



Ref. Certif. No.

JPTUV-075197-A1/M1

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

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

CB TEST CERTIFICATE

CERTIFICAT D'ESSAI OC

Product
Produit

LCD Monitor

Name and address of the applicant
Nom et adresse du demandeur

Top Victory Electronics (Taiwan) Co., Ltd.
10F., No. 230, Liancheng Rd.
Zhonghe Dist., New Taipei City, 23553 Taiwan

Name and address of the manufacturer
Nom et adresse du fabricant

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

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

See additional page(s)

Ratings and principal characteristics
Valeurs nominales et caractéristiques principales

1) AC 100-240V; 50/60Hz; 3.1-1.2A; Class I
2, 4) AC 100-240V; 50/60Hz; 2.7-1.1A; Class I
3) AC 100-240V; 50/60Hz; 2.9-1.2A; Class I

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

NEC

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

N/A

Model / Type Ref.
Ref. de type

1) P484, 2) V484
3) P404, 4) V404

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

For model differences, refer to the test report.
Re-issue of JPTUV-075197-A1 dated 21.09.2016,
due to first modification.

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

IEC 60950-1:2005+A1+A2
See Test Report for National Differences

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

11047815 003

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



TÜVRheinland®

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

Date: 26.10.2016

Signature:

Dipl.-Ing. F. Stoelzel

1. TPV Display Technology (Wuhan)
Co., Ltd.
Unique No. 11, Zhuankou Development
District of Economic Technological
Development Zone, Wuhan City 430056, P.R. China
2. TPV Electronics (Fujian) Co., Ltd.
Shangzheng, Yuan Hong Road
Fuqing City, Fujian Province
P.R. China
3. Envision Industry of Electronic
Products Ltd.
Rodovia Anhanguera S/N-KM 49
Tijuco Preto-Jundiá-SP-
13 205-700, Brazil
4. L&T Display Technology (Fujian) Ltd.
Optoelectronic Park, Rongqiao
Economic and Technological
Development Zone
Fuqing, Fujian 350301, P.R. China
5. TPV Electronics (Fujian) Co., Ltd.
Rongqiao Economic and
Technological Development Zone
Fuqing City, Fujian Province
P.R. China
6. Trend Smart CE Mexico S de RL de CV
Avenida Sor Juana Ines de la Cruz
de 19602 Nueva Tijuana,
22435 Tijuana Baja California
MEXICO
7. 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
8. Envision Industry of Electronic
Products Ltd.
Av Torquato Tapajós 7503,
Galpão : II Bloco B-Condomínio
de Galpões-Tarumã-Manaus, AM, Brazil
9. TPV Technology (Qingdao)
Co., Ltd.
No.99 Huoju Road, High-tech
Industrial Development Zone
Qingdao City, Shandong Province, P.R. China

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

Report Ref. No.: 11047815 003

Date:

26.10.2016

Signature:

Dipl.-Ing. F. Stoezel

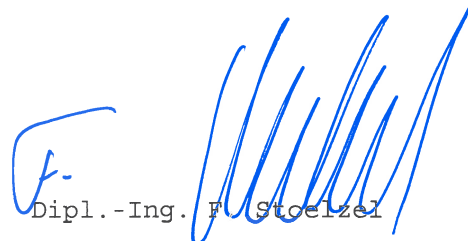
10. TPV Display Technology (China)
Co., Ltd.
No. 106 Jinghai 3 Rd., BDA
Beijing City 100176
P.R. China
11. Hefei Huntkey Display Technology
Co., Ltd.
South Jinxiu Road, East Qingtan Road
Economic And Technological
Development Zone, Hefei, Anhui 230601, P.R. China
12. TPV Electronics (Fujian) Co., Ltd.
Optoelectronic Park,
Rongqiao Economic and
Technological Development Zone,
Fuqing City, Fujian Province 350301, P.R. China
13. Envision Indústria de Produtos
Eletrônicos Ltda.
Av. Torquato Tapajós, 2236,
Flores - CEP 69058-830 - Manaus/AM
Brazil

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

Report Ref. No.: 11047815 003

Date: 26.10.2016

Signature:


Dipl.-Ing. F. Stoezel



Test Report issued under the responsibility of:



TEST REPORT

IEC 60950-1

Information technology equipment – Safety – Part 1: General requirements

Report Number.: 11047815 003

Date of issue: Oct. 20th, 2016

Total number of pages.....: 35

Applicant's name: Top Victory Electronics (Taiwan) Co., Ltd.

Address: 10F., No. 230, Liancheng Rd., Zhonghe Dist., New Taipei City,
23553 Taiwan

Test specification:

Standard: IEC 60950-1:2005 (Second Edition) + Am 1:2009 + Am 2:2013

Test procedure.....: CB Scheme

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

Test Report Form No.....: IEC60950_1F

Test Report Form(s) Originator.....: SGS Fimko Ltd

Master TRF: Dated 2014-02

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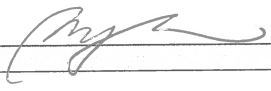
If this Test Report Form is used by non-IECEE members, the IECEE/IEC logo and the reference to the CB Scheme procedure shall be removed.

This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.

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..... :	NEC	
Manufacturer..... :	NEC Display Solutions, Ltd. 4-28, Mita 1-chome, Minato-ku, Tokyo, Japan	
Model/Type reference..... :	1) P484, 2) V484, 3) P404, 4) V404	
Ratings..... :	Input : 1) 100-240Vac, 50/60Hz, 3.1-1.2A 2), 4) 100-240Vac, 50/60Hz, 2.7-1.1A 3) 100-240Vac, 50/60Hz, 2.9-1.2A	
Testing procedure and testing location:		
☒	CB Testing Laboratory:	
Testing location/ address	TÜV Rheinland Taiwan Ltd., Taichung Laboratory No. 9, Ln. 36, Sec. 3, Minsheng Rd., Daya District, Taichung City 428, Taiwan	
☐	Associated CB Testing Laboratory:	
Testing location/ address		
Tested by (name + signature)..... :	Nai-Shuan Ti. 	
Approved by (name + signature)..... :	Raye Chou 	
☐	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

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

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

- The manufacturer specified the maximum ambient temperature as +40 °C.
- Highest load condition for this equipment is to operate at maximum backlight, brightness and contrast of LED backlight, and adjust to max. volume of speakers, 5V/0.5A for USB 2.0 port and 3.3V/0.5A for Display port, 3.3V/0.5A for SD card, +16V/4.0A for IF board and 16V, 0.7A for Mainboard connector of (CN512)
- The product is to be operated at 5000 m above sea level, the minimum clearances were multiplied by the factor given in Table A.2 of IEC 60664-1: 1.48
- Test samples are pre-production samples without serial numbers.
- The internal and external speaker could be only operate one at a time, except other noted, all tests were performed with external speakers to represent the internal speakers.
- The LCD Monitor can be adjustment monitor's height and operated in landscape (0 °) to portrait mode (90 °) when mainboard downside and with Panel face downward and upward. The heating test were performed with DC fan not operated and all ventilation openings blocked to simulate the worst condition.
- Except other noted, all tests were performed on model P404 to represent V404.

Testing location:

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

Summary of compliance with National Differences**List of countries addressed:**

EU Group Differences, EU Special National Conditions, US, CA

Explanation of used codes: US = United States of America, CA = Canada

☒ The product fulfils the requirements of EN 60950-1:2006/A11:2009/A1:2010/A12:2011/A2:2013

For IEC 60950-1:2005 / EN 60950-1:2006+A11:2009+A1:2010 (per client request):

DE, FI, IL, KR, CN

Explanation of used codes: DE = Germany, FI = Finland, IL = Israel, KR = Republic of Korea, CN=China.

For IEC 60950-1:2001 / EN 60950-1:2001+A11:2004 (per client request):

(All CB members countries listed in CB Bulletin No. 112A, dated December 2006)

AR, AT, BE, CZ, FR, GR, HU, IN, IT, JP, KE, MY, NL, PL, SG, SI, SK.

Explanation of used codes: AR=Argentina, AT=Austria, BE=Belgium, CZ=Czech Republic, FR=France, GR=Greece, HU=Hungary, IN=India, IT=Italy, JP=Japan, KE=Kenya, MY=Malaysia, NL=The Netherlands, PL=Poland, SG=Singapore, SI=Slovenia, SK=Slovakia.

For IEC 60950:1999 (3rd Edition) + Corr. Jan. 2000 (per client request):

BR, IE, PT, RU, TR, UA, ZA.

Explanation of used codes: BR=Brazil, IE=Ireland, PT=Portugal, RU=Russian Federation, TR=Turkey, UA=Ukraine, ZA=South Africa.

For National Differences see corresponding Attachment.

Copy of marking plate



Notes:

The above labels are draft of an artwork for marking plate pending approval by National Certification Bodies and it shall not be affixed to products prior to such an approval

Copy of marking plate

NEC MultiSync V404 LCD MONITOR
(MODEL: V404)

VOLTS 定格電圧: 100-240V~, AMPERES 定格電流: 2.7-1.1A (2.7-1.1A)
FREQUENCY 定格周波数: 50/60Hz

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

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

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

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

VAROITUS: LAITE ON LITETTÄVÄ SUOJAMAADOITUSKORKEITTIMILLA VAKUSTETTUUN PESTORASBAAN.

WARNING: APPARATEN SKALL ANSLUTAS TILL JORDAT UTTAG.

