDITIONING TEST (see 4.3.13.3)	
Y.1	Test apparatus	N/A
Y.2	Mounting of test samples:	N/A
Y.3	Carbon-arc light-exposure apparatus:	N/A
Y.4	Xenon-arc light exposure apparatus:	N/A

- Z ANNEX Z, OVERVOLTAGE CATEGORIES (see 2.10.3.2 and Clause G.2) N/A
- AA ANNEX AA, MANDREL TEST (see 2.10.5.8)

N/A

BB	ANNEX BB, CHANGES IN THE SECOND EDITION		
CC	ANNEX CC, Evaluation of integrated circuit (IC) current limiters		N/A
CC.1	General	No such device within the EUT	N/A
CC.2	Test program 1		N/A
CC.3	Test program 2		N/A

DD	ANNEX DD, Requirements for the mounting means of rack-mounted equipment		N/A
DD.1	General	The EUT is not such equipment	N/A
DD.2	Mechanical strength test, variable N		N/A
DD.3	Mechanical strength test, 250N, including end stops		N/A
DD.4	Compliance		N/A

EE	ANNEX EE, Household and home/office document/media shredders		
EE.1	General	The EUT is not such equipment	N/A
EE.2	Markings and instructions		N/A
	Use of markings or symbols		N/A
	Information of user instructions, maintenance and/or servicing instructions		N/A

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Clause	ause Requirement + Test Result - Remark				
EE.3	Inadvertent reactivation test		N/A		
EE.4	Disconnection of power to hazardous moving parts:		N/A		
	Use of markings or symbols		N/A		
EE.5	Protection against hazardous moving parts		N/A		
	Test with test finger (Figure 2A)		N/A		
	Test with wedge probe (Figure EE1 and EE2):		N/A		



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1.5.1 TA	BLE: List of critica	al components				Р
Object/part No.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s) conform	of hity <sup>1)</sup>
Appliance Inlet (CON1)( for model GT- 43008-WWVV- X.X-T3 series)	Zhejiang Leci	DB-14	10A, 250V, 70 ℃	IEC/EN 60320-1	VDE	
Alt.	TECX- UNIONS Technology	TU-301-A, TU- 301-AP, TU- 301-AL, TU-301- S, TU-301-SP	10A, 250V, 70 ℃	IEC/EN 60320-1	VDE	
Alt.	SUPERCOM	SC-8R Series	10A, 250V, 70 ℃	IEC/EN 60320-1	VDE	
Alt.	various	various	10A, 250V, 70 ℃	IEC/EN 60320-1		or other ification
Appliance Inlet (CON1)( for models GT- 43008-WWVV- X.X-T3A series	Zhejiang Leci	DB-6	2.5A, 250V, 70 ℃	IEC/EN 60320-1	VDE	
Alt.	TECX- UNIONS Technology	TU-333 series	2.5A, 250V, 70 ℃	IEC/EN 60320-1	VDE	
Alt.	SUPERCOM	SC-14	2.5A, 250V, 70 ℃	IEC/EN 60320-1	VDE	
Alt.	Sun Fair Electric Wire & Cable (HK)	S-02	2.5A, 250V, 70 ℃	IEC/EN 60320-1	VDE	
Alt.	Solteam	ST-03	2.5A, 250V, 70 ℃	IEC/EN 60320-1	VDE	
Alt.	Rich Bay	R-30790	2.5A, 250V, 70 ℃	IEC/EN 60320-1	VDE	
Alt.	various	various	2.5A, 250V, 70 ℃	IEC/EN 60320-1		or other ification
Fuse (FS1)	Conquer	MST	T3.15A, 250 V, LBC	IEC/EN 60127-3	VDE	



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Clause Requirement + Test Result -
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- Remark

1.5.1	TABL	E: List of critica	al components				Р
Object/par	t No.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s conforr	) of nity <sup>1)</sup>
Alt.		various	various	T3.15A, 250 V, LBC	IEC/EN 60127-3		or other ification
Varistor (N	/IOV1)	Centra Science Corp	CNR-14V511K, CNR-14D471K,	Min. 300 Vac, 14 Ø	IEC 61051-2, CECC 42 200 UL 1449	VDE, U	L
Alt.		Centra Science Corp	CNR-10D471K, CNR-10V471K, CNRV-10D471K	Min. 300 Vac, 10 Ø	IEC 61051-2, CECC 42 200 UL 1449	VDE, U	L
Alt.		Thinking	TVR14471, TVR14471-K, TVR14511-K	Min. 300 Vac, 14 Ø	IEC 61051-2, CECC 42 200 UL 1449	VDE, U	L
Alt.		Thinking	TVR10471-D, TVR10471-K, TVR10511-K, TVR10471-V	Min. 300 Vac, 10 Ø	IEC 61051-2, CECC 42 200 UL 1449	VDE, U	L
Alt.		Joyin Co., Ltd.	14N471K, 14N511K, 14S511K	Min. 300 Vac, 14 Ø	IEC 61051-2, CECC 42 200 UL 1449	VDE, U	L
Alt.		Joyin Co., Ltd.	10N511K, 10N471K, 10S471K	Min. 300 Vac, 10 Ø	IEC 61051-2, CECC 42 200 UL 1449	VDE, U	L
Alt.		Ceramate Technical Co., Ltd.	GNR14D471K, GNR14D511K,	Min. 300 Vac, 14 Ø	IEC 61051-2, CECC 42 200 UL 1449	VDE, U	L
Alt.		Ceramate Technical Co., Ltd.	GNR10D471K	Min. 300 Vac, 10 Ø	IEC 61051-2, CECC 42 200 UL 1449	VDE, U	L
Alt.		Ceramate Technical Co., Ltd.	GNR10D471K	Min. 300 Vac, 10 Ø	IEC 61051-2, CECC 42 200 UL 1449	VDE, U	L
Alt.		Meritek Electronics Corp.	MVR14D471K, MVR14D511K	Min. 300 Vac, 14 Ø	IEC 61051-2, CECC 42 200 UL 1449	VDE, U	L



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1.5.1 TAE	BLE: List of critica	I components		-		Р
Object/part No.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s) conform	of nity <sup>1)</sup>
Alt.	Success Electronics CO., LTD.	SVR10D471K, SVR10D511K	Min. 300 Vac, 10 Ø	IEC 61051-2, CECC 42 200 UL 1449	VDE, U	
Alt.	Success Electronics CO., LTD.	SVR14D471K, SVR14D511K,	Min. 300 Vac, 14 Ø	IEC 61051-2, CECC 42 200 UL 1449	VDE, U	L
Thermistor (THR1) (Optional)	various	various	Rated 2.5 Ω at 25 °C, 5 A	Applicable parts of IEC 60950-1	Tested applian	
Inductor (LF1) (Optional)	GlobTek	NF00025	130 °C	Applicable parts of IEC 60950-1	Tested appliance	
Inductor (LF2) (Optional)	GlobTek	NF00031	130 °C	Applicable parts of IEC 60950-1	Tested appliance	
X-Capacitor (CX1) (Optional)	Ultra Tech Xiphi Enterprise Co., Ltd.	HQX	X2 or X1, Max. 0.33 μF, Min. 250 V, 100 ℃	IEC 60384-14, 2 <sup>nd</sup> edition	VDE	
Alt.	various	various	X2 or X1, Max. 0.33 µF, Min. 250 V, 100 ℃	IEC 60384-14, 2 <sup>nd</sup> edition	S, VDE EU cert marks	or other ification
Bleeder Resisto (RS1, RS2) (Optional, when bleeder resistor be used, X- Capacitor is used.)		various	Max. 1.5M Ω, 1/4 W, two in series after fuse	Applicable parts of IEC 60950-1	Tested appliand	
Bridge diode (BD1)	various	various	Min. 4 A, min. 600 V	Applicable parts of IEC 60950-1	Tested appliant	
Bridge Capacito (CY1)	r TDK	CD	Y1, Max. 2200 pF, Min. 250 V, 125 ℃	IEC 60384-14, 2 <sup>nd</sup> edition	VDE	
Alt.	various	various	Y1, Max. 2200 pF, Min. 250 V, 125 ℃	IEC 60384-14, 2 <sup>nd</sup> edition	S, VDE EU cert marks	or other ification



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1.5.1 TAB	LE: List of critic	al components	_			Р
Object/part No.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s) conform	
Ripple capacitor (C1)	various	various	Min. 400 V, 105 ℃, 68- 82 µF	Applicable parts of IEC 60950-1	Tested applian	
MOSFET (Q1)	various	various	Min. 8 A, min. 600 V	Applicable parts of IEC 60950-1	Tested applian	
Sensing Resistor (R1) (for models GT-43008-3306- 1.0-T3, GT- 43008-3606-T3 used)	various	various	Rated 0.68 ohm, 2 W	Applicable parts of IEC 60950-1	Tested appliant	
Sensing Resistor (R1) (for models GT-43008-4509- T3, GT-43008- 3609-T3 used)	various	various	Rated 0.47 ohm, 2 W	Applicable parts of IEC 60950-1	Tested appliant	
Sensing Resistor (R1) (for models GT-43008-5015- 3.0-T3, GT- 43008-5024-T3 used)	various	various	Rated 0.39 ohm, 2 W	Applicable parts of IEC 60950-1	Tested applian	
Sensing Resistor (R1) (for models GT-43008-5015- T3, GT-43008- 5024-5.0-T3 used)	various	various	Rated 0.43 ohm, 2 W	Applicable parts of IEC 60950-1	Tested applian	
Optocoupler (U1)	Lite-on	LTV-817	$DtI \ge 0.4 mm;$ Int. cr > 4 mm; Ext. cr = 8 mm	EN 60747-5-2: 2003	VDE	



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Result - Remark

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1.5.1	TABL	E: List of critica	l components				Р
Object/part N	No.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s) conform	of iity <sup>1)</sup>
Alt.		COSMO	K1010	Dti = 0.5 mm; Int. cr = 5.3 mm; Ext. cr = 8.0 mm	EN 60747-5-2: 2003	VDE	
Secondary D (D3) (For mo GT-43008-33 1.0-T3, GT- 43008-3606- used)	odels 306-	various	various	Min. 20A, min. 60V	Applicable parts of IEC 60950-1	Tested i appliand	
Secondary d (D4)	liode	various	various	Min. 5 A, 60 V	Applicable parts of IEC 60950-1	Tested i appliance	
Output cord		various	various	Min. 22 AWG, 80℃, VW-1, min. 30 V	Applicable parts of IEC 60950-1	Tested i applianc	
Transforme	r:						
Transformer (For models 43008-3306- T3, GT-43008-30 T3 used)	GT- -1.0-	GlobTek	XF00732	Class B	Applicable parts of IEC 60950-1	Tested appliance	
Transformer (For models 43008-4509- GT-43008-30 T3 used)	GT- -T3,	GlobTek	XF00751	Class B	Applicable parts of IEC 60950-1	Tested i applianc	
Transformer (For models 43008-5015- T3, GT-4300 5015-T3 use	GT- -3.0- )8-	GlobTek	XF00623	Class B	Applicable parts of IEC 60950-1	Tested appliance	



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1.5.1 TA	BLE: List of critica	al components				Р
Object/part No.	. Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s conforr	
Transformer (T (For models G 43008-5024-5. T3, GT-43008- 5024-T3 used)	s GT- 4-5.0- 008- ed)		Applicable parts of IEC 60950-1	Tested appliar		
Primary magne wires	et Pacific Electric Wire & Cable Co., Ltd.	UEWN/U, UEWS/U	Min. 130 °C	Applicable parts of IEC 60950-1	Tested appliar	
Alt.	Jung Shing Wire Co., Ltd.	UEW-4, UEY-2	Min. 130 °C	Applicable parts of IEC 60950-1	Tested appliar	
Secondary tripl insulation wire	e Great Leoflon Industrial Co.,Ltd	TRW(B)	Min. 130 °C	IEC60950-1	VDE	
Plastic Materia	al List:					
Enclosure	Sabic	915R	Min. V-1, min. 1.5 mm thick, 120 °C	Applicable parts of IEC 60950, UL 94	UL Red	cognized
Alt.	Sabic Innovative Plastics	SE1X	Min. V-1, Min. 1.5 mm thick, 105 °C	Applicable parts of IEC 60950-1, UL 94	UL rec	ognized
Bobbin of T1	Chang Chun	T375J	V-0, 150 °C	Applicable parts of IEC 60950-1, UL 94	UL rec	ognized
Alt.	Sumitomo Bakelite	PM-9820	V-0, 150 °C	Applicable parts of IEC 60950-1, UL 94	-	
Insulating tape	ЗМ	1350F(#), 1350T-1	Min. 130 °C	Applicable parts of IEC 60950-1, UL 510	UL rec	ognized
Alt.	Bondtec Pacific	370S	Min. 130 ℃	Applicable parts of IEC 60950-1, UL 510	UL rec	ognized
PCB	Techni Technology Ltd	T2B	Min. V-1, 130 °C	Applicable parts of IEC 60950-1, UL 94, UL 796	UL rec	ognized



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1.5.1	TABL	E: List of critica	I components				Р
Object/part N	No.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s conforr	
Alt.		various	various	Min. V-1, 130 °C	Applicable parts of IEC 60950-1, UL 94, UL 796	UL rec	ognized
Insulation Tu on Heat sink (HS2) (See Photos for det	(	Changyuan Electronics (Shenzhen) Co., Ltd.	CB-HFT	Min. 300 V, 125°C, min. 0.4 mm thick, VW- 1	Applicable parts of IEC 60950, UL 510	UL Red	cognized
Alt.		various	various	Min. 150 V, 105°C, min. 0.4 mm thick, VW- 1	Applicable parts of IEC 60950, UL 224	UL Red	cognized
Insulation Tap Heat sink (HS (See Photos fo details)	52)	3M Company Electrical Markets Div (EMD)	1350F-1	Min. 130 °C, One layer.	Applicable parts of IEC 60950-1, UL 510	UL Rec	ognized
Mylar Sheet		various	various	Min.V-2, min. 0.4 mm thick	Applicable part of IEC60950-1 UL 94	UL rec	ognized

#### Supplementary information:

Note:

- 1) An asterisk indicates a mark which assures the agreed level of surveillance.
- 2) All the plastic material mentioned are checked and found to be acceptable for using in this product. Checking date: Same as this report issued data, see also page 1.
- 3) Thermal cycling test 10 cycles. Each cycle: 68 h in 100°C, 1 h in 25°C, 2 h in 0°C and 1 h in 25 °C. After the cycling test a humidity text for 48 h in 93% relatively humidity. Electric strength test between input and output 4800 V/1 minute.
- 4) A power supply cord set, complying with national requirements, shall be provideed when marketing in the specified countries.



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Clause	Requirement + Test		Result - Remark	Verdict					
1.5.1	TABLE: Opto Electronic Devic	es		Р					
Manufactur	er:	See appended tabl	e 1.5.1 for details.						
Туре	::	See appended tabl	e 1.5.1 for details.						
Separately	tested:	Tested by VDE							
Bridging ins	sulation:	Reinforced insulation	on						
External cre	eepage distance:	See appended tabl	e 1.5.1 for details.						
Internal cre	epage distance:	See appended tabl	e 1.5.1 for details.						

Distance through insulation .....: See appended table 1.5.1 for details.

Tested under the following conditions ......: RI Input.....: Output.....

supplementary information



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				IEC 60950-1	/Am1			
Clause	Require	ement + Test				Result - Rem	nark	Verdict
1.6.2	TABLE	: Electrical	data (in r	normal conditi	ons)			Р
U (V	′)	I (mA)	Irated (A)	P (W)	Fuse #	Ifuse (mA)	Condition/s	tatus
Tested on	model: G	GT-43008-33		3				
90V/50	)Hz	0.76	_	39.3	FS1	0.76	Maximum norr	nal load
90V/60	)Hz	0.78	_	39.3	FS1	0.78	Maximum norr	nal load
100V/5	0Hz	0.70	1.2	39.3	FS1	0.70	Maximum norr	nal load
100V/6	0Hz	0.72	1.2	39.3	FS1	0.72	Maximum norr	nal load
240V/5	0Hz	0.40	1.2	38.8	FS1	0.40	Maximum norr	nal load
240V/6	0Hz	0.40	1.2	38.8	FS1	0.40	Maximum norr	nal load
254V/5	0Hz	0.39	_	0.39	FS1	0.39	Maximum norr	nal load
254V/5	0Hz	0.39	_	0.39	FS1	0.39	Maximum norr	nal load
264V/5	0Hz	0.38	_	38.7	FS1	0.38	Maximum norr	nal load
264V/6	0Hz	0.38	_	38.7	FS1	0.38	Maximum norr	nal load
Tested on	model: G	GT-43008-36	06-T3					
90V/50	)Hz	0.76		39.3	FS1	0.76	Maximum norr	nal load
90V/60	)Hz	0.77		39.3	FS1	0.77	Maximum norr	nal load
100V/5	0Hz	0.70	1.2	39.3	FS1	0.70	Maximum norr	nal load
100V/6	0Hz	0.71	1.2	39.3	FS1	0.71	Maximum norr	nal load
240V/5	0Hz	0.40	1.2	38.7	FS1	0.40	Maximum norr	nal load
240V/6	0Hz	0.40	1.2	38.7	FS1	0.40	Maximum norr	nal load
254V/5	0Hz	0.39	_	38.7	FS1	0.39	Maximum norr	nal load
254V/5	0Hz	0.39	_	38.7	FS1	0.39	Maximum norr	nal load
264V/5	0Hz	0.37		38.7	FS1	0.37	Maximum norr	nal load
264V/6	0Hz	0.38		38.7	FS1	0.38	Maximum norr	nal load
Tested on	model: G	GT-43008-45	09-T3					
90V/50	)Hz	0.75	_	43.1	FS1	0.75	Maximum norr	nal load
90V/60	)Hz	0.87	_	43.1	FS1	0.87	Maximum norr	nal load
100V/5	0Hz	0.78	1.2	43.1	FS1	0.78	Maximum norr	nal load
100V/6	0Hz	0.81	1.2	43.1	FS1	0.81	Maximum norr	nal load



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				IEC 60950-1	/Am1			
Clause	Require	ement + Test				Result - Ren	nark	Verdict
1.6.2	TABLE	: Electrical o	data (in i	normal condition	ons)			Р
U (V		I (mA)	Irated	P (W)	Fuse	Ifuse (mA)	Condition/st	atus
- ( )	/		(A)	( )	#			
240V/50	OHz	0.45	1.2	42.9	FS1	0.45	Maximum norn	nal load
240V/60	OHz	0.45	1.2	42.9	FS1	0.45	Maximum norn	nal load
254V/50	OHz	0.43	—	42.8	FS1	0.43	Maximum norn	nal load
254V/50	OHz	0.43	—	42.8	FS1	0.43	Maximum norn	nal load
264V/50	OHz	0.42	—	42.7	FS1	0.42	Maximum norn	nal load
264V/60	OHz	0.42	_	42.7	FS1	0.42	Maximum norn	nal load
Tested on I	model: C	GT-43008-50	15-3.0-T	3		1		
90V/50	Hz	1.10	—	57.8	FS1	1.10	Maximum norn	nal load
90V/60	Hz	1.13	—	57.8	FS1	1.13	Maximum norn	nal load
100V/50	OHz	1.00	1.2	57.8	FS1	1.00	Maximum norn	nal load
100V/60	OHz	1.04	1.2	57.8	FS1	1.04	Maximum norn	nal load
240V/50	OHz	0.58	1.2	56.9	FS1	0.58	Maximum norn	nal load
240V/60	OHz	0.58	1.2	56.9	FS1	0.58	Maximum norn	nal load
254V/50	OHz	0.56	_	56.8	FS1	0.56	Maximum norn	nal load
254V/50	OHz	0.56	_	56.8	FS1	0.56	Maximum norn	nal load
264V/50	OHz	0.54	_	56.8	FS1	0.54	Maximum norn	nal load
264V/60	OHz	0.54	_	56.8	FS1	0.54	Maximum norn	nal load
Tested on I	model: C	GT-43008-50	15-T3					
90V/50	Hz	1.10	_	57.7	FS1	1.10	Maximum norn	nal load
90V/60	Hz	1.12	_	57.7	FS1	1.12	Maximum norn	nal load
100V/50	OHz	1.00	1.2	57.8	FS1	1.00	Maximum norn	nal load
100V/60	OHz	1.03	1.2	57.8	FS1	1.03	Maximum norn	nal load
240V/50	OHz	0.57	1.2	56.8	FS1	0.57	Maximum norn	nal load
240V/60	)Hz	0.57	1.2	56.8	FS1	0.57	Maximum norn	nal load
254V/50	)Hz	0.56	_	56.8	FS1	0.56	Maximum norn	nal load
254V/50	OHz	0.56	_	56.8	FS1	0.56	Maximum norn	nal load
264V/50	OHz	0.53	_	56.8	FS1	0.53	Maximum norn	nal load
264V/60	OHz	0.54	_	56.8	FS1	0.54	Maximum norn	nal load

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				IEC 60950-	1/Am1				
Clause	Require	ement + Test				Result - Rem	ark	Verdict	
1.6.2	TABLE	: Electrical	data (in n	ormal condi	tions)			Р	
U (	V)	I (mA)	Irated (A)	P (W)	Fuse #	· · · ·			
Tested on	model: 0	GT-43008-50	)24-5.0-T3	3					
90V/5	i0Hz	55.4	_	1.04	FS1	1.04	Maximum norm	al load	
90V/6	60Hz	55.4	_	1.07	FS1	1.07	Maximum norm	al load	
100V/	50Hz	55.4	1.2	0.96	FS1	0.96	Maximum norm	al load	
100V/	60Hz	55.4	1.2	0.97	FS1	0.97	Maximum norm	al load	
240V/	50Hz	54.6	1.2	0.54	FS1	0.54	Maximum norm	al load	
240V/	60Hz	54.6	1.2	0.54	FS1	0.54	Maximum norm	al load	
254V/	50Hz	54.6	_	0.53	FS1	0.53	Maximum norm	al load	
254V/	50Hz	54.6	_	0.53	FS1	0.53	Maximum norm	al load	
264V/	50Hz	54.6	_	0.51	FS1	0.51	Maximum norm	al load	
264V/	60Hz	54.6	_	0.51	FS1	0.51	Maximum norm	al load	
Tested on	model: 0	GT-43008-50	)24-T3						
90V/5	i0Hz	1.05		55.4	FS1	1.05	Maximum norm	al load	
90V/6	i0Hz	1.07	_	55.4	FS1	1.07	Maximum norm	al load	
100V/	50Hz	0.96	1.2	55.4	FS1	0.96	Maximum norm	al load	
100V/	60Hz	0.98	1.2	55.4	FS1	0.98	Maximum norm	al load	
240V/	50Hz	0.54	1.2	54.7	FS1	0.54	Maximum norm	al load	
240V/	60Hz	0.54	1.2	54.7	FS1	0.54	Maximum norm	al load	
254V/	50Hz	0.53		54.6	FS1	0.53	Maximum norm	al load	
254V/	50Hz	0.53		54.6	FS1	0.53	Maximum norm	al load	
264V/	50Hz	0.51		54.6	FS1	0.51	Maximum norm	al load	
264V/	60Hz	0.51		54.6	FS1	0.51	Maximum norm	al load	

The measured input current at rated voltage shall be  $\leq$  110 % of rated current.



