

JPTUV-053732-M1

**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

Name and address of the applicant Nom et adresse du demandeur

Name and address of the manufacturer Nom et adresse du fabricant

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

Ratings and principal characteristics Valeurs nominales et charactéristiques principales

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

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

Model / Type Ref. Ref. de type

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

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

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

LCD monitor

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

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

See additional page(s)

AC 100-240V; 50/60Hz; 1.5A; Class I

AOC

N/A

280LM000\*\*, \*2870\*\*\*\*\*\* = A-Z, a-z, 0-9, -,  $\setminus$ , /, + or blank; Represents different enclosure color and sales regions for marketing purpose only, no technical difference.) For model differences, refer to the test report. Re-issue of JPTUV-053732 dated 29.10.2013, due to first modification.

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

17034402 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 + 81 45 914-3354

Mail: info@jpn.tuv.com Web: www.tuv.com

Signature:

Dipl.-Ing. (FH) C. Nasca

0/061 CB

Date: 07.01.2014



JPTUV-053732-M1

PAGE 2 OF 3

- Tatung Mexico S.A. de. C.V. Ave. Rosa Ma. Fuentes #7050 Complejo Industrial Fuentes C.P. 32320, Cd. Juarez. Chih, MEXICO
- TPV Display Technology (Wuhan)
   Co., Ltd.
   Unique No. 11, Zhuankou Development
   District of Economic Technological
   Development Zone, Wuhan City 430056, P.R. China
- TPV Electronics (Fujian) Co., Ltd. Shangzheng, Yuan Hong Road Fuqing City, Fujian Province P.R. China
- Envision Industry of Electronic Products Ltd.
   895, Joao Marcos Pozzetti Street, Industrial District II, 69.075-215 Manaus, Am, Brazil
- 5. Tatung Czech s.r.o U Nove Hospody 4 30100 Plzen Czech Republic
- Envision Industry of Electronic Products Ltd.
   Rodovia Anhanguera S/N-KM 49
   13.205-700 Tijuco Preto-Jundiaí-SP-Brazil
- TPV Displays Polska Sp. z o.o. ul. Zlotego Smoka 9 66-400 Gorzów Wlkp. Poland
- L&T Display Technology (Fujian) Ltd.
   Optoelectronic Park, Rongqiao
   Economic and Technological
   Development Zone
   Fuqing, Fujian 350301, P.R. China
- Trend Smart CE Mexico S de RL de CV Avenida Sor Juana Ines de la Cruz de 19602 Nueva Tijuana, 22435 Tijuana Baja California MEXICO

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

Report Ref. No.: 17034402 002

Date: 07.01.2014

Signature:

Dipl.-Ing. (FH) C. Nasca



JPTUV-053732-M1

PAGE 3 OF 3

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

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

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

 TPV Display Technology (China) Co., Ltd.
 No. 106 Jinghai 3 Rd., BDA Beijing City 100176 P.R. China

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

Report Ref. No.: 17034402 002

Date: 07.01.2014

Signature:

Dipl.-Ing. (FH) C. Nasca



### Test Report issued under the responsibility of:



### **TEST REPORT**

### IEC 60950-1

# Information technology equipment - Safety -Part 1: General requirements

Report Number. ....: 17034402 002 Date of issue.....: 09. Jan., 2014 Total number of pages .....

TÜV Rheinland (Shenzhen) Co., Ltd. CB Testing Laboratory.....:

3 & 4 F, Cybio Technology Building No. 1, Langshan No. 2 Road Address .....:

South, 5th Industrial Area, High-Tech Industry Park North,

Nanshan District, 518057, Shenzhen, P.R. China

TPV Electronics (Fujian) Co., Ltd. Applicant's name.....

Shangzheng, Yuan Hong Road, Fuqing City, Fujian Province, P.R. Address .....:

China

13 pages

Manufacturer's name...... Same as applicant Address .....: Same as applicant

Test specification:

Standard ...... IEC 60950-1:2005 (Second Edition); Am 1:2009

**CB Scheme** Test procedure .....:

Non-standard test method.....

