

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST
CERTIFICATES FOR ELECTRICAL EQUIPMENT
(IECEE) CB SCHEME

SYSTEME CEI D'ACCEPTATION MUTUELLE DE
CERTIFICATS D'ESSAIS DES EQUIPEMENTS
ELECTRIQUES (IECEE) METHODE OC

CB TEST CERTIFICATE

CERTIFICAT D'ESSAI OC

Product
Produit

LCD MONITOR

Name and address of the applicant
Nom et adresse du demandeur

TPV Electronics (Fujian) Co., Ltd.
Shangzheng, Yuan Hong Road
Fuqing City, Fujian Province, P.R. China

Name and address of the manufacturer
Nom et adresse du fabricant

NEC Display Solutions, Ltd.
4-28, Mita 1-chome, Minato-ku
Tokyo, 108-0073 JAPAN

Name and address of the factory
Nom et adresse de l'usine

See additional page(s)

Ratings and principal characteristics
Valeurs nominales et caractéristiques principales

AC 100-240V; 50/60Hz; 1.0-0.5A or 1.3A; Class I

Trademark (if any)
Marque de fabrique (si elle existe)

NEC

Type of Manufacturer's Testing Laboratories used
Type de programme du laboratoire d'essais constructeur

N/A

Model / Type Ref.
Ref. de type

L273QL, EA274WMI-BK(C), EA274WMI(C), EA275WMI-BK(C)
EA275WMI(C)

Additional information (if necessary may also be
reported on page 2)
Les informations complémentaires (si nécessaire,
peuvent être indiqués sur la 2^{ème} page)

For model differences, refer to the test report.
Re-issue of JPTUV-052102 dated 08.07.2013,
due to first modification

A sample of the product was tested and found
to be in conformity with
Un échantillon de ce produit a été essayé et a été
considéré conforme à la

IEC 60950-1:2005+A1
National differences see test report

As shown in the Test Report Ref. No. which forms part
of this Certificate
Comme indiqué dans le Rapport d'essais numéro de
référence qui constitue partie de ce Certificat

17028389 002

This CB Test Certificate is issued by the National Certification Body
Ce Certificat d'essai OC est établi par l'Organisme National de Certification



TÜV Rheinland Japan Ltd.
Global Technology Assessment Center
4-25-2 Kita-Yamata, Tsuzuki-ku
Yokohama 224-0021 Japan
Phone + 81 45 914-3888
Fax + 81 45 914-3354
Mail: info@jpn.tuv.com
Web: www.tuv.com

Date: 14.01.2015

Signature:

Dipl.-Ing. F. Stoelzel

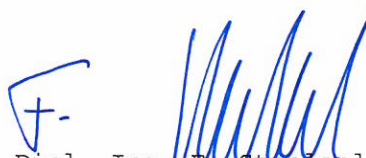
1. TPV Technology (Beijing) Co., Ltd.
No. 10, Jiu Xian Qiao Rd.
Chao Yang District, Beijing 100016
P.R. China
2. Tatung Mexico S.A. de. C.V.
Ave. Rosa Ma. Fuentes #7050
Complejo Industrial Fuentes
C.P. 32320, Cd. Juarez. Chih,
MEXICO
3. TPV Display Technology (Wuhan)
Co., Ltd.
Unique No. 11, Zhuankou Development
District of Economic Technological
Development Zone, Wuhan City 430056, P.R. China
4. TPV Electronics (Fujian) Co., Ltd.
Shangzheng, Yuan Hong Road
Fuqing City, Fujian Province
P.R. China
5. Envision Industry of Electronic
Products Ltd.
895, Joao Marcos Pozzetti Street,
Industrial District II,
69.075-215 Manaus, Am, Brazil
6. Envision Industry of Electronic
Products Ltd.
Rodovia Anhanguera S/N-KM 49
13.205-700 Tijuco Preto-Jundiaí-SP-
Brazil
7. TPV Displays Polska Sp. z o.o.
ul. Złotego Smoka 9
66-400 Gorzów Wlkp.
Poland
8. L&T Display Technology (Fujian) Ltd.
Optoelectronic Park, Rongqiao
Economic and Technological
Development Zone
Fuqing, Fujian 350301, P.R. China
9. TPV Display Technology (Beihai)
Co., Ltd.
China Electronic Beihai Industry
Park, Northeast of the Crossing
Between Taiwan Road and Jilin Road, Beihai City, Guangxi, P.R. China

Additional information (if necessary)
Information complémentaire (si nécessaire)

Report Ref. No.: 17028389 002

Date: 14.01.2015

Signature:


Dipl.-Ing. F. Stoezel

10. Envision Industry of Electronic
Products Ltd.
Av Torquato Tapajós 7503,
Galpão : II Bloco: B-Condomínio
de Galpões-Tarumã-Manaus, AM, Brazil

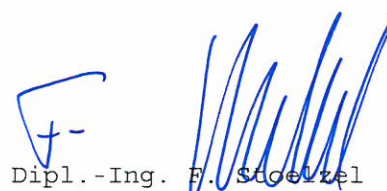
11. TPV Technology (Qingdao)
Co., Ltd.
No.99 Huoju Road, High-tech
Industrial Development Zone
Qingdao City, Shandong Province, P.R. China

Additional information (if necessary)
Information complémentaire (si nécessaire)

Report Ref. No.: 17028389 002

Date: 14.01.2015

Signature:


Dipl.-Ing. F. Stöelzel



Test Report issued under the responsibility of:



TEST REPORT IEC 60950-1 Information technology equipment – Safety – Part 1: General requirements	
Report Number	17028389 002
Date of issue	Jan. 05 th , 2015
Total number of pages	50
CB Testing Laboratory	TÜV Rheinland Taiwan Ltd., Taichung Laboratory
Address	No. 9, Ln. 36, Sec. 3, Minsheng Rd., Daya District, Taichung City 428, Taiwan
Applicant's name	TPV Electronics (Fujian) Co., Ltd.
Address	Shangzheng, Yuan Hong Road, Fuqing City, Fujian Province, P.R. China
Manufacturer's name	NEC Display Solutions, Ltd.
Address	4-28, Mita 1-chome, Minato-ku, Tokyo, Japan
Test specification:	
Standard	IEC 60950-1:2005 (Second Edition) + Am 1:2009
Test procedure	CB Scheme
Non-standard test method	N/A
Test Report Form No.	IEC60950_1C
Test Report Form(s) Originator	SGS Fimko Ltd
Master TRF	Dated 2012-08
Copyright © 2012 Worldwide System for Conformity Testing and Certification of Electrotechnical Equipment and Components (IECEE), Geneva, Switzerland. All rights reserved. This publication may be reproduced in whole or in part for non-commercial purposes as long as the IECEE is acknowledged as copyright owner and source of the material. IECEE takes no responsibility for and will not assume liability for damages resulting from the reader's interpretation of the reproduced material due to its placement and context. If this Test Report Form is used by non-IECEE members, the IECEE/IEC logo and the reference to the CB Scheme procedure shall be removed. This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.	
Test item description	LCD MONITOR
Trade Mark	NEC
Manufacturer	See manufacturer above.
Model/Type reference	L273QL, EA274WMI-BK(C), EA274WMI(C), EA275WMI-BK(C), EA275WMI(C)
Ratings	I/P: 100-240~, 50/60Hz, 1.0-0.5A or 1.3A

Testing procedure and testing location:		
☒	CB Testing Laboratory:	See cover page
Testing location/ address..... :		See cover page
☐	Associated CB Laboratory:	
Testing location/ address..... :		
Tested by (name + signature)..... :		Nai-Shiuan T.
Approved by (name + signature)..... :		Jacky Chen
☐	Testing procedure: TMP	
Testing location/ address..... :		
Tested by (name + signature)..... :		
Approved by (name + signature)..... :		
☐	Testing procedure: WMT	
Testing location/ address..... :		
Tested by (name + signature)..... :		
Witnessed by (name + signature)..... :		
Approved by (name + signature)..... :		
☐	Testing procedure: SMT	
Testing location/ address..... :		
Tested by (name + signature)..... :		
Approved by (name + signature)..... :		
Supervised by (name + signature)..... :		
☐	Testing procedure: RMT	
Testing location/ address..... :		
Tested by (name + signature)..... :		
Approved by (name + signature)..... :		
Supervised by (name + signature)..... :		

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

- Photo Documentation

Summary of testing:**Tests performed (name of test and test clause):**

All applicable tests as described in Test Case and Measurement Sections were performed.

- The manufacturer specified the maximum ambient temperature as +40°C.
- Highest load condition for this equipment is to operate at maximum backlight, brightness and contrast of LED backlight, and adjust to max. volume with 1KHz sine waveform of speakers, additional load of 5V/0.9A for each USB (3.0) port, 5V/0.5A for each USB (2.0) port, 3.3V/0.5A for Display port.
- The product is to be operated at 5000 m above sea level, the minimum clearances were multiplied by the factor given in Table A.2 of IEC 60664-1: 1.48
- Test samples are pre-production samples without serial numbers.
- The LCD Monitor can be adjustment monitor's height and operated in landscape (0 °) to portrait mode (90 °) when Power board side downward. For heating test were considered all orientation during test conducting.

Testing location:

All tests as described in Test Case and Measurement Sections were performed at the laboratory described on page 2.

Summary of compliance with National Differences

List of countries addressed:

EU Group Differences, EU Special National Conditions, EU A-Deviations, AT, AU*, BE, CA, CH, CN, CZ, DE, DK, FI, FR, GB, GR, HU, IT, IL, JP#, KR, NL, NO, PL, SE, SI, SK, US

Explanation of used codes: AT=Austria, AU=Australia, BE=Belgium, CA=Canada, CH=Switzerland, CN=China, CZ=Czech Republic, DE=Germany, DK=Denmark, FI=Finland, FR=France, GB=United Kingdom, GR=Greece, HU=Hungary, IT=Italy, IL=Israel, JP=Japan, KR=Korea, NL=The Netherlands, NO=Norway, PL=Poland, SE=Sweden, SI=Slovenia, SK=Slovakia, US=United States of America

For National Differences see end of this test report.

* National differences to IEC 60950-1:2005 evaluated.

National differences to IEC 60950-1:2001 evaluated.

Japan deviations J60950-1 (H22) and J3000 (H21) both covered.

The product fulfils the requirements of EN 60950-1: 2006 + A11:2009 + A1:2010 + A12:2011.

Copy of marking plate

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

NEC MultiSync EA275Wmi LCD MONITOR 100-240V~ 1.00-0.50A (for Mexico 1,3A) 50/60Hz (MODEL:L273QL)

CAUTION: TO PREVENT ELECTRIC SHOCK, DO NOT REMOVE THE ENCLOSURE. NO USER-SERVICEABLE PARTS INSIDE.

ATTENTION: AFIN DE PREVENIR DE TOUT CHOC ELECTRIQUES, NE PAS OUVRIR CE BOITIER. AUCUNE PIECE INTERNE NE PEUT-ETRE CHANGEES PAR L'UTILISATEUR.

ACHTUNG: ZUR TRENNUNG VOM NETZ IST DER NETZSTECKER AUS DER STECKDOSE ZU ZIEHEN. GERÄT NICHT ÖFFNEN. ES SIND KEINE DURCH DEN BENUTZER AUSWECHSELBAREN TEILE IM GERÄT VORHANDEN.

PRECAUCIÓN: PARA PREVENIR DESCARGA ELÉCTRICA, NO quite EL RECINTO. NINGUNAS PIEZAS DEL USUARIO SERVICABLE ADENTRO.

VAROITUS: LAITE ON LUTETTÄVÄ SUOJAMAADOITUSKOSKETTIMILLA VARUSTETTUUN PISTORASIAAN.

VARNING: APPARATEN SKALL ANSLUTAS TILL JORDAT UTGÅG.

ADVARSEL: APPARATET MÅ TILKOPLES JORDET STIKKONTAKT.

NEC Display Solutions, Ltd. 4-28, Miya 1-chome, Minato-ku, Tokyo, Japan

100-240V~ 1.00-0.50A (for Mexico 1,3A) 50/60Hz (MODEL:L273QL)

ISO 9001-2007

ISO 14001-2004

ISO 9001-2007

SAFETY MARK XXXXXX-XX

TCO

CE

RoHS

FC

UL LISTED

HDMI

Fabrique en Chine
Fabricado en China
MADE IN CHINA

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

NEC MultiSync EA275Wmi LCD MONITOR 100-240V~ 1.00-0.50A (for Mexico 1,3A) 50/60Hz (MODEL:L273QL)

CAUTION: TO PREVENT ELECTRIC SHOCK, DO NOT REMOVE THE ENCLOSURE. NO USER-SERVICEABLE PARTS INSIDE.

ATTENTION: AFIN DE PREVENIR DE TOUT CHOC ELECTRIQUES, NE PAS OUVRIR CE BOITIER. AUCUNE PIECE INTERNE NE PEUT-ETRE CHANGEES PAR L'UTILISATEUR.

ACHTUNG: ZUR TRENNUNG VOM NETZ IST DER NETZSTECKER AUS DER STECKDOSE ZU ZIEHEN. GERÄT NICHT ÖFFNEN. ES SIND KEINE DURCH DEN BENUTZER AUSWECHSELBAREN TEILE IM GERÄT VORHANDEN.

PRECAUCIÓN: PARA PREVENIR DESCARGA ELÉCTRICA, NO quite EL RECINTO. NINGUNAS PIEZAS DEL USUARIO SERVICABLE ADENTRO.

VAROITUS: LAITE ON LUTETTÄVÄ SUOJAMAADOITUSKOSKETTIMILLA VARUSTETTUUN PISTORASIAAN.

VARNING: APPARATEN SKALL ANSLUTAS TILL JORDAT UTGÅG.

ADVARSEL: APPARATET MÅ TILKOPLES JORDET STIKKONTAKT.

NEC Display Solutions, Ltd. 4-28, Miya 1-chome, Minato-ku, Tokyo, Japan

100-240V~ 1.00-0.50A (for Mexico 1,3A) 50/60Hz (MODEL:L273QL)

ISO 9001-2007

ISO 14001-2004

ISO 9001-2007

SAFETY MARK XXXXXX-XX

TCO

CE

RoHS

FC

UL LISTED

HDMI

Fabrique en Chine
Fabricado en China
MADE IN CHINA

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

NEC 液晶显示器 / LCD MONITOR

MultiSync EA275Wmi

型号: EA275Wmi-BK(C)

100-240~ , 1.00-0.50A , 50/60Hz

△注意:本显示器内有高压,非专业人员,请勿自行打开后盖,以免危险!

CAUTION: TO PREVENT ELECTRIC SHOCK, DO NOT REMOVE THE ENCLOSURE. NO USER-SERVICEABLE PARTS INSIDE.

NEC Display Solutions, Ltd. 日本国东京都港区三田一丁目4番28号

HDMI HIGH-DEFINITION MULTIMEDIA INTERFACE

10

CCC

生产厂: 福建捷联电子有限公司
生产地址: 福建省福清市元洪路上郑

中国制造 / Made in China

NEC 液晶显示器 / LCD MONITOR

MultiSync EA275Wmi

型号: EA275Wmi(C)

100-240~ , 1.00-0.50A , 50/60Hz

△注意:本显示器内有高压,非专业人员,请勿自行打开后盖,以免危险!

