Ref. Certif. No.

JPTUV-108750-M1

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

CB TEST CERTIFICATE

Product	LCD monitor
Name and address of the applicant	TPV Electronics (Fujian) Co., Ltd. Rongqiao Economic and Technological Development Zone, Fuqing City, Fujian, P.R. China
Name and address of the manufacturer	TPV Electronics (Fujian) Co., Ltd. Rongqiao Economic and Technological Development Zone, Fuqing City, Fujian, P.R. China
Name and address of the factory	See additional page(s)
Ratings and principal characteristics	I/P: 100-240VAC; 50/60Hz; 1.5A or 2.0A; Class I
Trademark (if any)	AOC
Customer's Testing Facility (CTF) Stage used	N/A
Model / Type Ref.	U34P2*******, Q34P2********, 34P2********, U34E2*******, Q34E2********, 34E2********, C*34E2*********, C34E2********* , C*34P2*********, C34P2*********; U32P2********, Q32P2********, 32P2********, C*32P2*********, Additional models see Page 2 (* can be 0-9, A-Z, a-z, -, \, /, + or blank) For model differences, refer to the test report.
Additional information (if necessary may also be reported on page 2)	Re-issue of JPTUV-108750 dated 15.05.2020, due to first modification.
A sample of the product was tested and found to be in conformity with	IEC 62368-1:2014 See Test Report for National Differences
As shown in the Test Report Ref. No. which forms part of this Certificate	60369700 002

This CB Test Certificate is issued by the National Certification Body

TÜVRheinland®

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Date: 2020-08-10

Signature: Aegean Li

10061 CB 0620v04

1. TPV Display Technology (Wuhan)
   Co., Ltd.
   Unique No. 11, Zhuankou Development
   District of Economic Technological
   Development Zone, 430056 Wuhan City, P.R. China

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

3. L&T Display Technology (Fujian) Ltd.
   Optoelectronic Park, Rongqiao
   Economic and Technological
   Development Zone
   Fuqing, 350301 Fujian, P.R. China

4. TPV Electronics (Fujian) Co., Ltd.
   Rongqiao Economic and
   Technological Development Zone
   Fuqing City
   Fujian, P.R. China

5. 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

6. TPV Display Technology (China) Co., Ltd.
   No. 106 Jinghai 3 Rd.,
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   100176 Beijing
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   Avenida Sor Juana Ines de la Cruz
   de 19602 Nueva Tijuana,
   22435 Tijuana Baja California
   MEXICO

Additional information (if necessary) Report Ref. No. : 60369700 002

Additional models: C32P2*********, U32E2********,
Q32E2********, 32E2********, C*32E2*********,
C32E2*********

Date: 2020-08-10 Signature: Aegean Li

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

9. Envision Indústria de Produtos
Eletrônicos Ltda.
Av. Torquato Tapajós, 2236,
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10. Pro Concept Manufacturer Co., Ltd
88/1 Moo 12, Soi
Phetkasem 120, Phetkasem
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Samutsakhon 74130, Thailand

11. TPV Technology (Thailand) Co., Ltd.
No.267 Mu7,
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Prachin Buri Province
Thailand

12. TPV Electronics (Fujian) Co., Ltd.
Optoelectronic Park,
Rongqiao Economic and
Technological Development Zone,
Fuqing City, 350301 Fujian, P.R. China

13. GeneTouch Corp.
No. 9 Neixi Rd.,
Luzhu Dist., Taoyuan City 33852
Taiwan

Additional information (if necessary) Report Ref. No. : 60369700 002

Date: 2020-08-10 Signature: Aegean Li

Test Report issued under the responsibility of:

TÜVRheinland®

TEST REPORT
IEC 62368-1
Audio/video, information and communication technology equipment
Part 1: Safety requirements

Report Number .....:	60369700 002
Date of issue .....:	2020-Aug-05
Total number of pages .....:	70
Applicant's name.....:	**TPV Electronics (Fujian) Co., Ltd.**
Address .....:	Rongqiao Economic and Technological Development Zone Fuqing City, Fujian, P.R.China
Test specification:	
Standard.....:	IEC 62368-1:2014 (Second Edition)
Test procedure .....:	CB Scheme
Non-standard test method.....:	N/A
Test Report Form No. .....:	IEC62368_1B
Test Report Form(s) Originator.....:	UL(US)
Master TRF .....:	2014-03

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.

General disclaimer:

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 CB Testing Laboratory. The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.

Test Item description ..... :	LCD monitor
Trade Mark ..... :	AOC
Manufacturer ..... :	Same as applicant
Model/Type reference ..... :	U34P2*******, Q34P2********, 34P2********, U34E2*******, Q34E2********, 34E2********, **C*34E2*********, C34E2********* , C*34P2*********, C34P2*********; U32P2********, Q32P2********, 32P2********, C*32P2*********, C32P2*********, U32E2********, Q32E2********, 32E2********, C*32E2*********, C32E2********* (* can be 0-9, A-Z, a-z, –, \, /, + or blank for marketing purpose only, no technical difference.)
Ratings ..... :	I/P: 100-240V~, 50/60Hz, 1.5A or **2.0A**

Testing procedure and testing location:

☒	**CB Testing Laboratory:**	**TÜV Rheinland (Shenzhen) Co., Ltd.**	
Testing location/ address ..... :		1601 R&D Room, 1602-1604, 17-18F, Building 7 Site C, Vanke Cloud City Phase I, Xingke First Street, Xili Street, Xili Community, Nanshan District, Shenzhen 518052, P.R. China	
☐	**Associated CB Testing Laboratory:**		
Testing location/ address ..... :			
Tested by (name + signature) ..... :		Solina Zhao Project Handler	Solina Zhao
Approved by (name + signature) ..... :		Anderson Wang Technical Reviewer	
☐	**Testing procedure: TMP/CTF Stage 1:**		
Testing location/ address ..... :			
Tested by (name + signature) ..... :			
Approved by (name + signature) ..... :			
☐	**Testing procedure: WMT/CTF Stage 2:**		
Testing location/ address ..... :			
Tested by (name + signature) ..... :			
Witnessed by (name + signature) ..... :			
Approved by (name + signature) ..... :			
☐	**Testing procedure: SMT/CTF Stage 3 or 4:**		
Testing location/ address ..... :			
Tested by (name + signature) ..... :			
Witnessed by (name + signature) ..... :			
Approved by (name + signature) ..... :			
Supervised by (name + signature)..... :			

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

- Photo documentation (11 Pages)
- Measurement Section (5 Pages)

Summary of testing:

Tests performed (name of test and test clause):

name of test	test clause number
Classification of electrical energy sources	5.2
Accessibility to electrical energy sources and safeguards (Accessibility test)	5.3.2
Maximum operating temperature test (Heating test)	5.4.1.4, 6.3.2, 9.0, B.2.6
Determination of working voltage	5.4.1.8
Humidity test	5.4.8
Electric strength test	5.4.9
Safeguards against capacitance discharge test	5.5.2.2
Resistance of the protective bonding system (Ground continuity test)	5.6.6.2
Earthed accessible conductive part test	5.7.2.2, 5.7.4
Electrical Power Source (PS) measurements for classification	6.2.2
Stability	8.6
Wall or ceiling mount loading test	8.7
Input test	Annex B.2.5
Simulated abnormal operating and single fault conditions	B.3, B.4
Limited power source test (LPS)	Annex Q.1
Steady force test, 10N, 30N, 250N	Annex T.2, T.3, T.5

Note: The EUT passed the test.

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:

Summary of compliance with National Differences to IEC 62368-1:2014 (Second Edition) and EN 62368-1:2014+ A11: 2017 (for explanation of codes see below):

EU Group Differences, EU Special National Conditions, AU, CA, DE, DK, FI, IT, JP, NO, SE, US

Explanation of used codes: AU=Australia, CA=Canada, DE=Germany, DK=Demark, FI=Finland, IT=Italy, JP=Japan, NO=Norway, SE=Sweden, US=United States of America

The product fulfils the requirements of EN 62368-1:2014+ A11:2017

For National Differences see corresponding Attachment.

For National Differences see corresponding Attachment of original report 60369700 001.

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.

Note: The above labels represent labels for model names other than above covered by the model name.

TEST ITEM PARTICULARS:	
Classification of use by..... :	☒ Ordinary person ☐ Instructed person ☐ Skilled person ☒ Children likely to be present
Supply Connection ..... :	☒ AC Mains ☐ DC Mains ☐ External Circuit - not Mains connected - ☐ ES1 ☐ ES2 ☐ ES3
Supply % Tolerance ..... :	☒ +10%/-10% ☐ +20%/-15% ☐ +____%/ -_____% ☐ None
Supply Connection – Type ..... :	☒ pluggable equipment type A - ☐ non-detachable supply cord ☒ appliance coupler ☐ direct plug-in ☐ mating connector ☐ pluggable equipment type B - ☐ non-detachable supply cord ☐ appliance coupler ☐ permanent connection ☐ mating connector ☐ other:_____
Considered current rating of protective device as part of building or equipment installation..... :	__20__ A; Installation location: ☒ building; ☐ equipment
Equipment mobility..... :	☒ movable ☐ hand-held ☐ transportable ☐ stationary ☐ for building-in ☐ direct plug-in ☐ rack-mounting ☒ wall-mounted
Over voltage category (OVC) ..... :	☐ OVC I ☒ OVC II ☐ OVC III ☐ OVC IV ☐ other: _____
Class of equipment ..... :	☒ Class I ☐ Class II ☐ Class III
Access location ..... :	☐ restricted access location ☒ N/A
Pollution degree (PD) ..... :	☐ PD 1 ☒ PD 2 ☐ PD 3
Manufacturer's specified maxium operating ambient :	__40__ °C
IP protection class ..... :	☒ IPX0 ☐ IP___
Power Systems ..... :	☒ TN ☐ TT ☐ IT - ____ V_{L-L}
Altitude during operation (m) ..... :	☐ 2000 m or less ☒ __5000__ m
Altitude of test laboratory (m) ..... :	☒ 2000 m or less ☐ _____ m
Mass of equipment (kg) ..... :	☒ For 34.0 inch models with base type A: **9.85kg**; For 31.5 inch models with base type A: 9.63kg; Base stand type A: **3.16kg**; type B: 1.48kg.
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)
- test object not yet conducted .....:	N/T
TESTING:	
Date of receipt of test item .....:	02.Jul.2020
Date (s) of performance of tests .....:	08.Jul.2020 - 31.Jul.2020

GENERAL REMARKS:

"(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 4.2.5 of IECEE 02:

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

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

Name and address of factory (ies).....: See original report 60369700 001.

GENERAL PRODUCT INFORMATION:

Product Description –

Description of change(s):

1. Add alternative main board 715G9823 only used with power board 715GB240 for 34.0 inch models.
2. Add new constructions for 34.0 inch models:
   New power board 715GB314 used with new main board 715GB273 and 715GB058, USB board 715GB001 (optional used).
3. Add 31.5 inch models with four alternative constructions. Model names are shown on page 2 and the constructions see below:
   a) Power board 715GB314 and main board 715GA732;
   b) Power board 715GB314, main board 715GA987 and USB board 715GB001 (optional used);
   c) Power board 715GB341, main board 715GB058 and USB board 715GB001 (optional used);
   d) Power board 715GB240 and main board 715G9823.
4. Add input rating current "2.0A" for all models.
5. Add model names for 34.0 inch models, the new models are identical to original 34.0 inch models except for type designation.
6. Add new base stand type B, meanwhile the original base stand is named as type A. Base stand type B is steady and type A can be rotated clockwise and anti-clockwise.
7. Change the weight of 34.0 inch models with base stand type A from "9.34" to "9.85" due to type error. Change the weight of base stand type A from "1.68kg" to "3.16" due to type error.
8. Add new metal enclosure type B and type C, meanwhile the original metal enclosure is named as type A. Type B is identical to type A except for adding numerous circle openings (∅1.7mm). Type C is identical to type A except for adding one rectangle opening on top side.
9. Add Saudi Arabia power cord set information due to client's request.
10. Add source of mylar sheet and change the fire rating from "V-1 or better" to "V-0 or better"due to client's request.

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

Change	Testing	Comments
1.	- Annex B.2.5 Input Test	The power consumption (33.4W) is not higher than that in original report (40.6W). No heater test is required. See following pages for details.
2-3.	- See page 3 for test clauses performed.	See following pages for details.
4.	- Annex B.2.5 Input Test	See page 2 and table B.2 for the details.
5.	- N/A	See page 2 for the details.
6.	- 8.6 Stability test	See clause 8.6 for the details.
7.	- N/A	See page 6 for the details.
8.	- 6.4.8.3.3, 6.4.8.3.4 enclosure openings	After evaluation, the metal enclosure is complied with fire enclosure. No hazardous. See attachment “Measurement Section” for the details.
9-10.	- N/A	See table 4.1.2 for the details.

Model Differences –

Table 1: Definition of variable(s):

Variable:	Range of variable:	Content:
*	0-9, A-Z, a-z, – , \ , / , + or blank	For marketing purpose, no technical difference.

Table 2: construction details

Models	Power board	Main board	USB board
U34P2*******, Q34P2********, 34P2********, U34E2*******, Q34E2********, 34E2********, **C*34E2*********, C34E2********* , C*34P2*********, C34P2*********	715GB321	715GA732	N/A
	715GB240	715G9485 **715G9823**	N/A
	715GB314	**715GB273** **715GB058**	**715GB001**
U32P2******, Q32P2********, 32P2********, C*32P2*********, C32P2*********, U32E2********, Q32E2********, 32E2********, C*32E2*********, C32E2***********	**715GB240**	**715G9823**	N/A
	715GB314	**715GA732**	N/A
		715GA987 **715GB058**	**715GB001**
Note: The USB board and speakers are optional used.			

History of amendments and modifications:

Ref. No. 60369700 001 dated May. 14. 2020 (original test report)
Ref. No. 60369700 002 dated Aug. 05. 2020 (modification)

Additional application considerations –

N/A

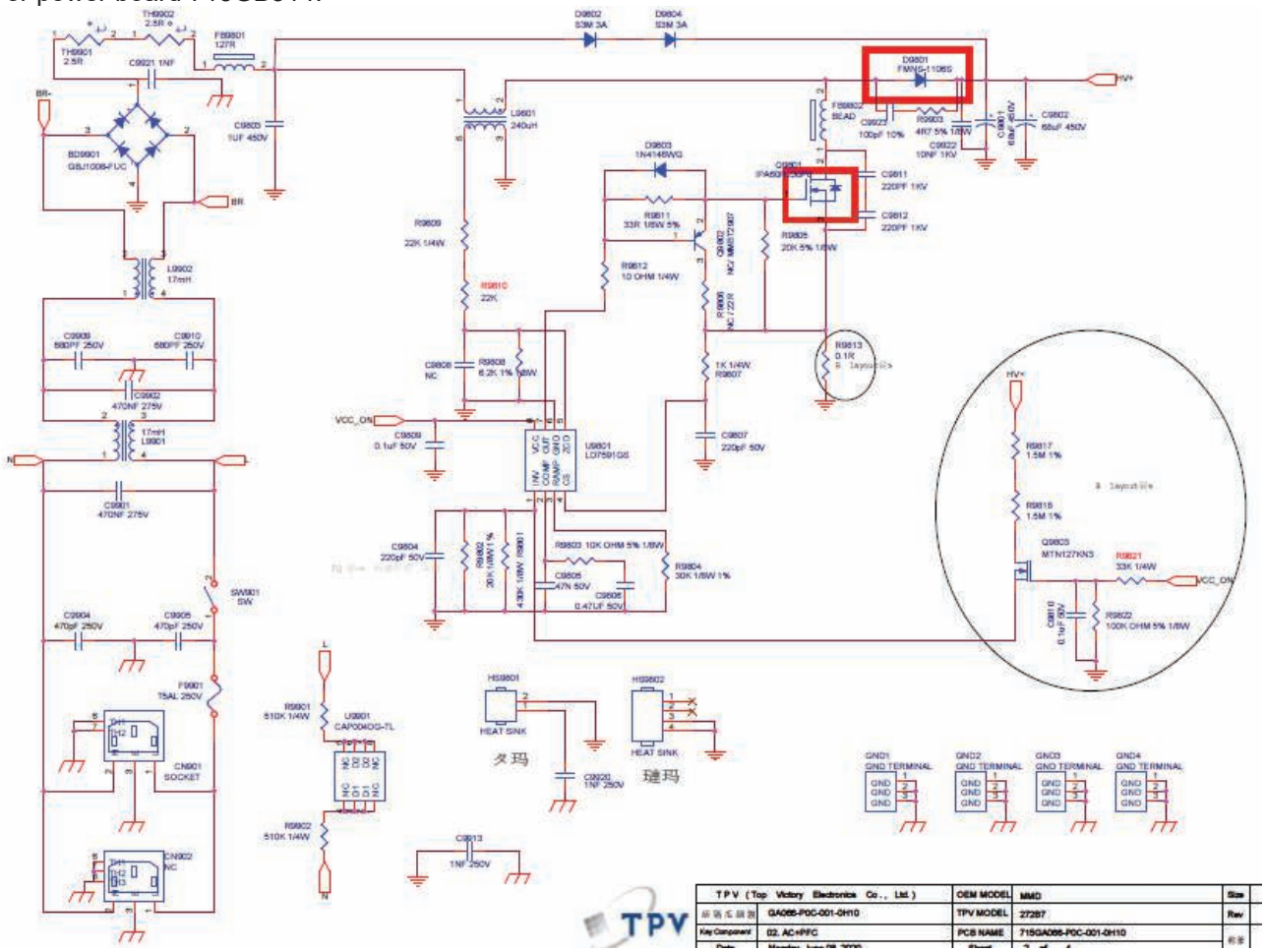
ENERGY SOURCE IDENTIFICATION AND CLASSIFICATION TABLE:	
(Note 1: Identify the following six (6) energy source forms based on the origin of the energy.) (Note 2: The identified classification e.g., ES2, TS1, should be with respect to its ability to cause pain or injury on the body or its ability to ignite a combustible material. Any energy source can be declared Class 3 as a worse case classification e.g. PS3, ES3.	
Electrically-caused injury (Clause 5): (Note: Identify type of source, list sub-assembly or circuit designation and corresponding energy source classification) Example: +5 V dc input ES1	
Source of electrical energy	**Corresponding classification (ES)**
L/N pin of appliance inlet	ES3
Primary circuit	ES3
+20V output of SPS	ES1
Electrically-caused fire (Clause 6): (Note: List sub-assembly or circuit designation and corresponding energy source classification) Example: Battery pack (maximum 85 watts): PS2	
Source of power or PIS	**Corresponding classification (PS)**
All circuit on power board	PS3
+20V output of SPS	PS2
Injury caused by hazardous substances (Clause 7) (Note: Specify hazardous chemicals, whether produces ozone or other chemical construction not addressed as part of the component evaluation.) Example: Liquid in filled component Glycol	
Source of hazardous substances	**Corresponding chemical**
N/A	N/A
Mechanically-caused injury (Clause 8) (Note: List moving part(s), fan, special installations, etc. & corresponding MS classification based on Table 35.) Example: Wall mount unit MS2	
Source of kinetic/mechanical energy	**Corresponding classification (MS)**
Sharp edges and corners	MS1
Equipment mass	MS2
Wall mount	MS3
Thermal burn injury (Clause 9) (Note: Identify the surface or support, and corresponding energy source classification based on type of part, location, operating temperature and contact time in Table 38.) Example: Hand-held scanner – thermoplastic enclosure TS1	
Source of thermal energy	**Corresponding classification (TS)**
Accessible parts	TS1
Radiation (Clause 10) (Note: List the types of radiation present in the product and the corresponding energy source classification.) Example: DVD – Class 1 Laser Product RS1	
Type of radiation	**Corresponding classification (RS)**
Indicating lights	RS1
LED backlight of LCD panel	RS1

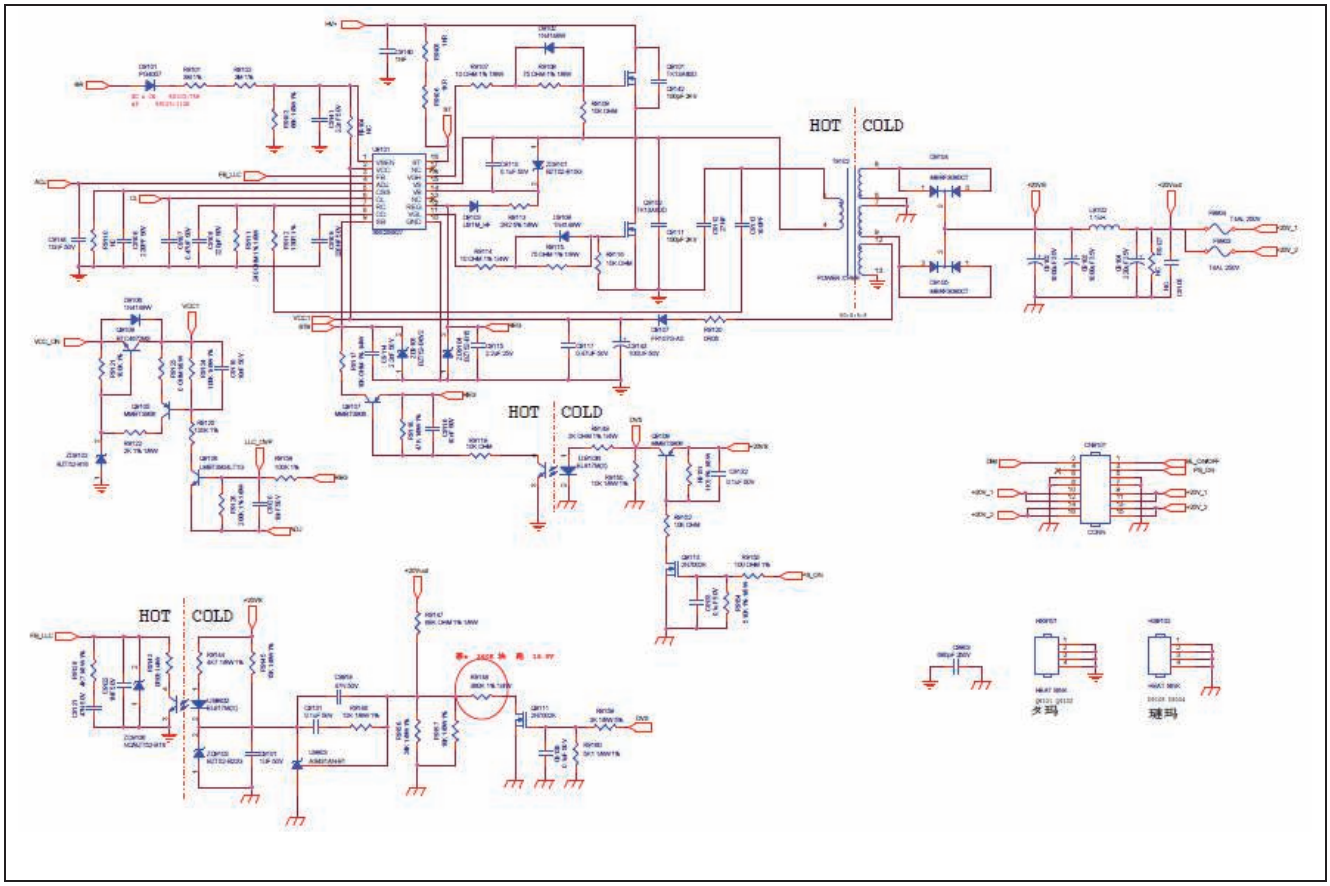
ENERGY SOURCE DIAGRAM

Indicate which energy sources are included in the energy source diagram. Insert diagram below

ES3, ES1 (See Source of electrical energy for the details),
PS3, PS2 (See Source of power or PIS for the details)

For power board 715GB314:





OVERVIEW OF EMPLOYED SAFEGUARDS				
Clause	**Possible Hazard**			
5.1	Electrically-caused injury			
Body Part (e.g. Ordinary)	Energy Source (ES3: Primary Filter circuit)	Safeguards		
		Basic	Supplementary	Reinforced (Enclosure)
Ordinary	ES3: L/N pin of appliance inlet	--	--	Bleeder Resistors, Discharge IC
Ordinary	ES3: Primary circuit	--	--	Transformers, Y-caps, Photo Couplers
Ordinary	ES1: +20V output of SPS	N/A	N/A	N/A
6.1	Electrically-caused fire			
Material part (e.g. mouse enclosure)	Energy Source (PS2: 100 Watt circuit)	Safeguards		
		Basic	Supplementary	Reinforced
Combustible materials inside primary circuit	PS3	Ignition not occur	Fire enclosure	--
Combustible materials supplied by +20V output of SPS	PS2	Ignition not occur	Mounted on V-1 min. PCB	--
7.1	Injury caused by hazardous substances			
Body Part	Energy Source	Safeguards		