IEC60950 1C Test Report Form No.....: 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 ..... AOC

Manufacturer ...... See above

Ratings ...... I/P: 100-240Vac, 50/60Hz, 1.5A



Page 2 of 13

Report No.: 17034402 002

Test	ing procedure and testing location:				
	CB Testing Laboratory:	TÜV Rheinland (Shenzhen) Co., Ltd.			
Test	ing location/ address:	3 & 4 F, Cybio Technology Building No. 1, Langshan No. 2 Road South, 5th Industrial Area, High-Tech Industry Park North, Nanshan District, 518057, Shenzhen, P.R. China			
	Associated CB Laboratory:	N/A			
Test	ing location/ address:	N/A			
	Tested by (name + signature):	Jet Luo	let h		
	Approved by (name + signature):	C. D. Reeves	CD. lewes		
	Testing procedure: TMP	N/A			
Test	ing location/ address:	N/A			
	Tested by (name + signature):				
	Approved by (name + signature):				
	Testing procedure: WMT	N/A			
Testi	ng location/ address:	N/A			
	Tested by (name + signature):				
	Witnessed by (name + signature):				
	Approved by (name + signature):				
	Testing procedure: SMT	N/A			
Testi	ng location/ address:	N/A			
	Tested by (name + signature):				
	Approved by (name + signature):				
	Supervised by (name + signature):				
	Testing procedure: RMT	N/A			
Testi	ng location/ address:	N/A			
	Tested by (name + signature):				
	Approved by (name + signature):				
	Supervised by (name + signature):				



Page 3 of 13 Report No.: 17034402 002

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

- Photo documentation (4 pages)

### Summary of testing:

Test performed (see page 6):

The test was carried out under the most unfavorable combination within the manufacturer's operating specifications of the following parameters:

- -supply voltage, which ranged from 100-240Vac
- -operating temperature, Max. ambient temperature 40°C declared by the client
- -operating mode: continuous
- -operating load:

100% brightness, 100% contrast, full white screen and optimal resolution@60Hz, which consumed maximum output power; speakers were loaded with 1KHz sinusoidal signal and turned to maximum volume (for mainboard 715G6124 with speakers unit only)

### **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**

See original report 17034402 001

### Copy of marking plate

See original report 17034402 001



Page 4 of 13

Test item particulars	
Equipment mobility:	[x] movable (for unit with base stand) [] hand-held [] transportable [x] stationary (for unit without base stand) [] for building-in [] direct plug-in
Connection to the mains:	<ul> <li>[x] pluggable equipment [x] type A [] type B</li> <li>[] permanent connection</li> <li>[x] detachable power supply cord</li> <li>[] non-detachable power supply cord</li> <li>[] not directly connected to the mains</li> </ul>
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% (requested by client)
Tested for IT power systems:	[] Yes [x] No
IT testing, phase-phase voltage (V)	N/A
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 (20A for North America)
Pollution degree (PD)	
IP protection class	
Altitude during operation (m)	•
Altitude of test laboratory (m)	
Mass of equipment (kg)	Approx. 4.97kg for unit with base stand (for unit without speakers unit); Approx. 5.17kg for unit with base stand (for mainboard 715G6124 with speakers unit); Approx. 0.43kg for base stand
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:	Dec., 2013
Date(s) of performance of tests:	Dec., 2013-Jan., 2014
General remarks:	
The test results presented in this report relate only to the This report shall not be reproduced, except in full, without laboratory.  "(see Enclosure #)" refers to additional information ap "(see appended table)" refers to a table appended to the	out the written approval of the Issuing testing pended to the report.
Throughout this report a $\square$ comma / $\boxtimes$ point is used a	s the decimal separator.