CAUTION: TO PREVENT ELECTRIC SHOCK, DO NOT REMOVE THE ENCLOSURE. NO USER-SERVICEABLE PARTS INSIDE.

NEC Display Solutions, Ltd. 日本国东京都港区三田一丁目4番28号

HDMI HIGH-DEFINITION MULTIMEDIA INTERFACE

10

CCC

生产厂: 福建捷联电子有限公司
生产地址: 福建省福清市元洪路上郑

中国制造 / Made in China

Test item particulars:	
Equipment mobility.....:	☒ movable ☐ hand-held ☐ transportable ☒ stationary (for unit with wall mount function) ☐ for building-in ☐ direct plug-in
Connection to the mains	☒ pluggable equipment ☒ type A ☐ type B ☐ permanent connection ☒ detachable power supply cord ☐ non-detachable power supply cord ☐ not directly connected to the mains
Operating condition.....:	☒ continuous ☐ rated operating / resting time:
Access location	☒ operator accessible ☐ restricted access location
Over voltage category (OVC)	☐ OVC I ☒ OVC II ☐ OVC III ☐ OVC IV ☐ other:
Mains supply tolerance (%) or absolute mains supply values	±10% (requested by client)
Tested for IT power systems	☐ Yes ☒ No
IT testing, phase-phase voltage (V)	N/A
Class of equipment	☒ Class I ☐ Class II ☐ Class III ☐ Not classified
Considered current rating of protective device as part of the building installation (A)	16A (20A for North America)
Pollution degree (PD)	☐ PD 1 ☒ PD 2 ☐ PD 3
IP protection class	IPX0
Altitude during operation (m)	Up to 5000
Altitude of test laboratory (m)	Less than 2000
Mass of equipment (kg)	Approx. 8.08kg (for unit with base stand for Construction A); Approx. 8.20kg (for unit with base stand for Construction B); Approx. 2.80kg (for base stand)
Possible test case verdicts:	
- test case does not apply to the test object	N/A (or N)
- test object does meet the requirement.....	P (Pass)
- test object does not meet the requirement.....	F (Fail)
Testing:	
Date of receipt of test item	2014-11-26
Date(s) of performance of tests	2014-11-27 to 2014-12-14
General remarks:	

The test results presented in this report relate only to the object tested.
This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.

"(see Enclosure #)" refers to additional information appended to the report.

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

Throughout this report a ☐ comma / ☒ point is used as the decimal separator.

Manufacturer's Declaration per sub-clause 6.2.5 of IEC60950-1:

The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided.....: ☒ Yes ☐ Not applicable

When differences exist; they shall be identified in the General product information section.

Name and address of factory (ies) : Same as report 17028389 001

General product information:

The model EA275Wmi-BK(C), EA275Wmi(C) were similar to each other except for type designation.

Description of change(s):

1. Add alternative construction B which is similar as original construction A except for
 - New power supply board of P/N: 715G7130
 - New Mainboard
2. Add alternative model name as EA275Wmi-BK(C), EA275Wmi(C) for construction B only.

For the above described change(s) the following was considered to be necessary:

Change	Testing	Comments
--------	---------	----------

1.	• Input Test • Max. VA Test • Discharge Test • Hazardous voltage measurement • SELV Test • Limited Current Circuit • Limited Power source measurement • Grounding Test • Humidity Test • Working Voltage Test • Mechanical strength test • Loading Test • Handle Test • Heating Test • Touch current test • Electric strength test • Abnormal Test	For results, see appended table, for new source, see appended table 1.5.1.																
2.	• N/A	For label of new models see page 4 and sub-clause 1.7.1 for marking details.																
History of amendments and modifications: Ref. No. 17028389 001, dated 03rd Jul., 2013 (original test report) Ref. No. 17028389 002, dated Jan. 05th, 2015 (modification)																		
Abbreviations used in the report: <table><tr><td>- normal conditions</td><td>N.C.</td><td>- single fault conditions</td><td>S.F.C</td></tr><tr><td>- functional insulation</td><td>OP</td><td>- basic insulation</td><td>BI</td></tr><tr><td>- double insulation</td><td>DI</td><td>- supplementary insulation</td><td>SI</td></tr><tr><td>- between parts of opposite polarity</td><td>BOP</td><td>- reinforced insulation</td><td>RI</td></tr></table> Indicate used abbreviations (if any)			- normal conditions	N.C.	- single fault conditions	S.F.C	- functional insulation	OP	- basic insulation	BI	- double insulation	DI	- supplementary insulation	SI	- between parts of opposite polarity	BOP	- reinforced insulation	RI
- normal conditions	N.C.	- single fault conditions	S.F.C															
- functional insulation	OP	- basic insulation	BI															
- double insulation	DI	- supplementary insulation	SI															
- between parts of opposite polarity	BOP	- reinforced insulation	RI															

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.7	Marking and instructions		P
1.7.1	Power rating and identification markings	The power rating marking is provided and is readily visible in operator access area.	P
1.7.1.1	Power rating marking	See copy of marking plate.	P
	Multiple mains supply connections.....:		N/A
	Rated voltage(s) or voltage range(s) (V)	See copy of marking plate.	P
	Symbol for nature of supply, for d.c. only		N/A
	Rated frequency or rated frequency range (Hz):	See copy of marking plate.	P
	Rated current (mA or A)	See copy of marking plate.	P
1.7.1.2	Identification markings		P
	Manufacturer's name or trade-mark or identification mark	See copy of marking plate.	P
	Model identification or type reference	See copy of marking plate.	P
	Symbol for Class II equipment only	The equipment is Class I equipment.	N/A
	Other markings and symbols	Other markings and symbols do not give rise to misunderstanding.	P
2.5	Limited power sources		P
	a) Inherently limited output		P
	b) Impedance limited output		N/A
	c) Regulating network limited output under normal operating and single fault condition		P
	d) Overcurrent protective device limited output	Output +16 Vdc protected by protective device of fuses (F905); +6.3V protected by protective device of fuses (F904 and F903) See appended table for test result.	P
	Max. output voltage (V), max. output current (A), max. apparent power (VA)	(see appended table 2.5)	—
	Current rating of overcurrent protective device (A) .:	See appended table 1.5.1	—
	Use of integrated circuit (IC) current limiters		—
2.9	Electrical insulation		P

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
2.9.1	Properties of insulating materials	Natural rubber, asbestos or hygroscopic materials are not used. After the humidity treatment of 2.9.2, the insulation is then subjected to the relevant electric strength test of 5.2.2	P
2.9.2	Humidity conditioning	Tested for 120 hrs.	P
	Relative humidity (%), temperature (°C) :	95 % R.H., 40 °C	—
2.9.3	Grade of insulation	Basic, supplementary, double insulation, reinforced or functional insulation.	P
2.9.4	Separation from hazardous voltages	See below.	P
	Method(s) used :	Method 1.	—
4	PHYSICAL REQUIREMENTS		P
4.1	Stability		P
	Angle of 10°	The equipment does not fall over.	P
	Test force (N) :		N/A
4.2	Mechanical strength		P
4.2.1	General	See below. After the tests, the equipment complies with the requirements of sub-clauses 2.1.1, 2.6.1 and 2.10.	P
	Rack-mounted equipment.		N/A
4.2.2	Steady force test, 10 N	10 N applied to all components other than the parts serving as an enclosure.	P
4.2.4	Steady force test, 250 N	For outer enclosure of plastic material at top, side and rear are tested. After subjected 250 N, no energy or other hazards.	P
4.2.5	Impact test	For outer enclosure of plastic material are tested. No hazard as result from the steel ball impact test.	P
	Fall test	See above.	P
	Swing test	See above.	P

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
4.2.7	Stress relief test	At 70 °C for 7 hours.	P
4.2.10	Wall or ceiling mounted equipment; force (N) :	For unit an additional force of 16.2kg (3 times the mass of the unit and the mass is 8.2 kg with base) was applied to the unit with the VESA adaptor kit. The unit withstood the load test without damages or breaks from the VESA adaptor kit.	P
4.3.2	Handles and manual controls; force (N).....:	50N Below test performed upon client request: The unit was subjected to the load test. An additional force of 32.8kg (321.44N) (4 times the mass of the unit with base) was applied to the unit and sustained for 1 min. The unit withstood the load test without damages or breaks.	P

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

1.5.1	TABLE: List of critical components					P
Object/part No.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s) of conformity ¹⁾	
For Construction B						
Appliance inlet (CN901)	Solteam	ST-01	10A, 250Vac; 15A, 250Vac	IEC/EN 60320-1, ANSI/UL498	UL, VDE	
	Zhang Jia Gang-Hua Jie	SA-4S	10A, 250Vac; 15A, 250Vac	IEC/EN 60320-1, ANSI/UL498	UL, VDE	
	Rong Feng	SS-120, SS-7B	10A, 250Vac; 15A, 250Vac	IEC/EN 60320-1, ANSI/UL498	UL, VDE	
	Shenzhen Delikang / Douling	CDJ-3, CDJ-3-1	10A, 250Vac	IEC/EN 60320-1, ANSI/UL498	UL, VDE	
	Inalways	0707-1, 0711-2	10A, 250Vac; 15A, 250Vac	IEC/EN 60320-1, ANSI/UL498	UL, VDE, N	
	Inalways	0714	10A, 250Vac;	IEC/EN 60320-1, ANSI/UL498	UL, VDE, N	
	TECX	TU-301 series	10A, 250Vac; 15A, 250Vac	IEC/EN 60320-1, ANSI/UL498	UL, VDE	
	Yueqing Hongchang	DB-14	10A/250Vac; 15A, 250Vac	IEC/EN 60320-1, ANSI/UL498	UL, VDE	
	Zhang Jia Gang-Hua Jie	SA-4D	10A, 250Vac; 15A, 250Vac	IEC/EN 60320-1, ANSI/UL498	UL, TUV	
	Interchangeable	Interchangeable	Max. 15A, 250Vac	IEC 60320-1	VDE, UL, ENEC, TUV, N	
Fuse (F901)	Littelfuse / Wickmann	392, 382 series	T3.15A, 250 Vac	IEC/EN 60127-1, IEC/EN 60127-3, ANSI/UL 248-1, ANSI/UL 248-14	VDE, UL	
	Conquer	MET, MST	T3.15A, 250 Vac	IEC/EN 60127-1, IEC/EN 60127-3, ANSI/UL 248-1, ANSI/UL 248-14	VDE, UL	

IEC 60950-1					
Clause	Requirement + Test		Result - Remark		Verdict
	Cooper Bussmann	SR-5, SS-5	T3.15A, 250 Vac	IEC/EN 60127-1, IEC/EN 60127-3, ANSI/UL 248-1, ANSI/ UL 248-14	VDE, UL
	Ever Island Electric Co., Ltd & Walter Electric	2000, 2010 series	T3.15AL, 250 Vac	IEC/EN 60127-1, IEC/EN 60127-3, ANSI/UL 248-1, ANSI/ UL 248-14	VDE, UL
Y- Capacitors (C944, C945, C965, C966, C967, C951) (Y1 or Y2 type) (Optional)	Walsin	AC, AH	Max. 4700pF, min. 250 Vac, min. 85°C	IEC / EN 60384-14: 2005, UL 1414	VDE, FI, UL
	TDK	CS, CD	Max. 4700pF, min. 250 Vac, min. 85°C	IEC / EN 60384-14: 2005, UL 1414	VDE, FI, UL
	Murata	KH, KX	Max. 4700pF, min. 250 Vac, min. 85°C	IEC / EN 60384-14: 2005, UL 1414	VDE, FI, UL
	JYA-NAY	JN, JY	Max. 4700pF, min. 250 Vac, min. 85°C	IEC / EN 60384-14: 2005, UL 1414	VDE, UL
	YINAN DON'S ELECTRONIC COMPONENT CO.,LTD	CT81	Max. 4700pF, min. 250 Vac, min. 85°C	IEC / EN 60384-14: 2005, UL 1414	VDE, UL
	Kunshan Wansheng	CT7	Max. 4700pF, min. 250 Vac, min. 85°C	IEC / EN 60384-14: 2005, UL 1414	VDE, UL
	SUCCESS	SB, SE	Max. 4700 pF, min. 250 Vac, min. 85°C	IEC / EN 60384-14: 2005	VDE, UL
	Interchangeable	Interchangeable	Max. 4700 pF, min. 250 Vac, min. 85°C	IEC / EN 60384-14: 2005	VDE, UL
Bridging - Capacitor (C907, C912) (Y1 type) (Optional)	Walsin	AH	Max. 2200 pF, min. 250 Vac, min. 85°C	IEC / EN 60384-14: 2005, UL 1414	VDE, FI, UL

IEC 60950-1					
Clause	Requirement + Test			Result - Remark	Verdict
	TDK	CD	Max. 2200 pF, min. 250 Vac, min. 85°C	IEC / EN 60384-14: 2005, UL 1414	VDE, FI, UL
	Murata	KX	Max. 2200 pF, min. 250 Vac, min. 85°C	IEC / EN 60384-14: 2005, UL 1414	VDE, UL
	JYA-NAY	JN	Max. 2200 pF, min. 250 Vac, min. 85°C	IEC / EN 60384-14: 2005, UL 1414	VDE, UL
	YINAN DON'S ELECTRONIC COMPONENT CO.,LTD	CT81	Max. 2200 pF, min. 250 Vac, min. 85°C	IEC / EN 60384-14: 2005, UL 1414	VDE, UL
	Kunshan Wansheng	CT7	Max. 2200 pF, min. 250 Vac, min. 85°C	IEC / EN 60384-14: 2005, UL 1414	VDE, UL
	SUCCESS	SE	Max. 2200 pF, min. 250 Vac, min. 85°C	IEC/EN 60384- 14: 2005, UL 1414	VDE, UL
	Interchangeable	Interchangeable	Max. 2200 pF, min. 250 Vac, min. 85°C	IEC/EN 60384- 14: 2005	VDE, UL
X- Capacitor (C931, C939) (X1 or X2 type) (Optional)	Ultra Tech Xiphi Enterprise Co., Ltd.	HQX	Max. 0.33 µF, min. 250 Vac, min. 100°C	IEC / EN 60384-14: 2005, UL 1414	VDE, FI, UL
	Hua Jung Components Co., Ltd.	MKP	Max. 0.33 µF, min. 250 Vac, min. 100°C	IEC / EN 60384-14: 2005, UL 1414	ENEC, FI, UL
	Europtronic (Taiwan) Industrial Corp.	MPX, MPX2	Max. 0.33 µF, min. 250 Vac, min. 100°C	IEC / EN 60384-14: 2005, UL 1414	VDE, FI, UL
	Liow Gu Electronics Industry Co., Ltd.	GS-L	Max. 0.33 µF, min. 250 Vac, min. 100°C	IEC / EN 60384-14: 2005, UL 1414	VDE, FI, UL
	Kemet	R.46	Max. 0.33 µF, min. 250 Vac, min. 100°C	IEC / EN 60384-14: 2005, UL 1414	VDE, UL
	Epcos Electronic Components S A	B3292#	Max. 0.33 µF, min. 250 Vac, min. 100°C	IEC / EN 60384-14: 2005, UL 1414	VDE, UL