(e.g., skilled)	(hazardous material)	Basic	Supplementary	Reinforced
N/A	N/A	N/A	N/A	N/A
8.1	Mechanically-caused injury			
Body Part (e.g. Ordinary)	Energy Source (MS3: High Pressure Lamp)	Safeguards		
		Basic	Supplementary	Reinforced (Enclosure)
Ordinary	MS3: Wall mount	--	--	Compliance with test 8.7.2
Ordinary	MS2: Equipment mass	Compliance with test 8.6.4 and 8.6.5	N/A	N/A
9.1	Thermal Burn			
Body Part (e.g., Ordinary)	Energy Source (TS2)	Safeguards		
		Basic	Supplementary	Reinforced
Ordinary	TS1: Accessible parts	N/A	N/A	N/A
10.1	Radiation			
Body Part (e.g., Ordinary)	Energy Source (Output from audio port)	Safeguards		
		Basic	Supplementary	Reinforced
Ordinary	RS1: Indicating lights	N/A	N/A	N/A
Ordinary	RS1: LED backlight of LCD panel	N/A	N/A	N/A
Supplementary information: (1) See attached energy source diagram for additional details. (2) “N” – Normal Condition; “A” – Abnormal Condition; “S” Single Fault				

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
4	**GENERAL REQUIREMENTS**		P
4.1.1	Acceptance of materials, components and subassemblies	See appended table 4.1.2.	P
4.1.2	Use of components	Components which are certified to IEC and/or national standards are used correctly within their ratings. Components not covered by IEC standards are tested under the conditions present in the equipment.	P
4.4.4	Safeguard robustness	For adhesives securing parts serving as safeguards, see Annex P.4. Others see below.	P
4.4.4.2	Steady force tests .....:	See Annex T.	P
4.6	Fixing of conductors	See below.	P
4.6.1	Fix conductors not to defeat a safeguard		P
4.6.2	10 N force test applied to .....:	See appended table 5.4.2.2, 5.4.2.4 and 5.4.3	P
4.9	Likelihood of fire or shock due to entry of conductive object .....:	Complied.	P
5	**ELECTRICALLY-CAUSED INJURY**		P
5.2.1	Electrical energy source classifications .....:	See ENERGY SOURCE IDENTIFICATION AND CLASSIFICATION TABLE.	P
5.2.2	ES1, ES2 and ES3 limits	See below.	P
5.2.2.2	Steady-state voltage and current.....:	(See appended table 5.2)	P
5.2.2.3	Capacitance limits .....:	(See appended table 5.2)	P
5.3	Protection against electrical energy sources	See below.	P
5.3.1	General Requirements for accessible parts to ordinary, instructed and skilled persons	See “OVERVIEW OF EMPLOYED SAFEGUARDS” table.	P
5.3.2.1	Accessibility to electrical energy sources and safeguards	ES2 or ES3 source cannot access by ordinary persons and ES3 source cannot accessed by instructed persons. Double or reinforced safeguard is provided between ES2 or ES3 and ordinary persons or instructed persons.	P
5.3.2.2	Contact requirements	See above.	P
	a) Test with test probe from Annex V .....:	Test probe V.1, V.2 applied.	P
	b) Electric strength test potential (V) .....:		N/A

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
	c) Air gap (mm) ..... :	Complied with the minimum distance requirement. (See appended table 5.4.2.2, 5.4.2.4 and 5.4.3.)	P
5.3.2.4	Terminals for connecting stripped wire	No such terminals.	N/A
5.4	Insulation materials and requirements		P
5.4.1.2	Properties of insulating material	Hygroscopic materials are not used for insulating material.	P
5.4.1.3	Humidity conditioning ..... :	(See sub-clause 5.4.8)	P
5.4.1.4	Maximum operating temperature for insulating materials ..... :	(See appended table 5.4.1.4)	P
5.4.1.5	Pollution degree ..... :	Pollution degree 2.	—
5.4.1.5.2	Test for pollution degree 1 environment and for an insulating compound		N/A
5.4.1.5.3	Thermal cycling		N/A
5.4.1.6	Insulation in transformers with varying dimensions		N/A
5.4.1.7	Insulation in circuits generating starting pulses		N/A
5.4.1.8	Determination of working voltage	Max. Vpeak of T9102 = 441V Max. Vrms of T9102 = 268V	P
5.4.1.9	Insulating surfaces	Considered.	P
5.4.1.10	Thermoplastic parts on which conductive metallic parts are directly mounted	Bobbin materials of all transformers T9102 is Phenolic that is accepted without further tests. Others see appended table 5.4.1.10.3.	P
5.4.2	Clearances	See below.	P
5.4.2.2	Determining clearance using peak working voltage	(See appended table 5.4.2.2, 5.4.2.4 and 5.4.3)	P
5.4.2.3	Determining clearance using required withstand voltage ..... :	(See appended table 5.4.2.3)	P
	a) a.c. mains transient voltage ..... :	2500V	—
	b) d.c. mains transient voltage ..... :		—
	c) external circuit transient voltage ..... :		—
	d) transient voltage determined by measurement ... :		—
5.4.2.4	Determining the adequacy of a clearance using an electric strength test		N/A
5.4.2.5	Multiplication factors for clearances and test voltages ..... :	Multiplication factor is 1.48 for altitude up to 5000m.	P
5.4.3	Creepage distances ..... :	(See appended table 5.4.2.2, 5.4.2.4 and 5.4.3)	P
5.4.3.1	General	See below.	P
5.4.3.3	Material Group ..... :	Material group IIIb assumed.	—
5.4.4	Solid insulation	See below.	P

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
5.4.4.2	Minimum distance through insulation .....:	No such component.	N/A
5.4.4.3	Insulation compound forming solid insulation	Alternative by 5.4.4.4.	N/A
5.4.4.4	Solid insulation in semiconductor devices	See above	P
5.4.4.5	Cemented joints		N/A
5.4.4.6	Thin sheet material	See below.	P
5.4.4.6.1	General requirements	See below.	P
5.4.4.6.2	Separable thin sheet material	(See appended Table 5.4.9)	P
	Number of layers (pcs) .....:	2	P
5.4.4.6.3	Non-separable thin sheet material		N/A
5.4.4.6.4	Standard test procedure for non-separable thin sheet material .....:		N/A
5.4.4.6.5	Mandrel test		N/A
5.4.4.7	Solid insulation in wound components	See Annex G.5	P
5.4.4.9	Solid insulation at frequencies >30 kHz .....:	(See appended Table 5.4.4.9) or (See appended Table 5.4.9)	P
5.4.8	Humidity conditioning	Complied.	P
	Relative humidity (%).....:	95	—
	Temperature (°C) .....:	40	—
	Duration (h) .....:	120	—
5.4.9	Electric strength test .....:	(See appended table 5.4.9)	P
5.4.9.1	Test procedure for a solid insulation type test	Method 1 is chose.	P
5.4.9.2	Test procedure for routine tests		N/A
5.5	Components as safeguards		P
5.5.1	General		P
5.5.2	Capacitors and RC units		P
5.5.2.1	General requirement	X-Cap. and Y-Cap. are IEC 60384-14 approval components and complied with Annex G.11.	P
5.5.2.2	Safeguards against capacitor discharge after disconnection of a connector.....:	See below.	N/A
5.5.3	Transformers	(See Annex G.5.3)	P
5.5.4	Optocouplers	(See sub-clause 5.4)	P
5.5.5	Relays		N/A
5.5.6	Resistors	Approved bleeding resistors used. (See Annex G.10)	P
5.6	Protective conductor		P
5.6.2	Requirement for protective conductors	Protective conductor served as a supplementary safeguard to prevent accessible conductive parts from exceeding ES2 limits.	P

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Clause	Requirement + Test	Result - Remark	Verdict
5.6.2.1	General requirements	No switch or overcurrent protective device in protective conductor.	P
5.6.2.2	Colour of insulation	No green-and-yellow wire used.	N/A
5.6.3	Requirement for protective earthing conductors		P
	Protective earthing conductor size (mm^2) .....:	Complied with table G.5	—
5.6.4	Requirement for protective bonding conductors	See below.	P
5.6.4.1	Protective bonding conductors	Protective bonding traces complied with Table G.5 and table 32..	P
	Protective bonding conductor size (mm^2). .....:	See above.	—
	Protective current rating (A) ..... :	20A	—
5.6.4.3	Current limiting and overcurrent protective devices		N/A
5.6.5	Terminals for protective conductors		P
5.6.5.1	Requirement	Screws fixing earthed PCB trace to metal chassis for protective bonding. Size of screws is according with Table 32.	P
	Conductor size (mm^2), nominal thread diameter (mm). .....:	3.7 mm	P
5.6.5.2	Corrosion	Complied.	P
5.6.6	Resistance of the protective system	See below.	P
5.6.6.1	Requirements	See below.	P
5.6.6.2	Test Method Resistance (Ω).....:	(See appended table 5.6.6.2)	P
5.6.7	Reliable earthing		N/A
5.7	Prospective touch voltage, touch current and protective conductor current		P
5.7.2	Measuring devices and networks	Figure 5 of IEC 60990 was used in determining of the limit of ES2.	P
5.7.2.1	Measurement of touch current .....:	(See appended table 5.7.2.2, 5.7.4)	P
5.7.2.2	Measurement of prospective touch voltage	(See appended table 5.7.2.2, 5.7.4)	P
5.7.3	Equipment set-up, supply connections and earth connections	Clause 4, 5.3 and 5.4 of IEC 60990: 1999 applied.	P
	System of interconnected equipment (separate connections/single connection) .....:	Single equipment.	—
	Multiple connections to mains (one connection at a time/simultaneous connections) .....:	Single connection.	—
5.7.4	Earthed conductive accessible parts.....:	(See appended Table 5.7.4)	P
5.7.5	Protective conductor current	Protective conductor current does not exceed the ES2 limits.	P
	Supply Voltage (V).....:	240	—
	Measured current (mA).....:	0.32 (tested with normal, abnormal and single-fault condition, and maximum value was recorded.)	—

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Clause	Requirement + Test	Result - Remark	Verdict
	Instructional Safeguard.....:		N/A

6	**ELECTRICALLY- CAUSED FIRE**		P
6.2	Classification of power sources (PS) and potential ignition sources (PIS)		P
6.2.2	Power source circuit classifications	See ENERGY SOURCE IDENTIFICATION AND CLASSIFICATION TABLE.	P
6.2.2.1	General		P
6.2.2.2	Power measurement for worst-case load fault ... :	(See appended table 6.2.2)	P
6.2.2.3	Power measurement for worst-case power source fault .....:	(See appended table 6.2.2)	P
6.2.2.4	PS1 .....:	(See appended table 6.2.2)	N/A
6.2.2.5	PS2 .....:	(See appended table 6.2.2)	P
6.2.2.6	PS3 .....:	(See appended table 6.2.2)	P
6.2.3	Classification of potential ignition sources		P
6.2.3.1	Arcing PIS .....:	All components located within the equipment are considered as arcing PIS.	P
6.2.3.2	Resistive PIS .....:	All components located within the equipment are considered as resistive PIS.	P
6.3	Safeguards against fire under normal operating and abnormal operating conditions		P
6.3.1 (a)	No ignition and attainable temperature value less than 90 % defined by ISO 871 or less than 300 °C for unknown materials .....:	(See appended table 5.4.1.5, 6.3.2, 9.0, B.2.6)	P
6.3.1 (b)	Combustible materials outside fire enclosure	(See appended table 5.4.1.5, 6.3.2, 9.0, B.2.6)	P
6.4	Safeguards against fire under single fault conditions		P
6.4.1	Safeguard Method	The method “Control fire spread” is selected.	P
6.4.4	Control of fire spread in PS1 circuits		N/A
6.4.5	Control of fire spread in PS2 circuits	See below.	P
6.4.5.2	Supplementary safeguards .....:	- All components in a PS2 are mounted on V-1 class material of printed boards and comply with the requirements of the relevant IEC components standard. - Certified wire insulation is used.	P
6.4.6	Control of fire spread in PS3 circuit	Providing fire enclosure for PS3 circuit.	P
6.4.7	Separation of combustible materials from a PIS	Providing fire enclosure for PS3 circuit.	N/A
6.4.7.1	General .....:		NA
6.4.7.2	Separation by distance		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
6.4.7.3	Separation by a fire barrier		N/A
6.4.8	Fire enclosures and fire barriers	See below.	P
6.4.8.1	Fire enclosure and fire barrier material properties		P
6.4.8.2.1	Requirements for a fire barrier		N/A
6.4.8.2.2	Requirements for a fire enclosure	Metal enclosure as fire enclosure.	N/A
6.4.8.3	Constructional requirements for a fire enclosure and a fire barrier	See below.	P
6.4.8.3.1	Fire enclosure and fire barrier openings		P
6.4.8.3.2	Fire barrier dimensions		N/A
6.4.8.3.3	Top Openings in Fire Enclosure: dimensions (mm) .....:	See attachment: Measurement Section for the details.	P
	Needle Flame test		N/A
6.4.8.3.4	Bottom Openings in Fire Enclosure, condition met a), b) and/or c) dimensions (mm) .....:	See attachment: Measurement Section for the details.	P
	Flammability tests for the bottom of a fire enclosure .....:		N/A
6.4.8.3.5	Integrity of the fire enclosure, condition met: a), b) or c) .....:	No door or cover in fire enclosure	N/A
6.4.8.4	Separation of PIS from fire enclosure and fire barrier distance (mm) or flammability rating ..... :	Metal enclosure used as fire enclosure.	P
6.5	Internal and external wiring		P
6.5.1	Requirements	Internal or external wiring materials are compliant with IEC 60950-1 according to Sub-clause 4.1.1. Furthermore, the test method described in IEC 60695-11-21 is considered equivalent to that test wiring materials for VW-1. All internal wiring are using VW-1 material.	P
6.5.2	Cross-sectional area (mm^2) .....:	See above.	—
6.5.3	Requirements for interconnection to building wiring .....:		N/A
6.6	Safeguards against fire due to connection to additional equipment	The connections to additional equipment are supplied by LPS.	P
	External port limited to PS2 or complies with Clause Q.1	(See appended table Annex Q.1)	P

8	**MECHANICALLY-CAUSED INJURY**		P
8.1	General		P
8.2	Mechanical energy source classifications	See ENERGY SOURCE IDENTIFICATION AND CLASSIFICATION TABLE.	P

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Clause	Requirement + Test	Result - Remark	Verdict
8.3	Safeguards against mechanical energy sources	See “OVERVIEW OF EMPLOYED SAFEGUARDS” table.	P
8.4	Safeguards against parts with sharp edges and corners	No sharp edges and corners in accessible area.	P
8.6.2	Static stability	MS2 equipment.	P
8.6.2.2	Static stability test	Unit did not fall over when tilted to an angle of 10° from its normal upright position.	P
	Applied Force .....:	See above.	—
8.6.4	Glass slide test	The equipment does not tip over during the test.	P
8.6.5	Horizontal force test (Applied Force).....:	The equipment does not tip over during the test.	P
	Position of feet or movable parts .....:		—
8.7	Equipment mounted to wall or ceiling		P
8.7.1	Mounting Means (Length of screws (mm) and mounting surface) .....:	See below	P
8.7.2	Direction and applied force .....:	Test 2: 6.47kg (for 31.5 inch models) applied for each point (four directions plus inward and outward). Test 3: 2.5Nm applied.	P
9	**THERMAL BURN INJURY**		P
9.2	Thermal energy source classifications	See ENERGY SOURCE IDENTIFICATION AND CLASSIFICATION TABLE.	P
9.3	Safeguard against thermal energy sources	No safeguards are required for TS1.	N/A
9.4	Requirements for safeguards		N/A
9.4.1	Equipment safeguard		N/A
9.4.2	Instructional safeguard .....:		N/A
B	**NORMAL OPERATING CONDITION TESTS, ABNORMAL OPERATING CONDITION TESTS AND SINGLE FAULT CONDITION TESTS**		P
B.2	Normal Operating Conditions	See below	P
B.2.1	General requirements.....:	(See Test Item Particulars and appended test tables)	P
	Audio Amplifiers and equipment with audio amplifiers .....:	No such equipment.	N/A
B.2.3	Supply voltage and tolerances	Considered	P
B.2.5	Input test.....:	(See appended table B.2.5)	P
B.3	Simulated abnormal operating conditions		P

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Clause	Requirement + Test	Result - Remark	Verdict
B.3.1	General requirements..... :	(See appended table B.3)	P
B.3.2	Covering of ventilation openings	(See appended table B.3)	P
B.3.3	D.C. mains polarity test		N/A
B.3.4	Setting of voltage selector ..... :		N/A
B.3.5	Maximum load at output terminals ..... :	(See appended table B.3)	P
B.3.6	Reverse battery polarity		N/A
B.3.7	Abnormal operating conditions as specified in Clause E.2.	(See appended table B.3)	P
B.3.8	Safeguards functional during and after abnormal operating conditions	Abnormal operating condition does not lead to a single fault condition, all safeguards remain effective. After restoration of normal operating conditions, all safeguards comply with applicable requirements.	P
B.4	Simulated single fault conditions		P
B.4.2	Temperature controlling device open or short-circuited ..... :	No such devices.	N/A
B.4.3	Motor tests		N/A
B.4.3.1	Motor blocked or rotor locked increasing the internal ambient temperature ..... :		N/A
B.4.4	Short circuit of functional insulation	For traces before fuse, comply with the clearance/creepage for basic insulation, others are considered to perform short-circuited during the tests.	P
B.4.4.1	Short circuit of clearances for functional insulation	See above.	P
B.4.4.2	Short circuit of creepage distances for functional insulation	See above.	P
B.4.4.3	Short circuit of functional insulation on coated printed boards		N/A
B.4.5	Short circuit and interruption of electrodes in tubes and semiconductors		P
B.4.6	Short circuit or disconnect of passive components		P
B.4.7	Continuous operation of components		N/A
B.4.8	Class 1 and Class 2 energy sources within limits during and after single fault conditions		P
B.4.9	Battery charging under single fault conditions.... :		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
F	**EQUIPMENT MARKINGS, INSTRUCTIONS, AND INSTRUCTIONAL SAFEGUARDS**		P
F.3.5.3	Replacement fuse identification and rating markings ..... :	Fuses are not replaceable by ordinary person, the marking is adjacent to the fuse. On power board 715GB314 Build-in fuse F9901 (on primary): T5AL/250Vac. F801, F9903, F9904(on secondary for LPS): T4AL/250Vac	P
F.3.5.5	Terminal marking location		P
F.3.6	Equipment markings related to equipment classification		P
F.3.6.1	Class I Equipment	See below.	P
F.3.6.1.1	Protective earthing conductor terminal	Appliance inlet is provided. The symbol IEC 60417-5019 was located on appliance inlet.	P
G	**COMPONENTS**		P
G.1	**Switches**		P
G.1.1	General requirements	Approved switch used.	P
G.1.2	Ratings, endurance, spacing, maximum load		N/A
G.3	**Protection Devices**		P
G.3.1	Thermal cut-offs		N/A
G.3.1.1a) &b)	Thermal cut-outs separately approved according to IEC 60730 with conditions indicated in a) & b)		N/A
G.3.1.1c)	Thermal cut-outs tested as part of the equipment as indicated in c)		N/A
G.3.1.2	Thermal cut-off connections maintained and secure		N/A
G.3.2	Thermal links		N/A
G.3.2.1a)	Thermal links separately tested with IEC 60691		N/A
G.3.2.1b)	Thermal links tested as part of the equipment		N/A
	Aging hours (H) ..... :		—
	Single Fault Condition ..... :		—
	Test Voltage (V) and Insulation Resistance (Ω) . :		—
G.3.3	PTC Thermistors		N/A
G.3.4	Overcurrent protection devices	Current fuse complying with IEC 60127 as overcurrent protection device.	P
G.3.5	Safeguards components not mentioned in G.3.1 to G.3.5		N/A
G.3.5.1	Non-resettable devices suitably rated and marking provided		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
G.3.5.2	Single faults conditions..... :		N/A
G.4	**Connectors**		P
G.4.1	Spacings	The appliance inlet complied with IEC 60320-1.	P
G.4.2	Mains connector configuration .....:	The appliance inlet complied with IEC 60320-1.	P
G.4.3	Plug is shaped that insertion into mains socket-outlets or appliance coupler is unlikely	No misconnection likely.	P
G.5	**Wound Components**		P
G.5.1	Wire insulation in wound components.....	Approved triple insulated wire used for winding of T9102.	P
G.5.1.2 a)	Two wires in contact inside wound component, angle between 45° and 90°	Physical separation provided by insulation tape or tube to relieve mechanical stress at the crossover point.	P
G.5.1.2 b)	Construction subject to routine testing		N/A
G.5.2	Endurance test on wound components		N/A
G.5.2.1	General test requirements		N/A
G.5.2.2	Heat run test		N/A
	Time (s).....:		—
	Temperature (°C).....:		—
G.5.2.3	Wound Components supplied by mains		N/A
G.5.3	**Transformers**		P
G.5.3.1	Requirements applied (IEC61204-7, IEC61558-1/-2, and/or IEC62368-1).....:	Meet the requirements in G.5.3.2 and G.5.3.3.	P
	Position.....:	T901	—
	Method of protection .....:	Overcurrent protection.	—
G.5.3.2	Insulation	See attachment Transformer table.	P
	Protection from displacement of windings.....:	Displacement of windings is unlikely.	—
G.5.3.3	Overload test ..... :	(See appended table B.3 & B.4)	P
G.5.3.3.1	Test conditions	Tested in the complete equipment.	P
G.5.3.3.2	Winding Temperatures testing in the unit	(See appended table B.3 & B.4)	P
G.5.3.3.3	Winding Temperatures - Alternative test method		N/A
G.6	**Wire Insulation**		P
G.6.1	General		P
G.6.2	Solvent-based enamel wiring insulation		N/A
G.10	**Resistors**		P
G.10.1	General requirements	Approved bleeding resistors used. (See appended table 4.1.2)	P
G.10.2	Resistor test		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
G.10.3	Test for resistors serving as safeguards between the mains and an external circuit consisting of a coaxial cable		N/A
G.10.3.1	General requirements		N/A
G.10.3.2	Voltage surge test		N/A
G.10.3.3	Impulse test		N/A
G.11	**Capacitor and RC units**		P
G.11.1	General requirements	X-Capacitors and Y-Capacitors used as safeguard and complied with IEC/EN 60384-14. (See appended table 4.1.2)	P
G.11.2	Conditioning of capacitors and RC units	At least 21 days at 40 ± 2°C and 93±3% RH.	P
G.11.3	Rules for selecting capacitors	The selection followed with tables G.9 and G.12.	P
G.12	**Optocouplers**		P
	Optocouplers comply with IEC 60747-5-5:2007 Spacing or Electric Strength Test (specify option and test results) ..... :	Approved components used.	P
	Type test voltage Vini .....:		—
	Routine test voltage, Vini,b .....:		—
G.13	**Printed boards**		P
G.13.1	General requirements	See below.	P
G.13.2	Uncoated printed boards	(see appended table 5.4.2.2, 5.4.2.4 and 5.4.3)	P
G.13.3	Coated printed boards		N/A
G.13.4	Insulation between conductors on the same inner surface		N/A
	Compliance with cemented joint requirements (Specify construction) .....:		—
G.13.5	Insulation between conductors on different surfaces		N/A
	Distance through insulation ..... :		N/A
	Number of insulation layers (pcs) .....:		—
G.13.6	Tests on coated printed boards		N/A
G.13.6.1	Sample preparation and preliminary inspection		N/A
G.13.6.2a)	Thermal conditioning		N/A
G.13.6.2b)	Electric strength test		N/A
G.13.6.2c)	Abrasion resistance test		N/A
G.16	**IC including capacitor discharge function (ICX)**		P
a)	Humidity treatment in accordance with sc5.4.8 – 120 hours	Approved discharge IC used.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
b)	Impulse test using circuit 2 with Uc = to transient voltage .....:		N/A
C1)	Application of ac voltage at 110% of rated voltage for 2.5 minutes		N/A
C2)	Test voltage .....:		—
D1)	10,000 cycles on and off using capacitor with smallest capacitance resistor with largest resistance specified by manufacturer		N/A
D2)	Capacitance .....:		—
D3)	Resistance .....:		—
J	**INSULATED WINDING WIRES FOR USE WITHOUT INTERLEAVED INSULATION**		P
	General requirements	Triple insulated wire used in transformer (T9102) was separately approved.	P
L	**DISCONNECT DEVICES**		P
L.1	General requirements	Appliance Inlet as disconnect device.	P
L.2	Permanently connected equipment		N/A
L.3	Parts that remain energized	When the power cord is removed from the inlet no remaining parts with hazardous voltage in the equipment.	P
L.4	Single phase equipment	The disconnect device disconnects both poles simultaneously.	P
L.5	Three-phase equipment		N/A
L.6	Switches as disconnect devices		N/A
L.7	Plugs as disconnect devices		N/A
L.8	Multiple power sources		N/A
O	**MEASUREMENT OF CREEPAGE DISTANCES AND CLEARANCES**		P
	Figures O.1 to O.20 of this Annex applied .....:	Considered	—
P	**SAFEGUARDS AGAINST ENTRY OF FOREIGN OBJECTS AND SPILLAGE OF INTERNAL LIQUIDS**		P
P.1	General requirements	See below.	P
P.2.2	Safeguards against entry of foreign object	Internal metal chassis are provided as internal barrier.	P
	Location and Dimensions (mm) .....:	See attachment: Measurement Section for the details.	—
P.2.3	Safeguard against the consequences of entry of foreign object	See above.	P
P.2.3.1	Safeguards against the entry of a foreign object		P
	Openings in transportable equipment		N/A
	Transportable equipment with metalized plastic parts.....:		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
P.2.3.2	Openings in transportable equipment in relation to metallized parts of a barrier or enclosure (identification of supplementary safeguard) .....:		N/A
P.3	Safeguards against spillage of internal liquids		N/A
P.3.1	General requirements		N/A
P.3.2	Determination of spillage consequences		N/A
P.3.3	Spillage safeguards		N/A
P.3.4	Safeguards effectiveness		N/A
P.4	Metallized coatings and adhesive securing parts	Ripple Capacitor (C9801, C9802) are considered as safeguard; Adhesive for Mylar sheet is considered as safeguard.	P
P.4.2 a)	Conditioning testing		N/A
	Tc (°C) .....:	100	—
	Tr (°C).....:	100	—
	Ta (°C).....:	70.0	—
P.4.2 b)	Abrasion testing .....:		N/A
P.4.2 c)	Mechanical strength testing .....:	After test mentioned above, all safeguards remain effective.	P
Q	**CIRCUITS INTENDED FOR INTERCONNECTION WITH BUILDING WIRING**		P
Q.1	Limited power sources		P
Q.1.1 a)	Inherently limited output	(See appended table Annex Q.1)	P
Q.1.1 b)	Impedance limited output		N/A
	- Regulating network limited output under normal operating and simulated single fault condition	All data ports of main board applied. (See appended table Annex Q.1)	P
Q.1.1 c)	Overcurrent protective device limited output	(See appended table Annex Q.1)	P
Q.1.1 d)	IC current limiter complying with G.9		N/A
Q.1.2	Compliance and test method	(See appended table Annex Q.1)	P
Q.2	Test for external circuits – paired conductor cable		N/A
	Maximum output current (A) .....:		—
	Current limiting method .....:		—
T	**MECHANICAL STRENGTH TESTS**		**P**
T.1	General requirements		P
T.2	Steady force test, 10 N ..... :	(See appended table T.2, T.3, T.4, T.5)	P
T.3	Steady force test, 30 N ..... :	(See appended table T.2, T.3, T.4, T.5)	P
V	**DETERMINATION OF ACCESSIBLE PARTS (FINGERS, PROBES AND WEDGES)**		P
V.1	Accessible parts of equipment		P
V.2	Accessible part criterion		P