Page 5 of 13 Report No.: 17034402 002

Manufacturer's Declaration per sub-clause 6.2.5 of IECEE 02:				
The application for obtaining a CB Test Certificate	⊠ Ye	26		
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		ot applicable		
When differences exist; they shall be identified in the	ie Gen	eral product information section.		
Name and address of factory (ies)::	1	Tatung Mexico S.A. de. C.V. Ave. Rosa Ma. Fuentes #7050, Complejo Industrial Fuentes, C.P. 32320, Cd. Juarez. Chih, MEXICO		
	2	TPV Display Technology (Wuhan) Co., Ltd. Unique No. 11, Zhuankou Development, District of Economic Technological Development Zone, Wuhan City 430056, P.R. China		
	3	TPV Electronics (Fujian) Co., Ltd. Shangzheng, Yuan Hong Road, Fuqing City, Fujian Province, P.R. China		
	4	Envision Industry of Electronic Products Ltd. 895, Joao Marcos Pozzetti Street, Industrial District II, 69.075-215 Manaus, Am, Brazil		
	5	TPV Displays Polska Sp. z o.o. ul. Zlotego Smoka 9, 66-400 Gorzów Wlkp., Poland		
	6	Tatung Czech s.r.o.		
	7	U Nove Hospody 4, 30100 Plzen, Czech Republic Envision Industry of Electronic Products Ltd. Rodovia Anhanguera S/N-KM 49, 13.205-700 Tijuco Preto-Jundiaí-SP-Brazil		
	8	L&T Display Technology (Fujian) Ltd. Optoelectronic Park, Rongqiao Economic and Technological Development Zone, Fuqing, Fujian 350301, P. R. China		
	9	Trend Smart CE Mexico S de RL de CV Avenida Sor Juana Ines de la Cruz de 19602 Nueva Tijuana, 22435 Tijuans Baja California, MEXICO		
	10	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		
	11	Envision Industry of Electronic Products Ltd. Av Torquato Tapajós 7503, Galpão: II Bloco: B – Condomínio de Galpões – Tarumã - Manaus, AM, Brazil		
	12	TPV Technology (Qingdao) Co., Ltd. No.99 Huoju Road, High-tech Industrial Development Zone, Qingdao City, Shandong Province, P.R. China		
	13	TPV Display Technology (China) Co., Ltd No.106 Jinghai 3 Rd., BDA, Beijing City 100176 P.R. China		

Page 6 of 13 Report No.: 17034402 002

#### **General product information:**

Description of change(s):

- 1. Add new mainboard 715G6124 which integrated VGA, DVI, HDMI, earphone out and audio in ports in one board;
- 2. Add another construction for mainboard 715G6124 which is identical with mainboard mentioned above except for additional DISPLAY port and port of external speaker. Construction contains two speakers (4ohm, 3W for each one).
- 3. Delete below factory

TPV Technology (Beijing) Co., Ltd.

No.10 Jiu xian qiao Rd., Chao yang District, Beijing 100016, P.R. China

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

Change	Testing	Comments
1	1.6.2	See table 1.6.2 in bold for mainboard 715G6124 without speakers. As the power consumption measured is lower than mainboard 715G6148, no additional test is required.
2	1.6.2, 2.10.2, 4.2.10, 4.5.2 and 5.3	See table 1.6.2 in bold for mainboard 715G6124 with speakers.
		After the working voltage (2.10.2) remeasured the required distances are not changed, so not required to remeasure the distance on the power board;
		Due to the weight of EUT is slightly increased, the test force applied is higher for test of clause 4.2.10.
3	N/A	See factory list on page 5.

### Definition of variable(s):

Variable:	Range of variable:	Content:
*	can be A-Z, a-z, 0-9, "+", "-", "/", "\" or blank	Represents different enclosure color and sales regions for marketing
		purpose only, no technical difference.

History of amendments and modifications:

Ref. No. 17034402 001, dated 24. Oct., 2013 (original report)

Ref. No. 17034402 002, dated 09. Jan., 2014 (1st modification)

#### Abbreviations used in the report:

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



	Page 7 of 13	Report No.: 17034	1402 002
	IEC 60950-1		
Clause	Requirement + Test	Result - Remark	Verdict
1.6	Power interface		Р
1.6.1	AC power distribution systems	TN power system	Р
1.6.2	Input current	(see appended table 1.6.2)	Р
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. The input neutral and secondary ground were connected during measurement. Pollution Degree 2 and Overvoltage Category II considered.	P
2.10.2.2	RMS working voltage	See table 2.10.2	Р
2.10.2.3	Peak working voltage	See table 2.10.2	Р
4.2	Mechanical strength		P
4.2.10	Wall or ceiling mounted equipment; force (N):	An additional force 139.4N applied downwards through the centre of gravity of the equipment for 1 min after the removal of base (by client's request).  After the test, the equipment was not damaged.  (139.4N = 3 x 4.74 x 9.8N)	P
4.5	The survey we survive we conte		Р
<b>4.5</b> 4.5.1	Thermal requirements  General		-
4.5.1			Р
7.J.Z	Temperature tests  Normal load condition per Annex L:	Equipment loaded with rated output current.	P —
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
5.3	Abnormal operating and fault conditions		Р
5.3.1	Protection against overload and abnormal operation	Ventilation openings blocked, output of power supply board overloaded, no unaccepted overheating of parts (see appended table 5.3)	P
5.3.3	Transformers	(see appended Annex C and table 5.3)	Р
5.3.7	Simulation of faults	(See appended table 5.3.)	Р



