

Prüfbericht-Nr.: Test Report No.:	50045506 001	Auftrags-N Order No.:	lr.:	164065000	Seite 1 von 88 Page 1 of 88
Kunden-Referenz-Nr.: Client Reference No.:	N/A	Auftragsda Order date:		May. 31, 2016	
Auftraggeber: Client:	Ajita International Technology 13F., No.181, Sec.2, Taiwan		ıng City,	40354, Taiwan(l	R.O.C)
Prüfgegenstand: Test item:	All in one touch screen monit	or			
Bezeichnung / Typ-Nr. : Identification / Type No.:	DB-0865, DB-0855				
Auftrags-Inhalt: Order content:	LVD CoC approval				
Prüfgrundlage: Test specification:	EN 60950-1:2006+A11:2009-	+A1:2010+A1	12:2011+	-A2:2013	
Wareneingangsdatum: Date of receipt:	May. 31, 2016	Sec	e photo	document	
Prüfmuster-Nr.: Test sample No.:	20160531200-1 to 20160531200-6				
Prüfzeitraum: Testing period:	Jul. 02, 2016 to Jul. 27, 2016	3			
Ort der Prüfung: Place of testing:	See page 5 for details				
Prüflaboratorium: Testing laboratory:	TÜV Rheinland (Shenzhen) (Co., Ltd.			
Prüfergebnis*: Test result*:	Pass			×	
geprüft von / tested by: Oct. 31, 2016 Michel Ya Datum Name / Stel Date Name / Pos	ing / Project Manager	Oct. 31, 20 Datum Date	16 Jet L	_uo / Reviewer e / Stellung	Unterschrift Signature
Sonstiges/ Other Aspect Details see next page	rs:		rvain		o.g.manv
Zustand des Prüfgegen Condition of the test item	standes bei Anlieferung: at delivery:			dig und unbesch and undamaged	ädigt
* Legende: 1 = sehr gut P(ass) = entspricht o. Legend: 1 = very good P(ass) = passed a.m.	2 = good $3 = satisfactory$ test specification(s) $F(ail) = failed a.m.$	nicht o.g. Prüfgrunc	dlage(n)	4 = ausreichend N/A = nicht anwendbar 4 = sufficient N/A = not applicable	5 = mangelhaft N/T = nicht getestet 5 = poor N/T = not tested
auszugsweise vervie This test report only relates	ieht sich nur auf das o.g. Prüfm elfältigt werden. Dieser Bericht b s to the a.m. test sample. Without	perechtigt nicl permission of	ht zur Ve the test o	erwendung eines center this test rep	Prüfzeichens.
vo4 be du	uplicated in extracts. This test repo	ort does not en	title to ca	rry any test mark.	



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Order No.:

Sonstiges/ Other Aspects:

- 1. The completed test report includes the following documents:
 - EN 60950-1 test report including cover pages (88 pages)
 Attachment 1: Equipment List (2 page)

 - EMF assessment report (1 page)
 - Photo document (16 pages)





TEST REPORT

IEC 60950-1

Information technology equipment – Safety – Part 1: General requirements

 Report Number.
 See cover page

 Date of issue
 See cover page

 Total number of pages
 See cover page

Applicant's name...... Ajita International Technology Co.,Ltd.

Test specification:

 Standard
 See cover page

 Test procedure
 See cover page

Non-standard test method.....: N/A

Test Report Form No....... IEC60950_1F
Test Report Form(s) Originator....: SGS Fimko Ltd
Master TRF...... Dated 2014-02

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General disclaimer:

The test results presented in this report relate only to the object tested.

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Test item description All in one touch screen monitor			
Trade Mark Ma	nufacturer name shown on rating label		
Manufacturer: Sa	me as applicant		
Model/Type reference: DE	3-0865, DB-0855		
Ratings: 10	0-240V~, 50/60Hz, 6.5A		
Testing procedure and testing location:			
	See cover page		
Testing location/ address	: See cover page		
Associated CB Testing Laboratory:	N/A		
Testing location/ address	: N/A		
Tested by (name + signature)	: See cover page		
Approved by (name + signature)	: See cover page		
☐ Testing procedure: TMP/CTF Stage	1: N/A		
Testing location/ address	N/A		
Tested by (name + signature)	:		
Approved by (name + signature)	:		
Tarian managaran	0 11/0		
Testing procedure: WMT/CTF Stage			
Testing location/ address			
Tested by (name + signature)			
Witnessed by (name + signature)			
Approved by (name + signature)	:		
Testing procedure: SMT/CTF Stage 3 or 4:	N/A		
Testing location/ address	: N/A		
Tested by (name + signature)	:		
Witnessed by (name + signature)	:		
Approved by (name + signature)	:		
Supervised by (name + signature)	:		



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

See cover page

Summary of testing:

Tests performed (name of test and test clause):

- 1. Maximum ambient temperature: 40°C
- 2. Following tests performed during evaluation

2. 1 OllOWITI	g lesis periorified duffing evaluatio
Clause(s)	Test(s)
1.6.2	Input Current Test
1.7.11	Durability of Marking Test
2.1.1.1	Access to energized parts
2.1.1.5	Energy Hazard in Operator
	Access Area
2.1.1.7	Discharge of capacitor
2.2.2	SELV limits for Normal
	Conditions
2.2.3	SELV limits for Abnormal
	Conditions
2.4.2	Limited Current Circuits
2.5	Limited power source
2.6.3.4	Resistance of Earthing circuit
2.9.2	Humidity Conditioning
2.10.2	Working Voltage over
	Insulation
2.10.3 &	Clearance and creepage
2.10.4	distance
4.2.2	Steady force test 10 N
4.2.3	Steady force test 30 N
4.2.4	Steady force test 250 N
4.2.5	Impact test
4.2.6	Wall or ceiling mounted
	equipment
4.2.7	Stress relief test
4.5	Maximum Temperature Test
4.6	Openings in enclosures
5.1	Touch Current and PE current
5.2	Electric Strength Test
5.3	Fault Condition Test

Unless otherwise specified, all tests were performed on model GT75, which represent all models

The EUTs passed the test.

Testing location:

Shenzhen Gongjin Electronics Co., Ltd.

B116, B118; B201-B213; A311-313; B411-413; BF08-09; B115; B401-403 Nanshan Medical Instrument Ind. Park, 1019# Nanhai Rd., Nanshan Dist., Shenzhen, Guangdong, P.R. China



Copy of marking plate:

All in one touch screen monitor

Model: GT75

AC100-240V 6.5A 50/60Hz







Ajita International Technology Co., LTD.

MADE IN CHINA

Note: The artwork above may be only a draft. Above label for representing the other models, due to similarity of the rating labels, only above label is listed.

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Test item particulars:			
Equipment mobility	[x] movable [] hand-held [] 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:	[x] continuous [] rated operating / resting time:		
Access location:	[x] operator accessible [] restricted access location		
Over voltage category (OVC):	[] OVC I [x] OVC II [] OVC III [] OVC IV [] other:		
Mains supply tolerance (%) or absolute mains supply values	+10%, -10%(requested by client)		
Tested for IT power systems	[x] Yes (only for Norway) [] No		
IT testing, phase-phase voltage (V)	230V (only for Norway)		
Class of equipment:	[x] Class I [] Class II [] Class III [] Not classified		
Considered current rating of protective device as part of the building installation (A)	16A		
Pollution degree (PD):	[] PD 1 [x] PD 2 [] PD 3		
IP protection class	IPX0		
Altitude during operation (m)	Up to 2000		
Altitude of test laboratory (m)	below 2000		
Mass of equipment (kg):	65 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:	See cover page		
Date (s) of performance of tests:	See cover page		
General remarks:			
"(See Enclosure #)" refers to additional information ap	opended to the report.		
"(See appended table)" refers to a table appended to the			
Throughout this report a \square comma / \boxtimes point is used as the decimal separator.			



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Manufacturer's Declaration	per sub-clause 4.2.5 of	IECEE 02:	
The application for obtaining includes more than one facto declaration from the Manufac sample(s) submitted for evalure representative of the products been provided	ry location and a sturer stating that the pation is (are) s from each factory has	☐ Yes ☑ Not applicable	
When differences exist; the	y shall be identified in t	he General product informa	tion section.
Name and address of factor	ory (ies):		
Same as applicant			
General product information	on:		
The equipment models HV75 information technology equip		5W, HV75Z and GT75Z are L	.CD monitor for use with
All models are identical to ea	ach other except different	model name.	
The unit has the following feat	ures:		
1. LCD panel type: LED back 2. Built-in power board DQM8 3. Main board type with HDM 4. TCON board and OPS/IO I 5. The external metal enclosure enclosure. 6. Max. ambient temperature	500L-5T0X. I port. board. ure is considered as electi	rical enclosure, mechanical er ent.	nclosure and fire
Abbreviations used in the	report:		
normal conditionsfunctional insulationdouble insulationbetween parts of opposite	OP - bas	gle fault conditions sic insulation oplementary insulation	S.F.C BI SI
polarity	BOP - rei	nforced insulation	RI
Indicate used abbreviation	s (if any)		

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	IEC 60950-1		
Clause	Requirement + Test	Result - Remark	Verdict
1	GENERAL		Р
			T
1.5	Components		Р
1.5.1	General		Р
	Comply with IEC 60950-1 or relevant component standard	(see appended tables 1.5.1)	Р
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.	Р
1.5.3	Thermal controls	No thermal controls.	N/A
1.5.4	Transformers	Transformers used are suitable for their intended application and comply with the relevant requirements of the standard and particularly Annex C.	Р
1.5.5	Interconnecting cables	Interconnecting cable does not carry voltage higher than SELV and no higher energy level than 240VA.	N/A
1.5.6	Capacitors bridging insulation	Between primary and earth: Min. Y2 capacitor (CY01, CY02) capacitor according to IEC 60384-14; Between primary and SELV: Min. Y1 capacitor (CY03, CY04) capacitor according to IEC 60384-14; Between lines: Min. X2- capacitor (CX01,CX02,CX03) capacitor according to IEC 60384-14	Р
1.5.7	Resistors bridging insulation	See below	Р
1.5.7.1	Resistors bridging functional, basic or supplementary insulation	Bleeder resistor (R01, R02, R03 and R04) briding functional insulation only.	Р
1.5.7.2	Resistors bridging double or reinforced insulation between a.c. mains and other circuits	No such resistor used.	N/A

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	IEC 60950-1				
Clause	Requirement + Test	Result - Remark	Verdict		
0	In				
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		N/A		
1.5.9	Surge suppressors	See below	Р		
1.5.9.1	General	Approved surge suppressor (ZR01) used between Line and Neutral, for details see appended table 1.5.1.	Р		
1.5.9.2	Protection of VDRs	Protected by a current fuse F01 before the VDR.	Р		
1.5.9.3	Bridging of functional insulation by a VDR	See 1.5.9.1.	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	No such construction.	N/A		

1.6	Power interface		Р
1.6.1	AC power distribution systems	TN and IT power system considered	Р
1.6.2	Input current	Highest load according to 1.2.2.1 for this equipment is the operation with the maximum specified by the manual instruction. (see appended table 1.6.2)	Р
1.6.3	Voltage limit of hand-held equipment	This appliance is not hand-held equipment.	N/A
1.6.4	Neutral conductor	The neutral conductor insulated from the body throughout the equipment as if it were a line 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		Р
	Multiple mains supply connections	Single power source	Р
	Rated voltage(s) or voltage range(s) (V)	100-240V~	Р
	Symbol for nature of supply, for d.c. only	AC source	N/A
	Rated frequency or rated frequency range (Hz):	50/60Hz	Р

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	IEC 60950-1		
Clause	Requirement + Test	Result - Remark	Verdict
	Rated current (mA or A)	6.5A	Р
1.7.1.2	Identification markings	See below	Р
	Manufacturer's name or trade-mark or identification mark:	See page 6	Р
	Model identification or type reference	See page 6	Р
	Symbol for Class II equipment only	Class I	N/A
	Other markings and symbols:	Additional symbol or marking does not give rise to misunderstanding.	Р
1.7.1.3	Use of graphical symbols		Р
1.7.2	Safety instructions and marking	English version user manual provided.(Version in other language will be provided when submitted for national approval)	Р
1.7.2.1	General		Р
1.7.2.2	Disconnect devices	Appliance inlet serves as disconnect device.	Р
1.7.2.3	Overcurrent protective device	Not such equipment.	N/A
1.7.2.4	IT power distribution systems		N/A
1.7.2.5	Operator access with a tool	No operator accessible area that needs to be accessed by the use of a tool.	N/A
1.7.2.6	Ozone	Not such equipment.	N/A
1.7.3	Short duty cycles	Equipment is designed for continuous operation.	N/A
1.7.4	Supply voltage adjustment:	No voltage selector.	N/A
	Methods and means of adjustment; reference to installation instructions		N/A
1.7.5	Power outlets on the equipment	No power outlets provided.	N/A
1.7.6	Fuse identification (marking, special fusing characteristics, cross-reference)	Fuse marking provided on PCB: F02 T8AH 250VAC	Р
1.7.7	Wiring terminals	See below.	Р
1.7.7.1	Protective earthing and bonding terminals	Class I equipment. Protective earthing terminal symbol marked on appliance inlet.	Р

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	IEC 60950-1		
Clause	Requirement + Test	Result - Remark	Verdict
1.7.7.2	Terminals for a.c. mains supply conductors	The equipment with appliance inlet is intended to use the detachable type power supply cord.	N/A
1.7.7.3	Terminals for d.c. mains supply conductors	No d.c. mains supply.	N/A
1.7.8	Controls and indicators	No controls and indicators which can affect safety used	N/A
1.7.8.1	Identification, location and marking		N/A
1.7.8.2	Colours		N/A
1.7.8.3	Symbols according to IEC 60417		N/A
1.7.8.4	Markings using figures		N/A
1.7.9	Isolation of multiple power sources	Single power source	N/A
1.7.10	Thermostats and other regulating devices	Such devices not used.	N/A
1.7.11	Durability	The label was subjected to the permanence of marking test. The label was rubbed with cloth soaked with water for 15 sec. And then again for 15 sec. With the cloth soaked with petroleum spirit. After this test there was no damage to the label. The marking on the label did not fade. There was no curling and lifting of the label edge.	Р
1.7.12	Removable parts	No removable part.	N/A
1.7.13	Replaceable batteries:	No battery provided.	N/A
	Language(s):		_
1.7.14	Equipment for restricted access locations:	Not intended for use in restricted access locations.	N/A

2	PROTECTION FROM HAZARDS		Р
2.1	Protection from electric shock and energy hazards		Р
2.1.1	Protection in operator access areas	No access with test finger and test pin to any parts with only basic insulation to ELV or hazardous voltage.	Р
2.1.1.1	Access to energized parts	See above.	Р

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	IEC 60950-1		
Clause	Requirement + Test	Result - Remark	Verdict
	Test by inspection:		Р
	Test with test finger (Figure 2A):		P
			P
	Test with test pin (Figure 2B):	No TNV.	•
0.4.4.0	Test with test probe (Figure 2C):		N/A
2.1.1.2	Battery compartments	No battery compartment.	N/A
2.1.1.3	Access to ELV wiring	No ELV wiring in operator accessible area.	N/A
	Working voltage (Vpeak or Vrms); minimum distance through insulation (mm)	(see appended tables 2.10.2 and 2.10.5)	_
2.1.1.4	Access to hazardous voltage circuit wiring	No hazardous voltage wiring in operator accessible area.	N/A
2.1.1.5	Energy hazards:	The energy does not exceed 240VA between any two points in accessible connector of secondary circuit. (see appended table 2.1.1.5.)	Р
2.1.1.6	Manual controls	No manual controls.	N/A
2.1.1.7	Discharge of capacitors in equipment	See below	Р
	Measured voltage (V); time-constant (s):	(see appended table 2.1.1.7)	_
2.1.1.8	Energy hazards – d.c. mains supply	Connected to a.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 hazard parts accessible	Р
2.1.2	Protection in service access areas	No operator accessible area that needs to be accessed by the use of a tool.	N/A
2.1.3	Protection in restricted access locations	Not intended for use in restricted access locations.	N/A

2.2	SELV circuits		Р
2.2.1	General requirements	The secondary circuits were tested as SELV. See 2.2.2 to 2.2.4.	Р
2.2.2	Voltages under normal conditions (V):	Between any conductors of the SELV circuits 42.4 V peak or 60 V d.c. are not exceeded. See appended table 2.2.	Р

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	IEC 60950-1		
Clause	Requirement + Test	Result - Remark	Verdict
2.2.3	Voltages under fault conditions (V):	Single fault did not cause excessive voltage in accessible SELV circuits. Limits of 71V peak or 120V peak were not exceeded within 0.2 seconds and limits 42.4V peak or 60V d.c. were not exceeded for longer than 0.2 seconds.	Р
2.2.4	Connection of SELV circuits to other circuits:	See sub-clauses 2.2.2 and 2.2.3. and 2.4.2	Р
			1
2.3	TNV circuits	T	N/A
2.3.1	Limits		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 Bridging Y capacitor (YC03, YC04) according to class primary and SELV	use 1.5.7 connected between	Р
2.4.1	General requirements	See below.	Р
2.4.2	Limit values	(see appended table 2.4.2)	Р
	Frequency (Hz):	(see appended table 2.4.2)	
	Measured current (mA):	The peak voltage drop was measured with annex D.1. Results see appended table 2.4.2.	_
	Measured voltage (V):	See appended table 2.4.2.	

