



Test Report issued under the responsibility of:



TEST REPORT IEC 60950-1 Information technology equipment – Safety – Part 1: General requirements	
Report Number.....	11034686 002
Date of issue.....	Nov. 15 th , 2013
Total number of pages.....	17
CB Testing Laboratory	TÜV Rheinland Taiwan Ltd., Taichung Laboratory.
Address.....	No. 9, Ln. 36, Sec. 3, Minsheng Rd., Daya District, Taichung City 428, Taiwan
Applicant's name	Top Victory Electronics (Taiwan) Co., Ltd.
Address.....	10F., No. 230, Liancheng Rd., Zhonghe Dist., New Taipei City, 23553 Taiwan
Manufacturer's name	NEC Display Solutions, Ltd.
Address.....	4-28, Mita 1-chome, Minato-ku, Tokyo, Japan
Test specification:	
Standard	IEC 60950-1:2005 (Second Edition) + Am 1:2009
Test procedure.....	CB Scheme
Non-standard test method.....	N/A
Test Report Form No.	IEC60950_1C
Test Report Form(s) Originator	SGS Fimko Ltd
Master TRF	Dated 2012-08
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Test item description.....	LCD Monitor
Trade Mark	NEC
Manufacturer.....	See above manufacturer
Model/Type reference	1) X554UN, X554UN(C), MultiSync X554UN 2) X464UN, X464UN(C), MultiSync X464UN
Ratings.....	I/p: 1) 100-240Vac, 50/60Hz, 3.8-1.6 A 2) 100-240Vac, 50/60Hz, 3.0-1.2A

Testing procedure and testing location:		
☒	CB Testing Laboratory:	Refer to page 1
Testing location/ address..... :		Refer to page 1
☐	Associated CB Laboratory:	
Testing location/ address..... :		
Tested by (name + signature).....:		Abi-Shiaan Tin
Approved by (name + signature)		Tennis Chin
☐	Testing procedure: TMP	
Testing location/ address..... :		
Tested by (name + signature).....:		
Approved by (name + signature)		
☐	Testing procedure: WMT	
Testing location/ address..... :		
Tested by (name + signature).....:		
Witnessed by (name + signature).....:		
Approved by (name + signature)		
☐	Testing procedure: SMT	
Testing location/ address..... :		
Tested by (name + signature).....:		
Approved by (name + signature)		
Supervised by (name + signature).....:		
☐	Testing procedure: RMT	
Testing location/ address..... :		
Tested by (name + signature).....:		
Approved by (name + signature)		
Supervised by (name + signature).....:		

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

- Photo documentation

Total number of pages in each attachment is indicated in individual attachment.

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

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

- The manufacturer specified the maximum ambient temperature as +40°C.
- Highest load condition for this equipment is to operate at maximum backlight, brightness and contrast of LED backlight, and adjust to max. volume with 1KHz sine waveform of speakers, additional load of 5V/0.5A for USB port and dummy load 16V/4A (located at top side), dummy load 5V/1A (CN505) (located down side), and additional load of 3.3V/ 0.5A for Display port (CN501 and CN506).
- 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.
- Except other noted, all tested were performed on model X464UN with all optional component and external speakers installed in place to simulate the worst condition and to represent other similar models.
- The Heating test and abnormal test were performed with all system fan locked.
- The LCD Monitor can be adjustment monitor's height and operated in landscape (0 °) to portrait mode (90 °) when building-in power supply board downside. For heating test were considered all orientation during test conducting.

Testing location:

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

Summary of compliance with National Differences

List of countries addressed:

EU Group Differences, EU Special National Conditions, CA, DE, FI, IL, KR, US.

Explanation of used codes: CA = Canada, DE = Germany, FI = Finland, IL = Israel, KR = Republic of Korea, US = United States of America.

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

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

AU, CN

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

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

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

Explanation of used codes: AR=Argentina, AT=Austria, AU=Australia, BE=Belgium, BR=Brazil, CN=China, CZ=Czech Republic, FR=France, GR=Greece, HU=Hungary, IE=Ireland, IN=India, IT=Italy, JP=Japan, KE=Kenya, MY=Malaysia, NL=The Netherlands, PL=Poland, PT=Portugal, RU=Russian Federation, SG=Singapore, SI=Slovenia, SK=Slovakia, TR=Turkey, UA=Ukraine, ZA=South Africa.

For National Differences see corresponding Attachment.

Copy of marking plate:

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.

NEC
MultiSync X464UN

LCD MONITOR
(Model :X464UN)

VOLTS 定格電圧:100-240V~, AMPERES 定格電流:3.0-1.2A (3.0-1.2A)
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 ELECTRIQUES, 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 quite el
RECINTO. NINGUNAS PIEZAS DEL USUARIO SERVICABLE ADENTRO.