ADVARSEL: APPARATET MÅ TILKOPLSES JORDET STØKKONTAKT.

ADVARSEL: APPARATETS STØKPROP SKAL TILSLUTTES EN STØKKONTAKT MED JORD, SOM GIVER FORBUDSELS TIL STØKPROPPENS JORD.

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

For Japan only

警告

高圧注意

この製品は、内部には修理可能な部品がありません。ユーザーが内部を開くと、感電の危険があります。

感電注意

電源コードを「アース」端子に接続する前に、必ず電源を切り、内部の部品を確認してください。

安全マーク

UL LISTED E136888 US L.T.E. 1K01

CE EAC FC VCCI

HDMI

NECディスプレイソリューションズ株式会社
NEC Display Solutions, Ltd.
日本国東京都港区三田一丁目4番28号
4-28, Mita 1-chome, Minato-ku, Tokyo, Japan

MADE IN CHINA

NEC MultiSync V404 LCD MONITOR
液晶显示器 (MODEL/型号: V404)

VOLTS 定格電圧: 輸入電圧 100-240V~, AMPERES 定格電流: 2.7-1.1A (2.7-1.1A)
FREQUENCY 定格周波数: 工作頻率 50/60Hz

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

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

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

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

VAROITUS: LAITE ON LITETTÄVÄ SUOJAMAADOITUSKORKEITTIMILLA VAKUSTETTUUN PESTORASBAAN.

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ADVARSEL: APPARATETS STØKPROP SKAL TILSLUTTES EN STØKKONTAKT MED JORD, SOM GIVER FORBUDSELS TIL STØKPROPPENS JORD.

△注意: 電源コードを「アース」端子に接続する前に、必ず電源を切り、内部の部品を確認してください。

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△警告: 使用電源の電圧を必ず確認してください。

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

For Japan only

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感電注意

電源コードを「アース」端子に接続する前に、必ず電源を切り、内部の部品を確認してください。

安全マーク

UL LISTED E136888 US L.T.E. 1K01

CE EAC FC VCCI

HDMI

NECディスプレイソリューションズ株式会社
NEC Display Solutions, Ltd.
日本国東京都港区三田一丁目4番28号
4-28, Mita 1-chome, Minato-ku, Tokyo, Japan

MADE IN CHINA 中国製造

TPV Electronics(Fujian)Co., Ltd.
生产厂: 福建捷联电子有限公司
生产地址: 福建省厦门市同安区技术开发区

NEC MultiSync V404 LCD MONITOR
彩色显示器 液晶显示器
모니터 (40인치 LCD 모니터)
(MODEL/型号/型番: V404)

VOLTS 定格電圧: 輸入電圧 100-240V~, AMPERES 定格電流: 2.7-1.1A (2.7-1.1A)
FREQUENCY 定格周波数: 工作頻率 50/60Hz

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

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

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

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

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ADVARSEL: APPARATETS STØKPROP SKAL TILSLUTTES EN STØKKONTAKT MED JORD, SOM GIVER FORBUDSELS TIL STØKPROPPENS JORD.

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△警告: 使用電源の電圧を必ず確認してください。

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

사용상 주의사항: 감전 위험 및 제품의 손상이 발생할 수 있으므로 제품의 커넥터를 분리하십시오.
인증 서비스 센터 연락처: 080-422-9168 (호선) (주식회사)
*본 라벨과 인증번호는 국내 규격 내에서 적용된 목적으로만 사용되어야 합니다.

For European market

Contact Information:
NEC Display Solutions Europe GmbH
Landshuter Allee 12-14
80637 Munich
Germany

CE EAC FC VCCI

HDMI

NECディスプレイソリューションズ株式会社
NEC Display Solutions, Ltd.
日本国東京都港区三田一丁目4番28号
4-28, Mita 1-chome, Minato-ku, Tokyo, Japan

MADE IN CHINA 中国製造

TPV Electronics(Fujian)Co., Ltd.
生产厂: 福建捷联电子有限公司
生产地址: 福建省厦门市同安区技术开发区

Notes:

The above labels are draft of an artwork for marking plate pending approval by National Certification Bodies and it shall not be affixed to products prior to such an approval

Test item particulars.....:	
Equipment mobility	☒ movable ☐ hand-held ☐ transportable ☒ stationary (when with mounting function) ☒ for building-in (when installed within a wooden box which provided by the manufacture) ☐ direct plug-in
Connection to the mains.....:	☒ pluggable equipment ☒ type A ☐ type B ☐ permanent connection ☒ detachable power supply cord ☐ non-detachable power supply cord ☐ not directly connected to the mains
Operating condition.....:	☒ continuous ☐ rated operating / resting time:
Access location	☒ operator accessible ☐ restricted access location
Over voltage category (OVC)	☐ OVC I ☒ OVC II ☐ OVC III ☐ OVC IV ☐ other:
Mains supply tolerance (%) or absolute mains supply values	±10
Tested for IT power systems	☒ Yes ☐ No
IT testing, phase-phase voltage (V)	230 for Norway
Class of equipment	☒ Class I ☐ Class II ☐ Class III ☐ Not classified
Considered current rating of protective device as part of the building installation (A)	16 (20 for North America)
Pollution degree (PD)	☐ PD 1 ☒ PD 2 ☐ PD 3
IP protection class	IP20
Altitude during operation (m)	Up to 5000
Altitude of test laboratory (m)	Less than 2000
Mass of equipment (kg)	Approx. 17.07 kg (Unit only, without base and external speaker)(For P484, V484) Approx. 13.99 kg (Unit only, without base and external speaker)(For P404, V404) Base stand 1.83 kg External speaker : 0.86kg (for SP-TF1)
Possible test case verdicts:	
- test case does not apply to the test object	N/A
- test object does meet the requirement.....	P (Pass)
- test object does not meet the requirement	F (Fail)
Testing	
Date of receipt of test item	2016-10-10
Date(s) of performance of tests	2016-10-11 to 2016-10-14
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 IEC60950:

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

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

Name and address of factory (ies)

1. TPV Electronics (Fujian) Co., Ltd.
Shangzheng, Yuan Hong Road, Fuqing City, Fujian Province, P.R. China
2. TPV Display Technology (Wuhan) Co., Ltd.
Unique No. 11, Zhuankou Development, District of Economic Technological Development Zone, Wuhan City 430056, P.R. China
3. TPV Technology (Qingdao) Co., Ltd.
No.99 Huoju Road, High-tech Industrial Development Zone, Qingdao City, Shandong Province, P.R. China
4. L&T Display Technology (Fujian) Ltd.
Optoelectronic Park, Rongqiao Economic and Technological, Development Zone, Fuqing, Fujian 350301, P.R. China
5. Envision Industry of Electronic Products Ltd.
Rodovia Anhanguera S/N-KM 49, Tijuco Preto-Jundiaí-SP-13.205-700, Brazil
6. 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
7. TPV Display Technology (China) Co., Ltd.
No. 106 Jinghai 3 Rd., BDA, Beijing City 100176 P.R. China
8. Hefei Huntkey Display Technology Co., Ltd.
South Jinxiu Road, East Qingtan Road, Economic And Technological Development Zone, Hefei, Anhui 230601, P.R. China
9. Trend Smart CE Mexico S de RL de CV
Avenida Sor Juana Ines de la Cruz de 19602 Nueva Tijuana, 22435 Tijuana Baja California, MEXICO
10. TPV Electronics (Fujian) Co., Ltd.
Optoelectronic Park, Rongqiao Economic and Technological Development Zone, Fuqing City, Fujian Province 350301, P.R. China
11. Envision Industry of Electronic Products Ltd.
Av Torquato Tapajós 7503, Galpão : II Bloco: B-Condomínio de Galpões-Tarumã-Manaus, AM, Brazil
12. Envision Indústria de Produtos Eletrônicos Ltda.
Av. Torquato Tapajós, 2236, Flores - CEP 69058-830 - Manaus/AM, Brazil
13. TPV Electronics (Fujian) Co., Ltd.
Rongqiao Economic and Technological Development Zone, Fuqing City, Fujian Province, P.R. China

General product information:

- Refer to report 11047815 001-002
- The model P404 and V404 are similar to each other except for input rating and panel source used.
- Special national conditions for AS/NZS 60950.1:2015
Per client's request, supplement the special national conditions for AS/NZS 60950.1:2015 to present test report. (For National differences refer to report 11047815 001)

Description of change(s):

1. Add additional model name as P404, V404 which is similar to original model except for
 - Panel size
 - Enclosure size
 - Transformer T8601
2. Additional limited power source evaluation of output connector for further more single fault condition.
3. Re-conduct transformer T9301 single fault condition.
4. Corrected typing error of 11047815 001 report as below:
 - Voltage measured value of table 1.2.2.1
 - Add missing T9301/T9101/T8601 tape and bobbin of T9101/T8601 in table 5.2
 - Fuse current of transformer overload condition in table 5.3.
 - metal chassis technical data description in table 1.5.1
 - Remove "AU" country code in "Summary of compliance with National Difference" and replace it with additional description in "General product information" above.
 - VESA mount information change to "**VESA compatible wall mounting kit, 300 × 300 mm, M6 type screw.**" in sub-clause 4.2.10
5. Add alternative gas tube source for all models.
6. Update construction for P484 and V484 as below
 - Add internal four corner of plastic stand
 - Slightly modify the internal metal chassis dimension near inlet side of power supply board.
 - Enlarge the original internal mylar sheet dimension
 - Slightly change the metal chassis design inside at both sides which do not impact any external dimension of the metal enclosure.
 - Add additional fixing screw for rear cover.
 - Remove mainboard extension board
7. Add additional photo documentation with external speaker upon client request.

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

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

1., 2., 3., 5	• Input Test • Hazardous voltage measurement • SELV measurement • Grounding Test • Working voltage • Stability Test • Mechanical Test • Loading Test • Handle Test • Heating Test • Hi-Pot Test • Abnormal Test • Construction Check	The new model V404, P404 are similar to original For label see page 5 and 6, for marking details, refer to sub-clause 1.7.1. For results, see appended tables. For new sources, see appended table 1.5.1.																
4.	• N/A	See updated information in appended tables in bold type.																
6.,7.	• Construction Check	Due to original temp. related tests were all performed under opening blocked condition, therefore, no further temp. related tests were considered to be necessary. Due to only minor change of the metal chassis, no grounding test is considered to be necessary. For new construction detail , refer to photo documentation.																
History of amendments and modifications: Ref. No. 11047815 001, dated 22th 08, 2016 (original test report) Ref. No. 11047815 002, dated 20th 09, 2016 (amendment) Ref. No. 11047815 003, dated 20th 10, 2016 (modification)																		
Abbreviations used in the report: <table><tr><td>- normal conditions</td><td>N.C.</td><td>- single fault conditions</td><td>S.F.C</td></tr><tr><td>- functional insulation</td><td>OP</td><td>- basic insulation</td><td>BI</td></tr><tr><td>- double insulation</td><td>DI</td><td>- supplementary insulation</td><td>SI</td></tr><tr><td>- between parts of opposite polarity</td><td>BOP</td><td>- reinforced insulation</td><td>RI</td></tr></table> Indicate used abbreviations (if any)			- normal conditions	N.C.	- single fault conditions	S.F.C	- functional insulation	OP	- basic insulation	BI	- double insulation	DI	- supplementary insulation	SI	- between parts of opposite polarity	BOP	- reinforced insulation	RI
- normal conditions	N.C.	- single fault conditions	S.F.C															
- functional insulation	OP	- basic insulation	BI															
- double insulation	DI	- supplementary insulation	SI															
- between parts of opposite polarity	BOP	- reinforced insulation	RI															

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.7	Marking and instructions		P
1.7.1	Power rating and identification markings	The power rating marking is provided and is readily visible in operator access area.	P
1.7.1.1	Power rating marking	See copy of marking plate	P
	Multiple mains supply connections.....:		N/A
	Rated voltage(s) or voltage range(s) (V)	See copy of marking plate	P
	Symbol for nature of supply, for d.c. only		N/A
	Rated frequency or rated frequency range (Hz)	See copy of marking plate	P
	Rated current (mA or A)	See copy of marking plate	P
1.7.1.2	Identification markings		P
	Manufacturer's name or trade-mark or identification mark	See copy of marking plate	P
	Model identification or type reference	See copy of marking plate	P
	Symbol for Class II equipment only :	The equipment is Class I equipment.	N/A
	Other markings and symbols :	Other markings and symbols do not give rise to misunderstanding.	P
4	PHYSICAL REQUIREMENTS		P
4.1	Stability		P
	Angle of 10°	The equipment does not fall over.	P
	Test force (N)		N/A
4.2	Mechanical strength		P
4.2.1	General	See below. After the tests, the equipment complies with the requirements of sub-clauses 2.1.1, 2.6.1 and 2.10.	P
	Rack-mounted equipment.		N/A
4.2.2	Steady force test, 10 N	10 N applied to all components other than the parts serving as an enclosure.	P
4.2.3	Steady force test, 30 N		N/A
4.2.4	Steady force test, 250 N	After subjected 250 N to the external enclosure, no energy or other hazards.	P

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
4.2.5	Impact test	No hazard as result from the steel ball impact test to the external enclosure.	P
	Fall test	See above.	P
	Swing test	See above.	P
4.2.10	Wall or ceiling mounted equipment; force (N) :	For unit an additional force of 44.55kg (3 times the mass of the unit without base with external speaker type SP-TF1) was applied to the unit with the VESA adaptor kit The unit withstood the load test without damages or breaks from the VESA adaptor kit. VESA compatible wall mounting kit, 300 × 300 mm, M6 type screw.	P

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

1.5.1	TABLE: List of critical components					P
Object/part No.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s) of conformity ¹⁾	
For all models						
Metal enclosure	Interchangeable	Interchangeable	Metal ,thickness: 0.81mm min. (For Bottom and Side cover) thickness: 0.45mm min. (For Rear cover)	--	--	
Gas tube (SG9903)	SIN NAGATA ELECTRONICS CO LTD	LSE-4500LX2P, LSE-402M	250Vac, basic insulation	UL 1414 IEC/EN 60950-1 cl.1.5, 2.9, 2.10, 5.2 and Annex G test within equipment	UL	
LCD Panel (For model P404)	SAMSUNG Display	LTc400Hiz-N (c can be A,C,F,I,J,K,U,Y, W,Z,N,L,R or M for final application tyep) (i can be A to Z) (z can be 0 to 9)	40.0” TFT type, with LED backlight.	IEC/EN 60950-1:A1+A2 UL 60950-1 Tested within equipment	CB, UL	
LCD Panel (For model V404)	SAMSUNG Display	LTc400Hiz-D (c can be A,C,F,I,J,K,U,Y, W,Z,N,L,R or M for final application tyep) (i can be A to Z) (z can be 0 to 9)	40.0” TFT type, with LED backlight.	IEC/EN 60950-1:A1+A2 UL 60950-1 Tested within equipment	CB, UL	
For V404, P404 used only						
Transformer (T8601)	CHANNELON	380GL52P521H	Class 130 material (B)	Applicable parts of IEC 60950-1 and according to IEC 60085	Accepted by TÜ V Rheinland	
-Bobbin	SUMITOMO	PM-9820	V-0, phenolic,	UL 94	UL	

IEC 60950-1					
Clause	Requirement + Test		Result - Remark		Verdict
			150 °C		
-Insulation tape	Symbio	35660Y	130 °C	UL 510	UL
	Jingjiang Yahua Pressure Sensitive Co Ltd	CT	130 °C	UL 510	UL
Transformer (T8601) (alternate)	TAICHANG	380GL52P521S	Class 130 material (B)	Applicable parts of IEC 60950-1 and according to IEC 60085	Accepted by TÜV Rheinland
-Bobbin	SUMITOMO	PM-9820	V-0, phenolic, 150 °C	UL 94	UL
-Insulation tape	Jingjiang Yahua Pressure Sensitive Co Ltd	CT	130 °C	UL 510	UL
Transformer (T8601) (alternate)	Li Tai	380GL52P521L	Class 130 material (B)	Applicable parts of IEC 60950-1 and according to IEC 60085	Accepted by TÜV Rheinland
-Bobbin	SUMITOMO	PM-9820	V-0, phenolic, 150 °C	UL 94	UL
-Insulation tape	Jingjiang Yahua Pressure Sensitive Co Ltd	CT	130 °C	UL 510	UL
	Symbio	35660Y	130 °C	UL 510	UL
Supplementary information:					
1. Provided evidence ensures the agreed level of compliance. See OD-CB2039.					

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

1.6.2	TABLE: Electrical data (in normal conditions)						P
U(V)/f(Hz)	I (A)	I _{rated} (A)	P (W)	Fuse #	I _{fuse} (A)	Condition/status	
For model P404 with external speaker (SP-TF1)							
Display mode							
90/50	2.29	--	204	F901	2.29	Maximum normal load	
90/60	2.29	--	204	F901	2.29	Maximum normal load	
100/50	2.07	2.9	202	F901	2.07	Maximum normal load	
100/60	2.07	2.9	202	F901	2.07	Maximum normal load	
240/50	0.92	1.2	202	F901	0.92	Maximum normal load	
240/60	0.92	1.2	202	F901	0.92	Maximum normal load	
264/50	0.84	--	200	F901	0.84	Maximum normal load	
264/60	0.84	--	200	F901	0.84	Maximum normal load	
VGA mode							
90/50	1.94	--	170	F901	1.94	Maximum normal load	
90/60	1.94	--	170	F901	1.94	Maximum normal load	
100/50	1.74	2.9	169	F901	1.74	Maximum normal load	
100/60	1.74	2.9	169	F901	1.74	Maximum normal load	
240/50	0.79	1.2	168	F901	0.79	Maximum normal load	
240/60	0.79	1.2	168	F901	0.79	Maximum normal load	
264/50	0.73	--	168	F901	0.73	Maximum normal load	
264/60	0.73	--	168	F901	0.73	Maximum normal load	
HDMI mode							
90/50	2.30	--	204	F901	2.30	Maximum normal load	
90/60	2.30	--	204	F901	2.30	Maximum normal load	
100/50	2.07	2.9	204	F901	2.07	Maximum normal load	
100/60	2.07	2.9	204	F901	2.07	Maximum normal load	
240/50	0.93	1.2	203	F901	0.93	Maximum normal load	
240/60	0.93	1.2	203	F901	0.93	Maximum normal load	
264/50	0.85	--	202	F901	0.85	Maximum normal load	
264/60	0.85	--	202	F901	0.85	Maximum normal load	
DVI mode							
90/50	1.95	--	172	F901	1.95	Maximum normal load	
90/60	1.95	--	172	F901	1.95	Maximum normal load	