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			IEC 60950-1/Am1			
Clause	Requireme	nt + Test		Result - Remark		Verdict
2.1.1.5 c) 1)	TABLE: ma	ax. V, A, VA test				Р
•	e (rated) V)	Current (rated) (A)	Voltage (max.) (V)	Current (max.) (A)	VA (max (VA)	(.)
Tested on	model: GT-4	I3008-3306-1.0-T3				
	5 6.5 5.16 7.2 39.2		39.22			
Tested on	model: GT-4	I3008-3606-T3				
5	5.95 6 6.1 7.3 42.34					
Tested on	model: GT-4	3008-4509-T3				
	9 5 9.1 6.5 56		56.16			
Tested on	model: GT-4	3008-5015-3.0-T3				
	12         4.2         12.24         7.23         82.7		82.79			
Tested on	model: GT-4	I3008-5015-T3				
	15 3.34 15.01 5.5 80.85		80.85			
Tested on	model: GT-4	13008-5024-5.0-T3				
19 2.64 19.12 3		3.55	66.74			
Tested on	model: GT-4	3008-5024-T3				
2	24	2.08	24.2	3.77	87.54	
supplement	tary informati	on:				

2.1.1.5 c) 2)	TABLE: sto	ored energy		N/A	
Capacitar	nce C (µF)	Voltage U (V)	Energy E (J)		
supplementary information:					



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	IEC	C 60950-1/Am1				
Clause	ause Requirement + Test I		Result - F	Remark	Verdict	
2.2	TABLE: evaluation of voltage lim	niting componer	ts in SEL	ELV circuits		
Component (measured between)		max. vo	ltage (V) operation)	Voltage Limiting Cor	nponents	
		V peak	V peak V d.c.			
Tested o	n model: GT-43008-3306-1.0-T3					
T1 Pin A t	to Pin G	18				
Tested or	n model: GT-43008-3606-T3					
T1 Pin A to Pin G		19				
Tested o	n model: GT-43008-4509-T3					
T1 Pin A to Pin G		52				
T1 Pin A a	T1 Pin A after D4 to pin G		9.1	D4		
T1 Pin A a	after RS25, RS26 pin G	38		RS25, RS26		
Tested o	n model: GT-43008-5015-3.0-T3					
T1 Pin A t	o pin G	49				
T1 Pin A a	after D4 to pin G		12.24	D4		
T1 Pin A a	after RS25, RS26 to pin G	45		RS25, RS2	6	
T1 Pin A a	after CS5 to pin G		12.24	CS5		
Tested or	n model: GT-43008-5015-T3	·				
T1 Pin A t	o pin G	49				
T1 Pin A a	after D4 to pin G		15.01	D4		
T1 Pin A a	after RS25, RS26 to pin G	46		RS25, RS2	6	
T1 Pin A a	after CS5 to pin G		15.01	CS5		
Tested or	n model: GT-43008-5024-5.0-T3		4			
T1 Pin A t	o pin G	59				
T1 Pin A a	after D4 to pin G		19.12	D4		
T1 Pin A a	after RS25, RS26 to pin G	50		RS25, RS2	6	
T1 Pin A a	after CS5 to pin G		19.12	CS5		



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	IEC 6095	0-1/Am1			
Clause Requirement + Test		Result - Remark		Verdict	
2.2	TABLE: evaluation of voltage limiting				Р
	t (measured between)	max. vo	Itage (V)	Voltage Limiting Con	
		V peak V d.c.		-	
Tested on	model: GT-43008-5024-T3				
T1 Pin A to	pin G	62			
T1 Pin A af	ter D4 to pin G		24.2	D4	
T1 Pin A af	ter RS25, RS26 to pin G	53		RS25, RS26	6
T1 Pin A af	ter CS5 to pin G		24.2	CS5	
Fault test p	erformed on voltage limiting components	s Voltage measured (V) in SELV circuits (V peak or V d.c.)			lits
Tested on	model: GT-43008-4509-T3				
D4 shorted		0 Vdc (shorted)			
RS25, RS2	26 shorted	0 Vdc (shorted)			
Tested on	model: GT-43008-5015-3.0-T3				
D4 shorted		0 Vdc (shorted)			
RS25, RS2	26 shorted	0 Vdc (shorted)			
CS5 shorte	d		0	Vdc (shorted)	
Tested on	model: GT-43008-5015-T3				
D4 shorted		0 Vdc (shorted)			
RS25, RS2	26 shorted	0 Vdc (shorted)			
CS5 shorte	d	0 Vdc (shorted)			
Tested on	model: GT-43008-5024-5.0-T3				
D4 shorted		0 Vdc (shorted)			
RS25, RS2	26 shorted		0	Vdc (shorted)	
CS5 shorte	CS5 shorted 0 Vdc (shorted)				
Tested on	model: GT-43008-5024-T3				
D4 shorted		0 Vdc (shorted)			
RS25, RS2	6 shorted	0 Vdc (shorted)			
CS5 shorte	d		0	Vdc (shorted)	



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	IE	C 60950-1/Am1			
Clause	e Requirement + Test Result - Remark			nark	Verdict
2.2	TABLE: evaluation of voltage lin	niting compone	ents in SELV ci	rcuits	Р
supplement	ary information:				
Supplement	tary information:				
Test voltage	e: 264 Vac, 60 Hz				
2.5	TABLE: limited power sources				Р
	-43008-3306-1.0-T3				1
	ut tested: $V(+) - V(-)$	5 40 V (-) -			
disconnecte	Joc (V) with all load circuits ed:	5.16 Vdc			
	I <sub>sc</sub> (A) VA			4	
		Meas.	Limit	Meas.	Limit
Normal condition		7.2	≤ 8.0 A	33.69	≤ 100 VA
Circuit outp	Circuit output tested: V (+) – GND				
Measured Uoc (V) with all load circuits 5.16 Vdc/ 5.16 Vdc disconnected:					
		I <sub>sc</sub> (A) VA			٩
		Meas.	Limit	Meas.	Limit
Single fault	condition (RS12 short)	7.2	≤ 8.0 A	33.69	$\leq$ 100 VA
Single fault	condition (RS11 short)	7.2	≤ 8.0 A	33.69	$\leq$ 100 VA
Circuit outp	ut tested: V (+) – GND				
Measured L disconnecte	Joc (V) with all load circuits	See the note b	pelow		
		I <sub>sc</sub> (A)		V	4
		Meas.	Limit	Meas.	Limit
Single fault	condition		≤ 8.0 A		≤ 100 VA
Model: GT-	-43008-3606-T3		·		
Circuit outp	ut tested: V (+) – V (-)				
Measured L disconnecte	Joc (V) with all load circuits	6.1 Vdc			
		I <sub>sc</sub>	(A)	V	4
		Meas.	Limit	Meas.	Limit
Normal con	dition	7.3	≤ 8.0 A	42.34	≤ 100 VA



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		IEC 60950-1/Am1				
Clause	Requirement + Test		Result - Rem	nark	Verdict	
2.5	TABLE: limited power source	S			Р	
Circuit outp	out tested: V (+) – GND					
Measured disconnect	Uoc (V) with all load circuits ted:	6.1 Vdc/ 6.1 V	dc			
		I <sub>sc</sub>	(A)	١	/A	
		Meas.	Limit	Meas.	Limit	
Single faul	t condition (RS12 short)	7.3	≤ 8.0 A	42.34	≤ 100 VA	
Single faul	t condition (RS11 short)	7.3	≤ 8.0 A	42.34	≤ 100 VA	
Circuit outp	out tested: V (+) – GND					
Measured disconnect	Uoc (V) with all load circuits ted:	See the note t	below			
		l <sub>sc</sub>	I <sub>sc</sub> (A)		VA	
		Meas.	Limit	Meas.	Limit	
Single fault condition			≤ 8.0 A		≤ 100 VA	
Model: GT	Г-43008-4509-Т3			I		
Circuit outp	out tested: V (+) – V (-)					
Measured disconnect	Uoc (V) with all load circuits ted:	9.1 Vdc				
		I <sub>sc</sub>	(A)	١	/A	
		Meas.	Limit	Meas.	Limit	
Normal co	ndition	6.5	≤ 8.0 A	56.16	≤ 100 VA	
Circuit outp	out tested: V (+) – GND	·				
Measured disconnect	Uoc (V) with all load circuits ted:	9.1 Vdc/ 9.1 V	dc			
		I <sub>sc</sub>	(A)	١	/A	
		Meas.	Limit	Meas.	Limit	
Single faul	t condition (RS12 short)	6.5	≤ 8.0 A	56.16	≤ 100 VA	
Single faul	t condition (RS11 short)	6.5	≤ 8.0 A	56.16	≤ 100 VA	
Circuit outp	out tested: V (+) – GND				•	
Measured disconnect	Uoc (V) with all load circuits ted:	See the note t	below			
		I <sub>sc</sub>	(A)	\	/A	
		Meas.	Limit	Meas.	Limit	



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		IEC 60950-1/Am1				
Clause	Requirement + Test		Result - Remark			
2.5	TABLE: limited power sources	5			Р	
	It condition		≤ 8.0 A		≤ 100 VA	
-	Т-43008-5015-3.0-Т3					
Circuit out	put tested: V (+) – V (-)					
Measured disconnec	Uoc (V) with all load circuits ted:	12.24 Vdc				
		I <sub>sc</sub>	(A)	١	/A	
		Meas.	Limit	Meas.	Limit	
Normal co	ondition	7.23	≤ 8.0 A	82.78	≤ 100 VA	
Circuit out	put tested: V (+) – GND					
Measured disconnec	Uoc (V) with all load circuits ted:	12.24 Vdc/ 12	.24 Vdc			
		I <sub>sc</sub>	I <sub>sc</sub> (A) VA		/A	
		Meas.	Limit	Meas.	Limit	
Single fau	It condition (RS12 short)	7.23	≤ 8.0 A	82.78	≤ 100 VA	
Single fau	It condition (RS11 short)	7.23	≤ 8.0 A	82.78	≤ 100 VA	
Circuit out	put tested: V (+) – GND					
Measured disconnec	Uoc (V) with all load circuits ted:	See the note b	below			
		I <sub>sc</sub>	I <sub>sc</sub> (A) VA		VA	
		Meas.	Limit	Meas.	Limit	
Single fau	It condition		≤ 8.0 A		≤ 100 VA	
Model: G	T-43008-5015-T3					
Circuit out	put tested: V (+) – V (-)					
Measured disconnec	Uoc (V) with all load circuits ted:	15.01 Vdc				
		I <sub>sc</sub>	I <sub>sc</sub> (A)		/A	
		Meas.	Limit	Meas.	Limit	
Normal co	ondition	7.23	≤ 8.0 A	82.78	≤ 100 VA	
Circuit out	put tested: V (+) – GND					
Measured disconnec	Uoc (V) with all load circuits ted:	15.01 Vdc/ 15	.01 Vdc			
		I <sub>sc</sub>	(A)	١	/A	



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		IEC 60950-1/Am1				
Clause	Requirement + Test		Result - Rem	nark	Verdict	
2.5	TABLE: limited power source	e			Р	
2.0	TABLE. IIIIIted power source	Meas.	Limit	Meas.	Limit	
Single fau	It condition (RS12 short)	7.23	≤ 8.0 A	82.78	≤ 100 VA	
-	It condition (RS11 short)	3.13	≤ 8.0 A	47.04	≤ 100 VA ≤ 100 VA	
-	put tested: V (+) – GND	0.10	20.077		100 1/1	
	Uoc (V) with all load circuits	See the note t	below			
-		I <sub>sc</sub>	I <sub>sc</sub> (A) VA			
		Meas.	Limit	Meas.	Limit	
Single fault condition			≤ 8.0 A		≤ 100 VA	
Model: G	Г-43008-5024-5.0-Т3				-	
Circuit out	put tested: V (+) – V (-)					
Measured disconnec	Uoc (V) with all load circuits ted:	19.12 Vdc				
		I <sub>sc</sub>	(A)	٧	/A	
		Meas.	Limit	Meas.	Limit	
Normal co	ndition	3.55	≤ 8.0 A	66.74	≤ 100 VA	
Circuit out	put tested: V (+) – GND					
Measured disconnec	Uoc (V) with all load circuits ted:	19.12 Vdc/ 19	.12 Vdc			
		I <sub>sc</sub>	(A)	١	/A	
		Meas.	Limit	Meas.	Limit	
Single fau	It condition (RS12 short)	3.55	≤ 8.0 A	66.74	≤ 100 VA	
Single fau	It condition (RS11 short)	3.55	≤ 8.0 A	66.74	≤ 100 VA	
Circuit out	put tested: V (+) – GND	·			•	
Measured disconnec	Uoc (V) with all load circuits ted:	See the note b	below			
		I <sub>sc</sub>	(A)	· ·	/A	
		Meas.	Limit	Meas.	Limit	
Single fau	It condition		≤ 8.0 A		≤ 100 VA	
Model: G	Г-43008-5024-Т3	·	•	-	- •	
Circuit out	put tested: V (+) – V (-)					



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	IEC	C 60950-1/Am1			
Clause	Requirement + Test		Result - Remark		Verdict
2.5	TABLE: limited power sources				Р
Measured disconned	d Uoc (V) with all load circuits cted:	24.2 Vdc			
		I <sub>sc</sub>	(A)	V	A
		Meas.	Limit	Meas.	Limit
Normal co	ondition	3.77	≤ 8.0 A	87.54	≤ 100 VA
Circuit ou	tput tested: V (+) – GND				
Measured disconned	d Uoc (V) with all load circuits cted:	24.2 Vdc/ 24.2	2 Vdc		
		I <sub>sc</sub> (A) VA		4	
		Meas.	Limit	Meas.	Limit
Single fau	ult condition (RS12 short)	3.77	≤ 8.0 A	87.54	≤ 100 VA
Single fau	ult condition (RS11 short)	3.77	≤ 8.0 A	87.54	≤ 100 VA
Measured disconned	d Uoc (V) with all load circuits cted:	See the note b	below		
		I <sub>sc</sub>	(A)	V	A
		Meas.	Limit	Meas.	Limit
Single fau	ult condition		≤ 8.0 A		≤ 100 VA
suppleme	entary information:				
Measured Measured Measured Measured Measured Measured	odel, the other single fault conditions and d result shut down under the single fault d result shut down under the single fault	It condition of U It condition of U It condition of U It condition of U It condition of R It condition of R	1 (pin 1-2) short 1 (pin 3-4) short 1 (pin 1) openeo 1 (pin 4) openeo S15 short-circui S20 short-circui	-circuited. I-circuited. I-circuited. ted. ted.	