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	IEC 60950-1				
Clause	Requirement + Test	Result - Remark	Verdict		
	Measured circuit capacitance (nF or μF):	See appended table 2.4.2.	_		
2.4.3	Connection of limited current circuits to other circuits	Output circuit as limited current circuit connected to primary via bridging capacitors (YC03, YC04)	Р		

2.5	Limited power sources		Р
	a) Inherently limited output		
	b) Impedance limited output		N/A
	c) Regulating network or IC current limiter, limits output under normal operating and single fault condition	A regulating network limits the output power to output USB port in compliance with table 2B both under normal operating conditions and after any single fault.	Р
	Use of integrated circuit (IC) current limiters		N/A
	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) .	:	

2.6	Provisions for earthing and bonding		Р
2.6.1	Protective earthing	Class I appliance inlet provided as protective earthing; The metal enclosure is reliably earthed by screw with spring washer via PCB trace.	Р
2.6.2	Functional earthing	Secondary functional earthing is separated from primary by double or reinforced insulation.	Р
	Use of symbol for functional earthing:		N/A
2.6.3	Protective earthing and protective bonding conductors		N/A
2.6.3.1	General	Appliance inlet used.	Р
2.6.3.2	Size of protective earthing conductors	AC inlet used	N/A
	Rated current (A), cross-sectional area (mm²), AWG:		_
2.6.3.3	Size of protective bonding conductors		Р

	IEC 60950-1		
Clause	Requirement + Test	Result - Remark	Verdict
	Rated current (A), cross-sectional area (mm²), AWG		_
	Protective current rating (A), cross-sectional area (mm²), AWG	Rated 16A	_
2.6.3.4	Resistance of earthing conductors and their terminations; resistance (Ω) , voltage drop (V) , test current (A) , duration (min)	See appended table 2.6.3.4	Р
2.6.3.5	Colour of insulation		Р
2.6.4	Terminals		Р
2.6.4.1	General		Р
2.6.4.2	Protective earthing and bonding terminals	Earthing terminal of AC inlet is regarded as the PE terminal, screw terminals on metal enclosure considered as the bonding terminals	Р
	Rated current (A), type, nominal thread diameter (mm)	See only test in appended table 2.6.3.4	_
2.6.4.3	Separation of the protective earthing conductor from protective bonding conductors	AC inlet used	Р
2.6.5	Integrity of protective earthing	See below.	Р
2.6.5.1	Interconnection of equipment	Not depending on interconnection for protective earth.	Р
2.6.5.2	Components in protective earthing conductors and protective bonding conductors	No switch or overcurrent protective device in protective earthing	Р
2.6.5.3	Disconnection of protective earth	It is not possible to disconnect earth without disconnecting mains as an appliance inlet is used.	Р
2.6.5.4	Parts that can be removed by an operator	No such parts	Р
2.6.5.5	Parts removed during servicing		Р
2.6.5.6	Corrosion resistance	See annex J	Р
2.6.5.7	Screws for protective bonding		Р
2.6.5.8	Reliance on telecommunication network or cable distribution system		Р

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

2.7	Overcurrent and earth fault protection in primary	y circuits	Р
2.7.1	Basic requirements	The equipment relies on fuse or circuit breaker of the wall outlet protection of the building installation in regard to L to N short-circuits condition. A buildin fuse F02 provided as overcurrent protection device (see 5.3)	Р
	Instructions when protection relies on building installation	Pluggable equipment type A.	N/A
2.7.2	Faults not simulated in 5.3.7	The protection devices are well dimensioned and mounted.	Р
2.7.3	Short-circuit backup protection	Building installation is considered as providing short-circuit backup protection.	Р
2.7.4	Number and location of protective devices:	Over-current protection by one built-in fuse F02	Р
2.7.5	Protection by several devices	One current fuse F02 provided in line conductor.	N/A
2.7.6	Warning to service personnel	No service work necessary.	N/A

2.8	Safety interlocks	N/A
2.8.1	General principles	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

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	IEC 60950-1				
Clause	Requirement + Test	Result - Remark	Verdict		
			1		
2.9	Electrical insulation		Р		
2.9.1	Properties of insulating materials	Natural rubber, asbestos or hygroscopic material not used.	Р		
2.9.2	Humidity conditioning	Performed at 40 °C, 93% R.H. for 120 h for all models and all source of transformer (requested by manufacturer).	Р		
	Relative humidity (%), temperature (°C):	See above.	_		
2.9.3	Grade of insulation	See above.	Р		
2.9.4	Separation from hazardous voltages	The adequate levels of safety insulation provided and maintained to comply with the requirements of this standard.	Р		
	Method(s) used:	SELV separated from primary by reinforced or double insulation.	_		

2.10	Clearances, creepage distances and distances through insulation		
2.10.1	General	See 2.10.3, 2.10.4 and 2.10.5.	Р
2.10.1.1	Frequency:	Frequency generated internally exceeds 30kHz	Р
2.10.1.2	Pollution degrees:	2	Р
2.10.1.3	Reduced values for functional insulation	See 5.3.4.	N/A
2.10.1.4	Intervening unconnected conductive parts	No such part.	N/A
2.10.1.5	Insulation with varying dimensions	No such transformer used.	N/A
2.10.1.6	Special separation requirements	No TNV	N/A
2.10.1.7	Insulation in circuits generating starting pulses	No such circuit.	N/A
2.10.2	Determination of working voltage		Р
2.10.2.1	General	The rms and the peak voltage were measured with unit connected to a 240V TN power system. Pollution Degree 2 and Overvoltage Category II considered.	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

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Clause	Requirement + Test	Result - Remark	Verdict
2.10.3	Clearances	See below and advantage of annex G is not considered.	Р
2.10.3.1	General	Considered.	Р
2.10.3.2	Mains transient voltages		Р
	a) AC mains supply:	240V a.c. and 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 table 2.10.3 and 2.10.4)	Р
2.10.3.4	Clearances in secondary circuits	Sub-clause 5.3.4 considered.	Р
2.10.3.5	Clearances in circuits having starting pulses		N/A
2.10.3.6	Transients from a.c. mains supply:	Normal transient voltage considered (overvoltage category II for primary circuit).	N/A
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 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
2.10.4	Creepage distances		Р
2.10.4.1	General		Р
2.10.4.2	Material group and comparative tracking index		Р
	CTI tests:	Material group IIIb is assumed to be used	_
2.10.4.3	Minimum creepage distances	(see appended table 2.10.3 and 2.10.4)	Р
2.10.5	Solid insulation		Р
2.10.5.1	General	See below.	Р
2.10.5.2	Distances through insulation	(see appended table 2.10.5)	Р
2.10.5.3	Insulating compound as solid insulation	Only inside approved optocoupler.	N/A

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Clause Requirement + Test 2.10.5.4 Semiconductor devices 2.10.5.5. Cemented joints 2.10.5.6 Thin sheet material – General 2.10.5.7 Separable thin sheet material Number of layers (pcs)	insulation e (see appended table 5.2)	P N/A P N/A P N/A P P P
Cemented joints Thin sheet material – General Separable thin sheet material Number of layers (pcs)	No such construction. Used in transformer T1, T2, T3 and T4 2 layers for reinforced insulation (see appended table 5.2) Ire (see appended table 5.2) Approved tripled insulated wire	N/A P N/A P P
Cemented joints Thin sheet material – General Separable thin sheet material Number of layers (pcs)	No such construction. Used in transformer T1, T2, T3 and T4 2 layers for reinforced insulation (see appended table 5.2) Ire (see appended table 5.2) Approved tripled insulated wire	N/A P N/A P P
2.10.5.6 Thin sheet material – General 2.10.5.7 Separable thin sheet material Number of layers (pcs)	Used in transformer T1, T2, T3 and T4: 2 layers for reinforced insulation e (see appended table 5.2) ure (see appended table 5.2) Approved tripled insulated wire	P P N/A P P
Separable thin sheet material Number of layers (pcs)	and T4: 2 layers for reinforced insulation e (see appended table 5.2) ure (see appended table 5.2) Approved tripled insulated wire	P
Number of layers (pcs)	and T4: 2 layers for reinforced insulation e (see appended table 5.2) ure (see appended table 5.2) Approved tripled insulated wire	N/A P
Non-separable thin sheet material Thin sheet material – standard test procedure Electric strength test	insulation e (see appended table 5.2) ure (see appended table 5.2) Approved tripled insulated wire	P — P —
2.10.5.9 Thin sheet material – standard test procedure Electric strength test	(see appended table 5.2) Approved tripled insulated wire	P — P —
Electric strength test	(see appended table 5.2) Approved tripled insulated wire	Р Р
	Approved tripled insulated wire	_
2.10.5.10 Thin sheet material – alternative test procedu	Approved tripled insulated wire	_
		<u> </u>
Electric strength test		Р
2.10.5.11 Insulation in wound components	T4	
2.10.5.12 Wire in wound components		Р
Working voltage	:	Р
a) Basic insulation not under stress	:	N/A
b) Basic, supplementary, reinforced insulation	n: Insulation complying to 2.10.5.10 used.	Р
c) Compliance with Annex U	:	Р
Two wires in contact inside wound componer angle between 45° and 90°		Р
2.10.5.13 Wire with solvent-based enamel in wound components	No such construction.	N/A
Electric strength test		
Routine test		N/A
2.10.5.14 Additional insulation in wound components	No such construction.	N/A
Working voltage	:	N/A
- Basic insulation not under stress	:	N/A
- Supplementary, reinforced insulation	:	N/A
2.10.6 Construction of printed boards	See below.	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	No coated printed boards.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
2.10.6.3	Insulation between conductors on the same inner surface of a printed board	No multi-layer PCBs provided.	N/A
2.10.6.4	Insulation between conductors on different layers of a printed board	No multi-layer PCBs provided.	N/A
	Distance through insulation		N/A
	Number of insulation layers (pcs):	Single layer PCB	N/A
2.10.7	Component external terminations	(see appended table 2.10.3 and 2.10.4)	Р
2.10.8	Tests on coated printed boards and coated components	No such boards and components	N/A
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		Р
2.10.10	Test for Pollution Degree 1 environment and insulating compound		N/A
2.10.11	Tests for semiconductor devices and cemented joints		N/A
2.10.12	Enclosed and sealed parts	No hermetically sealed component.	N/A
3	WIRING, CONNECTIONS AND SUPPLY		Р
· · · · · · · · · · · · · · · · · · ·			

3	WIRING, CONNECTIONS AND SUPPLY		Р
3.1	General		Р
3.1.1	Current rating and overcurrent protection	Internal wires are UL recognized wiring which is rated VW-1, min. 80°C and having gauge suitable for current intended to be carried.	Р
3.1.2	Protection against mechanical damage	Wires do not touch sharp edges which could damage the insulation and cause hazard.	Р
3.1.3	Securing of internal wiring	Internal wires are routed and secured so that adequate insulations are maintained. Internal secondary wires are secured by pluggable connector or cable tie so that a loosening of the terminal connection is unlikely.	Р

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Clause	Requirement + Test	Result - Remark	Verdict
3.1.4	Insulation of conductors	The insulation of the individual conductors suitable for the application and the working voltage. For the insulation material see 3.1.1.	Р
3.1.5	Beads and ceramic insulators	Not used.	N/A
3.1.6	Screws for electrical contact pressure	No such screws provided.	N/A
3.1.7	Insulating materials in electrical connections	All current carrying connections are metal to metal.	N/A
3.1.8	Self-tapping and spaced thread screws	Not used.	N/A
3.1.9	Termination of conductors	All conductors are reliable secured by crimped soldering.	Р
	10 N pull test	Force of 10 N applied to the termination points of the conductors.	Р
3.1.10	Sleeving on wiring	No such component.	N/A
3.2	Connection to a mains supply		Р
3.2.1	Means of connection	See below.	Р
3.2.1.1	Connection to an a.c. mains supply	Appliance inlet provided;	Р
3.2.1.2	Connection to a d.c. mains supply	Only a.c. mains supply.	N/A
3.2.2	Multiple supply connections	Only for one mains connection.	N/A
3.2.3	Permanently connected equipment	Unit is not a permanently connected equipment.	N/A
	Number of conductors, diameter of cable and conduits (mm):		_
3.2.4	Appliance inlets	Approved appliance inlet used.	Р
3.2.5	Power supply cords	Not provided.	N/A
3.2.5.1	AC power supply cords		N/A
	Type:		
	Rated current (A), cross-sectional area (mm²), AWG:		_
3.2.5.2	DC power supply cords	AC Source.	N/A
3.2.6	Cord anchorages and strain relief		N/A
	Mass of equipment (kg), pull (N):		_
	Longitudinal displacement (mm):		

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Clause	Requirement + Test	Result - Remark	Verdict	
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	Not permanent connection or non-detachable power cord type.	N/A	

3.3	Wiring terminals for connection of external conductors		Р
3.3.1	Wiring terminals	Approved appliance inlet used.	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 (mm²)		_
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	See below.	Р
3.4.2	Disconnect devices	Approved appliance inlet used.	Р
3.4.3	Permanently connected equipment	Not permanently connected equipment.	N/A
3.4.4	Parts which remain energized	When appliance inlet is disconnected no hazardous voltage in the equipment.	Р
3.4.5	Switches in flexible cords	None	N/A
3.4.6	Number of poles - single-phase and d.c. equipment	Appliance inlet disconnects both poles simultaneously.	Р
3.4.7	Number of poles - three-phase equipment	Single phase equipment.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
3.4.8	Switches as disconnect devices		N/A
3.4.9	Plugs as disconnect devices		N/A
3.4.10	Interconnected equipment	Not interconnected equipment.	N/A
3.4.11	Multiple power sources	Only one supply connection provided.	N/A

3.5 Interconnection of equipment			Р
3.5.1	General requirements	This power supply is not considered for connection to TNV.	Р
3.5.2	Types of interconnection circuits:	Interconnection circuits of SELV through the connector. No ELV interconnection circuits.	Р
3.5.3	ELV circuits as interconnection circuits	No ELV interconnection	N/A
3.5.4	Data ports for additional equipment	All USB ouput comply with LPS. See appended table 2.5 for details.	Р

4	PHYSICAL REQUIREMENTS	
4.1	Stability	
	Angle of 10°	N/A
	Test force (N)	N/A

4.2	Mechanical strength		Р
4.2.1	General	eral After tests, unit complies with the requirements of sub-clauses 2.1.1, 2.6.1 and 2.10.	Р
	Rack-mounted equipment.		N/A
4.2.2	Steady force test, 10 N	10 N applied to all internal components.	Р
4.2.3	Steady force test, 30 N	30N applied to Internal metal enclosure.	Р
4.2.4	Steady force test, 250 N	250 N applied to outer enclosure. No energy or other hazards.	Р

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Clause	Requirement + Test	Result - Remark	Verdict	
4.2.5	Impact test	Applied on top and side enclosure	Р	
	Fall test	1.3m, 3 times	Р	
	Swing test	See above	Р	
4.2.6	Drop test; height (mm)		N/A	
4.2.7	Stress relief test		N/A	
4.2.8	Cathode ray tubes	No CRT in the unit.	N/A	
	Picture tube separately certified		N/A	
4.2.9	High pressure lamps	No high pressure lamp provided.	N/A	
4.2.10	Wall or ceiling mounted equipment; force (N):	An addition force 1950N (3 times the mass without base 65kg) applied to the unit with the VESA adaptor kit and sustained for 1 min.	Р	
		The unit withstood the load test without damage or breakage from the mount kit.		
		VESA compatible wall mounting kit, 780 x 520 mm, four M8 x 10 mm with screws to secure.		