IEC 60950-1					
Clause	Requirement + Test		Result - Remark		Verdict
	RongGuangDa	MKP	Max. 0.33 μ F, min. 250 Vac, min. 100°C	IEC / EN 60384-14: 2005, UL 1414	VDE, UL
	ZhuHai Sung Ho Electronics Co., Ltd.	CMPP	Max. 0.33 μ F, min. 250 Vac, min. 100°C	IEC / EN 60384-14: 2005, UL 1414	VDE, UL
	Interchangeable	Interchangeable	Max. 0.33 μ F, min. 250 Vac, min. 85°C	EN 60384-14: 2005	VDE, UL
Discharge IC (U906)	POWER INTEGRATION S	CAP004DG	825V	IEC 60950- 1:2005+A1	CB by Nemko (NO77404)
Bleeder Resistors (R950, R951)	Interchangeable	SMD type	330K Ω , min. 1/4W (two provided, located after fuse)	--	--
Current sensor resistor (R966)	Interchangeable	Interchangeable	Min. 0.39 Ω , 2W	--	--
Current sensor resistor (R921)	Interchangeable	Interchangeable	Min. 0.18 Ω , 3W	--	--
Bridging Diode (BD901)	Interchangeable	Interchangeable	Min. 2A, min. 800Vac	--	--
Ripple Capacitor (C905)	Interchangeable	Interchangeable	100 μ F, min. 450 V, min. 105 °C	--	--
Transistors (Q902, Q907)	Interchangeable	Interchangeable	Min. 600V, min. 3.8A	--	--
Thermistor (TH901, TH902) (Optional)	Interchangeable	Interchangeable	Min. 3 Ω , min. 2A at 25 °C	--	--
Line Choke (L903) (Optional)	ASET	73G174-106-X	105 °C	--	--
	Jiangsu Chanelon Electronics Group Co., Ltd.	73G174-106-H	105 °C	--	--

IEC 60950-1					
Clause	Requirement + Test		Result - Remark		Verdict
	YAO SHENG	73G174-106-YS	105 °C	--	--
	TPV	73G174-106-V	105 °C	--	--
	LITAI	73G174-106-L	105 °C	--	--
	Darfon	73G174-106-DN	105 °C	--	--
Line Choke (L906) (Optional)	ASET	373G0174313X	105 °C	--	--
	Jiangsu Channelon Electronics Group Co., Ltd.	373G0174313H	105 °C	--	--
	TAICHANG	373G0174313S	105 °C	--	--
	LITAI	373G0174313L	105 °C	--	--
Line Chokes (L901) (Optional)	YUVA	73G174-166-N	105 °C	--	--
	TPV	73G174-166-V	105 °C	--	--
	Li Tai	73G174-166-L	105 °C		
Transformer (T901)	YUVA	380GL32P529N	Class B	Applicable parts of IEC 60950-1 and according to IEC 60085	Accepted by TUV Rheinland
-Bobbin	SUMITOMO	PM-9820	V-0, phenolic, 150°C	UL 94	UL
-Insulation tape	Symbio	35660Y	130°C	UL 510	UL
	Jingjiang Yahua Pressure Sensitive Co Ltd	CT	130°C	UL 510	UL
-Triple insulation wire	COSMOLINK CO LTD	TIW-M	130°C	UL 2353 IEC/EN 60950-1	UL
Transformer (T901) (Alternate)	TPV	S80GL32P529V	Class B	Applicable parts of IEC 60950-1 and according to IEC 60085	Accepted by TUV Rheinland
-Bobbin	SUMITOMO	PM-9820	V-0, phenolic, 150°C	UL 94	UL
-Insulation tape	Symbio	35660Y	130°C	UL 510	UL

IEC 60950-1					
Clause	Requirement + Test		Result - Remark		Verdict
	Jingjiang Yahua Pressure Sensitive Co Ltd	CT	130°C	UL 510	UL
-Triple insulation wire	FURUKAWA ELECTRIC CO LTD	TEX-E	130°C	UL 2353 IEC/EN 60950-1	UL
Transformer (T901) (Alternate)	CHEN PING	380GL32P529C P	Class B	Applicable parts of IEC 60950-1 and according to IEC 60085	Accepted by TUV Rheinland
-Bobbin	SUMITOMO	PM-9820, PM-9630	V-0, phenolic, 150°C	UL 94	UL
-Insulation tape	Jingjiang Yahua Pressure Sensitive Co Ltd	CT	130°C	UL 510	UL
-Triple insulation wire	COSMOLINK CO LTD	TIW-M	130°C	UL 2353 IEC/EN 60950-1	UL
Transformer (T901) (Alternate)	TAICHANG	380GL32P529S	Class B	Applicable parts of IEC 60950-1 and according to IEC 60085	Accepted by TUV Rheinland
-Bobbin	SUMITOMO	PM-9820	V-0, phenolic, 150°C	UL 94	UL
-Insulation Tape	Jingjiang Yahua Pressure Sensitive Co., Ltd.	CT	130°C	UL 510	UL
-Triple insulation wire	GREAT LEOFLON INDUSTRIAL CO., Ltd.	TRW(B)	130°C	UL 2353 IEC/EN 60950-1	UL
Transformer (T902)	YUVA	380GL32P532N	Class B	Applicable parts of IEC 60950-1 and according to IEC 60085	Accepted by TUV Rheinland
-Bobbin	SUMITOMO	PM-9820	V-0, phenolic, 150°C	UL 94	UL
-Insulation tape	Symbio	35660Y	130°C	UL 510	UL
	Jingjiang Yahua Pressure Sensitive Co Ltd	CT	130°C	UL 510	UL

IEC 60950-1					
Clause	Requirement + Test		Result - Remark		Verdict
-Triple insulation wire	COSMOLINK CO LTD	TIW-M	130°C	UL 2353 IEC/EN 60950-1	UL
Transformer (T902) (Alternate)	TPV	S80GL32P532V	Class B	Applicable parts of IEC 60950-1 and according to IEC 60085	Accepted by TUV Rheinland
-Bobbin	SUMITOMO	PM-9820	V-0, phenolic, 150°C	UL 94	UL
-Insulation tape	Symbio	35660Y	130°C	UL 510	UL
	Jingjiang Yahua Pressure Sensitive Co Ltd	CT	130°C	UL 510	UL
-Triple insulation wire	FURUKAWA ELECTRIC CO LTD	TEX-E	130°C	UL 2353 IEC/EN 60950-1	UL
Transformer (T902) (Alternate)	LITAI	380GL32P532L	Class B	Applicable parts of IEC 60950-1 and according to IEC 60085	Accepted by TUV Rheinland
-Bobbin	SUMITOMO	PM-9820	V-0, phenolic, 150°C	UL 94	UL
-Insulation tape	Jingjiang Yahua Pressure Sensitive Co Ltd	CT	130°C	UL 510	UL
	Symbio	35660Y	130°C	UL 510	UL
-Triple insulation wire	COSMOLINK CO LTD	TIW-M	130°C	UL 2353 IEC/EN 60950-1	UL
Transformer (T902) (Alternate)	TAICHANG	380GL32P532S	Class B	Applicable parts of IEC 60950-1 and according to IEC 60085	Accepted by TUV Rheinland
-Bobbin	SUMITOMO	PM-9820	V-0, phenolic, 150°C	UL 94	UL
-Insulation tape	Jingjiang Yahua Pressure Sensitive Co Ltd	CT	130°C	UL 510	UL
-Triple insulation wire	GREAT LEOFLON INDUSTRIAL CO LTD	TRW(B)	130°C	UL 2353 IEC/EN 60950-1	UL

IEC 60950-1					
Clause	Requirement + Test			Result - Remark	Verdict
Fuse (For LPS used) (F903, F904, F905)	Littelfuse / Wickmann	392, 382 series	T5AL, 250 Vac	IEC/EN 60127-1, IEC/EN 60127-3, ANSI/UL 248-1, ANSI/ UL 248-14	VDE, UL
	Conquer	MET, MST	T5AL, 250 Vac	IEC/EN 60127-1, IEC/EN 60127-3, ANSI/UL 248-1, ANSI/ UL 248-14	VDE, UL
	Cooper Bussmann	SR-5, SS-5	T5AL, 250 Vac	IEC/EN 60127-1, IEC/EN 60127-3, ANSI/UL 248-1, ANSI/ UL 248-14	VDE, UL
	Ever Island Electric Co., Ltd & Walter Electric	2000, 2010 series	T5AL, 250 Vac	IEC/EN 60127-1, IEC/EN 60127-3, ANSI/UL 248-1, ANSI/ UL 248-14	VDE, UL
Optocouplers (U902, U904, U909)	Sharp	PC123	Di more than 0.4mm, int. cr = thermal cycling test, ext. cr more than 8.0mm, 5000 Vac, 100 °C	DIN EN 60747-5-2:2003, IEC/EN 60950-1, UL 1577	VDE, UL, Semko, Fimko, Nemko
	Vishay Semiconductor	TCET1103	Di more than 0.5mm, int. cr more than 6.0mm, ext. cr more than 7.7mm 3000Vac, 100 °C	DIN EN 60747-5-2:2003, IEC/EN 60950-1, UL 1577	VDE, UL, Semko, Fimko, Nemko
	Everlight Electronics Co., Ltd.	EL817, EL817M UL : EL8X7 (X=1 or 2)	Di more than 0.5mm, int. cr more than 6.0mm, ext. cr more than 7.7mm, 3000Vac, 100 °C	DIN EN 60747-5-2:2003, IEC/EN 60950-1, UL 1577	VDE, UL, Semko, Fimko, Nemko

IEC 60950-1					
Clause	Requirement + Test		Result - Remark		Verdict
	TOSHIBA	TLP781F , TLP781	Di more than 0.5mm, int.cr =thermal cycling test, ext. cr more than 8.0mm, 4800 Vac, 100 °C	DIN EN 60747- 5-2:2003, IEC/EN 60950- 1, UL 1577	VDE,UL, Semko, Fimko
	TOSHIBA	TLP421F ,	Di more than 0.4mm, int.cr=thermal cycling test, ext. cr more than 8.0mm, 5000 Vac, 100 °C	DIN EN 60747- 5-2:2003, IEC/EN 60950- 1, UL 1577	VDE,UL, Semko, Fimko
	RENESAS ELECTRONICS CORPORATIO N	PS2561-1, PS2561L-1, PS2561L1-1, PS2561L2-1. PS2561DL1-1	Di more than 0.4mm, int.cr=thermal cycling test, ext. cr more than 8.0mm, 5000Vac, 100 °C	DIN EN 60747- 5-2:2003, IEC/EN 60950- 1, UL 1577	VDE,UL, Nemko, Fimko
	Everlight Electronics Co., Ltd.	EL1013	Di more than 0.4mm, int.cr=thermal cycling test, ext. cr more than 8.1mm, 3000Vac, 100 °C	DIN EN 60747- 5-2:2003, IEC/EN 60950- 1, UL 1577	VDE,UL, Semko, Fimko, Nemko
	Lite-On	LTV-817	Di more than 0.6mm, int.cr=thermal cycling test, ext. cr more than 8.0mm, 4800Vac, 100 °C	DIN EN 60747- 5-2:2003, IEC/EN 60950- 1, UL 1577	VDE,UL, Semko, Fimko, Nemko
Supplementary information:					
1) Provided evidence ensures the agreed level of compliance. See OD-CB2039.					

1.5.1	TABLE: Opto Electronic Devices	P
Manufacturer.....: Sharp / Vishay / Everlight / TOSHIBA / TOSHIBA / RENESAS / Everlight/Lite-On		

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
Type: PC123 / TCET1103 / EL817, EL817M / TLP781F, TLP781 / TLP421F / PS2561-1, PS2561L-1, PS2561L1-1, PS2561L2-1, PS2561DL1-1 / EL1013/LTV817 Separately tested: Tested by FIMKO Bridging insulation.....: Reinforced insulation. External creepage distance: >8.0 / >7.7 / >7.7 / >8.0 / >8.0 / >8.0 / >8.1/>8.0 Internal creepage distance.....: ¹⁾ / >6.0 / >6.0 / ¹⁾ / ¹⁾ / ¹⁾ / ¹⁾ Distance through insulation.....: >0.4 / >0.5 / >0.5 / >0.5 / >0.4 / >0.4 / >0.4/>0.6 Tested under the following conditions.....: -- Input: -- Output: -- Supplementary information: 1) There is not any internal creepage distance. Test according to IEC 60950-1: 2001, cl. 2.10.8 (same as requirement in IEC 60950-1: 2005, cl. 2.10.9) has been carried out ten times for components at 100°C / 25°C / 0°C / 25°C. Humidity treatment of 48 hours as well as electric strength tests at 3000V / 1 minute and 5000V / 1 minute were carried out to the component after thermal cycling test.			

1.6.2	TABLE: Electrical data (in normal conditions)						P
U(V)/f(Hz)	I (A)	I _{rated} (A)	P (W)	Fuse #	I _{fuse} (A)	Condition/status	
Test performed with Internal speaker of 4Ω, 3.0W							
HDMI mode							
90/50	0.84	--	75.0	F901	0.84	Maximum normal load	
90/60	0.84	--	75.0	F901	0.84	Maximum normal load	
100/50	0.75	1.0	74.1	F901	0.75	Maximum normal load	
100/60	0.75	1.0	74.1	F901	0.75	Maximum normal load	
240/50	0.34	0.5	71.2	F901	0.34	Maximum normal load	
240/60	0.34	0.5	71.2	F901	0.34	Maximum normal load	
264/50	0.33	--	73.3	F901	0.33	Maximum normal load	
264/60	0.33	--	73.3	F901	0.33	Maximum normal load	
DVI mode							
90/50	0.83	--	75.0	F901	0.83	Maximum normal load	
90/60	0.83	--	75.1	F901	0.83	Maximum normal load	
100/50	0.74	1.0	73.9	F901	0.74	Maximum normal load	
100/60	0.74	1.0	74.0	F901	0.74	Maximum normal load	

IEC 60950-1						
Clause	Requirement + Test				Result - Remark	Verdict
240/50	0.34	0.5	72.3	F901	0.34	Maximum normal load
240/60	0.34	0.5	72.3	F901	0.34	Maximum normal load
264/50	0.33	--	73.4	F901	0.33	Maximum normal load
264/60	0.33	--	73.3	F901	0.33	Maximum normal load
Display mode						
90/50	0.81	--	72.0	F901	0.81	Maximum normal load
90/60	0.81	--	72.0	F901	0.81	Maximum normal load
100/50	0.73	1.0	71.9	F901	0.73	Maximum normal load
100/60	0.73	1.0	71.9	F901	0.73	Maximum normal load
240/50	0.34	0.5	70.4	F901	0.34	Maximum normal load
240/60	0.34	0.5	70.4	F901	0.34	Maximum normal load
264/50	0.32	--	71.2	F901	0.32	Maximum normal load
264/60	0.32	--	71.2	F901	0.32	Maximum normal load
Supplementary information:						

2.1.1.5 c) 1)	TABLE: max. V, A, VA test				P
Voltage (rated) (V)	Current (rated) (A)	Voltage (max.) (V)	Current (max.) (A)	VA (max.) (VA)	
CN902(+6.3V)	--	6.32	7.2	27.72	
CN902(+16V)	--	16.20	5.5	86.52	
supplementary information:					
Supply voltage: 240Vac, 60Hz					

2.1.1.5 c) 2)	TABLE: stored energy		N/A
Capacitance C (μF)	Voltage U (V)	Energy E (J)	
supplementary information:			

2.2	TABLE: evaluation of voltage limiting components in SELV circuits			P
Component (measured between)		max. voltage (V) (normal operation)		Voltage Limiting Components
		V peak	V d.c.	