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		IEC 6095	0-1/Am1		
Clause	Requirement + Test		Result	- Remark	Verdict
2.10.2	Table: working volta	oltage measurement			Р
Location	ation RMS voltage (V) Peak voltage (V) Comments				
Tested on	model: GT-43008-330	6-1.0-T3			
T1 pin 2 to	A	217	388		
T1 pin 2 to	G	217	392		
T1 pin 3 to	A	218	556		
T1 pin 3 to	G	218	532		
T1 pin 4 to	A	188	384		
T1 pin 4 to	G	187	345		
T1 pin 6 to	A	237	596		
T1 pin 6 to	G	241	604		
CY1 prima	ry pin to secondary pin	204	382		
U1 pin 3 to	pin 1	217	382		
U1 pin 3 to	pin 2	218	384		
U1 pin 4 to	pin 1	216	380		
U1 pin 4 to	pin 2	218	382		
Tested on	model: GT-43008-360	6-ТЗ		·	
T1 pin 2 to	A	214	386		
T1 pin 2 to	G	216	390		
T1 pin 3 to	A	215	554		
T1 pin 3 to	G	217	530		
T1 pin 4 to	A	188	383		
T1 pin 4 to	G	186	345		
T1 pin 6 to	A	236	592		
T1 pin 6 to	G	239	602		
CY1 prima	ry pin to secondary pin	203	380		
U1 pin 3 to	p pin 1	217	380		
U1 pin 3 to	pin 2	218	383		
U1 pin 4 to	pin 1	217	380		
U1 pin 4 to	pin 2	217	382		

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IEC 60950-1/	A 4

		IEC 6095	0-1/Am1		
Clause	Requirement + Test		Result	- Remark	Verdict
2.10.2	Table: working volta	age measurement			Р
Location		RMS voltage (V)	Peak voltage (V)	Comments	
Tested or	n model: GT-43008-450	9-ТЗ			
T1 pin 2 to	A	214	372		
T1 pin 2 to	G	226	388		
T1 pin 3 to	A	218	444		
T1 pin 3 to	G	214	416		
T1 pin 4 to	A	193	344		
T1 pin 4 to	G	196	380		
T1 pin 6 to	A	258	560		
T1 pin 6 to	G	239	572		
CY1 prima	ary pin to secondary pin	202	372		
U1 pin 3 to	pin 1	220	378		
U1 pin 3 to	pin 2	221	380		
U1 pin 4 to	pin 1	218	379		
U1 pin 4 to	pin 2	222	382		
Tested or	n model: GT-43008-501	5-3.0-T3			
T1 pin 2 to	A	213	372		
T1 pin 2 to	G	203	388		
T1 pin 3 to	A	215	420		
T1 pin 3 to	G	200	390		
T1 pin 4 to	A	184	380		
T1 pin 4 to	G	178	384		
T1 pin 6 to	A	264	560		
T1 pin 6 to	G	245	544		
CY1 prima	ary pin to secondary pin	208	376		
U1 pin 3 to	pin 1	216	382		
U1 pin 3 to	pin 2	219	384		
U1 pin 4 to	pin 1	214	380		
U1 pin 4 to	p pin 2	220	382		

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IEC 60950-1/Am1	IEC	60950-1/Am1
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	1	IEC 6095	- 1/AIII I		1
Clause	Requirement + Test	Requirement + Test Result - Remark			Verdict
2.10.2	Table: working volta	ige measurement			Р
Location		RMS voltage (V)	Peak voltage (V)	Comments	
Tested or	n model: GT-43008-501	5-T3			
T1 pin 2 to	A	210	371		
T1 pin 2 to	G	200	382		
T1 pin 3 to	A	212	421		
T1 pin 3 to	o G	201	388		
T1 pin 4 to	A	185	379		
T1 pin 4 to	G	175	382		
T1 pin 6 to	A	261	556		
T1 pin 6 to	G	243	542		
CY1 prima	ary pin to secondary pin	206	373		
U1 pin 3 to	o pin 1	214	380		
U1 pin 3 to	o pin 2	215	380		
U1 pin 4 to	o pin 1	210	379		
U1 pin 4 to	o pin 2	215	380		
Tested or	n model: GT-43008-5024	4-5.0-T3	L	1	
T1 pin 2 to	A	219	430		
T1 pin 2 to	G	220	464		
T1 pin 3 to	A	211	513		
T1 pin 3 to	G	208	444		
T1 pin 4 to	A	190	422		
T1 pin 4 to	G	194	373		
T1 pin 6 to	A	254	702		
T1 pin 6 to	G	231	740		
CY1 prima	ary pin to secondary pin	182	384		
U1 pin 3 to	o pin 1	186	381		
U1 pin 3 to	o pin 2	182	383		
U1 pin 4 to	o pin 1	184	380		
U1 pin 4 to	o pin 2	184	380		



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		IEC 60950-1/Am1		
Clause	Requirement + Test		Result - Remark	Verdict
	•			

2.10.2	Table: working volta	Table: working voltage measurement				
Location		RMS voltage (V)	Peak voltage (V)	Comments		
Tested on	Tested on model: GT-43008-5024-T3					
T1 pin 2 to	A	218	432			
T1 pin 2 to	G	219	468			
T1 pin 3 to	A	210	516			
T1 pin 3 to	G	209	448			
T1 pin 4 to	A	192	424			
T1 pin 4 to	G	198	370			
T1 pin 6 to	A	260	708			
T1 pin 6 to	G	232	744			
CY1 prima	ry pin to secondary pin	184	386			
U1 pin 3 to	pin 1	188	382			
U1 pin 3 to	pin 2	187	384			
U1 pin 4 to pin 1		184	378			
U1 pin 4 to pin 2		186	380			
supplemen	tary information:	•				
	age: 240 Vac. 60 V					

1. Test voltage: 240 Vac, 60 V

2. Bold texts indicate the highest Vrms and Vpeak

2.10.3 and 2.10.4	TABLE: Clearance and creepage distance measurements						Р
	cl) and creepage ) at/of/between:	U peak (V)	U r.m.s. (V)	Required cl (mm)	cl (mm)	Required cr (mm)	cr (mm)
On PCB sol	lder side:						
	utral before and fuse (FS1) (FI)	340	240	1.5	7.4	2.5	7.4
Two ends of (FS1) (FI)	f the current fuse	340	240	1.5	2.6	2.5	2.6
Primary and	earth (BI)	340	240	2.0	3.7	2.5	3.7
Primary and sides of U1)	secondary (two (RI)	384	240	4.0	9.0	5.0	9.0



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			IEC 60950	-1/Am1			
Clause	Requirement + Tes	st		Re	sult - Remar	k	Verdict
0.40.0		ABLE: Clearance and creepage distance measurements					
2.10.3 and 2.10.4	TABLE: Clearand	e and cree	page distan	ice measurem	ents		Р
	cl) and creepage at/of/between:	U peak (V)	U r.m.s. (V)	Required cl (mm)	cl (mm)	Required cr (mm)	cr (mm)
Primary and sides of CY1	secondary (two	386	240	4.0	7.5	5.0	7.5
	es / leads to user	340	240	4.0	5.0	5.0	5.0
Primary and	secondary (two en T1 pin 2 and	744	264	5.0	8.4	5.4	8.4
On PCB co	mponent side:						
Line and Ne current fuse		340	240	1.5	12.1	2.5	12.1
	the current fuse	340	240	1.5	4.5	2.5	4.5
	earth (appliance	340	240	2.0	6.6	2.5	6.6
	onding trace to	340	240	2.0	3.5	2.5	3.5
	ser accessible	340	240	4.0	6.9	5.0	6.9
	secondary (two (RI)	384	240	4.0	9.9	5.0	9.9
	secondary (two	386	240	4.0	7.8	5.0	7.8
-	1) to Secondary	340	240	4.0	6.1	5.0	6.1
Transforme	r (T1):						
	es to secondary CB solder side	744	264	5.0	7.8	5.4	7.8
	component (C4) to	744	264	5.0	7.7.	5.4	7.7
	component (U1) to	744	264	5.0	13.0	5.4	13.0
Secondary v (RI)	vinding to core	744	264	5.0	>7.1	5.4	>7.1

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#### IEC 60950-1/Am1

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

2.10.3 and TABLE: Clearance 2.10.4	TABLE: Clearance and creepage distance measurements					
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)
Primary pins to secondary pins (RI)	744	264	5.0	>7.1	5.4	>7.1
Primary winding to secondary winding (RI)	744	264	5.0	>7.1	5.4	>7.1
Secondary pins to core (RI)	744	264	5.0	>7.1	5.4	>7.1

Supplementary information:

1) FI: insulation; BI: Basic insulation; SI: Supplementary insulation; RI: Reinforced insulation.

2) A force of 10 N is applied to the internal components and 30 N is applied to the enclosure when measuring the distances.

3) The core of transformer (T1) is considered as primary winding, the TIW is used in secondary winding of transformer (T1).

4) Secondary heatsink (HS2) is provided by 1 layer of insulating tape (3M, Model 1350F-1) between heatink and enclosure. See the details in appendix 6.

5) Secondary heatsink (HS2) is provided by Heat shrinkable tubing near primary components. See the details in appendix 6.



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EC.	609	50-1	/Δm	1

		IEC 60950-1/Am1		
Clause	Requirement + Test		Result - Remark	Verdict
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2.10.5	TABLE: Distance through insulation measurements					
Distance th	nrough insulation (DTI) at/of:	U peak (V)	U rms (V)	Test volt- age (V)	Required DTI (mm)	DTI (mm)
RI: Optoco	upler (U1)	384	240	3000 Vac	0.4	Min. 0.4
RI: Enclosu	ure: inner/outer	340	240	3000 Vac	0.4	1.5
	rinkable tubing around the of Heatsink (HS2)	340	240	3000 Vac	0.4	Min. 0.4
thin sheet I	naterial at/of:	Up (V)	U rms (V)	test volt- age (V)	required layer(s)	layer(s)
Insulating t transforme	ape around the outer side <sup>2)</sup> of r (T1) (RI)	744	264	3000 Vac / 2 layers	3	3
Supplemer	ntary information:					

1. FI: Functional insulation; BI: Basic insulation; SI: Supplementary insulation; RI: Reinforced insulation.

2. The core of transformer (T1) is considered as primary winding.



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IEC 60950-1/Am1

			IE	C 60950-1	/Am1				
Clause	Requirement + Test				Result - Re	Verdict			
4.3.8	TABLE: Batteries						N/A		
The tests of 4.3.8 are applicable only when app data is not available				propriate battery				—	
Is it possibl	e to install	the battery	in a reverse p	olarity pos	sition?				
	Non-re	chargeable	e batteries			Rechargeal	ole batterie	es	
	Discharging		Un- intentional	Charging		Discharging		Reversed charging	
	Meas. current	Manuf. Specs.	charging	Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.
Max. current during normal condition	_		1)			_			
Max. current during fault condition			1)		_				
			L	•	•			•	
Test results:									
- Chemical leaks									
- Explosion of the battery									
- Emission of flame or expulsion of molten metal									
- Electric strength tests of equipment after completion of tests				tests					
Supplemen	tary inform	ation:							



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IEC 60950-1/Am1						
Clause	Requirement + Test	Result - Remark	Verdict			

4.3.8	TABLE: Batteries	N/A	
Battery cate	gory		
Manufacturer			
Type / model			
Voltage	:		
Capacity			
Tested and	Certified by (incl. Ref. No.):		
Circuit prote	ction diagram:		

MARKINGS AND INSTRUCTIONS (1.7.12, 1.7.15)			
Location of replaceable battery			
Language(s)			
Close to the battery			
In the servicing instructions			
In the operating instructions			



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	IEC 6	0950-1/Ar	n1					
Clause	se Requirement + Test				Result - Remark			
4.5	TABLE: maximum temperatures						Р	
	test voltage (V)	90Vac	264Vac	90Vac	264Vac			
	t <sub>amb1</sub> (°C)	40	40	40	40			
	t <sub>amb2</sub> (°C)	40	40	40	40			
maximum temperature T of part/at::		T (°C)				allowed T <sub>max</sub> (°C)		
Test posit	ion:	Label up		Label down				
T1 coil		81.7	75.4	81.7	78.2	110 (B)		
T1 core		79.8	74.6	79.5	77.2	110 (B)		
U1 body		81.8	75.3	81.5	78.3	100		
CY1 body		67.1	62.9	70.2	66.7	125		
CON1 body		68.9	61.9	68.4	64.6	70		
PWB under THR1		65.1	59.6	65.4	62.3	130		
MOV1 body		73.1	65.8	73.4	68.8	85		
LF1 coil		73.3	65.9	74.1	69.6	130		
CX1 body		75.9	67.0	77.5	70.4	100		
LF2 coil		82.0	69.7	83.7	73.0	130		
PWB under BD1		69.3	62.8	69.7	65.1	130		
C1 body		86.0	73.8	87.1	77.5	105		
PWB under Q1		73.4	69.5	74.5	73.0	130		
PWB und	er D3	83.4	75.6	80.8	77.4	130		
C4 body	C4 body		72.4	80.9	75.3	105		
C5 body	C5 body		69.4	77.7	72.8	105		
Enclosure inside		71.6	67.8	69.7	68.0	105 (For Stress relief		
Enclosure	Enclosure outside		60.7	56.5	55.3	95		
Ambient		40.0	40.0	40.0	40.0			
Note:				•	•	•		

Note:

Max. Operation ambient is considered as 40 °C which declared by the manufacturer. Tested on model: **GT-43008-3306-1.0-T3**.



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	IEC 6	0950-1/Ar	n1				
Clause	Requirement + Test		Re	esult - Rem	ark		Verdict
4.5	TABLE: maximum temperatures						Р
	test voltage (V)	90Vac	264Vac	90Vac	264Vac		٢
	t <sub>amb1</sub> (°C)	40	40	40	40		
	t <sub>amb1</sub> (°C)	40	40	40	40		
maximum t	emperature T of part/at::	40		(°C)	40	allowed	T <sub>max</sub> (°C)
Test positio	on:	Lab	el up	Label	down		
T1 coil		75.1	71.3	73.9	70.2	11	0 (B)
T1 core		72.8	69.1	71.6	68.7		0 (B)
U1 body		74.0	71.9	73.7	70.3	1	00
CY1 body		62.3	54.9	60.3	54.9	125	
CON1 bod	y	65.8	63.3	66.5	58.7	70	
PWB unde	r THR1	56.6	57.6	59.8	55.3	1	30
MOV1 bod	у	66.1	65.2	68.0	61.5		85
LF1 coil		66.8	65.7	68.4	62.3	1	30
CX1 body		71.4	68.5	72.2	63.2	1	00
LF2 coil		78.2	74.3	78.0	65.6	1	30
PWB unde	r BD1	65.9	63.0	65.5	59.9	1	30
C1 body		83.9	81.9	81.4	69.7	1	05
PWB unde	r Q1	70.5	64.9	68.6	65.4	1	30
PWB unde	r D3	72.3	73.2	72.1	70.5	1	30
C4 body		73.9	71.0	71.6	67.3	1	05
C5 body		71.6	66.8	68.2	63.8	1	05
Enclosure i	inside	64.4	61.7	62.7	61.6		05 ess relief)
Enclosure	outside	52.1	53.6	49.5	53.4		95
Ambient		40.0	40.0	40.0	40.0		
Note:				•	•		

Max. Operation ambient is considered as 40 °C which declared by the manufacturer. Tested on model: **GT-43008-3606-T3**.



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	IEC 6	0950-1/Ar	n1				
Clause	Requirement + Test		R	esult - Rem	ark		Verdict
4.5	TABLE: maximum temperatures						Р
	test voltage (V)	90Vac	264Va	90Vac	264Vac	-	
	t <sub>amb1</sub> (°C)	40	40	40	40		
	t <sub>amb2</sub> (°C)	40	40	40	40	-	
maximum	temperature T of part/at::		т	(°C)		allowed	T <sub>max</sub> (°C)
Test posit	ion:	Lab	el up	Labe	down		
T1 coil		91.6	81.3	91.0	83.2	11	0 (B)
T1 core		88.6	79.0	87.5	80.5	11	0 (B)
U1 body		85.0	77.0	87.9	81.7	1	00
CY1 body		74.2	66.0	76.2	66.7	1	25
CON1 bo	dy	68.8	63.2	68.9	65.1		70
PWB und	er THR1	74.9	63.8	74.6	67.8	1	30
MOV1 bo	dy	78.5	67.0	81.1	71.2		85
LF1 coil		79.8	69.6	83.5	74.4	1	30
CX1 body		88.3	72.7	89.8	75.9	1	00
LF2 coil		93.5	73.8	95.1	76.9	1	30
PWB und	er BD1	78.5	65.1	78.4	66.9	1	30
C1 body		92.6	75.9	93.6	79.0	1	05
PWB und	er Q1	81.7	71.5	80.0	73.1	1	30
PWB und	er D3	82.2	75.1	87.0	81.4	1	30
C4 body		84.1	75.6	86.5	80.0	1	05
C5 body		81.1	72.5	82.1	76.0	1	05
Enclosure	inside	79.8	69.9	75.9	69.1		05 ess relief)
Enclosure	outside	70.3	62.7	64.6	60.0		95
Ambient		40.0	40.0	40.0	40.0		
Note:							

## vote:

Max. Operation ambient is considered as 40 °C which declared by the manufacturer. Tested on model: GT-43008-4509-T3.



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	IEC 6	0950-1/Ar	n1				
Clause	Requirement + Test		Re	esult - Rem	nark		Verdict
4.5	TABLE: maximum temperatures						Р
	test voltage (V)	90Vac	264Vac	90Vac	264Vac		_
	t <sub>amb1</sub> (°C)	40	40	40	40		
	t <sub>amb2</sub> (°C)	40	40	40	40		
maximum	temperature T of part/at::		т	(°C)		allowed	T <sub>max</sub> (°C)
Test positi	on:	Lab	el up	Labe	l down		
T1 coil		86.3	78.1	85.8	77.7	11	0 (B)
T1 core		84.4	75.6	83.3	74.9	11	0 (B)
U1 body		79.3	73.9	80.7	75.1	1	00
CY1 body		64.3	59.3	70.4	60.0	1	25
CON1 boo	ly	68.8	60.0	65.2	60.3	70	
PWB unde	er THR1	65.4	59.5	67.8	61.3	1	30
MOV1 boo	ly	73.5	64.5	75.6	66.1	1	85
LF1 coil		72.2	63.9	75.3	66.5	1	30
CX1 body		79.6	68.3	81.1	69.4	1	00
LF2 coil		87.7	70.3	88.9	71.2	1	30
PWB unde	er BD1	75.8	64.0	75.1	63.4	1	30
C1 body		86.0	73.1	86.9	73.9	1	05
PWB unde	er Q1	76.9	66.5	76.3	66.2	1	30
PWB unde	er D3	77.8	72.6	79.3	73.6	1	30
C4 body		75.6	70.4	76.8	71.5	1	05
C5 body		73.2	68.2	74.4	69.3	1	05
Enclosure	inside	77.0	67.2	73.4	64.6		05 ess relief)
Enclosure	outside	64.7	58.6	55.1	51.2	9	95
Ambient		40.0	40.0	40.0	40.0		

Note:

Max. Operation ambient is considered as 40 °C which declared by the manufacturer. Tested on model: GT-43008-5015-3.0-T3.



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	IEC 6	0950-1/Ar	n1				
Clause	Requirement + Test	Result - Remark					Verdict
4.5	TABLE: maximum temperatures				Р		
	test voltage (V):	90Vac	264Vac	90Vac	264Vac	-	_
	t <sub>amb1</sub> (°C)	40	40	40	40	-	
	t <sub>amb2</sub> (°C)	40	40	40	40	-	
maximum	temperature T of part/at::		Т (	°C)		allowed	T <sub>max</sub> (°C)
Test position:		Lab	el up	Label	down		
T1 coil		85.1	84.7	84.7	78.4	11	D (B)
T1 core		83.3	83.3	82.8	76.5	11	) (B)
U1 body		75.4	73.4	72.8	69.5	100	
CY1 body		63.9	65.3	64.2	60.9	1	25
CON1 boo	dy	68.6	67.9	68.7	62.0	-	70
PWB und	er THR1	69.3	65.3	67.9	60.3	1	30
MOV1 bo	dy	75.8	72.5	74.7	65.0	8	35
LF1 coil		75.5	71.1	74.3	64.4	1	30
CX1 body		80.8	78.1	79.9	69.0	1	00
LF2 coil		87.6	85.3	86.7	70.9	1	30
PWB und	er BD1	74.6	74.1	74.3	64.4	1	30
C1 body		86.3	84.2	85.1	73.4	1	05
PWB und	er Q1	76.0	76.5	76.1	68.0	1	30
PWB und	er D3	78.7	74.3	76.2	70.2	1	30
C4 body		75.3	73.0	74.2	69.4	1	05
C5 body		72.9	71.4	72.4	67.9	1	05
Enclosure	inside	74.2	76.4	73.8	68.4		05 ess relief)
Enclosure	outside	58.1	63.8	57.6	58.8	(	95
Ambient		40.0	40.0	40.0	40.0		

Note:

Max. Operation ambient is considered as 40 °C which declared by the manufacturer. Tested on model: **GT-43008-5015-T3**.



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	IEC 6	0950-1/Ar	m1				
Clause	Requirement + Test		R	esult - Rem	nark		Verdict
4.5	TABLE: maximum temperatures						Р
	test voltage (V):	90Vac	264Vac	90Vac	264Vac	-	
	t <sub>amb1</sub> (°C):	40	40	40	40	-	
	t <sub>amb2</sub> (°C):	40	40	40	40	-	
maximum	temperature T of part/at::		Т	(°C)		allowed	T <sub>max</sub> (°C)
Test position:		Lab	el up	Label	l down		
T1 coil		85.2	84.8	84.9	78.5	11	) (B)
T1 core		79.6	78.5	77.2	72.1	11	) (B)
U1 body		75.4	73.4	72.8	69.5	1	00
CY1 body		64.0	61.8	61.8	58.1	1	25
CON1 bo	dy	68.8	68.3	68.3	59.7	-	70
PWB und	er THR1	65.4	62.8	63.4	58.0	1	30
MOV1 bo	dy	71.1	68.7	68.9	61.4	8	35
LF1 coil		73.5	70.0	71.2	62.7	1	30
CX1 body		77.2	74.7	75.0	65.0	1	00
LF2 coil		84.3	82	82.0	67.5	1	30
PWB und	er BD1	72.1	71.1	69.7	62.1	1	30
C1 body		83.9	81.9	81.4	69.7	1	05
PWB und	er Q1	77.2	75.1	74.6	68.1	1	30
PWB und	er D3	73.9	72.4	70.9	68.6	1	30
C4 body		71.0	69.8	68.9	66.4	1	05
C5 body		68.3	66.6	66.3	63.4	1	05
Enclosure	inside	66.7	70.4	63.9	63.1		05 ess relief)
Enclosure	outside	53.8	60.5	51.7	55.8	(	95
Ambient		40.0	40.0	40.0	40.0		

Note:

Max. Operation ambient is considered as 40 °C which declared by the manufacturer. Tested on model: **GT-43008-5024-5.0-T3**.