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Clause	Requirement + Test	Result - Remark	Verdict

4.1.2	**TABLE: List of critical components**				P
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity[1]
LCD Panel (For 31.5 inch models)	TPV	TPM315W** (*can be 0-9, A-Z, dot or blank for marketing purpose).	31.5 inch TFT LCD (power consumption: 51.2W; LED array voltage: 49.0V)	--	Tested in equipment
Alt.)	TPV	TPT315** (*can be 0-9, A-Z, dot or blank for marketing purpose).	31.5 inch TFT LCD (power consumption: 40.7W; LED array voltage: 45.5V)	--	Tested in equipment
Alt.)	BOE	MV315***-*** (*can be 0-9, A-Z or blank for marketing purpose).	31.5 inch TFT LCD (power consumption: 46.6W; LED array voltage: 35.2V)	--	Tested in equipment
Mylar sheet between power board and panel plate	SUZHOU OMAY OPTICAL MATERIALS CO LTD	SE42B, SE42B-F	min. 0.4mm thickness, min. **V-0** or better, 105°C	UL 94	UL E249605
Alt.)	SICHUAN LONGHUA FILM CO LTD	PC-770F, PC-770F-A, PC-770	min. 0.4mm thickness, min. **V-0** or better, 105°C	UL 94	UL E254551
Alt.)	SICHUAN DONGFANG INSULATING MATERIAL CO LTD	DFR700, DFR700F	min. 0.4mm thickness, min. **V-0** or better, 105°C	UL 94	UL E199019
Alt.)	CHENGDU KANGLONGXIN PLASTICS CO LTD	KLX FRPC-1860B, KLX FRPC-1870B, KLX FRPC-870B	min. 0.4mm thickness, min. **V-0** or better, 105°C	UL 94	UL E315185
Alt.)	SICHUAN DONGFANG INSULATING MATERIAL CO LTD	DFR117ECOC, DFR117ECOB, DFR117ECO, DFR3A(d)	min. 0.4mm thickness, min. **V-0** or better, 105°C	UL 94	UL E199019
Alt.)	JINGMEN GORUN TECHNOLOGY CO LTD	HF70	min. 0.4mm thickness, min. **V-0** or better, 105°C	UL 94	UL E305163

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Clause	Requirement + Test	Result - Remark	Verdict

Alt.)	CHENGDU KANGLONGXIN PLASTICS CO LTD	KLX PP BK-10	min. 0.4mm thickness, min. **V-0** or better, 105°C	UL 94	UL E315185
Alt.)	KUNSHAN DOBESTY OPTOELECTRO NIC MATERIALS CO LTD	PC9842B, **PC9821B, PC9832B**	min. 0.4mm thickness, min. **V-0** or better, 105°C	UL 94	UL E339070
Alt.)	SHENZHEN TEESUN TECHNOLOGY CO LTD	FR370, FR370F, FE383	min. 0.4mm thickness, min. **V-0** or better, 105°C	UL 94	UL
Mylar sheet (On metal enclosure to cover the opening)	SUZHOU OMAY OPTICAL MATERIALS CO LTD	SE42B, SE42B-F	min. 0.25mm thickness, min. V-0 or better, 105°C	UL 94	UL E249605
Alt.)	SICHUAN LONGHUA FILM CO LTD	PC-770F, PC-770F-A, PC-770	min. 0.25mm thickness, min. V-0 or better, 105°C	UL 94	UL E254551
Alt.)	SICHUAN DONGFANG INSULATING MATERIAL CO LTD	DFR700, DFR700F	min. 0.25mm thickness, min. V-0 or better, 105°C	UL 94	UL E199019
Alt.)	CHENGDU KANGLONGXIN PLASTICS CO LTD	KLX FRPC-1860B, KLX FRPC-1870B, KLX FRPC-870B	min. 0.25mm thickness, min. V-0 or better, 105°C	UL 94	UL E315185
Alt.)	SICHUAN DONGFANG INSULATING MATERIAL CO LTD	DFR117ECOC, DFR117ECOB, DFR117ECO, DFR3A(d)	min. 0.25mm thickness, min. V-0 or better, 105°C	UL 94	UL E199019
Alt.)	JINGMEN GORUN TECHNOLOGY CO LTD	HF70	min. 0.25mm thickness, min. V-0 or better, 105°C	UL 94	UL E305163
Alt.)	CHENGDU KANGLONGXIN PLASTICS CO LTD	KLX PP BK-10	min. 0.25mm thickness, min. V-0 or better, 105°C	UL 94	UL E315185

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Alt.)	KUNSHAN DOBESTY OPTOELECTRO NIC MATERIALS CO LTD	PC9842B, PC9821B, PC9832B	min. 0.25mm thickness, min. V-0 or better, 105°C	UL 94	UL E339070
Alt.)	SHENZHEN TEESUN TECHNOLOGY CO LTD	FR370, FR370F, FE383	min. 0.25mm thickness, min. V-0 or better, 105°C	UL 94	UL
Limited current IC U7405, U7406 on main board 715GB058	SILERGY TECHNOLOGY	SY6288D20AAC	Input voltage: 2.5Vdc to 5.5Vdc Output: 5.5V max. 4.4A max.	IEC 60950-1	CB of TUV Cert. No. JP-3049765
Switching mode power supply board: 715GB314 by TPV					
AC-Inlet (CN901)	Solteam	ST-01	10A, 250Vac	IEC/ EN 60320-1 UL60320-1	ENEC, UL
Alt.)	Zhang Jia Gang-Hua Jie	SA-4S, SA-4S-1, SA-4D, SA-4S 9	10A, 250Vac	IEC/ EN 60320-1 UL60320-1	VDE, UL
Alt.)	Rong Feng	SS-120, SS-7B	10A, 250Vac	IEC/ EN 60320-1 UL60320-1	VDE, UL
Alt.)	Inalways	0707-1, 0711-2, 0714	10A, 250Vac	IEC/ EN 60320-1 UL60320-1	VDE, UL
Alt.)	DELIKANG	CDJ-3, CDJ-3-1	10A, 250Vac	IEC/ EN 60320-1 UL60320-1	VDE, UL
Alt.)	TECX	TU-301 series	10A, 250Vac	IEC/ EN 60320-1 UL60320-1	VDE, UL
Alt.)	Yueqing Hongchang	DB-14, DB-14-14-R, DB-14 Series, DB-14-05	10A, 250Vac	IEC/ EN 60320-1 UL60320-1	VDE, UL
Power switch (SW901) (Optional)	Rong Feng Industrial Co., Ltd.	RF-1003	VDE: 10(4)A, 250Vac UL: 10A, 250Vac	IEC/EN 61058-1, UL 1054	VDE, UL
Alt.)	Solteam Electronics Co Ltd	MR-21 series	ENEC: 6A, 250Vac UL:10A, 125/250Vac	IEC/EN 61058-1, UL 1054	ENEC, UL
Alt.)	Solteam Electronics Co Ltd	MR-21S	ENEC: 6A, 250Vac UL:10A, 125/250Vac	IEC/EN 61058-1, UL 1054	ENEC, UL

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Alt.)	Solteam Electronics Co Ltd	OR-L series, OR-P series	ENEC: 6A, 250Vac UL: 10A/125Vac, 6A/250Vac	IEC/EN 61058-1, UL 1054	ENEC, UL
Alt.)	Solteam Electronics Co Ltd	MR-22 series	ENEC: 12(4)A, 250Vac UL: 12A,125/250Vac	IEC/EN 61058-1, UL 1054	ENEC, UL
Alt.)	Chily	3024 series	VDE:16(4)A, 250Vac UL: 15A,125/250Vac	IEC/EN 61058-1, UL 1054	VDE, UL
Alt.)	Ningbo Yinzhou Lihe Switch Factory	RL3-4	VDE: 10(4), 250Vac UL: 16A, 125Vac	IEC/EN 61058-1, UL 1054	VDE, UL
Alt.)	Hongchang	RS and RT series	10A,125Vac, 6A, 250Vac.	IEC/EN 61058-1	ENEC/FI UL
Alt.)	Zhangjiagang Huajie	PS8-338	8A, 250Vac, 12(4), 250Vac.	IEC/EN 61058-1	ENEC/FI UL
Fuse (F9901 in primary)	Littelfuse, Inc. Wickmann	382-series, 392	T5AL, 250Vac	IEC/ EN 60127-1 IEC/ EN 60127-3 UL 248-1	VDE, UL
Alt.)	Littelfuse Phils. Inc.	TE5 400 series	T5AL, 250Vac	IEC/ EN 60127-1 IEC/ EN 60127-3 UL 248-1	VDE
Alt.)	Conquer	MET series MST series PTU	T5AL, 250Vac	IEC/ EN 60127-1 IEC/ EN 60127-3 UL 248-1	VDE, UL
Alt.)	Cooper Bussmann	SR-5, SS-5	T5AL, 250Vac	IEC/ EN 60127-1 IEC/ EN 60127-3 UL 248-1	VDE, UL
Alt.)	Ever Island Electric Co., Ltd. & Walter Electric	2000, 2010 series	T5AL, 250Vac	IEC/ EN 60127-1 IEC/ EN 60127-3 UL 248-1	VDE, UL
Alt.)	Littelfuse Phils. Inc.	877	T5AL, 250Vac	IEC/ EN 60127-1 IEC/ EN 60127-3 UL 248-1	VDE, UL
Fuse (F801, F9903, F9904) (sec. for LPS)	Littelfuse, Inc. Wickmann	382-series, 392	T4AL, 250Vac	IEC/ EN 60127-1 IEC/ EN 60127-3 UL 248-1	VDE, UL
Alt.)	Littelfuse Phils. Inc.	TE5 400 series	T4AL, 250Vac	IEC/ EN 60127-1 IEC/ EN 60127-3 UL 248-1	VDE

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Clause	Requirement + Test	Result - Remark	Verdict

Alt.)	Conquer	MET series MST series PTU	T4AL, 250Vac	IEC/ EN 60127-1 IEC/ EN 60127-3 UL 248-1	VDE, UL
Alt.)	Cooper Bussmann	SR-5, SS-5	T4AL, 250Vac	IEC/ EN 60127-1 IEC/ EN 60127-3 UL 248-1	VDE, UL
Alt.)	Ever Island Electric Co., Ltd. & Walter Electric	2000, 2010 series	T4AL, 250Vac	IEC/ EN 60127-1 IEC/ EN 60127-3 UL 248-1	VDE, UL
Alt.)	Littelfuse Phils. Inc.	877	T4AL, 250Vac	IEC/ EN 60127-1 IEC/ EN 60127-3 UL 248-1	VDE, UL
Fuse (F9903, F9904) (sec. for LPS)	Littelfuse, Inc. Wickmann	382-series, 392	T5AL, 250Vac	IEC/ EN 60127-1 IEC/ EN 60127-3 UL 248-1	VDE, UL
Alt.)	Littelfuse Phils. Inc.	TE5 400 series	T5AL, 250Vac	IEC/ EN 60127-1 IEC/ EN 60127-3 UL 248-1	VDE
Alt.)	Conquer	MET series MST series PTU	T5AL, 250Vac	IEC/ EN 60127-1 IEC/ EN 60127-3 UL 248-1	VDE, UL
Alt.)	Cooper Bussmann	SR-5, SS-5	T5AL, 250Vac	IEC/ EN 60127-1 IEC/ EN 60127-3 UL 248-1	VDE, UL
Alt.)	Ever Island Electric Co., Ltd. & Walter Electric	2000, 2010 series	T5AL, 250Vac	IEC/ EN 60127-1 IEC/ EN 60127-3 UL 248-1	VDE, UL
Alt.)	Littelfuse Phils. Inc.	877	T5AL, 250Vac	IEC/ EN 60127-1 IEC/ EN 60127-3 UL 248-1	VDE, UL
Y- Capacitor (C9904, C9905) Y1 or Y2 type (Optional)	Walsin	AC, AH	Max. 470pF, 250Vac, 105°C	IEC/EN 60384-14, UL 60384-14	VDE, UL
Alt.)	Wansheng	CT7	Max. 470pF, 250Vac, 105°C	IEC/EN 60384-14, UL 60384-14	VDE, UL
Alt.)	TDK	CS, CD	Max. 470pF, 250Vac, 105°C	IEC/EN 60384-14, UL 60384-14	VDE, UL
Alt.)	Murata	KH, KX	Max. 470pF, 250Vac, 105°C	IEC/EN 60384-14, UL 60384-14	VDE, UL
Alt.)	Matsushita	NS-A, NS-B	Max. 470pF, 250Vac, 105°C	IEC/EN 60384-14, UL 60384-14	VDE, UL
Alt.)	JYA-NAY	JY, JN	Max. 470pF, 250Vac, 105°C	IEC/EN 60384-14, UL 60384-14	VDE, UL

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Clause	Requirement + Test	Result - Remark	Verdict

Alt.)	Hongming	F	Max. 470pF, 250Vac, 105°C	IEC/EN 60384-14, UL 60384-14	VDE, UL
Alt.)	Yinan Don's	CT81	Max. 470pF, 250Vac, 105°C	IEC/EN 60384-14, UL 60384-14	VDE, UL
Alt.)	SUCCESS	SB, SE	Max. 470pF, 250Vac, 105°C	IEC/EN 60384-14, UL 60384-14	VDE, UL
Y- Capacitor (C9903, C9909, C9910) Y1 or Y2 type (Optional)	Walsin	AC, AH	Max. 680pF, 250Vac, 105°C	IEC/EN 60384-14, UL 60384-14	VDE, UL
Alt.)	Wansheng	CT7	Max. 680pF, 250Vac, 105°C	IEC/EN 60384-14, UL 60384-14	VDE, UL
Alt.)	TDK	CS, CD	Max. 680pF, 250Vac, 105°C	IEC/EN 60384-14, UL 60384-14	VDE, UL
Alt.)	Murata	KH, KX	Max. 680pF, 250Vac, 105°C	IEC/EN 60384-14, UL 60384-14	VDE, UL
Alt.)	Matsushita	NS-A, NS-B	Max. 680pF, 250Vac, 105°C	IEC/EN 60384-14, UL 60384-14	VDE, UL
Alt.)	JYA-NAY	JY, JN	Max. 680pF, 250Vac, 105°C	IEC/EN 60384-14, UL 60384-14	VDE, UL
Alt.)	Hongming	F	Max. 680pF, 250Vac, 105°C	IEC/EN 60384-14, UL 60384-14	VDE, UL
Alt.)	Yinan Don's	CT81	Max. 680pF, 250Vac, 105°C	IEC/EN 60384-14, UL 60384-14	VDE, UL
Alt.)	SUCCESS	SB, SE	Max. 680pF, 250Vac, 105°C	IEC/EN 60384-14, UL 60384-14	VDE, UL
Y- Capacitor (C9920, C9921) Y1 or Y2 type (Optional)	Walsin	AC, AH	Max. 1000pF, 250Vac, 105°C	IEC/EN 60384-14, UL 60384-14	VDE, UL
Alt.)	Wansheng	CT7	Max. 1000pF, 250Vac, 105°C	IEC/EN 60384-14, UL 60384-14	VDE, UL
Alt.)	TDK	CS, CD	Max. 1000pF, 250Vac, 105°C	IEC/EN 60384-14, UL 60384-14	VDE, UL
Alt.)	Murata	KH, KX	Max. 1000pF, 250Vac, 105°C	IEC/EN 60384-14, UL 60384-14	VDE, UL
Alt.)	Matsushita	NS-A, NS-B	Max. 1000pF, 250Vac, 105°C	IEC/EN 60384-14, UL 60384-14	VDE, UL
Alt.)	JYA-NAY	JY, JN	Max. 1000pF, 250Vac, 105°C	IEC/EN 60384-14, UL 60384-14	VDE, UL
Alt.)	Hongming	F	Max. 1000pF, 250Vac, 105°C	IEC/EN 60384-14, UL 60384-14	VDE, UL

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Alt.)	Yinan Don's	CT81	Max. 1000pF, 250Vac, 105°C	IEC/EN 60384-14, UL 60384-14	VDE, UL
Alt.)	SUCCESS	SB, SE	Max. 1000pF, 250Vac, 105°C	IEC/EN 60384-14, UL 60384-14	VDE, UL
Y- Capacitor (C9913) Y1 type (optional)	Walsin	AH	Max. 1000pF, 250Vac, 85°C	IEC/EN 60384-14 UL 60384-14	VDE, UL
Alt.)	TDK	CD	Max. 1000pF, 250Vac, 85°C	IEC/EN 60384-14 UL 60384-14	VDE, UL
Alt.)	Murata	KX	Max. 1000pF, 250Vac, 85°C	IEC/EN 60384-14 UL 60384-14	VDE, UL
Alt.)	JYA-NAY	JN	Max. 1000pF, 250Vac, 85°C	IEC/EN 60384-14 UL 60384-14	VDE, UL
Alt.)	Hongming	F	Max. 1000pF, 250Vac, 85°C	IEC/EN 60384-14 UL 60384-14	VDE, UL
Alt.)	Wansheng	CT7	Max. 1000pF, 250Vac, 85°C	IEC/EN 60384-14 UL 60384-14	VDE, UL
Alt.)	Haohua	CT7	Max. 1000pF, 250Vac, 85°C	IEC/EN 60384-14 UL 60384-14	VDE, UL
Alt.)	Samwha	SD	Max. 1000pF, 250Vac, 85°C	IEC/EN 60384-14 UL 60384-14	VDE, UL
Alt.)	Success	SB, SE	Max. 1000pF, 250Vac, 85°C	IEC/EN 60384-14 UL 60384-14	VDE, UL
Alt.)	Yinan Don's	CT81	Max. 1000pF, 250Vac, 85°C	IEC/EN 60384-14 UL 60384-14	VDE, UL
X-Capacitor (X1 or X2 type) (C9901, C9902) (optional)	Ultra Tech Xiphi	HQX	Max. 0.47µF, Min. 250Vac, 85°C	IEC/EN 60384-14 UL 60384-14	VDE, UL
Alt.)	Faratronic	MKP62	Max. 0.47µF, Min. 250Vac, 85°C	IEC/EN 60384-14 UL 60384-14	VDE, UL
Alt.)	Hua Jung	MKP	Max. 0.47µF, Min. 250Vac, 85°C	IEC/EN 60384-14 UL 60384-14	ENEC(Semko), UL
Alt.)	Nanjing Tengen Rongguangda	MKP	Max. 0.47µF, Min. 250Vac, 85°C	IEC/EN 60384-14 UL 60384-14	VDE, UL
Alt.)	Europtronic	MPX, MPX2	Max. 0.47µF, Min. 250Vac, 85°C	IEC/EN 60384-14 UL 60384-14	VDE, UL
Alt.)	Liow Gu	GS-L	Max. 0.47µF, Min. 250Vac, 85°C	IEC/EN 60384-14 UL 60384-14	VDE, UL
Alt.)	Arcotronics (KEMET)	R.46	Max. 0.47µF, Min. 250Vac, 85°C	IEC/EN 60384-14 UL 60384-14	ENEC(IMQ), UL

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Alt.)	EPCOS	B3292#	Max. 0.47µF, Min. 250Vac, 85°C	IEC/EN 60384-14 UL 60384-14	VDE, UL
Alt.)	ZhuHai Sung Ho Electronics Co., Ltd.	CMPP	Max. 0.47µF, Min. 250Vac, 85°C	IEC/EN 60384-14 UL 60384-14	VDE, UL
Discharge IC (U9901)	Power Integrations	CAP200DG	825V Resistance: 780kohm Max. total X-capacitance: 1uF	IEC 62368-1	CB issued by Nemko (CB cert No. NO81546 and NO81546/M1)
Bleeder Resistor (R9901, R9902)	Tzai Yuan Enterprise Co., Ltd.	HSMD series	Max.510KΩ, min.1/4W	IEC 62368-1: 2010	UL CB (Report No. OFF-12CA24616-A-1)
Alt.)	Yageo Corporation	RV1206 series	Max.510KΩ, min.1/4W	IEC 62368-1: 2010	UL CB (Report No. E491387-4787887815-1 Original)
Alt.)	Fenghua	RVS-06 series	Max.510KΩ, min.1/4W	IEC 62368-1: 2014	Nemko CB (Report No. 336992)
Alt.)	Fenghua	RS-06 series	Max.510KΩ, min.1/4W	IEC 62368-1: 2014	Nemko CB (Report No. 337017)
Photo Coupler (U9802, U9106)	Sharp	PC123	Di more than 0.4mm, int = thermal cycling test,ext. more than 8.0mm, 5000Vac, 100°C.	DIN EN 60747-5-5:2007 IEC60747-5-5:2007 IEC/EN 60950-1 UL 1577	VDE, UL, Semko, Nemko, Fimko
Alt.)	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 60747-5-5:2007 IEC60747-5-5:2007 IEC/EN 60950-1 UL 1577	VDE, UL, Semko, Fimko
Alt.)	Everlight Electronics Co., Ltd.	EL817, EL817M	Di more than 0.5mm, int. cr = thermal cycling test, ext. cr more than 7.7mm, 3000Vac, 100°C.	DIN EN 60747-5-5:2007 IEC60747-5-5:2007 IEC/EN 60950-1 UL 1577	VDE, UL, Semko, Nemko, Fimko