4.3	Design and construction		Р
4.3.1	Edges and corners	Edges and corners of the enclosure are rounded.	Р
4.3.2	Handles and manual controls; force (N):	No handles or controls provided.	N/A
4.3.3	Adjustable controls	No such controls provided.	N/A
4.3.4	Securing of parts	Mechanical fixings in such a way designed that they will withstand mechanical stress occurring in normal use.	Р
4.3.5	Connection by plugs and sockets	Mismatch of connectors either not possible or does not result in any hazard.	Р
4.3.6	Direct plug-in equipment	Not direct plug-in equipment	N/A
	Torque		_
	Compliance with the relevant mains plug standard		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
4.3.7	Heating elements in earthed equipment	No heating elements provided.	N/A
4.3.8	Batteries	No batteries provided.	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 heating elements provided.	N/A
4.3.10	Dust, powders, liquids and gases	Equipment in intended use not considered to be exposed to these.	N/A
4.3.11	Containers for liquids or gases	No container for liquid or gas.	N/A
4.3.12	Flammable liquids	No such flammable liquid.	N/A
	Quantity of liquid (I)		N/A
	Flash point (°C)		N/A
4.3.13	Radiation	See only cl. 4.3.13.5	Р
4.3.13.1	General		Р
4.3.13.2	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		N/A
	Part, property, retention after test, flammability classification		N/A
4.3.13.4	Human exposure to ultraviolet (UV) radiation:		N/A
4.3.13.5	Lasers (including laser diodes) and LEDs		N/A
4.3.13.5.1	Lasers (including laser diodes)		N/A
	Laser class		_
4.3.13.5.2	Light emitting diodes (LEDs)	Indicating LED used only, considered as low power application of LEDs	_
4.3.13.6	Other types		Р

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Clause	Requirement + Test	Result - Remark	Verdict	
4.4	Protection against hazardous moving parts	No moving parts	N/A	
4.4.1	General		N/A	
4.4.2	Protection in operator access areas:		N/A	
	Household and home/office document/media shredders		N/A	
4.4.3	Protection in restricted access locations:		N/A	
4.4.4	Protection in service access areas		N/A	
4.4.5	Protection against moving fan blades		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	Equipment loaded with rated output current.	Р
4.5.2	Temperature tests	(see appended table 4.5)	Р
	Normal load condition per Annex L:	(see appended table 4.5)	_
4.5.3	Temperature limits for materials	(see appended table 4.5)	Р
4.5.4	Touch temperature limits	(see appended table 4.5)	Р
4.5.5	Resistance to abnormal heat:	Phenolic bobbin material used in transformer T1, T2, T3, T4 and line filter L1, L2 and L3, which is acceptable without test. Other parts see appended table 4.5.5.	Р

4.6	Openings in enclosures		Р
4.6.1	Top and side openings	(See appended table 4.6.1 and 4.6.2)	Р
	Dimensions (mm):		_
4.6.2	Bottoms of fire enclosures	(See appended table 4.6.1 and 4.6.2)	Р

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Clause	Requirement + Test	Result - Remark	Verdict	
	Construction of the bottomm, dimensions (mm):		_	
4.6.3	Doors or covers in fire enclosures		N/A	
4.6.4	Openings in transportable equipment		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	
4.6.5	Adhesives for constructional purposes	Not used.	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	No excessive temperatures. No easily burning materials employed. Fire enclosure provided.	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		N/A
4.7.2	Conditions for a fire enclosure	No excessive temperatures. No easily burning materials employed. Fire enclosure provided.	Р
4.7.2.1	Parts requiring a fire enclosure	With having the following parts: Components in primary Components having unenclosed arcing parts at hazardous voltage or energy level Insulated wiring Components in secondary (not supplied by LPS) Metal enclosure used as fire enclosure.	P
4.7.2.2	Parts not requiring a fire enclosure		N/A
4.7.3	Materials		Р
4.7.3.1	General	See below	Р

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Clause	Requirement + Test	Result - Remark	Verdict	
4.7.3.2	Materials for fire enclosures	Earthed metal enclosure is considered as fire enclosure, which complies without test.	Р	
4.7.3.3	Materials for components and other parts outside fire enclosures		N/A	
4.7.3.4	Materials for components and other parts inside fire enclosures	PCB rated V-0. See appended table 1.5.1 for details. Internal components except small parts are V-2 or better.	Р	
4.7.3.5	Materials for air filter assemblies	No air filters provided.	N/A	
4.7.3.6	Materials used in high-voltage components	No high voltage components provided.	N/A	

5	ELECTRICAL REQUIREMENTS AND SIMULATED ABNORMAL CONDITIONS		Р
5.1	Touch current and protective conductor current		Р
5.1.1	General	(see appended Table 5.1)	Р
5.1.2	Configuration of equipment under test (EUT)	EUT has only one mains connection.	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		N/A
5.1.2.3	Simultaneous multiple connections to an a.c. mains supply		N/A
5.1.3	Test circuit	Equipment of figure 5A used.	Р
5.1.4	Application of measuring instrument	Using measuring instrument in annex D.	Р
5.1.5	Test procedure	The touch current was measured from mains to accessible signal terminal of main board and to accessible plastic enclosure wrapped with metal foil.	Р
5.1.6	Test measurements	(see appended table 5.1)	Р
	Supply voltage (V):		
	Measured touch current (mA):		
	Max. allowed touch current (mA):		
	Measured protective conductor current (mA):		_
	Max. allowed protective conductor current (mA):		_

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Clause	Requirement + Test	Result - Remark	Verdict
5.1.7	Equipment with touch current exceeding 3,5 mA		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.	N/A
5.1.8.1	Limitation of the touch current to a telecommunication network or to a cable distribution system		N/A
	Supply voltage (V):		_
	Measured touch current (mA):		_
	Max. allowed touch current (mA):		
5.1.8.2	Summation of touch currents from telecommunication networks		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		Electric strength		Р
5.2.	.1	General	(see appended table 5.2)	Р
5.2.	.2	Test procedure		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	No motors.	N/A
5.3.3	Transformers	(see appended Annex C and table 5.3)	Р
5.3.4	Functional insulation:	By short-circuited, results see appended table 5.3.	Р
5.3.5	Electromechanical components		N/A
5.3.6	Audio amplifiers in ITE:	(see appended table 5.3.)	Р
5.3.7	Simulation of faults	(see appended table 5.3.)	Р
5.3.8	Unattended equipment	No such equipment.	N/A
5.3.9	Compliance criteria for abnormal operating and fault conditions		Р

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Clause	Requirement + Test	Result - Remark	Verdict
5.3.9.1	During the tests	No fire or molten metal occurred and no deformation of enclosure during the tests.	Р
5.3.9.2	After the tests	No reduction of clearance and creepage distance. Electric strength test is made on basic, supplementary and reinforced insulation after test.	Р
6	CONNECTION TO TELECOMMUNICATION NETW	ORKS	N/A
6.1	Protection of telecommunication network service equipment connected to the network, from hazar		N/A
6.1.1	Protection from hazardous voltages		N/A
6.1.2	Separation of the telecommunication network from e	arth	N/A
6.1.2.1	Requirements		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 networks	s on telecommunication	N/A
6.2.1	Separation requirements		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 syste	em from overheating	N/A
	Max. output current (A)		_
	Current limiting method:		
7	CONNECTION TO CABLE DISTRIBUTION SYSTE	MS	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		N/A

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Clause	Requirement + Test	Result - Remark	Verdict		
7.3	Protection of equipment users from overvithe cable distribution system	oltages on	N/A		
7.4	Insulation between primary circuits and cadistribution systems	able	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
A	ANNEX A, TESTS FOR RESISTANCE TO HEAT AN	ID 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)		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)		N/A
A.2.1	Samples, material		
	Wall thickness (mm)		
A.2.2	Conditioning of samples; temperature (°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):		_

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Clause	Requirement + Test	Result - Remark	Verdict		
A.3	Hot flaming oil test (see 4.6.2)		N/A		
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	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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	IEC 60950-1		
Clause	Requirement + Test	Result - Remark	Verdict
С	ANNEX C, TRANSFORMERS (see 1.5.4 and 5.3.3)		Р
	Position:	T1, T2, T3, T4	
	Manufacturer:	See table 1.5.1	_
	Type:	See table 1.5.1	_
	Rated values:	See table 1.5.1	_
	Method of protection:	By protection circuit	_
C.1	Overload test	(see appended table 5.3)	Р
C.2	Insulation	(see appended tables 5.2 and C2)	Р
	Protection from displacement of windings:	By bobbin and insulation tape	Р
D	ANNEX D, MEASURING INSTRUMENTS FOR TO (see 5.1.4)	UCH-CURRENT TESTS	Р
D.1	Measuring instrument		Р
D.2	Alternative measuring instrument		N/A
E	ANNEX E, TEMPERATURE RISE OF A WINDING	(see 1.4.13)	N/A
F	ANNEX F, MEASUREMENT OF CLEARANCES A (see 2.10 and Annex G)	ND CREEPAGE DISTANCES	Р
G	ANNEX G, ALTERNATIVE METHOD FOR DETER CLEARANCES	MINING MINIMUM	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
G.3	Determination of telecommunication network transient voltage (V):		N/A
G.4	Determination of required withstand voltage (V)		N/A

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IEC 60950-1					
Clause	Requirement + Test	Result - Remark	Verdict		
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		
••	ARTICAL II, TORIZINO RADIATION (SEE 4.0.10)		14// (
J	ANNEX J, TABLE OF ELECTROCHEMICAL POTENTIALS (see 2.6.5.6)		Р		
	Metal(s) used:	Metals which the combination electrochemical potential is less than 0.6 V.	_		
K	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 reliability, operating voltage (V) 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 SO	OME TYPES OF ELECTRICAL	Р		
-	BUSINESS EQUIPMENT (see 1.2.2.1 and 4.5.2)	JULY 11 EO OF ELECTRICAL	'		
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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		Roport No.: 000-R	
	IEC 60950-1		
Clause	Requirement + Test	Result - Remark	Verdict
L.6	Motor-operated files		N/A
L.7	Other business equipment	See 1.6.2.	Р
M	ANNEX M, CRITERIA FOR TELEPHONE RINGING	G 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 7.3.2, 7.4.3 and Clause G.5)	.5.7.2, 1.5.7.3, 2.10.3.9, 6.2.2.1,	N/A
N.1	ITU-T impulse test generators		N/A
N.2	IEC 60065 impulse test generator		N/A
P	ANNEX P, NORMATIVE REFERENCES		
			1 _
Q	ANNEX Q, Voltage dependent resistors (VDRs)	<u>, </u>	P
	- Preferred climatic categories	See table 1.5.1	P
	- Maximum continuous voltage	See table 1.5.1	P
	- Combination pulse current	See table 1.5.1	P
	Body of the VDR Test according to IEC60695-11-5		N/A
	Body of the VDR. Flammability class of material (min V-1)	VDR body flammabitlity V-0, see table 1.5.1 for details	Р



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	IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdic	
R	ANNEX R, EXAMPLES OF REQUIREMENTS FO	DR QUALITY CONTROL	N/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 TESTIN	NG (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 AGAIN (see 1.1.2)	NST INGRESS OF WATER	N/A	
U	ANNEX U, INSULATED WINDING WIRES FOR USE WITHOUT INTERLEAVED INSULATION (see 2.10.5.4)			
		VDE approved triple insulated wire used.	_	
V	ANNEX V, AC POWER DISTRIBUTION SYSTEM	S (soo 1.6.1)	Р	
V.1	Introduction	3 (See 1.0.1)	P	
V.1	TN power distribution systems		Р	
			I	
W	ANNEX W, SUMMATION OF TOUCH CURRENTS	S	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	
X	ANNEX X, MAXIMUM HEATING EFFECT IN TRA	NSFORMER TESTS (see clause	N/A	

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	IEC 60950-1	
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)	N/A
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)	Р
AA	ANNEX AA, MANDREL TEST (see 2.10.5.8)	Р
		"
ВВ	ANNEX BB, CHANGES IN THE SECOND EDITION	_
СС	ANNEX CC, Evaluation of integrated circuit (IC) current limiters	N/A
CC.1	General	N/A
CC.2	Test program 1:	N/A
CC.3	Test program 2	N/A
CC.4	Test program 3:	N/A
CC.5	Compliance:	N/A
DD	ANNEX DD, Requirements for the mounting means of rack-mounted equipment	N/A
DD.1	General	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	N/A
EE.1	General	N/A
EE.2	Markings and instructions	N/A
	Use of markings or symbols:	N/A

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IEC 60950-1					
Clause	Requirement + Test	Result - Remark	Verdict		
	Information of user instructions, maintenance and/or servicing instructions		N/A		
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	ABLE: List of crit	ical components			Р
Object/part No.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s) of conformity ¹)
Metal Enclosure	Interchangeable	Interchangeable	Metallic. Thickness min. 1.0mm		Tested within appliance
Plug	Toong Yean Plastic Ind. Co., Ltd.	TY-013	16A, 250V	DIN VDE 0620-1	VDE 40002155
Power cord	Toong Yean Plastic Ind. Co., Ltd.	H05VN-F	3 x 0.75mm ² (Max. length: 2m)	IEC/EN 60227-1	VDE 40032826
Connector	Toong Yean Plastic Ind. Co., Ltd.	TY-014	10A, 250V, standard sheet C13	IEC/EN 60320-1	VDE 40028582
Appliance inlet	ZHE JIANG BEI ER JIA ELECTRONIC CO LTD	ST-A01-001L	10A, 250V, 70°C, standard sheet C14	IEC/EN 60320-1	VDE 40013388
Internal input lead wire between AC connector CON01 and appliance inlet	Shenzhen Kaijiafeng Electric Ltd	1007	80°C, VW-1, 300V, 22AWG min.	UL 758	UL E338918
Mylar Sheet	SICHUAN LONGHUA FILM CO LTD	PC-870	V-0, 80°C, Min. thickness 0.4mm.	UL94 UL746	UL E254551
PCB	SHENZHEN VICTORY ELECTRONIC TECHNOLOGY CO.,LTD	F-M	V-0, 130°C	UL94, UL746	UL E254215
Heat-shrinkable tubing	SHENZHEN WOER HEAT- SHRINKABLE MATERIAL CO LTD	RSFR	VW-1, 600V, 125°C	UL 224	UL E203950
Output wire (between Power Supply and LED board)	Shenzhen Kaijiafeng Electric Ltd	1007	80°C, VW-1, 300V, 22AWG min.	UL 758	UL E338918
Internal wire of control board	Interchangeable	Interchangeable	Min. 22AWG, 80°C, 300V, VW-1	UL 758	UL
Speaker (Optional) (two Provided)	Interchangeable	Interchangeable	10Ω, 20W Max.		Tested within apparatus

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LED Panel	INNOLUX	V750DK1-QS3	75 inch, TFT type LED backlight	IEC 60950-1	Tested within appliance
For built-in Swite	ching Power Supply	DQM500L-5T0X	•		
AC connector (CON01)	LAND WIN ELECTRONIC CORP	3961P-02	V-0, 105°C	UL 1977	UL E159426
(Alternative)	ZHEJIANG JIESHITAI ELECTRONICS CO LTD	VH-3A	V-0, 105°C	UL 1977	UL E314369
PCB	KINGBOARD LAMINATES HOLDINGS LTD	KB-5150	V-0, 130°C,	UL 796 UL 94	UL E123995
(Alternative)	CHANG CHUN PLASTICS CO LTD	CCP-508	V-0, 130°C	UL 796 UL 94	UL E108591
(Alternative)	SHANDONG JINBAO ELECTRONICS CO LTD	ZD-95(G)F	V-0, 130°C	UL 796 UL 94	UL E141940
(Alternative)	DOOSAN CORPORATIO N ELECTRO- MATERIALS BG	DS-7400	V-0, 130°C	UL 796 UL 94	UL E103670
(Alternative)	Interchangeable	Interchangeable	V-0, min, 130°C	UL 796 UL 94	UL
Fuse (F02)	Dongguan Better Electronics Technology Co., Ltd.	524	T8A, 250V	IEC/EN 60127-1 IEC/EN 60127-3	VDE 40020107
(Alternative)	Conquer Electronics Co., Ltd.	UDA-A	T8A, 250V	IEC/EN 60127-1 IEC/EN 60127-3	VDE 0008022
MOV (ZR01)	SUCCESS ELECTRONICS CO LTD	10D681K	420VAC, 85°C(Tested for 6KV/3KA combination pulse), V-0	IEC/EN 61051-1 IEC/EN 61051-2 UL 1449	VDE 4003040 UL E330256