IEC 60950-1				
Clause	Requirement + Test	Result - Remark		Verdict
T901 Pin 7,8,9 – Pin 10,11,12	38.0	--	--	
T902 Pin 7,8 – Pin 9,10	25.6	--	--	
T902 Pin 11,12 – Pin 9,10	80.0	--	--	
After D910	--	16.2	D910	
For LED Driver circuit				
After L802	69.0	--	--	
After D803	--	53.4	D803	
Fault test performed on voltage limiting components	Voltage measured (V) in SELV circuits (V peak or V d.c.)			
D910 short circuited	Unit shutdown			
D803 short circuited	Vout = 16Vp			
supplementary information:				
Input Voltage is 240 Vac, 60 Hz				

2.5	TABLE: limited power sources					P
Circuit output tested:						
Note: Measured Uoc (V) with all load circuits disconnected: See below						
Components	Sample No.	U oc (V)	I _{sc} (A)		VA	
			Meas.	Limit	Meas.	Limit
Building power output of +16V (CN902) pin 5 to earth according to table 2C (Fuse F905 by passed)						
Normal	1	16.20	5.5	61	86.52	250
Building power output of +6.3V (CN902) pin 1, 3 to earth according to table 2C (Fuse F904, F903 by passed)						
Normal	1	6.32	4.5	158	27.72	250
Building power output of +6.3V (CN902) pin 1, 3 to earth according to table 2C (Fuse F903 by passed)						
Normal	1	6.32	4.5	158	27.72	250
Display connector (CN108) pin 20 to earth according to table 2B						
Normal	1	3.28	0.8	8	1.57	100
Single fault: U602 pin 1 to 2	1	3.28	0.8	8	2.15	100
Single fault: R689	1	3.28	0.8	8	2.15	100
Single fault: R675	1	3.28	0.8	8	2.12	100

IEC 60950-1						
Clause	Requirement + Test			Result - Remark		Verdict
2.5	TABLE: limited power sources					P
Display connector (CN108) pin 1, 3, 4, 6, 7, 9, 10, 12 to earth according to table 2B						
Normal	1	1.20	Can't load	8	Can't load	100
Display connector (CN108) pin 16 to earth according to table 2B						
Normal	1	2.64	Can't load	8	Can't load	100
Display connector (CN108) pin 18 to earth according to table 2B						
Normal	1	3.28	Can't load	8	Can't load	100
Display connector (CN108) other pins to earth according to table 2B						
Normal	1	0	0	8	0	100
Display connector (CN109) pin 16 to earth according to table 2B						
Normal	1	2.67	Can't load	8	Can't load	100
Display connector (CN109) pin 17 to earth according to table 2B						
Normal	1	2.23	Can't load	8	Can't load	100
Display connector (CN109) pin 18 to earth according to table 2B						
Normal	1	1.81	Can't load	8	Can't load	100
Display connector (CN109) other pins to earth according to table 2B						
Normal	1	0	0	8	0	100
USB 3.0 A (CN7733) pin 1 to earth according to table 2B						
Normal	1	5.1	1.3	8	2.12	100
Single fault: U7741 pin 1 to 5	1	5.1	1.6	8	2.54	100
Single fault: C7744	1	0	0	8	0	100
USB 3.0 A (CN7733) all other pins to earth according to table 2B						
Normal	1	0	0	8	0	100
USB 3.0 B (CN7733) pin 1 to earth according to table 2B						
Normal	1	5.1	1.3	8	2.12	100
Single fault: U7742 pin 1 to 5	1	5.1	1.7	8	2.51	100
Single fault: C7734	1	0	0	8	0	100
USB 3.0 B (CN7733) all other pins to earth according to table 2B						

IEC 60950-1						
Clause	Requirement + Test			Result - Remark		Verdict
2.5	TABLE: limited power sources					P
Normal	1	5.1	1.3	8	2.12	100
USB 2.0 (CN201) pin 1 to earth according to table 2B						
Normal	1	5.1	0.8	8	2.25	100
Single fault: U7743 pin 1 to 5 short	1	5.1	1.3	8	2.36	100
Single fault: C7758	1	0	0	8	0	100
USB 2.0 (CN201) all pin to earth according to table 2B						
Normal	1	0	0	8	0	100
DVI (CN105) pin 1, 2, 4, 5, 9, 10, 12, 13, 17, 18, 20, 21, 23, 24 to earth according to table 2B						
Normal	1	3.24	Can't load	8	Can't load	100
DVI (CN105) pin 6, 7 to earth according to table 2B						
Normal	1	4.22	Can't load	8	Can't load	100
DVI (CN105) pin 15 to earth according to table 2B						
Normal	1	3.0	Can't load	8	Can't load	100
DVI (CN105) other pins to earth according to table 2B						
Normal	1	0	0	8	0	100
HDMI (CN102) pin 1, 2, 4, 5 to earth according to table 2B						
Normal	1	1.75	Can't load	8	Can't load	100
HDMI (CN102) pin 6 to earth according to table 2B						
Normal	1	2.44	Can't load	8	Can't load	100
HDMI (CN102) pin 8 to earth according to table 2B						
Normal	1	4.6	Can't load	8	Can't load	100
HDMI (CN102) pin 12, 13 to earth according to table 2B						
Normal	1	3.26	Can't load	8	Can't load	100
HDMI (CN102) pin 15, 16 to earth according to table 2B						
Normal	1	3.28	Can't load	8	Can't load	100
HDMI (CN102) pin 18 to earth according to table 2B						
Normal	1	4.61	Can't load	8	Can't load	100
HDMI (CN102) all other pins to earth according to table 2B						
Normal	1	0	0	8	0	100

IEC 60950-1						
Clause	Requirement + Test			Result - Remark		Verdict
2.5	TABLE: limited power sources					P
Control Sync in (CN411) pin 1 to earth according to table 2B						
Normal	1	3.05	Can't load	8	Can't load	100
Control Sync in (CN411) all other pins to earth according to table 2B						
Normal	1	0	0	8	0	100
Control Sync in (CN410) all pins to earth according to table 2B						
Normal	1	0	0	8	0	100
Audio in (CN602) all other pins to earth according to table 2B						
Normal	1	0	0	8	0	100
Audio out (CN203) all other pins to earth according to table 2B						
Normal	1	0	0	8	0	100
supplementary information:						
Input Voltage is 240 Vac, 60 Hz						

2.10.2	Table: working voltage measurement			P
Location		RMS voltage (V)	Peak voltage (V)	Comments
Supply Voltage: 240Vac/60Hz				
T901 Pin 1 to Pin 7,8,9		128	244	
Pin 1 to Pin 10,11,12		127	234	
Pin 3 to Pin 7,8,9		196	595	
Pin 3 to Pin 10,11,12		206	620	Highest Vp and Vrms of T901
Pin 4 to Pin 7,8,9		130	308	
Pin 4 to Pin 10,11,12		133	336	
Pin 6 to Pin 7,8,9		129	238	
Pin 6 to Pin 10,11,12		128	230	
T902 Pin 1 to Pin7,8		129	236	
Pin 1 to Pin 9,10		128	232	
Pin 1 to Pin 11,12		132	248	
Pin 4 to Pin 7,8		223	620	
Pin 4 to Pin 9,10		229	635	Highest Vp and Vrms of T902
Pin 4 to Pin 11,12		207	570	
Pin 6 to Pin 7,8		128	424	
Pin 6 to Pin 9,10		127	238	

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

2.10.2	Table: working voltage measurement			P
Pin 6 to Pin 11,12	131	254		
C907 Primary to Secondary	128	234		
C912 Primary to Secondary	128	234		
U909 Pin 1 to Pin 3	128	230		
Pin 1 to Pin 4	128	230		
Pin 2 to Pin 3	128	230		
Pin 2 to Pin 4	128	230		
U902 Pin 1 to Pin 3	128	230		
Pin 1 to Pin 4	128	230		
Pin 2 to Pin 3	128	230		
Pin 2 to Pin 4	128	230		
U904 Pin1 to Pin3	128	232		
Pin 1 to Pin 4	128	232		
Pin 2 to Pin 3	128	232		
Pin 2 to Pin 4	128	232		
Supply Voltage: 100Vac/60Hz				
T901 Pin 1 to Pin 7,8,9	55.0	117		
Pin 1 to Pin10,11,12	53.2	108		
Pin 3 to Pin 7,8,9	158	460		
Pin 3 to Pin 10,11,12	169	496		
Pin 4 to Pin 7,8,9	57.9	179		
Pin 4 to Pin 10,11,12	63.7	210		
Pin 6 to Pin 7,8,9	55.1	110		
Pin 6 to Pin 10,11,12	53.2	101		
T902 Pin 1 to Pin 7,8	54.3	101		
Pin 1 to Pin 9,10	53.2	98.5		
Pin 1 to Pin 11,12	61.2	118		
Pin 4 to Pin 7,8	190	480		
Pin 4 to Pin 9,10	199	505		
Pin 4 to Pin 11,12	171	436		
Pin 6 to Pin 7,8	54.2	115		
Pin 6 to Pin 9,10	53.1	108		

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

2.10.2	Table: working voltage measurement			P
Pin 6 to Pin 11,12	0.8	143		
C907 Primary to Secondary	53.2	99.0		
C912 Primary to Secondary	53.2	99.0		
U909 Pin 1 to Pin 3	53.5	98.5		
Pin 1 to Pin 4	53.2	98.5		
Pin 2 to Pin 3	53.2	98.5		
Pin 2 to Pin 4	53.3	98.5		
U902 Pin 1 to Pin 3	53.3	104.0		
Pin 1 to Pin 4	53.2	104.0		
Pin 2 to Pin 3	53.1	104.0		
Pin 2 to Pin 4	53.2	104.0		
U904 Pin1 to Pin 3	53.1	101.0		
Pin 1 to Pin 4	53.1	101.0		
Pin 2 to Pin 3	53.2	101.0		
Pin 2 to Pin 4	53.3	101.0		
supplementary information:				

2.10.3 and 2.10.4	TABLE: Clearance and creepage distance measurements						P
Clearance (cl) and creepage distance (cr) at/of/between:	U peak (V)	U r.m.s. (V)	Required cl (mm) ³	cl (mm)	Required cr (mm)	cr (mm)	
Functional:							
Line to Neutral before fuse	420	250	2.3 (1.5*1.48)	5.0	2.5	5.0	
Traces under fuse(F901)	420	250	2.3 (1.5*1.48)	2.5	2.5	2.5	
Basic/supplementary:							
Primary to earthed trace	420	250	3.0 (2.0*1.48)	See below	3.0	See below	
L to earth trace				3.7		3.7	
Under C945				7.5		7.5	
Under C944/C965/C966/C967				7.5		7.5	

IEC 60950-1						
Clause	Requirement + Test			Result - Remark		Verdict
HS3 to earthed screw trace				8.3		8.3
BD901 to earthed trace				8.1		8.1
Primary to earthed components or metal chassis	420	250	3.0 (2.0*1.48)	See below	3.0	See below
Primary trace to metal part of panel				6.8		6.8
HS4 to metal chassis				7.4		7.4
Primary/Secondary to floating components	420	250	3.0 (2.0*1.48)	See below	3.0	See below
T902 core to HS1				3.7		3.7
HS4 to T902 core				5.7		5.7
C904 to T901 core				6.0		6.0
Reinforced:						
Primary traces to secondary traces	420	250	6.0 (4.0*1.48)	See below	6.0	See below
Under U909				7.9		7.9
Under C907				7.6		7.6
Under C912				7.4		7.4
Under U902/U904				8.0		8.0
Under T901 trace side	620	250 (real measured value: 206V)	6.6 (4.4*1.48)	8.2	6.6	8.2
Under T902 trace side	635	250 (real measured value: 229V)	6.6 (4.4*1.48)	8.1	6.6	8.1
Supplementary information:						
- Functional insulation shorted, see 5.3.4 c). - Working voltages of primary circuits to secondary circuits/user accessible parts considered as 420 V pk and 250 V r.m.s. minimum (according to applicable rows of tables 2H and 2L). - The required clearances multiplied by 1.48 considering that EUT operates up to 5000m. - For clearance and creepage did not describe above are far larger than limit above. - All internal wires are located by mechanical fixings to keep distance. - There is one mylar sheet between Power supply board component side and metal chassis - The working voltage were measured under both Input = 100V and 240V, the Vp and Vrms value being recoded above were the highest among the two.						

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

2.10.5	TABLE: Distance through insulation measurements					P
Distance through insulation (DTI) at/of:		U peak (V)	U rms (V)	Test voltage (V)	Required DTI (mm)	DTI (mm)
Optocouplers (Reinforced insulation)		420	250	AC 3000	0.4	¹⁾
Supplementary information:						
1) See appended table 1.5.1 for the source details.						