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	IEC 6	0950-1/Aı	n1				
Clause	Requirement + Test		Result - Remark				
4.5	TABLE: maximum temperatures					Р	
	test voltage (V):	90Vac	264Vac	90Vac	264Vac		
	t <sub>amb1</sub> (°C):	40	40	40	40		
	t <sub>amb2</sub> (°C)	40	40	40	40		
maximum	temperature T of part/at::		Т	(°C)		allowed T <sub>max</sub> (°C	
Test posit	Test position:		el up	Labe	down		
T1 coil		83.6	75.4	81.7	74.4	110 (B)	
T1 core		83.2	74.4	80.9	73.1	110 (B)	
U1 body		74.1	69.0	75.5	70.5	100	
CY1 body		71.8	62.0	71.0	59.9	125	
CON1 bo	dy	67.7	60.6	64.4	60.4	70	
PWB und	er THR1	63.6	57.4	65.4	59.3	130	
MOV1 bo	dy	70.8	61.4	71.8	62.8	85	
LF1 coil		72.0	62.9	74.4	65.2	130	
CX1 body	,	78.2	66	78.5	66.6	100	
LF2 coil		86.9	69.2	86.5	69.3	130	
PWB und	er BD1	74.4	63.3	72.5	62.3	130	
C1 body		85.4	72.7	85.9	73.4	105	
PWB und	er Q1	80.3	70.6	78.3	69.6	130	
PWB und	er D3	70.4	66.6	73.0	68.9	130	
C4 body		70.0	66	70.6	66.7	105	
C5 body		68.5	64.4	68.6	64.8	105	
Enclosure	inside	78.9	67.7	74.3	64.1	105 (For Stress relief	
Enclosure	outside	65.9	59.2	58.6	53.5	95	
Ambient		40.0	40.0	40.0	40.0		

Note:

Max. Operation ambient is considered as 40 °C which declared by the manufacturer. Tested on model: **GT-43008-5024-T3**.



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

4.5.5	TABLE: Ball pressure test of thermoplastic parts						
	Allowed impression diameter (mm)	<u>2 mm</u>	1				
Part		Test temperature (°C)	Impression (mn				
PCB		125	1.2	3			
Bobbin o	of T1 for material type T375J	125	<b>1</b> .1				
Bobbin of T1 for material type PM-9820		125	1.1				
Supplem	Supplementary information:						

4.7	TABLE:	Resistance to fire				Р
Pa	ırt	Manufacturer of material	Type of material	Thickness (mm)	Flammability class	Evidence
Enclosure		SABIC	SE1X	Min. 1.50 mm	Min. V-0	UL Recognized
Alt.		SABIC	915R	Min. 1.50 mm	Min. V-0	UL Recognized
Bobbin of T	Г1	Chang Chun	T375J	Min. 0.8 mm	V-0	UL Recognized
Alt.		Sumitomo Bakelite	PM-9820	Min. 0.51 mm	V-0	UL Recognized
Mylar shee	t	various	various	Min. 0.4 mm	Min. V-2	UL Recognized
PCB		Techni	Т2В	Min. 1.5 mm	Min. V-0	UL Recognized
Alt.		various	various	Min. 1.5 mm	Min. V-1	UL Recognized
Supplemer	ntary inforn	nation:				



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		IEC 609	950-1/Am1			
Clause	Requirement + Test			Result - Remark	Verdict	
5.1	TABLE: touch curre	ent measurement			Р	
Measured	between:	Measured (mA)	Limit (mA)	Comments/conditions		
Model: GT	-43008-3306-1.0-ТЗ					
L/N and ea	arth	0.15	3.5			
L/N and se	condary	0.15	0.25			
	earthed enclosure th metal foil	0.005	0.25	-		
Model: GT	-43008-3606-T3					
L/N and ea	arth	0.15	3.5			
L/N and se	condary	0.15	0.25			
	earthed enclosure th metal foil	0.005	0.25	_		
	-43008-4509-T3					
L/N and ea	irth	0.15	3.5	_		
L/N and se	condary	0.15	0.25	_		
	earthed enclosure th metal foil	0.005	0.25	-		
	-43008-5015-3.0-T3					
L/N and ea	irth	0.15	3.5	_		
L/N and se	condary	0.15	0.25	_		
	earthed enclosure th metal foil	0.005	0.25	-		
Model: GT	-43008-5015-T3					
L/N and ea	arth	0.15	3.5	_		
L/N and se	condary	0.15	0.25			
	earthed enclosure th metal foil	0.005	0.25	_		
	-43008-5024-5.0-T3	11		I		
L/N and ea		0.15	3.5	_		
L/N and se		0.15	0.25	_		
L/N and un	hearthed enclosure th metal foil	0.005	0.25	-		



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ſ			IEC 60950-1/Am1		
ſ	Clause	Requirement + Test		Result - Remark	Verdict

5.1	TABLE: touch curre	ent measurement	t		Р	
Measured between:		Measured (mA)	Limit (mA)	Comments/conditions		
Model: GT-43008-5024-T3						
L/N and ea	rth	0.15	3.5	_		
L/N and se	condary	0.15	0.25	_		
	earthed enclosure th metal foil	0.005	0.25	_		
supplementary information:						
1. Test voltage: 264 Vac, 60 Hz						

2. Y-capacitor(s) used in the equipment: CY1: 2200 pF

5.2	TABLE: Electric strength tests, impulse tests and voltage surge tests							
Test voltage a	applied between:	Voltage shape (AC, DC, impulse, surge)	Test voltage (V)	Breakdo wn Yes / No				
Voltage surg	e test:							
RI: L/N and s	econdary circuits	DC	4242	No				
BI: L/N and e	arth	AC	2113	No				
RI: L/N and p	lastic enclosure covered with metal foil	AC	3000	No				
RI: Transform	er: primary and secondary	AC	3000	No				
BI: Transform	er: secondary and core	AC	3000	No				
RI: Insulating	tape around the outer side <sup>3)</sup> of transformer (T1)	AC	3000	No				
BI: HS2 of Ins	sulation Tape	AC	2113	No				
RI: HS2 of Ins	sulation Tube	AC	3000	No				
FI: Line and N	Neutral after current fuse (FS1) opened	AC	1500	No				

Supplementary information:

1. FI: Functional insulation; BI: Basic insulation; SI: Supplementary insulation; RI: Reinforced insulation.

- 2. Test voltage a.c. / d.c.
- 3. The core of transformer (T1) is considered as primary winding.
- 4. Test on Models **GT-43008-3306-1.0-T3**, **GT-43008-3606-T3**, **GT-43008-4509-T3**, **GT-43008-5015-3.0-T3**, **GT-43008-5015-T3**, **GT-43008-5024-T3**.



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			IEC 609	950-1/Am	1		
Clause	Requirement +	Test			Resu	lt - Remark	Verdict
5.3	TABLE: Fault	condition te	ests				Р
•	Ambient temp	perature (°C)			: 25, if n	o else specified	
	Power source model/type, o	for EUT: Ma	anufacturer,		See ap	opended table 1.5.1	_
Component No.	Fault	Supply voltage (V)	Test time	Fuse #	Fuse current (A)	Observation	
Model: GT-4	3008-3306-1.0-	Т3					
U1 Pin 1-2	S	264	10 mins.	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
U1 Pin 3-4	S	264	10 mins.	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
U1 Pin 1	0	264	10 mins.	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
U1 Pin 4	0	264	10 mins.	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
Q1 pin G to pin S	S	264	10 mins	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	
Q1 pin D to pin S	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) ope hazards Damaged: — Temp: — Max. Voltage: —	ned. No
Q1 pin D to pin G	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) ope hazards Damaged: — Temp: — Max. Voltage: —	ned. No
R1	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) ope hazards Damaged: — Temp: — Max. Voltage: —	ned. No
US1 pin 2 to pin 7	S	264	10 mins.	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No



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5.3 (cont.)	ABLE: Fault c	ondition te	sts				Р
Component No.	Fault	Supply voltage (V)	Test time	Fuse #	Fuse current (A)	Observation	
US1 Pin 3 to pin 7	S	264	10 mins	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
US1 pin 2 to pin 3	S	264	10 mins	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	
US1 pin 2 to pin 4	S	264	10 mins	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	
BD1 pin ~ to pin +	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) oper hazards Damaged: — Temp: — Max. Voltage: —	
C1	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) oper hazards Damaged: — Temp: — Max. Voltage: —	ned. No
T1 pin 4 to pin 6	S	264	10 mins	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
T1 pin 2 to pin 3	S	264	10 mins	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
T1 pin A to pin G	S	264	10 mins	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
T1 pin A after D3 to pin G	O/L	264	9 hrs.	FS1	0.50	Total testing duration: 9.0 ho transformer overload to 0.7A, N No hazards, the maximum tem Damaged: — Temp: T1 coil = 139.4 °C, T1 of 136.4 °C, U1 Body = 97.2 °C, J	No damage, up of core =
						21.2 °C Max. Voltage: 5.16 Vdc	



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Clause	Requirement +	Fest			Resul	t - Remark	Verdict
5.3 (cont.)	TABLE: Fault o	condition te	sts				Р
Component No.	Fault	Supply voltage (V)	Test time	Fuse #	Fuse current (A)	Observation	
Output	S	264	10 mins	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
Output	O/L	264	7 hrs.	FS1	0.50	Total testing duration: 7.0 ho output overload to 7.1A, No da hazards, the maximum temp of Damaged: — Temp: T1 coil = 149.4 °C, T1 149.0 °C, U1 Body = 127.9 °C 21.5 °C Max. Voltage: 5.16 Vdc	amage, No of core =
Model: GT-4	3008-3606-T3	I		1			
U1 Pin 1-2	S	264	10 mins.	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	
U1 Pin 3-4	S	264	10 mins.	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
U1 Pin 1	0	264	10 mins.	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
U1 Pin 4	0	264	10 mins.	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
Q1 pin G to pin S	S	264	10 mins	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
Q1 pin D to pin S	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) ope hazards Damaged: — Temp: — Max. Voltage: —	
Q1 pin D to pin G	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) ope hazards Damaged: — Temp: — Max. Voltage: —	ened. No



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5.3 (cont.) 1	ABLE: Fault	condition te	ests				Р
Component No.	Fault	Supply voltage (V)	Test time	Fuse #	Fuse current (A)	Observation	
R1	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) oper hazards Damaged: — Temp: — Max. Voltage: —	ned. No
US1 pin 2 to pin 7	S	264	10 mins.	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
US1 Pin 3 to pin 7	S	264	10 mins	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	
US1 pin 2 to pin 3	S	264	10 mins	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
US1 pin 2 to pin 4	S	264	10 mins	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
BD1 pin ~ to pin +	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) oper hazards Damaged: — Temp: — Max. Voltage: —	ned. No
C1	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) oper hazards Damaged: — Temp: — Max. Voltage: —	ned. No
T1 pin 4 to pin 6	S	264	10 mins	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
T1 pin 2 to pin 3	S	264	10 mins	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	
T1 pin A to pin G	S	264	10 mins	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No



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5.3 (cont.)	TABLE: Fault o	condition te	ests				Р
Component No.	Fault	Supply voltage (V)	Test time	Fuse #	Fuse current (A)	Observation	
T1 pin A after D3 to pin G	O/L	264	9 hrs.	FS1	0.42	Total testing duration: 9.0 ho transformer overload to 0.7A, No hazards, the maximum tem Damaged: —	No damage, p of
						Temp: T1 coil = 93.9 °C, T1 co °C, U1 Body = 90.5 °C, Ambien Max. Voltage: 6.1 Vdc	
Output	S	264	10 mins	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
Output	O/L	264	13 hrs.	FS1	0.43	Total testing duration: 13 hou output overload to 7.2 A, No da hazards, the maximum temp o Damaged: —	amage, No
						<b>Temp:</b> T1 coil = 83.8 °C, T1 co °C, U1 Body = 78.9 °C, Ambien <b>Max. Voltage:</b> 6.1 Vdc	
Model: GT-43	3008-4509-T <b>3</b>						
U1 Pin 1-2	S	264	10 mins.	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
U1 Pin 3-4	S	264	10 mins.	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
U1 Pin 1	0	264	10 mins.	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
U1 Pin 4	0	264	10 mins.	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
Q1 pin G to pin S	S	264	10 mins	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
Q1 pin D to pin S	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) oper hazards Damaged: — Temp: — Max. Voltage: —	ned. No



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5.3 (cont.) T	ABLE: Fault	condition te	sts			Р
Component No.	Fault	Supply voltage (V)	Test time	Fuse #	Fuse current (A)	Observation
Q1 pin D to pin G	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) opened. No hazards Damaged: — Temp: — Max. Voltage: —
R1	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) opened. No hazards Damaged: — Temp: — Max. Voltage: —
US1 pin 2 to pin 7	S	264	10 mins.	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
US1 Pin 3 to pin 7	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
US1 pin 2 to pin 3	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
US1 pin 2 to pin 4	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
BD1 pin ~ to pin +	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) opened. No hazards Damaged: — Temp: — Max. Voltage: —
C1	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) opened. No hazards Damaged: — Temp: — Max. Voltage: —
T1 pin 4 to pin 6	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
T1 pin 2 to pin 3	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —



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5.3 (cont.)	TABLE: Fault o	ondition te	sts			Р
Component No.	Fault	Supply voltage (V)	Test time	Fuse #	Fuse current (A)	Observation
T1 pin A to pin G	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
T1 pin A after D3 to pin G	O/L	264	9 hrs.	FS1	0.50	Total testing duration: 9.0 hours. While transformer overload to 1.5 A, No damage, No hazards, the maximum terr of Damaged: — Temp: T1 coil = 142.4 °C, T1 core = 142.1 °C, U1 Body = 116.2 °C, Ambient 21.5 °C Max. Voltage: 9.1 Vdc
Output	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
Output	O/L	264	7 hrs.	FS1	0.50	Total testing duration: 7 hours. While output overload to 6.5 A, No damage, N hazards, the maximum temp of Damaged: — Temp: T1 coil = 131.1 °C, T1 core = 130.8 °C, U1 Body = 91.0 °C, Ambient = 26.9 °C Max. Voltage: 9.1 Vdc
Model: GT-43	3008-5015-3.0-7	Г3				
U1 Pin 1-2	S	264	10 mins.	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
U1 Pin 3-4	S	264	10 mins.	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
U1 Pin 1	0	264	10 mins.	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
U1 Pin 4	0	264	10 mins.	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —



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5.3 (cont.)	TABLE: Fault c	condition te	sts			Р
Component No.	Fault	Supply voltage (V)	Test time	Fuse #	Fuse current (A)	Observation
Q1 pin G to pin S	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
Q1 pin D to pin S	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) opened. No hazards Damaged: — Temp: — Max. Voltage: —
Q1 pin D to pin G	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) opened. No hazards Damaged: — Temp: — Max. Voltage: —
R1	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) opened. No hazards Damaged: — Temp: — Max. Voltage: —
US1 pin 2 to pin 7	S	264	10 mins.	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
US1 Pin 3 to pin 7	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
US1 pin 2 to pin 3	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
US1 pin 2 to pin 4	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
BD1 pin ~ to pin +	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) opened. No hazards Damaged: — Temp: — Max. Voltage: —
C1	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) opened. No hazards Damaged: — Temp: — Max. Voltage: —



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5.3 (cont.) 1	TABLE: Fault of	condition te	sts			Р
Component No.	Fault	Supply voltage (V)	Test time	Fuse #	Fuse current (A)	Observation
T1 pin 4 to pin 6	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
T1 pin 2 to pin 3	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
T1 pin A to pin G	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
T1 pin A after D3 to pin G	O/L	264	10 hrs.	FS1	0.67	Total testing duration: 10.0 hours. While transformer overload to 3.1 A, No damage, No hazards, the maximum temp of Damaged: — Temp: T1 coil = 135.6 °C, T1 core = 123.4 °C, U1 Body = 99.1 °C, Ambient = 26.5 °C
Output	S	264	10 mins	FS1	0.03	Max. Voltage: 12.24 Vdc Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
Output	O/L	264	6 hrs.	FS1	0.66	Total testing duration: 6 hours. While output overload to 7 A, No damage, No hazards, the maximum temp of Damaged: — Temp: T1 coil = 128.5 °C, T1 core = 122.4 °C, U1 Body = 99.4 °C, Ambient = 21.6 °C Max. Voltage: 12.24 Vdc
Model GT-43	008-5015-T3					
U1 Pin 1-2	S	264	10 mins.	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
U1 Pin 3-4	S	264	10 mins.	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —



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5.3 (cont.)	TABLE: Fault o	condition te	sts				Р
Component No.	Fault	Supply voltage (V)	Test time	Fuse #	Fuse current (A)	Observation	
U1 Pin 1	Ο	264	10 mins.	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
U1 Pin 4	0	264	10 mins.	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
Q1 pin G to pin S	S	264	10 mins	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
Q1 pin D to pin S	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) ope hazards Damaged: — Temp: — Max. Voltage: —	ned. No
Q1 pin D to pin G	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) oper hazards Damaged: — Temp: — Max. Voltage: —	ned. No
R1	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) oper hazards Damaged: — Temp: — Max. Voltage: —	ned. No
US1 pin 2 to pin 7	S	264	10 mins.	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
US1 Pin 3 to pin 7	S	264	10 mins	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
US1 pin 2 to pin 3	S	264	10 mins	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
US1 pin 2 to pin 4	S	264	10 mins	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No



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Verdict

IEC 60950-1/Am1

Clause	Requirement + Test
--------	--------------------

Result - Remark

5.3 (cont.) 1	ABLE: Fault	condition te	sts			P
Component No.	Fault	Supply voltage (V)	Test time	Fuse #	Fuse current (A)	Observation
BD1 pin ~ to pin +	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) opened. No hazards Damaged: — Temp: — Max. Voltage: —
C1	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) opened. No hazards Damaged: — Temp: — Max. Voltage: —
T1 pin 4 to pin 6	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
T1 pin 2 to pin 3	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
T1 pin A to pin G	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
T1 pin A after D3 to pin G	O/L	264	10 hrs.	FS1	0.64	Total testing duration: 10.0 hours. Whi transformer overload to 2.1 A, No damage, No hazards, the maximum tem of Damaged: — Temp: T1 coil = 105.6 °C, T1 core = 102.5 °C, U1 Body = 93.4 °C, Ambient = 26.6 °C Max. Voltage: 15.01 Vdc
Output	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
Output	O/L	264	13 hrs.	FS1	0.64	Total testing duration: 13 hours. While output overload to 5.5 A, No damage, No hazards, the maximum temp of Damaged: — Temp: T1 coil = 104.5 °C, T1 core = 101.3 °C, U1 Body = 83.5 °C, Ambient = 31.0 °C Max. Voltage: 15.01 Vdc



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Clause	Requirement +	Test		Resu	Result - Remark				
5.3 (cont.)	TABLE: Fault of	E: Fault condition tests							
Component No.	Fault	Supply voltage (V)	Test time	Fuse #	Fuse current (A)	Observation			
U1 Pin 1-2	S	264	10 mins.	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No		
U1 Pin 3-4	S	264	10 mins.	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No		
U1 Pin 1	0	264	10 mins.	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No		
U1 Pin 4	0	264	10 mins.	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No		
Q1 pin G to pin S	S	264	10 mins	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: —	No		

						Max. Voltage: —
U1 Pin 3-4	S	264	10 mins.	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: —
U1 Pin 1	0	264	10 mins.	FS1	0.03	Max. Voltage: — Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
U1 Pin 4	0	264	10 mins.	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
Q1 pin G to pin S	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
Q1 pin D to pin S	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) opened. No hazards Damaged: — Temp: — Max. Voltage: —
Q1 pin D to pin G	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) opened. No hazards Damaged: — Temp: — Max. Voltage: —
R1	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) opened. No hazards Damaged: — Temp: — Max. Voltage: —
US1 pin 2 to pin 7	S	264	10 mins.	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
US1 Pin 3 to pin 7	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —



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Verdict

IEC 60950-1/Am1

Clause Requirement + Test

Result - Remark

					•	· · · · ·
5.3 (cont.)	TABLE: Fault o	condition te	sts			Р
Component No.	Fault	Supply voltage (V)	Test time	Fuse #	Fuse current (A)	Observation
US1 pin 2 to pin 3	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
US1 pin 2 to pin 4	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
BD1 pin ~ to pin +	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) opened. No hazards Damaged: — Temp: — Max. Voltage: —
C1	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) opened. No hazards Damaged: — Temp: — Max. Voltage: —
T1 pin 4 to pin 6	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
T1 pin 2 to pin 3	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
T1 pin A to pin G	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
T1 pin A after D3 to pin G	O/L	264	9 hrs.	FS1	0.56	Total testing duration: 9.0 hours. While transformer overload to 0.8 A, No damage, No hazards, the maximum temp of Damaged: —
						Temp: T1 coil = 94.3 °C, T1 core = 89.2 °C, U1 Body = 85.3 °C, Ambient = 28.5 °C Max. Voltage: 19.12 Vdc
Output	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —



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Clause	Requirement +	Test		Result - Remark			Verdict
5.3 (cont.)	TABLE: Fault o	condition te	sts				Р
Component No.	Fault	Supply voltage (V)	Test time	Fuse #	Fuse current (A)	Observation	
Output	O/L	264	13 hrs.	FS1	0.55	Total testing duration: 13 hours. Wh output overload to 3.5 A, No damage, hazards, the maximum temp of Damaged: — Temp: T1 coil = 93.1 °C, T1 core = 88 °C, U1 Body = 84.3 °C, Ambient = 31. Max. Voltage: 19.12 Vdc	
Model GT-4	3008-5024-T3						
U1 Pin 1-2	S	264	10 mins.	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	-
U1 Pin 3-4	S	264	10 mins.	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
U1 Pin 1	0	264	10 mins.	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
U1 Pin 4	0	264	10 mins.	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
Q1 pin G to pin S	S	264	10 mins	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
Q1 pin D to pin S	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) ope hazards Damaged: — Temp: — Max. Voltage: —	ned. No
Q1 pin D to pin G	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) ope hazards Damaged: — Temp: — Max. Voltage: —	ned. No
R1	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) ope hazards Damaged: — Temp: — Max. Voltage: —	ned. No



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Verdict

IEC 60950-1/Am1

Clause Requirement + Test

Result - Remark

5.3 (cont.)	TABLE: Fault o	condition te	sts			Р
Component No.	Fault	Supply voltage (V)	Test time	Fuse #	Fuse current (A)	Observation
US1 pin 2 to pin 7	S	264	10 mins.	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
US1 Pin 3 to pin 7	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
US1 pin 2 to pin 3	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
US1 pin 2 to pin 4	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
BD1 pin ~ to pin +	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) opened. No hazards Damaged: — Temp: — Max. Voltage: —
C1	S	264	< 1 sec.	FS1	> 5.25	Observation: Fuse (FS1) opened. No hazards Damaged: — Temp: — Max. Voltage: —
T1 pin 4 to pin 6	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
T1 pin 2 to pin 3	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —
T1 pin A to pin G	S	264	10 mins	FS1	0.03	Observation: Unit shut down. No hazards. Damaged: — Temp: — Max. Voltage: —



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Verdict

IEC 60950-1/Am1

Requirement + Test Clause

Result - Remark

5.3 (cont.)	TABLE: Fault o	ondition te	sts				Р
Component No.	Fault	Supply voltage (V)	Test time	Fuse #	Fuse current (A)	Observation	
T1 pin A after D3 to pin G	O/L	264	8 hrs.	FS1	0.64	Total testing duration: 8.0 ho transformer overload to 1.5 A, damage, No hazards, the max of Damaged: — Temp: T1 coil = 122.7 °C, T1 o 118.3 °C, U1 Body = 81.4 °C, 2 25.0 °C Max. Voltage: 24.2 Vdc	No imum temp core =
Output	S	264	10 mins	FS1	0.03	Observation: Unit shut down. hazards. Damaged: — Temp: — Max. Voltage: —	No
Output	O/L	264	7 hrs.	FS1	0.64	Total testing duration: 7 hour output overload to 3.6 A, No da hazards, the maximum temp o Damaged: — Temp: T1 coil = 110.0 °C, T1 of 105.4 °C, U1 Body = 77.8 °C, 2 21.6 °C Max. Voltage: 24.2 Vdc	amage, No f core =

Supplementary information:

1. S: Short-circuited; O: Open-circuited; O/L: Overloaded; B: Blocked; L: Locked.

2. Observation: The observations during and after fault condition tests.

3. Damaged: Which component (components) damaged during the fault condition test.

4. Temp: The maximum temperature of transformer (T1) winding.

5. Max. Voltage: The maximum accessible voltage of DC output terminal during the fault condition test.

6. The test was performed for 3 times, the similar test result come out.



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	IEC	6005	<b>()</b> 1	/Am1

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

C.2 1	TABLE: tra	ansformers						Р
Loc.		Tested insulation	Working voltage peak / V (2.10.2)	Working voltage rms / V (2.10.2)	Required electric strength (5.2)	Required clearance / mm (2.10.3)	Required creepage distance / mm (2.10.4)	Required distance thr. insul. (2.10.5)
Secondary wir core (RI)	nding to	RI	744	264	3000 Vac	5.0	5.4	
Primary windin secondary wir		RI	744	264	3000 Vac	5.0	5.4	
Secondary components ( core (RI)	CY1) to	RI	386	240	3000 Vac	4.0	5.0	
Loc.		Tested insulation			Test voltage/ V	Measured clearance / mm	Measured creepage dist./ mm	Measured distance thr. insul. / mm; number of layers
Insulating tape the outer side transformer (1	of	RI			3000 Vac / 2 layers			3
Primary traces secondary trac PCB solder si	ces on	RI			3000 Vac	7.8	7.8	
Primary windin secondary wir		RI			3000 Vac	> 7.1	> 7.1	
Secondary wir core (RI)	•	RI			3000 Vac	> 7.1	> 7.1	
oundomontor	· informati	~ ~ ·						

supplementary information:

The core of transformer (T1) is considered as primary winding.

The secondary wires are triple wire see appended table 1.5.1 for details.

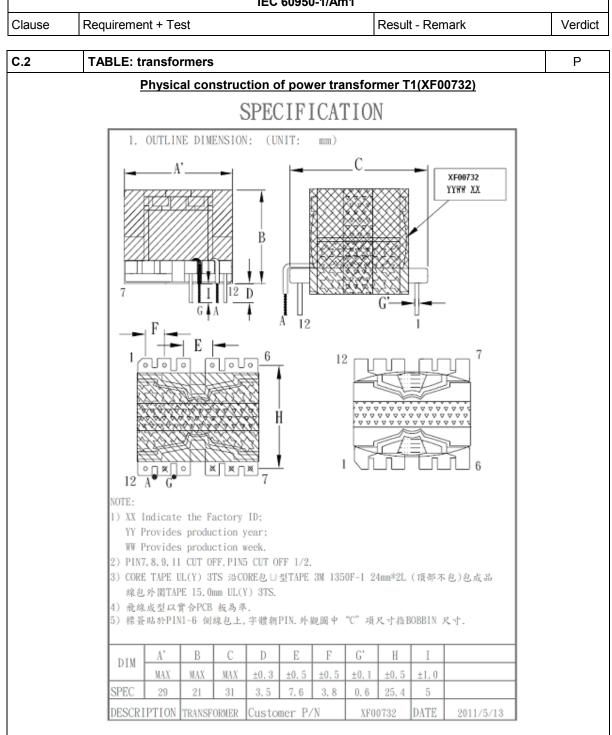
The distances are measured along the insulating tape around the core of T1. Three layers insulating tape are provided between the core of transformer (T1) and secondary winding / components.

Additionally tubings are provided to prevent mechanical stress in the ends of two different secondary windings.



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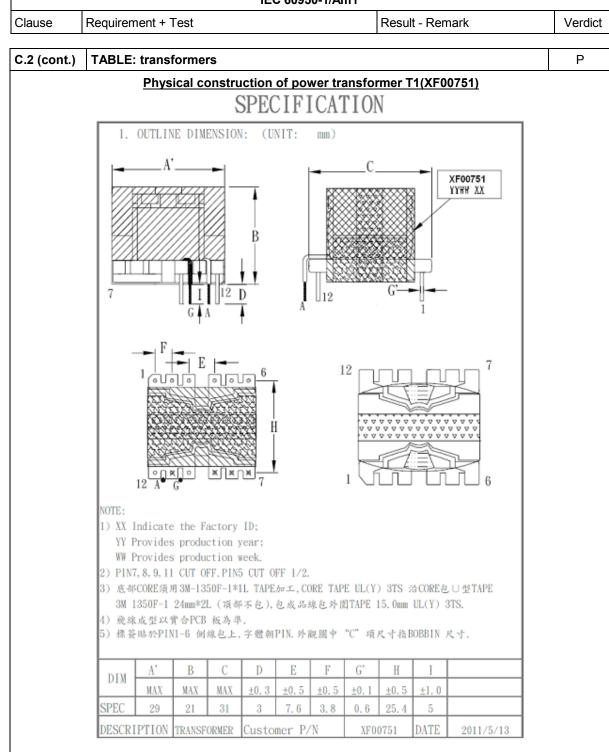
-	600	<b>EO</b> '	1/8	m1

Clause	Requiremen	t + Test			Result - F	Remark		Verdic
C.2 (cont.)	TABLE: tra	ansforme	ers					Р
2. SCH	<u>Phys</u> EMATIC:	ical cons	struction of pow		former T1(XF00 3. WINDING			
PR		SEC N 1 N 3	⇒ A <b>-</b> G		N N5 N4 N3 E2 N2 N2 N2		2L 2L 2L 2L 2L 2L 2L 2L 2L 2L	
4. WIN	2 JING TABL	TF TU	BE(透明) BE(黑色)		E1 N1 BOBBIN	GAP:研磨	2L 2L	
Winding No (組別)	Margin Tape (檔牆膠帶)	PIN (腳位)	Wire&Wire Copper (線徑X股數)	Turns (圈數)	Winding Tape (続線方式)	Tape Layer (膠帶層次)		Contribution of the Contri
N1	0	A~G	0.50ΦX3P (三層絕緣線)	3Ts	密繞	2L		
E1	0	~4	0.025*8mm	1.1Ts	背膠	2L		
N2	0	6~5	0.22ΦX2P	30Ts	密繞	2L		
E2	0	~4	0.025*8mm 0.50ФХЗР	1.1Ts	背膠	2L		
N3	0	A~G	(三層絕緣線)	3Ts	密繞	2L		
N4	0	3~2	0.22ΦX2P	8Ts	疏繞	2L		
N5	0	5~4	0.22ΦX2P	15Ts	密繞	2L		
		1					1	



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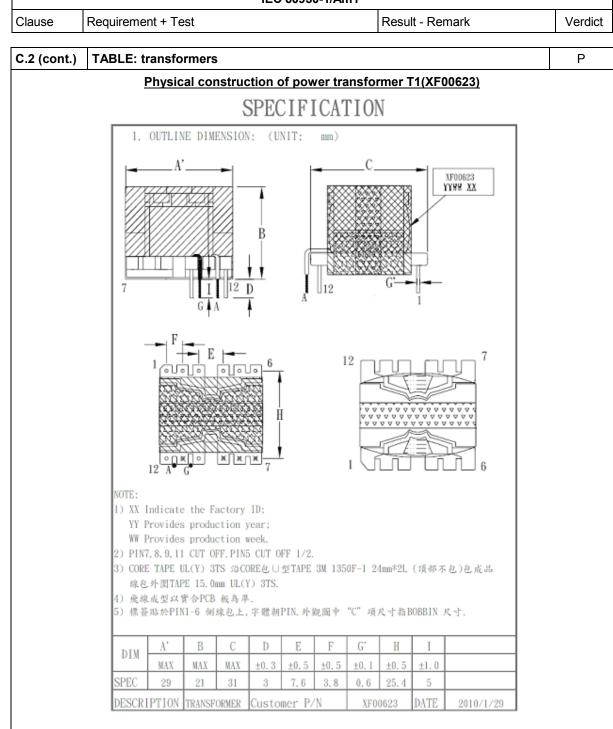
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ause	Requirement				Result - F	Pomark	Vero
ause	Requirement	. + 1651			Result - P	<b>Nethalk</b>	Vert
2 (cont.)	TABLE: tra	nsforme	ers				Р
	Physi	cal cons	struction of pow	ver trans	former T1(XF00	)751) (cont.)	
2. SCI	HEMATIC:				3. WINDING	SEQUENCE:	
	ND I	OPO					
ł	PRI	SEC		PIN		TO	
	[]]						Tape layer
3-==N	3				N 4		2 L
2		•	→ A		N 3		2 L
		N 2			N 2		2 L
				N 2		2 L	
	4		0		E 1		2 L
	8-1	• ST	ART		N 1		1 L
4==			F TUBE(透明)		N 1		I L
		1)	F TUBE(黑色)		BOBBIN	GAP:研磨	-
	NDING TABL	E					Ĩ
Winding No	Margin	PIN	Wire&Wire Copper	Turns	Winding Tape (绕線方式)	Tape Layer	Tube
(組別)	Tape (檔牆膠帶)	(腳位)	(線徑X股數)	(圖數)	(死秋刀式)	(膠帶層次)	(套管)
N1	0	6~5	0.32ΦX2P	25Ts	密繞	2L	22*15/22*12
E1	0	~4	0.025*8mm	1.1Ts	背膠	2L	0*26/15*0
~ 1			0.50ΦX5P				12*25(透明)/
N2	0	A~G	(三層絕緣線)	4Ts	密繞	2L	12*25(黑色)
N3	0	3~2	0.25ΦX2P	7Ts	疏繞	2L	24*11/24*11
N4	0	5~4	0.30ΦX2P	11Ts	密繞	2L	23*11/23*11



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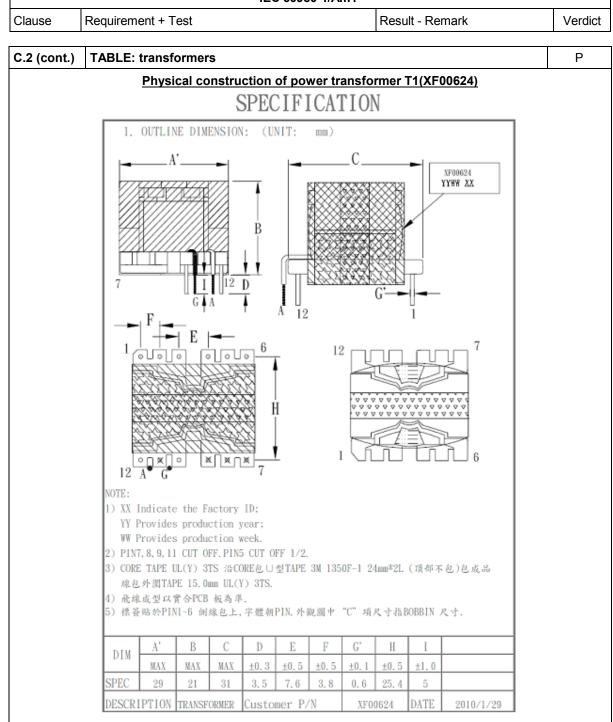
Report No.: TS11100048-ST

ause	Requirement	+ Toot			Result - F	Domark	Verd
ause	Requirement	+ Test			Result - F	Remark	Veru
2 (cont.)	TABLE: tra	nsforme	ers				Р
	Physi	cal cons	truction of pow	ver trans	former T1(XF00	0623) (cont.)	·
2. SC	HEMATIC:				3. WINDING	SEQUENCE:	
		ono		12712/010			
1	PRI	SEC		PIN		TO	
0							Tape layer
3- <del>C</del> N	N 3		— ·		N 4		Press (2004)
2	[]]	•	→ A		N 3		2 L
6-=	N 1	N 2			N 2		2 L
5			- G		N 2		2 L
4.00	N 4				E 1		2 L
	E 1		ART		N 1		1 L
	AND PROVIDED OF LODGE AND		~TUBE(透明) ~TUBE(黒色)		N 1		
			TODL(MC)		BOBBIN	GAP:研磨	
4 WI	NDINC TADI	P					
Winding	NDING TABL Margin		Wire&Wire		Winding Tape		
No	Tape	PIN (腳位)	Copper	Turns (圏數)	(繞線方式)	Tape Layer (膠帶層次)	Tube (套管)
(組別)	(檔牆膠帶)	(1819-132)	(線徑X股數)	(图数)		(修軍層-次)	(雲官)
N1	0	6~5	0.32ΦX2P	25Ts	密繞	2L	22*15/22*12
E1	0	~4	0.025*8mm	1.1Ts	背膠	2L	0*26/15*0
stations:			0.50ΦX5P				12*25(透明)/
N2	0	A~G	(三層絕緣線)	4Ts	密繞	2L	12*25(黑色)
N3	0	3~2	0.25ΦX2P	5Ts	疏繞	2L	24*11/24*11
N4	0	5~4	0.30ΦX2P	11Ts	密繞	2L	23*11/23*11



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ause	Requiremen	t + Test			Result - F	Remark	Verdi
2 (cont.)	TABLE: tra	ansform	ers				Р
		ical con	struction of pov				
2. SCH	IEMATIC:				3. WINDING	SEQUENCE:	
D	RI	SEC		DIN		TO	D
I	NI	SLC		PIN		TO	
							Tape layer 2 L
8- <del></del> N	3				N 4		The All State
		•	→ A		N 3		2 L
)- <b>C</b>	1	N 2			N 2		2 L
; —			G		N 2		2 L
N N	4		0		E 1		2 L
E E	1	• ST	ART		N 1		
4=3			「TUBE(透明)		N 1		1 L
		TI	「TUBE(黑色)		BOBBIN	GAP:研磨	<u></u>
11	NDING TABL	E	w. ow.	r	W. 1. 70		
Vinding No	Margin Tape	PIN	Wire&Wire Copper	Turns	Winding Tape (繞線方式)	Tape Layer	
(組別)	(檔牆膠帶)	(腳位)	(線徑X股數)	(圖數)		(膠帶層次)	(套管)
N1	0	6~5	0.32ΦX2P	25Ts	密繞	2L	22*15/22*12
E1	0	~4	0.025*8mm	1.1Ts	背膠	2L	0*26/15*0
			0.55ΦX3P				14*25(透明)/
N2	0	A~G	(三層絕緣線)	6Ts	密繞	2L	14*25(黑色)
N3	0	3~2	0.25ΦX2P	5Ts	疏繞	2L	24*11/24*11
N4	0	5~ <mark>4</mark>	0.30ΦX2P	11Ts	密繞	2L	23*11/23*11



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	IEC 60950-1/Am1		
Clause	Requirement + Test	Result - Remark	Verdict

## List of test equipment used:

(Note: This is an example of the required attachment. Other forms with a different layout but containing similar information are also acceptable.)

Clause	Measurement / testing	Testing / measuring equipment / material used	Range used	Calibration date
Note:		•		
Refer to the	e project file.			