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(Alternative)	JOYIN CO LTD	10S681K	420VAC, 85°C (Tested for 6KV/3KA combination pulse), V-0 coating	EC/EN 61051-1 IEC/EN 61051-2 UL 1449	VDE 40004658 UL E325508
(Alternative)	CERGLASS MFG INC	10D681K	420VAC, 85°C (Tested for 6KV/3KA combination pulse), V-0 coating	EC/EN 61051-1 IEC/EN 61051-2 UL 1449	VDE 40028836 E317616
Y-capacitor (CY01, CY02, CY03, CY04)	SUCCESS ELECTRONICS CO LTD	SB	Min. 250 V, max. 1000 pF, min. 125 °C, Y1 type	IEC/EN 60384-14	VDE 40020001
(Alternative)	SUCCESS ELECTRONICS CO LTD	SE	Min. 250 V, max. 1000 pF, min. 125 °C, Y1 type	IEC/EN 60384-14	VDE 40037211
(Alternative)	WALSIN TECHNOLOGY CORP	АН	Min. 250 V, max. 1000 pF, min. 125 °C, Y1 type	IEC/EN 60384-14	VDE 40001804
(Alternative)	Guangdong South Hongming Electronic Science and Technology Co., Ltd	F	Min. 250 V, max. 1000 pF, min. 125 °C, Y1 type	IEC/EN 60384-14	VDE 40036393
(Alternative)	Jyh Chung Electronic Co., Ltd.	JD	Min. 250 V, max. 1000 pF, min. 125 °C, Y1 type	IEC/EN 60384-14	VDE 137027
X-capacitor (CX01, CX02, CX03)	ULTRA TECH XIPHI ENTERPRISE CO LTD	HQX	Max. 0.22μF, 275VAC, 100 °C, X2 type	IEC/EN 60384-14	VDE 40024534
(Alternative)	WINDAY ELECTRONIC INDUSTRIAL CO LTD	MPX	Max. 0.22μF, 275VAC, 100 °C, X2 type	IEC/EN 60384-14	VDE 40018071
(Alternative)	Changzhou Jiaguan Electronics CO.,LTD	МКР	Max. 0.22μF, 275VAC, 110 °C, X2 type	IEC/EN 60384-14	VDE 40037250

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Inductor(LF01)	Dong Guan Di Que Mei Electronic Co Ltd	T13*7*7-001	Min. 130°C		Tested with appliance
Inductor (LF02, LF03)	Dong Guan Di Que Mei Electronic Co Ltd	T22148C-006	Min. 130°C		Tested with appliance
Inductor(L1, L2, L3)	Dong Guan Di Que Mei Electronic Co Ltd	POT3314-014	Min. 130°C		Tested with appliance
- Bobbin	CHANG CHUN PLASTICS CO LTD	T375J	V-0, 150°C, Phenolic,	UL94	UL E59481
- Coil	Interchangeable	Interchangeable	130°C		UL
- Tape	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	WF310(a), JY25- A(b)	130°C	UL 510	UL E165111
Bleeder Resistor (R01,R02,R03, R04)	Interchangeable	Interchangeable	1.5M;1/4W		Tested with appliance
Ripple Capacitor (EC2,EC3, EC4)	Interchangeable	Interchangeable	68uF, 450V min, 105°C min		Tested with appliance
Bridge Diodes (BD1, BD2)	Interchangeable	Interchangeable	600V min,25A Min		Tested with appliance
Switching IC (U300)	Interchangeable	Interchangeable	10V min, 300mA Min		Tested with appliance
Switching IC (U100)	Interchangeable	Interchangeable	10V min, 300mA Min		Tested with appliance
Photo-coupler (PC1,PC2,PC3, PC4)	Everlight Electronics Co., Ltd.	EL8171	Dti >0.4mm, Ext. cr > 8mm, 100°C	IEC/EN 60747-5- 5	VDE 132249
Transformer (T1)	SHENZHEN XIEXING ELECTRONICS CO.,LTD.	EFD25-015	Class B	Applicable parts in IEC 60950-1 and acc. to IEC 60085	Tested with appliance

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- Bobbin	CHANG CHUN	T375J	V 0. 450°C	UL 94	UL E59481
- BODOIII	PLASTICS CO LTD	13733	V-0, 150°C, Phenolic, min. thickness 0.7mm	OL 94	OL E39401
- Tape	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	WF310(a)	130°C	UL 510	UL E165111
(Alternative)	SUZHOU MAILADUONA ELECTRIC MATERIAL CO LTD	JY312	130°C	UL 510	UL E188295
- Tube	FUREDA PLASTIC CO.,LTD	FRD-TT-S	200°C	UL 224	UL E254113
- Wire	SHANTOU SHENGANG ELECTRICALI NDUSTRIAL CO.,LTD	2UEW	130 ℃	UL1446	UL E239508
- Varnish	HANG CHEUNG PETROCHEMI CAL LTD.	8562(a)	155°C	UL1446	UL E200154
Transformer (T2)	SHENZHEN XIEXING ELECTRONICS CO.,LTD.	EFD50-005	Class B	Applicable parts in IEC 60950-1 and acc. to IEC 60085	Tested with appliance
- Bobbin and cover sheet	CHANG CHUN PLASTICS CO LTD	T375J	V-0, 150°C, Phenolic, min. thickness 0.8mm	UL 94	UL E59481
- Tape	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	JY25-A(b)	130°C	UL 510	UL E165111
- Tube	FUREDA PLASTIC CO.,LTD	FRD-TT-S	200°C	UL 224	UL E254113
- Wire	SHANTOU SHENGANG ELECTRICALI NDUSTRIAL CO.,LTD	2UEW	130°C	UL1446	UL E239508

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- Varnish	HANG CHEUNG PETROCHEMI CAL LTD.	8562(a)	155°C	UL1446	UL E200154
Transformer (T3)	SHENZHEN XIEXING ELECTRONICS CO.,LTD.	EFD50-008	Class B	Applicable parts in IEC 60950-1 and acc. to IEC 60085	Tested with appliance
(Alternative)	Dong Guan Di Que Mei Electronic Co Ltd	EFD50-008	Class B	Applicable parts in IEC 60950-1 and acc. to IEC 60085	Tested with appliance
- Bobbin and cover sheet	CHANG CHUN PLASTICS CO LTD	T375J	V-0, 150°C, Phenolic, min. thickness 0.8mm	UL 94	UL E59481
- Tape	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	WF310(a), JY25- A(b)	130°C	UL 510	UL E165111
- Tube	FUREDA PLASTIC CO.,LTD	FRD-TT-S	200°C	UL 224	UL E254113
- Wire	SHANTOU SHENGANG ELECTRICALI NDUSTRIAL CO.,LTD	2UEW	130°C	UL1446	UL E239508
Transformer (T4)	SHENZHEN XIEXING ELECTRONICS CO.,LTD.	EE16-001	Class B	Applicable parts in IEC 60950-1 and acc. to IEC 60085	Tested with appliance
- Bobbin	CHANG CHUN PLASTICS CO LTD	T375J	V-0, 150°C, Phenolic, min. thickness 0.7mm	UL 94	UL E59481
- Tape	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	WF310(a), JY25-A(b)	130°C	UL 510	UL E165111
- Tube	FUREDA PLASTIC CO.,LTD	FRD-TT-S	200°C	UL 224	UL E254113

- Wire	SHANTOU SHENGANG ELECTRICALI NDUSTRIAL CO.,LTD	2UEW	130°C	UL 1446	UL E239508
-Triple insulated wire	SHENZHEN DARUN SCIENCE AND TECHNOLOGY CO LTD	DRTIW-B	130 °C	UL 2353	UL E206440

Supplementary information:

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

1.6.2		TABLE:	electrical d	ata (in norm	al condition	s)		Р
U (V)	I (A	١)	Irated (A)	P (W)	Fuse #	Ifuse (A)	Condition/status	
НОМІ								
90/50		3.36		292.6	F1	3.36	Maximum normal load	d
90/60		3.38		292.7	F1	3.38	Maximum normal load	d
100/50		2.96	6.5	288.7	F1	2.96	Maximum normal load	d
100/60		2.98	6.5	289.1	F1	2.98	Maximum normal load	d
240/50		1.22	6.5	276.9	F1	1.22	Maximum normal load	d
240/60		1.23	6.5	276.9	F1	1.23	Maximum normal load	d
264/50		1.11		276.1	F1	1.11	Maximum normal load	d
264/60		1.12		276.1	F1	1.12	Maximum normal load	d

Note(s): Maximum normal load: Brightness: 100%, Contrast: 100%, White screen. Three vertical bar signal played and 2 pieces of speakers were loaded with 1KHz noise and turned to 1/8 max. non-clipped output power, which consumed maximum output power. Three USB 2.0 port load 5V/0.5A.

The Max. input current is 2.98A, rated current is 6.5A, (2.98-6.5)/6.5x100% = -54.2%, limit is +10%

2.1.1.5 c) 1) TABLE: max. V, A, VA test								
Voltage (rated) (V)	Current (rated) (A)	Voltage (max.) (V)	Current (max.) (A)	VA (ma: (VA)	x.)			
USB port	USB port							
5.0	0.5	5.03	2.8	13.93				
Supplied by 240V/60Hz								

2.1.1.7	TABLE: discharge test					Р
Condition		τ calculated (s)	τ measured (s)	$t u \rightarrow 0V$ (s)	Comments	
L-N		0.99	0.016	-	Vpeak= 372V, 37%Vpeak= 137	7.6V

Notes:

1. Supplied by 264V/60Hz

2. Capacitance: 0.66µF (CX01=CX02=CX03=0.22uF); Resistance: 1.5Mohm (R01=R02=R03=R04=1.5Mohm)

2.2	TABLE: evaluation of voltage limiting	components in SELV circuits					
Component	(measured between)	max. voltage (V) (normal operation)		Voltage Limiting Components			
		V peak	V d.c.				
T1 Pin 6-9		26.4					
T2 Pin 15-14		27.6					
T2 Pin 16-14	27.4						
T2 Pin 12-14		18.4					
T2 Pin 9-14		24.4					
T2 Pin 8-14		24.6					
T4 Pin 7-9		11.2					
Fault test pe	erformed on voltage limiting components	Voltage measured (V) in SELV circuits (V peak or V d.c.)			ts		
supplementa	supplementary information:						
Supplied by	Supplied by 240V/60Hz						

2.4.2	TABLE: limited	TABLE: limited current circuit measurement					
Location		Voltage (V)	Current (mA)	Freq. (KHz)	Limit (mA)	Comments	
CY03 secondary pin to earth		0.118	0.236		0.7	Test with annex D	0.1
CY04 secondary pin to earth		0.129	0.258		0.7	Test with annex D	0.1
CY03/CY04 secondary pin combination to earth		0.251	0.502		0.7	Test with annex D	0.1
Note(s): EUT supplied with 264V/60Hz, YC03=YC04=1000pF							

2.5	TABLE: lim	ited power source	s				Р
Circuit	output tested:	Output + to output	-				
Note: N	leasured Uoc	(V) with all load cir	cuits disconne	ected:			
Components Test condition Uoc (V) Isc (A) VA							
		(single fault)		Meas.	Limit	Meas.	Limit
Uoc=5.0	09V (Under E	C207)	1		1	•	
Normal	condition		5.09	4.7	8.0	21.71	100
R116		sc	5.09	0	8.0	0	100
PC3 pir	า 3-4	sc	5.09	0	8.0	0	100
supplen	nentary inform	nation:	1	-	1		
	ort circuit, oc=0 tes unit shutd	Open circuit own. [#] indicates fu	se opened.				

2.6.3.4	TABLE: ground cont	inue test		Р
Location		Resistance measured (mΩ)	Comments	
The PE pin of AC inlet to CY01 earth pin		9	32A, 2min	
The PE pin of AC inlet to metal enclosure		22	32A, 2min	
Note: limit : 0	0.1 Ohm			

2.10.2	Table: working volta	ge measurement			Р
Location		Peak voltage (V)	RMS voltage (V)	Comments	
T1 Pin 1-6		310	428		
T1 Pin 2-6		322	506	Max.Vrms&Vpeak ir	n T1
T1 Pin 4-6		166	406		
T1 Pin 5-6		166	348		
T1 Pin 1-9		313	408		
T1 Pin 2-9		313	508		
T1 Pin 4-9		167	412		
T1 Pin 5-9		165	344		
T2 Pin 2-9		230	390		
T2 Pin 7-9		167	262		
T2 Pin 2-12		235	398		
T2 Pin 7-12		159	256		

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T2 Pin 2-14	242	402	Max.Vrms&Vpeak in T2
T2 Pin 7-14	156	242	
T2 Pin 2-15	224	386	
T2 Pin 7-15	154	232	
T3 Pin 3-8	245	540	
T3 Pin 3-11	334	602	Max.Vrms&Vpeak in T3
T3 Pin 5-8	253	484	
T3 Pin 5-11	249	500	
T4 Pin 1-7	175	350	
T4 Pin 2-7	169	356	
T4 Pin 4-7	253	410	Max.Vrms&Vpeak in T4
T4 Pin 5-7	246	404	
T4 Pin 1-9	172	345	
T4 Pin 2-9	168	354	
T4 Pin 4-9	251	408	
T4 Pin 5-9	246	405	
PC1 Pin 1-3	179	366	
PC1 Pin 1-4	178	364	
PC1 Pin 2-3	178	364	
PC1 Pin 2-4	176	366	
PC2 Pin 1-3	211	338	
PC2 Pin 1-4	211	342	
PC2 Pin 2-3	210	340	
PC2 Pin 2-4	212	340	
PC3 Pin 1-3	212	344	
PC3 Pin 1-4	213	342	
PC3 Pin 2-3	213	346	
PC3 Pin 2-4	212	342	
PC4 Pin 1-3	200	326	
PC4 Pin 1-4	200	324	
PC4 Pin 2-3	200	326	
PC4 Pin 2-4	200	324	
Two poles of CY03	163	340	

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Two poles of CY04	164	338					
supplementary information:							
Input voltage is 240V/60Hz.							

2.10.3 and TABLE: Clearand 2.10.4	e and cree	page distar	ice measurem	ents		Р
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)
Functional: On primary circuit	it					
Distance between L & N before fuse(F)*	420	250	1.5	3.8	2.5	3.8
Distance between L & N under Fuse F01(F)	420	250	1.5	2.7	2.5	2.7
Basic/supplementary/Reinfor	eced: Prim	ary compor	nents to acces	sible parts	/earth parts	
Primary component L1 core to earthed metal panel(B)*	420	250	2.0	2.7	2.5	2.7
primary to secondary of CY01/CY02 on PCB trace(B)	420	250	2.0	7.1	2.5	7.1
Reinforced: Primary compon	ents to sec	ondary con	nponents			
primary to secondary of CY03 on PCB trace(R)*	420	250	4.0	7.8	5.0	7.8
primary to secondary of CY04 on PCB trace(R)	420	250	4.0	7.5	5.0	7.5
primary to secondary of optocoupler P1/P2 on PCB trace(R)	420	250	4.0	7.8	5.0	7.8
primary to secondary of optocoupler P3/P4 on PCB trace(R)	420	250	4.0	7.5	5.0	7.5
Primary to secondary of T1 on PCB trace(R)	506	322	4.4	8.1	6.6	8.1
T1 core to primary component C104 body(B)	506	322	2.2	3.8	3.3	6.1
T1 core to primary component EC102 body(B)	506	322	2.2	3.4	3.3	5.7
T1 core to CY03 primary pin(S)*	506	322	2.2	6.8	3.3	10.4
T1 core to CY03 secondary pin(S)	506	322	2.2	6.8	3.3	10.4

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Primary to secondary of T2 on PCB trace(R)	420	250	4.0	8.0	5.0	8.0
T2 core to primary C312 body(B)	420	250	4.0	8.3	5.0	13.5
T2 core to secondary EC202 body(S)	420	250	4.0	8.3	5.0	13.5
Primary to secondary of T3 on PCB trace(R)	602	334	4.6	7.4	6.8	11.9
T3 core to primary component C411 body(B)	602	334	2.3	3.5	3.4	6.2
T3 core to secondary J31 body(S)	602	334	2.3	5.5	3.4	5.5
T3 core to secondary C11F body(S)	602	334	2.3	6.8	3.4	9.1
T4 core to T1 core (S)	506	322	2.2	4.8	3.3	8.5

Supplementary information:

- * F=Functional insulation, B=Basic insulation, S=Supplementary insulation, R=Reinforced insulation.
 - 1. All internal wires are secured by cable tie or insulation tape.
 - 2. Transformer T1, T2, T3 core considered as intermediate part.
 - 3. Triple insulation wire used as secondary windings of T4. Core is considered as primary part.
 - 4. For transformer T1,T2,T3,T4 construction, see appended table C.2 for details.

2.10.5	TABLE: Distance through insulation measurements					
Distance through insulation (DTI) at/of:		U peak (V)	U rms (V)	Test voltage (V)	Required DTI (mm)	DTI (mm)
Photo couplers (reinforced insulation)		420	250	AC 3000	0.4	approved comp.1)
Bobbin and	cover sheet of transformer T2&T3	602	334	AC 3000	0.4	0.5 ¹⁾
Supplementary information: 1) see appended table 1.5.1.						