4.5	TABLE: Thermal requirements			P
	Supply voltage (V) :	See below		—
	Ambient T _{min} (°C) :	See below		—
	Ambient T _{max} (°C) :	See below		—
Maximum measured temperature T of part/at::		T (°C)		Allowed T _{max} (°C)
Test voltage and orientation		90V/60Hz Horizontal	90V/60Hz Vertical	--
AC inlet near L		47.3	47.0	70
PCB near TH901 and TH902		74.3	73.2	105
C939 body		57.9	62.1	85
L906 coil		58.7	60.3	105
C931 body		56.3	58.4	85
L903 coil		61.5	62.1	105
PCB near BD901		71.1	68.0	105
C967 body		51.6	52.2	85
C950 body		56.3	58.0	85
L901 coil		73.4	74.8	105
PCB near Q902 and D902		61.3	64.6	105
PCB near U903		69.1	69.3	105
PCB near Q907		72.9	67.9	105
U909 body		67.1	57.2	100
C907 body		66.8	54.8	85
T902 core		79.6	72.8	110
T902 coil		78.0	71.8	110

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
T901 coil	72.1	69.3	110
T901 core	70.0	66.3	110
C912 body	61.7	63.7	85
U902 body	65.5	68.1	100
PCB near D912	74.4	69.6	105
PCB near D910	80.2	67.3	105
PCB near U802	66.8	58.1	105
L802 coil	85.7	68.5	105
PCB near U7733(Main board)	70.5	75.0	105
Plastic enclosure inside	43.6	43.1	--
Plastic enclosure outside	43.7	41.4	95
Panel body	52.4	53.3	95
Tamb.	20.4	20.7	--
Tma.	40.0	40.0	--
Test voltage and orientation	264V/60Hz Horizontal	--	--
AC inlet near L	45.6	--	70
PCB near TH901 and TH902	57.8	--	105
C939 body	51.8	--	85
L906 coil	51.8	--	105
C931 body	51.7	--	85
L903 coil	53.4	--	105
PCB near BD901	60.8	--	105
C967 body	48.8	--	85
C950 body	52.5	--	85
L901 coil	60.9	--	105
PCB near Q902 and D902	57.7	--	105
PCB near U903	66.5	--	105
PCB near Q907	66.7	--	105
U909 body	63.0	--	100
C907 body	62.4	--	85
T902 core	75.8	--	110
T902 coil	74.3	--	110
T901 coil	68.6	--	110

IEC 60950-1							
Clause	Requirement + Test	Result - Remark	Verdict				
T901 core	67.2	--	110				
C912 body	59.9	--	85				
U902 body	64.9	--	100				
PCB near D912	72.8	--	105				
PCB near D910	77.0	--	105				
PCB near U802	62.4	--	105				
L802 coil	83.1	--	105				
PCB near U7733 (Main board)	71.5	--	105				
Plastic enclosure inside	43.1	--	--				
Plastic enclosure outside	42.0	--	95				
Panel body	52.6	--	95				
Tamb.	20.6	--	--				
Tma.	40.0	--	--				
Supplementary information:							
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.							
The maximum ambient temperature specified by manufacturer is 40°C (Tma).							
All values for T(°C) are re-calculated from Tamb respectively.							
<u>Winding components (with safety isolation):</u>							
- Class B Tmax = 120 °C - 10°C = 110°C							
Temperature T of winding:	t ₁ (°C)	R ₁ (Ω)	t ₂ (°C)	R ₂ (Ω)	T (°C)	Allowed T _{max} (°C)	Insulation class
Supplementary information:							

4.5.5	TABLE: Ball pressure test of thermoplastic parts			P
	Allowed impression diameter (mm) :	≤ 2 mm		—
Part		Test temperature (°C)	Impression diameter (mm)	
Below tests for client required only				
Plastic material, Kingfa : HIPS-5197, 2.5mm		90	1.59	
Plastic material, Kingfa : GAR-011(L85), 2.5mm		85	1.31	
Plastic material, Kingfa : GAR-011(L65), 2.5mm		85	1.29	
Plastic material, Kingfa : HIPS-510(H), 2.5mm		80	1.29	
Plastic material, Kingfa : FRHIPS-960, 2.5mm		85	1.88	

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Plastic material, Cheil : GC-0750(+), 2.5mm	80	1.61
	Plastic material, Cheil : GC-0700(+), 2.5mm	80	1.94
	Plastic material, Cheil : HG-0760(+), 2.5mm	85	1.73
	Plastic material, Cheil : LX-0951(+), 2.5mm	85	1.83
	Plastic material, Cheil : SD-0150, 2.5mm	85	1.48
	Plastic material, Cheil : HR-1360, 2.5mm	85	1.71
	Plastic material, Cheil : BF-0670F, 2.5mm	80	1.59
	Plastic material, LG : HF380, 2.5mm	85	1.48
	Plastic material, LG : SE885, 2.5mm	80	1.42
	Plastic material, LG : LUPOY GP-1000(#), 2.5mm	95	1.21
	Plastic material, LG : XG568, 2.5mm	80	1.81
	Plastic material, LG : XG569C, 2.5mm	80	1.85
	Plastic material, LG : HF388H, 2.5mm	85	1.39
	Plastic material, LG : SE750, 2.5mm	80	1.50
	Plastic material, Teijin : TN-7500, 2.5mm	85	1.57
	Plastic material, ORINKO : HIPS-2000, 2.5mm	85	1.48
	Plastic material, Kingfa : GAR-011C, 2.5mm	90	1.91
	Plastic material, Kingfa : GAR-011C, 3.0mm	90	1.59
	Plastic material, Kingfa : CK-61006, 3.0mm	85	1.67
	Plastic material, Kingfa : CK-61506, 3.0mm	85	1.43
Supplementary information:			
Phoenolic materiala are accepted without test.			

5.1	TABLE: touch current measurement			P
Measured between:		Measured (mA)	Limit (mA)	Comments/conditions
Input voltage: 100V, 60Hz (Test upon client request)				
L/N to secondary output connecor		0.01/0.01	0.25	Switch “e” closed
L/N to metal chassis		0.62/0.40	1.0	Switch “e” opened
L/N to Plastic enclosure with metal foil		0.01/0.01	0.25	Switch “e” closed
Input voltage: 264V, 60Hz				
L/N to secondary output connecor		0.01/0.01	0.25	Switch “e” closed

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
L/N to metal chassis	1.70/1.15	3.5	Switch "e" opened
L/N to Plastic enclosure with metal foil	0.01/0.01	0.25	Switch "e" closed
supplementary information:			
1. Overall capacity: See table 1.5.1			

5.2	TABLE: Electric strength tests, impulse tests and voltage surge tests			P
Test voltage applied between:		Voltage shape (AC, DC, impulse, surge)	Test voltage (V)	Breakdown Yes / No
Transformer:				
T901 Primary to core		AC	1922	No
T901 secondary to core		AC	1922	No
T901 One layers of insulation		AC	3000	No
T901 primary to secondary		AC	3000	No
T902 Primary to core		AC	1944	No
T902 secondary to core		AC	1944	No
T902 One layers of insulation		AC	3000	No
T902 primary to secondary		AC	3000	No
Unit:				
Primary to Earth		DC	2749	No
Primary to Secondary		DC	4242	No
Primary to Plastic enclosure with foil		DC	4242	No
Supplementary information:				
1. Test was performed on all sources of transformer and tape.				

5.3	TABLE: Fault condition tests						P
	Ambient temperature (°C) :				40, if no otherwise specified		—
	Power source for EUT: Manufacturer, model/type, output rating :				See appended table 1.5.1		—
Component No.	Fault	Supply voltage (V)	Test time	Fuse #	Fuse current (A)	Observation	

IEC 60950-1						
Clause	Requirement + Test			Result - Remark		Verdict
Openings	Blocked	240Vac	2hrs 57mins	F901	0.34	Unit normal operation. Max. Temp. stabled at : T902 coil = 86.7°C T902 core = 85.4°C Ambient=40.0°C
BD901 Pin 2-4	Short	240Vac	1sec	F901	0	F901 opened, no hazards.
U901 Pin 5-2	Short	240Vac	1sec	F901	0.02	U901 damaged, no hazards. Same test has been repeated twice, and all came out with same results.
U901 Pin 8-2	Short	240Vac	1sec	F901	0.02	U901 damaged, no hazards. test has been repeated twice, and all came out with same results.
Q901 Pin D-S	Short	240Vac	1sec	F901	0.02	Q901 damaged, no hazards. Same test has been repeated twice, and all came out with same results.
Q901 Pin G-S	Short	240Vac	10min	F901	0.06	Unit shutdown, no hazards, no damage.
Q901 Pin D-G	Short	240Vac	1sec	F901	0.02	Q901 damaged, no hazards. Same test has been repeated twice, and all came out with same results.
Q902 Pin D-S	Short	240Vac	1sec	F901	0.02	Q901. R921 damaged, no hazards. Same test has been repeated twice, and all came out with same results.
Q902 Pin G-S	Short	240Vac	10min	F901	0.06	Unit shutdown, no hazards, no damage.
Q902 Pin D-G	Short	240Vac	1sec	F901	0.02	Q902, R901 damaged, no hazards. Same test has been repeated twice, and all came out with same results.
C905	Short	240Vac	1sec	F901	0	F901 opened, no hazards.
T901 Pin 1-3	Short	240Vac	10min	F901	0.06	Unit shutdown, no hazards, no damage.
T901 Pin 4-3	Short	240Vac	1sec	F901	0.02	U901 damaged, no hazards. Same test has been repeated twice, and all came out with same results.
T901 Pin 4-5,6	Short	240Vac	10min	F901	0.06	Unit shutdown, no hazards, no damage.
T901 Pin 7,8,9-10,11,12	Short	240Vac	10min	F901	0.06	Unit shutdown, no hazards, no damage.
T902 Pin 4-6	Short	240Vac	10min	F901	0.07	Unit shutdown, no hazards, no damage.
T902 Pin 1-6	Short	240Vac	1sec	F901	0	F901 opened, U901 damaged, no hazards.
T902 Pin 7,8-9,10	Short	240Vac	10min	F901	0.06	Unit shutdown, no hazards, no damage.
T902 Pin 7,8-11,12	Short	240Vac	10min	F901	0.14	Unit shutdown, no hazards, no damage.

IEC 60950-1						
Clause	Requirement + Test			Result - Remark		Verdict
D912 Pin 2-3	Short	240Vac	10min	F901	0.06	Unit shutdown, no hazards, no damage.
U902 Pin 1-2	Short	240Vac	10min	F901	0.06	Unit shutdown, no hazards, no damage.
U902 Pin 3-4	Short	240Vac	10min	F901	0.06	Unit shutdown, no hazards, no damage.
U902 Pin 1	Open	240Vac	10min	F901	0.08	Unit shutdown, no hazards, no damage.
U904 Pin 1-2	Short	240Vac	10min	F901	0.06	Unit shutdown, no hazards, no damage.
U904 Pin 3-4	Short	240Vac	10min	F901	0.06	Unit shutdown, no hazards, no damage.
U904 Pin 1	Open	240Vac	10min	F901	0.06	Unit shutdown, no hazards, no damage.
U907 Pin 2-5	Short	240Vac	10min	F901	0.06	Unit shutdown, no hazards, no damage.
U907 Pin 2-6	Short	240Vac	1sec	F901	0.06	U907 damaged, no hazard, same test has been repeated twice, and all came out with same results.
Q907 Pin D-S	Short	240Vac	1sec	F901	0.02	Q907, U907 damaged, no hazard, same test has been repeated twice, and all came out with same results.
Q907 Pin G-S	Short	240Vac	10min	F901	0.06	Unit shutdown, no hazards, no damage.
Q907 Pin D-G	Short	240Vac	1sec	F901	0.02	Q907, U907 damaged, no hazard, same test has been repeated twice, and all came out with same results.
D908	Short	240Vac	10min	F901	0.06	Unit shutdown, no hazards, no damage.
D910 Pin 1-2	Short	240Vac	10min	F901	0.06	Q907, U907 damaged, no hazard, same test has been repeated twice, and all came out with same results.
U909 Pin 1-2	Short	240Vac	10min	F901	0.06	Unit shutdown, no hazards, no damage.
U909 Pin 3-4	Short	240Vac	10min	F901	0.06	Unit shutdown, no hazards, no damage.
U909 Pin 1	Open	240Vac	10min	F901	0.08	Unit shutdown, no hazards, no damage.
T901 after D912 (+6.3V)	Overload	240	5hrs 26mins	F901	0.46	Constant temp. stabled at load to 4.5 A. Unit shut down when load increase to 4.6 A No hazard T901 coil=75.6°C, T901 core=74.3°C, Ambient=21.7°C

IEC 60950-1							
Clause	Requirement + Test				Result - Remark		Verdict
T902 after D910 (+16V)	Overload	240	4hrs 18mins	F901	0.66	Constant temp. stabled at load to 5.5 A. Unit shut down when load increase to 5.6 A. No hazard, T902 coil=104.0°C, T902 core=90.7°C, Ambient=21.5°C	
Speaker	short	240	10min	F901	0.29	Speaker no output, no hazards, no damage.	
Supplementary Informaion:							
1. The electric strength test performed after fault condition test and see appended table 5.2 for detailed test conditions.							
Maximum permitted temperature of T801 based on a test temperature of 40 °C:							
- Class B Tmax = 175 °C – (40-25) °C = 160 °C.							

C.2	TABLE: transformers						P
Loc.	Tested insulation	Working voltage peak / V (2.10.2)	Working voltage rms / V (2.10.2)	Require d electric strength (5.2)	Required clearance / mm (2.10.3)	Required creepage distance / mm (2.10.4)	Required distance thr. insul. (2.10.5)
T901	Primary / input winding and secondary / output winding (internal) (DI)	620	250 (real measure d value: 206V)	AC 3000V	6.6 (4.4*1.48)	6.6	2 layers or 3 layers insulation tape
T901	Primary / input winding and core (internal) (BI)	620	250 (real measure d value: 206V)	AC 1922V	3.3 (2.2*1.48)	3.3	--
T901	Secondary / output winding and core (internal) (SI)	620	250 (real measure d value: 206V)	AC 1922V	3.3 (2.2*1.48)	3.3	--
T901	Primary / input part and secondary / output part (external) (DI)	620	250 (real measure d value: 206V)	AC 3000V	6.6 (4.4*1.48)	6.6	--
T901	Primary / input part and secondary / output winding (external) (DI)	620	250 (real measure d value: 206V)	AC 3000V	6.6 (4.4*1.48)	6.6	--

IEC 60950-1							
Clause	Requirement + Test			Result - Remark			Verdict
T901	Primary / input part and core (external) (BI)	620	250 (real measured value: 206V)	AC 1922V	3.3 (2.2*1.48)	3.3	--
T901	Secondary / output part and core (external) (SI)	620	250 (real measured value: 206V)	AC 1922V	3.3 (2.2*1.48)	3.3	--
T901	Secondary / output part and primary / input winding (external) (DI)	620	250 (real measured value: 206V)	AC 3000V	6.6 (4.4*1.48)	6.6	--
Loc.	Tested insulation			Test voltage/ V	Measured clearance / mm	Measured creepage dist./ mm	Measured distance thr. insul. / mm; number of layers
T901	Primary / input winding and secondary / output winding (internal) (DI)			AC 3000V	Triple insulation wire used	Triple insulation wire used	3 layers insulation tape
T901	Primary / input winding and core (internal) (BI)			AC 1922V	Triple insulation wire used	Triple insulation wire used	--
T901	Secondary / output winding and core (internal) (SI)			AC 1922V	Triple insulation wire used	Triple insulation wire used	--
T901	Primary / input part and secondary / output part (external) (DI)			AC 3000V	27.1	27.1	--
T901	Primary / input part and secondary / output winding (external) (DI)			AC 3000V	Triple insulation wire used	Triple insulation wire used	--
T901	Primary / input part and core (external) (BI)			AC 1922V	6.3	6.3	--
T901	Secondary / output part and core (external) (SI)			AC 1922V	6.1	6.1	--
T901	Secondary / output part and primary / input winding (external) (DI)			AC 3000V	Triple insulation wire used	Triple insulation wire used	--
supplementary information:							
1. The required clearances multiplied by 1.48 considering that EUT operates up to 5000m. 2. Same construction for all source							

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

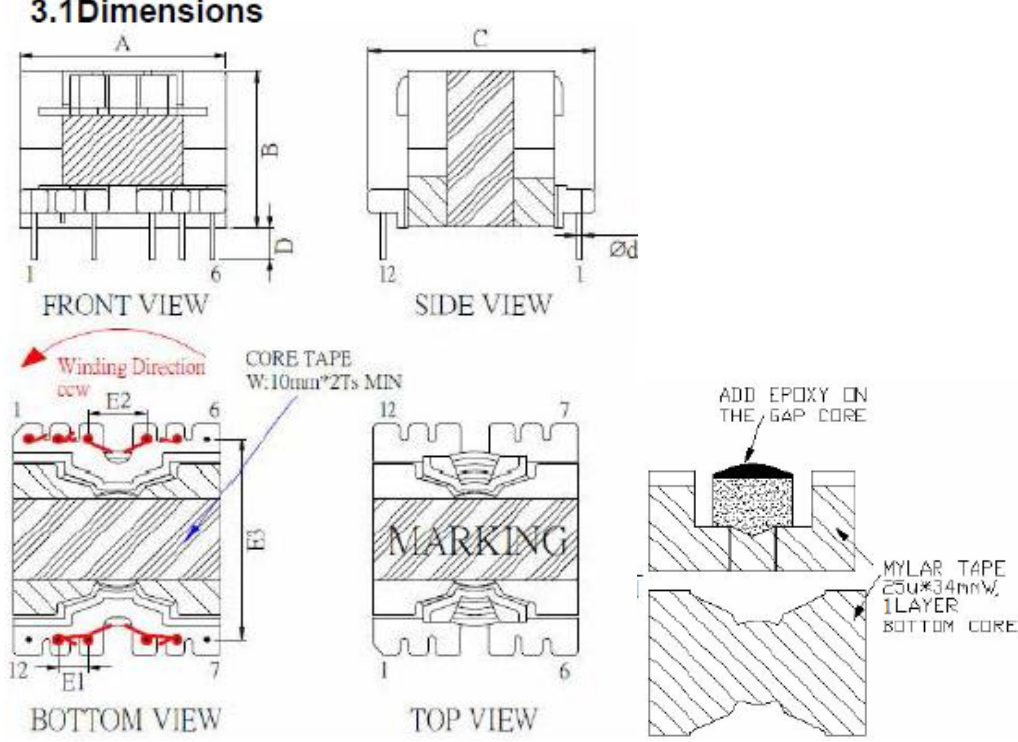
C.2	TABLE: transformers	P
-----	---------------------	---

Transformer T901:

Concentric windings on bobbin (Vertical type core). Outer winding is Primary. Min. one layers of insulation tape provided between primary winding (triple insulation wire) and secondary winding (triple insulation wire) . The core is considered as floating part. Min. one layer of insulation tape is provided on bottom core and fold up. For other details, refer to below illustration.