Intertek

Appendix 1 Appended Table				Page 1 of 4	Report No.: TS1	Report No.: TS11100048-5	
2.1.1.7	TABLE	: Stored disch	arge on capaci	tors test		Р	
Test conditions:		τ calculated (s)	$\tau$ measured (s)	$tu \rightarrow 0$ (s)	Remarks:		
MODEL: GT	-43008	-3306-1.0-T3					
Output with no load		0.99	1.0	8.5	After 1 s, measured 138 Vpeak (limit: Max voltage 380 Vpeak X 37 % = 140.6 Vpeak		
MODEL: GI	Г-43008	-3606-T3					
Output with no load		0.99	1.0	8.5	After 1 s, measured 138 Vpeak (limit: Max. voltage 380 Vpeak X 37 % = 140.6 Vpeak)		
MODEL: GI	Г-43008	-4509-T3					
Output with no load		0.99	1.0	8.5	After 1 s, measured 138 Vpeak (limit: Max. voltage 380 Vpeak X 37 % = 140.6 Vpeak)		
MODEL: GI	Г-43008	-5015-3.0-T3					
Output with no load		0.99	1.0	8.5	After 1 s, measured 138 Vpeak (limit: Ma voltage 380 Vpeak X 37 % = 140.6 Vpea		
MODEL: GI	Г-43008	-5015-T3					
Output with no load		0.99	1.0	8.5	After 1 s, measured 138 Vpeak (limit: Max voltage 380 Vpeak X 37 % = 140.6 Vpeak)		
MODEL: GI	Г-43008	-5024-5.0-T3					
Output with no load		0.99	1.0	8.5	After 1 s, measured 138 Vpeak (limit: Max voltage 380 Vpeak X 37 % = 140.6 Vpeak		
MODEL: GI	r-43008	-5024-T3					
Output with no load		0.99	1.0	8.5	After 1 s, measured 138 Vpeak (limit: Max. voltage 380 Vpeak X 37 % = 140.6 Vpeak)		

1. X-Capacitor(s) installed for testing: CX1 = 0.33 uF

2. Bleeding resistor(s): RS1 = RS2 = 1.5 Mohm

2.4.2	TABLE: Limited current circuits measurement						Р				
Location		Voltage (Vpeak)	Current (mA)	Frequency (Hz)	Limit (mA)	Comments					
MODEL: GT-43008-3306-1.0-T3											
CY1 secondary to earth		0.508	0.254	60	0.7	_					
CY1 secondary to earth		3.26	1.63	22.9K	16.03	_					
MODEL: G	Т-43008-3606-ТЗ										
CY1 seco	CY1 secondary to earth		0.254	60	0.7	_					
CY1 secondary to earth		3.26	1.63	22.9K	16.03	_					
MODEL: G	T-43008-4509-T3			· · ·		•					



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Appendix 1 Appended Table

2.4.2	TABLE: Limited	current circuits	measuremen	t			Р
Loc	cation	Voltage (Vpeak)	Current (mA)	Frequency (Hz)	Limit (mA)	Comm	nents
CY1 secon	idary to earth	0.508	0.254	60	0.7		-
CY1 secon	idary to earth	3.26	1.63	22.9K	16.03	_	-
MODEL: GT	-43008-5015-3.0	-T3					
CY1 secon	idary to earth	0.508	0.254	60	0.7	_	-
CY1 secon	idary to earth	3.26	1.63	22.9K	16.03	_	-
MODEL: GT-	-43008-5015-T3						
CY1 secon	idary to earth	0.508	0.254	60	0.7	_	-
CY1 secon	idary to earth	3.26	1.63	22.9K	16.03	_	-
MODEL: GT-	-43008-5024-5.0	-T3					
CY1 secon	idary to earth	0.508	0.254	60	0.7	_	-
CY1 secon	idary to earth	3.26	1.63	22.9K	16.03	_	-
MODEL: GT-	-43008-5024-T3						
CY1 secon	idary to earth	0.508	0.254	60	0.7	_	-
CY1 secon	idary to earth	3.26	1.63	22.9K	16.03	_	-
Supplementa	ry information:						
Test voltage:	264 Vac / 60 Hz	<u>,</u>					

Rating of bridging components: CY1, measured Max. 2200 pF

2.6.3.4 TABLE: Resista	nce of earthing conductors an	e of earthing conductors and their terminals test				
location	resistance measured (m $\Omega$ )	limit	comments			
MODEL: GT-43008-3306-1.0-T3						
Earth pin of appliance inlet to earthed GND	19	100 m $\Omega$	Test current = 32 A ap 2 minute	plied for		
Earth pin of appliance inlet to earthed GND	20	100 mΩ	Test current = 40 A applied fo 2 minutes			
location	drop voltage measured (V)	limit	comments			
Earth pin of appliance inlet to earthed GND	0.8	2.5 V	Test current = 40 A applied for 2 minutes			
MODEL: GT-43008-3606-T3						
Earth pin of appliance inlet to earthed GND	19	100 m $\Omega$	Test current = 32 A ap 2 minute	plied for		
Earth pin of appliance inlet to earthed GND	20	100 mΩ	Test current = 40 A applied for 2 minutes			
location	drop voltage measured (V)	limit	comments			



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Appendix 1 Appended Table

Appended Table				
2.6.3.4 TABLE: Resista	nce of earthing conductors and	their termina	ls test	Р
location	resistance measured (m $\Omega$ )	limit	comments	
Earth pin of appliance inlet to earthed GND	0.8	2.5 V	Test current = 40 A ap 2 minutes	plied for
MODEL: GT-43008-4509-T3				
Earth pin of appliance inlet to earthed GND	19	100 mΩ	Test current = 32 A ap 2 minute	plied for
Earth pin of appliance inlet to earthed GND	20	100 mΩ	Test current = 40 A ap 2 minutes	plied for
location	drop voltage measured (V)	limit	comments	
Earth pin of appliance inlet to earthed GND	0.8	2.5 V	Test current = 40 A ap 2 minutes	plied for
MODEL: GT-43008-5015-3.0	-T3			
Earth pin of appliance inlet to earthed GND	19	100 mΩ	Test current = 32 A ap 2 minute	plied for
Earth pin of appliance inlet to earthed GND	20	100 mΩ	Test current = 40 A ap 2 minutes	plied for
location	drop voltage measured (V)	limit	comments	
Earth pin of appliance inlet to earthed GND	0.8	2.5 V	Test current = 40 A applied fo 2 minutes	
MODEL: GT-43008-5015-T3				
Earth pin of appliance inlet to earthed GND	19	100 mΩ	Test current = 32 A ap 2 minute	plied for
Earth pin of appliance inlet to earthed GND	20	100 mΩ	Test current = 40 A ap 2 minutes	plied for
location	drop voltage measured (V)	limit	comments	
Earth pin of appliance inlet to earthed GND	0.8	2.5 V	Test current = 40 A ap 2 minutes	plied for
MODEL: GT-43008-5024-5.0	-T3			
Earth pin of appliance inlet to earthed GND	19	100 mΩ	Test current = 32 A ap 2 minute	plied for
Earth pin of appliance inlet to earthed GND	20	100 mΩ	Test current = 40 A ap 2 minutes	plied for
location	drop voltage measured (V)	limit	comments	
Earth pin of appliance inlet to earthed GND	0.8	2.5 V	Test current = 40 A ap 2 minutes	plied for
MODEL: GT-43008-5024-T3				
Earth pin of appliance inlet to earthed GND	19	100 m $\Omega$	Test current = 32 A ap 2 minute	plied for



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Appendix 1 Appended Table

2.6.3.4 TABLE: Resistance of earthing conductors and their terminals test				Р
location	resistance measured (m $\Omega$ )	limit	comments	
Earth pin of appliance inlet to earthed GND	20	100 m $\Omega$	Test current = 40 A ap 2 minutes	plied for
location	drop voltage measured (V)	limit	comments	
Earth pin of appliance inlet to earthed GND	0.8	2.5 V	Test current = 40 A ap 2 minutes	plied for

Supplementary information:

4.6.1, 4.6.2	6.2 TABLE: Enclosure openings			N/A
locatio	on	size (mm)	comments	
Currente me e interne i	afa waa ati a wax	•		

Supplementary information:

4.6.4 TABLE: Enclosure openings in transportable equipment			N/A	
I	ocation	size (mm)	comments	
Supplemer	ntary information:			



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Appendix 2

IEC60950\_1B - ATTACHMENT

Clause

Requirement + Test

Result - Remark

Verdict

# ATTACHMENT TO TEST REPORT IEC 60950-1 EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES

Information technology equipment – Safety –

PAF	PART 1: GENERAL REQUIREMENTS				
Differences according to	EN 60950-1:2006/A11:2009/A1:2010				
Attachment Form No	EU_GD_IEC60950_1B				
Attachment Originator	SGS Fimko Ltd				
Master Attachment	Date (2010-04)				
Copyright © 2010 IEC System for Co	nformity Testing and Certification of Electrical Equipment				
(IECEE), Geneva, Switzerland. All rig	(IECEE), Geneva, Switzerland. All rights reserved.				

### EN 60950-1:2006/A11:2009/A1:2010 - CENELEC COMMON MODIFICATIONS

	IEC 60950-1, GROU	JP DIFFERE	NCES (CENEI	LEC commo	n modifications EN)	
Clause	Requirement + Test			Result	- Remark	Verdict
Contents	Add the following	annexes:				Р
	Annex ZA (norma	ive)	Normative r	eferences to	international	
			publications	with their co	rresponding European	
			publications	6		
	Annex ZB (normat	ive)	Special nati	onal conditio	ns	
General	Delete all the "cou	ntry" notes in	the reference	document (I	EC 60950-1:2005)	Р
	according to the fo	llowing list:				
	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			2.6.3.3	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	
	4.7.3.1Note 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			
General	Delete all the "cou				EC 60950-	Р
(A1:2010)	1:2005/A1:2010) a	according to t	he following lis	st:		
	1.5.7.1 Note		6.1.2.1	Note 2		
	6.2.2.1 Note	2	EE.3	Note		



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	IEC60950_1B - ATTACHME	NT	
Clause	Requirement + Test	Result - Remark	Verdict
	IEC 60950-1, GROUP DIFFERENCES (CENELEC c	ommon modifications E	N)
Clause	Requirement + Test	Result - Remark	Verdict
1.3.Z1	Add the following subclause:	Considered	N/A
	1.3.Z1 Exposure to excessive sound pressure		
	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.		
	NOTE Z1 A new method of measurement is described		
	in EN 50332-1, Sound system equipment:		
	Headphones and earphones associated 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		
1.5.1	coming from different manufacturers. Add the following NOTE:		N/A
1.5.1	NOTE Z1 The use of certain substances in electrical		IN/A
	and electronic equipment is restricted within the EU:		
	see Directive 2002/95/EC		
1.7.2.1	In addition, for a PORTABLE SOUND SYSTEM,		N/A
(A1:2010)	the instructions shall include a warning that		
(/11.2010)	excessive sound pressure from earphones and		
	headphones can cause hearing loss.		
2.7.1	Replace the subclause as follows:	Considered	Р
	Basic requirements		
	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;		



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	IEC60950_1B - ATTACHME	ENT	
Clause	Requirement + Test	Result - Remark	Verdict
	IEC 60950-1, GROUP DIFFERENCES (CENELEC o	common modifications F	EN)
Clause	Requirement + Test	Result - Remark	Verdict
Clause	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	Result - Remark	P
	TYPE A the building installation shall be regarded as providing protection in accordance with the rating of the wall applied outlet		
2.7.2	rating of the wall socket outlet. This subclause has been declared 'void'.		N/A
3.2.3	Delete the NOTE in Table 3A, and delete also in this table the conduit sizes in parentheses.		N/A
3.2.5.1	Replace"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".In Table 3B, replace the first four lines by the following: Up to and including 6  0,75 a)   0,75 a)   Over 6 up to and including 10  (0,75) b)Over 10 up to and including 16  (1,0) c)1,5   In the conditions applicable to Table 3B delete the words "in some countries" in condition a). In NOTE 1, applicable to Table 3B, delete the second sentence.		N/A
3.3.4	In Table 3D, delete the fourth line: conductor sizes for 10 to 13 A, and replace with the following: Over 10 up to and including 16   1,5 to 2,5   1,5 to 4   Delete the fifth line: conductor sizes for 13 to 16 A		N/A
4.3.13.6 (A1:2010)	Replace the existing NOTE by the following: 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, and 2006/25/EC: Directive on the minimum health and safety requirements regarding the exposure of workers to risks arising from physical agents (artifical optical radiation).	(For radiation)	N/A



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	IEC60950 1B - ATTACHME	INT	
Clause	Requirement + Test	Result - Remark	Verdict
	IEC 60950-1, GROUP DIFFERENCES (CENELEC c	ommon modifications EN)	
Clause	Requirement + Test	Result - Remark	Verdict
	Standards taking into account mentioned Recommendation and Directive which demonstrate compliance with the applicable EU Directive are indicated in the OJEC.		N/A
Annex H	Replace the last paragraph of this annex by: At any point 10 cm from the surface of the OPERATOR ACCESS AREA, the dose rate shall not exceed 1 $\mu$ Sv/h (0,1 mR/h) (see NOTE). Account is taken of the background level. Replace the notes as follows: NOTE These values appear in Directive 96/29/Euratom. Delete NOTE 2.	(For radiation)	N/A
Bibliography	Additional EN standards.		

## ZA NORMATIVE REFERENCES TO INTERNATIONAL PUBLICATIONS WITH THEIR CORRESPONDING EUROPEAN PUBLICATIONS

	ZB ANNEX (normative) SPECIAL NATIONAL CONDITIONS (EN)			
Clause	Requirement + Test	Result - Remark	Verdict	
1.2.4.1	In <b>Denmark</b> , certain types of Class I appliances (see 3.2.1.1) may be provided with a plug not establishing earthing conditions when inserted into Danish socket-outlets.		N/A	
1.2.13.14	In <b>Norway</b> and <b>Sweden</b> , for requirements see 1.7.2.1 and 7.3 of this annex.		N/A	
1.5.7.1	In <b>Finland, Norway</b> and <b>Sweden</b> , resistors bridging BASIC INSULATION in CLASS I PLUGGABLE EQUIPMENT TYPE A must comply with the requirements in 1.5.7.1. In addition when a single resistor is used, the resistor must withstand the resistor test in 1.5.7.2.		N/A	
1.5.8	In <b>Norway</b> , due to the IT power system used (see annex V, Figure V.7), capacitors are required to be rated for the applicable line-to-line voltage (230 V).		P	
1.5.9.4	In <b>Finland</b> , <b>Norway</b> and <b>Sweden</b> , the third dashed sentence is applicable only to equipment as defined in 6.1.2.2 of this annex.		N/A	



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IEC60950_1B - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdic
	ZB ANNEX (normative) SPECIAL NATIONAL CONDITIO		
Clause	Requirement + Test	Result - Remark	Verdict
1.7.2.1	<ul> <li>Requirement + Test</li> <li>In Finland, Norway and Sweden, CLASS I PLUGGABLE EQUIPMENT TYPE A intended for connection to other equipment or a network shall, if safety relies on connection to protective earth or if surge suppressors are connected between the network terminals and accessible parts, have a marking stating that the equipment must be connected to an earthed mains socket-outlet. The marking text in the applicable countries shall be as follows:</li> <li>In Finland: "Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan"</li> <li>In Norway: "Apparatet må tilkoples jordet stikkontakt"</li> <li>In Sweden: "Apparaten skall anslutas till jordat uttag"</li> <li>In Norway and Sweden, the screen of the cable 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 need to be isolated from the screen of a cable distribution system.</li> <li>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 e.g. a retailer. 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: "Equipment connected to the protective earthing of the building installation through the mains connection to protective earthing – and to a cable distribution system using coaxial cable, may in some circumstances create a fire hazard. Connection to a cable distribution system has therefore to be provided through a device providing electrical isolation below a certain frequency range (galvanic isolator, see EN 60728- 11)."</li> </ul>		P



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IEC60950_1B - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	ZB ANNEX (normative)		
	SPECIAL NATIONAL CONDITION		
Clause	Requirement + Test	Result - Remark	Verdict
	NOTE In Norway, due to regulation for installations of cable		N/A
	distribution systems, 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.		
	Translation to Norwegian (the Swedish text will		
	also be accepted in Norway):		
	"Utstyr som er koplet til beskyttelsesjord via		
	nettplugg og/eller via annet jordtilkoplet		
	utstyr – og er tilkoplet et kabel-TV nett, kan		
	forårsake brannfare. For å unngå dette skal det		
	ved tilkopling av utstyret til kabel-TV nettet		
	installeres en galvanisk isolator mellom utstyret		
	og kabel- TV nettet." Translation to Swedich:		
	Translation to Swedish: "Utrustning 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 medfőra risk főr		
	brand. Főr att undvika detta skall vid anslutning av		
	utrustningen till kabel-TV nät		
	galvanisk isolator finnas mellan utrustningen och		
	kabel-TV nätet."		
1.7.5	In Denmark, socket-outlets for providing power to		N/A
	other equipment shall be in accordance with the		
	Heavy Current Regulations, Section 107-2-D1,		
	Standard Sheet DK 1-3a, DK 1-5a or DK 1-7a,		
	when used on Class I equipment. For		
	STATIONARY EQUIPMENT the socket-outlet		
	shall be in accordance with Standard Sheet DK 1-		
	1b or DK 1-5a.		
	For CLASS II EQUIPMENT the socket outlet shall be		
	in accordance with Standard Sheet DKA 1-4a.		
2.2.4	In <b>Norway</b> , for requirements see 1.7.2.1, 6.1.2.1		N/A
	and 6.1.2.2 of this annex.		
2.3.2	In <b>Finland</b> , <b>Norway</b> and <b>Sweden</b> there are		N/A
	additional requirements for the insulation. See		
0.0.4	6.1.2.1 and 6.1.2.2 of this annex.		<b>N1/A</b>
2.3.4	In <b>Norway</b> , for requirements see 1.7.2.1, 6.1.2.1		N/A
	and 6.1.2.2 of this annex.		<b>N1/A</b>
2.6.3.3	In the <b>United Kingdom</b> , the current rating of the		N/A



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	IEC60950_1B - ATTACHN	IENT	
Clause	Requirement + Test	Result - Remark	Verdict
	ZB ANNEX (normative SPECIAL NATIONAL CONDITION		
Clause	Requirement + Test	Result - Remark	Verdict
2.7.1	In the <b>United Kingdom</b> , to protect against excessive currents and short-circuits in the PRIMARY CIRCUIT of DIRECT PLUG-IN EQUIPMENT, tests according to 5.3 shall be conducted, using an external protective device rated 30 A or 32 A. If these tests fail, suitable protective devices shall be included as integral parts of the DIRECT PLUG-IN EQUIPMENT, so that the requirements of 5.3 are met.		N/A
2.10.5.13	In <b>Finland</b> , <b>Norway</b> and <b>Sweden</b> , there are additional requirements for the insulation, see 6.1.2.1 and 6.1.2.2 of this annex.		N/A
3.2.1.1	In <b>Switzerland</b> , supply cords of equipment having a RATED CURRENT not exceeding 10 A shall be provided with a plug complying with SEV 1011 or IEC 60884-1 and one of the following dimension sheets: SEV 6532-2.1991 Plug Type 15 3P+N+PE 250/400 V, 10 A SEV 6533-2.1991 Plug Type 11 L+N 250 V, 10 A SEV 6534-2.1991 Plug Type 12 L+N+PE 250 V, 10 A In general, EN 60309 applies for plugs for currents exceeding 10 A. However, a 16 A plug and socket-outlet system is being introduced in Switzerland, the plugs of which are according to the following dimension sheets, published in February 1998: SEV 5932-2.1998: Plug Type 25, 3L+N+PE 230/400 V, 16 A SEV 5933-2.1998: Plug Type 21, L+N, 250 V, 16A SEV 5934-2.1998: Plug Type 23, L+N+PE .250 V 16 A		N/A



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IEC60950_1B - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	ZB ANNEX (normative) SPECIAL NATIONAL CONDITIO		
Clause	Requirement + Test	Result - Remark	Verdict
3.2.1.1	In <b>Denmark</b> , supply cords of single-phase equipment having a rated current not exceeding13 A shall be provided with a plug according to the Heavy Current Regulations, Section 107-2-D1. 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 poly-phase equipment and single-phase equipment having a RATED CURRENT exceeding 13 A is provided with a supply cord with a plug, this plug shall be in accordance with the Heavy Current Regulations, Section 107-2-D1 or EN 60309-2.		N/A
3.2.1.1	<ul> <li>In Spain, supply cords of single-phase equipment having a rated current not exceeding 10 A shall be provided with a plug according to UNE 20315:1994.</li> <li>Supply cords of single-phase equipment having a rated current not exceeding 2,5 A shall be provided with a plug according to UNE-EN 50075:1993.</li> <li>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 UNE 20315:1994.</li> <li>If poly-phase equipment is provided with a supply cord with a plug, this plug shall be in accordance with UNE-EN 60309-2.</li> </ul>		N/A
3.2.1.1	In the <b>United Kingdom</b> , apparatus 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 and plug, shall be fitted with a 'standard plug' in accordance with Statutory Instrument 1768:1994 - The Plugs and Sockets etc. (Safety) Regulations 1994, unless exempted by those regulations. NOTE 'Standard plug' is defined in SI 1768:1994 and essentially means an approved plug conforming to BS 1363 or an approved conversion plug.		N/A



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IEC60950_1B - ATTACHMENT				
Clause	Requirement + Test	Result - Remark	Verdict	
	ZB ANNEX (normative) SPECIAL NATIONAL CONDITION			
Clause	Requirement + Test	Result - Remark	Verdict	
3.2.1.1	<ul> <li>In Ireland, apparatus which is fitted with a flexible cable or cord and is designed to be connected to a mains socket conforming to I.S. 411 by means of that flexible cable or cord and plug, shall be fitted with a 13 A plug in accordance with Statutory Instrument 525:1997 - National Standards Authority of Ireland (section 28) (13 A Plugs and Conversion Adaptors for Domestic Use) Regulations 1997.</li> </ul>		N/A	
3.2.4	In <b>Switzerland</b> , for requirements see 3.2.1.1 of this annex.		N/A	
3.2.5.1	In the <b>United Kingdom</b> , a power supply cord with conductor of 1,25 mm2 is allowed for equipment with a rated current over 10 A and up to and including 13 A.		N/A	
3.3.4	In the <b>United Kingdom</b> , the range of conductor sizes of flexible cords to be accepted by terminals for equipment with a RATED CURRENT of over 10 A up to and including 13 A is: • 1,25 mm <sup>2</sup> to 1,5 mm <sup>2</sup> nominal cross-sectional area.		N/A	
4.3.6	In the <b>United Kingdom</b> , the torque test is performed using a socket outlet complying with BS 1363 part 1:1995, including Amendment 1:1997 and Amendment 2:2003 and 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.		N/A	
4.3.6	In <b>Ireland</b> , DIRECT PLUG-IN EQUIPMENT is known as plug similar devices. Such devices shall comply with Statutory Instrument 526:1997 - National Standards Authority of Ireland (Section 28) (Electrical plugs, plug similar devices and sockets for domestic use) Regulations, 1997.		N/A	