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Alt.)	TOSHIBA	TLP781F , TLP781	Di more than 0.5mm, int. cr =thermal cycling test, ext. cr more than 8.0mm, 4800Vac, 100°C.	DIN EN 60747-5-5:2007 IEC60747-5-5:2007 IEC/EN 60950-1 UL 1577	VDE, UL, Semko
Alt.)	TOSHIBA	TLP421F	Di more than 0.4mm, int.cr=thermal cycling test, ext. cr more than 8.0mm, 5000Vac, 100°C.	DIN EN 60747-5-5:2007 IEC60747-5-5:2007 IEC/EN 60950-1 UL 1577	VDE, UL
Alt.)	RENESAS ELECTRONICS CORPORATION	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 60747-5-5:2007 IEC60747-5-5:2007 IEC/EN 60950-1 UL 1577	VDE, UL, Nemko, Fimko
Alt.)	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 60747-5-5:2007 IEC60747-5-5:2007 IEC/EN 60950-1 UL 1577	VDE, UL, Semko, Fimko
Alt.)	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 60747-5-5:2007 IEC60747-5-5:2007 IEC/EN 60950-1 UL 1577	VDE, UL, Semko, Fimko
PFC choke (L9801) (Optional)	LIANFENG	373G0174A10J	130°C	--	--
Alt.)	ASET	373G0174A10X	130°C	--	--
Alt.)	LIANZHEN	373G0174A10Z	130°C	--	--
Line Choke (L9901, L9902) (Optional)	LIANFENG DONGJJIN	373G0174405J	130°C	--	--
Alt.)	PHOENIX	373G0174405P	130°C	--	--
Alt.)	ASET	373G0174405X	130°C	--	--
Alt.)	HA	373G0174405H	130°C	--	--
Transformer (T9102) (Alt.) - Bobbin	CHANNELON CHANG CHUN	380GL32P616H T200HF	Class B V-0, Phenolic, 150°C	IEC/EN 60950-1 UL 94	Tested with appliance UL

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- Triple insulation wire	COSMOLINK	TIW-M	Max.130°C	IEC/EN 60950-1, VDE0805 Teil1, UL 2353	UL, VDE
- Teflon tube	GREAT HOLDING	TFL	200°C	UL 224	UL
- Insulation tape	Jing jiang YaHua	CT	130°C	UL 510	UL
Transformer (T9102) (Alt.)	LIANFENG DONGJIN	380GL32P616J	Class B	IEC/EN 60950-1	Tested with appliance
- Bobbin	SUMITOMO	PM-9750	V-0, Phenolic, 150°C	UL 94	UL
- Triple insulation wire	COSMOLINK	TIW-M	Max.130°C	IEC/EN 60950-1, VDE0805 Teil1, UL 2353	UL, VDE
- Teflon tube	GREAT HOLDING	TFL	200°C	UL 224	UL
- Insulation tape	Jing jiang YaHua	CT	130°C	UL 510	UL
Transformer (T9102) (Alt.)	ASET	380GL32P616X	Class B	IEC/EN 60950-1	Tested with appliance
- Bobbin	CHANG CHUN	T200NA	V-0, Phenolic, 150°C	UL 94	UL
- Triple insulation wire	COSMOLINK	TIW-M	Max.130°C	IEC/EN 60950-1, VDE0805 Teil1, UL 2353	UL, VDE
- Teflon tube	GREAT HOLDING	TFL	200°C	UL 224	UL
- Insulation tape	Jing jiang YaHua SYMBIO INC	CT PF*(d)(g)	130°C	UL 510	UL
Transformer (T9102) (Alt.)	PHOENIX	380GL32P616P	Class B	IEC/EN 60950-1	Tested with appliance
- Bobbin	SUMITOMO	PM-9750	V-0, Phenolic, 150°C	UL 94	UL
- Triple insulation wire	YUSHENG	TIW-B	Max.130°C	IEC/EN 60950-1, VDE0805 Teil1, UL 2353	UL, VDE
- Teflon tube	GREAT HOLDING	TFL	200°C	UL 224	UL
- Insulation tape	Jing jiang YaHua SYMBIO INC	CT	130°C	UL 510	UL
Rating information of components which are not critical components:					

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Thermistor (TH9901)	Interchangeable	Interchangeable	Min. 2.5Ω, Min. 2A, 25°C	--	--
Bridging Diode (BD9901)	Interchangeable	Interchangeable	Min. 2A, Max 800V.	--	--
Ripple Capacitor (C9801, C9920)	Interchangeable	Interchangeable	30-150uF, min. 450 V, min .105°C	--	--
Transistor (Q9801, Q9101, Q9102)	Interchangeable	Interchangeable	Min. 5A, 500V min.	--	--
PCB	Interchangeable	Interchangeable	V-1 or better, 130°C	--	--
Power cord set listed below by client's request					
Mains cord set (Saudi Arabia) (Optional)					
Plug	I-SHENG	SP-62	13A,250V or 10A, 250V or 5A, 250V	SASO 2203:2018	Intertek (ASTA)
Connector	I-SHENG	IS-14	10A,250V	SASO 2203:2018	Intertek (ASTA)
		IS-034	2.5A/250V		
Cable	I-SHENG	H05VV-F	3X0.75mm^2	SASO 2203:2018	Intertek (ASTA)
Plug	CHANGHZOU Hongchang Electronics CO., Ltd	DTII-3P-22	13A,250V or 5A, 250V	SASO 2203:2018	Intertek (ASTA)
Connector	CHANGHZOU Hongchang Electronics CO., Ltd	DTII-3P-04	10A,250V or 2.5A,250V	SASO 2203:2018	Intertek (ASTA)
Cable	CHANGHZOU Hongchang Electronics CO., Ltd	H05VV-F	3 x 0.75 mm^2	SASO 2203:2018	Intertek (ASTA)
Plug	HONGLIN	HL-044	13A,250V or 5A, 250V	SASO 2203:2018	Intertek (ASTA)
Connector	HONGLIN	H05VV-F	10A,250V or 2.5A,250V	SASO 2203:2018	Intertek (ASTA)
Cable	HONGLIN	HL-052	3 x 0.75 mm^2	SASO 2203:2018	Intertek (ASTA)

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Plug	FUND RESOURCES ELECTRIC INDUSTRY CO.,LTD	BS-01J	13A,250V or 10A,250V or 5A, 250V	SASO 2203:2018	Intertek (ASTA)
Connector	FUND RESOURCES ELECTRIC INDUSTRY CO.,LTD	CE-608J	13A,250V or 5A, 250V or 2.5A, 250V	SASO 2203:2018	Intertek (ASTA)
		CE-602J	2.5A, 250V		
Cable	FUND RESOURCES ELECTRIC INDUSTRY CO.,LTD	H05VV-F	3 x 0.75 mm^2	SASO 2203:2018	Intertek (ASTA)
Plug	Longwell	LP-61L, LP-61LA	13A, 250V	SASO 2203:2018	Intertek (ASTA)
Connector	Longwell	LS-18	2.5A,250V	SASO 2203:2018	Intertek (ASTA)
Cable	Longwell	H05VV-F	3 x 0.75 mm^2	SASO 2203:2018	Intertek (ASTA)
Plug	ASAP	A12-0031-AC2, A12-0058-AC2, A12-0059-AC2	3A, 250V or 5A, 250V or 10A, 250V or 13A, 250V	SASO 2203:2018	Intertek (ASTA)
Connector	ASAP	A12-0012-AC2	10A,250V	SASO 2203:2018	Intertek (ASTA)
		A12-0011-AC2	2.5A,250V		
Cable	ASAP	H05VV-F	3 x 0.75 mm^2	SASO 2203:2018	Intertek (ASTA)
Plug	ASAP	A12-0136-AC2, A12-0137-AC2	3A, 250V or 5A, 250V or 10A, 250V or 13A, 250V	SASO 2203:2018	Intertek (ASTA)
Connector	ASAP	A12-0012-AC2	10A,250V	SASO 2203:2018	Intertek (ASTA)
		A12-0011-AC2	2.5A,250V		
Cable	ASAP	H05VV-F	3 x 0.75 mm^2	SASO 2203:2018	Intertek (ASTA)

Supplementary information:

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

[2)] Description line content is optional. Main line description needs to clearly detail the component used for testing

[3)] All sources of transformer were checked with same construction.

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

4.8.4, 4.8.5	**TABLE: Lithium coin/button cell batteries mechanical tests**	N/A

(The following mechanical tests are conducted in the sequence noted.)

4.8.4.2	**TABLE: Stress Relief test**		—
Part	**Material**	**Oven Temperature (°C)**	**Comments**

4.8.4.3	**TABLE: Battery replacement test**		—
Battery part no. ..... :			—
Battery Installation/withdrawal		Battery Installation/Removal Cycle	Comments
		1	
		2	
		3	
		4	
		5	
		6	
		7	
		8	
		9	
		10	

4.8.4.4	**TABLE: Drop test**			—
Impact Area	Drop Distance		Drop No.	Observations
			2	

4.8.4.5	**TABLE: Impact**		—
Impacts per surface	**Surface tested**	**Impact energy (Nm)**	**Comments**

4.8.4.6	**TABLE: Crush test**		—
Test position	**Surface tested**	**Crushing Force (N)**	**Duration force applied (s)**

Supplementary information:

4.8.5	**TABLE: Lithium coin/button cell batteries mechanical test result**	N/A

Test position	**Surface tested**	**Force (N)**	**Duration force applied (s)**

Supplementary information:

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

5.2	**Table: Classification of electrical energy sources**						P
5.2.2.2 – Steady State Voltage and Current conditions							
No.	Supply Voltage	Location (e.g. circuit designation)	Test conditions	Parameters			ES Class
				U (Vrms or Vpk)	I (Apk or Arms)	Hz	
Test for power board 715GB314							
1	240V, 60Hz	+20V output of SPS to "-"/GND	Normal	19.3Vdc	--	--	ES1
			Abnormal – (see table B.3 for details, maximum result recorded)	18.5Vdc	--	--	
			Single fault – (see table B.4 for details, maximum result recorded)	19.3Vdc	--	--	
2	240V, 60Hz	LED backlight output to "-" /GND	Normal	28.0Vdc	--	--	ES1
			Abnormal – (see table B.3 for details, maximum result recorded)	27.6Vdc	--	--	
			Single fault – (see table B.4 for details, maximum result recorded)	28.0Vdc	--	--	
3	240V, 60Hz	L/N to all secondary ports	Normal	--	0.01mApk	--	ES1
			Abnormal – (see table B.3 for details, maximum result recorded)	--	0.01mApk	--	
			Single fault – (see table B.4 for details, maximum result recorded)	--	0.01mApk	--	
4	240V, 60Hz	L/N to button of key board	Normal	--	0.01mApk	--	ES1
			Abnormal – (see table B.3 for details, maximum result recorded)	--	0.01mApk	--	

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

			Single fault – (see table B.4 for details, maximum result recorded)	--	0.01mApk	--	

5.2.2.3 - Capacitance Limits

No.	Supply Voltage	Location (e.g. circuit designation)	Test conditions	Parameters		ES Class
				Capacitance, nF	Upk (V)	
1	240V, 60Hz	L&N pin of AC inlet	Normal	0.47µF (C9901)	373	ES3
			Abnormal	--	--	
			Single fault – SC/OC	--	--	

5.2.2.4 - Single Pulses

No.	Supply Voltage	Location (e.g. circuit designation)	Test conditions	Parameters			ES Class
				Duration (ms)	Upk (V)	Ipk (mA)	
--	--	--	Normal	--	--	--	--
			Abnormal	--	--	--	
			Single fault – SC/OC	--	--	--	

5.2.2.5 - Repetitive Pulses

No.	Supply Voltage	Location (e.g. circuit designation)	Test conditions	Parameters			ES Class
				Off time (ms)	Upk (V)	Ipk (mA)	
--	--	--	Normal	--	--	--	--
			Abnormal	--	--	--	
			Single fault – SC/OC	--	--	--	

Test Conditions:

Normal – Max. normal load

Supplementary information: SC=Short Circuit, OC=Open Circuit

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

5.4.1.4, 6.3.2, 9.0, B.2.6	**TABLE: Temperature measurements**					P
	Supply voltage (V) ..... :	264V/ 60Hz	90V/ 60Hz	90V/ 60Hz	90V/ 60Hz	—
	Ambient T_{min} (°C) ..... :	40.0	40.0	40.0	40.0	—
	Ambient T_{max} (°C) ..... :	40.0	40.0	40.0	40.0	—
	Tma (°C) ..... :	40.0	40.0	40.0	40.0	—
Maximum measured temperature T of part/at:		T (°C)				Allowed T_{max} (°C)
Test for 34.0 inch models with power board 715GB314, main board 715GB058 and USB board 715GB001, HDMI mode		Horizontal		Vertical [a)]	Vertical [b)]	--
AC inlet near "L" (on power board)		53.9	59.5	67.7	64.9	70
SW901 (on power board)		50.1	55.6	74.6	60.1	85
T9102 Core (on power board)		86.8	93.0	106.7	95.8	110
T9102 Coil (on power board)		82.8	86.2	104.4	98.5	110
L9901 Coil (on power board)		60.0	89.5	110.5	104.5	130
X-cap C9901 (on power board)		59.3	68.8	81.0	84.6	100
Y-cap C9903 (on power board)		66.4	70.9	87.9	82.1	105
Y-cap C9910 (on power board)		53.1	60.5	84.2	68.3	105
Y-cap C9913 (on power board)		64.1	75.9	94.9	54.1	105
E-cap C9801 (on power board)		67.7	88.2	92.7	82.3	105
PCB near D9104 (on power board)		91.9	92.4	86.9	102.6	130
PCB near Q9101 (on power board)		87.4	97.8	97.6	82.1	130
PCB near BD9901 (on power board)		60.7	76.6	100.4	82.8	130
PCB near TH9901 (on power board)		79.5	116.9	129.3	105.8	130
PCB near main IC (on main board)		88.6	89.3	74.2	89.4	130
Ambient		40.0 (26.1)	40.0 (26.3)	40.0 (27.0)	40.0 (26.0)	--
Touch temperature for accessible part under normal condition						
Plastic enclosure outside near T9102		33.6	35.8	35.9	32.6	94
Metal enclosure		41.9	46.7	47.0	37.6	70
Panel surface		38.2	38.4	36.5	35.0	94
Button		31.8	31.8	37.3	33.0	77
Ambient		25.0 (26.1)	25.0 (26.3)	25.0 (27.0)	25.0 (26.0)	--

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

Supplementary information:							
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:

Note 1: Tma should be considered as directed by appliable requirement

Note 2: Tma is not included in assessment of Touch Temperatures (Clause 9)

5.4.1.4, 6.3.2, 9.0, B.2.6	**TABLE: Temperature measurements**					P
	Supply voltage (V) ..... :	264V/ 60Hz	90V/ 60Hz	90V/ 60Hz	90V/ 60Hz	—
	Ambient T_{min} (°C) ..... :	40.0	40.0	40.0	40.0	—
	Ambient T_{max} (°C) ..... :	40.0	40.0	40.0	40.0	—
	Tma (°C) ..... :	40.0	40.0	40.0	40.0	—
Maximum measured temperature T of part/at:		T (°C)				Allowed T_{max} (°C)
Test for 31.5 inch models with power board 715GB314, main board 715GB058 and USB board 715GB001, HDMI mode		Horizontal		Vertical [a)]	Vertical [b)]	--
AC inlet near "L" (on power board)		49.3	52.9	60.4	53.8	70
SW901 (on power board)		47.8	52.8	69.3	54.5	85
T9102 Core (on power board)		93.2	97.9	103.4	94.1	110
T9102 Coil (on power board)		86.4	93.7	99.0	83.2	110
L9801 Coil (on power board)		74.6	96.7	111.1	101.9	130
L9901 Coil (on power board)		59.1	87.5	107.8	98.9	130
X-cap C9901 (on power board)		53.8	62.2	75.0	69.0	100
Y-cap C9903 (on power board)		61.1	66.1	84.2	76.0	105
Y-cap C9910 (on power board)		49.9	57.9	79.5	61.4	105
Y-cap C9913 (on power board)		61.0	74.0	89.2	47.4	105
E-cap C9801 (on power board)		65.4	82.2	88.5	76.5	105
PCB near D9104 (on power board)		85.2	86.7	75.9	92.5	130
PCB near Q9101 (on power board)		75.8	88.1	91.0	71.5	130
PCB near BD9901 (on power board)		59.6	79.4	103.6	80.9	130
PCB near TH9901 (on power board)		76.8	113.5	122.5	98.0	130
Ambient		40.0 (26.4)	40.0 (26.6)	40.0 (28.7)	40.0 (30.2)	--
Touch temperature for accessible part under normal condition						

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

Plastic enclosure outside near T9102	30.3	32.4	32.8	30.2	94
Metal enclosure	40.7	45.7	44.7	41.3	70
Panel surface	34.1	35.2	31.5	31.0	94
Button	29.5	31.7	34.6	30.0	77
Ambient	25.0 (26.4)	25.0 (26.6)	25.0 (28.7)	25.0 (30.2)	--

Supplementary information:

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:
Note 1: Tma should be considered as directed by appliable requirement
Note 2: Tma is not included in assessment of Touch Temperatures (Clause 9)

5.4.1.10.2	TABLE: Vicat softening temperature of thermoplastics		N/A
Penetration (mm).....:			—
Object/ Part No./Material	Manufacturer/trademark	T softening (°C)	

Supplementary information:

5.4.1.10.3	TABLE: Ball pressure test of thermoplastics		P
Allowed impression diameter (mm) .....:		≤ 2 mm	—
Object/Part No./Material	Manufacturer/trademark	Test temperature (°C)	Impression diameter (mm)
Plastic enclosure: HIPS-5197, 2.5mm	Kingfa	90	1.59
Plastic enclosure: GAR-011(L85), 2.5mm	Kingfa	85	1.31
Plastic enclosure: GAR-011(L65), 2.5mm	Kingfa	85	1.29
Plastic enclosure: HIPS-510(H), 2.5mm	Kingfa	80	1.29
Plastic enclosure: FRHIPS-960, 2.5mm	Kingfa	85	1.88
Plastic enclosure: GC-0750(+), 2.5mm	Cheil	80	1.61
Plastic enclosure: GC-0700(+), 2.5mm	Cheil	80	1.94
Plastic enclosure: HG-0760(+), 2.5mm	Cheil	85	1.73
Plastic enclosure: LX-0951(+), 2.5mm	Cheil	85	1.83
Plastic enclosure: SD-0150, 2.5mm	Cheil	85	1.48
Plastic enclosure: HR-1360, 2.5mm	Cheil	85	1.71
Plastic enclosure: BF-0670F, 2.5mm	Cheil	80	1.59

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Clause	Requirement + Test	Result - Remark	Verdict

Plastic enclosure: HF380, 2.5mm	LG	85	1.48
Plastic enclosure: SE885, 2.5mm	LG	80	1.42
Plastic enclosure: LUPOY GP-1000(#), 2.5mm	LG	95	1.21
Plastic enclosure: XG568, 2.5mm	LG	80	1.81
Plastic enclosure: XG569C, 2.5mm	LG	80	1.85
Plastic enclosure: HF388H, 2.5mm	LG	85	1.39
Plastic enclosure: SE750, 2.5mm	LG	80	1.5
Plastic enclosure: TN-7500, 2.5mm	Teijin	85	1.57
Plastic enclosure: HIPS-2000, 2.5mm	ORINKO	85	1.48
Plastic enclosure: GAR-011C, 2.5mm	Kingfa	90	1.91
Supplementary information: Above mentioned plastic enclosure material was tested by client's request.			

5.4.2.2, 5.4.2.4 and 5.4.3	**TABLE: Minimum Clearances/Creepage distance**						P
Clearance (cl) and creepage distance (cr) at/of/between:	Up (V)	U r.m.s. (V)	Frequency (kHz)	Required cl (mm)	cl (mm)	Required cr (mm)	cr (mm)
Test for power board 715GB314							
Under fuse (F9901)	420	250	--	2.3	2.6	2.5	2.6
Before fuse (between L-N)	420	250	--	2.3	3.1	2.5	3.1
Line-GND [1.]	420	250	--	2.3	3.1	2.5	3.7
Neutral-GND [1.]	420	250	--	2.3	3.1	2.5	3.7
Under C9903/C9904 [1)]	420	250	--	2.3	7.6	2.5	8.9
Under C9905 [1)]	420	250	--	2.3	7.3	2.5	8.3
Under C9909/C9910 [1)]	420	250	--	2.3	7.6	2.5	8.9
Under C9920	420	250	--	2.3	7.7	2.5	7.7
Under C9921	420	250	--	2.3	7.7	2.5	7.7
Primary component of R9813 to metal enclosure	420	240	--	2.3	6.2	2.5	6.2
Reinforced:							
Under T9102	**441**	**268**	Above 30	4.5	8.0	5.4	8.0
Under C9913 [1)]	420	250	--	4.5	7.5	5.0	7.9
U9802 primary pin to secondary pin (trace side) [1)]	420	250	--	4.5	7.5	5.0	7.9
U9106 primary pin to secondary pin (trace side) [1)]	420	250	--	4.5	7.5	5.0	7.9
Primary component C9112 to core	**441**	**268**	Above 30	4.5	12.4	5.4	12.4

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

Supplementary information:

1) There is one slot measured 1mm width.
2) Core of main transformers T901 consider as primary.
3) One mylar sheet is fixed between power board and panel to fulfil the requirement for reinforced. See table 4.1.2 for the details. And see table 5.4.9 for electric strength test for mylar.
4) Glued component: C9801, C9802
5) Considered altitude correction factor 1.48 for clearances for an altitude of 5000m.
6) For clearance and creepage that did not describe above are far larger than limit above.

5.4.2.3	**TABLE: Minimum Clearances distances using required withstand voltage**	P
	Overvoltage Category (OV):	II
	Pollution Degree:	2

Clearance distanced between:	Required withstand voltage	Required cl (mm)	Measured cl (mm)
Basic	2500	See table 5.4.2.2, 5.4.2.4 and 5.4.3	See table 5.4.2.2, 5.4.2.4 and 5.4.3
Reinforce	2500	See table 5.4.2.2, 5.4.2.4 and 5.4.3	See table 5.4.2.2, 5.4.2.4 and 5.4.3

Supplementary information:

Consider the altitude up to 5000m, multiplication factor (according to Table 17) is 1.48.

* For clearance and creepage that did not describe above are far larger than limit above.

5.4.2.4	**TABLE: Clearances based on electric strength test**	N/A

Test voltage applied between:	Required cl (mm)	Test voltage (kV) peak/ r.m.s. / d.c.	Breakdown Yes / No
--	--	--	--

Supplementary information:

5.4.4.2, 5.4.4.5 c) 5.4.4.9	**TABLE: Distance through insulation measurements**	P

Distance through insulation di at/of:	Peak voltage (V)	Frequency (kHz)	Material	Required DTI (mm)	DTI (mm)
Plastic enclosure	420	0.06	See table 4.1.2	0.4	See table 4.1.2

Supplementary information:

1) For details refer to appended table 4.1.2.

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

5.4.9	TABLE: Electric strength tests			P
Test voltage applied between:		Voltage shape (AC, DC)	Test voltage (V)	Breakdown Yes / No
Basic/supplementary:				
Unit primary to earthed metal part		AC	2500	No
Reinforced:				
L/N to accessible plastic enclosure with metal foil		AC	4000	No
Mylar sheet between power board trace side and metal plate of panel 2)		AC	4000	No
Unit primary to secondary (output)		AC	4000	No
T9102 1): primary to secondary		AC	4000	No
T9102 1): core to secondary		AC	4000	No
T9102 1): each layer of insulation tape		AC	4000	No
Supplementary information: 1. For all sources of T9102; 2. The test mentioned above were performed after humidity conditioning test.				