3. Mechanical Characteristics

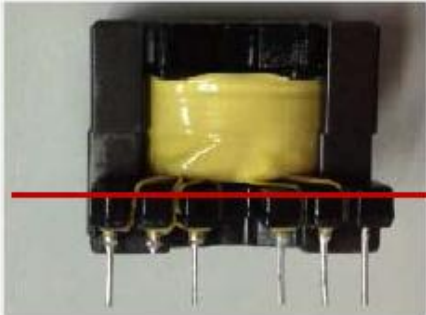
3.1Dimensions



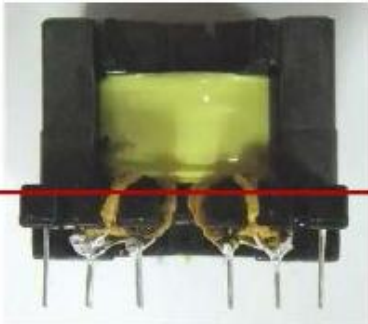
Dimensions:

- A = 27.0 ± 2.0 mm
- B = 21.5 ± 1.5 mm
- C = 31.5 ± 2.0 mm
- D = 3.5 ± 0.3 mm
- E1 = 3.8 ± 0.3 mm
- E2 = 7.6 ± 0.5 mm
- E3 = 27.4 ± 0.5 mm
- d = 0.6 ± 0.1 mm

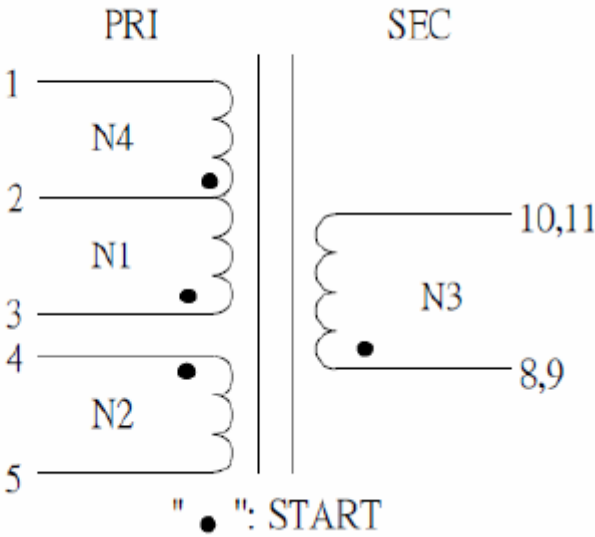
IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict



三层绝缘线
烫伤露铜不
能超过此线
(骨架 PIN 座
上边缘)

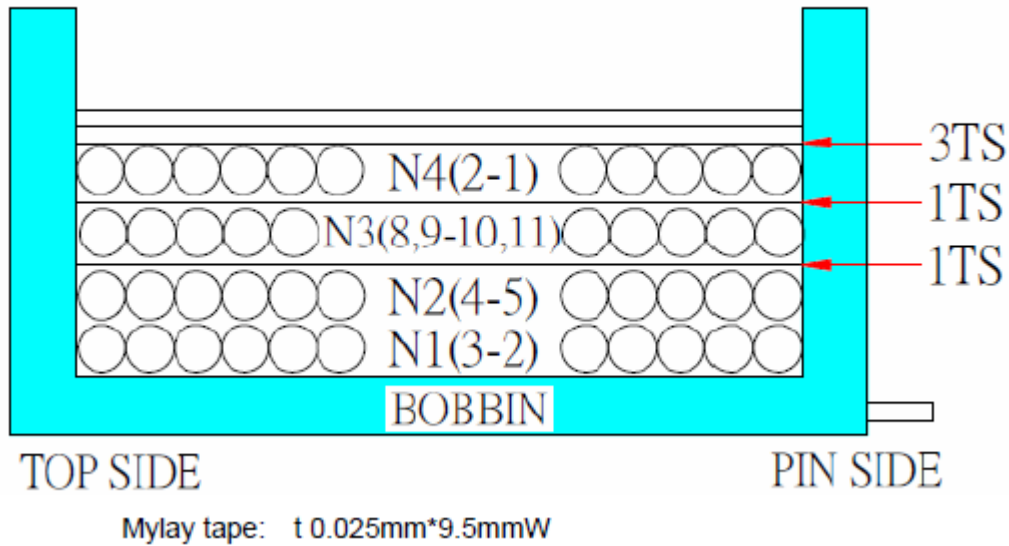


3.4 Schematic



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

3.5 Winding construction



Description of design:	
(a) Bobbin	
Primary/input pins :	3-2-1, 4 -5
Secondary/output pins :	8, 9 – 10, 11
Material (manufacturer, type, ratings) :	Bobbin: see table 1.5.1
Thickness (mm) :	Min. 0.45 mm

C.2	TABLE: transformers						P
Loc.	Tested insulation	Working voltage peak / V (2.10.2)	Working voltage rms / V (2.10.2)	Required electric strength (5.2)	Required clearance / mm (2.10.3)	Required creepage distance / mm (2.10.4)	Required distance thr. insul. (2.10.5)
T902	Primary / input winding and secondary / output winding (internal) (DI)	635	250 (real measured value: 229V)	AC 3000V	6.6 (4.4*1.48)	6.6	2 layers or 3 layers insulation tape

IEC 60950-1							
Clause	Requirement + Test			Result - Remark			Verdict
T902	Primary / input winding and core (internal) (BI)	635	250 (real measured value: 229V)	AC 1944V	3.3 (2.2*1.48)	3.3	--
T902	Secondary / output winding and core (internal) (SI)	635	250 (real measured value: 229V)	AC 1944V	3.3 (2.2*1.48)	3.3	--
T902	Primary / input part and secondary / output part (external) (DI)	635	250 (real measured value: 229V)	AC 3000V	6.6 (4.4*1.48)	6.6	--
T902	Primary / input part and secondary / output winding (external) (DI)	635	250 (real measured value: 229V)	AC 3000V	6.6 (4.4*1.48)	6.6	--
T902	Primary / input part and core (external) (BI)	635	250 (real measured value: 229V)	AC 1944V	3.3 (2.2*1.48)	3.3	--
T902	Secondary / output part and core (external) (SI)	635	250 (real measured value: 229V)	AC 1944V	3.3 (2.2*1.48)	3.3	--
T902	Secondary / output part and primary / input winding (external) (DI)	635	250 (real measured value: 229V)	AC 3000V	6.6 (4.4*1.48)	6.6	--
Loc.	Tested insulation			Test voltage/ V	Measured clearance / mm	Measured creepage dist./ mm	Measured distance thr. insul. / mm; number of layers
T902	Primary / input winding and secondary / output winding (internal) (DI)			AC 3000V	Triple insulation wire used	Triple insulation wire used	3 layers insulation tape
T902	Primary / input winding and core (internal) (BI)			AC 1944V	Triple insulation wire used	Triple insulation wire used	--

IEC 60950-1					
Clause	Requirement + Test	Result - Remark			Verdict
T902	Secondary / output winding and core (internal) (SI)	AC 1944V	Triple insulation wire used	Triple insulation wire used	--
T902	Primary / input part and secondary / output part (external) (DI)	AC 3000V	30.0	30.0	--
T902	Primary / input part and secondary / output winding (external) (DI)	AC 3000V	Triple insulation wire used	Triple insulation wire used	--
T902	Primary / input part and core (external) (BI)	AC 1944V	6.0	6.0	--
T902	Secondary / output part and core (external) (SI)	AC 1944V	6.4	6.4	--
T902	Secondary / output part and primary / input winding (external) (DI)	AC 3000V	Triple insulation wire used	Triple insulation wire used	--
supplementary information:					
1. The required clearances multiplied by 1.48 considering that EUT operates up to 5000m. 2. Same construction for all source					

C.2	TABLE: transformers
------------	----------------------------

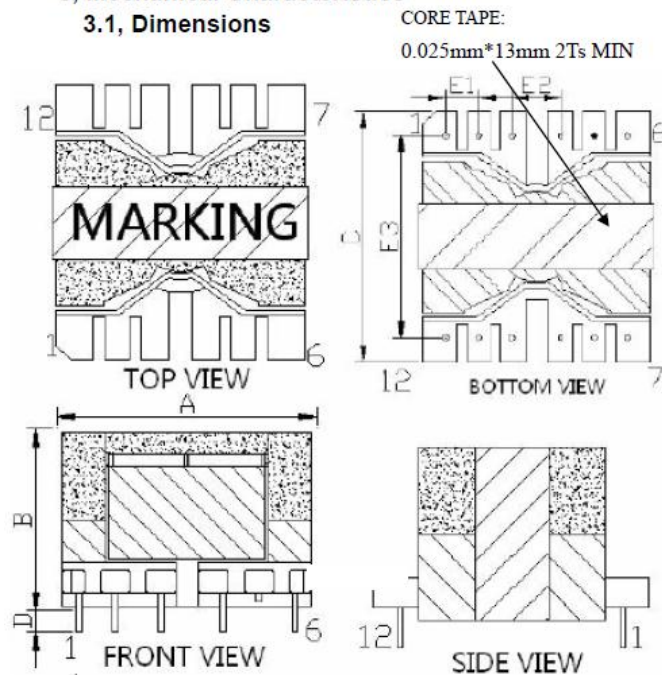
IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

Transformer T902:

Concentric windings on bobbin (Vertical type core). Outer winding is Primary. Min. one layers of insulation tape provided between primary winding (triple insulation wire) and secondary winding (triple insulation wire) . The core is considered as floating part. Min. one layer of insulation tape is provided on bottom core and fold up. For other details, refer to below illustration.

3, Mechanical Characteristics

3.1, Dimensions



$$A = 37.0\text{mm MAX}$$

$$B = 24.0\text{mm MAX}$$

$$C = 38.0\text{mm MAX}$$

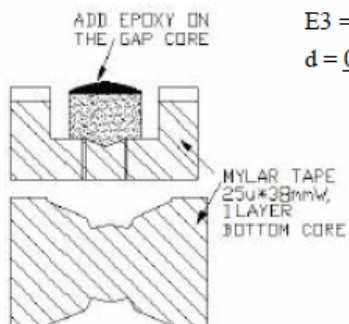
$$D = 3.5 \pm 0.3\text{mm}$$

$$E1 = 5.1 \pm 0.5\text{mm}$$

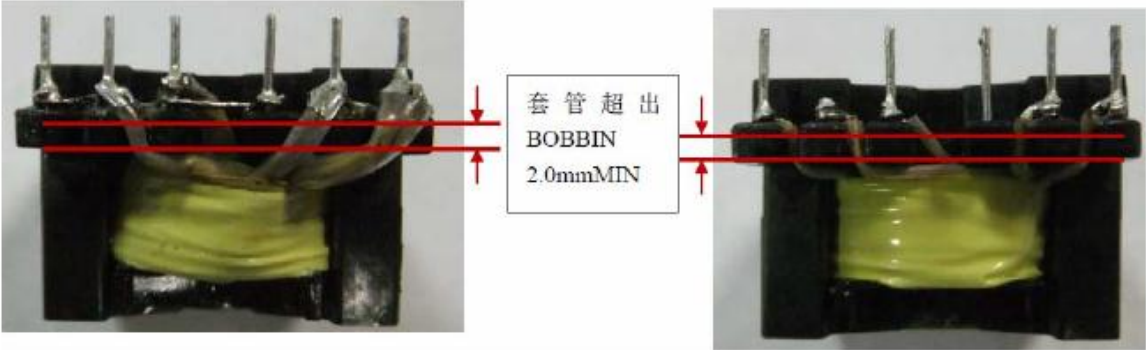
$$E2 = 7.6 \pm 0.5\text{mm}$$

$$E3 = 30.5 \pm 0.5\text{ mm}$$

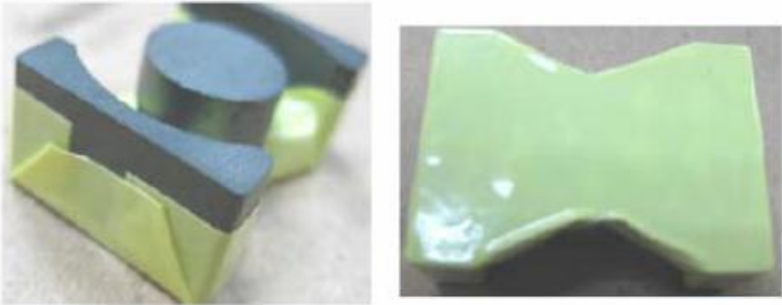
$$d = 0.8 \pm 0.1\text{ mm}$$



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



套管超出
BOBBIN
2.0mmMIN



Pri.

4

5

6

2

1

N1

N4

N5

Sec.