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4.5	TABLE: Thermal requirements	S			Р
	Supply voltage (V)	Test A: 90V Test B: 264			_
	Ambient T _{min} (°C)				_
	Ambient T _{max} (°C)				
Maximui part/at::	Maximum measured temperature T of part/at::		Т (°	C)	Allowed T_{max} (°C)
Loading	condition	А	В		
CY01 bo	ody	59.7	67.0		 125
CX01 bo	doy	58.3	74.8		 100
ZR01 bc	doy	61.3	83.2		 85
EC2 boo	dy	60.2	68.3		 100
PCB nea	ar BD1	66.5	89.5		 130
L1 coil		60.6	83.6		 130
PCB nea	ar Q4	75.3	98.3		 130
T3 coil		104.2	108.2		 110
T3 core		103.2	107.1		 110
T4 core		75.0	80.7		 110
T4 coil		75.8	81.6		 110
T1 coil		72.7	77.3		 110
T1 core		73.0	77.5		 110
T2 core		82.4	85.3		 110
T2 coil		86.2	89.3		 110
CY04 bo	ody	61.8	63.1		 125
PC4 boo	dy	65.3	67.7		 100
PCB nea	ar D210	75.1	78.0		 130
Input wir	re	56.5	63.0		 85
Primary	connector (CON01)	50.4	57.6		 105
Applianc	ce inlet	45.4	48.7		 70
Key butt	on	43.1	43.6		 85
Function	board 1 PCB	76.2	79.3		 130
Function	board 2 PCB	65.2	67.7		 130
Function	n board 3 PCB	64.5	69.5		 130

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Metal enclosure outside near T3		48.0	50.5				70
Metal enclosure inside near T3		54.7	61.2				
Ambient		40.0	40.0				
Temperature T of winding:	t ₁ (°C	$R_1(\Omega)$	t ₂ (°C)	$R_2(\Omega)$	T (°C)	Allowed T _{max} (°C)	Insulation class

Supplementary information:

- 1. The temperatures were measured under worst normal mode defined in 1.2.2.1 and as described in sub-clause 1.6.2 and at voltages as described above.
- 2. The maximum ambient temperature permitted by the manufacturer's specification is 40°C

4.5.5	TABLE: Ball pressure test of thermoplastic parts					
	Allowed impression diameter (mm)	≤ 2 mm				
Part		Test temperature (°C)	Impression (mm			
AC conn	ector (CON01) (type 3961P-02)	125	1.26			
AC conn	ector (CON01) (type VH-3A)	125	1.07			
Supplementary information: Bobbin material of transformer XF501 is made of phenolic materials, no test necessary						

4.6.1, 4.6.2	Table: Enclosure	opening measurements	nts F			
Location		Size (mm)	Comments			
For horizonta	For horizontal panel					
Metal enclosu	ıre					
Top side 2.42mm x 45.0 mm Opening are similar to slanted opening Vertical enter is prevented.				ngs.		
Left side		N/A	No openings.			
Right side		N/A	No openings.			
Rear side		20.0mm x 1.0mm	Numerous rectangular openings provided. No hazardous voltage parts within a volume bounded by 5° vertical projection up to the openings.			
Bottom side		N/A	No openings.			
Front side		N/A	No openings.			
Supplementa	ry information:					

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4.7	TABLE:	ABLE: Resistance to fire								
Par	t	Manufacturer of material	Type of material	Thickness (mm)	Flammability class	E۱	/idence			
Metal enclosure				1.0						
Supplement	ary inform	Supplementary information: Other internal parts see table 1.5.1								

5.1	TABLE: touch current measurement				
Measured b	etween:	Measured (mA)	Limit (mA)	Comments/conditions	
Mains input terminal	to accessible output	0.096	0.25	With earth connection	
Mains input enclosure	to earthed metal	0.305	3.5	With earth disconnectio	n
supplement	ary information:				

Supplied with 264V/60Hz.

Between primary and earth: YC01=YC02=1000pF Between primary and SPS output: YC03=YC04=1000pF

5.2	TABLE: Electric strength tests, impulse tests and voltage surge tests						
Test voltage	applied between:	Voltage shape (AC, DC, impulse, surge)	Test voltage (V)	Breakdo wn Yes / No			
Functional:							
L to N (fuse	F01 opened)	AC	1500	No			
L to metal er	nclosure	AC	1500	No			
Basic/supple	ementary:	·					
Unit primary	to earthed metal enclosure	AC	1922	No			
T1 primary t	o core	AC	1772	No			
T1 secondar	ry to core	AC	1772	No			
T2 primary t	o core	AC	1500	No			
T2 secondar	ry to core	AC	1500	No			
T3 primary t	o core	AC	1922	No			
T3 secondar	ry to core	AC	1922	No			
Mylar sheet	covered on main board PCB trace	AC	1922	No			
Reinforced:		<u>, </u>					
Unit primary	to secondary (output)	AC	3000	No			
T1 primary t	o secondary	AC	3000	No			

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T2 primary to secondary	AC	3000	No
T3 primary to secondary	AC	3000	No
T4 primary to secondary	AC	3000	No
T4 secondary to core	AC	3000	No
One of two layers insulation tape used in T1, T2, T3, T4	AC	3000	No

Supplementary information:

The test performed immediately following the tests as specified according to 4.5.1, 2.9.2 and following tests of 5.3.

5.3	TABLE: Fault	condition tes	sts				Р
	Ambient tempe	erature (°C)					_
	Power source to output rating						_
Component No.	Fault	Supply voltage (V)	Test time	Fuse #	Fuse current (A)	Observation	
BD1 Pin 1-3	s-c	264Vac	1s	F02	1.12->0	F02 opened immediately, No hazards	ı
EC2	s-c	264Vac	1s	F02	1.12->0	F02 opened immediately, no damaged, No hazards	
T1 Pin 1-2	S-C	264Vac	10 mins	F02	1.12- >0.097	Unit shut down immediate no damaged, no hazards	ely,
T1 Pin 4-5	s-c	264Vac	10 mins	F02	1.12- >0.097	Unit shut down immediate no damaged, no hazards	ely,
T1 Pin 6-9	s-c	264Vac	10 mins	F02	1.12- >0.097	Unit shut down immediate no damaged, no hazards	ely,
T2 Pin 2-7	s-c	264Vac	10 mins	F02	1.12- >0.082	Unit shut down immediate no damaged, no hazards	ely,
T2 Pin14-15	s-c	264Vac	10 mins	F02	1.12- >0.082	Unit shut down immediate no damaged, no hazards	ely,
T2 Pin12-14	s-c	264Vac	10 mins	F02	1.12- >0.082	Unit shut down immediate no damaged, no hazards	ely,
T2 Pin 9-14	s-c	264Vac	10 mins	F02	1.12- >0.082	Unit shut down immediate no damaged, no hazards	ely,
D201	S-C	264Vac	10 mins	F02	1.12- >0.082	Unit shut down immediate no damaged, no hazards	ely,
D202	S-C	264Vac	10 mins	F02	1.12- >0.082	Unit shut down immediate no damaged, no hazards	ely,
D203	S-C	264Vac	10 mins	F02	1.12- >0.082	Unit shut down immediate no damaged, no hazards	ely,

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D212	S-C	264Vac	10 mins	F02	1.12- >0.082	Unit shut down immediately, no damaged, no hazards
D210	S-C	264Vac	10 mins	F02	1.12- >0.082	Unit shut down immediately, no damaged, no hazards
EC211	S-C	264Vac	10 mins	F02	1.12- >0.082	Unit shut down immediately, no damaged, no hazards
EC210	S-C	264Vac	10 mins	F02	1.12- >0.082	Unit shut down immediately, no damaged, no hazards
EC201	S-C	264Vac	10 mins	F02	1.12- >0.082	Unit shut down immediately, no damaged, no hazards
EC207	S-C	264Vac	10 mins	F02	1.12- >0.082	Unit shut down immediately, no damaged, no hazards
PC1 Pin 1-2	s-c	264Vac	10 mins	F02	1.12- >0.067	Unit shut down immediately, no damaged, no hazards
PC1 Pin 3-4	s-c	264Vac	10 mins	F02	1.12- >0.067	Unit shut down immediately, no damaged, no hazards
PC2 Pin 1-2	S-C	264Vac	10 mins	F02	1.12- >0.103	Unit shut down immediately, no damaged, no hazards
PC2 Pin 3-4	s-c	264Vac	10 mins	F02	1.12- >0.103	Unit shut down immediately, no damaged, no hazards
PC3 Pin 1-2	s-c	264Vac	10 mins	F02	1.12- >0.167	Unit shut down immediately, no damaged, no hazards
PC3 Pin 3-4	S-C	264Vac	10 mins	F02	1.12- >0.167	Unit shut down immediately, no damaged, no hazards
PC4 Pin 1-2	S-C	264Vac	10 mins	F02	1.12- >0.093	Unit shut down immediately, no damaged, no hazards
PC4 Pin 3-4	S-C	264Vac	10 mins	F02	1.12- >0.093	Unit shut down immediately, no damaged, no hazards
PC1 Pin 1	O-C	264Vac	10 mins	F02	1.12- >0.067	Unit shut down immediately, no damaged, no hazards
PC2 Pin 1	O-C	264Vac	10 mins	F02	1.12- >0.103	Unit shut down immediately, no damaged, no hazards
PC3 Pin 1	O-C	264Vac	10 mins	F02	1.12- >0.167	Unit shut down immediately, no damaged, no hazards
PC4 Pin 1	o-c	264Vac	10 mins	F02	1.12- >0.093	Unit shut down immediately, no damaged, no hazards
Q4 Pin2-3	s-c	264Vac	1s	F02	1.12->0	F02 opened immediately, No hazards
Q4 Pin1-2	s-c	264Vac	1s	F02	1.12->0	F02 opened immediately, no damaged, No hazards
Q4 Pin1-3	S-C	264Vac	10 mins	F02	1.12- >0.067	Unit shut down immediately, no damaged, no hazards

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			<u> </u>		l	
Q5 Pin2-3	s-c	264Vac	1s	F02	1.12->0	F02 opened immediately, No hazards
Q5 Pin1-2	S-C	264Vac	1s	F02	1.12->0	F02 opened immediately, no damaged, No hazards
Q5 Pin1-3	S-C	264Vac	10 mins	F02	1.12- >0.067	Unit shut down immediately, no damaged, no hazards
Q400 Pin2-3	S-C	264Vac	1s	F02	1.12->0	F02 opened immediately, Q401damaged, No hazards
Q400 Pin1-2	S-C	264Vac	1s	F02	1.12->0	F02 opened immediately, Q401 damaged, No hazards
Q400 Pin1-3	S-C	264Vac	10 mins	F02	1.12- >0.067	Unit shut down immediately, no damaged, no hazards
Q300 Pin2-3	S-C	264Vac	1s	F02	1.12->0	F02 opened immediately, Q301damaged, No hazards
Q300 Pin1-2	S-C	264Vac	1s	F02	1.12->0	F02 opened immediately, Q301 damaged, No hazards
Q300 Pin1-3	S-C	264Vac	10 mins	F02	1.12- >0.067	Unit shut down immediately, no damaged, no hazards
+5V output	0-1	264Vac	7 hrs 50mins	F02	1.12-> 1.16> 1.21-> 0.097	Temperature were steady at 6.3A, when increase to 6.5A, Unit shut down immediately, The maximum temperature of: T1 coil=97°C,
						T1 core=92.8°C, Ambient=26.3°C, No damage, No hazards.
.401/	o-l	264Vac	8hrs 10mins	F02	1.12-> 1.27> 1.44-> 0.082	Temperature were steady at 5.1A, when increase to 5.3A, Unit shut down immediately, The maximum temperature of :
+12V output						T2 coil=108.8°C, T2 core=104.1°C, Ambient=26.7°C, No damage, No hazards.
+19V output	0-1	264Vac	8hrs 10mins	F02	1.12-> 1.29> 1.46-> 0.082	Temperature were steady at 5.0A, when increase to 5.2A, Unit shut down immediately, The maximum temperature of: T2 coil=115.8°C,
						T2 core=109.1°C, Ambient=26.7°C, No damage, No hazards.

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	- 1	0041/	Ob	F00	4.40	T
	o-l	264Vac	8hrs 30mins	F02	1.12-> 1.31> 1.52> 0.082	Temperature were steady at 2.7A, when increase to 2.9A, Unit shut down immediately, The maximum temperature of :
+24V output						T2 coil=121.1°C,
						T2 core=114.8°C,
						Ambient=25.3°C,
						No damage, No hazards.
	o-l	264Vac	8hrs 30mins	F02	1.12-> 1.43> 1.81> 0.131	When output over load to 150V (max. output power 90W), Unit shut down immediately, The maximum temperature of :
LED output						T3 coil=147.1°C,
						T3 core=139.8°C,
						Ambient=27.1°C,
						No damage, No hazards.
	o-l	264Vac	3hrs 30mins	F02	1.12-> 1.13> 1.13-> 1.12	Temperature were steady at 2.5A, when increase to 2.6A, USB shut down immediately, The maximum temperature of :
USB						T1 coil=81.1°C,
						T1 core=79.8°C,
						Ambient=26.3°C, No damage, No hazards.
USB	S-C	264Vac	10 mins	F02	1.12	USB shut down immediately, no damaged, no hazards
LED + to USB	S-C	264Vac	10 mins	F02	1.12- >0.078	Unit shut down immediately, no damaged, no hazards
	Blocked	264Vac	8hrs	F02	1.12	Unit work normally, The maximum temperature of :
						T1 coil=75.8°C
						T1 core=74.0°C
						T2 coil=87.3°C
Ventilation						T2 core=86.0°C
ventuation						T3 coil=108.0°C,
						T3 core=107.3°C,
						T4 coil=81.2°C,
						T4 core=79.9°C,
						Ambient=27.5°C,
						No damage, No hazards.

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Supplementary information:

The ambient temperature specified by the client is 40°C. The unit passed 3000V hi-pot test between primary and accessible signal connector after single fault test above.

- 1. In fault column, s-c=short-circuited, o-c=open-circuited, o-l=over-loaded.
- 2. For transformer winding overload, each winding was individually loaded after the rectifier.
- 4. Transformer T1, T2, T3 and T4 winding and core temperature limit is 150°C (175-10-(40-25)).
- 5. Each fault where fuse F02 opened was tested with all sources of fuse, the same result obtained.

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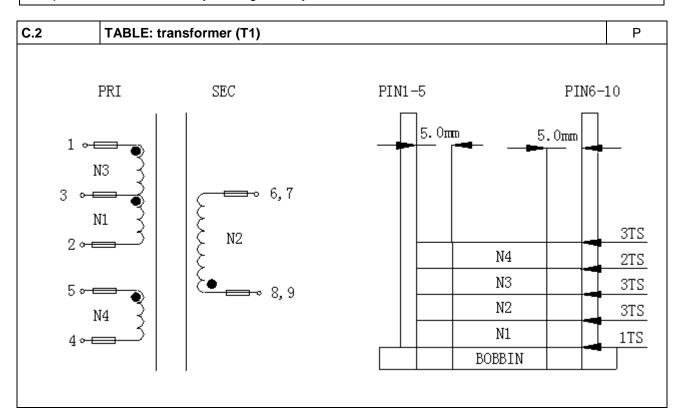
C.2	TABLE: transforme	r (T1)					Р
Loc.	Tested insulation	Working voltage peak / V	Working voltage rms / V	Required electric strength	Required clearance / mm	Required creepage distance / mm (2.10.4)	Required distance thr. insul.
Primary winding to secondary winding	RI	506	322	(5.2) 3000Vac	(2.10.3) 4.4	6.6	Min. 2 layers of insulation tape
Core to primary winding	BI	506	322	1772Vac	2.2	3.3	Min. 2 layers of insulation tape
Core to secondary winding	SI	506	322	1772Vac	2.2	3.3	Min. 2 layers of insulation tape
Loc.	Tested insulation			Test voltage/ V	Measured clearance / mm	Measured creepage dist./ mm	Measured distance thr. insul. / mm; number of layers
Primary winding to secondary winding	RI			3000Vac	10.0 (Secondary winding to primary winding) 6.7 (Secondary soldering pin to primary winding) 6.8 (Primary soldering pin to secondary winding)	10.0 (Secondary winding to primary winding) 6.7 (Secondary soldering pin to primary winding) 6.8 (Primary soldering pin to secondary winding)	3 layers
Core to primary winding	BI			1772Vac	5.0 (Primary winding to core) 3.5 (Primary soldering pin to core)	5.0 (Primary winding to core) 3.5 (Primary soldering pin to core)	2 layers

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Core to	SI	1772Vac	5.0	5.0	2 layers
secondary winding			(Secondary winding to core) 3.5 (Secondary soldering pin to core)	(Secondary winding to core) 3.5 (Secondary soldering pin to core)	

supplementary information:

Concentric windings on phenolic type bobbin. Three layers insulation tape wrapped around external transformer as reinforced insulation and two layers insulation tape wrapped over transformer core and folded inside as basic/supplementary insulation. Core is considered as Intermediate part. Tube enclosed on all winding leads and extended inside at least 1.0mm. Min. 4.0mm width margin tape used between all windings and bobbin. The primary lead pins soldered to primary windings directly moulded in bobbin and secondary lead pins soldered to secondary windings directly moulded in bobbin also.