VARNING: APPARATEN SKALL ANSLUTAS TILL JORDAT UTTAG.

VAROITUS: LAITE ON LITETTÄVÄ SUOJAMAADOITUSKOSKETTIMILLA
VARUSTETTUUN PISTORASIAAN.

ADVARSEL: APPARATET MÅ TILKOPLES JORDET STIKKONTAKT.
CAN ICES-3(A) / NMB-3(A)

この装置は、クラスA情報技術装置です。この装置を家庭環境で使用すると
電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を
講ずるよう要求されることがあります。 VCCI-A

THIS DEVICE COMPLIES WITH PART15 OF THE FCC RULES. OPERATION IS SUBJECT
TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL
INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED,
INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRABLE OPERATION.

For Japan only

警告 高圧注意
サービスマン以外は分解しないでください。内部には高電圧部分があり、万が一さわると危険です。
感電注意
電源コードのアースリード線は必ず接続ください。故障のときに感電の原因になります。

UL LISTED E135689 US I.T.E. 1K81 SAFETY MARK TÜV Rheinland TÜV Rheinland Argentina S.A. CE EAC HDMI PS E

NECディスプレイソリューションズ株式会社
NEC Display Solutions, Ltd.
4-28, Mita 1-chome, Minato-ku, Tokyo, Japan

MADE IN CHINA

COMPANY NAME OR TRADEMARK OF PRINTING VENDOR TPU/PIN I

NEC
MultiSync X464UN

LCD MONITOR
液晶显示器
(Model / 型号:X464UN(C))

VOLTS 输入电压:100-240V~, AMPERES 电流:3.0-1.2A
FREQUENCY 工作频率:50/60Hz

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

注意: 请勿打开后盖, 小心高压电击, 机内并无用户配件。

MADE IN CHINA 中国制造
生产厂: 福建捷联电子有限公司
生产地址: 福建省福清市元洪路上郡

CCC 10 HDMI

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

COMPANY NAME OR TRADEMARK OF PRINTING VENDOR TPU/PIN I

Copy of marking plate:

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.

NEC
MultiSync X464UN

LCD MONITOR
 彩色顯示器 液晶显示器
 모니터 (46인치 LCD 모니터)
 (Model/型号/型號/모델명: X464UN)

VOLTS 定格電壓 輸入電壓 輸入電壓: 100-240V~
 AMPERES 定格電流 電流 電流: 3.0-1.2A (3.0-1.2A)
 FREQUENCY 定格周波數 工作頻率 工作頻率: 50/60Hz

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

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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.

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

VARNING: APPARATEN SKALL ANSLUTAS TILL JORDAT UTTAG.

VAROITUS: LAITE ON LITETTÄVÄ SUOJAMAADOITUSKOSKETTIMILLA VARUSTETTUUN PISTORASIAAN.

ADVARSEL: APPARATET MÅ TILKOPLES JORDET STIKKONTAKT.

意: 請勿打開後蓋, 小心高壓電擊。機內並無用戶配件。
 注意: 請勿打開後蓋, 小心高壓電擊。機內並無用戶配件。

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

この装置は、クラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。 VCCI-A

警告使用者: 此為甲類資訊技術設備, 於居住環境中使用時, 可能會造成射頻擾動。在此種情況下, 使用者會被要求採取某些適當的對策。
 THIS DEVICE COMPLIES WITH PART15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRE OPERATION.
 사용상 주의사항 감전의 위험 및 제품의 손상이 발생할 수 있으므로 제품의 커버를 열지 마십시오.
 인증 서비스 센터 전화 번호: 02-2102-8592 (효성ITX주식회사)
 *본 라벨과 전화번호는 국내 규정 내에서 적절한 목적으로만 사용되어야 합니다.

For Japan only
 ⚠ 警告 ⚡
 高圧注意
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 感電注意
 電源コードのアースリード線は必ず接地ください。故障のときに感電の原因になります。

UL E135689
US I.T.E.
LISTED 1K81

SAFETY MARK
 x x x x x x x - x x

TÜV Rheinland
 TÜV Rheinland
 TÜV Rheinland

MADE IN CHINA 中国制造 中國製造
 Manufacturing factory: TPV Electronics(Fujian)Co.,Ltd.
 Applicant: Top Victory Electronics(Fujian)Co.,Ltd.
 生產廠: 福建捷聯電子有限公司
 生產廠: 福建捷聯電子有限公司
 生產地址: 福建省福清市元洪路上郊