11.12

7.8

9.10

N3

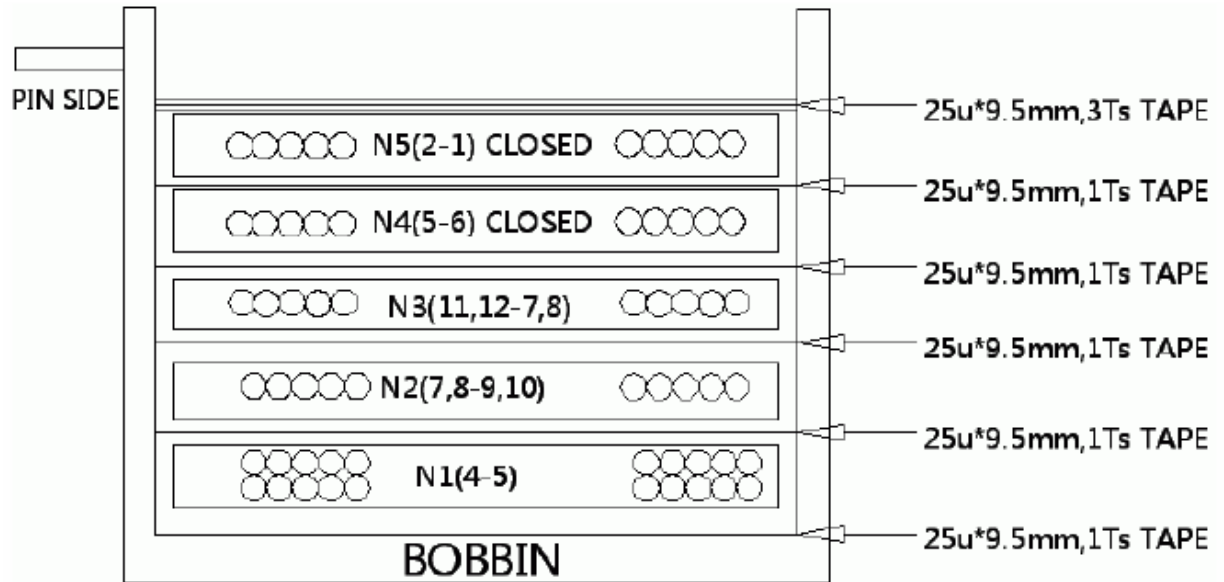
N2

"●", WINDING START;

"□", TEFLON TUBE

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

3.5 Winding construction



Mylar tape: t 0.025mm*9.5mmW
 1.) ALL PIN ADDED TUBE,

Description of design:

(a) Bobbin

Primary/input pins :	4-5-6, 2-1
Secondary/output pins :	11, 12-7, 8-9, 10
Material (manufacturer, type, ratings) :	Bobbin: see table 1.5.1
Thickness (mm) :	Min. 0.45 mm

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

List of test equipment used:

Clause	Measurement / testing	Testing / measuring equipment / material used	Range used	Calibration date

No listing of test equipment used necessary for chosen test procedure.

IEC 60950-1				
Clause	Requirement + Test			Verdict
2.1.1.7	TABLE: Discharge test			P
Condition	τ calculated (ms)	τ measured (ms)	t u→ 0V (s)	Comments
Supply voltage: 264 Vac, 60 Hz				
Line to Neutral	--	433	--	V _O = 375.0 Vpeak, 37 % of V _O = 138.75, Vpeak, voltage drop to 41.67 Vpeak after 1 s
Supply voltage: 100Vac, 60 Hz				
Line to Neutral	--	448	--	V _O = 143.75Vpeak, 37 % of V _O = 53.19Vpeak, voltage drop to 18.75 Vpeak after 1 s
Supplementary information: Overall capacity and bleeder resistor: see appended table 1.5.1				

2.4.2	TABLE: Limited current circuit measurement					P
Location	Voltage (V)	Current (A)	Freq. (Hz)	Limit (mA)	Comments	
C912 sec. pin to earth	0.8	0.4	--	0.7	2KΩ non-inductive resistor used.	
C907 sec. pin to earth	0.77	0.39	--	0.7	2KΩ non-inductive resistor used.	
Supplementary information: Supply voltage: 240Vac, 60 Hz						

2.6.3.4	TABLE: Resistance of earthing measurement		P
Location	Resistance measured (mΩ)	Comments	
AC inlet to metal part	10	Test current : 32A, duration: 2 min., Voltage drop: 0.32V	
AC inlet to C945	6	Test current : 32A, duration: 2 min., Voltage drop: 0.20V	
AC inlet C611	9	Test current : 32A, duration: 2 min., Voltage drop: 0.29V	
AC inlet C965	9	Test current : 32A, duration: 2 min., Voltage drop: 0.29V	
AC inlet C966	9	Test current : 32A, duration: 2 min., Voltage drop: 0.29V	
AC inlet C967	9	Test current : 32A, duration: 2 min., Voltage drop: 0.29V	

IEC 60950-1			
Clause	Requirement + Test		Verdict
AC inlet to metal part	12	Test current : 40A, duration: 2 min., Voltage drop: 0.48V	
AC inlet to C945	28	Test current : 40A, duration: 2 min., Voltage drop: 1.12V	
AC inlet C611	6	Test current : 40A, duration: 2 min., Voltage drop: 0.24V	
AC inlet C965	6	Test current : 40A, duration: 2 min., Voltage drop: 0.24V	
AC inlet C966	8	Test current : 40A, duration: 2 min., Voltage drop: 0.32V	
AC inlet C967	9	Test current : 40A, duration: 2 min., Voltage drop: 0.29V	
Supplementary information:			

4.6.1, 4.6.2	Table: Enclosure opening measurements		P
Location	Size (mm)	Comments	
Horizontal (Metal enclosure)			
Top	Ø 4.5	Numerous circular openings provided.	
Rear	1) Ø 4.6 2) 35mm x 55mm 3) Ø 14.0	1) Numerous circular openings provided. 2), 3) External Plastic enclosure with no opening provided outside of opening. There is no portion of the side of fire enclosure falls within the area traced out by the 5° angle	
Left side (near Mainboard side)	1) Ø 4.6 2) 35mm x 11mm	1) Numerous circular openings provided. 2) One rectangle opening provided There is no portion of the side of fire enclosure falls within the area traced out by the 5° angle	
Right side	Ø 1.7	Numerous circular openings provided.	
Bottom	Ø 1.8 centre to centre= 4.8 min., metal thickness= 0.81	Numerous circle openings provided. Compliance with 4.6.2 table 4D.	
Vertical (Metal enclosure)			

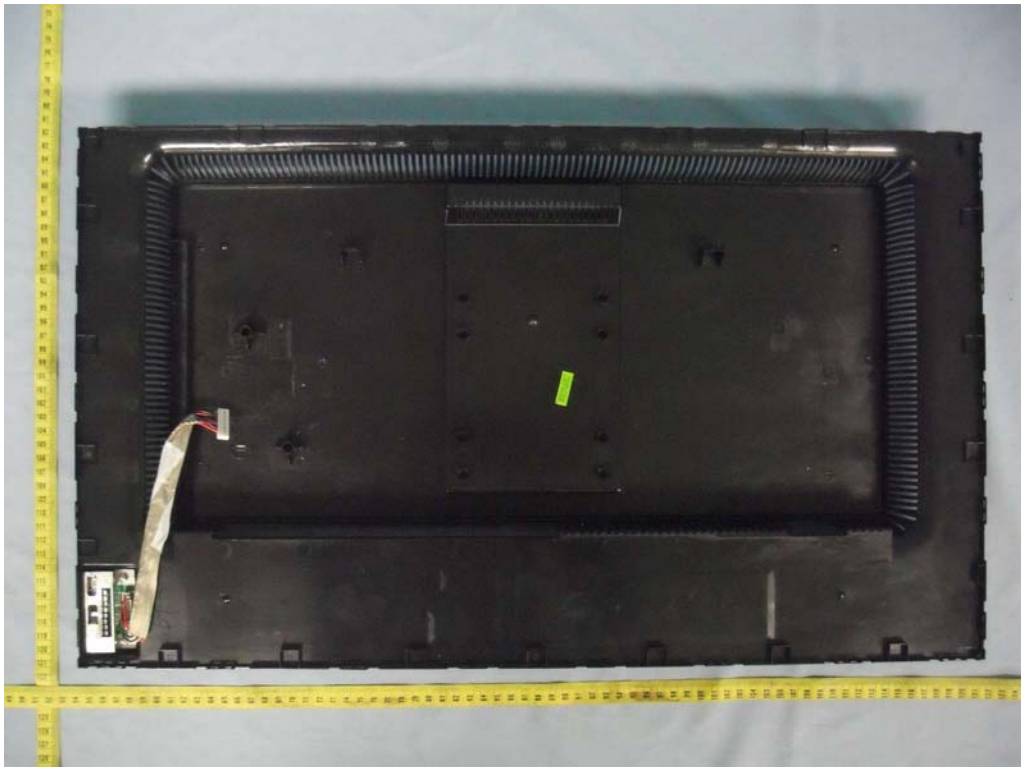
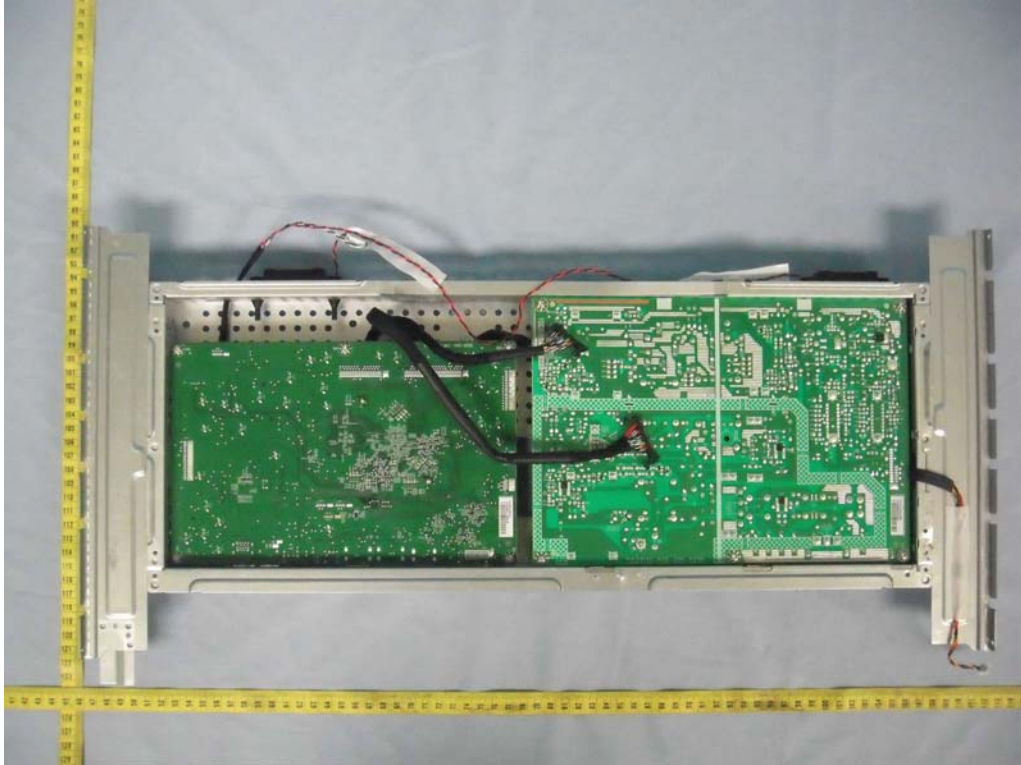
IEC 60950-1			
Clause	Requirement + Test		Verdict
Top	1) $\varnothing$ 4.6 2) 3.6mm x 3.6mm max.	1) Numerous circular openings provided. 2) Numerous rectangle openings provided. External Plastic enclosure provided outside of the metal chassis opening and combined both metal chassis and plastic enclosure to form the top opening construction.	
Rear	$\varnothing$ 4.0	Numerous circular openings provided. There is no portion of the side of fire enclosure falls within the area traced out by the 5° angle.	
Left	$\varnothing$ 1.8	Numerous circular openings provided.	
Right side (near spreader)	$\varnothing$ 4.5	Numerous circular openings provided.	
Bottom	$\varnothing$ 1.7 centre to centre= 4.7 min., metal thickness= 0.81	Numerous circle openings provided. Compliance with 4.6.2 table 4D.	
Horizontal (Plastic enclosure)			
Top	2.1mm x 38mm	Numerous rectangle openings provided.	
Rear	2.1mm x 38mm	Numerous rectangle openings provided.	
Left	2.1mm x 38mm	Numerous rectangle openings provided.	
Right side	2.1mm x 38mm	Numerous rectangle openings provided.	
Bottom	1) 32mm x 2.2mm 2) 35mm x 30mm 3) 236mm x 30mm	1), 2), 3) one rectangle opening provided	
Vertical (Plastic enclosure)			
Top	2.1mm x 38mm	Numerous rectangle openings provided.	
Rear	2.1mm x 38mm	Numerous rectangle openings provided.	
Left	1) 32mm x 2.2mm 2) 35mm x 30mm 3) 236mm x 30mm	1), 2), 3) one rectangle opening provided	

IEC 60950-1				
Clause	Requirement + Test		Result - Remark	Verdict
Right side	2.1mm x 38mm		Numerous rectangle openings provided.	
Bottom	2.1mm x 38mm		Numerous rectangle openings provided.	
Supplementary information:				

Product: LCD MONITOR

Type Designation: L273QL, EA274WMi-BK(C), EA274WMi(C), EA275WMi-BK(C), EA275WMi(C)