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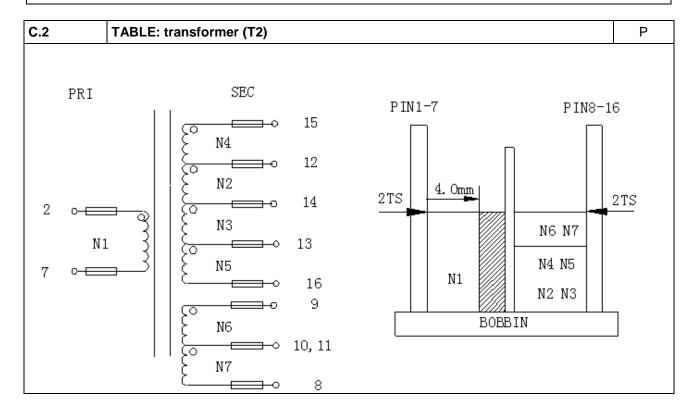
C.2	TABLE: transform	ner (T2)					Р
Loc.	Tested insulation	Working voltage peak / V	Working voltage rms / V	Required electric strength	Required clearance / mm (2.10.3)	Required creepage distance / mm (2.10.4)	Required distance thr. insul. (2.10.5)
Primary winding to secondary winding	RI	420	250	3000Vac	4.0	5.0	Min. 2 layers of insulation tape
Core to primary winding	BI	420	250	1500Vac	2.0	2.5	Min. 2 layers of insulation tape
Core to secondary winding	SI	420	250	1500Vac	2.0	2.5	Min. 2 layers of insulation tape
Loc.	Tested insulation			Test voltage/ V	Measured clearance / mm	Measured creepage dist./ mm	Measured distance thr. insul. / mm; number of layers
Primary winding to secondary winding	RI			3000Vac	8.4 (Secondary winding to primary winding via bottom bobbin) 11.1 (Secondary winding to primary winding via top cover)	11.6 (Secondary winding to primary winding via bottom bobbin) 11.6 (Secondary winding to primary winding via top cover)	2 layers
Core to primary winding	BI			1772Vac	3.5 (Primary winding to core) 4.0 (Primary soldering pin to core)	3.5 (Primary winding to core) 5.1 (Primary soldering pin to core)	2 layers

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Core to secondary winding	1772Vac	3.5 (Secondary winding to core) 3.6 (Secondary soldering pin to core)	3.5 (Secondary winding to core) 4.6 (Secondary soldering pin to core	2 layers
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supplementary information:

Concentric windings on phenolic type bobbin. Two layers insulation tape with width 7.5mm wrapped around external transformer core as reinforced insulation. Core is considered as Intermediate part. Tube enclosed on all winding leads and extended inside at least 1.0mm. Min. 4.0mm width margin tape used between primary winding and middle bobbin. The primary lead pins soldered to primary windings directly moulded in bobbin and secondary lead pins soldered to secondary windings directly moulded in bobbin also.



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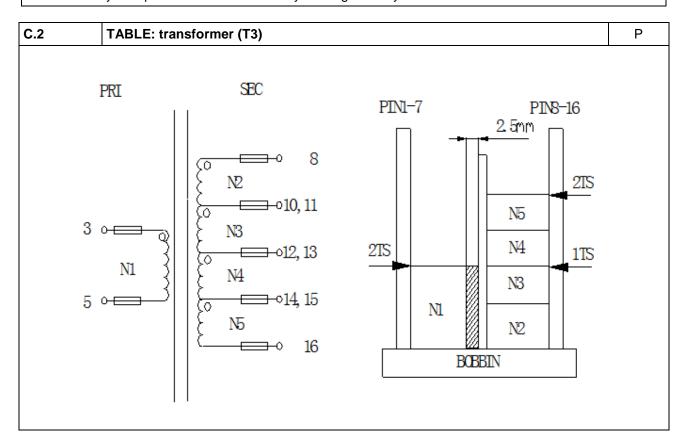
C.2	TABLE: transform	er (T3)					Р
Loc.	Tested insulation	Working voltage peak / V	Working voltage rms / V (2.10.2)	Required electric strength (5.2)	Required clearance / mm (2.10.3)	Required creepage distance / mm (2.10.4)	Required distance thr. insul.
Primary winding to secondary winding	RI	602	334	3000Vac	4.6	6.8	Min. 2 layers of insulation tape
Core to primary winding	ВІ	602	334	1922Vac	2.3	3.4	Min. 2 layers of insulation tape
Core to secondary winding	SI	602	334	1922Vac	2.3	3.4	Min. 2 layers of insulation tape
Loc.	Tested insulation			Test voltage/ V	Measured clearance / mm	Measured creepage dist./ mm	Measured distance thr. insul. / mm; number of layers
Primary winding to secondary winding	RI			3000Vac	6.9 (Secondary winding to primary winding via bottom bobbin) 9.9 (Secondary winding to primary winding via top cover)	10.3 (Secondary winding to primary winding via bottom bobbin) 10.3 (Secondary winding to primary winding via top cover)	2 layers
Core to primary winding	BI			1922Vac	3.5 (Primary winding to core) 4.0 (Primary soldering pin to core)	3.5 (Primary winding to core) 5.1 (Primary soldering pin to core)	2 layers

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Core to secondary winding	SI	1922Vac	3.5 (Secondary winding to core) 3.6 (Secondary soldering	3.5 (Secondary winding to core) 4.6 (Secondary soldering	2 layers
			pin to core)	pin to core	

supplementary information:

Concentric windings on phenolic type bobbin. Two layers insulation tape with width 7.5mm wrapped around external transformer core as reinforced insulation. Core is considered as Intermediate part. Tube enclosed on all winding leads and extended inside at least 1.0mm. Min. 2.5mm width margin tape used between primary winding and middle bobbin. The primary lead pins soldered to primary windings directly moulded in bobbin and secondary lead pins soldered to secondary windings directly moulded in bobbin also.



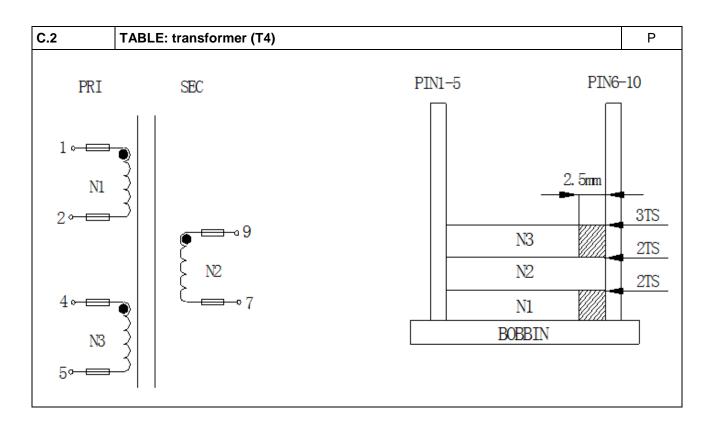
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C.2	TABLE: transforme	r (T4)					Р
Loc.	Tested insulation	Working voltage peak / V	Working voltage rms / V	Required electric strength	Required clearance / mm	Required creepage distance / mm (2.10.4)	Required distance thr. insul.
		(2.10.2)	(2.10.2)	(5.2)	(2.10.3)		(2.10.5)
Primary winding to secondary winding	RI	420	253	3000Vac	4.0	5.2	Min. 2 layers of insulation tape
Core to secondary winding	RI	420	253	3000Vac	4.0	5.2	Min. 2 layers of insulation tape
Loc.	Tested insulation			Test voltage/ V	Measured clearance / mm	Measured creepage dist./ mm	Measured distance thr. insul. / mm; number of layers
Primary winding to secondary winding	RI			3000Vac	6.5 (Secondary soldering pin to primary winding)	6.5 (Secondary soldering pin to primary winding)	2 layers
Core to secondary winding	RI			3000Vac	7.2 (Secondary soldering pin to core)	7.2 (Secondary soldering pin to core)	2 layers

supplementary information:

Concentric windings on phenolic type bobbin. Three layers insulation tape wrapped around external of transformer as reinforced insulation. Triple insulated wires used as secondary winding. Core is considered as primary. Min. 2.5mm margin tape used between primary winding N1/N3 and secondary soldering pin. Tube used where primary winding and secondary triple insulated wire can contact at angle between 45° and 90°. The primary lead pins soldered to primary windings directly moulded in bobbin and secondary lead pins soldered to secondary windings directly moulded in bobbin also.

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IEC60950_1F - ATTACHMENT					
Clause	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

Differences according to...... EN 60950-1:2006/A11:2009/A1:2010/A12:2011/A2:2013

Attachment Form No...... EU_GD_IEC60950_1F

Attachment Originator SGS Fimko Ltd

Master Attachment Date 2014-02

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EN 60950-1:2006/A11:2009/A1:2010/A12:2011/A2:2013 - CENELEC COMMON MODIFICATIONS

	IEC 609	50-1, GROUP	DIFFEREN	ICES (CENELEC	common me	odifications EN)		
Clause	Require	ment + Test			Result - Re	Result - Remark		
		Clauses, subclauses, notes, tables and figures which are additional to those in IEC60950-1 and it's amendmets are prefixed "Z"						
Contents	Add the following annexes: Annex ZA (normative) Normative references to international publications with their corresponding European publications						Р	
(A2:2013)		ZB (normative) ZD (informative) IEC	cial national condi and CENELEC co ble cords		ons for		
General		all the "country' ng to the follow		e reference docur	ment (IEC 60	950-1:2005)	Р	
	1.4.8 1.5.8 2.2.3 2.3.2.1 2.7.1 3.2.1.1 4.3.6 4.7.3.1 6 6.2.2 7.1 G.2.1	Note 2 Note 2 Note 1 Note 1 & 2 Note 2 Note 2 Note 2 Note 2 & 5 Note Note 3 Note 2	2.2.4 2.3.4 2.10.3.2 3.2.4	Note 3. Note 4 Note 3 & 4 Note 2 Note 2 Note	1.7.2.1 2.3.2 2.6.3.3 2.10.5.13 2.5.1 4.7.2.2 5.3.7	Note Note 4, 5 & 6 Note Note 2 & 3 Note 3 Note 2 Note Note 1 Note Note Note Note Note Note Note 1 & 2		

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IEC60950_1F - ATTACHMENT					
Clause	Requirement + Test		Result - Remark	Verdict	

	IEC 60950-1, GROUP DIFFERENCES (CENELEC	common modifications EN)		
Clause	Requirement + Test	Result - Remark	Verdict	
General (A1:2010)	Delete all the "country" notes in the reference document (IEC 60950-1:2005/A1:2010) according to the following list: 1.5.7.1 Note 6.1.2.1 Note 2 6.2.2.1 Note 2 EE.3 Note			
General (A2:2013)	Delete all the "country" notes in the reference docume 1:2005/A2:2013) according to the following list: 2.7.1 Note * 2.10.3.1 Note 2 6.2.2. Note * Note of secretary: Text of Common Modification remains unchange.	·	Р	
1.1.1 (A1:2010)	Replace the text of NOTE 3 by the following. NOTE 3 The requirements of EN 60065 may also be used to me equipment. See IEC Guide 112, Guide on the safety of multimed 60065 applies.	et safety requirements for multimedia	Р	
1.3.Z1	Add the following subclause: 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 coming from different manufacturers.	Not such equipment.	N/A	
(A12:2011)	In EN 60950-1:2006/A12:2011 Delete the addition of 1.3.Z1 / EN 60950-1:2006 Delete the definition 1.2.3.Z1 / EN 60950-1:2006 /A1:2010	Deleted.	N/A	
1.5.1 (Added info*)	Add the following NOTE: NOTE Z1 The use of certain substances in electrical and electronic equipment is restricted within the EU: see Directive 2002/95/EC. New Directive 2011/65/11 *	Added.	Р	



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	IEC60950_1F - ATTACHMENT					
Clause	Requirement + Test		Result - Remark	Verdict		

	IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN)					
Clause	Requirement + Test	Result - Remark	Verdict			
1.7.2.1 (A1:2010)	In addition, for a PORTABLE SOUND SYSTEM, the instructions shall include a warning that excessive sound pressure from earphones and headphones can cause hearing loss.	Added.	N/A			
1.7.2.1 (A12.2011)	In EN 60950-1:2006/A12:2011 Delete NOTE Z1 and the addition for Portable Sound System. Add the following clause and annex to the existing standard and amendments.	Replaced.	Р			
	Zx Protection against excessive sound pressure from personal music players					



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IEC60950_1F - ATTACHMENT					
Clause	Requirement + Test		Result - Remark	Verdict	

Clause	Requirement + Test	Result - Remark	Verdict
	Zx.1 General	Not such equipment.	N/A
	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 in this sub-clause are valid for music or video mode only.		
	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 or the listening device, but which is intended to play the music as a standalone music player.		
	The requirements do not apply to:		
	 hearing aid equipment and professional equipment; 		
	NOTE 3 Professional equipment is equipment sold through special sales channels. All products sold through normal electronics stores are considered not to be professional equipment.		



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IEC60950_1F - ATTACHMENT				
Clause	Requirement + Test		Result - Remark	Verdict

Clause	Requirement + Test	Result - Remark	Verdict
	 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 exist. This exemption will not be extended to other technologies. For equipment which is clearly designed or intended for use by young children, the limits of EN 71-1 apply. 		
	Zx.2 Equipment requirements	Not such equipment.	N/A
	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 L _{Aeq,⊤} 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		
	b) have a standard acoustic output level not exceeding those mentioned above, and automatically return to an output level not exceeding those mentioned above when the power is switched off; and		



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IEC60950_1F - ATTACHMENT				
Clause	Requirement + Test		Result - Remark	Verdict

	IEC 60950-1, GROUP DIFFERENCES (CENELEC	common modifications EN	1)
Clause	Requirement + Test	Result - Remark	Verdict
	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. The 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.	Not such equipment.	N/A
	NOTE 3 The 20 h listening time is the accumulative 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 following:		
	 equipment provided as a package (player with Its listening device), the acoustic output shall be ≤ 100 dBA measured while playing the fixed "programme simulation noise" described in EN 50332-1; and 		
	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. 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.		
	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.		
	For example, if the player is set with the programme simulation noise to 85 dBA, but the average music level of the song is only 65 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.		