5.5.2.2	TABLE: Stored discharge on capacitors				P
Supply Voltage (V), Hz	Test Location	Operating Condition (N, S)	Switch position On or off	Measured Voltage (after 2 seconds)	ES Classification
264V, 60Hz	C9901, C9902	N	On	0V	ES1
Supplementary information: X-capacitors installed for testing are: C9901, C9902=0.47μF ■ Approved Bleeding resistor rating: R9901=R9902=510KΩ, see Table 4.1.2 for source information. ■ ICX: Approved discharge IC: see Table 4.1.2 for source information. Notes: A. Test Location: Phase to Neutral; Phase to Phase; Phase to Earth; and/or Neutral to Earth B. Operating condition abbreviations: N – Normal operating condition (e.g., normal operation, or open fuse); S –Single fault condition					

5.6.6.2	TABLE: Resistance of protective conductors and terminations			P
Accessible part	Test current (A)	Duration (min)	Voltage drop (V)	Resistance (mΩ)
Test for power board 715GB314				
PE terminal of AC inlet to internal metal enclosure	40	2	0.14	6

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Clause	Requirement + Test	Result - Remark	Verdict

PE terminal of AC inlet to internal metal enclosure	32	2	0.13	6
PE terminal of AC inlet to C9903/C9904 trace	40	2	0.14	6
PE terminal of AC inlet to C9903/C9904 trace	32	2	0.14	6
PE terminal of AC inlet to C9905 trace	40	2	0.14	6
PE terminal of AC inlet to C9905 trace	32	2	0.14	6
PE terminal of AC inlet to C9909/C9910 trace	40	2	0.14	6
PE terminal of AC inlet to C9909/C9910 trace	32	2	0.14	6
PE terminal of AC inlet to C9920/C9921 trace	40	2	0.24	8
PE terminal of AC inlet to C9920/C9921 trace	32	2	0.24	8
Supplementary information:				

5.7.2.2, 5.7.4	**TABLE: Earthed accessible conductive part**		P
Supply voltage .....:			—
Location	Test conditions specified in 6.1 of IEC 60990 or Fault Condition No in IEC 60990 clause 6.2.2.1 through 6.2.2.8, except for 6.2.2.7		Touch current (mA)
Line to earth, Neutral to earth, Line to secondary connector, Neutral to secondary connector, Line to metal enclosure,	1		0.23 max. (for earthed part) 0.01 max. (for non-earthed part)
Neutral to metal enclosure,	2*		--
Line to plastic enclosure with copper foil,	3		--
Neutral to plastic enclosure with copper foil	4		--
	5		--
	6		--
	7		--
	8		--
Supplementary information: [1] Supply voltage is the anticipated maximum Touch Voltage			

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Clause	Requirement + Test	Result - Remark	Verdict

[2] Earthed neutral conductor [Voltage differences less than 1% or more]

[3] Specify method used for measurement as described in IEC 60990 sub-clause 4.3

[4] IEC60990, sub-clause 6.2.2.7, Fault 7 not applicable.

[5] (*) IEC60990, sub-clause 6.2.2.2 is not applicable if switch or disconnect device (e.g., appliance coupler) provided.

[6] Tested with normal, abnormal and single-fault condition, and maximum value was recorded.

6.2.2	Table: Electrical power sources (PS) measurements for classification				P
Source	Description	Measurement	Max Power after 3 s	Max Power after 5 s*)	PS Classification
A	+20V output of power board	Power (W) :	--	--	PS2 (See Table Annex Q.1
		V_A (V) :	--	--	
		I_A (A) :	--	--	
		I_A (A) :	--	--	

Supplementary information:

(*) Measurement taken only when limits at 3 seconds exceed PS1 limits

6.2.3.1	Table: Determination of Potential Ignition Sources (Arcing PIS)			P
Location	Open circuit voltage After 3 s (Vp)	Measured r.m.s current (Irms)	Calculated value (V_p x I_{rms})	Arcing PIS? Yes / No
2)	2)	2)	2)	Yes

Supplementary information:

1) An Arcing PIS requires a minimum of 50 V (peak) a.c. or d.c. An Arcing PIS is established when the product of the open circuit voltage (V_p) and normal operating condition rms current (I_{rms}) is greater than 15.

2) All components located within the EUT are considered as arcing PIS.

6.2.3.2	Table: Determination of Potential Ignition Sources (Resistive PIS)				P
Circuit Location (x-y)	Operating Condition (Normal / Describe Single Fault)	Measured wattage or VA During first 30 s (W / VA)	Measured wattage or VA After 30 s (W / VA)	Protective Circuit, Regulator, or PTC Operated? Yes / No (Comment)	Resistive PIS? Yes/No
3)	3)	3)	3)	--	Yes

Supplementary information:

1) A combination of voltmeter, VA and ammeter IA may be used instead of a wattmeter. If a separate voltmeter and ammeter are used, the product of (VA x IA) is used to determine Resistive PIS classification.

2) A Resistive PIS: (a) dissipates more than 15 W, measured after 30 s of normal operation, or (b) under single fault conditions has either a power exceeding 100 W measured immediately after the introduction of the fault if electronic circuits, regulators or PTC devices are used, or has an available power exceeding 15 W measured 30 s after introduction of the fault.

3) All components located within the EUT are considered as resistive PIS.

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

8.5.5	TABLE: High Pressure Lamp		N/A
Description		Values	Energy Source Classification
Lamp type.....:			—
Manufacturer .....:			—
Cat no. .....:			—
Pressure (cold) (MPa).....:			MS_
Pressure (operating) (MPa) .....:			MS_
Operating time (minutes) .....:			—
Explosion method .....:			—
Max particle length escaping enclosure (mm) .:			MS_
Max particle length beyond 1 m (mm).....:			MS_
Overall result .....:			
Supplementary information:			

B.2.5	TABLE: Input test						P
U (V)	I (A)	I rated (A)	P (W)	P rated (W)	Fuse No	I fuse (A)	Condition/status
Test for 34.0 inch models with power board 715GB240, main board 715G9823							
HDMI mode							
90V/50Hz	0.600	--	33.4	--	F901	0.600	Max. normal load condition. 1)
90V/60Hz	0.581	--	33.3	--	F901	0.581	Max. normal load condition. 1)
100V/50Hz	0.546	2.0	33.3	--	F901	0.546	Max. normal load condition. 1)
100V/60Hz	0.530	2.0	33.3	--	F901	0.530	Max. normal load condition. 1)
240V/50Hz	0.272	2.0	32.9	--	F901	0.272	Max. normal load condition. 1)
240V/60Hz	0.267	2.0	32.9	--	F901	0.267	Max. normal load condition. 1)
264V/50Hz	0.254	--	33.0	--	F901	0.254	Max. normal load condition. 1)
264V/60Hz	0.251	--	33.1	--	F901	0.251	Max. normal load condition. 1)
DP mode							
90V/50Hz	0.598	--	33.4	--	F901	0.598	Max. normal load condition. 1)
90V/60Hz	0.581	--	33.3	--	F901	0.581	Max. normal load condition. 1)
100V/50Hz	0.544	2.0	33.2	--	F901	0.544	Max. normal load condition. 1)

IEC 62368-1							
Clause	Requirement + Test				Result - Remark		Verdict
100V/60Hz	0.530	2.0	33.3	--	F901	0.530	Max. normal load condition. 1)
240V/50Hz	0.271	2.0	32.9	--	F901	0.271	Max. normal load condition. 1)
240V/60Hz	0.266	2.0	32.8	--	F901	0.266	Max. normal load condition. 1)
264V/50Hz	0.253	--	33.0	--	F901	0.253	Max. normal load condition. 1)
264V/60Hz	0.254	--	33.1	--	F901	0.254	Max. normal load condition. 1)
Test for 34.0 inch models with power board 715GB314, main board 715GB273 and USB board 715GB001							
HDMI mode							
90V/50Hz	1.813	--	161.8	--	F9901	1.813	Max. normal load condition. 1)
90V/60Hz	1.808	--	161.5	--	F9901	1.808	Max. normal load condition. 1)
100V/50Hz	1.608	2.0	159.5	--	F9901	1.608	Max. normal load condition. 1)
100V/60Hz	1.559	2.0	159.4	--	F9901	1.559	Max. normal load condition. 1)
240V/50Hz	0.668	2.0	153.3	--	F9901	0.668	Max. normal load condition. 1)
240V/60Hz	0.670	2.0	153.2	--	F9901	0.670	Max. normal load condition. 1)
264V/50Hz	0.619	--	152.9	--	F9901	0.619	Max. normal load condition. 1)
264V/60Hz	0.637	--	152.5	--	F9901	0.637	Max. normal load condition. 1)
DP mode							
90V/50Hz	1.810	--	161.4	--	F9901	1.810	Max. normal load condition. 2)
90V/60Hz	1.805	--	161.1	--	F9901	1.805	Max. normal load condition. 2)
100V/50Hz	1.605	2.0	159.1	--	F9901	1.605	Max. normal load condition. 2)
100V/60Hz	1.556	2.0	159.0	--	F9901	1.556	Max. normal load condition. 2)
240V/50Hz	0.665	2.0	152.9	--	F9901	0.665	Max. normal load condition. 2)
240V/60Hz	0.667	2.0	152.8	--	F9901	0.667	Max. normal load condition. 2)
264V/50Hz	0.616	--	152.5	--	F9901	0.616	Max. normal load condition. 2)
264V/60Hz	0.634	--	152.1	--	F9901	0.634	Max. normal load condition. 2)

IEC 62368-1							
Clause	Requirement + Test			Result - Remark			Verdict
Test for 34.0 inch models with power board 715GB314, main board 715GB058 and USB board 715GB001							
HDMI mode							
90V/50Hz	1.896	--	169.8	--	F9901	1.896	Max. normal load condition. 3)
90V/60Hz	1.893	--	169.5	--	F9901	1.893	Max. normal load condition. 3)
100V/50Hz	1.682	2.0	167.3	--	F9901	1.682	Max. normal load condition. 3)
100V/60Hz	1.681	2.0	165.0	--	F9901	1.681	Max. normal load condition. 3)
240V/50Hz	0.696	2.0	158.4	--	F9901	0.696	Max. normal load condition. 3)
240V/60Hz	0.698	2.0	158.4	--	F9901	0.698	Max. normal load condition. 3)
264V/50Hz	0.639	--	158.0	--	F9901	0.639	Max. normal load condition. 3)
264V/60Hz	0.639	--	157.9	--	F9901	0.639	Max. normal load condition. 3)
DP mode							
90V/50Hz	1.893	--	169.4	--	F9901	1.893	Max. normal load condition. 3)
90V/60Hz	1.890	--	169.2	--	F9901	1.890	Max. normal load condition. 3)
100V/50Hz	1.679	2.0	166.8	--	F9901	1.679	Max. normal load condition. 3)
100V/60Hz	1.678	2.0	164.7	--	F9901	1.678	Max. normal load condition. 3)
240V/50Hz	0.693	2.0	158.1	--	F9901	0.693	Max. normal load condition. 3)
240V/60Hz	0.695	2.0	158.1	--	F9901	0.695	Max. normal load condition. 3)
264V/50Hz	0.635	--	157.7	--	F9901	0.635	Max. normal load condition. 3)
264V/60Hz	0.635	--	157.6	--	F9901	0.635	Max. normal load condition. 3)
Test for 31.5 inch models with power board 715GB240, main board 715G9823							
HDMI mode							
90V/50Hz	0.688	--	38.8	--	F901	0.688	Max. normal load condition. 4)
90V/60Hz	0.666	--	38.7	--	F901	0.666	Max. normal load condition. 4)
100V/50Hz	0.623	2.0	38.6	--	F901	0.623	Max. normal load condition. 4)

IEC 62368-1							
Clause	Requirement + Test				Result - Remark		Verdict
100V/60Hz	0.605	2.0	38.7	--	F901	0.605	Max. normal load condition. 4)
240V/50Hz	0.308	2.0	38.1	--	F901	0.308	Max. normal load condition. 4)
240V/60Hz	0.303	2.0	38.0	--	F901	0.303	Max. normal load condition. 4)
264V/50Hz	0.289	--	38.2	--	F901	0.289	Max. normal load condition. 4)
264V/60Hz	0.284	--	38.2	--	F901	0.284	Max. normal load condition. 4)
DP mode							
90V/50Hz	0.683	--	38.4	--	F901	0.683	Max. normal load condition. 4)
90V/60Hz	0.662	--	38.3	--	F901	0.662	Max. normal load condition. 4)
100V/50Hz	0.622	2.0	38.3	--	F901	0.622	Max. normal load condition. 4)
100V/60Hz	0.604	2.0	38.1	--	F901	0.604	Max. normal load condition. 4)
240V/50Hz	0.307	2.0	37.9	--	F901	0.307	Max. normal load condition. 4)
240V/60Hz	0.302	2.0	37.8	--	F901	0.302	Max. normal load condition. 4)
264V/50Hz	0.287	--	38.0	--	F901	0.287	Max. normal load condition. 4)
264V/60Hz	0.282	--	38.0	--	F901	0.282	Max. normal load condition. 4)
Test for 31.5 inch models with power board 715GB314, main board 715GA732							
HDMI mode							
90V/50Hz	0.649	--	57.2	--	F9901	0.649	Max. normal load condition. 5)
90V/60Hz	0.649	--	57.1	--	F9901	0.649	Max. normal load condition. 5)
100V/50Hz	0.584	2.0	57.0	--	F9901	0.584	Max. normal load condition. 5)
100V/60Hz	0.586	2.0	57.1	--	F9901	0.586	Max. normal load condition. 5)
240V/50Hz	0.269	2.0	56.5	--	F9901	0.269	Max. normal load condition. 5)
240V/60Hz	0.278	2.0	56.6	--	F9901	0.278	Max. normal load condition. 5)
264V/50Hz	0.256	--	56.5	--	F9901	0.256	Max. normal load condition. 5)
264V/60Hz	0.256	--	56.5	--	F9901	0.256	Max. normal load condition. 5)

IEC 62368-1							
Clause	Requirement + Test			Result - Remark			Verdict
DP mode							
90V/50Hz	0.644	--	56.8	--	F9901	0.644	Max. normal load condition. 5)
90V/60Hz	0.643	--	56.6	--	F9901	0.643	Max. normal load condition. 5)
100V/50Hz	0.580	2.0	56.5	--	F9901	0.580	Max. normal load condition. 5)
100V/60Hz	0.581	2.0	56.6	--	F9901	0.581	Max. normal load condition. 5)
240V/50Hz	0.268	2.0	56.2	--	F9901	0.268	Max. normal load condition. 5)
240V/60Hz	0.276	2.0	56.2	--	F9901	0.276	Max. normal load condition. 5)
264V/50Hz	0.256	--	56.2	--	F9901	0.256	Max. normal load condition. 5)
264V/60Hz	0.266	--	56.2	--	F9901	0.266	Max. normal load condition. 5)
Test for 31.5 inch models with power board 715GB314, main board 715GA987 and USB board 715GB001							
HDMI mode							
90V/50Hz	1.656	--	147.9	--	F9901	1.656	Max. normal load condition. 6)
90V/60Hz	1.658	--	147.9	--	F9901	1.658	Max. normal load condition. 6)
100V/50Hz	1.486	2.0	147.3	--	F9901	1.486	Max. normal load condition. 6)
100V/60Hz	1.434	2.0	146.8	--	F9901	1.434	Max. normal load condition. 6)
240V/50Hz	0.615	2.0	140.7	--	F9901	0.615	Max. normal load condition. 6)
240V/60Hz	0.615	2.0	140.8	--	F9901	0.615	Max. normal load condition. 6)
264V/50Hz	0.598	--	139.6	--	F9901	0.598	Max. normal load condition. 6)
264V/60Hz	0.588	--	139.6	--	F9901	0.588	Max. normal load condition. 6)
DP mode							
90V/50Hz	1.653	--	147.6	--	F9901	1.653	Max. normal load condition. 6)
90V/60Hz	1.653	--	147.6	--	F9901	1.653	Max. normal load condition. 6)
100V/50Hz	1.480	2.0	146.9	--	F9901	1.480	Max. normal load condition. 6)
100V/60Hz	1.431	2.0	146.5	--	F9901	1.431	Max. normal load condition. 6)

IEC 62368-1							
Clause	Requirement + Test				Result - Remark		Verdict
240V/50Hz	0.612	2.0	140.4	--	F9901	0.612	Max. normal load condition. 6)
240V/60Hz	0.612	2.0	140.5	--	F9901	0.612	Max. normal load condition. 6)
264V/50Hz	0.595	--	139.2	--	F9901	0.595	Max. normal load condition. 6)
264V/60Hz	0.585	--	139.2	--	F9901	0.585	Max. normal load condition. 6)
Test for 31.5 inch models with power board 715GB314, main board 715GB058 and USB board 715GB001							
HDMI mode							
90V/50Hz	1.752	--	156.7	--	F9901	1.752	Max. normal load condition. 7)
90V/60Hz	1.755	--	156.7	--	F9901	1.755	Max. normal load condition. 7)
100V/50Hz	1.571	2.0	155.9	--	F9901	1.571	Max. normal load condition. 7)
100V/60Hz	1.519	2.0	155.5	--	F9901	1.519	Max. normal load condition. 7)
240V/50Hz	0.652	2.0	149.6	--	F9901	0.652	Max. normal load condition. 7)
240V/60Hz	0.656	2.0	149.6	--	F9901	0.656	Max. normal load condition. 7)
264V/50Hz	0.623	--	148.6	--	F9901	0.623	Max. normal load condition. 7)
264V/60Hz	0.623	--	148.6	--	F9901	0.623	Max. normal load condition. 7)
DP mode							
90V/50Hz	1.749	--	156.4	--	F9901	1.749	Max. normal load condition. 7)
90V/60Hz	1.750	--	156.4	--	F9901	1.750	Max. normal load condition. 7)
100V/50Hz	1.565	2.0	155.5	--	F9901	1.565	Max. normal load condition. 7)
100V/60Hz	1.516	2.0	155.2	--	F9901	1.516	Max. normal load condition. 7)
240V/50Hz	0.649	2.0	149.3	--	F9901	0.649	Max. normal load condition. 7)
240V/60Hz	0.653	2.0	149.3	--	F9901	0.653	Max. normal load condition. 7)
264V/50Hz	0.620	--	148.2	--	F9901	0.620	Max. normal load condition. 7)
264V/60Hz	0.620	--	148.2	--	F9901	0.620	Max. normal load condition. 7)

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

Supplementary information:

1. Three vertical bar signal which as defined in 3.2.1.3 of 60107-1 display with maximum brightness, maximum contrast; speakers were loaded with 1KHz sinusoidal signal and turned to maximum volume
2. Three vertical bar signal which as defined in 3.2.1.3 of 60107-1 display with maximum brightness, maximum contrast; speakers were loaded with 1KHz sinusoidal signal and turned to maximum volume; Each USB 3.0 was loaded 5V/0.9A, one USB fast charge was loaded 5V/1.5A, one USB type-C was loaded 20V/3.25A.
3. Three vertical bar signal which as defined in 3.2.1.3 of 60107-1 display with maximum brightness, maximum contrast; speakers were loaded with 1KHz sinusoidal signal and turned to maximum volume; Each USB 3.0 was loaded 5V/0.9A, one USB fast charge was loaded 5V/1.5A, one USB type-C was loaded 20V/3.25A.
4. Three vertical bar signal which as defined in 3.2.1.3 of 60107-1 display with maximum brightness, maximum contrast; speakers were loaded with 1KHz sinusoidal signal and turned to maximum volume;
5. Three vertical bar signal which as defined in 3.2.1.3 of 60107-1 display with maximum brightness, maximum contrast; speakers were loaded with 1KHz sinusoidal signal and turned to maximum volume;
6. Three vertical bar signal which as defined in 3.2.1.3 of 60107-1 display with maximum brightness, maximum contrast; Each USB 3.0 was loaded 5V/0.9A, one USB fast charge was loaded 5V/1.5A, one USB type-C was loaded 20V/3.25A.
7. Three vertical bar signal which as defined in 3.2.1.3 of 60107-1 display with maximum brightness, maximum contrast; Each USB 3.0 was loaded 5V/0.9A, one USB fast charge was loaded 5V/1.5A, one USB type-C was loaded 20V/3.25A.

B.3	**TABLE: Abnormal operating condition tests**							P
Ambient temperature (°C) .....:				See below				—
Power source for EUT: Manufacturer, model/type, output rating ..:				See table 4.1.2				—
Component No.	Abnormal Condition	Supply voltage (V)	Test time (ms)	Fuse no.	Fuse current (A)	T-couple	Temp. (°C)	Observation
Test on 34.0 inch models with power board 715GB314								
Ventilation openings	blocked	264	4.0 hrs	F9901	0.635	Yes	Max. measured temperature: T9102 coil = 75.6°C, T9102 core = 81.1°C, AC inlet =45.3°C, Metal enclosure =49.6°C, Plastic enclosure outside=40.0°C, Panel =44.2°C, Button =34.3°C, Ambient = 26.1°C	Unit operated normally, no hazards, no damage.

IEC 62368-1								
Clause	Requirement + Test					Result - Remark		Verdict
T901 pin 6, 9- pin 7, 8 after D9104 (+20V)	overload	264	7.5 hrs	F9901	0.802	Yes	Max. measured temperature: T9102 coil = 101.7°C, T9102 core = 90.7°C, AC inlet = 40.3°C, Metal enclosure =47.1°C, Plastic enclosure outside=35.0°C, Panel = 40.1°C, Button =35.0°C, Ambient = 27.5°C	Before shutdown winding is loaded to additional 2.0A/27.9W. No damage, no hazards.
USB fast charging	overload	264	6.5 hrs	F9901	0.668	Yes	Max. measured temperature: T9102 coil = 78.1°C, T9102 core = 72.4°C, AC inlet = 40.5°C, Metal enclosure =45.0°C, Plastic enclosure outside=34.6°C, Panel = 39.2°C, Button =31.7°C, Ambient = 26.1°C	Before shutdown winding is loaded to 2.6A/10.5W. No damage, no hazards.
USB 3.0 output	overload	264	6.0 hrs	F9901	0.675	Yes	Max. measured temperature: T9102 coil = 77.9°C, T9102 core = 72.7°C, AC inlet = 40.3°C, Metal enclosure =44.8°C, Plastic enclosure outside=35.0°C, Panel = 39.7°C, Button =31.2°C, Ambient = 26.2°C	Before shutdown winding is loaded to 2.5A/10.2W. No damage, no hazards.
USB type-C output	overload	264	7.0 hrs	F9901	0.712	Yes	Max. measured temperature: T9102 coil = 78.0°C, T9102 core = 73.6°C, AC inlet = 41.3°C, Metal enclosure =45.3°C, Plastic enclosure outside=35.0°C, Panel = 39.5°C, Button =32.3°C, Ambient = 26.5°C	Before shutdown winding is loaded to 3.9A/75.1W. No damage, no hazards.

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

Supplementary information:
1. Test table is provided to record abnormal and fault conditions for all applicable energy sources including Thermal burn injury. Column “Abnormal/Fault.” Specify if test condition by indicating “Abnormal” then the condition for a Clause B.3 test or “Single Fault” then the condition for Clause B.4.

2. Temp. limit of transformer according to table C.1 is 175°C - 10 - (40°C - Tamb) (worst case) for Class B.

B.4	**TABLE: Fault condition tests**							P
Ambient temperature (°C) .....:				See below				—
Power source for EUT: Manufacturer, model/type, output rating ..:				See table 4.1.2				—
Component No.	Fault Condition	Supply voltage, (V)	Test time (ms)	Fuse no.	Fuse current, (A)	T-couple	Temp. (°C)	Observation
BD9901 pin1-4	s-c	264	<1 sec.	F9901	--	--	--	Fuse F9901 opened instantly, no hazard.
C9801	s-c	264	<1 sec.	F9901	--	--	--	Fuse F9901 opened instantly, no hazard.
C9802	s-c	264	<1 sec.	F9901	--	--	--	Fuse F9901 opened instantly, no hazard.
Q9101 pin G-S	s-c	264	5 min	F9901	0.09	--	--	Unit shut down, no damaged, no hazard.
Q9101 pin D-G	s-c	264	<1 sec.	F9901	--	--	--	Fuse opened, Q9101 damaged. Repeated the test with three times and same result come out. No hazards.
Q9101 pin D-S	s-c	264	<1 sec.	F9901	--	--	--	Fuse opened, Q9101 damaged. Repeated the test with three times and same result come out. No hazards.
Q9102 pin G-S	s-c	264	5 min	F9901	0.09	--	--	Unit shut down, no damaged, no hazard.

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Clause	Requirement + Test				Result - Remark			Verdict
Q9102 pin D-G	s-c	264	<1 sec.	F9901	--	--	--	Fuse opened, Q9102 damaged. Repeated the test with three times and same result come out. No hazards.
Q9102 pin D-S	s-c	264	<1 sec.	F9901	--	--	--	Fuse opened, Q9102 damaged. Repeated the test with three times and same result come out. No hazards.
Q9801 pin G-S	s-c	264	5min	F9901	0.556	--	--	Normal operation, no damage, no hazards.
Q9801 pin D-G	s-c	264	<1 sec.	F9901	--	--	--	Fuse opened, Q9801 damaged. Repeated the test with three times and same result come out. No hazards.
Q9801 pin D-S	s-c	264	<1 sec.	F9901	--	--	--	Fuse opened, Q9801 damaged. Repeated the test with three times and same result come out. No hazards.
T9102 pin 2 - pin 4	s-c	264	5 min	F9901	0.09	--	--	Unit shut down, no damaged, no hazard.
T9102 pin 6 - pin 7,8	s-c	264	5 min	F9901	0.09	--	--	Unit shut down, no damaged, no hazard.
T9102 pin 7,8 - pin 9	s-c	264	5 min	F9901	0.09	--	--	Unit shut down, no damaged, no hazard.
T9102 pin 12 - pin 13	s-c	264	5 min	F9901	0.09	--	--	Unit shut down, no damaged, no hazard.
U902 pin 1 - 2	s-c	264	5 min	F9901	0.04	--	--	Unit shut down, no damaged, no hazard.