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IEC60950_1B - ATTACHMENT				
Clause	Requirement + Test	Result - Remark	Verdict	
	ZB ANNEX (normative) SPECIAL NATIONAL CONDITIO			
Clause	Requirement + Test	Result - Remark	Verdict	
<u>Clause</u> 5.1.7.1	Requirement + Test         In Finland, Norway and Sweden TOUCH         CURRENT measurement results exceeding 3,5         mA r.m.s. are permitted only for the following         equipment:         • STATIONARY PLUGGABLE EQUIPMENT         TYPE A that         is intended to be used in a RESTRICTED         ACCESS LOCATION where equipotential bonding         has been applied, for example, in a         telecommunication centre; and         has provision for a permanently connected         PROTECTIVE EARTHING CONDUCTOR; and         is provided with instructions for the         installation of that conductor by a SERVICE         PERSON;         • STATIONARY PLUGGABLE EQUIPMENT		N/A	
	TYPE B; • STATIONARY PERMANENTLY CONNECTED EQUIPMENT.			
6.1.2.1 (A1:2010)	In Finland, Norway and Sweden, add the following text between the first and second paragraph of the compliance clause: If this insulation is solid, including insulation forming part of a component, it shall at least consist of either - 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. Alternatively for components, there is no distance through insulation requirements 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 - passes the tests and inspection criteria of 2.10.11 with an electric strength test of 1,5 kV multiplied by 1,6 (the electric strength test of 2.10.10 shall be performed using 1,5 kV), and - is subject to ROUTINE TESTING for electric strength during manufacturing, using a test voltage of 1,5 kV.		N/A	



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	IEC60950_1B - ATTACHMENT				
Clause	Requirement + Test	Result - Remark	Verdict		
	ZB ANNEX (normative) SPECIAL NATIONAL CONDITIO				
Clause	Requirement + Test	Result - Remark	Verdict		
	It is permitted to bridge this insulation with an optocoupler complying with 2.10.5.4 b).		N/A		
	It is permitted to bridge this insulation with a capacitor complying with EN 60384-14:2005, subclass Y2. A capacitor classified Y3 according to EN				
	60384-14:2005, may bridge this insulation under the following conditions: - 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				
	EN 60950-1:2006, 6.2.2.1; - 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.				
6.1.2.2	In Finland, Norway and Sweden, the exclusions are applicable for PERMANENTLY CONNECTED EQUIPMENT, PLUGGABLE EQUIPMENT TYPE B and equipment intended to be used in a RESTRICTED ACCESS LOCATION where equipotential bonding has been applied, e.g. in a telecommunication centre, and which has provision for a permanently connected PROTECTIVE EARTHING CONDUCTOR and is provided with instructions for the installation of that conductor by a SERVICE PERSON.		N/A		
7.2	In <b>Finland</b> , <b>Norway</b> and <b>Sweden</b> , for requirements see 6.1.2.1 and 6.1.2.2 of this annex. The term TELECOMMUNICATION NETWORK in 6.1.2 being replaced by the term CABLE DISTRIBUTION SYSTEM.	The EUT is not connected to cable distribution system	N/A		
7.3	In <b>Norway</b> and <b>Sweden</b> , for requirements see 1.2.13.14 and 1.7.2.1 of this annex.		N/A		
7.3	In <b>Norway</b> , for installation conditions see EN 60728-11:2005.		N/A		



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Clause

Appendix 2

IEC60950\_1B - ATTACHMENT

Requirement + Test

Result - Remark

Verdict

## ATTACHMENT TO TEST REPORT IEC 60950-1 EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES

Information technology equipment – Safety – PART 1: GENERAL REQUIREMENTS

### EN 60950-1:2006/A12: 2011 – CENELEC COMMON MODIFICATIONS

1.3.Z1	in EN 60950-1:2006	N/A
	Delete the addition of 1.3.Z1	
1.2.3	in EN 60950-1:2006/A1:2010	N/A
	Delete the definition 1.2.3.Z1	
1.7.2.1	in EN 60950-1:2006 and EN 60950-	N/A
	1:2006/A1:2010	
	Delete NOTE Z1 and the addition for Portable	
	Sound System	
	Add the following clause and annex to the	
	existing standard and amendments	
Zx.	Protection against excessive sound pressure	N/A
	from personal music players	



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Clause	Nausa Requirement + Test Regult Remark Vordi				
Clause	Requirement + Test	Result - Remark	veraid		
Zx.1	Requirement + Test           General           This sub-clause specifies requirements for protection against excessive sound pressure from personal music players that are closely coupled to the ear. It also specifies requirements for earphones and headphones intended for use with personal music players.           A personal music player is a portable equipment for personal use, that:         is designed to allow the user to listen to recorded or broadcast sound or video; and primarily uses headphones or earphones that can be worn in or on or around the ears; and allows the user to walk around while in use.           NOTE 1 Examples are hand-held or body-worn portable CD players, MP3 audio players, mobile phones with MP3 type features, PDA's or similar equipment.           A personal music player and earphones or headphones intended to be used with personal music players shall comply with the requirements of this sub-clause.           The requirements do not apply:           while the personal music player is connected to an external amplifier; or -while the headphones or earphones are not used.           NOTE 2 An external amplifier is an amplifier which is not part of the personal music player.           The requirements do not apply to: hearing aid equipment and professional equipment;           NOTE 3 Professional equipment is equipment.           analogue personal music players (personal music players without any kind of digital processing of the sound signal) that are brought to the market before the end of 2015.           NOTE 4 This exemption has been allowed because this technology is falling out of use and it is expected that within a few years it will no longer ex		Verdic N/A		



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Clause	Requirement + Test	Result - Remark Ve	
Clause	Requirement + rest	Result - Remark	Verdic
Zx.2	Equipment requirements         No safety provision is required for equipment that complies with the following:         -equipment provided as a package (personal music player with its listening device), where the acoustic output LAeq,T is ≤ 85 dBA measured while playing the fixed "programme simulation noise" as described in EN 50332-1; and a personal music player provided with an analogue electrical output socket for a listening device, where the electrical output is ≤ 27 mV measured as described in EN 50332-2, while playing the fixed "programme simulation noise" as described in EN 50332-1.         NOTE 1 Wherever the term acoustic output is used in this clause, the 30 s A-weighted equivalent sound pressure level LAeq,T is meant. See also Zx.5 and Annex Zx.         All other equipment shall:         a) protect the user from unintentional acoustic outputs exceeding those mentioned above, and automatically return to an output level not exceeding those mentioned above when the power is switched off; and         c) provide a means to actively inform the user of the increased sound pressure when the equipment is operated with an acoustic output exceeding those mentioned above. Any means used shall be acknowledged by the user before activating a mode of operation which allows for an acoustic output exceeding those mentioned above. Any means used shall be acknowledgement does not need to be repeated more than once every 20 h of cumulative listening time; and         NOTE 2 Examples of means include visual or audible signals. Action from the user is always required.         NOTE 3 The 20 h listening time; independent how often and how long the personal music player has been switched off.         d) have a warning as specified in Zx.3; and e) not exceed the f		N/A



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	IEC60950_1B - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdic	
(Cont.)	<ul> <li>2) a personal music player provided with an analogue electrical output socket for a listening device, the electrical output shall be ≤ 150 mV measured as described in EN 50332-2, while playing the fixed "programme simulation noise" described in EN 50332-1.</li> <li>For music where the average sound pressure (long term LAeq,T) measured over the duration of the song is lower than the average produced by the programme simulation noise, the warning does not need to be given as long as the average sound pressure of the song is below the basic limit of 85 dBA. In this case T becomes the duration of the song.</li> <li>NOTE 4 Classical music typically has an average sound pressure (long term LAeq,T) which is much lower than the average programme simulation noise. Therefore, if the player is capable to analyse the song and compare it with the programme simulation noise, the warning does not need to be given as long as the average sound pressure of the song is below the basic limit of 85 dBA.</li> <li>For example, if the player is set with the programme simulation noise to 85 dBA, there is no need to give a warning or ask an acknowledgement as long as the average sound level of the song is not above the basic limit of 85 dBA.</li> </ul>		N/A	
Zx.3	Warning         The warning shall be placed on the equipment, or         on the packaging, or in the instruction manual and         shall consist of the following:         the symbol of Figure 1 with a minimum height of 5         mm; and         the following wording, or similar:         To prevent possible hearing damage, do not         listen at high volume levels for long periods.         Figure 1 – Warning label (IEC 60417-6044)         Alternatively, the entire warning may be given         through the equipment display during use, when         the user is asked to acknowledge activation of the         higher level.		N/A	



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IEC60950_1B - ATTACHMENT				
Clause	Requirement + Test	Result - Remark	Verdict	
Zx.4	Requirements for listening devices (headphones and earphones)		N/A	
Zx.4.1	<ul> <li>Wired listening devices with analogue input</li> <li>With 94 dBA sound pressure output LAeq,T, the input voltage of the fixed "programme simulation noise" described in EN 50332-2 shall be ≥ 75 mV. This requirement is applicable in any mode where the headphones can operate (active or passive), including any available setting (for example built-in volume level control).</li> <li>NOTE The values of 94 dBA – 75 mV correspond with 85dBA – 27 mV and 100 dBA – 150 mV.</li> </ul>		N/A	
Zx.4.2	<ul> <li>Wired listening devices with digital input</li> <li>With any playing device playing the fixed</li> <li>"programme simulation noise" described in EN</li> <li>50332-1 (and respecting the digital interface standards, where a digital interface standard exists that specifies the equivalent acoustic level), the acoustic output LAeq,T of the listening device shall be ≤ 100 dBA.</li> <li>This requirement is applicable in any mode where the headphones can operate, including any available setting (for example built-in volume level control, additional sound feature like equalization, etc.).</li> <li>NOTE An example of a wired listening device with digital input is a USB headphone.</li> </ul>		N/A	
Zx.4.3	Wireless listening devices In wireless mode: with any playing and transmitting device playing the fixed programme simulation noise described in EN 50332-1; and respecting the wireless transmission standards, where an air interface standard exists that specifies the equivalent acoustic level; and with volume and sound settings in the listening device (for example built-in volume level control, additional sound feature like equalization, etc.) set to the combination of positions that maximize the measured acoustic output for the above- mentioned programme simulation noise, the acoustic output LAeq,T of the listening device shall be ≤ 100 dBA. NOTE An example of a wireless listening device is a Bluetooth headphone.		N/A	



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IEC60950_1B - ATTACHMENT				
Clause	Requirement + Test	Result - Remark	Verdic	
Zx.5	Measurement methods Measurements shall be made in accordance with EN 50332-1 or EN 50332-2 as applicable. Unless stated otherwise, the time interval T shall be 30 s. NOTE Test method for wireless equipment provided without listening device should be defined.		N/A	
Annex Zx (informative)	Significance of LAeq,T in EN 50332-1 and additional information LAeq,T is derived from the general formula for equivalent sound pressure: $L_{eq} = 10 \log \left[ \frac{1}{t_2 - t_1} \int_{t_1}^{t_2} \frac{p_A^2}{2^d} dt \right]$ This can be represented graphically as follows: $\int_{0}^{0} \frac{1}{t_2 - t_1} \int_{t_1}^{t_2} \frac{p_A^2}{2^d} dt = \frac{1}{t_2 - t_1} \int_{t_1}^{t_2} \frac{p_A^2}{2^d} dt = \frac{1}{t_2 - t_1} \int_{t_1}^{t_2} \frac{p_A^2}{p_0^2} dt = \frac{1}{t_2 - t_1} \int_{t_1}^{t_2} \frac{p_A^2}{p_A^2} dt = \frac{1}{t_2 - t_1} \int_{t_1}^{t_2} \frac{p_A^2}{p_A^2} dt = \frac{1}{t_2 - t_1} \int_{t_1}^{t_2} \frac{p_A^2}{p_A^2} dt =$		N/A	



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 IEC60950\_1B - ATTACHMENT

 Clause
 Requirement + Test
 Result - Remark
 Verdict



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National Differences				
Clause	Requirement + Test	Result - Remark	Verdict	
	National Differences Korea IEC 60950-1, 2nd ed.	<b>V</b> 7		
	(K 60950-1	1) Last modification 2007-05-29		
1.5.101	Plugs for the connection of the apparatus to the supply mains shall comply with the Korean requirement (KSC 8305).	Shall be evaluated when subjected to national approval	N/A	
7	EMC The apparatus shall comply with the relevant CISPR standards.	Shall be evaluated when subjected to national approval	N/A	



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National Differences

Clause Requirement + Test

Result - Remark

Verdict

	National Differences Australia (AU) IEC 60950-1, 2nd ed.	
	(AS/NZS 60950.1:2011) Last modification 2011-05-06	
	Appendix ZZ (Normative) Variations to IEC 60950-1:2005 for application in Australia and New Zealand	—
	ZZ1 Introduction This Appendix sets out variations and additional requirements to cover issues which have been addressed by International Standard. These variations indicate national variations for purposes of the IECEE CB System and will be published in the IECEE CB Bulletin.	_
	ZZ2 Variations The following variations apply to the source text:	—
1.2	Insert the following between 'person, service' and 'range, rated frequency': POTENTIAL IGNITION SOURCE1.2.12	Р
1.2.12.201	Insert a new Clause 1.2.12.201 after Clause 1.2.12.15 as follows: 1.2.12.201 POTENTIAL IGNITION SOURCE Possible fault which can start a fire if the open- circuit voltage measured across an interruption or faulty contact exceeds a value of 50 V (peak) a.c. or d.c. and the product of the peak value of this voltage and the measured r.m.s. current under normal operating conditions exceeds 15 VA. Such a faulty contact or interruption in an electrical connection includes those which may occur in CONDUCTIVE PATTERNS on PRINTED BOARDS. NOTE 201 An electronic protection circuit may be used to prevent such a fault from becoming a POTENTIAL IGNITION SOURCE. NOTE 202 This definition is from AS/NZS 60065:2003.	Ρ
1.5.1	Add the following to the end of first paragraph: 'or the relevant Australian/New Zealand Standard.' Add the following after the word 'standard', in NOTE 1: 'or the Australian/New Zealand Standard'	Р
1.5.2	Add the following to the end of first and third dash items: 'or the relevant Australian/New Zealand Standard'	Р



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		Natio	nal Differences		
Clause	Requirement + Test			Result - Remark	Verdict
3.2.5.1	Modify Table 3B as foll Delete the first four row following:		e with the		N/A
	RATED CURRENT OF	Minimum co	nductor sizes		
	EQUIPMENT	Nominal cross- section area mm <sup>2</sup>	AWG or Kcmil (cross-section area in mm <sup>2</sup> ) See note 2		
	Over 0.2 up to and including 3 Over 3 up to and including 7.5 Over 7.5 up to and including 10 Over 10 up to and including 16	0,5 <sup>a)</sup> 0,75 (0,75) <sup>b)</sup> 1,00 (1,0) <sup>c)</sup> 1,5	16 [1,3]		
	Delete NOTE 1. Delete Footnote <sup>a)</sup> and a) This nominal cross-s for Class II appliances i supply cord, measured cord, or cord guard, ent entry to the plug does n three-core supply flexib see AS/NZS 3191).	ectional area f the length of between the ers the appli- ot exceed 2	i is only allowed of the power point where the ance, and the m (0.5 mm <sup>2</sup>		
4.1.201	Insert a new Clause 4. follows: 4.1.201 Display devices purposes Display devices which r purpose, with a mass o with the requirements for hazards, including the a requirements for televis AS/NZS 60065.	es used for t nay be used f 7 kg or mor or stability an additional sta	elevision for television e, shall comply d mechanical bility		N/A
4.3.6	Delete the third paragra following: Equipment with a plug p into a 10 A 3-pin flat-pir with AS/NZS 3112, sha requirements in AS/NZS integral pins for insertio	portion, suital socket-outle Il comply with S 3112 for ec	ble for insertion et complying n the quipment with		N/A
4.3.13.5	Add the following to the ', or AS/NZS 2211.1'				N/A
4.7	Add the following new p clause: 'For alternate tests refe				N/A
4.7.201	Insert a new Clause 4. follows: 4.7.201 Resistance to	7.201 after C	lause 4.7.3.6 as	3	N/A



	National Differences			
Clause	Requirement + Test	Result - Remark	Verdict	
4.7.201.1	<ul> <li>General</li> <li>Parts of non-metallic material shall be resistant to ignition and spread of fire.</li> <li>This requirement does not apply to decorative trims, knobs and other parts unlikely to be ignited or to propagate flames originating from inside the apparatus, or the following: <ul> <li>(a) Components that are contained in an enclosure having a flammability category of FV-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.</li> <li>(b) The following parts which would contribute negligible fuel to a fire: <ul> <li>small mechanical parts, the mass of which does not exceed 4 g, such as mounting parts, gears, cams, belts and bearings;</li> <li>small electrical components, such as capacitors with a volume not exceeding 1 750 mm<sup>3</sup>, 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.</li> </ul> </li> </ul></li></ul>		N/A	
(cont.)	<ul> <li>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 fire from one part to another.</li> <li>Compliance shall be checked by the tests of 4.7.201.2, 4.7.201.3, 4.7.201.4 and 4.7.201.5.</li> <li>For the base material of printed boards, compliance shall be checked by the test of 4.7.201.5.</li> <li>The tests shall be carried out on parts of nonmetallic material which have been removed from the apparatus. When the glow wire test is carried out, the parts shall be placed in the same orientation as they would be in normal use.</li> <li>These tests are not carried out on internal wiring.</li> </ul>		N/A	



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	National Differences			
Clause	Requirement + Test	Result - Remark	Verdict	
4.7.201.2	Testing of non-metallic materials 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 $^{\circ}$ C. 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 sample tested was not thicker than the relevant part.		N/A	
4.7.201.3	Testing of insulating materials 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 $^{\circ}$ C. The test shall be also carried out on other parts of insulating material which are within a distance of 3 mm of the connection. NOTE Contacts in components such as switch contacts are considered to be connections.		N/A	



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_		National Differences		
Clause	Requirement + Tes	t	Result - Remark	Verdic
(cont.)	produce a flame, o within the envelope diameter of 20 mm subjected to the ne shielded by a barrie test shall not be tes The needle-flame t	hstand the glow-wire test but ther parts above the connection of a vertical cylinder having a and a height of 50 mm shall be edle-flame test. However, parts er which meets the needle-flame sted. est shall be made in accordance 5.11.5 with the following		N/A
	Clause of AS/NZS	Change		
	60695.11.5			
	9 Test procedure			
	9.2 Application of	Replace the first paragraph		
	9.3 Number of test	with: The specimen shall be arranged so that the 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. <b>Replace</b> the second paragraph with: The duration of application of the test flame shall be 30 $s \pm 1 s$ .		
	11 Evaluation of test results	which shall withstand the test.  Replace with: The duration of burning (t <sub>b</sub> )		
		shall not exceed 30 s. However, for printed circuit boards, it shall not exceed 15 s.		
(cont.)	parts of material cla to AS/NZS 60695.1	est shall not be carried out on assified as V-0 or V-1 according 1.10, provided that the sample ker than the relevant part.		