IEC 60950-1						
Clause	Requirement + Test				Result - Remark	Verdict
100/50	1.75	2.9	171	F901	1.75	Maximum normal load
100/60	1.75	2.9	171	F901	1.75	Maximum normal load
240/50	0.79	1.2	168	F901	0.79	Maximum normal load
240/60	0.79	1.2	168	F901	0.79	Maximum normal load
264/50	0.72	--	167	F901	0.72	Maximum normal load
264/60	0.72	--	167	F901	0.72	Maximum normal load
USB mode						
90/50	1.93	--	172.8	F901	1.93	Maximum normal load
90/60	1.93	--	172.8	F901	1.93	Maximum normal load
100/50	1.72	2.9	172.2	F901	1.72	Maximum normal load
100/60	1.72	2.9	172.2	F901	1.72	Maximum normal load
240/50	0.81	1.2	171.6	F901	0.81	Maximum normal load
240/60	0.81	1.2	171.6	F901	0.81	Maximum normal load
264/50	0.75	--	170.4	F901	0.75	Maximum normal load
264/60	0.75	--	170.4	F901	0.75	Maximum normal load
SD Card Reader mode						
90/50	1.92	--	172.6	F901	1.92	Maximum normal load
90/60	1.92	--	172.6	F901	1.92	Maximum normal load
100/50	1.71	2.9	172.0	F901	1.71	Maximum normal load
100/60	1.71	2.9	172.0	F901	1.71	Maximum normal load
240/50	0.80	1.2	171.4	F901	0.80	Maximum normal load
240/60	0.80	1.2	171.4	F901	0.80	Maximum normal load
264/50	0.73	--	170.1	F901	0.73	Maximum normal load
264/60	0.73	--	170.1	F901	0.73	Maximum normal load
For model P404 with internal speaker						
HDMI mode						
90/50	2.17	--	190	F901	2.17	Maximum normal load
90/60	2.17	--	190	F901	2.17	Maximum normal load
100/50	1.95	2.9	189	F901	1.95	Maximum normal load
100/60	1.95	2.9	189	F901	1.95	Maximum normal load
240/50	0.88	1.2	188	F901	0.88	Maximum normal load
240/60	0.88	1.2	188	F901	0.88	Maximum normal load
264/50	0.81	--	188	F901	0.81	Maximum normal load

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

264/60	0.81	--	188	F901	0.81	Maximum normal load
For model V404with External speaker (SP-TF1)						
HDMI mode						
90/50	2.28	--	203	F901	2.28	Maximum normal load
90/60	2.28	--	203	F901	2.28	Maximum normal load
100/50	2.06	2.7	202	F901	2.06	Maximum normal load
100/60	2.06	2.7	202	F901	2.06	Maximum normal load
240/50	0.93	1.1	201	F901	0.93	Maximum normal load
240/60	0.93	1.1	201	F901	0.93	Maximum normal load
264/50	0.84	--	201	F901	0.84	Maximum normal load
264/60	0.84	--	201	F901	0.84	Maximum normal load
Supplementary information:						

2.1.1.5 c) 1)	TABLE: max. V, A, VA test				P
Voltage (rated) (V)	Current (rated) (A)	Voltage (max.) (V)	Current (max.) (A)	VA (max.) (VA)	
For model P484					
Output +16V	--	15.99	3.6	55.48	
Output +24V	--	24.21	3.4	81.04	
For model P404					
Output VLED +54V (From Transformer T8601)	--	54.12	1.5	80.43	
supplementary information:					
Supply voltage: 240Vac, 60Hz					

2.2	TABLE: evaluation of voltage limiting components in SELV circuits			P
Component (measured between)	max. voltage (V) (normal operation)		Voltage Limiting Components	
	V peak	V d.c.		
T8601 pin 7 to Earth	88.4	--	--	
T8601 pin 9 to Earth	88.4	--	--	
After D8603 to Earth	--	54.1	D8603	
Fault test performed on voltage limiting components	Voltage measured (V) in SELV circuits (V peak or V d.c.)			
D8603 short circuited	Panel shutdown			

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

supplementary information:

1) Input Voltage is 240 Vac, 60 Hz

2.5	TABLE: limited power sources					P
Circuit output tested:						
Note: Measured Uoc (V) with all load circuits disconnected: See below						
Components	Test condition (single fault)	Uoc (V)	I _{sc} (A)		VA	
			Meas.	Limit	Meas.	Limit
According to table 2B						
CN601 (output to internal speaker) all pins to earth	Normal	0	0	8	0	100
CN413 (output to IR board) pin 1 to earth (with TH402 by passed)	Normal	3.32	Could not be loaded	8	Could not be loaded	100
CN413 (output to IR board) pin 1 to earth (with TH402 by passed)	Single fault U440 pin 11-4 short	0	0	8	0	100
CN413 (output to IR board) pin 1 to earth (with TH402 by passed)	Single fault U440 pin 7-4 short	0	0	8	0	100
CN413 (output to IR board) pin 2 to earth (with TH402 by passed)	Normal	2.9	Could not be loaded	8	Could not be loaded	100
CN413 (output to IR board) pin 3 to earth (with TH402 by passed)	Normal	2.76	Could not be loaded	8	Could not be loaded	100

IEC 60950-1						
Clause	Requirement + Test			Result - Remark		Verdict
CN413 (output to IR board) pin 4, 5 to earth (with TH402 by passed)	Normal	3.3	Could not be loaded	8	Could not be loaded	100
CN413 (output to IR board) pin 6 to earth (with TH402 by passed)	Normal	3.3	1.2	8	25.92	100
CN413 (output to IR board) pin 6 to earth (with TH402 by passed)	Single fault U702 pin 7, 8 to 10 short	0	0	8	0	100
CN413 (output to IR board) pin 7, 9 to earth (with TH402 by passed)	Normal	2.9	Could not be loaded	8	Could not be loaded	100
CN413 (output to IR board) pin 8, 10 to earth (with TH402 by passed)	Normal	0	0	8	0	100
CN412 (output to key board) pin 1 to earth	Normal	3.26	Could not be loaded	8	Could not be loaded	100
CN412 (output to key board) pin 2 to earth	Normal	2.33	Could not be loaded	8	Could not be loaded	100
CN412 (output to key board) pin 3 to earth	Normal	2.72	Could not be loaded	8	Could not be loaded	100
CN412 (output to key board) pin 4 to earth	Normal	0	0	8	0	100

IEC 60950-1						
Clause	Requirement + Test	Result - Remark				Verdict
CN412 (output to key board) pin 5, 6 to earth	Normal	0	0	8	0	100
CN411 (output to NFC board) pin 1 to earth (with TH403 by passed)	Normal	3.33	1.5	8	3.49	100
CN411 (output to NFC board) pin 1 to earth (with TH403 by passed)	Single fault U702 pin 7, 8 – 10 short	0	0	8	0	100
CN411 (output to NFC board) pin2 to earth (with TH403 by passed)	Normal	0	0	8	0	100
CN411 (output to NFC board) pin 3 to earth (with TH403 by passed)	Normal	3.9	Could not be loaded	8	Could not be loaded	100
CN411 (output to NFC board) pin 4 to earth (with TH403 by passed)	Normal	0	0	8	0	100
CN411 (output to NFC board) pin 5 to earth (with TH403 by passed)	Normal	3.18	Could not be loaded	8	Could not be loaded	100
CN411 (output to NFC board) pin 6, 7 to earth (with TH403 by passed)	Normal	0	0	8	0	100

IEC 60950-1						
Clause	Requirement + Test	Result - Remark				Verdict
USB downstream (CN508) pin 1 to earth	Normal	4.99	2.2	8	9.5	100
USB downstream (CN508) pin 1 to earth	Single fault (U531 pin1-5 short)	5.07	2.5	8	10.11	100
USB downstream (CN508) pin 1 to earth	Single fault (C5068 short)	0	0	8	0	100
USB downstream (CN508) all other pins to earth	Normal	0	0	8	0	100
CN404 (LVDS Connector)(output connector to panel control board) pin 36, 37, 38, 39, 40 to earth	Normal	11.93	7.5	8	75.68	100
CN404 (LVDS Connector)(output connector to panel control board) Pin36,37,38,39,40 to earth	Single fault (Q408 D-S short)	0	0	8	0	100
CN404 (LVDS Connector)(output connector to panel control board) Pin36,37,38,39,40 to earth	Single fault (Q408 D-G short)	0	0	8	0	100
CN404 (LVDS Connector)(output connector to panel control board) Pin36,37,38,39,40 to earth	Single fault (Q408 S-G short)	0	0	8	0	100

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

supplementary information:

1. Input condition: 240 Vac, 60 Hz.

2.6.3.4	TABLE: Resistance of earthing measurement		P
Location		Resistance measured (mΩ)	Comments
For model P404			
AC inlet earth pin to Metal enclosure		18	Test current : 32A, duration: 2 min., Voltage drop: 0.576V
AC inlet earth pin to Metal enclosure		19	Test current : 40A, duration: 2 min., Voltage drop: 0.76V
AC inlet earth pin to C9329 trace		13	Test current : 32A, duration: 2 min., Voltage drop: 0.416V
AC inlet earth pin to C9329 trace		11.2	Test current : 40A, duration: 2 min., Voltage drop: 0.448V
AC inlet earth pin to C9902 trace		13	Test current : 32A, duration: 2 min., Voltage drop: 0.416V
AC inlet earth pin to C9902 trace		11.2	Test current : 40A, duration: 2 min., Voltage drop: 0.448V
AC inlet earth pin to C9901 trace		14	Test current : 32A, duration: 2 min., Voltage drop: 0.448V
AC inlet earth pin to C9901 trace		15	Test current : 40A, duration: 2 min., Voltage drop: 0.600V
AC inlet earth pin to C9904 trace		13	Test current : 32A, duration: 2 min., Voltage drop: 0.416V
AC inlet earth pin to C9904 trace		11.2	Test current : 40A, duration: 2 min., Voltage drop: 0.448V
AC inlet earth pin to C9905 trace		14	Test current : 32A, duration: 2 min., Voltage drop: 0.448V
AC inlet earth pin to C9905 trace		15	Test current : 40A, duration: 2 min., Voltage drop: 0.600V
Supplementary information:			

2.10.2	Table: working voltage measurement			P
Location		RMS voltage (V)	Peak voltage (V)	Comments
Supply Voltage: 240Vac/60Hz				
T8601 pin1,2 to pin 7		180	452	
T8601 pin1,2 to pin 9		200	368	
T8601 pin1,2 to pin11,12		180	410	
T8601 pin5,6 to pin 7		285	310	

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
T8601 pin5,6 to pin 9	212	490	
T8601 pin5,6 to pin11,12	250	455	
Supply Voltage: 100Vac/60Hz			
T8601 pin1,2 to pin 7	180	370	
T8601 pin1,2 to pin 9	300	415	
T8601 pin1,2 to pin11,12	175	310	
T8601 pin5,6 to pin 7	295	490	Highest Vp and Vrms of T8601
T8601 pin5,6 to pin 9	215	460	
T8601 pin5,6 to pin11,12	250	400	
supplementary information:			

2.10.3 and 2.10.4	TABLE: Clearance and creepage distance measurements						P
Clearance (cl) and creepage distance (cr) at/of/between:	U peak (V)	U r.m.s. (V)	Required cl (mm) ³	cl (mm)	Required cr (mm)	cr (mm)	
Gas Tub body between terminals (outside)	420	250	3.0 (2.0*1.48)	6.4	3.0	6.4	
Gas Tub body between terminals (inside)	420	250	3.0 (2.0*1.48)	4.8	3.0	4.8	
Supplementary information:							
1. Functional insulation shorted, see 5.3.4 c).							
2. The measurement were conducted on both component side and trace layout side, only smaller value being recorded above.							

4.5	TABLE: Thermal requirements		P
	Supply voltage (V)	See below	—
	Ambient T _{min} (°C)	See below	—
	Ambient T _{max} (°C)	See below	—
Maximum measured temperature T of part/at::		T (°C)	Allowed T _{max} (°C)

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

Test voltage and orientation	90V/60Hz	264V/60Hz	--
AC inlet near Lpin	46.0	44.4	70
Switch body	46.3	44.6	95
CN901 body	50.5	47.6	--
PCB near RV9901	52.7	50.4	105
PCB near RV9902	51.3	48.5	105
C9903 body	51.6	49.1	--
Sw9901 coil	69.4	67.6	105
PCB near TH9901	53.7	49.9	105
L9901 coil	62.0	51.4	105
L9902 coil	56.6	49.8	105
L9906 coil	54.3	49.5	105
L9903 coil	62.4	51.3	105
L9904 coil	65.9	55.4	105
L9905 coil	66.2	56.3	105
L9801 coil	72.9	64.5	105
L9802 coil	68.5	62.1	105
PCB near BD9901	69.9	56.6	105
PCB near D9805	72.7	70.1	105
PCB near D9806	73.0	73.0	105
PCB near Q9301	76.9	75.3	105
C9815 body	62.6	56.4	85
U9302 body	67.3	66.3	100
T8601 core	73.8	72.6	110
T8601 coil	75.4	74.3	110
C9331 body	72.7	71.3	85
U9102 body	71.7	70.9	100
T9101 coil	84.9	84.3	110
T9101 core	78.7	78.2	110
T9301 coil	80.8	80.6	110
Tamb.	24.3	23.7	--
Tma.	40.0	40.0	--
T9301 core	78.0	78.1	110
PCB near Q8601	71.0	70.5	105
PCB near Q9101	71.2	69.6	105
PCB near D8603	81.7	81.3	105
PCB near D9165	69.8	70.8	105

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

PCB near D9306	83.4	83.2	105
PCB near D9307	77.5	76.9	105
L9163 coil	72.2	71.6	105
Mylar near T9101	68.7	68.5	--
Main board near HS401	60.1	59.7	105
PCB near U301	64.4	64.2	105
Metal enclosure outside	45.3	46.2	70
Panel body	41.8	43.0	95
Tamb.	24.2	23.0	--
Tma.	40.0	40.0	--

Supplementary information:

- The temperatures were measured under worst case normal mode defined in 1.2.2.1 and as described in 1.6.2 at voltages as described in above.
- Unit specified with maximum of 40 °C ambient temperature and above test data was calculated by original test result of ambient temperature above.
Winding components (providing safety isolation):
- Class 130 material (B) $T_{max} = 120\text{ °C} - 10\text{ °C} = 110\text{ °C}$
- Thermocouple method used for measuring the temperatures.
- The heating test were performed with DC fan not operated and all ventilation openings blocked to simulate the worst condition.

4.6.1, 4.6.2	Table: Enclosure opening measurements		P
Location	Size (mm)	Comments	
Horizontal for model P404/V404			
Top	--	None	
Rear, Rear Top, Rear right(near mainboard)	Ø 4.7	Numerous circular openings provided. There is no portion of the side of fire enclosure falls within the area traced out by the 5° angle.	
Right side	Ø 1.8	Numerous circular openings provided. There is no portion of the side of fire enclosure falls within the area traced out by the 5° angle.	
Left side (near building-in power supply board)	--	None	
Bottom	- Ø 1.7 centre to centre= 3.3 min., metal thickness= 0.81 - Ø 1.7 centre to centre= 3.5 min., metal thickness= 0.81	- An internal metal chassis which provide numerous circle openings which compliance with 4.6.2 table 4D. - Numerous circle openings provided. Compliance with 4.6.2 table 4D.	

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Clause	Requirement + Test	Result - Remark	Verdict
Vertical (with mainboard down side)			
Top	--	None	
Rear	Ø 4.7	Numerous circular openings provided. There is no portion of the side of fire enclosure falls within the area traced out by the 5° angle.	
Bottom	Ø 1.8 centre to centre= 3.4 min., metal thickness= 0.81	Numerous circle openings provided. Compliance with 4.6.2 table 4D.	
Left Side	--	None	
Right Side	Ø 1.7	Numerous circular openings provided. There is no portion of the side of fire enclosure falls within the area traced out by the 5° angle.	
Panel Face up			
Top	--	None	
Bottom	Ø 4.7 max.	Numerous circular openings provided under secondary DC Fan, internal insulated wiring insulated and connectors which complied with limited power source.	
Left side (near building-in power supply board)	--	None	
Right side	Ø 1.8	Numerous circular openings provided. There is no portion of the side of fire enclosure falls within the area traced out by the 5° angle.	
Rear	Ø 1.7	Numerous circular openings provided.	
Panel Face down			
Bottom	--	None	
Top	Ø 4.7	Numerous circular openings provided.	
Left side (near building-in power supply board)	--	None	
Right side	Ø 1.8	Numerous circular openings provided. There is no portion of the side of fire enclosure falls within the area traced out by the 5° angle.	
Rear	Ø 1.7	Numerous circular openings provided.	

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Clause	Requirement + Test	Result - Remark	Verdict

Supplementary information:

1. Metal enclosure was considered as fire enclosure.

5.2	TABLE: Electric strength tests, impulse tests and voltage surge tests			P
Test voltage applied between:		Voltage shape (AC, DC, impulse, surge)	Test voltage (V)	Breakdown Yes / No
Transformer:				
T8601 primary to secondary		AC	3000	No
T8601 primary to core		AC	1734	No
T8601 secondary to core		AC	1734	No
Unit:				
Primary to secondary		DC	4242	No
Primary to plastic enclosure with foil		DC	4242	No
Primary to earth		DC	2572	No
Gas Tube		AC	1500	No
One layer of insulation tape used for T9101 /T9301/T8601 (min. 2 layers used)		AC	3000	No
Bobbin of T9101 and T8601		AC	3000	No
Supplementary information:				
1. Test was performed on all sources of transformer and tape.				