IEC 62368-1								
Clause	Requirement + Test				Result - Remark			Verdict
U9106 pin1-2	s-c	264	5 min	F9901	0.556	--	--	Normal operation, no damage, no hazards.
U9106 pin3-4	s-c	264	5 min	F9901	0.556	--	--	Normal operation, no damage, no hazards.
U9106 pin 1	o-c	264	5 min	F9901	0.556	--	--	Normal operation, no damage, no hazards.
U9802 pin1-2	s-c	264	5 min	F9901	0.09	--	--	Unit shut down, no damaged, no hazard.
U9802 pin3-4	s-c	264	5 min	F9901	0.09	--	--	Unit shut down, no damaged, no hazard.
U9802 pin 1	o-c	264	5 min	F9901	0.09	--	--	Unit shut down, no damaged, no hazard.
D9104	s-c	264	5 min	F9901	0.09	--	--	Unit shut down, no damaged, no hazard.
D9105	s-c	264	5 min	F9901	0.09	--	--	Unit shut down, no damaged, no hazard.
D801	s-c	264	5 min	F9901	0.09	--	--	Unit shut down, no damaged, no hazard.
+20V output to earth	s-c	264	5 min	F9901	0.09	--	--	Unit shut down, no damaged, no hazard.

Supplementary information:

1) The unit passed 4000V hi-pot test between primary and accessible output connector after single fault test above.
2) In fault column, where s-c=short-circuited, o-c=open-circuited, o-l = overload.
3) For fuse opened conditions were tested with each source of fuse.
4) For component damaged conditions have been repeated twice (three tests total) with same result.
5) For heating test mentioned above was tested under HDMI mode.
6) All source of each transformer considered with maximum value recorded.

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Clause	Requirement + Test	Result - Remark	Verdict

Annex M	**TABLE: Batteries**		N/A
The tests of Annex M are applicable only when appropriate battery data is not available			
Is it possible to install the battery in a reverse polarity position? .....:			

	Non-rechargeable batteries			Rechargeable batteries					
	Discharging		Un-intentional charging	Charging		Discharging		Reversed charging	
	Meas. current	Manuf. Specs.		Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.
Max. current during normal condition									
Max. current during fault condition									

Test results:		Verdict
- Chemical leaks		
- Explosion of the battery		
- Emission of flame or expulsion of molten metal		
- Electric strength tests of equipment after completion of tests		
Supplementary information:		

Annex M.4	**Table: Additional safeguards for equipment containing secondary lithium batteries**	N/A

Battery/Cell No.	Test conditions	Measurements			Observation
		U	I (A)	Temp (C)	
	Normal				
	Abnormal				
	Single fault –SC/OC				
	Normal				
	Abnormal				
	Single fault – SC/OC				
Supplementary information:					

Battery identification	Charging at T_{lowest} (°C)	Observation	Charging at $T_{highest}$ (°C)	Observation
Supplementary information:				

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Clause	Requirement + Test	Result - Remark	Verdict

Annex Q.1	**TABLE: Circuits intended for interconnection with building wiring (LPS)**					P
Note: Measured UOC (V) with all load circuits disconnected:						
Output Circuit	Components	U_{oc} (V)	I_{sc} (A)		S (VA)	
			Meas.	Limit	Meas.	Limit
Circuit output tested: +20V outputs of power board 4)						
1).	Normal condition	19.4	8.9	1000/Uoc= 51.5	150.1	250
Circuit output tested: data ports on main board 715G9823						
HDMI (CN501) pin 18 to GND	Normal condition	5.0	0 (can't loaded)	8	0 (can't loaded)	100
HDMI (CN501) others pins to GND	Normal condition	0 (can't loaded)	0 (can't loaded)	8	0 (can't loaded)	100
HDMI (CN502) pin 18 to GND	Normal condition	5.0	0 (can't loaded)	8	0 (can't loaded)	100
HDMI (CN502) others pins to GND	Normal condition	0 (can't loaded)	0 (can't loaded)	8	0 (can't loaded)	100
DP (CN503) pin 20 to GND	Normal condition	3.3	1.9	8	5.2	100
DP (CN503) pin 20 to GND	Fault condition (U541 Pin 2-3 SC)	3.3	2.0	8	5.4	100
DP (CN503) pin 20 to GND	Fault condition (U503 Pin 2-3 SC)	5.0	2.0	8	7.4	100
DP (CN503) others pins to GND	Normal condition	0 (can't loaded)	0 (can't loaded)	8	0 (can't loaded)	100
Circuit output tested: data ports on main board 715GB273						

IEC 62368-1						
Clause	Requirement + Test			Result - Remark		Verdict
HDMI (CN501) pin 18 to GND	Normal condition	4.9	0 (can't loaded)	8	0 (can't loaded)	100
HDMI (CN501) others pins to GND	Normal condition	0 (can't loaded)	0 (can't loaded)	8	0 (can't loaded)	100
HDMI (CN502) pin 18 to GND	Normal condition	4.9	0 (can't loaded)	8	0 (can't loaded)	100
HDMI (CN502) others pins to GND	Normal condition	0 (can't loaded)	0 (can't loaded)	8	0 (can't loaded)	100
DP (CN503) pin 20 to GND	Normal condition	3.3	1.8	8	5.2	100
DP (CN503) pin 20 to GND	Fault condition (U545 Pin 1-5 SC)	3.3	1.9	8	5.3	100
DP (CN503) pin 20 to GND	Fault condition (U541 Pin 2-3 SC)	5.0	1.9	8	7.4	100
DP (CN503) others pins to GND	Normal condition	0 (can't loaded)	0 (can't loaded)	8	0 (can't loaded)	100
USB (CN106) pin 1 to GND	Normal condition	5.1	3.3	8	11.5	100
USB (CN106) pin 1 to GND	Fault condition (U7406 PIN 1-5 SC)	5.1	3.3	8	11.5	100

IEC 62368-1						
Clause	Requirement + Test			Result - Remark		Verdict
USB (CN106) others pins to GND	Normal condition	0 (can't loaded)	0 (can't loaded)	8	0 (can't loaded)	100
USB (CN107) pin 1 to GND	Normal condition	5.1	3.5	8	12.0	100
USB (CN107) pin 1 to GND	Fault condition (U7405 PIN 1-5 SC)	5.1	3.6	8	12.0	100
USB (CN107) others pins to GND	Normal condition	0 (can't loaded)	0 (can't loaded)	8	0 (can't loaded)	100
USB Type-C (CN102) pin 4,9,16,21 to GND	Normal condition	20.1	3.6	8	65.2	100
USB Type-C (CN102) pin 4,9,16,21 to GND	Fault condition (R131 SC)	20.1	3.6	8	65.4	100
USB Type-C (CN102) pin 4,9,16,21 to GND	Fault condition (ZD6605 SC)	0	0	8	0	100
USB Type-C (CN102) others pins to GND	Normal condition	0 (can't loaded)	0 (can't loaded)	8	0 (can't loaded)	100
Circuit output tested: data ports on main board 715GB058						
HDMI (CN501) pin 18 to GND	Normal condition	5.0	0 (can't loaded)	8	0 (can't loaded)	100
HDMI (CN501) others pins to GND	Normal condition	0 (can't loaded)	0 (can't loaded)	8	0 (can't loaded)	100

IEC 62368-1						
Clause	Requirement + Test			Result - Remark		Verdict
HDMI (CN502) pin 18 to GND	Normal condition	5.0	0 (can't loaded)	8	0 (can't loaded)	100
HDMI (CN502) others pins to GND	Normal condition	0 (can't loaded)	0 (can't loaded)	8	0 (can't loaded)	100
DP (CN503) pin 20 to GND	Normal condition	3.3	1.8	8	5.0	100
DP (CN503) pin 20 to GND	Fault condition (U505 Pin 1-5 SC)	3.3	1.9	8	5.1	100
DP (CN503) pin 20 to GND	Fault condition (C514 SC)	0	0	8	0	100
DP (CN503) others pins to GND	Normal condition	0 (can't loaded)	0 (can't loaded)	8	0 (can't loaded)	100
USB (CN106) pin 1 to GND	Normal condition	5.1	3.6	8	13.3	100
USB (CN106) others pins to GND	Normal condition	0 (can't loaded)	0 (can't loaded)	8	0 (can't loaded)	100
USB (CN107) pin 1 to GND	Normal condition	5.1	3.7	8	13.2	100
USB (CN107) others pins to GND	Normal condition	0 (can't loaded)	0 (can't loaded)	8	0 (can't loaded)	100

IEC 62368-1						
Clause	Requirement + Test			Result - Remark		Verdict
USB Type-C (CN102) pin 4,9,16,21 to GND	Normal condition	20.1	4.4	8	78.1	100
USB Type-(CN102) pin 4,9,16,21 to GND	Fault condition (R131 SC)	20.1	4.4	8	78.3	100
USB Type-(CN102) pin 4,9,16,21 to GND	Fault condition (ZD6605 SC)	0	0	8	0	100
USB Type-(CN102) others pins to GND	Normal condition	0 (can't loaded)	0 (can't loaded)	8	0 (can't loaded)	100
Circuit output tested: data ports on main board 715GA987						
HDMI (CN501) pin 18 to GND	Normal condition	5.0	0 (can't loaded)	8	0 (can't loaded)	100
HDMI (CN501) others pins to GND	Normal condition	0 (can't loaded)	0 (can't loaded)	8	0 (can't loaded)	100
HDMI (CN502) pin 18 to GND	Normal condition	5.0	0 (can't loaded)	8	0 (can't loaded)	100
HDMI (CN502) others pins to GND	Normal condition	0 (can't loaded)	0 (can't loaded)	8	0 (can't loaded)	100
DP (CN503) pin 20 to GND	Normal condition	3.3	1.8	8	5.0	100
DP (CN503) pin 20 to GND	Fault condition (U541 Pin 2-3 SC)	3.3	1.9	8	5.1	100

IEC 62368-1						
Clause	Requirement + Test			Result - Remark		Verdict
DP (CN503) pin 20 to GND	C541	0	0	8	0	100
DP (CN503) others pins to GND	Normal condition	0 (can't loaded)	0 (can't loaded)	8	0 (can't loaded)	100
USB (CN5901) pin 1 to GND	Normal condition	5.1	3.5	8	11.1	100
USB (CN5901) pin 1 to GND	Fault condition (C5980 SC)	5.1	0	8	0	100
USB (CN5901) others pins to GND	Normal condition	0 (can't loaded)	0 (can't loaded)	8	0 (can't loaded)	100
USB (CN5902) pin 1 to GND	Normal condition	5.1	2.9	8	10.0	100
USB (CN5902) pin 1 to GND	Fault condition (C5980 SC)	5.1	0	8	0	100
USB (CN5902) others pins to GND	Normal condition	0 (can't loaded)	0 (can't loaded)	8	0 (can't loaded)	100
USB Type-C (CN593) pin 4,9,16,21 to GND	Normal condition	19.9	6.98	8	96.01	100
USB Type-C (CN593) pin 4,9,16,21 to GND	Fault condition (R5801 SC)	19.9	6.99	8	96.23	100

IEC 62368-1						
Clause	Requirement + Test	Result - Remark				Verdict
USB Type-C (CN593) pin 4,9,16,21 to GND	Fault condition (C5811 SC)	0	0	8	0	100
USB Type-C (CN593) others pins to GND	Normal condition	0 (can't loaded)	0 (can't loaded)	8	0 (can't loaded)	100
Circuit output tested: data ports on main board 715GA732						
HDMI (CN501) pin 18 to GND	Normal condition	5.0	0 (can't loaded)	8	0 (can't loaded)	100
HDMI (CN501) others pins to GND	Normal condition	0 (can't loaded)	0 (can't loaded)	8	0 (can't loaded)	100
HDMI (CN502) pin 18 to GND	Normal condition	5.0	0 (can't loaded)	8	0 (can't loaded)	100
HDMI (CN502) others pins to GND	Normal condition	0 (can't loaded)	0 (can't loaded)	8	0 (can't loaded)	100
DP (CN503) pin 20 to GND	Normal condition	3.3	1.6	8	4.2	100
DP (CN503) pin 20 to GND	Fault condition (U545 Pin 3-4 SC)	3.3	2.0	8	5.4	100
DP (CN503) pin 20 to GND	Fault condition (ZD514 SC)	0	0	8	0	100
DP (CN503) others pins to GND	Normal condition	0 (can't loaded)	0 (can't loaded)	8	0 (can't loaded)	100
Circuit output tested: data ports on USB board 715GB001						

IEC 62368-1						
Clause	Requirement + Test			Result - Remark		Verdict
USB (CN7202) pin 1 to GND	Normal condition	5.1	3.5	8	11.1	100
USB (CN7202) pin 1 to GND	Fault condition (C7201 SC)	5.1	0	8	0	100
USB (CN7202) others pins to GND	Normal condition	0 (can't loaded)	0 (can't loaded)	8	0 (can't loaded)	100
USB (CN7203) pin 1 to GND	Normal condition	5.1	3.5	8	11.1	100
USB (CN7203) pin 1 to GND	Fault condition (C7202 SC)	5.1	0	8	0	100
USB (CN7203) others pins to GND	Normal condition	0 (can't loaded)	0 (can't loaded)	8	0 (can't loaded)	100
Supplementary information: 1) Tested with +20V outputs of power board. 2) Outputs protected by fuses that will break the circuit within 120s with a current equal to 210%. Current limit of table 2C reduced to breaking capacity of the fuse (5A).						

T.2, T.3, T.4, T.5	**TABLE: Steady force test**				**P**
Part/Location	Material	Thickness (mm)	Force (N)	Test Duration (sec)	Observation
Internal components	--	--	10	5	The clearance and creepage distances do not be reduced below the required values.
Internal metal enclosure	See table 4.1.2	See table 4.1.2	30	5	All safeguards remained effective.
Supplementary information:					

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

T.6, T.9	TABLE: Impact tests				N/A
Part/Location	Material	Thickness (mm)	Vertical distance (mm)	Observation	
Supplementary information:					

T.7	TABLE: Drop tests				N/A
Part/Location	Material	Thickness (mm)	Drop Height (mm)	Observation	
Supplementary information:					

T.8	TABLE: Stress relief test					N/A
Part/Location	Material	Thickness (mm)	Oven Temperature (°C)	Duration (h)	Observation	
Supplementary information:						

List of test equipment used:

A completed list of used test equipment shall be provided in the Test Reports when a Manufacturer Testing Laboratory according to TMP/CTF stage 1 or WMT/CTF stage 2 procedure has been used.

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

Information:

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

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

6.4.8.3.3, 6.4.8.3.4 & P.2.2	**Table: enclosure openings**	**P**

Location	Size (mm)	Comments
Internal metal enclosure type B, a) at horizontal orientation, b) at vertical orientation (power board on bottom), c) at vertical orientation (power board on top)		
a) Top b) Right c) Left	Numerous circle openings: ∅2.8mm.	1) Openings do not exceed 3mm in any dimension. No hazards.
a) / b) c) Rear	1) One circle opening: ∅2.6mm; 2) Three rectangle openings: 1.6mm x 16.5mm; 1.8mm x 15.2mm; 2.5mm x 4.5mm	1) Openings do not exceed 3mm in any dimension. No hazards. 2) No opening was fall in Volume of PS3 component shown as Figure 41 and 42 of this standard. No hazards.
a) Left b) Top c) Bottom	1) Numerous circle openings near main board ∅1.7mm; 2) One rectangle opening: 28.4mm x 19.7mm	1) Openings do not exceed 3mm in any dimension. No hazards. 2) No opening was fall in Volume of PS3 component shown as Figure 41 and 42 of this standard. No hazards.
a) Right b) Bottom c) Top	**Numerous circle openings near main board ∅1.7mm;**	Openings do not exceed 3mm in any dimension. No hazards.
a) Bottom b) Left c) Right	1) Under power board side: Numerous ∅1.7mm holes	Openings do not exceed 3mm in any dimension. No hazards.
Note(s):		

6.4.8.3.3, 6.4.8.3.4 & P.2.2	**Table: enclosure openings**	**P**

Location	Size (mm)	Comments
Internal metal enclosure type B, a) at horizontal orientation, b) at vertical orientation (power board on bottom), c) at vertical orientation (power board on top)		
a) Top b) Right c) Left	1) Numerous circle openings: ∅2.8mm. **2) One rectangle opening: 59.2mm x 31.1mm**	1) Openings do not exceed 3mm in any dimension. No hazards. 2) The opening is covered by V-0 mylar sheet. No hazards.

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

a) / b) c) Rear	1) One circle opening: ∅2.6mm; 2) Four rectangle openings: 1.6mm x 16.5mm; 1.8mm x 15.2mm; 2.5mm x 4.5mm 3) Four rectangle openings: **59.2mm x 24.1mm**	1) Openings do not exceed 3mm in any dimension. No hazards. 2) No opening was fall in Volume of PS3 component shown as Figure 41 and 42 of this standard. No hazards. 3) The opening is covered by V-0 mylar sheet. No hazards.
a) Left b) Top c) Bottom	1) Numerous circle openings near main board ∅1.7mm; 2) One rectangle opening: 28.4mm x 19.7mm	1) Openings do not exceed 3mm in any dimension. No hazards. 2) No opening was fall in Volume of PS3 component shown as Figure 41 and 42 of this standard. No hazards.
a) Right b) Bottom c) Top	No openings.	--
a) Bottom b) Left c) Right	1) Under power board side: Numerous ∅1.7mm holes	Openings do not exceed 3mm in any dimension. No hazards.
Note(s):		

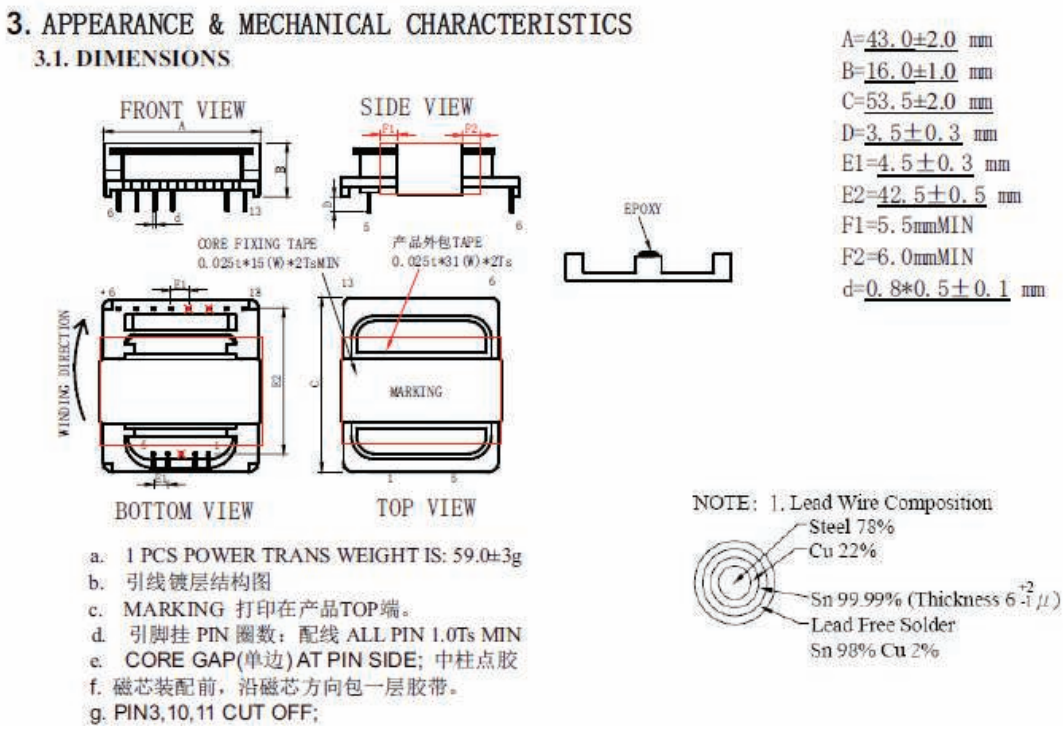
G.5.3.2	TABLE: transformers						P
Loc.	Tested insulation	Working voltage peak / V (2.10.2)	Working voltage rms / V (2.10.2)	Required electric strength (5.2)	Required clearance / mm (2.10.3)	Required creepage distance / mm (2.10.4)	Required distance thr. insul. (2.10.5)
For power board 715GB314							
T9102	Input terminal to output winding (RI)	441	268	AC 4000V	4.5	5.4	Min. 2 layers tape
T9102	Input terminal to output terminal (RI)	441	268	AC 4000V	4.5	5.4	Min. 2 layers tape
T9102	Input winding to output winding (RI)	441	268	AC 4000V	4.5	5.4	Min. 2 layers tape
T9102	Input winding to output terminal (RI)	441	268	AC 4000V	4.5	5.4	Min. 2 layers tape
T9102	Input winding to Core (RI)	441	268	AC 4000V	4.5	5.4	--
T9102	Input terminal to Core (RI)	441	268	AC 4000V	4.5	5.4	--

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

Loc.	Tested insulation	Test voltage/ V	Measured clearance / mm	Measured creepage dist./ mm	Measured distance thr. insul. / mm; number of layers
T9102	Input terminal to output winding (RI)	AC 4000V	7.2	7.2	--
T9102	Input terminal to output terminal (RI)	AC 4000V	7.5	7.5	--
T9102	Input winding to output winding (RI)	AC 4000V	7.5	7.5	--
T9102	Input winding to output terminal (RI)	AC 4000V	42.5	42.5	--
T9102	Input winding to Core (RI)	AC 4000V	8.9	8.9	--
T9102	Input terminal to Core (RI)	AC 4000V	9.0	9.0	--
Supplementary information: All sources of transformer were checked with same construction.					

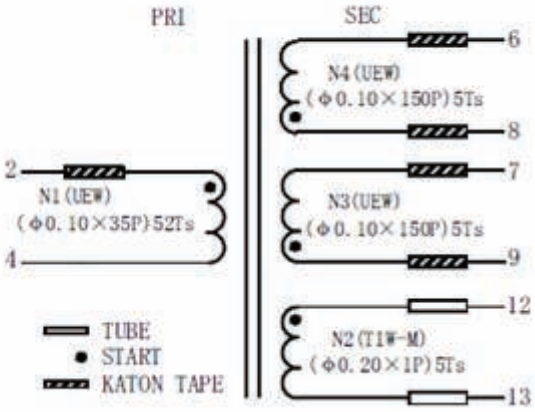
G.5.3.2	**TABLE: transformers**	P

Construction:



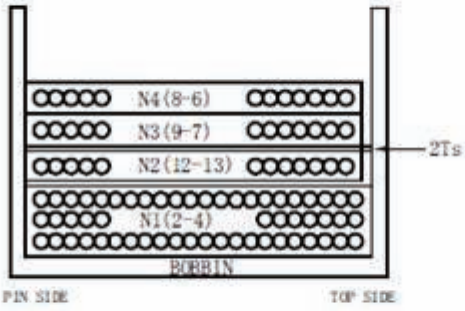
IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

3.4. SCHEMATIC:



PIN	Tube length
2, 6, 7, 8, 9, 12, 13	12mm MIN

3.5. WINDING CONSTRUCTION:



. Note:
1.) PIN2,6,7,8,9,12,13 ADDED TUBE/TAPE,
2.) TUBE/TAPE over winding 2.5mm min

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

3.6. WINDING MODE:

No.	COIL	TERMINAL	WIRE GAUGE	WIRE TYPE	TUNS	WINDING METHOD	TAPE
1	N1	2-4	Φ0.10mm×35	UEW	52	CLOSE	/
2	N2	12-13	Φ0.20mm	TIW-M	5	CLOSE	2Ts
3	N3	9-7	Φ0.10mm×150	UEW	5	CLOSE	
4	N4	8-6	Φ0.10mm×150	UEW	5	CLOSE	

Concentric windings on bobbin (horizontal type core). Coils N1, N2 are for primary, and coils N3, N4 are for secondary. Triple insulated wire used for primary coil N1. The core is considered as secondary part.