For Construction B



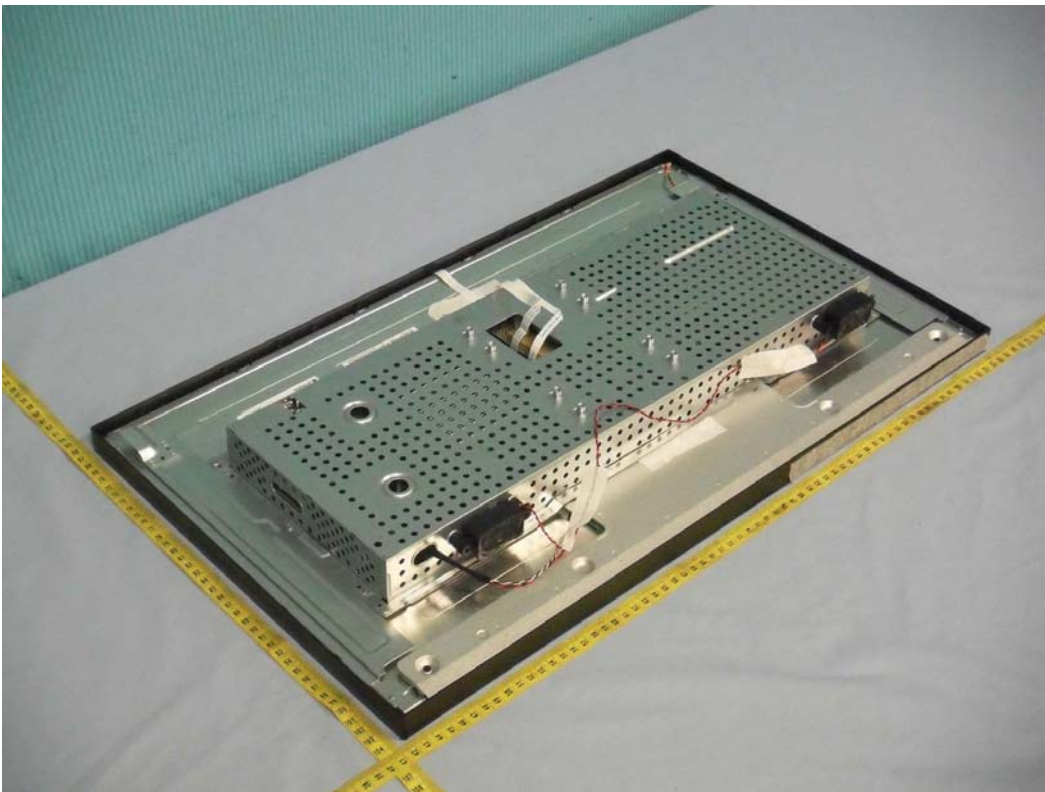
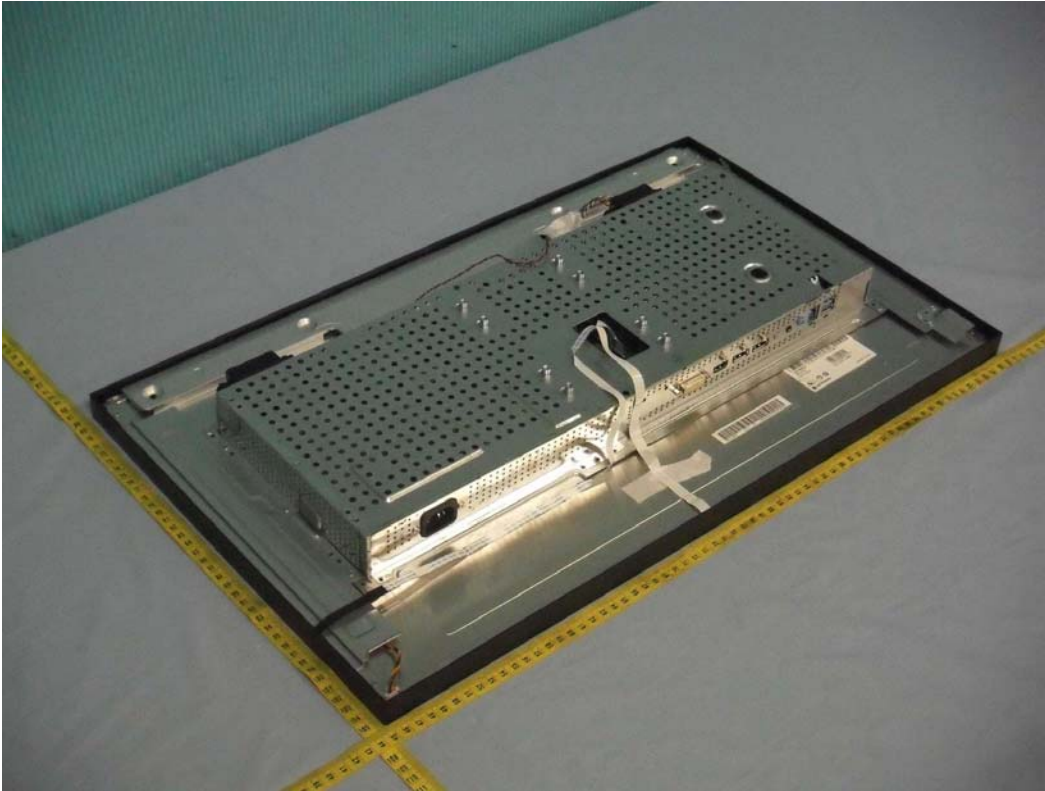
Product: LCD MONITOR

Type Designation: L273QL, EA274WMi-BK(C), EA274WMi(C), EA275WMi-BK(C), EA275WMi(C)



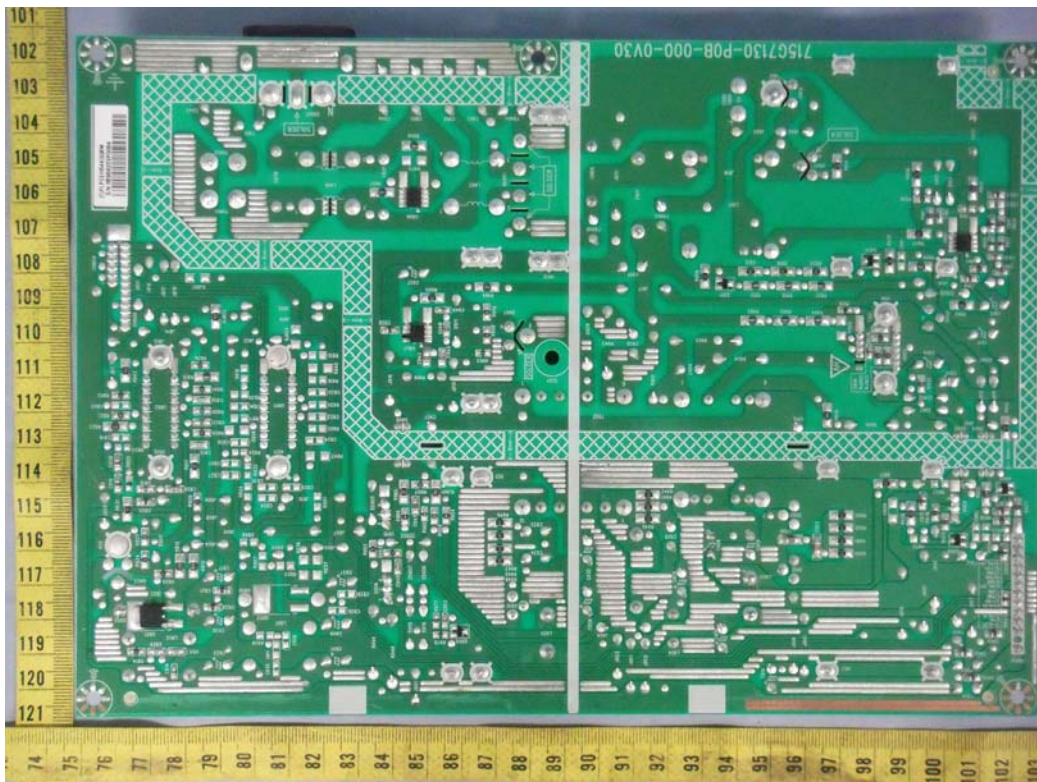
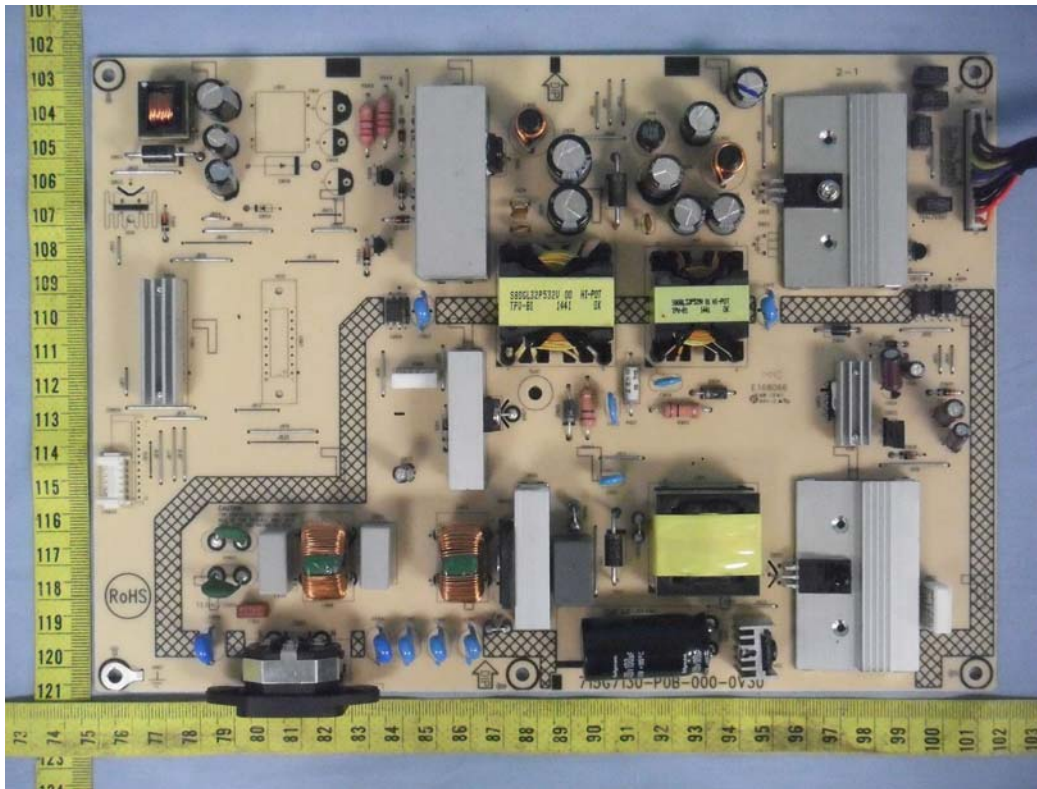
Product: LCD MONITOR

Type Designation: L273QL, EA274WMi-BK(C), EA274WMi(C), EA275WMi-BK(C), EA275WMi(C)



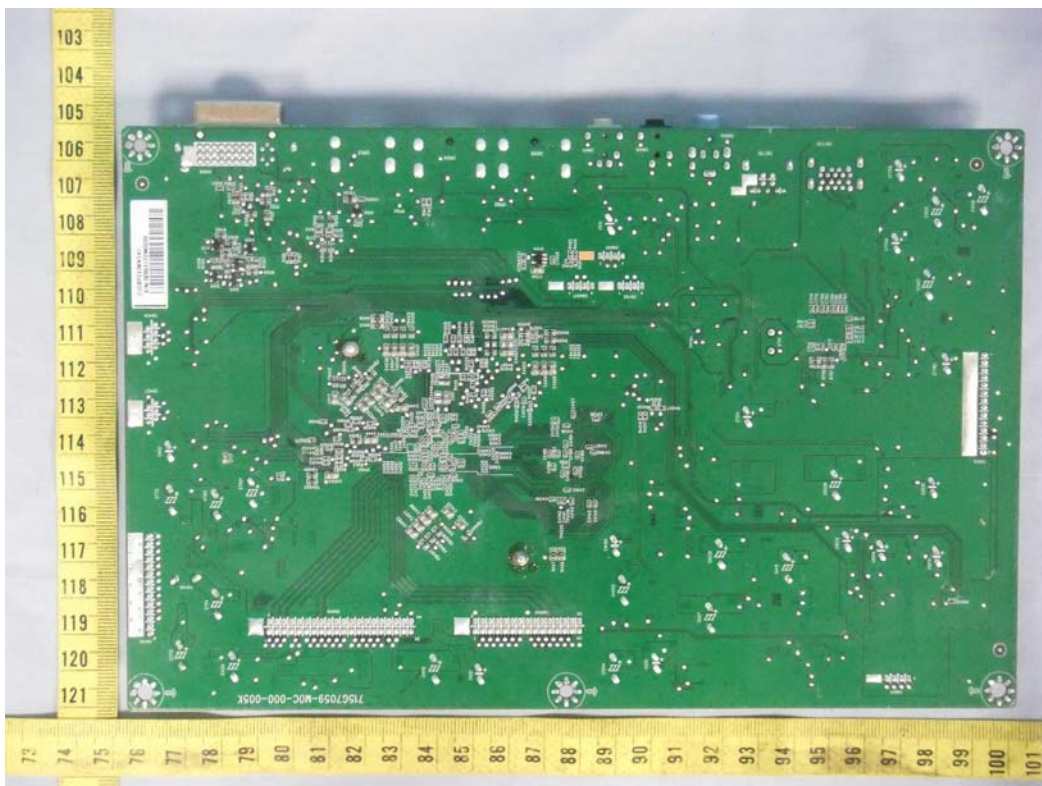
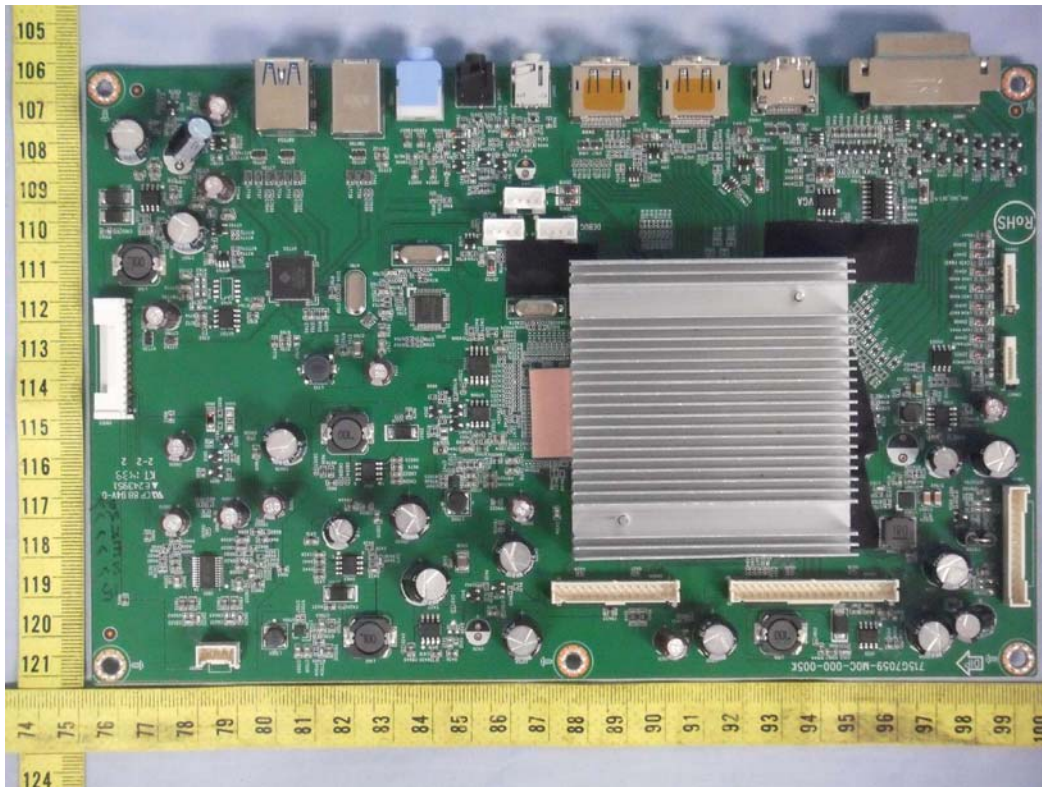
Product: LCD MONITOR

Type Designation: L273QL, EA274Wmi-BK(C), EA274Wmi(C), EA275Wmi-BK(C), EA275Wmi(C)



Product: LCD MONITOR

Type Designation: L273QL, EA274Wmi-BK(C), EA274Wmi(C), EA275Wmi-BK(C), EA275Wmi(C)



Product: LCD MONITOR

Type Designation: L273QL, EA274Wmi-BK(C), EA274Wmi(C), EA275Wmi-BK(C), EA275Wmi(C)