5.3	TABLE: Fault condition tests					P
	Ambient temperature (°C)		25, if no otherwise specified			—
	Power source for EUT: Manufacturer, model/type, output rating		See appended table 1.5.1			—
Component No.	Fault	Supply voltage (V)	Test time	Fuse #	Fuse current (A)	Observation

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Clause	Requirement + Test				Result - Remark	Verdict
Transformer VLED (+54V) (After D8603)	Overload	240	4 hr 01 min	F901	1.05	Constant temp. stabled at load to 1.5A, unit shutdown when load to increase 1.6 A Unit shutdown, no hazards, no damage. T9301 coil=75.7°C, T9301 core=74.5 °C, T9101 coil=80.7°C T9101 core=74.6°C T8601 coil=94.1°C T8601 core=86.4°C Ambient= 40.0°C
T8601 pin1,2-5,6	Short	240	10 min	F901	0.09	Unit shutdown, no hazards, no damage.
T8601 pin7-11,12	Short	240	10 min	F901	0.09	Unit shutdown, no hazards, no damage.
T8601 pin9-11,12	Short	240	10 min	F901	0.10	Unit shutdown, no hazards, no damage.
D8603	short	240	10 min	F901	0.16	Panel shutdown, no hazards, no damage.
For model P484						
T9301 pin 1-3	Short	240	10 min	F601	0.08	Unit shutdown, no damage, no hazards.
T9301 pin 5-6	Short	240	10 min	F601	0.08	Unit shutdown, no damage, no hazards.
T9301 pin 10,11,12-7,8	Short	240	10 min	F601	0.08	Unit shutdown, no damage, no hazards.

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Clause	Requirement + Test	Result - Remark	Verdict

Transformer +5V (After D9307)	Overload	240	3 hr 14 min	F901	1.193	Constant temp. stabled at load to 3.5A, unit shutdown when load to increase 3.7 A Unit shutdown, no hazards, no damage. T9301 coil=95.1°C, T9301 core=73.8 °C, T9101 coil=85.7°C T9101 core=79.8°C T8601 coil=96.3°C T8601 core=89.2°C Ambient= 40.0°C
Transformer VLED (+66V) (After D8603)	Overload	240	3 hr 20 min	F901	1.148	Constant temp. stabled at load to 0.8A, unit shutdown when load to increase 1.0 A Unit shutdown, no hazards, no damage. T9301 coil=77.9°C, T9301 core=74.0 °C, T9101 coil=80.4°C T9101 core=76.9°C T8601 coil=91.6°C T8601 core=82.6°C Ambient= 40.0°C

Supplementary information:

1. The electric strength test performed after fault condition test and see appended table 5.2 for detailed test conditions.
2. For fuse opened conditions, same result came out for each source of fuse.
3. In fault column, where s-c=short-circuited, o-c = open circuit, o-l= over-loaded.
4. Maximum permitted temperature of all transformer based on maximum operation temperature of 40 °C: $T_{max} = 175\text{ °C} - (40-25)\text{ °C} = 160\text{ °C}$.

C.2	TABLE: transformer						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)
T8601	Primary / input winding and secondary / output winding (internal) (DI)	490	295	AC 3000	6.6	6.6	See below transforme construction
T8601	Primary / input winding and core (internal) (BI)	490	295	AC 1734	3.3	3.3	See below transforme construction

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Clause	Requirement + Test			Result - Remark			Verdict
T8601	Secondary / output winding and core (internal) (BI)	490	295	AC 1734	3.3	3.3	See below transforme construction
T8601	Primary / input part and secondary / output part (external) (DI)	490	295	AC 3000	6.6	6.6	See below transforme construction
T8601	Primary / input part and secondary / output winding (external) (DI)	490	295	AC 3000	6.6	6.6	Approved triple insulated wire used
T8601	Primary / input part and core (external) (BI)	490	295	AC 1734	3.3	3.3	See below transforme construction
T8601	Secondary / output part and core (external) (BI)	490	295	AC 1734	3.3	3.3	See below transforme construction
T8601	Secondary / output part and primary / input winding (external) (DI)	496	300	AC 3000	6.6	6.6	Approved triple insulated wire used
Loc.	Tested insulation			Test voltage/ V	Measured clearance / mm	Measured creepage dist./ mm	Measured distance thr. insul. / mm; number of layers
T8601	Primary / input winding and secondary / output winding (internal) (DI)			AC 3000	7.0	7.0	--
T8601	Primary / input winding and core (internal) (BI)			AC 1734	4.2	4.2	--
T8601	Secondary / output winding and core (internal) (BI)			AC 1734	4.2	4.2	--
T8601	Primary / input part and secondary / output part (external) (DI)			AC 3000	42.0	42.0	--
T8601	Primary / input part and secondary / output winding (external) (DI)			AC 3000	16.0	16.0	--
T8601	Primary / input part and core (external) (BI)			AC 1734	6.7	6.7	--
T8601	Secondary / output part and core (external) (BI)			AC 1734	5.7	5.7	--
T8601	Secondary / output part and primary / input winding (external) (DI)			AC 3000	12.5	12.5	--
supplementary information:							

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Clause	Requirement + Test	Result - Remark	Verdict

1. Altitude correction factor for clearances for an altitude of 5000 m (based on IEC 60664-1:1992): 1.48.
2. Same construction and Test for all sources.

C.2

TABLE: transformer

P

Two separated windings (primary and secondary) on bobbin design (horizontal type core). Bobbin partition that width min.7.0 mm separated primary and secondary winding. Two layers of insulation tape around the core. The core is considered as floating part.

TOP VIEW

BOTTOM VIEW

WINDING DIRECTION

SIDE VIEW

FORNT VIEW

$A=38.0\pm1.5\text{ mm}$

$B=13.5+0/-1.0\text{ mm}$

$C=42.5\pm1.5\text{ mm}$

$D=3.5\pm0.3\text{ mm}$

$E1=5.5\pm0.3\text{ mm}$

$E2=5.75\pm0.3\text{ mm}$

$E3=8.2\pm0.3\text{ mm}$

$E4=43.0\pm0.5\text{ mm}$

$d=0.8*0.8\pm0.15\text{ mm}$

次级侧 TOP 端 CASE 与 CORE 接触处 EPOXY

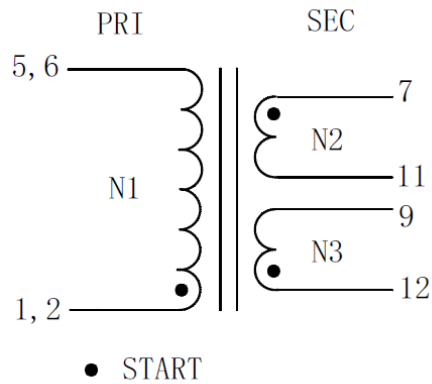
底部 CASE 与 BOBBIN 接触处对角点胶

底部 初级 侧 CASE 与 CORE 接触处点胶

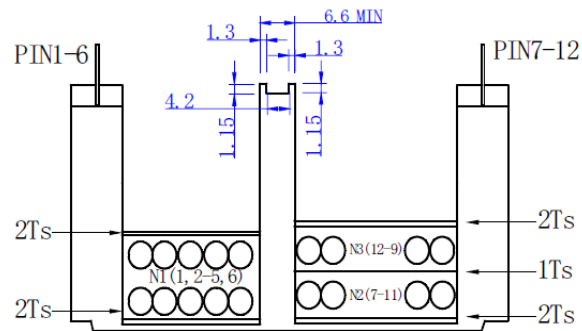
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IEC 60950-1

Clause	Requirement + Test	Result - Remark	Verdict
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3.5. WINDING CONSTRUCTION:



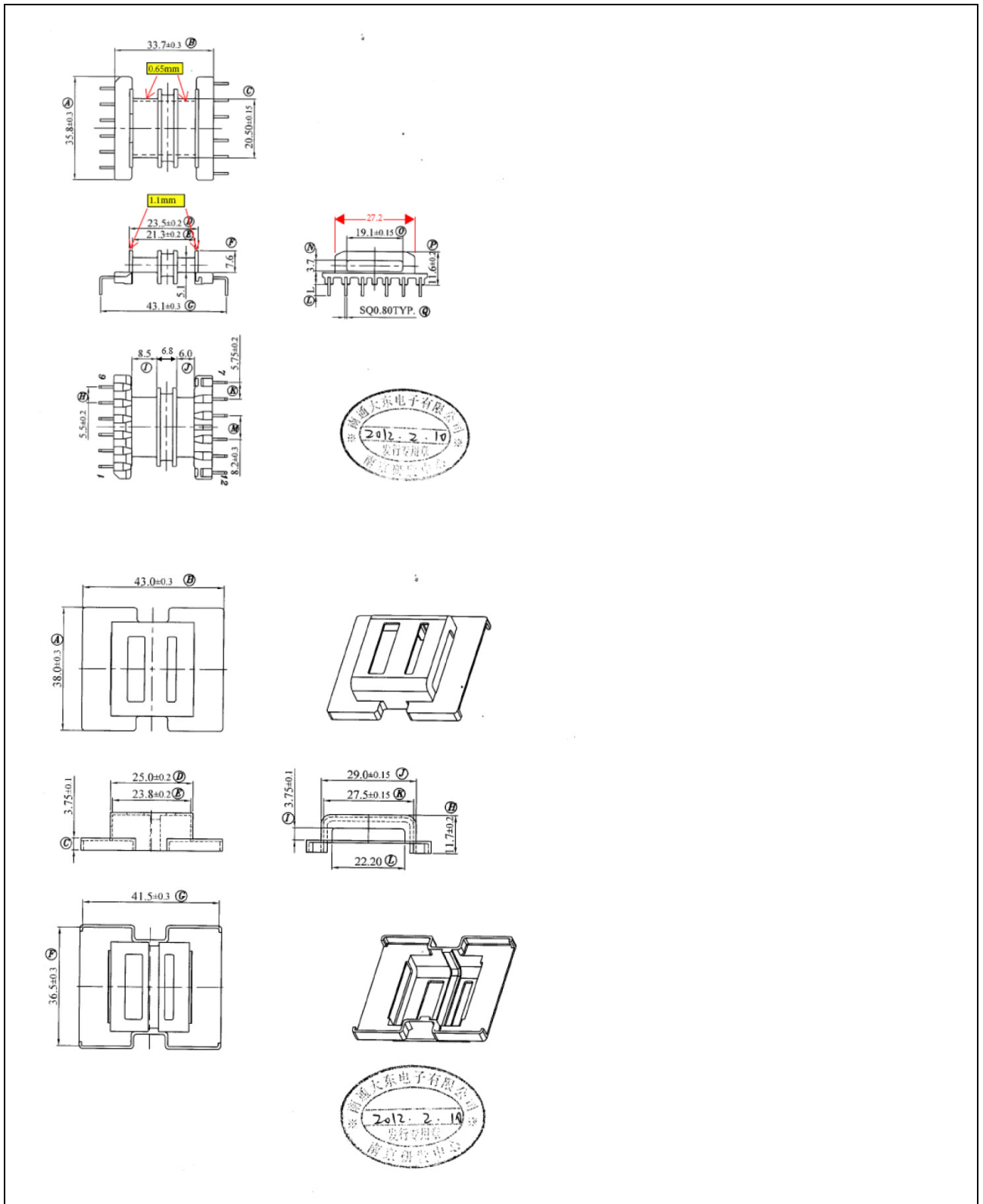
3.6. WINDING MODE:

No.	COIL	TERMINAL	WIRE GAUGE	WIRE TYPE	TUNS	WINDING METHOD	TAPE/2Ts
1	N1	1,2--5,6	$\Phi 0.10 \times 22$	LITZ	52	CLOSED	2Ts
2	N2	7--11	$\Phi 0.10 \times 22$	LITZ	15	CLOSED	1Ts
3	N3	12--9	$\Phi 0.10 \times 22$	LITZ	15	CLOSED	2Ts

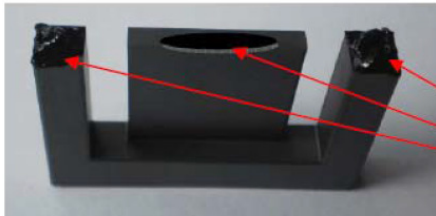
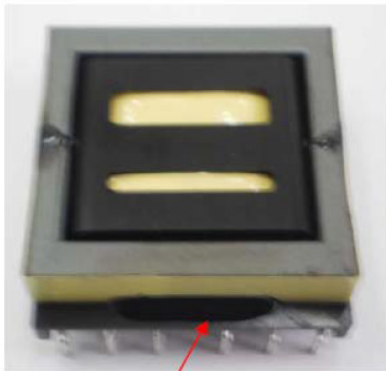
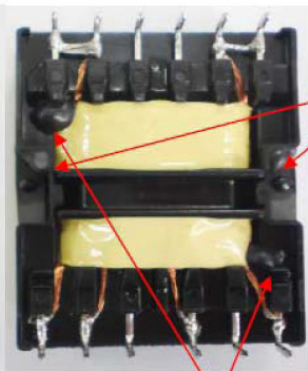
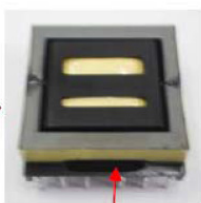
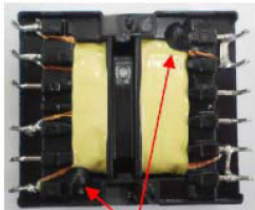
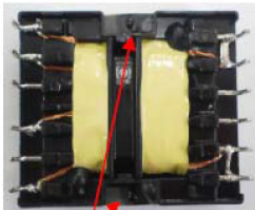
3.7. Winding Direction: It Is clockwise From PIN1-6 Side

IEC 60950-1

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

	GAP CORE EPOXY (E-500-1) WEIGHT ALMOST0.05g±0.03(REF)
	次级侧 TOP 端 CASE 与 CORE 接触处 EPOXY(E-500) WEIGHT ALMOST0.1g±0.05g(REF)
	底部 CASE 与 BOBBIN 接触处 4 点 EPOXY(E-500) WEIGHT ALMOST0.05g±0.03g(REF)
	底部初级侧 CASE 与 CORE 接触处 EPOXY(E-500) WEIGHT ALMOST0.1g±0.05g(REF)
AOC EFD3835 先含浸线包，后组合 CORE 工法	
	线包先含浸烘干
	组合 CORE,边柱以 EPOXY(硬)固定
	次级侧 TOP 端 CASE 与 CORE 接触处点胶(软)
	底部 CASE 与 BOBBIN 接触处对角点胶(软)
	底部初级侧 CASE 与 CORE 接触处点胶(软)

Description of design:

(a) Bobbin

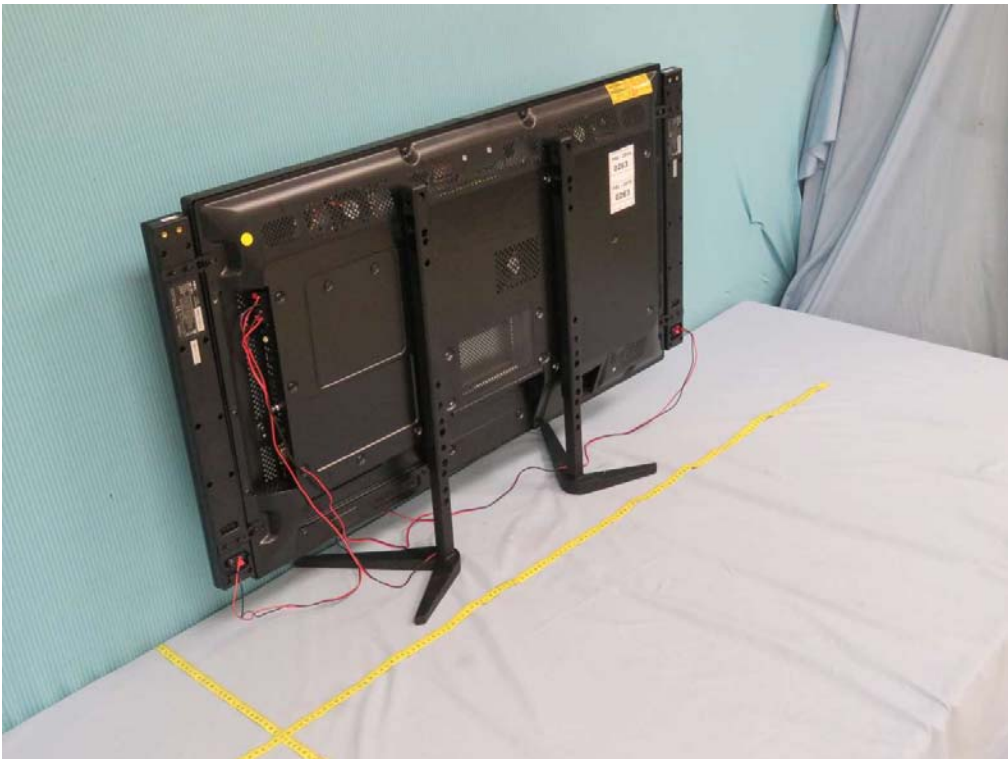
IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

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

Product: LCD Monitor

Type Designation: P484, V484, P404, V404 (NEC)

For P404, V404 (with External speaker)



Product: LCD Monitor

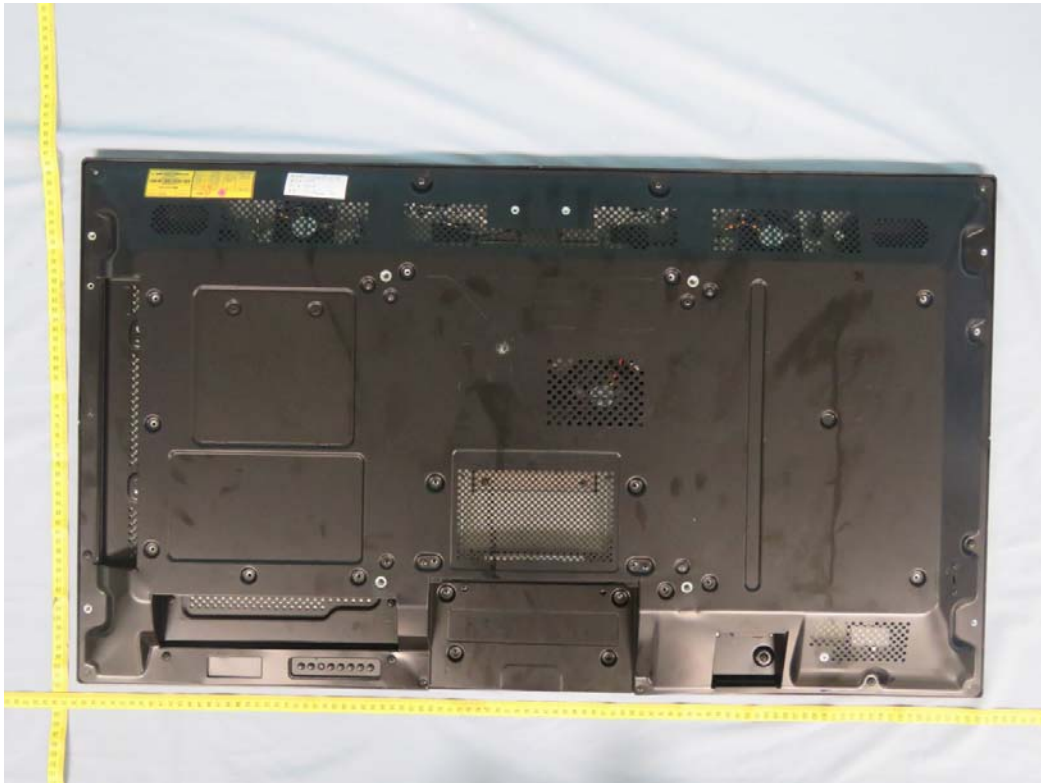
Type Designation: P484, V484, P404, V404 (NEC)