PS E **G** **RECYCLED**

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

HDMI

Contact address for EMEA

NEC Display Solutions Europe GmbH
 Landshuter Allee 12-14
 80637 Munich, Germany

Test item particulars:	
Equipment mobility.....:	☐ movable ☐ hand-held ☐ transportable ☒ stationary ☐ for building-in ☐ direct plug-in
Connection to the mains	☒ pluggable equipment ☒ type A ☐ type B ☐ permanent connection ☒ detachable power supply cord ☐ non-detachable power supply cord ☐ not directly connected to the mains
Operating condition.....:	☒ continuous ☐ rated operating / resting time:
Access location	☒ operator accessible ☐ restricted access location
Over voltage category (OVC)	☐ OVC I ☒ OVC II ☐ OVC III ☐ OVC IV ☐ other:
Mains supply tolerance (%) or absolute mains supply values	±10
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	IPX0
Altitude during operation (m)	Up to 5000
Altitude of test laboratory (m)	Less than 2000
Mass of equipment (kg)	1) approx. 29.01kg (Unit with handle); 4 handles: 0.4kg; one single base : 0.6kg (Base A), 1.09 kg (Base B); 1.97kg (external speaker)(for model X554UN, X554UN(C), MultiSync X554UN) 2) approx. 22.44kg (Unit with handle); 4 handles: 0.4kg; one single base : 0.62 kg (Base C); 1.97kg (external speaker)(for model X464UN, X464UN(C), MultiSync X464UN)
Possible test case verdicts:	
- test case does not apply to the test object	N/A (or N)
- test object does meet the requirement.....	P (Pass)
- test object does not meet the requirement.....	F (Fail)
Testing:	
Date of receipt of test item	Nov., 2013
Date(s) of performance of tests	Nov., 2013
General remarks:	

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

This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.

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

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

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

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

The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided.....:

☒ Yes

☐ Not applicable

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

- Name and address of factory (ies)** :
1. TPV Electronics (Fujian) Co., Ltd.
Shangzheng, Yuan Hong Road, Fuqing City,
Fujian Province, P.R.China
 2. TPV Technology (Beijing) Co., Ltd.
No. 10, Jiu Xian Qiao Rd., Chao Yang District,
Beijing 100016, P.R. China
 3. TPV Display Technology (Wuhan) Co., Ltd.
Unique No. 11, Zhuankou Development, District
of Economic Technological Development Zone,
Wuhan City 430056, P.R. China
 4. TPV Technology (Qingdao) Co., Ltd.
No.99 Huoju Road, High-tech Industrial,
Development Zone Qingdao City, Shandong
Province, P.R. China
 5. L&T Display Technology (Fujian) Ltd.
Optoelectronic Park, Rongqiao Economic and
Technological, Development Zone, Fuqing,
Fujian 350301, P.R. China
 6. Envision Industry of Electronic Products Ltd.
Rodovia Anhanguera S/N-KM 49, 13.205-700
Tijucu Preto-Jundiaí-SP-Brazil
 7. Envision Industry of Electronic Products Ltd.
Av Torquato Tapajós 7503, Galpão : II Bloco: B
-Condomínio de Galpões-Tarumã-Manaus, AM,
Brazil
 8. 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
 9. TPV Display Technology (China) Co., Ltd.
No. 106 Jinghai 3 Rd., BDA, Beijing City
100176 P.R. China

Description of change(s):

1. Add alternative model as X464UN, X464UN(C) and MultiSync X464UN which is similar to previous approved model X554UN except for
 - Panel size
 - LED driver board
 - Metal enclosure size
 - Base stand type C
 - Rated input rating
2. Additional evaluating of Discharge IC to comply with CTL decision of DSH1080.
3. Add alternative base stand B for model X554UN, X554UN(C), MultiSync X554UN and define the original base stand as type A.
4. Update "Mass of equipment" for model X554UN, X554UN(C), MultiSync X554UN for more detailed description.

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

Change	Testing	Comments
1., 3.	- Input Test - Hazardous voltage measurement - Constructional Check - Stability Test - Mechanical Test - Loading Test - Heating Test - Abnormal Test - Electric strength test	For results, refer to appended tables. For new sources, refer to appended table 1.5.1. For new label, see page 5, 6, 7, for marking details, refer to appended sub-clause 1.7.1
2.	- N/A	IEC 60950-1 recognized source used. No further tests considered to be necessary. For Mark(s) of conformity information, refer to appended table 1.5.1.
4.	- N/A	See update information in page 8 in bold type.