Product: LCD monitor

Type Designation: U34P2*******, Q34P2********, 34P2********, U34E2*******, Q34E2********, 34E2********, C*34E2*********, C34E2********* , C*34P2*********, C34P2*********; U32P2********, Q32P2********, 32P2********, C*32P2*********, C32P2*********, U32E2********, Q32E2********, 32E2********, C*32E2*********, C32E2*********

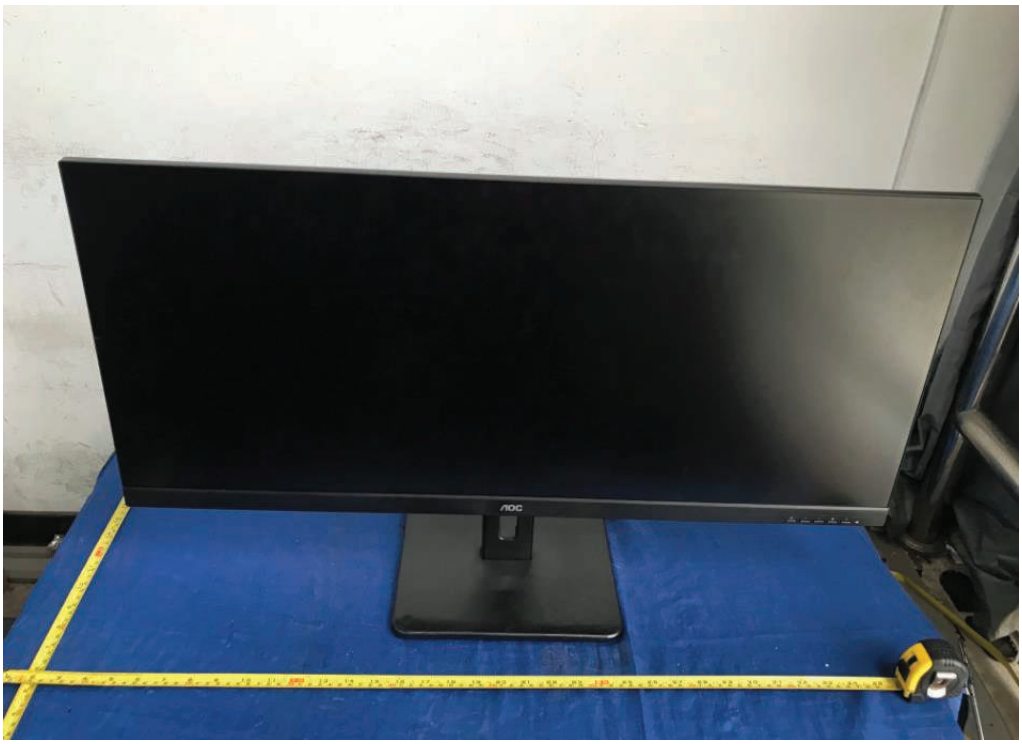


Figure 1. Front view with base stand type B for 31.5 inch models

Figure 2. Back view with base stand type B for 31.5 inch models

Product: LCD monitor

Type Designation: U34P2*******, Q34P2********, 34P2********, U34E2*******, Q34E2********, 34E2********, C*34E2*********, C34E2********* , C*34P2*********, C34P2*********; U32P2********, Q32P2********, 32P2********, C*32P2*********, C32P2*********, U32E2********, Q32E2********, 32E2********, C*32E2*********, C32E2*********

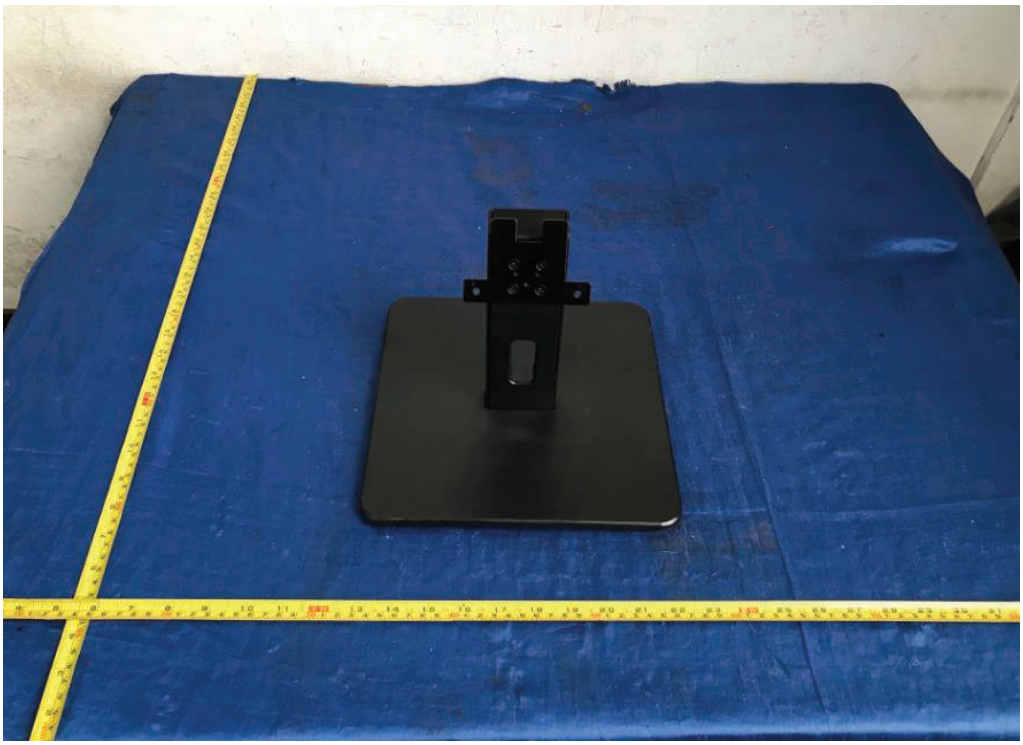


Figure 3. Base stand type B

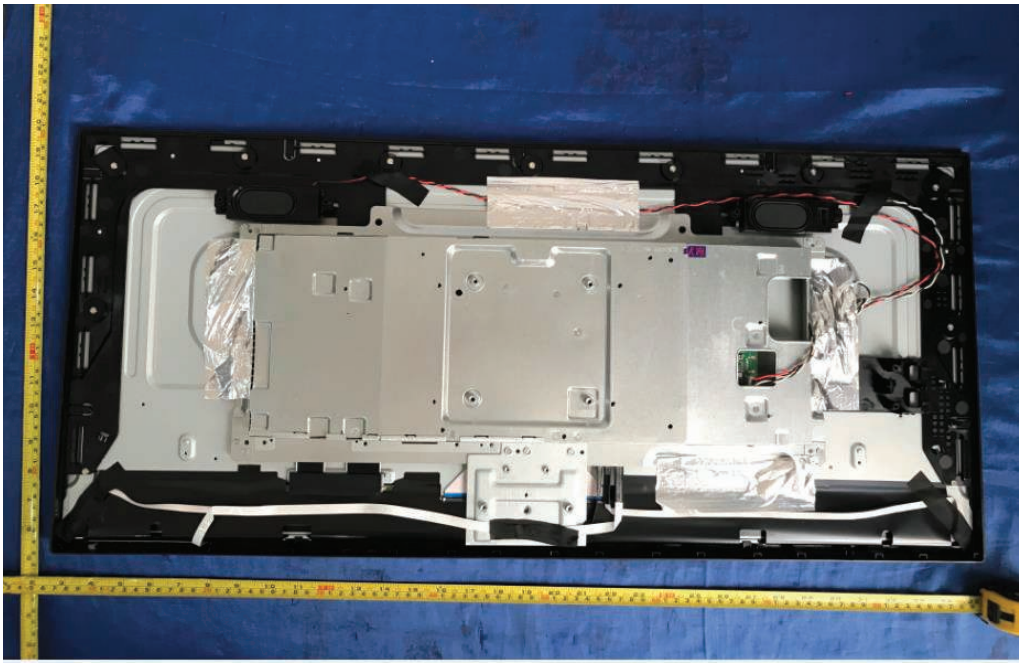


Figure 4. Metal enclosure type B

Product: LCD monitor

Type Designation: U34P2*******, Q34P2********, 34P2********, U34E2*******, Q34E2********, 34E2********, C*34E2*********, C34E2********* , C*34P2*********, C34P2*********; U32P2********, Q32P2********, 32P2********, C*32P2*********, C32P2*********, U32E2********, Q32E2********, 32E2********, C*32E2*********, C32E2*********

Figure 5. Metal enclosure type B

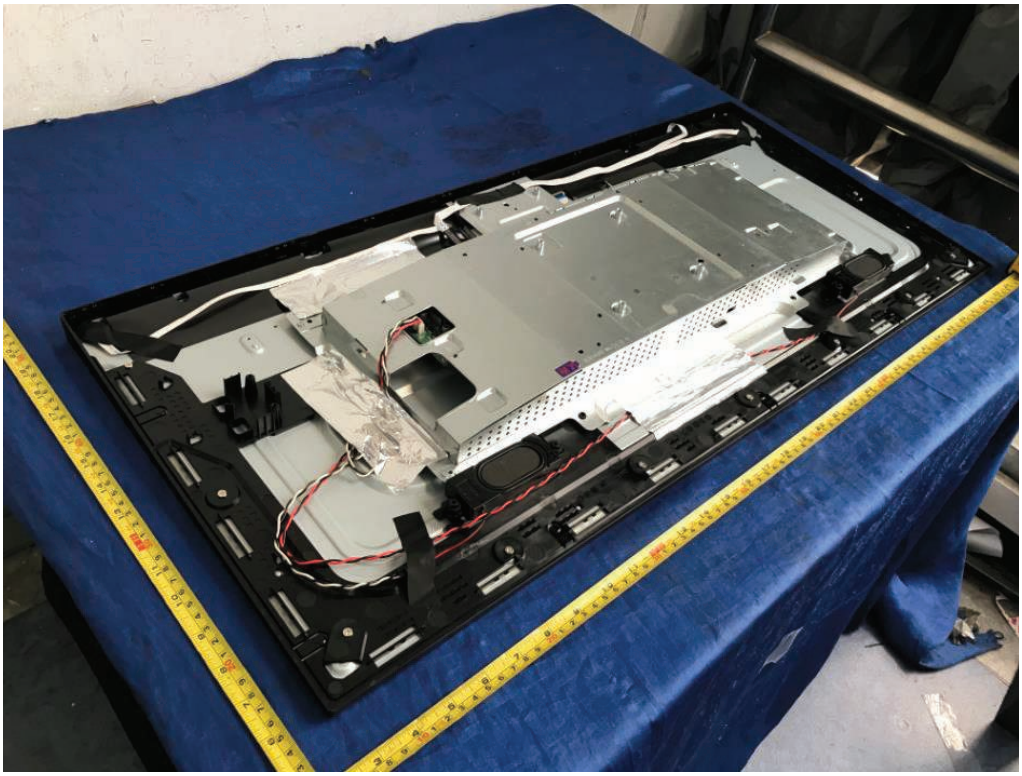


Figure 6. Metal enclosure type B

Product: LCD monitor

Type Designation: U34P2*******, Q34P2********, 34P2********, U34E2*******, Q34E2********, 34E2********, C*34E2*********, C34E2********* , C*34P2*********, C34P2*********; U32P2********, Q32P2********, 32P2********, C*32P2*********, C32P2*********, U32E2********, Q32E2********, 32E2********, C*32E2*********, C32E2*********

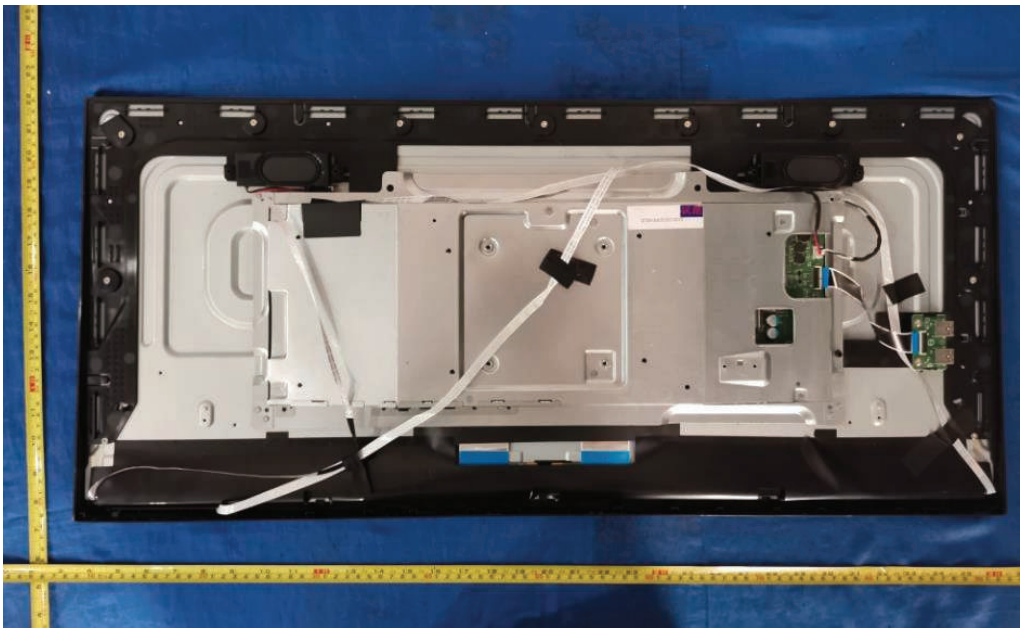


Figure 7. Metal enclosure type C

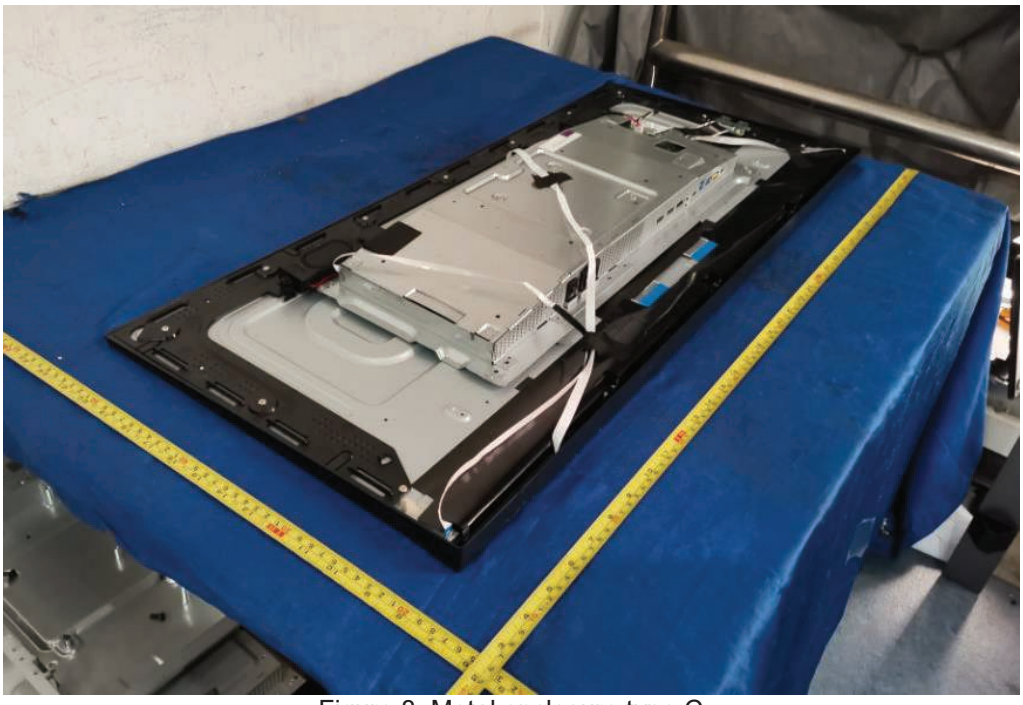


Figure 8. Metal enclosure type C

Product: LCD monitor

Type Designation: U34P2*******, Q34P2********, 34P2********, U34E2*******, Q34E2********, 34E2********, C*34E2*********, C34E2********* , C*34P2*********, C34P2*********; U32P2********, Q32P2********, 32P2********, C*32P2*********, C32P2*********, U32E2********, Q32E2********, 32E2********, C*32E2*********, C32E2*********

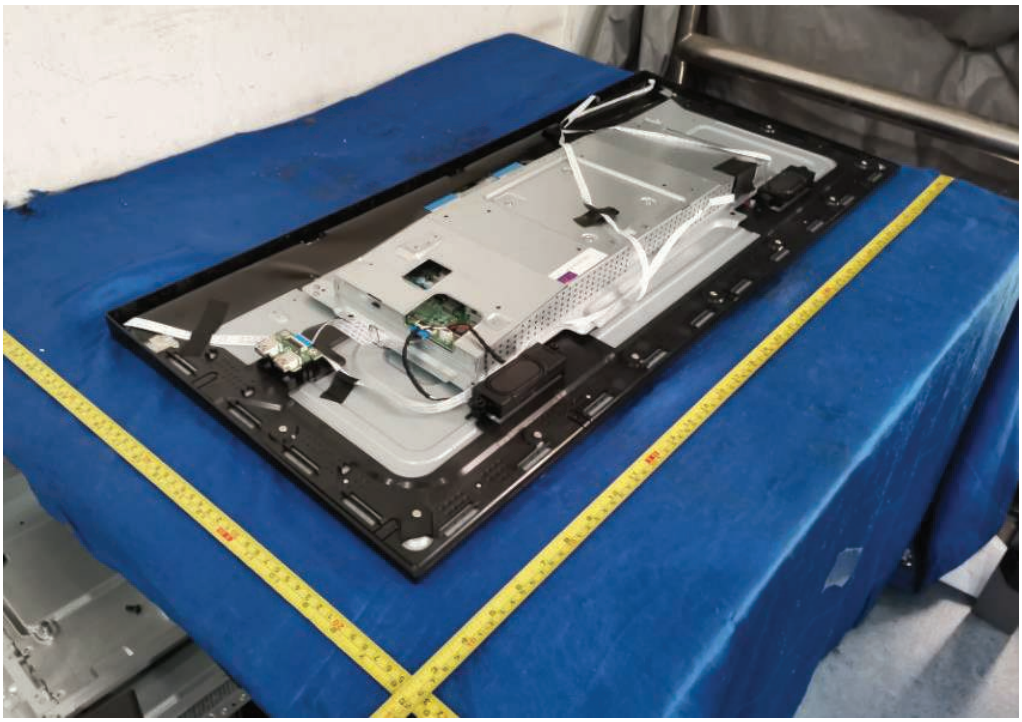


Figure 9. Metal enclosure type C

Figure 10. Metal enclosure

Product: LCD monitor

Type Designation: U34P2*******, Q34P2********, 34P2********, U34E2*******, Q34E2********, 34E2********, C*34E2*********, C34E2********* , C*34P2*********, C34P2*********; U32P2********, Q32P2********, 32P2********, C*32P2*********, C32P2*********, U32E2********, Q32E2********, 32E2********, C*32E2*********, C32E2*********

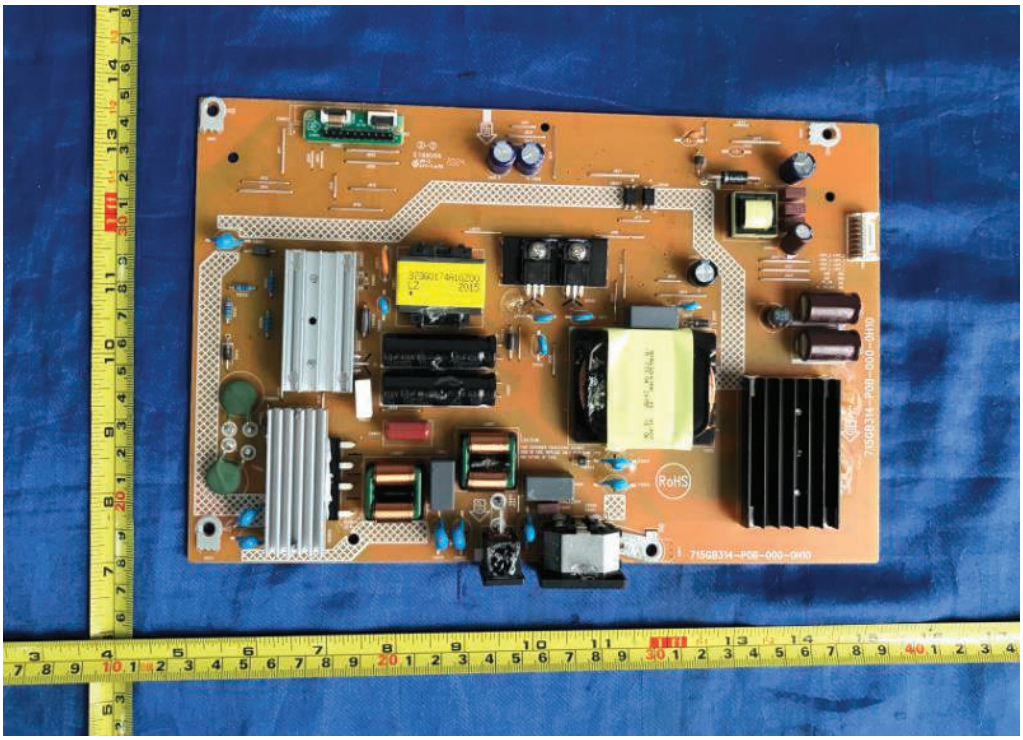


Figure 11. Power board 715GB314

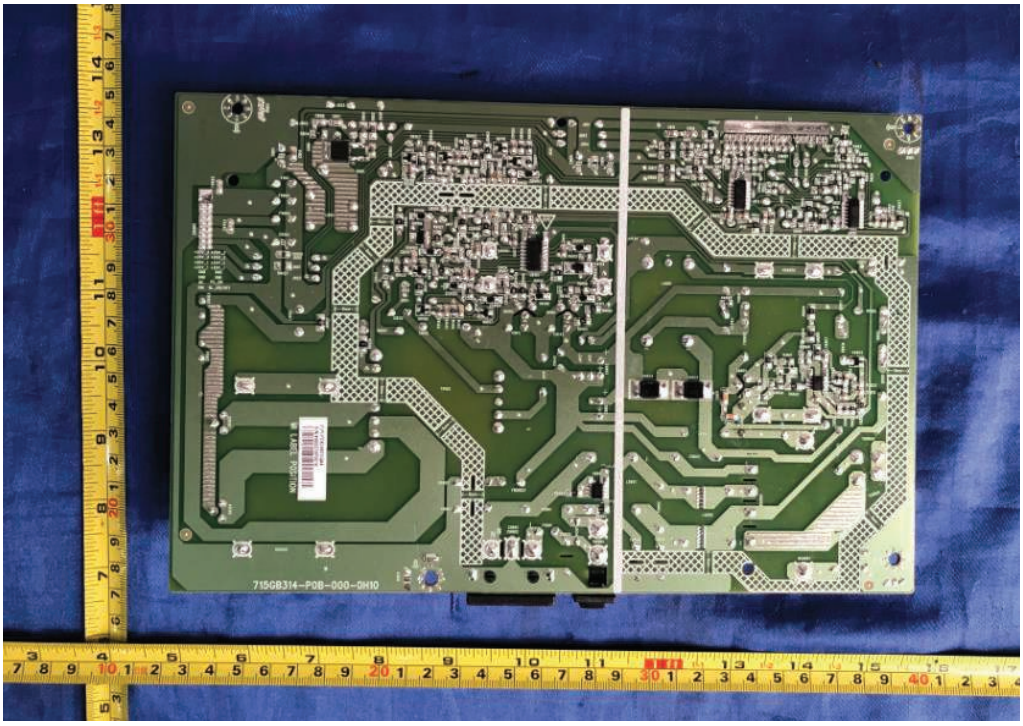


Figure 12. Power board 715GB314

Product: LCD monitor

Type Designation: U34P2*******, Q34P2********, 34P2********, U34E2*******, Q34E2********, 34E2********, C*34E2*********, C34E2********* , C*34P2*********, C34P2*********; U32P2********, Q32P2********, 32P2********, C*32P2*********, C32P2*********, U32E2********, Q32E2********, 32E2********, C*32E2*********, C32E2*********