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IEC60950_1F - ATTACHMENT				
Clause	Requirement + Test		Result - Remark	Verdict

	IEC 60950-1, GROUP DIFFERENCES (CENELEC	common modifications EN))
Clause	Requirement + Test	Result - Remark	Verdict
	 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: 	Not such equipment.	N/A
	"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.		
	Zx.4 Requirements for listening devices (headph	ones and earphones)	N/A
	Zx.4.1 Wired listening devices with analogue input 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). NOTE The values of 94 dBA – 75 mV correspond with 85dBA –	Not such equipment.	N/A

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IEC60950_1F - ATTACHMENT				
Clause	Requirement + Test		Result - Remark	Verdict

	IEC 60950-1, GROUP DIFFERENCES (CENELEC	common modifications EN	l)
Clause	Requirement + Test	Result - Remark	Verdict
	Zx.4.2 Wired listening devices with digital input With any playing device playing the fixed "programme simulation noise" described in EN 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. 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.). NOTE An example of a wired listening device with digital input is a USB headphone.	Not such equipment.	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 abovementioned 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. 	Not such equipment.	N/A
	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.	Not such equipment.	N/A

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IEC60950_1F - ATTACHMENT				
Clause	Requirement + Test		Result - Remark	Verdict

	IEC 60950-1, GROUP DIFFERENCES (CENELEC	<u>, </u>	
Clause	Requirement + Test	Result - Remark	Verdict
2.7.1	Replace the subclause as follows: Basic requirements	Replaced.	Р
	To protect against excessive current, short-circuits and earth faults in PRIMARY CIRCUITS, protective devices shall be included either as integral parts of the equipment or as parts of the building installation, subject to the following, a), b) and c): a) except as detailed in b) and c), protective devices necessary to comply with the requirements of 5.3 shall be included as parts of the equipment; b) for components in series with the mains input to the equipment such as the supply cord, appliance coupler, r.f.i. filter and switch, short-circuit and earth fault protection may be provided by protective devices in the building installation;		
	c) it is permitted for PLUGGABLE EQUIPMENT TYPE B or PERMANENTLY CONNECTED EQUIPMENT, to rely on dedicated overcurrent and short-circuit protection in the building installation, provided that the means of protection, e.g. fuses or circuit breakers, is fully specified in the installation instructions. If reliance is placed on protection in the building installation, the installation instructions shall so state, except that for PLUGGABLE EQUIPMENT TYPE A the building installation shall be regarded as providing protection in accordance with the		N/A
2.7.2	rating of the wall socket outlet. This subclause has been declared 'void'.		N/A
3.2.3		Deleted.	N/A
S.∠.3	Delete the NOTE in Table 3A, and delete also in this table the conduit sizes in parentheses.	20.000	IN/A

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	IEC60950_1F - ATTACHMENT			
Clause	Requirement + Test		Result - Remark	Verdict

	IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN)				
Clause	Requirement + Test	Result - Remark	Verdict		
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) Over 6 up to and including 10 (0,75) b) 1,0 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	Replaced.	N/A		
	second sentence.				
3.2.5.1 (A2:2013)	NOTE Z1 The harmonised code designations corresponding to the IEC cord types are given in Annex ZD		Р		
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	Deleted.	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).	Added.	Р		
	Standards taking into account mentioned Recommendation and Directive which demonstrate compliance with the applicable EU Directive are indicated in the OJEC.		Р		
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 µSv/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.	Replaced.	N/A		



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IEC60950_1F - ATTACHMENT				
Clause	Requirement + Test		Result - Remark	Verdict

	IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN)			
Clause	Requirement + Test	Result - Remark	Verdict	
Bibliograph y	Additional EN standards.		_	

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

	ZB ANNEX (normative) SPECIAL NATIONAL CONDITIONS (EN)				
1.2.4.1	In Denmark , 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 (A11:2009)	In Norway and Sweden , for requirements see 1.7.2.1 and 7.3 of this annex.		N/A		
1.5.7.1 (A11:2009)	In Finland, Norway and Sweden , 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 Norway , 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).		Р		
1.5.9.4	In Finland , Norway and Sweden , the third dashed sentence is applicable only to equipment as defined in 6.1.2.2 of this annex.	No such construction.	N/A		
1.7.2.1	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:		N/A		
	be as follows: In Finland : "Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan"				
	In Norway : "Apparatet må tilkoples jordet				



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	IEC60950_1F - ATTACHMENT				
Clause	Requirement + Test	Result - Remark	Verdic		
	stikkontakt" In Sweden : "Apparaten skall anslutas till jordat uttag"				
1.7.2.1 (A11:2009)	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. 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 or through other equipment with a 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)."				

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	IEC60950_1F - ATTACHMENT				
Clause	Requirement + Test	Result - Remark	Verdict		
	NOTE In Norway, due to regulation for installations of cable 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.		N/A		
	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 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."				
1.7.2.1 (A2:2013)	In Denmark , 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.		N/A		
	The marking text in Denmark shall be as follows: In Denmark : "Apparatets stikprop skal tilsluttes en stikkontakt med jord, som giver forbindelse til stikproppens jord."				
1.7.5	In Denmark , socket-outlets for providing power to 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.	No socket-outlet provided.	N/A		
1.7.5 (A11:2009)	For CLASS II EQUIPMENT the socket outlet shall be in accordance with Standard Sheet DKA 1-4a.				

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	IEC60950_1F - ATTACHM	ENT	
Clause	Requirement + Test	Result - Remark	Verdict
1.7.5 (A2:2013)	In Denmark , socket-outlets for providing power to other equipment shall be in accordance with the DS 60884-2-D1:2011. For class I equipment the following Standard Sheets are applicable: DK 1-3a, DK 1-1c, DK 1-1d, DK 1-5a or DK 1-7a, with the exception for STATIONARY EQUIPMENT where the socket-outlets shall be in accordance with Standard Sheet DK 1-1b, DK 1-1c, DK 1-1d or DK 1-5a. Socket outlets intended for providing power to Class II apparatus with a rated current of 2,5 A shall be in accordance with DS 60884-2-D1 standard sheet DKA 1-4a. Other current rating socket outlets shall be in compliance with by DS 60884-2-D1 Standard Sheet DKA 1-3a or DKA 1-3b. Justification the Heavy Current Regulations, 6c	No socket-outlet provided.	N/A
2.2.4	In Norway , for requirements see 1.7.2.1, 6.1.2.1 and 6.1.2.2 of this annex.	No TNV.	N/A
2.3.2	In Finland , Norway and Sweden there are additional requirements for the insulation. See 6.1.2.1 and 6.1.2.2 of this annex.	No TNV.	N/A
2.3.4	In Norway , for requirements see 1.7.2.1, 6.1.2.1 and 6.1.2.2 of this annex.	No TNV.	N/A
2.6.3.3	In the United Kingdom , the current rating of the circuit shall be taken as 13 A, not 16 A.		Р
2.7.1	In the United Kingdom , 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.		Р
2.10.5.13	In Finland , Norway and Sweden , there are additional requirements for the insulation, see 6.1.2.1 and 6.1.2.2 of this annex.	No TNV.	N/A

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	IEC60950_1F - ATTACHM	IENT	
Clause	Requirement + Test	Result - Remark	Verdict
		1	1
3.2.1.1	In Switzerland , 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		N/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		
3.2.1.1	In Denmark , 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		N/A

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IEC60950_1F - ATTACHMENT				
Requirement + Test	Result - Remark	Verdict		
In Denmark , supply cords of single-phase		N/A		
equipment having a rated current not exceeding 13 A shall be provided with a plug according to DS 60884-2-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 a single-phase equipment having a RATED CURRENT exceeding 13 A or if a poly-phase equipment is provided with a supply cord with a plug, this plug shall be in accordance with the standard sheets DK 6-1a in DS 60884-2-D1 or EN 60309-2.				
Justification the Heavy Current Regulations, 6c				
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.		N/A		
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.				
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.				
If poly-phase equipment is provided with a supply cord with a plug, this plug shall be in accordance with UNE-EN 60309-2.				
In the United Kingdom , 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 assertially means an approved plug conforming to BS.		N/A		
	In Denmark , supply cords of single-phase equipment having a rated current not exceeding 13 A shall be provided with a plug according to DS 60884-2-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 a single-phase equipment having a RATED CURRENT exceeding 13 A or if a poly-phase equipment is provided with a supply cord with a plug, this plug shall be in accordance with the standard sheets DK 6-1a in DS 60884-2-D1 or EN 60309-2. Justification the Heavy Current Regulations, 6c 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. 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. 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. If poly-phase equipment is provided with a supply cord with a plug, this plug shall be in accordance with UNE-EN 60309-2. In the United Kingdom , 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.	In Denmark, supply cords of single-phase equipment having a rated current not exceeding 13 A shall be provided with a plug according to DS 60884-2-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 a single-phase equipment having a RATED CURRENT exceeding 13 A or if a poly-phase equipment is provided with a supply cord with a plug, this plug shall be in accordance with the standard sheets DK 6-1a in DS 60884-2-D1 or EN 60309-2. Justification the Heavy Current Regulations, 6c 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. 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. 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. If poly-phase equipment is provided with a supply cord with a plug, this plug is hall be in accordance with standard UNE 20315:1994. If poly-phase equipment is provided with a supply cord with a plug, this plug shall be in accordance with standard UNE 20315:1994. In the United Kingdom, 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.		

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IEC60950_1F - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
3.2.1.1	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.		N/A
3.2.4	In Switzerland , for requirements see 3.2.1.1 of this annex.		N/A
3.2.5.1	In the United Kingdom , 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.	No power supply cord provided.	N/A
3.3.4	In the United Kingdom , 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 mm² to 1,5 mm² nominal cross-sectional area.		N/A
4.3.6	In the United Kingdom , 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 Ireland, 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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Clause	Requirement + Test	Result - Remark	Verdict
5.1.7.1	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 TYPE	Not exceed 3.5mA.	N/A
	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.	No TNV.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
		1	
	It is permitted to bridge this insulation with an optocoupler complying with 2.10.5.4 b).		
	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.	No TNV.	N/A
7.2	In Finland , Norway and Sweden , 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.	Not connected to cable distribution system.	N/A
7.3 (A11:2009)	In Norway and Sweden , for requirements see 1.2.13.14 and 1.7.2.1 of this annex.	Not connected to cable distribution system.	N/A

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Clause	Requirement + Test		Result - Remark	Verdict

Annex ZD (informative)

IEC and CENELEC code designations for flexible cords

Type of flexible cord	Code designations		
	IEC	CENELEC	
PVC insulated cords			
Flat twin tinsel cord	60227 IEC 41	H03VH-Y	
Light polyvinyl chloride sheathed flexible cord	60227 IEC 52	H03VV-F H03VVH2-F	
Ordinary polyvinyl chloride sheathed flexible cord	60277 IEC 53	H05VV-F H05VVH2-F	
Rubber insulated cords			
Braided cord	60245 IEC 51	H03RT-F	
Ordinary tough rubber sheathed flexible cord	60245 IEC 53	H05RR-F	
Ordinary polychloroprene sheathed flexible cord	60245 IEC 57	H05RN-F	
Heavy polychloroprene sheathed flexible cord	60245 IEC 66	H07RN-F	
Cords having high flexibility			
Rubber insulated and sheathed cord	60245 IEC 86	H03RR-H	
Rubber insulated, crosslinked PVC sheathed cord	60245 IEC 87	H03RV4-H	
Crosslinked PVC insulated and sheathed cord	60245 IEC 88	H03V4V4-H	



EMF Assessment report

Applicant: Ajita International Technology Co.,LTD

13F., No.181, Sec.2, Taiwan Blvd., Taichung City, 40354,

Taiwan(R.O.C)

Product name: All in one touch screen monitor

Model name: DB-0865, DB-0855

Test report No.: <u>50045506 001</u>

The equipment is a low power LCD Monitor, it does incorporate only non-intentional radiators, but does not contain radio transmitters; the typical usage, installation and physical characteristics make the equipment inherently compliant with all applicable EMF exposure levels (EN 62479:2010 clause 4.1 Route A).

Name of SV: Michael Yang (Cidael S

Date: Oct. 31, 2016



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Product: All in one touch screen monitor

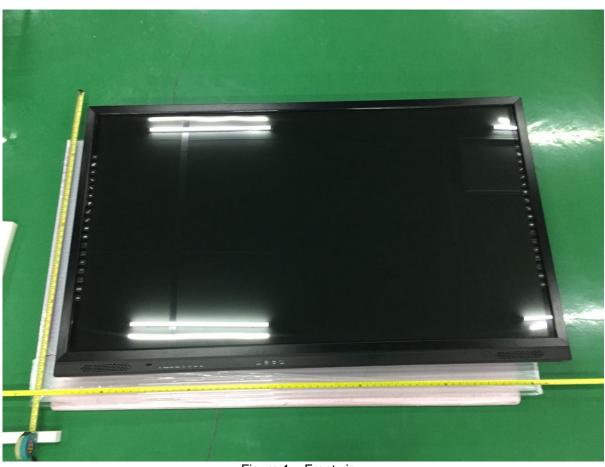


Figure 1. Front view



Figure 2. Back view



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Product: All in one touch screen monitor



Figure 3. Top side view



Figure 4. Inside view with back cover removed



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Product: All in one touch screen monitor

Type Designation: DB-0865, DB-0855

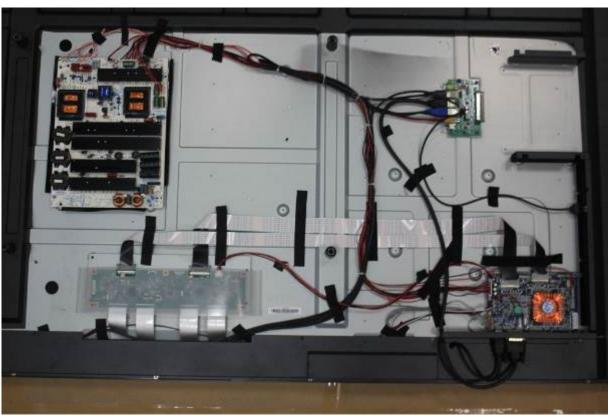


Figure 5. Inside view (all internal wires are fixed by cable tie or insulation tape)

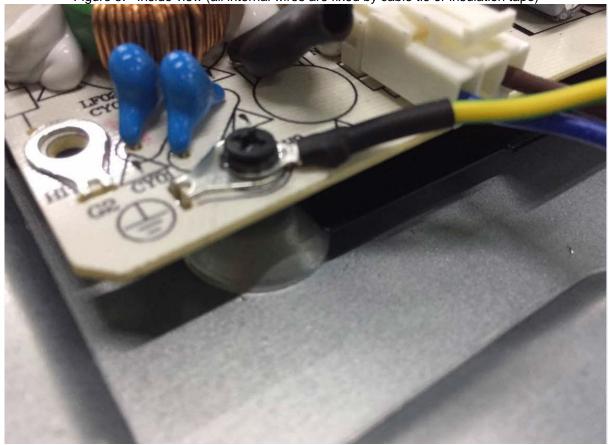


Figure 6. protective bonding terminal with spring washer



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Product: All in one touch screen monitor

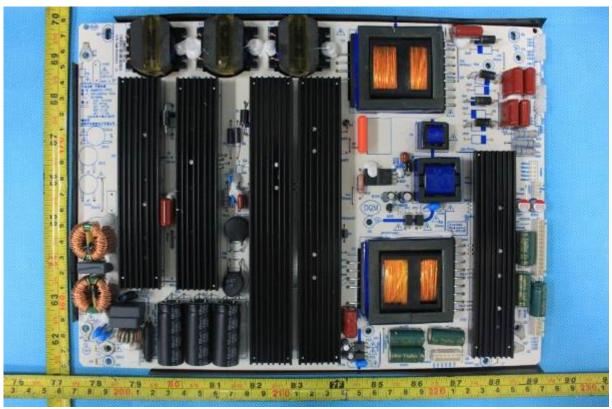


Figure 7. Power board PCB component side view

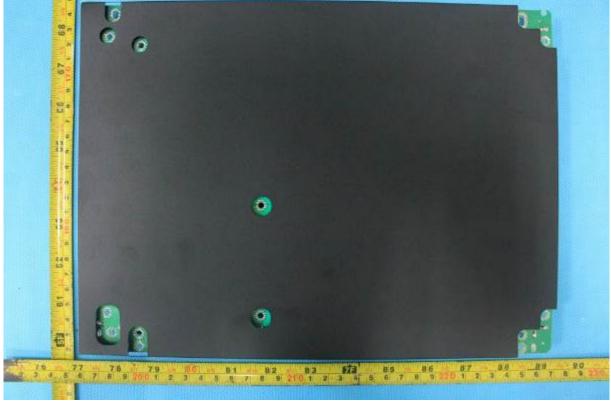


Figure 8. Power board PCB trace side view (covered by mylar sheet)



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Product: All in one touch screen monitor





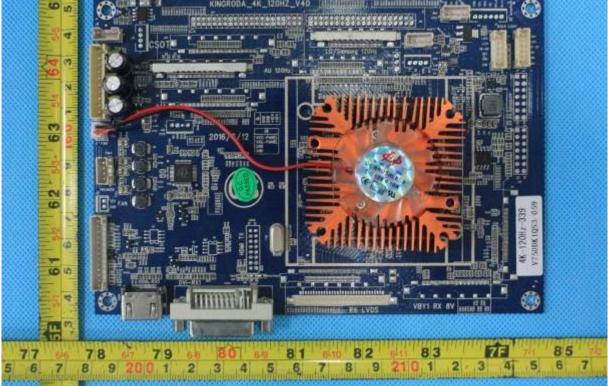
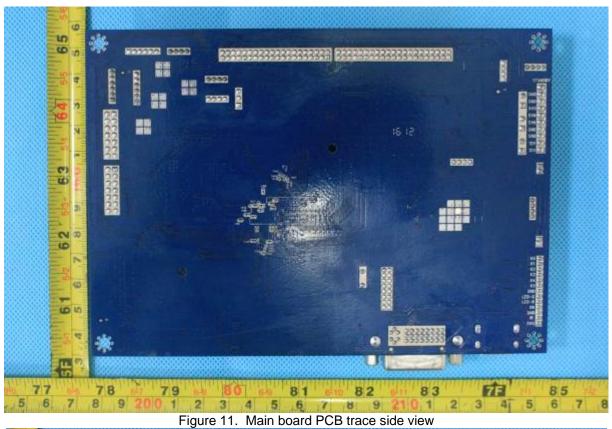


Figure 10. Main board PCB component side view



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Product: All in one touch screen monitor