## Page 8 of 13

	Page 8 of 13 Report No.: 17034		4402 002				
	IEC 60950-1						
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			



Page 9 of 13

1.6.2 TABLE: electrical data (in normal conditions) P (W) Ifuse (A) U(V) I (A) Irated (A) Fuse # Condition/status Tested with panel M280HKJ (CHIMEI INNOLUX), VGA mode a) Maximum normal load <sup>2.</sup> 90V/50Hz 0.66 35.4 F901 0.66 Maximum normal load 2. 90V/60Hz 0.66 35.2 F901 0.66 Maximum normal load 2. 100V/50Hz 0.61 0.61 1.5 35.1 F901 Maximum normal load 2. 100V/60Hz 0.61 1.5 35.2 F901 0.61 Maximum normal load 2. 240V/50Hz 0.31 1.5 34.9 F901 0.31 Maximum normal load <sup>2.</sup> 240V/60Hz 0.32 1.5 35.3 F901 0.32 Maximum normal load <sup>2.</sup> 264V/50Hz 0.30 35.2 0.30 F901 Maximum normal load 2. 264V/60Hz 0.30 35.1 F901 0.30 Tested with panel M280HKJ (CHIMEI INNOLUX), DVI mode a) Maximum normal load 2. 90V/50Hz 0.67 36.6 F901 0.67 Maximum normal load 2. 90V/60Hz 0.67 36.4 F901 0.67 Maximum normal load 2. 100V/50Hz 0.63 1.5 36.5 F901 0.63 Maximum normal load 2. 100V/60Hz 0.62 1.5 36.2 F901 0.62 Maximum normal load 2. 240V/50Hz 0.32 1.5 36.0 F901 0.32 Maximum normal load 2. 240V/60Hz 0.33 1.5 35.9 F901 0.33 Maximum normal load 2. 264V/50Hz 0.30 --35.7 F901 0.30 264V/60Hz 0.31 F901 0.31 Maximum normal load 2. 35.6 Tested with panel M280HKJ (CHIMEI INNOLUX), HDMI mode a) Maximum normal load 2. 90V/50Hz 0.68 37.9 F901 0.68 Maximum normal load 2. 90V/60Hz 0.67 37.6 F901 0.67 Maximum normal load 2. 100V/50Hz 0.63 1.5 F901 0.63 37.4 Maximum normal load <sup>2.</sup> 100V/60Hz 0.62 1.5 37.7 F901 0.62 Maximum normal load 2. 240V/50Hz 0.33 1.5 F901 0.33 36.9 Maximum normal load 2. 240V/60Hz 0.34 1.5 37.1 F901 0.34 Maximum normal load 2. 264V/50Hz 0.31 37.3 F901 0.31 Maximum normal load 2. 264V/60Hz 0.32 F901 0.32 37.1 Tested with panel M280HKJ (CHIMEI INNOLUX), DISPLAY mode a) Maximum normal load 2. 90V/50Hz 0.67 37.8 F901 0.67 Maximum normal load 2. 90V/60Hz 0.67 37.5 F901 0.67 Maximum normal load 2. 100V/50Hz 0.62 1.5 37.2 F901 0.62 Maximum normal load 2. 100V/60Hz 0.62 1.5 37.1 F901 0.62 Maximum normal load 2. 240V/50Hz 0.33 1.5 36.6 F901 0.33 Maximum normal load 2. 240V/60Hz F901 0.33 1.5 36.9 0.33