For P404, V404 (without External speaker)



Product: LCD Monitor

Type Designation: P484, V484, P404, V404 (NEC)



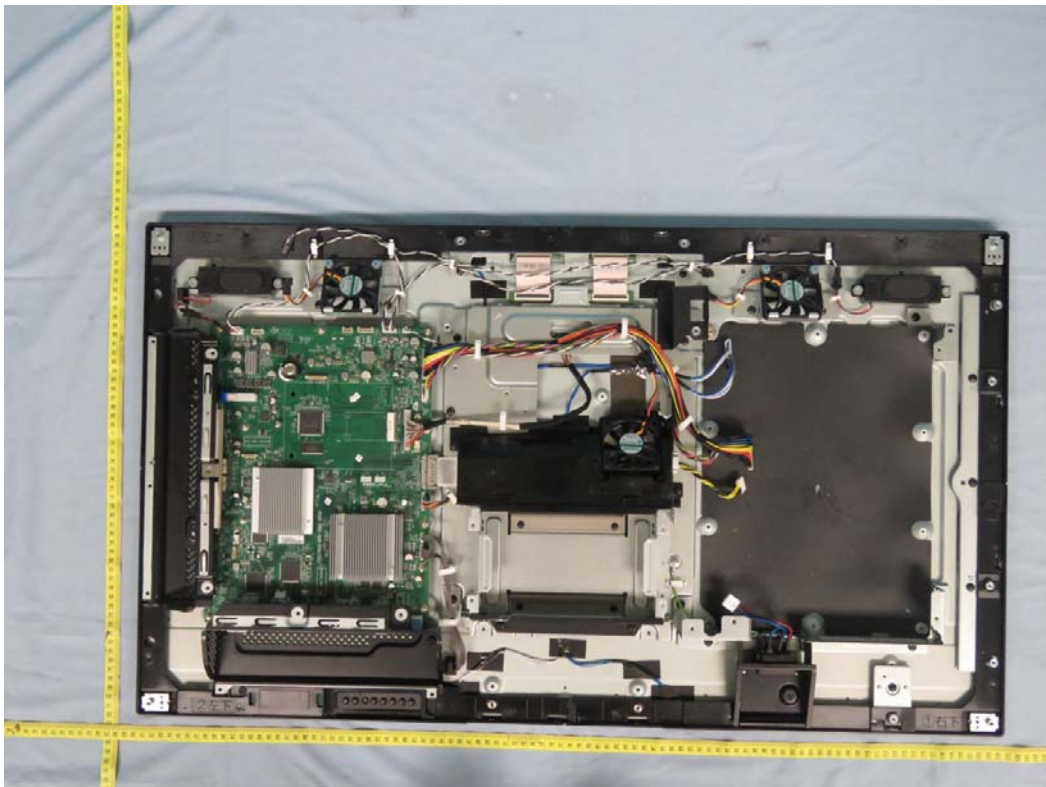
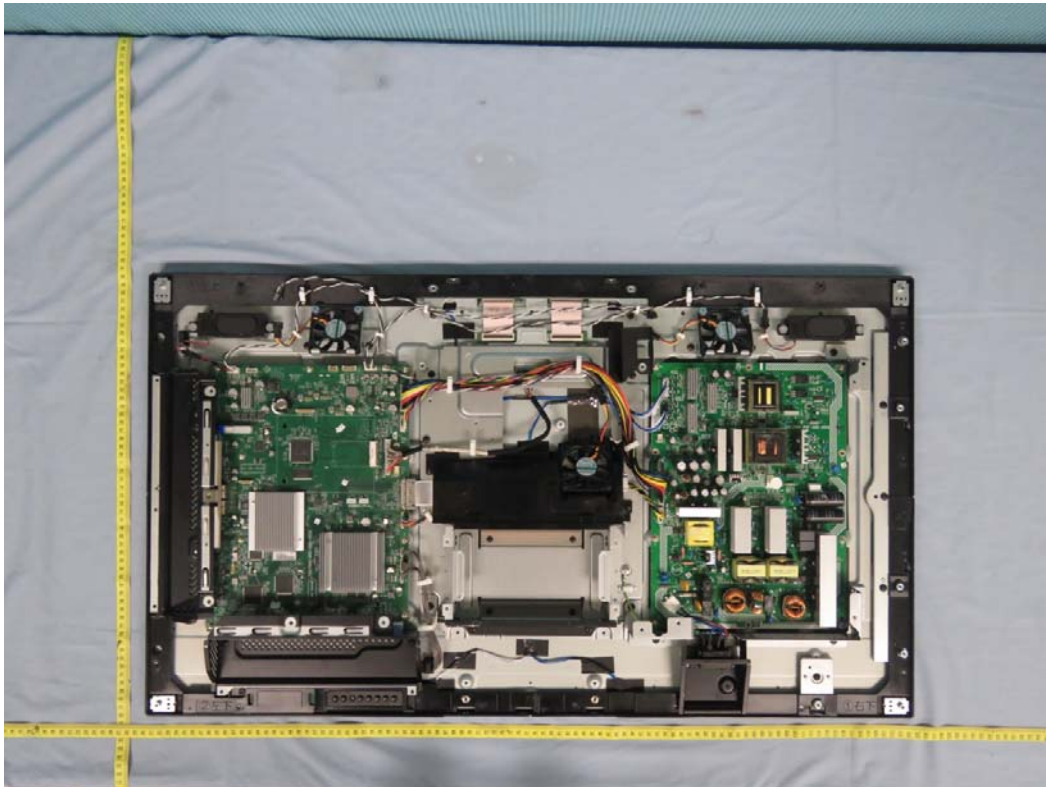
Product: LCD Monitor

Type Designation: P484, V484, P404, V404 (NEC)



Product: LCD Monitor

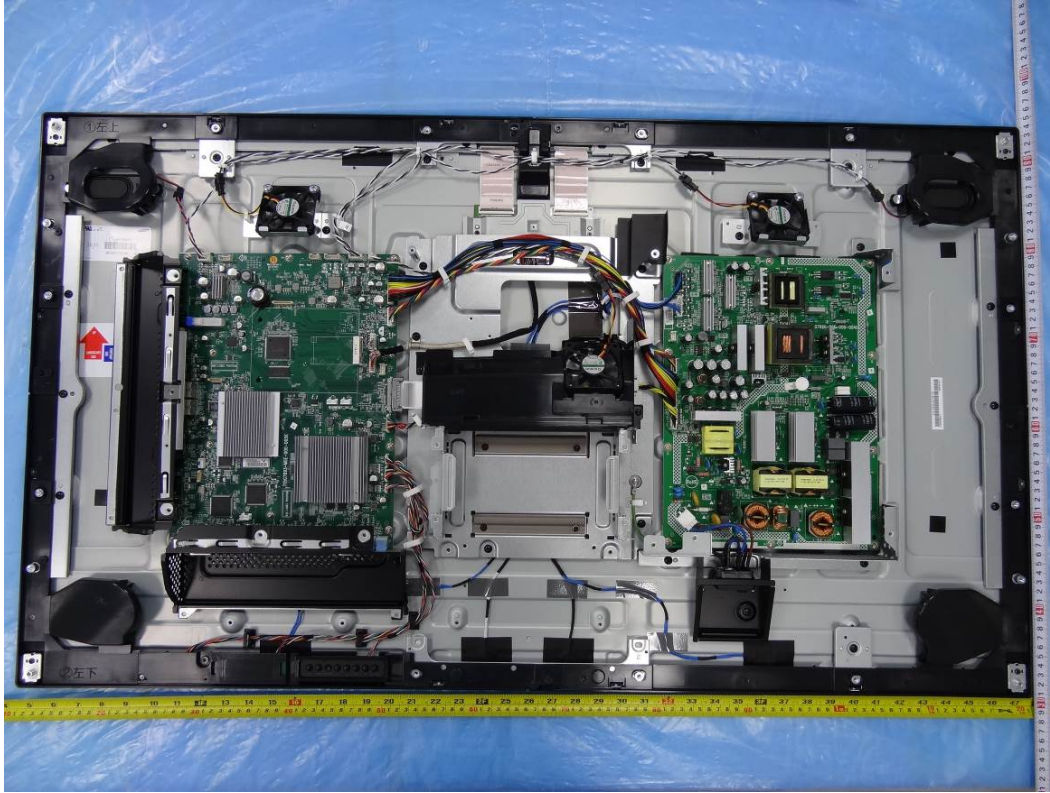
Type Designation: P484, V484, P404, V404 (NEC)



Product: LCD Monitor

Type Designation: P484, V484, P404, V404 (NEC)

For P484, V484



Product: LCD Monitor

Type Designation: P484, V484, P404, V404 (NEC)

For P484, V484 with external speaker