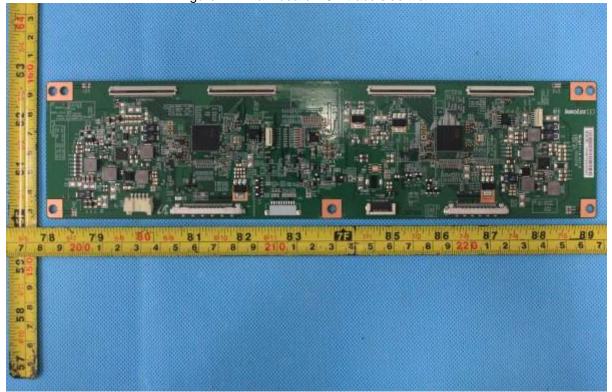


Figure 12. TCON board PCB component side view



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Product: All in one touch screen monitor

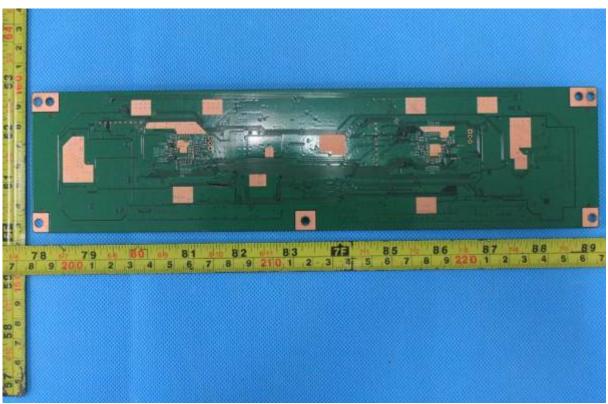


Figure 13. TCON board PCB trace side view



Figure 14. OPS/IO board PCB component side view



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Product: All in one touch screen monitor

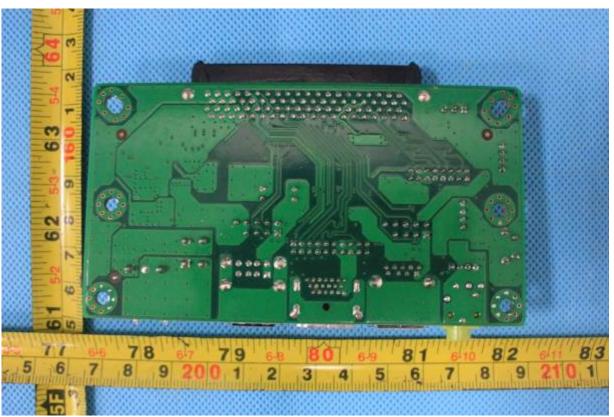


Figure 15. OPS/IO board PCB trace side view

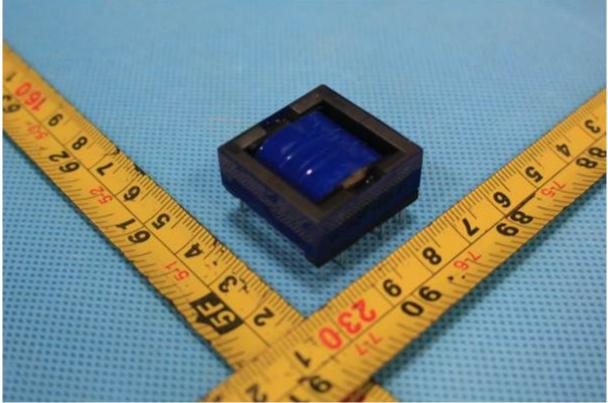


Figure 16. Transformer T1 top view



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Product: All in one touch screen monitor

Type Designation: DB-0865, DB-0855

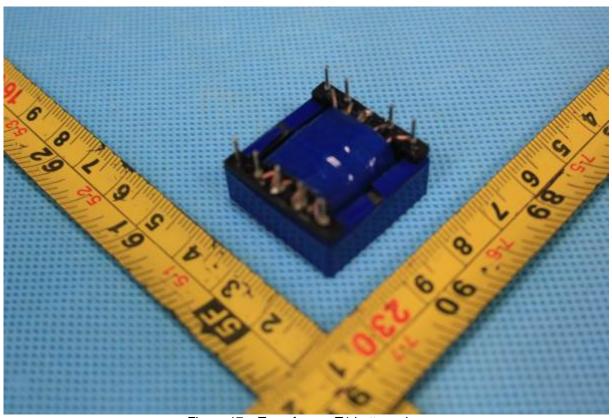


Figure 17. Transformer T1 bottom view



Figure 18. Transformer T1 bottom view (two layers insulation tape wrapped over transformer core)



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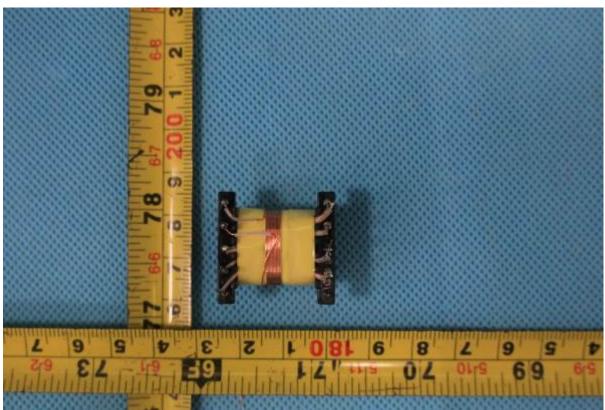


Figure 19. Transformer T1 (min. 5.0mm margin tape used between all winding and bobbin)

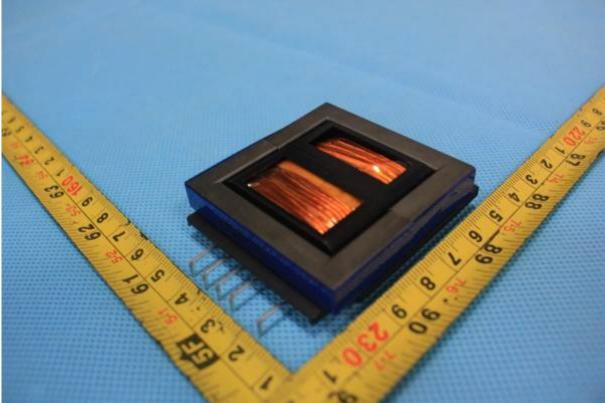


Figure 20. Transformer T2 top view



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Product: All in one touch screen monitor

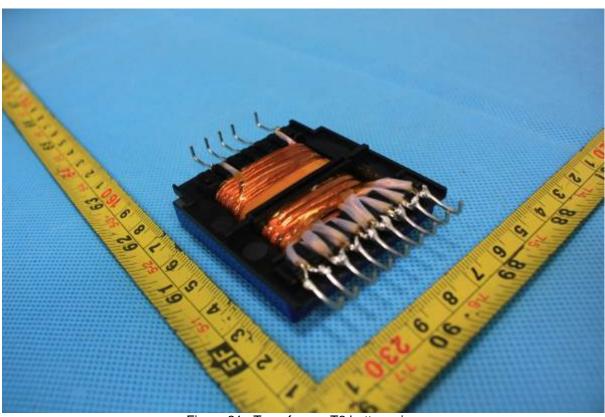


Figure 21. Transformer T2 bottom view

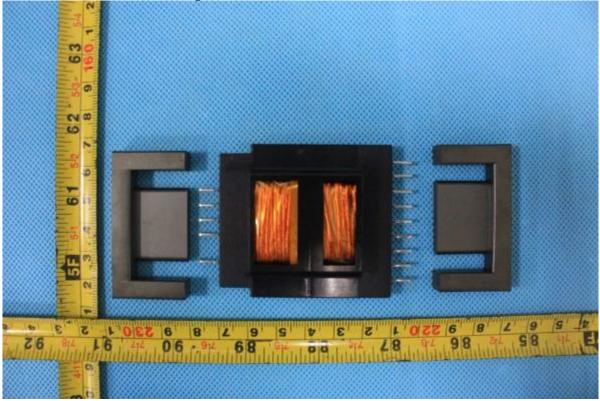


Figure 22. Transformer T2 core



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Product: All in one touch screen monitor

Type Designation: DB-0865, DB-0855

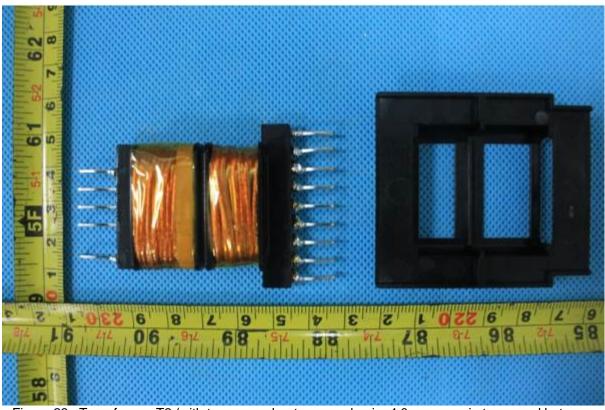


Figure 23. Transformer T2 (with top cover sheet removed, min. 4.0 mm margin tape used between primary winding and middle bobbin)

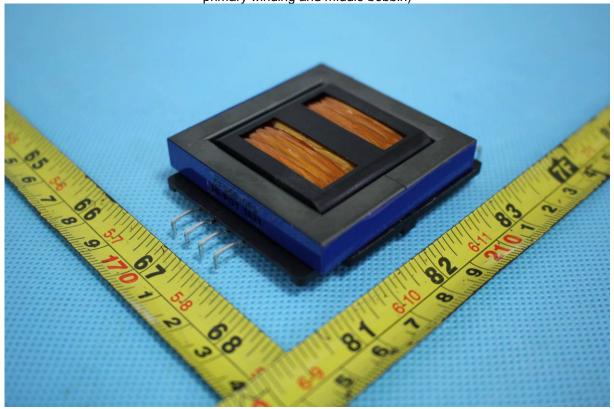


Figure 24. Transformer T3 top view



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Product: All in one touch screen monitor

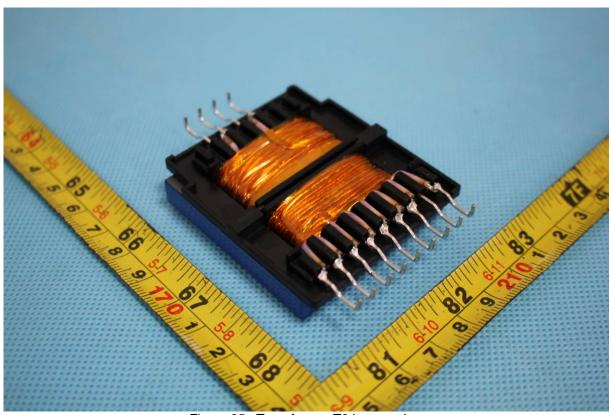


Figure 25. Transformer T3 bottom view

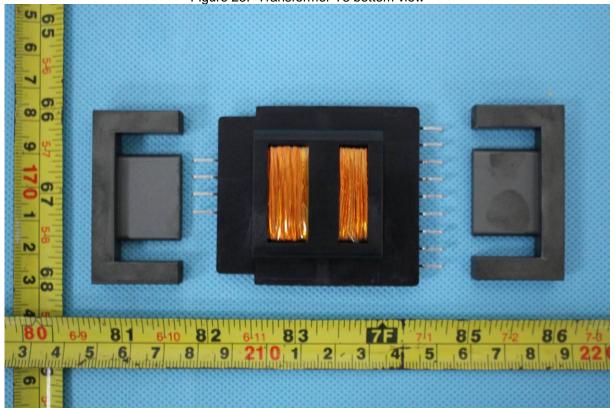


Figure 26. Transformer T3 core



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Product: All in one touch screen monitor

Type Designation: DB-0865, DB-0855

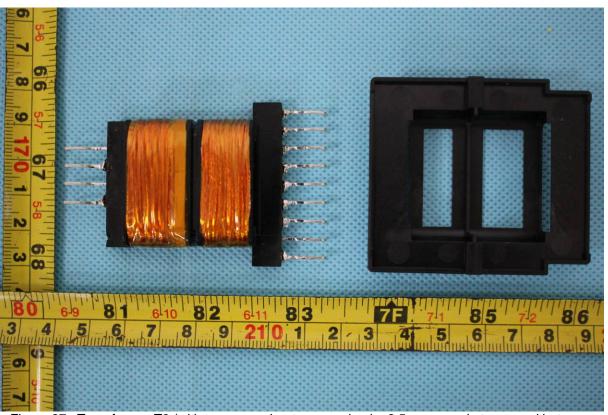


Figure 27. Transformer T3 (with top cover sheet removed, min. 2.5 mm margin tape used between primary winding and middle bobbin)

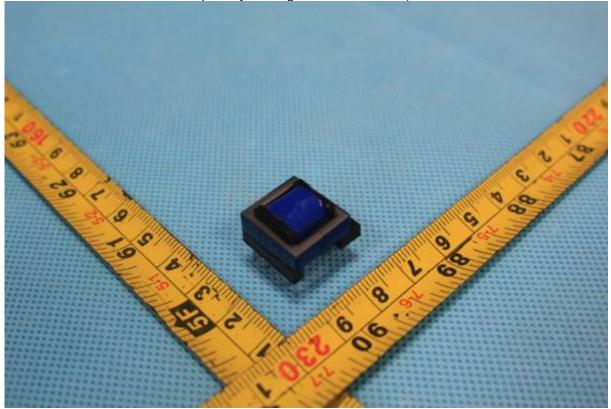


Figure 28. Transformer T4 top view

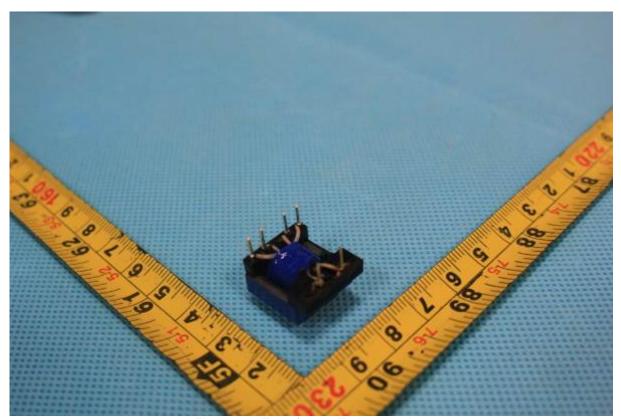


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Product: All in one touch screen monitor



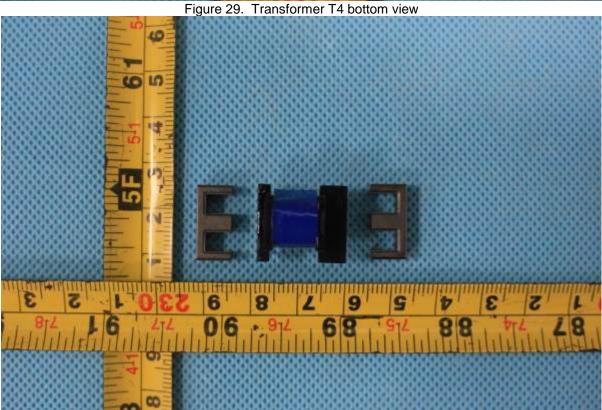


Figure 30. Transformer T4 core



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Product: All in one touch screen monitor

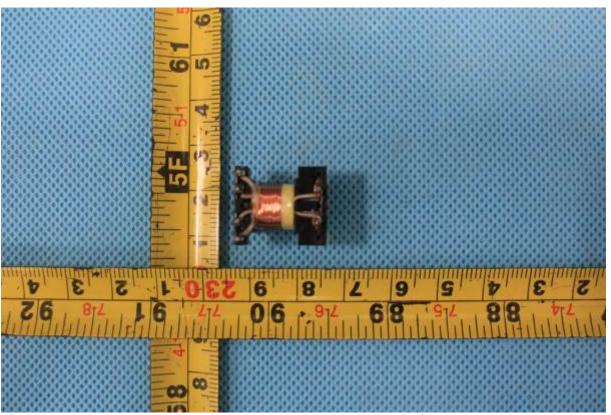


Figure 31. Min. 2.5mm margin tape used between primary winding N1/N3 and secondary soldering in

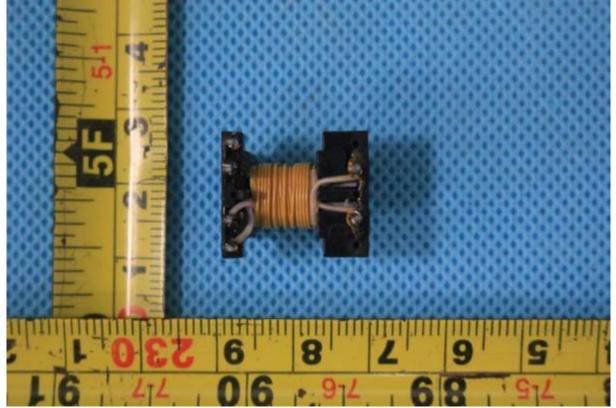


Figure 32. Tube use between primary winding and secondary TIW where can contact at 45-90 angle