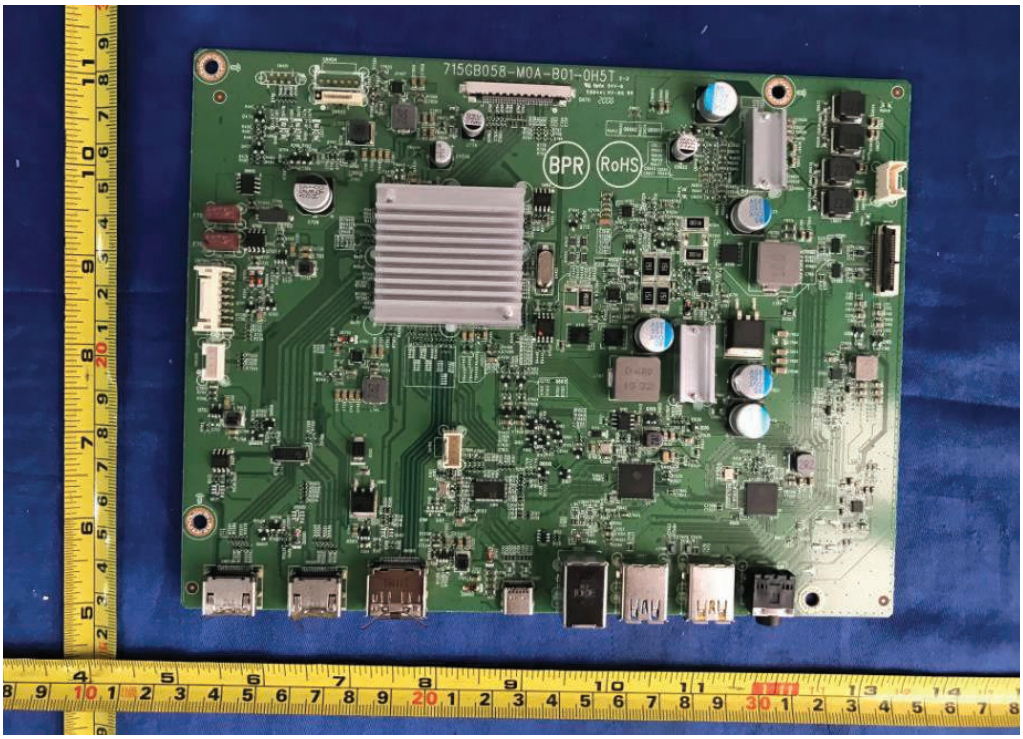


Figure 13. Main board 715GB058

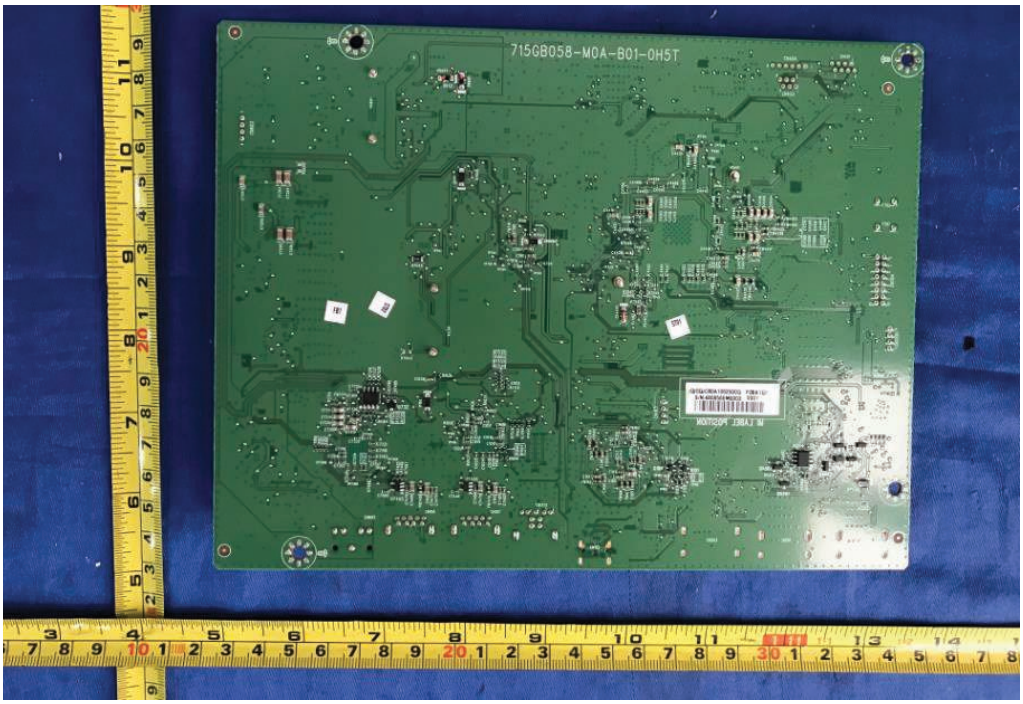


Figure 14. Main board 715GB058

Product: LCD monitor

Type Designation: U34P2*******, Q34P2********, 34P2********, U34E2*******, Q34E2********, 34E2********, C*34E2*********, C34E2********* , C*34P2*********, C34P2*********; U32P2********, Q32P2********, 32P2********, C*32P2*********, C32P2*********, U32E2********, Q32E2********, 32E2********, C*32E2*********, C32E2*********

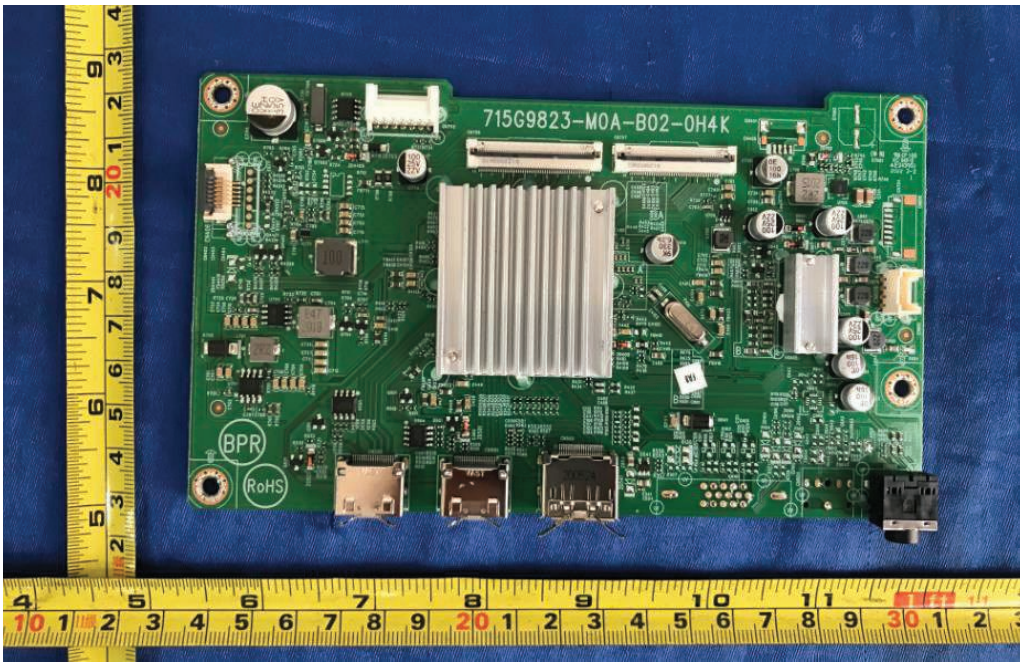


Figure 15. Main board 715G9823

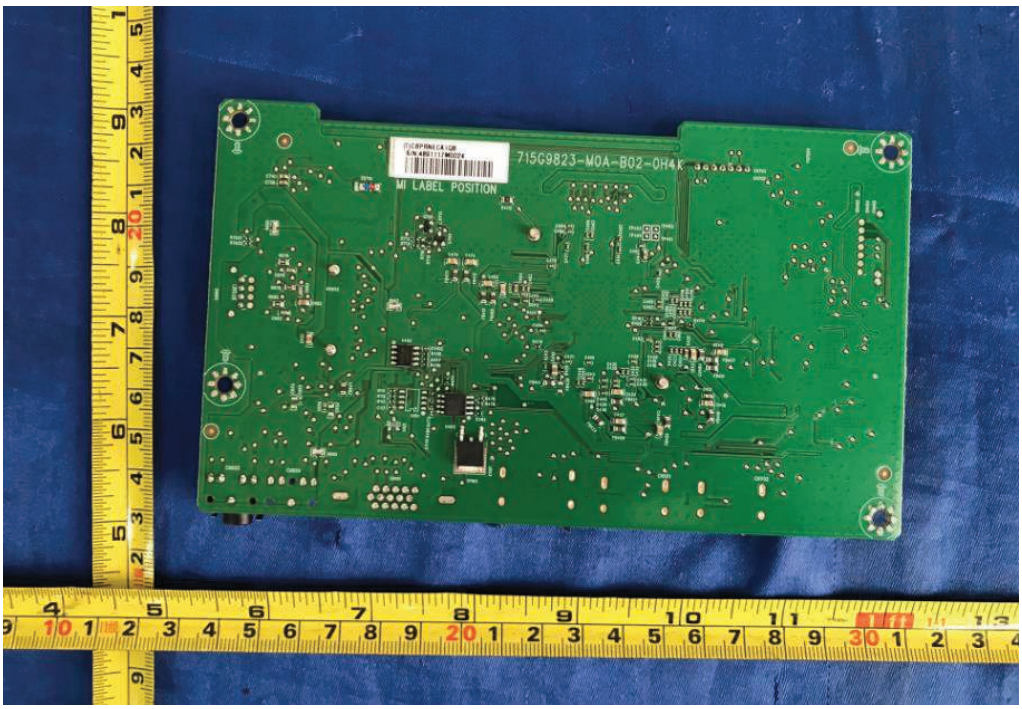


Figure 16. Main board 715G9823

Product: LCD monitor

Type Designation: U34P2*******, Q34P2********, 34P2********, U34E2*******, Q34E2********, 34E2********, C*34E2*********, C34E2********* , C*34P2*********, C34P2*********; U32P2********, Q32P2********, 32P2********, C*32P2*********, C32P2*********, U32E2********, Q32E2********, 32E2********, C*32E2*********, C32E2*********

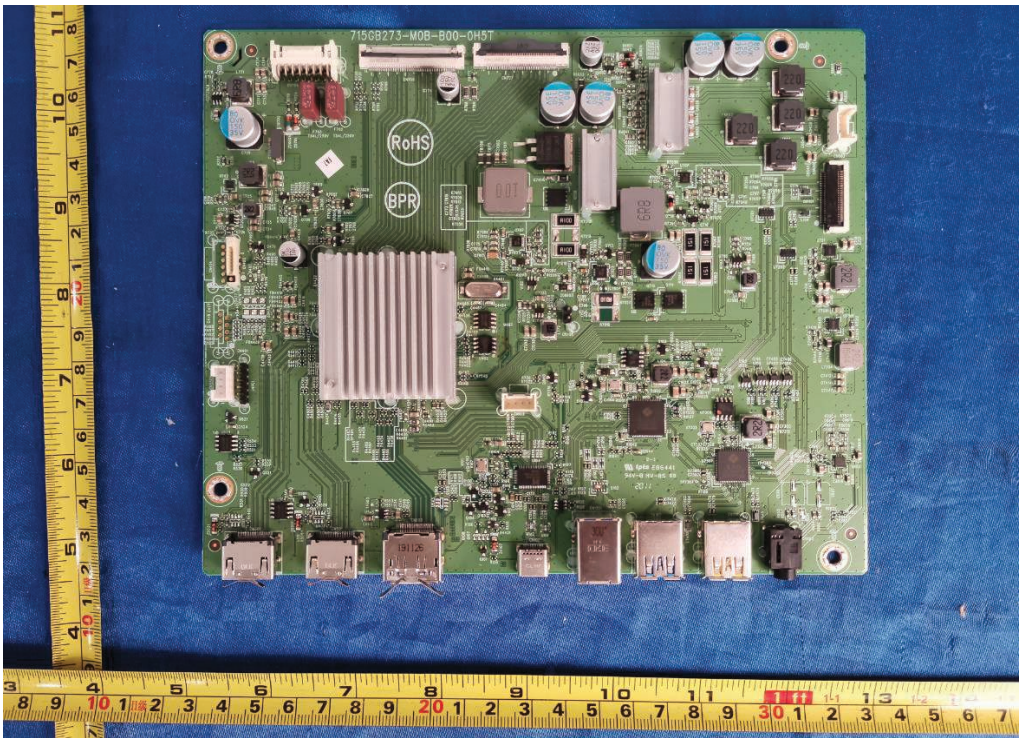


Figure 17. Main board 715GB273

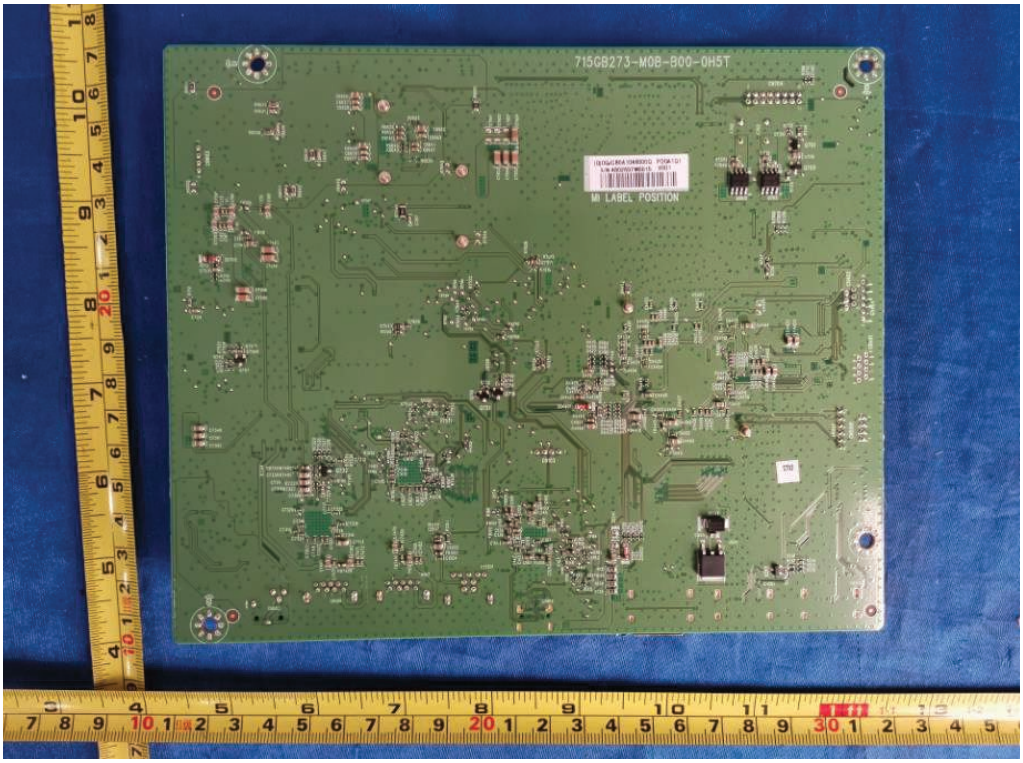


Figure 18. Main board 715GB273

Product: LCD monitor

Type Designation: U34P2*******, Q34P2********, 34P2********, U34E2*******, Q34E2********, 34E2********, C*34E2*********, C34E2********* , C*34P2*********, C34P2*********; U32P2********, Q32P2********, 32P2********, C*32P2*********, C32P2*********, U32E2********, Q32E2********, 32E2********, C*32E2*********, C32E2*********

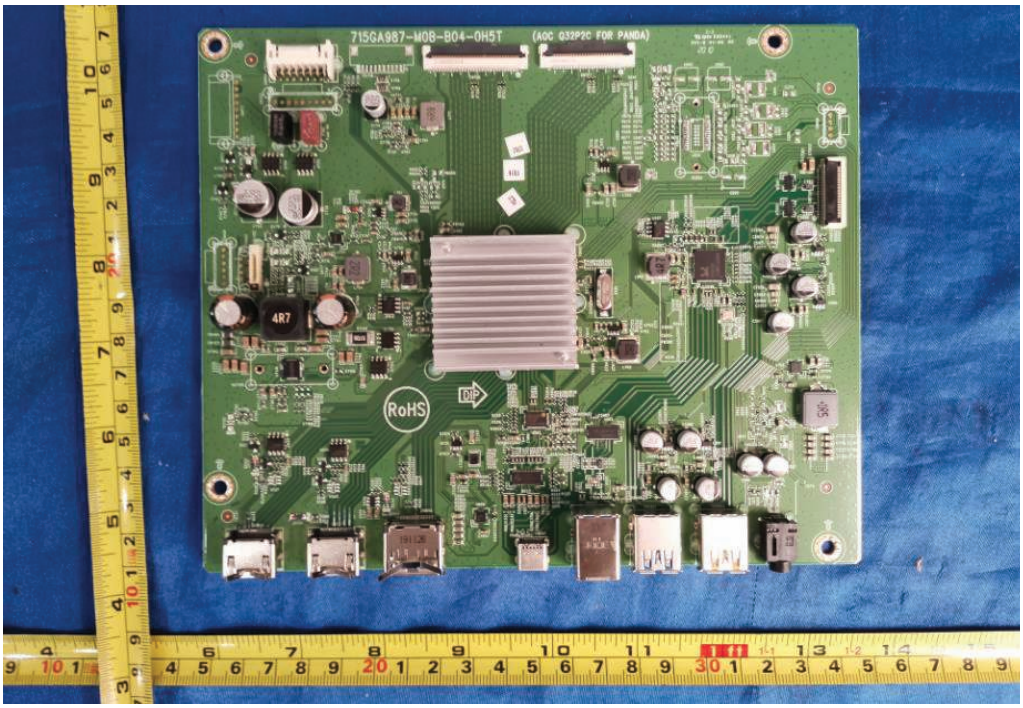


Figure 19. Main board 715GA987

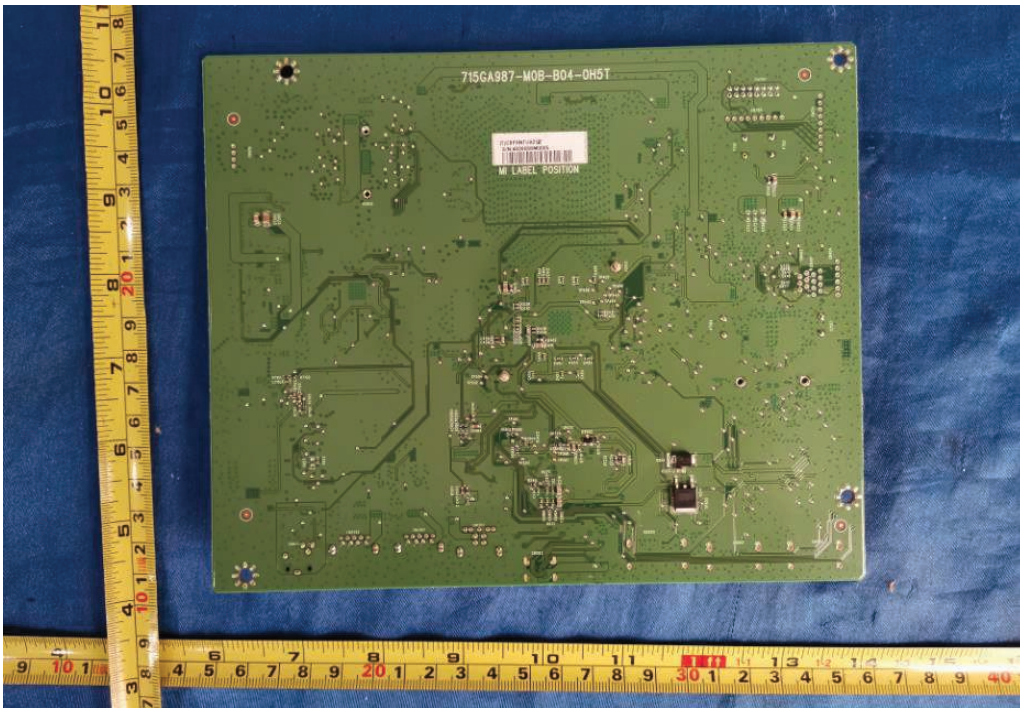


Figure 20. Main board 715GA987

Product: LCD monitor

Type Designation: U34P2*******, Q34P2********, 34P2********, U34E2*******, Q34E2********, 34E2********, C*34E2*********, C34E2********* , C*34P2*********, C34P2*********; U32P2********, Q32P2********, 32P2********, C*32P2*********, C32P2*********, U32E2********, Q32E2********, 32E2********, C*32E2*********, C32E2*********

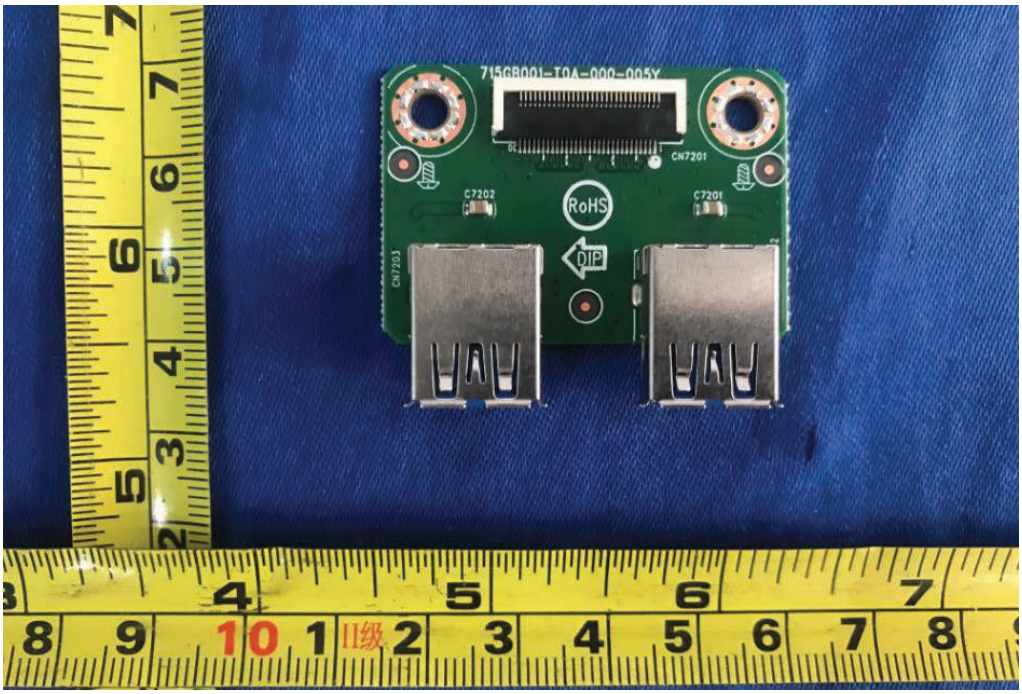


Figure 21. USB board 715GB001

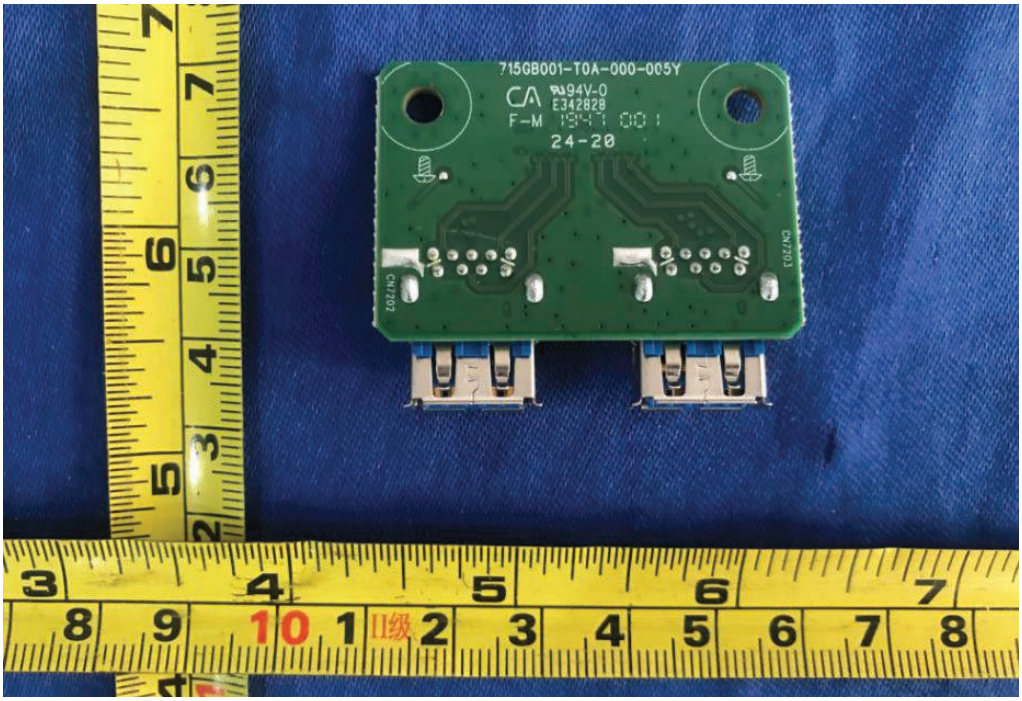


Figure 22. USB board 715GB001