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	National Differences			
Clause	Requirement + Test	Result - Remark	Verdic	
4.7.201.4	Testing in the event of non-extinguishing material If parts, other than enclosures, do not withstand the glow wire tests of 4.7.201.3, by failure to extinguish within 30 s after the removal of the glow-wire tip, the needle-flame test detailed in 4.7.201.3 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 4.7.201.3. Parts shielded by a separate barrier which meets the needle-flame test need not be tested. 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 4.7.201 without the need for consequential testing. NOTE 2 If other parts do not withstand the glow- wire test due 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 4.7.201 without the need for consequential testing. NOTE 2 If other parts do not withstand the glow- wire test due 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 4.7.201 without the need for consequential testing. 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.		N/A	



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Clause	Dequirement L Test	Docult Domort	Vandia
Clause	Requirement + Test	Result - Remark	Verdic
4.7.201.5	Testing of printed board		N/A
	The base material of printed boards shall be		
	subjected to the needle-flame test of Clause		
	4.7.201.3. 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.		
	The test is not carried out if the —		
	<ul> <li>Printed board does not carry any POTENTIAL IGNITION SOURCE;</li> </ul>		
	- 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		
	- Base material of printed boards, on which the		
	available apparatus 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.		
	Compliance shall be determined using the smallest		
	thickness of the material.		
	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 maximise the apparent power for		
	more than 2 min when the circuit supplied is		
	disconnected.		
6.2.2	For Australia only, <b>delete</b> the first paragraph and		
	Note, and <b>replace</b> with the following:		
	In Australia only, compliance with 6.2.2 shall be		
	checked by the tests of both 6.2.2.1 and 6.2.2.2.	1	



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	National Differences			
Clause	Requirement + Test	Result - Remark	Verdict	
6.2.2.1	<ul> <li>For Australia only, delete the first paragraph including the Notes, and replace with the following: In Australia only, the electrical separation is subjected to 10 impulses of alternating polarity, using the impulse test generator reference 1 of Table N.1. The interval between successive impulses is 60 s and the initial voltage, U<sub>c</sub>, is:</li> <li>(i) for 6.2.1 a): 7.0 kV for hand-held telephones and for headsets and 2.5 kV for other equipment; and</li> <li>(ii) for 6.2.1 b) and 6.2.1 c): 1.5 kV.</li> <li>NOTE 201 The 7 kV impulse simulates lightning surges on typical rural and semi-rural network lines. NOTE 202 The value of 2.5 kV for 6.2.1 a) was chosen to ensure the adequacy of the insulation concerned and does not necessarily simulate likely overvoltages.</li> </ul>		N/A	
6.2.2.2	overvoltages.         For Australia only, delete the second paragraph including the Note, and replace with the following:         In Australia only, the a.c. test voltage is:         (i) for 6.2.1 a): 3 kV; and         (ii) for 6.2.1 b) and 6.2.1 c): 1.5 kV.         NOTE 201 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 have been determined considering the low frequency induced		N/A	
7.3	<ul> <li>voltages from the power supply distribution system.</li> <li>Add the following before the first paragraph:</li> <li>Equipment providing functions that fall only within the scope of AS/NZS 60065 and that incorporate a PSTN interface, are not required to comply with this clause where the only ports provided on the equipment, in addition to a coaxial cable connection and a PSTN interface, are audio or video ports and analogue or data ports not intended to be used for telecommunications purposes.</li> </ul>		N/A	
Annex P	Add the following Normative References: AS/NZS 3191, Electric flexible cords AS/NZS 3112, Approval and test specification— Plugs and socket-outlets		N/A	



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	National Differences				
Clause	Requirement + Test	Result - Remark	Verdict		
Index	Insert the following between 'asbestos, not to be used as insulation' and 'attitude see orientation':           AS/NZS 2211.1		N/A		



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National Differences

Clause Requirement + Test Result - Remark Verdict National Differences China (CN) IEC 60950, 3rd ed.

1	. Supply tolerance	Р
	em 1.4.5 of IEC 60950 stipulates the tolerance of	
	ated voltage is +6 % and –10 %, while GB4943-	
	001 makes a specification of tolerance of +10 %	
	nd –10 %.	
2.	. Power rating marking	Р
Ite	em 1.7.1 of IEC 60950 does not specify concrete	
fig	gures of markings of supply voltage and frequency,	
in	stead, descriptions are given by examples. But the	
e	xamples do not include China's mains voltage.	
G	B4943-2001 stipulates that:	
-	A single rated voltage shall expressed as 220 V	
-	When a rated voltage range is given, the range	
	shall cover 220 V	
-	When a variety voltages or rated voltage ranges	
	are given, one of them shall be set as 220 V	
	when dispatched from the factory	
-	Rated frequency or rated frequency range shall	
	be 50 Hz or include 50 Hz	
-	If a unit is not provided with means of direct	
	connection to the AC mains supply, it need not	
	be marked with any electrical rating	
	Plate and warning marking in Chinese	N/A
	em 1.7.12 of GB4943-2001 stipulates: instructions	
	nd equipment markings related to safety shall be in	
	andardized Chinese.	
	Power supply plug	N/A
	ccording to China's particular standard for power	
	upply plug, it is added in article 3.2.1 of GB4943-	
	001 that plug connecting equipment with AC mains	
	upply shall be in accordance with requirements of	
G	B1002.	



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National Differences

	National Differences	1	I
Clause	Requirement + Test	Result - Remark	Verdict
	National Differences Japa IEC 60950-1, 1st ed		
	(J60950-1 (H22	2)) Last modification 2010-11-27	
1.2.4.1	Add the following new notes: Note: Even if the equipment is designed as Class I, the equipment is regarded as Class 0I equipment when 2-pin adaptor with earthing lead wire or cord set having 2-pin plug with earthing lead wire is provided or recommended.	Added	Р
1.2.4.3A	Add the following new clause:         1.2.4.3A CLASS 0I EQUIPMENT         Equipment having attachment plug without earthing         blade, where protection against electric shock is         achieved by:         - using BASIC INSULATION, and         - providing externally an earth terminal or a lead         wire for earthing in order to connect those         conductive parts that might assume a         HAZARDOUS VOLTAGES in the event of BASIC         INSULATION fault to the PROTECTIVE         EARTHING CONDUCTOR in the building wiring.         NOTE – Class 0I equipment may have a part         constructed with Double Insulation or Reinforced         Insulation circuit.		N/A
1.3.2	Add the following notes after first paragraph:         Note 1: Transportable or similar equipment that are relocated frequently for intended usage should not be designed as Class I or Class 0I equipment unless it is intended to be installed by service personnel.         Note 2: Considering wiring circumstance in Japan, equipment intended to be installed where the provision for earthing connection is unlikely should not be designed as Class I or Class 0I equipment unless it is intended to be installed where the provision for earthing connection is unlikely should not be designed as Class I or Class 0I equipment unless it is intended to be installed by service personnel.	Added	Р



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	National Differences	1	
Clause	Requirement + Test	Result - Remark	Verdict
1.5.1	Replace the first paragraph with the follows: Where safety is involved, components shall comply either with the requirements of this standard, with the safety aspects of the relevant JIS component standard, or IEC component standards in case there is no applicable JIS component standard is available. However, a component that falls within the scope of METI Ministerial ordinance No. 85 is properly used in accordance with its marked ratings, requirements of 1.5.4, 2.8.7 and 3.2.5 apply, and in addition, a cord connector of power supply cord set mating with appliance inlet complying with the standard sheet of IEC 60320-1, shall comply with relevant standard sheet of IEC 60320-1. Replace Note 1 with the following: Note 1: A JIS or an IEC component standard is considered relevant only if the component in question clearly falls within its scope.	Added	P
1.5.2	<ul> <li>Replace first sentence in the first dashed paragraph with the following:</li> <li>a component that has been demonstrated to comply with a JIS component standard harmonized with the relevant IEC component standard, or where such JIS component standard is not available, a component that has been demonstrated to comply with the relevant IEC component standard for correct application and use in accordance with its rating. Add a note after the first dashed paragraph as follows:</li> <li>Note 1: See 1.7.5A when Type C.14 appliance coupler rated 10 A per IEC 60320-1 is used with an equipment rated not more than 125 V and rated more than 10 A.</li> </ul>	Added	P
(cont.)	Replace first sentence in the third dashed paragraph as follows: where no relevant IEC component standard or JIS component standard harmonized with the relevant IEC component standard exists, or where components are used in circuits not in accordance with their specified rating, the components shall be tested under the conditions occurring in the equipment.	Added	P
1.7.1	<ul> <li>Replace fifth dashed paragraph with the following:</li> <li>manufacturer's or responsible company's name or trade-mark or identification mark;</li> </ul>	Added	Р



	National Differences		
Clause	Requirement + Test	Result - Remark	Verdict
1.7.5A	Add the following new clause. after 1.7.5: 1.7.5A Appliance Coupler If appliance coupler according to IEC60320-1, C.14(rated current: 10A)is used in equipment whose rated voltage is less than 125V and rated current is over 10A, the following instruction or equivalent shall be described in the user instruction. " Use only designated cord set attached in this equipment"	Added	N/A
1.7.12	<b>Replace</b> first sentence with the following: Instructions and equipment marking related to safety shall be in Japanese.	Added	Р
1.7.17A	Add the following new clause. after 1.7.17: 1.7.17A Marking for CLASS 0I EQUIPMENT For CLASS 0I EQUIPMENT, the following instruction shall be marked on the visible place of the mains plug or the main body: "Provide an earthing connection" Moreover, for CLASS 0I EQUIPMENT, the following or equivalent instruction shall be indicated on the visible place of the main body or written in the operating instructions: "Provide an earthing connection before the mains plug is connected to the mains. And, when disconnecting the earthing connection, be sure to disconnect after pulling out the mains plug from the mains."	Added	Р
2.6.3.2	Add the following after 1st paragraph: This also applies to the conductor of lead wire for protective earthing of CLASS 0I EQUIPMENT.	Added	Р
2.6.4.2	<b>Replace</b> 1st paragraph with the following: Equipment required to have protective earthing shall have a main protective earthing terminal. For equipment with a DETACHABLE POWER SUPPLY CORD, the earthing terminal in the appliance inlet is regarded as the main protective earthing terminal except for CLASS 0I EQUIPMENT providing separate main protective earthing terminal other than appliance inlet.		Р
2.6.5.4	<b>Replace</b> 1st sentence with the following: Protective earthing connections of CLASS I EQUIPMENT shall make earlier and break later than the supply connections in each of the following:	Added	P



	National Differences		
Clause	Requirement + Test	Result - Remark	Verdict
2.6.5.8A	Add the following new clause. after 2.6.5.8A: 2.6.5.8A Earthing of CLASS 0I EQUIPMENT Plugs with a lead wire for earthing shall not be used for equipment having a rated voltage exceeding 150V. For plugs with a lead wire for earthing, the lead wire shall not be earthed by a clip. CLASS 0I EQUIPMENT shall be provided with an earthing terminal or lead wire for earthing in the external location where easily visible.	Added	P
3.2.3	Add the following after Table 3A: Table 3A applies when cables complying JIS C 3662 or JIS C 3663 are used. In case of other cables, cable entries shall be so designed that a conduit suitable for the cable used can be fitted.	Added	N/A
3.2.5.1	Add the following to the last of first dashed paragraph: Or mains cords shall be of the sheathed type complying with Appendix 1 of Article 1 of the Ministerial Ordinance on stipulating technical requirements for the Electrical Appliance. Add the following to the last of second dashed paragraph. Or mains cords shall be of the sheathed type complying with Appendix 1 of Article 1 of the Ministerial Ordinance on stipulating technical requirements for the Electrical Appliance. Delete 1) in Table 3B.	Added	N/A
3.3.4	Add the following note to Table 3D: Note: For cables other than those complying with JIS C 3662 or JIS C 3663, terminals shall be suitable for the size of the intended cables.	Added	N/A
3.3.7	Add the following after the first sentence: This requirement is not applicable to the external earthing terminal of Class 0I equipment.	Added	Р
4.3.4	Add the following after the first sentence: This requirement also applies to those connections in Class 0I equipment, where CLEARANCE or CREEPAGE DISTANCES over BASIC INSULATION would be reduced to less than the values specified in 2.10.	Added	Р
5.1.3	Add a note after the first paragraph as follows: Note – Attention should be drawn to that majority of three-phase power system in Japan is of delta connection, and therefore, in that case, test is conducted using the test circuit from IEC 60990, figure 13.	Added	P



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quirement place Tabl Type of equipment L equipment L equipment ND-HELD VABLE her than ND-HELD, including ANS-	le 5A. as folic Terminal A of measuring instrument connected to:	Maximum TOUCH CURRENT mA r.m.s. <sup>1)</sup> 0,25 0,75 3,5	Maximum PROTECTIVE CONDUCTOR CURRENT - -	Result - Remark	P
Type of equipment L equipment ND-HELD VABLE her than ND-HELD, including	Terminal A of measuring instrument connected to: Accessible parts and circuits not connected to protective earth Equipment main protective earthing terminal (if	Maximum TOUCH CURRENT mA r.m.s. <sup>1)</sup> 0,25	PROTECTIVE CONDUCTOR CURRENT -		P
ND-HELD ND-HELD ND-HELD, including	measuring instrument connected to: Accessible parts and circuits not connected to protective earth Equipment main protective earthing terminal (if	TOUCH CURRENT mA r.m.s. <sup>1)</sup> 0,25	PROTECTIVE CONDUCTOR CURRENT -		
ND-HELD VABLE her than ND-HELD, including	parts and circuits not connected to protective earth Equipment main protective earthing terminal (if	0,25	-		
VABLE ner than ND-HELD, including	Equipment main protective earthing terminal (if		-		
ner than ND-HELD, including	protective earthing terminal (if	3,5	-		
RTABLE	CLASS I EQUIPMENT				
UIPMENT) ATIONARY, UGGABLE PE A L other	-	3,5	-		
ATIONARY UIPMENT ot subject to e conditions 5.1.7 ubject to the		3,5 -	5 % of input		
nditions of 1.7			current		
ND-HELD	Equipment	0,5	-		
ners	main protective earthing terminal (if any) CLASS 0I EQUIPMENT	1,0	-		
PLA U ot e 5 ut on 1. Ne	E A other TIONARY IIPMENT subject to conditions 6.1.7 oject to the ditions of .7 D-HELD ers	E A other TIONARY IIPMENT subject to conditions i.1.7 oject to the ditions of .7 D-HELD Equipment main protective earthing terminal (if any) CLASS 0I EQUIPMENT beak values of TOUCH-CUF mum values obtained by m	E A       other         other       TIONARY         IIPMENT       3,5         subject to       3,5         conditions       -         i.1.7       -         opject to the       -         ditions of       -         7       -         D-HELD       Equipment       0,5         main       1,0         protective       earthing         terminal (if       any)         CLASS 0I       EQUIPMENT         beeak values of TOUCH-CURRENT are normore obtained by multiplying the	E A       other         TIONARY       IPMENT         subject to       3,5         conditions       -         i.1.7       -         opject to the       -         ditions of       -         7       -         D-HELD       Equipment         protective       0,5         earthing       terminal (if         any)       CLASS 0I         EQUIPMENT       EQUIPMENT	E A       other         other       TIONARY         IIPMENT       3,5         subject to       3,5         conditions       -         i.1.7       -         pject to the       -         ditions of       -         7       -         D-HELD       Equipment         non       1,0         protective       -         earthing       -         terminal (if       -         any)       CLASS 0I         EQUIPMENT       -         beeak values of TOUCH-CURRENT are measured, the         mumum values obtained by multiplying the r.m.s. values by



	National Differences				
Clause	Requirement + Test	Result - Remark	Verdict		
7.2	Add the following after the paragraph:         However, the separation requirements and tests of         6.2.1 a), b) and c) do not apply to a CABLE         DISTRIBUTION SYSTEM if all of the following         apply:         - the circuit under consideration is a TNV-1         CIRCUIT; and         - the common or earthed side of the circuit is         connected to the screen of the coaxial cable and to         all accessible parts and circuits (SELV, accessible         metal parts and LIMITED CURRENT CIRCUITS, if         any); and         - the screen of the coaxial cable is intended to be	Added	N/A		
W.1	connected to earth in the building installation.Replace second and third sentence in the firstparagraph with the following:This distinction between earthed and unearthed(floating) circuit is not the same as between CLASSI EQUIMENT, CLASS 0I EQUIPMENT and CLASSII EQUIPMENT. Floating circuits can exist inCLASS I EQUIPMENT or CLASS 0I EQUIPMENTand earthed circuits in CLASS II EQUIPMENT.	Added	N/A		
Annex JA	Add a new annex JA with the following contents: Annex JA (normative) Document shredding machines Document shredding machines shall also comply with the requirements of this annex except those of STATIONARY EQUIPMENT used by connecting directly to an AC MAINS SUPPLY of three-phase 200V or more. JA.1 Markings and instructions The symbol (JIS S 0101:2000, 6.2.4) and the following precautions for use shall be marked on readily visible part adjacent to document feed opening. The marking shall be clearly legible, permanent, and easily discernible; - that use by an infants/children may cause a hazard of injury etc.;	Added	N/A		



	National Differences		
Clause	Requirement + Test	Result - Remark	Verdic
(cont.)	<ul> <li>that a hand can be drawn into the mechanical section for shredding when touching the document-slot;</li> <li>that clothing can be drawn into the mechanical section for shredding when touching the document-slot;</li> <li>that hairs can be drawn into the mechanical section for shredding when touching the document-slot;</li> <li>that hairs can be drawn into the mechanical section for shredding when touching the document-slot;</li> <li>in case of equipment incorporating a commutator motor, that equipment may catch fire or explode by spraying of flammable gas.</li> <li>JA.2 Indvertent reactivation</li> <li>Any safety interlock that can be operated by means of the test finger, Figure JA.1, is considered to be likely to cause inadvertent reactivation of the hazard.</li> <li>Compliance is checked by inspection and, where necessary, by a test with the test finger, Figure JA.1</li> <li>JA.3 Disconnection from the mains supply</li> <li>Document shredding machines shall incorporate an isolating switch complying with sub-clause 3.4.2 as the device disconnecting the power of hazardous moving parts. For this switch, two-position (single-use) switch or multi-position (multifunction) switch (e.g., slide switch) may be used.</li> <li>If two-position switch, the positions for "ON" and "OFF" shall be indicated in accordance with subclause 1.7.8 and other position switch, the position for "OFF" shall be indicated in accordance with subclause 1.7.8 and other positions shall be indicated with proper terms or symbols.</li> <li>Compliance is checked by inspection</li> <li>JA.4 Protection against hazardous moving parts.</li> <li>Document shredding machines shall comply with the following requirements.</li> </ul>	Added	N/A



	National Differences		
Clause	Requirement + Test	Result - Remark	Verdict
(cont.)	Insert the test finger, Figure JA.1, into all openings in MECHANICAL ENCLOSURES without applying appreciable force. It shall not be possible to touch hazardous moving parts with the test finger. This consideration applies to all sides of MECHANICAL ENCLOSURES when the equipment is mounted as intended. Before testing with the test finger, remove the parts detachable without a tool. Insert the wedge-probe, Figure JA.2, into the document-slot. And, against all directions of openings, if straight-cutting type, a force of 45 N shall apply to the probe, and 90 N if cross-cutting type. In this case, the weight of the probe is to be factored into the overall applied force. Before testing with the wedge-probe, remove the parts detachable without a tool. It shall not be possible to touch any hazardous moving parts, including the shredding roller or the mechanical section for shedding, with the probe.	Added	N/A



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		National Differences		
Clause	Requirement + Test		Result - Remark	Verdict
(cont.)		Diameters in millimeters Diameters in millimeters Diameters in millimeters Diameters in millimeters Rounded to allow rotation about hinge pin (screw) in one direction	Added	N/A
	Distance from the tip (mm) 0 12 180	Thickness of probe (mm) 2 4 24		
	Note 1 - The thickness o with slope changes at the in the table.	f the probe varies linearly, e respective points shown mensional tolerance of the		



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I Clause Requirement + res	Clause	Requirement + Test
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Result - Remark

Verdict

	National Differences Japa Special National conditions, National deviatio according to METI Ordinance (J3000 (H21	on and other information	
1	General requirement When equipment provides with appliance inlet complying with JIS-C 8283-1(2008), soldered parts of appliance inlet is not applied by force during insert or removal of connector. This is not applied when inlet body is fixed itself and not fixed by solder.		Ρ
2	Requirement for equipment		N/A
2.1	Electric heater When diode is used in parallel for adjustment of power, the equipment shall remain safe for operation under open condition of one diode.		N/A
	The current rating of one diode shall be more than main current. The diodes connected in parallel are same type.		N/A
	The heating test specified by clause 11 of JIS C 9335-2-30(2006) under open condition of one diode shall comply with the requirements.		N/A
2.2	Electric heater with glowing heating elements		N/A
	Surface treatment by paint or adhesive on protective frame or protective mesh shall not be used.		N/A
	Caution marking like below shall be on - easily visible place of the equipment or - Instruction manual 「注意当該機器から、使用初期段階で揮発性有機化 合物及びカルボニル化合物が最も放散 するおそれがあるため、その際には十分換気を行う こと。」		N/A