History of amendments and modifications:

Ref. No. 11034686 001, dated Oct., 3rd, 2013 (original test report)

Ref. No. 11034686 002, dated Nov., 15th, 2013 (modification)

Abbreviations used in the report:

- 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

Indicate used abbreviations (if any)

IEC 60950			
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	See below.	P
	Angle of 10°	The equipment does not fall over.	P
	Test force (N)	A force of 250N was applied to the Top, Side and Rear of the equipment for all models.	P

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, no energy or other hazards.	P

IEC 60950			
Clause	Requirement + Test	Result - Remark	Verdict
4.2.5	Impact test	No hazard as result from the steel ball impact test.	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 72.03kg (3 times the mass of the unit and the mass is 24.01kg without base, with external speaker) and was applied to the unit with the VESA adaptor kit. (for model X464UN) The unit withstood the load test without damages or breaks from the VESA adaptor kit.	P
4.3.2	Handles and manual controls; force (N) :	50N Following test for customer's request. Four handles provided, each handles provide additional force 232.1N (total additional force 928.26N) = 4 times the mass of the unit with base of 1.24kg and without external speaker. No loosen and no hazard results.(for model X464UN); and each handles provide additional force 305.7N (total additional force 1222.65N) = 4 times the mass of the unit with base B of 2.18kg and without external speaker. No loosen and no hazard results. .(for model X554UN)	P

IEC 60950			
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 X464UN, X464UN(C), MultiSync X464UN						
LCD Panel	SAMSUNG DISPLAY CO LTD	LTx460rz (x, r = A~Z Z=0~9, A~Z)	46.0" TFT type, with LED backlight	IEC 60950- 1:2005; EN 60950- 1:2006+A11:2009	TÜV SUD, UL	
Metal enclosure	--	--	Metal, thickness: 0.81 mm min.	--	--	
Stand base C (2 sets) (Optional)	--	--	HB or batter and metal, total weight: 1.24 kg; one set weight: 0.62 kg	UL 94	UL	
Stand base B (2 sets) (Optional) (For models X554UN, X554UN(C), MultiSync X554UN only)	--	--	HB or batter and metal, total weight: 2.18kg; one set weight: 1.09 kg	UL 94	UL	
For all models						
Discharge IC (U9901)	Power Integrations	CAP014DG	825V min.	IEC 60950- 1:2005+A1	CB by Nemko (NO77404)	
Supplementary information:						
¹⁾ Provided evidence ensures the agreed level of compliance. See OD-CB2039.						

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	
VGA mode							
90/50	3.05	--	273	F901, F902	3.05	Maximum normal load.	
90/60	3.05	--	273	F901, F902	3.05	Maximum normal load.	
100/50	2.75	3.0	271	F901, F902	2.75	Maximum normal load.	
100/60	2.75	3.0	271	F901, F902	2.75	Maximum normal load.	
240/50	1.18	1.2	269	F901, F902	1.18	Maximum normal load.	
240/60	1.18	1.2	269	F901, F902	1.18	Maximum normal load.	
264/50	1.08	--	268	F901, F902	1.08	Maximum normal load.	
264/60	1.08	--	268	F901, F902	1.08	Maximum normal load.	
Supplementary information:							

IEC 60950			
Clause	Requirement + Test	Result - Remark	Verdict

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)	cl (mm)	Required cr (mm)	cr (mm)	
Basic/supplementary:							
Primary heatsink HS6 to metal chassis	420	250	2.3 (2.0*1.48)	8.0	2.5	28.4	
Panel (HV) to operator accessible part	420	250	6.0 (4.0*1.48)	Over 10mm	6.0	Over 10mm	
Supplementary information:							
1. Functional insulation shorted, see 5.3.4 c).							
2. The required clearances multiplied by 1.48 considering that EUT operates up to 5000m.							
3. For clearance and creepage did not describe above are far larger than limit above.							

4.5	TABLE: Thermal requirements				P
	Supply voltage (V)	90/60 (horizontal)	90/60 (vertical)	264/60 (horizontal)	—
	Ambient T _{min} (°C)	--	--	--	—
	Ambient T _{max} (°C)	--	--	--	—
Maximum measured temperature T of part/at::		T (°C)			Allowed T _{max} (°C)
AC inlet		44.7	45.4	42.7	70
Switch body		43.7	45.2	42.2	95
CN901 body		46.6	51.3	43.7	70
PCB near TH9901		53.7	61.1	49.0	105
SW9901 body		64.8	67.2	63.0	85
C9906 body		55.3	57.5	46.9	85
L9901 coil		62.1	67.2	48.7	105
L9902 coil		60.1	63.3	48.7	105
L9903 coil		59.3	65.5	46.1	105
L9801 coil		76.4	76.4	67.8	105
L9802 coil		77.0	75.6	68.8	105
PCB near BD901		51.8	52.1	47.6	105
C9814 body		62.4	48.6	59.9	105
U9302 body		64.0	64.2	59.6	100
U9102 body		74.0	48.8	72.9	100