Page 10 of 13

Maximum normal load 2. 264V/50Hz 0.30 37.3 F901 0.30 Maximum normal load 2. 264V/60Hz 0.31 37.2 F901 0.31 Tested with panel M280HKJ (CHIMEI INNOLUX), VGA mode b) Maximum normal load <sup>1.</sup> 90V/50Hz 0.51 31.7 F901 0.51 Maximum normal load 1. 90V/60Hz 0.50 31.7 F901 0.50 Maximum normal load 1. 100V/50Hz 0.47 1.5 31.5 F901 0.47 Maximum normal load <sup>1.</sup> 100V/60Hz 0.46 0.46 1.5 31.5 F901 Maximum normal load 1. 240V/50Hz 0.23 1.5 31.0 F901 0.23 Maximum normal load <sup>1.</sup> 240V/60Hz 0.23 0.23 1.5 31.0 F901 Maximum normal load 1. 264V/50Hz 0.22 31.2 F901 0.22 Maximum normal load 1. 264V/60Hz 0.21 31.1 F901 0.21 Tested with panel M280HKJ (CHIMEI INNOLUX), DVI mode b) Maximum normal load <sup>1.</sup> 90V/50Hz 0.52 32.3 F901 0.52 Maximum normal load 1. 90V/60Hz 0.51 32.3 F901 0.51 Maximum normal load 1. 100V/50Hz 0.47 1.5 32.3 F901 0.47 Maximum normal load <sup>1.</sup> 100V/60Hz 0.47 1.5 32.2 F901 0.47 Maximum normal load 1. 240V/50Hz 0.23 1.5 31.7 F901 0.23 Maximum normal load 1. 240V/60Hz 0.23 1.5 31.6 F901 0.23 Maximum normal load <sup>1.</sup> 264V/50Hz 0.22 31.7 F901 0.22 Maximum normal load 1. 264V/60Hz 0.22 31.8 F901 0.22 Tested with panel M280HKJ (CHIMEI INNOLUX), HDMI mode b) Maximum normal load 1. 90V/50Hz 0.52 F901 32.2 0.52 Maximum normal load 1. 90V/60Hz 0.51 32.2 F901 0.51 Maximum normal load 1. 100V/50Hz 0.47 F901 0.47 1.5 32.1 Maximum normal load 1. 100V/60Hz 0.47 1.5 32.0 F901 0.47 Maximum normal load 1. 240V/50Hz 0.24 1.5 31.5 F901 0.24 Maximum normal load <sup>1.</sup> 240V/60Hz 0.23 F901 0.23 1.5 31.5 Maximum normal load 1. 264V/50Hz 0.22 31.6 F901 0.22 Maximum normal load 1. 264V/60Hz 0.22 31.6 F901 0.22 Tested with panel M280HKJ (CHIMEI INNOLUX), VGA mode c) Maximum normal load 1. 90V/50Hz 0.72 F901 39.3 0.72 Maximum normal load 1. 90V/60Hz 0.72 39.3 F901 0.72 --Maximum normal load 1. 100V/50Hz 0.67 1.5 38.8 F901 0.67 Maximum normal load 1. 100V/60Hz 0.67 38.8 F901 1.5 0.67 Maximum normal load 1. 240V/50Hz 0.38 1.5 38.4 F901 0.38 Maximum normal load 1. 240V/60Hz F901 0.38 1.5 38.4 0.38

Page 11 of 13

264V/50Hz	0.36		38.5	F901	0.36	Maximum normal load 1.		
264V/60Hz	0.36		38.5	F901	0.36	Maximum normal load 1.		
Tested with	Tested with panel M280HKJ (CHIMEI INNOLUX), DVI mode c)							
90V/50Hz	0.72		39.0	F901	0.72	Maximum normal load 1.		
90V/60Hz	0.72		39.0	F901	0.72	Maximum normal load 1.		
100V/50Hz	0.66	1.5	38.6	F901	0.66	Maximum normal load 1.		
100V/60Hz	0.66	1.5	38.6	F901	0.66	Maximum normal load 1.		
240V/50Hz	0.38	1.5	38.3	F901	0.38	Maximum normal load 1.		
240V/60Hz	0.38	1.5	38.3	F901	0.38	Maximum normal load 1.		
264V/50Hz	0.35		38.4	F901	0.35	Maximum normal load 1.		
264V/60Hz	0.35		38.4	F901	0.35	Maximum normal load 1.		
						L\		

Supplementary information: <sup>a)</sup> with mainboard 715G6124 with speakers unit, <sup>b)</sup> with mainboard 715G6124 without speakers unit, <sup>c)</sup> with mainboard 715G6148, data from previous CB report 17034402 001.

- 1. Operated under 100% brightness, 100% contrast, full white screen and optimal resolution@60Hz, which consumed maximum output power.
- 2. Operated under 100% brightness, 100% contrast, full white screen and optimal resolution@60Hz, which consumed maximum output power, speakers were loaded with 1KHz sinusoidal signal and turned to maximum volume.
- 3. Panel M280HKJ (CHIMEI INNOLUX) chosen for the tests, due to higher power consumption specified in panel specification than other panels.

2.10.2	Table: working v	oltage measurement	Р		
Location		Peak voltage (V)	RMS voltage (V)	Comments	
T901A: Pin 1 to pin 7,8		352	216		
T901A: Pin	1 to pin 9,10	342	212		
T901A: Pin	1 to pin 11,12	362	214		
T901A: Pin	3 to pin 7,8	436	218		
T901A: Pin	3 to pin 9,10	468	219		
T901A: Pin	3 to pin 11,12	392	217		
T901A: Pin	4 to pin 7,8	376	217		
T901A: Pin	4 to pin 9,10	350	217		
T901A: Pin	4 to pin 11,12	436	218		
T901A: Pin	6 to pin 7,8	484	254		
T901A: Pin	6 to pin 9,10	492	258	Max Vrms & V <sub>I</sub>	oeak
T901A: Pin	6 to pin 11,12	468	240		
IC902 Pin1	-3	352	214		
IC902 Pin1	-4	352	213		
IC902 Pin2	2-3	352	214		
IC902 Pin2	2-4	352	213		

TRF No. IEC60950\_1C



Page 12 of 13

C900 primary pin – secondary pin	342	212	
Note(s): Input Voltage is 240Vac, 5	0Hz		

4.5	TABLE: maximum temperature	es				Р
	test voltage (V)		a) 90V/60I	Hz, b) 264V/	50Hz	_
	t1 (°C)	:				_
	t2 (°C)					
Maximur	n temperature T of part/at:		Т	(°C)	allowed	T <sub>max</sub> (°C)
Tested v	with panel M280HKJ (CHIMEI INN	OLUX), HDMI	mode		_	
Test volta	age		a)	b)		
Line pin	of AC Inlet CN901 (on power board)		31.2	30.4	5	3.2
PCB nea	r NR901 (on power board)		41.2	36.3	8	8.2
C902 bo	dy (on power board)		37.0	34.0	6	8.2
C900 bo	dy (on power board)		35.5	33.8	6	8.2
C908 bo	dy (on power board)		40.9	36.6	6	8.2
L901 coil	(on power board)		51.9	43.5	8	8.2
PCB nea	r BD901 (on power board)		52.1	41.5	8	8.2
C907 bo	dy (on power board)		45.0	40.4	88.2	
PCB nea	r Q901 (on power board)		58.7	58.3	8	8.2
T901A co	oil (on power board)		65.2	65.2	9	3.2
T901A co	ore (on power board)		63.1	63.1	9	3.2
PCB nea	r IC902 (on power board)		58.7	58.3	88.2	
PCB nea	r D901 (on power board)		56.3	58.2	88.2	
PCB nea	r L801 (on power board)		58.9	58.6	88.2	
PCB nea	r U801 (on power board)		52.1	52.3	8	8.2
PCB nea	r U401 ( on main board)		50.6	50.1	88.2	
Panel su	rface		24.2	24.9	7	8.2
Metal			23.8	24.3	5	3.2
Plastic enclosure outside			28.9	29.2	4	3.2
Plastic enclosure inside near T901A			31.4	31.6		
Ambient			23.2	23.2		
Tempera	ature T of winding:	R <sub>1</sub> (Ω)	R <sub>2</sub> (Ω)	T (°C)	Allowed T <sub>max</sub> (°C)	Insulation class

#### Note(s)

<sup>1.</sup> The temperatures were measured under the worst case normal mode defined in 1.2.2.1 and as described in sub-clause 1.6.2 at voltages as described above.

<sup>2.</sup> With a specified ambient temperature of 40°C, and the minimum ambient temperature during test Tam, Temperature is calculated as follows:

Page 13 of 13

Report No.: 17034402 002

Winding components providing safety isolation:

T901A, Class B  $\rightarrow$  T<sub>max</sub> = 120°C - 10°C - 40°C+ 23.2 = 93.2°C.

Components with maximum absolute temperature of others:

Tmax= Tmax of component – 40+Tamb.

5.3	TABLE: Fault condition tests								Р
	Am	Ambient temperature (°C)				See below			_
	Power source for EUT: ManuFacturer, model/type, output rating							_	
Component No.		Fault	Supply voltage (V)	Test time	Fuse #		Fuse current (A)	Observation	
Tested with panel M280HKJ (CHIMEI INNOLUX), DISPLAY mode									
Ventilation openings		block ed	240	4.5hours	F901		0.34	Unit operated normally, no hazards, no damage. After temperature reached stable, max. measured temp. in T901A coil = 67.5°C, T901A core = 65.4°C, IC902 = 60.6°C, ambient = 23.2°C	
Speaker		S-C	240	2hours	F90	1	0.34	No sound ou hazards, no Max. measu T901A coil = T901A core IC902 = 55.9 ambient = 22	damage. red temp. in = 63.1°C, = 61.1°C, 9°C,

### Supplementary information:

- The unit passed 3000V hi-pot test between primary and accessible output connector after single fault test above.
- 2. In fault column, where o-l = overload, s-c = short circuit.
- 3. For fuse opened conditions were tested with each source of fuse.
- Temp. limit of transformer according to table C.1 is  $175^{\circ}$ C 10  $(40^{\circ}$ C 22.9) =  $147.9^{\circ}$ C for Class B.

# **Photo Documentation**

**TÜV**Rheinland®

17034402 002

Report No.:

Page 1 of 4

Product: LCD Monitor

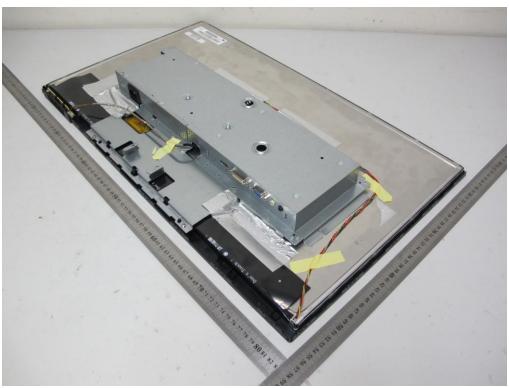
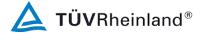


Figure 1 Metal enclosure with mainboard 715G6124 (without speakers)



Figure 2 Metal enclosure with mainboard 715G6124 (with speakers)

## **Photo Documentation**



17034402 002

Report No.:

Page 2 of 4

Product: LCD Monitor



Figure 3 Metal enclosure with mainboard 715G6124 (with speakers)

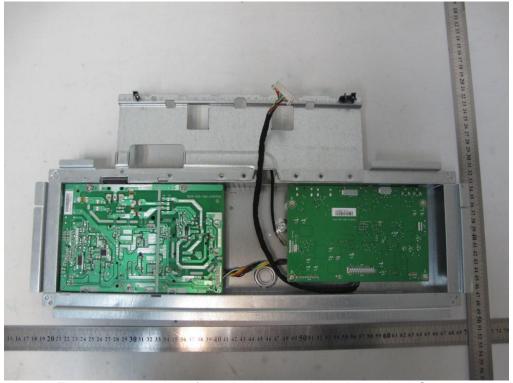


Figure 4 Internal view of metal enclosure with mainboard 715G6124

## **Photo Documentation**



17034402 002

Report No.:

Page 3 of 4

Product: LCD Monitor



Figure 5 Main board 715G6124 without Display port

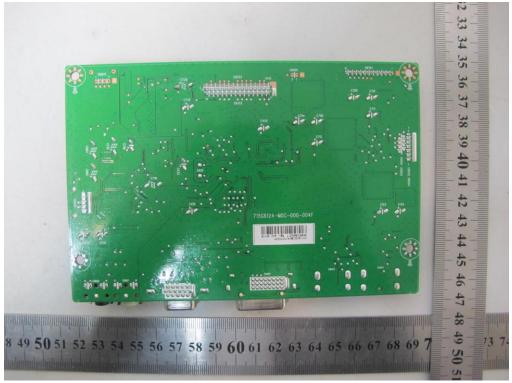


Figure 6 Main board 715G6124 without Display port

## **Photo Documentation**



17034402 002

Report No.:

Page 4 of 4

Product: LCD Monitor



Figure 7 Main board 715G6124 with Display port

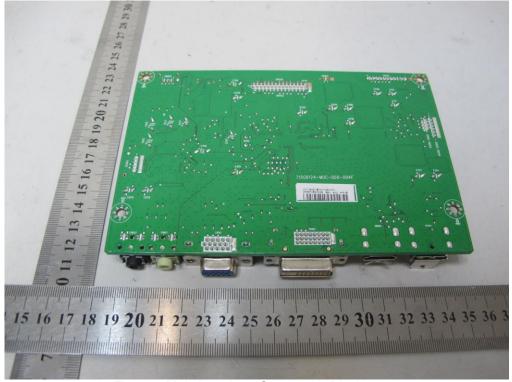


Figure 8 Main board 715G6124 with Display port