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Clause	Requirement + Test	Result - Remark		Verdict			
C9322 body	62.1	64.0	58.6	85			
T9301 coil	78.8	76.7	76.3	110			
T9301 core	77.6	75.1	75.3	110			
T9102 coil	79.1	72.5	77.5	110			
T9102 core	82.0	74.4	80.4	110			
T9101 coil	82.5	69.0	80.7	110			
T9101 core	81.6	64.4	80.2	110			
PCB near D9109	80.5	63.8	79.6	105			
PCB near HS401(Main board)	59.8	44.2	60.0	105			
PCB near U9 (converter board)	42.3	58.5	42.2	105			
T1 coil (converter board)	77.2	79.5	77.1	105			
T1 core (converter board)	73.4	75.6	73.2	105			
Metal enclosure near T9102	52.2	48.1	51.5	70			
Panel body	51.4	52.4	51.5	95			
Tamb.	22.9	22.5	23.5	--			
Tma.	40.0	40.0	40.0	--			
Supplementary information:							
The temperatures were measured under worst normal mode defined in 1.2.2.1 and as described in sub-clause 1.6.2 and at voltages as described above.							
The maximum ambient temperature specified by manufacturer is 40°C (Tma).							
All values for T(°C) are re-calculated from Tamb respectively.							
Winding components (with safety isolation):							
- Class B T _{max} = 120 °C - 10°C = 110°C							
Temperature T of winding:	t ₁ (°C)	R ₁ (Ω)	t ₂ (°C)	R ₂ (Ω)	T (°C)	Allowed T _{max} (°C)	Insulation class
Supplementary information:							

4.6.1, 4.6.2	Table: Enclosure opening measurements		P
Location	Size (mm)	Comments	
Horizontal			
Top	Ø 3.9	Numerous circular openings provided.	
Rear	Ø 4.0	Numerous circular openings provided. There is no portion of the side of fire enclosure falls within the area traced out by the 5° angle.	

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Clause	Requirement + Test	Result - Remark	Verdict
Left side (near building-in power supply board)	--	No openings	
Right side	1) $\varnothing$ 4.7 2) $\varnothing$ 4.7	1) Numerous circular openings provided. There is no portion of the side of fire enclosure falls within the area traced out by the 5° angle. 2) 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	$\varnothing$ 1.7 centre to centre= 3.1 min., metal thickness= 0.81	Numerous circle openings provided. Compliance with 4.6.2 table 4D.	
Vertical			
Top	1) $\varnothing$ 4.7 2) $\varnothing$ 4.7	1) Numerous circular openings provided. There is no portion of the side of fire enclosure falls within the area traced out by the 5° angle. 2) 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	$\varnothing$ 4.0	Numerous circular openings provided. There is no portion of the side of fire enclosure falls within the area traced out by the 5° angle.	
Left	$\varnothing$ 3.9	Numerous circular openings provided.	
Right side (near building-in power supply board)	$\varnothing$ 1.7 centre to centre= 3.1 min., metal thickness= 0.81	Numerous circular openings provided.	
Bottom	--	No opening	
Supplementary information:			

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
Basic/supplementary:				
Unit: Primary to earth (metal enclosure)		DC	2568	No

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Clause	Requirement + Test	Result - Remark	Verdict

Reinforced:

Unit: Primary to secondary

DC

4242

No

Unit: Primary to plastic front bezel with metal foil

DC

4242

No

Supplementary information:

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 in 001 report			—
Component No.	Fault	Supply voltage (V)	Test time	Fuse #	Fuse current (A)	Observation
All ventilation Openings	blocked	240	2 hr 52 min.	F901, F902	1.18	Maximum temperature: T9101 coil =78.0°C, T9102 coil =77.8°C, T9301 coil =73.2°C, Unit normal working under thermal equilibrium was reached. No hazards.
For LED driver board /LED driver board output (After D4) = 63.6Vdc, (After D5) = 56.7Vdc (normal condition)						
LED driver Vout to metal part	shorted	240	10 min.	F901, F902	0.15	Unit shutdown, no hazards, no damage
LED driver Vout to output connector	shorted	240	10 min.	F901, F902	0.15	Unit shutdown, no hazards, no damage

Supplementary information:

For D4 and D5 in LED driver circuit refer to below:

