



Ref. Certif. No.

JPTUV-038092-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 City, Taipei County 23553 Taiwan

Name and address of the manufacturer
Nom et adresse du fabricant

NEC Display Solutions, Ltd.
4-13-23 Shibaura
Minato-ku, Tokyo, 108-0023 JAPAN

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

See additional page(s)

Rating and principal characteristics
Valeurs nominales et caractéristiques principales

- 1) AC 100-240V; 50/60Hz; 5.1-2.0A; Class I
- 2) AC 100-240V; 50/60Hz; 4.1-1.65A; Class I

Trade mark (if any)
Marque de fabrique (si elle existe)

NEC

Model/type Ref.
Ref. de type

- 1) L650U9, V651-U1(C), MultiSync V651
- 2) L550UG, X551UN-G1(C), MultiSync X551UN

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

For model differences, refer to the test report.
Re-issue of JPTUV-038092 dated 12.04.2011,
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
National differences see test report

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

11024491 002

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



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Global Technology Assessment Center
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Mail: info@jpn.tuv.com
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Date: 21.04.2011

Signature:

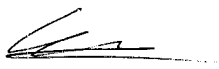
Dipl.-Ing. A. Klinker

1. TPV Technology (Beijing) Co., Ltd.
No. 10, Jiu Xian Qiao Rd.
Chao Yang District, Beijing 100016
P.R. China
2. Tatung Mexico S.A. de. C.V.
Ave. Rosa Ma. Fuentes #7050
Complejo Industrial Fuentes
C.P. 32320, Cd. Juarez. Chih,
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3. TPV Display Technology (Wuhan)
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Unique No. 11, Zhuankou Development
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Fuqing City Fujian 350301
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5. Envision Industry of Electronic
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69.075-215 Manaus, Am, Brazil
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9. TPV Displays Polska Sp. z o.o.
ul. Zlotego Smoka 9
66-400 Gorzów Wlkp.
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Additional information (if necessary)
Information complémentaire (si nécessaire)

Date: 21.04.2011

Signature:


Dipl.-Ing. A. Klinker

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

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

Date: 21.04.2011

Signature:


Dipl.-Ing. A. Klinker



Test Report issued under the responsibility of:



TEST REPORT IEC 60950-1: 2005 (2nd Edition) and/or EN 60950-1:2006 Information technology equipment – Safety – Part 1: General requirements	
Report Reference No.	11024491 002
Date of issue	April 19, 2011
Total number of pages	15
CB/CCA 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 City, Taipei County 23553 Taiwan
Manufacturer's name	NEC Display Solutions, Ltd.
Address	4-13-23 Shibaura, Minato-ku, Tokyo, 108-0023 JAPAN
Factory's name	See following page.
Address	See following page.
Test specification:	
Standard	☒ IEC 60950-1:2005 (2nd Edition) and/or ☒ EN 60950-1:2006
Test procedure	CB
Non-standard test method	N/A
Test Report Form No.	IECEN60950_1C
Test Report Form(s) Originator	SGS Fimko Ltd
Master TRF	Dated 2007-06
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Test item description	LCD Monitor
Trade Mark	NEC
Manufacturer	See above.
Model/Type reference	1) L650U9, V651-U1(C), MultiSync V651 2) L550UG, X551UN-G1(C), MultiSync X551UN
Ratings	1) 100-240 V ~, 50/60 Hz, 5.1-2.0 A 2) 100-240 V ~, 50/60 Hz, 4.1-1.65 A



Testing procedure and testing location:	
☒ CB/CCA Testing Laboratory:	Refer to cover page
Testing location/ address..... : Refer to cover page	
 ☐ Associated CB Laboratory:	
Testing location/ address..... :	
Tested by (name + signature)..... :	<i>Raye Chou</i>
Approved by (+ signature)..... :	<i>Jacky Chou</i> <i>[Signature]</i>
 ☐ Testing procedure: TMP	
Tested by (name + signature)..... :	
Approved by (+ signature)..... :	
Testing location/ address..... :	
 ☐ Testing procedure: WMT	
Tested by (name + signature)..... :	
Witnessed by (+ signature)..... :	
Approved by (+ signature)..... :	
Testing location/ address..... :	
 ☐ Testing procedure: SMT	
Tested by (name + signature)..... :	
Approved by (+ signature)..... :	
Supervised by (+ signature)..... :	
Testing location/ address..... :	
 ☐ Testing procedure: RMT	
Tested by (name + signature)..... :	
Approved by (+ signature)..... :	
Supervised by (+ signature)..... :	
Testing location/ address..... :	

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

All applicable tests as described in Test Case were performed.

- The load condition used as below during testing:
The equipment operated under maximum brightness, maximum contrast of LCD backlight circuit, max. volume of speakers with 1 kHz sine wave signal and extend board provided extra load 4 A per client's request.
- Ventilation requirement: leave adequate space allow heat to disperse according to user's manual.
- The test samples are pre-production without serial numbers.
- The equipment provided wall mounting function and complied with loading test mentioned at subclause 4.2.10.
- The base stand can be operated in horizontal (0 °) to vertical mode (90 °) when power board downside. For heating test were considered all orientation.
- The equipment has been evaluated according to the specified by the manufacturer maximum operating altitude of 3000 m (correction factor for clearances according to IEC 60664:1992+A1:2000+A2:2002 of 1.14 is considered).
- Unless special specified, all tests were performed on model L550UG to represent.

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:

EU Group Differences, EU Special National Conditions, EU A-Deviations, CA, CH, DE, DK, ES, FI, GB, IE, KR, NO, SE, US.

Explanation of used codes: CA=Canada, CH=Switzerland, DE=Germany, DK=Denmark, ES=Spain, FI=Finland, GB=United Kingdom, IE=Ireland, KR=Korea, NO=Norway, SE=Sweden, US=United States of America.

For IEC 60950-1:2001 / EN 60950-1:2001+A11:2004

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

EU Group Differences, EU Special National Conditions, EU A-Deviations, AR, AT, AU, BE, CA, CH, CN, CZ, DE, DK, FI, FR, GB, GR, HU, IL, IN, IT, KE, KR, MY, NL, NO, PL, SE, SG, SI, SK, US.

AR=Argentina, AT=Austria, AU=Australia, BE=Belgium, CA=Canada, CH=Switzerland, CN=China, CZ=Czech Republic, DE=Germany, DK=Denmark, FI=Finland, FR=France, GB=United Kingdom, GR=Greece, HU=Hungary, IL=Israel, IN=India, IT=Italy, KE=Kenya, KR=Korea, MY=Malaysia, NL=The Netherlands, NO=Norway, PL=Poland, SE=Sweden, SG=Singapore, SI=Slovenia, SK=Slovakia, US=United States of America.

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

EU Group Differences, EU Special National Conditions, EU A-Deviations, AR, AT, AU, BE, BR, CA, CH, CN, CZ, DE, DK, ES, FI, FR, GB, HU, IE, IL, IN, IT, JP, KE, KR, MY, NL, NO, PL, PT, RU, SE, SG, SI, SK, TR, UA, US, ZA.

AR=Argentina, AT=Austria, AU=Australia, BE=Belgium, BR=Brazil, CA=Canada, CH=Switzerland, CN=China, CZ=Czech Republic, DE=Germany, DK=Denmark, ES=Spain, FI=Finland, FR=France, GB=United Kingdom, HU=Hungary, IE=Ireland, IL=Israel, IN=India, IT=Italy, JP=Japan, KE=Kenya, KR=Korea, MY=Malaysia, NL=The Netherlands, NO=Norway, PL=Poland, PT=Portugal, RU=Russian Federation, SE=Sweden, SG=Singapore, SI=Slovenia, SK=Slovakia, TR=Turkey, UA=Ukraine, US=United States of America, ZA=South Africa.

All country difference listed in the CB Bulletin are covered by Common Modifications, Special National Conditions, National Deviations and National Requirements noted follows except for the following countries which are documented in Country Difference.

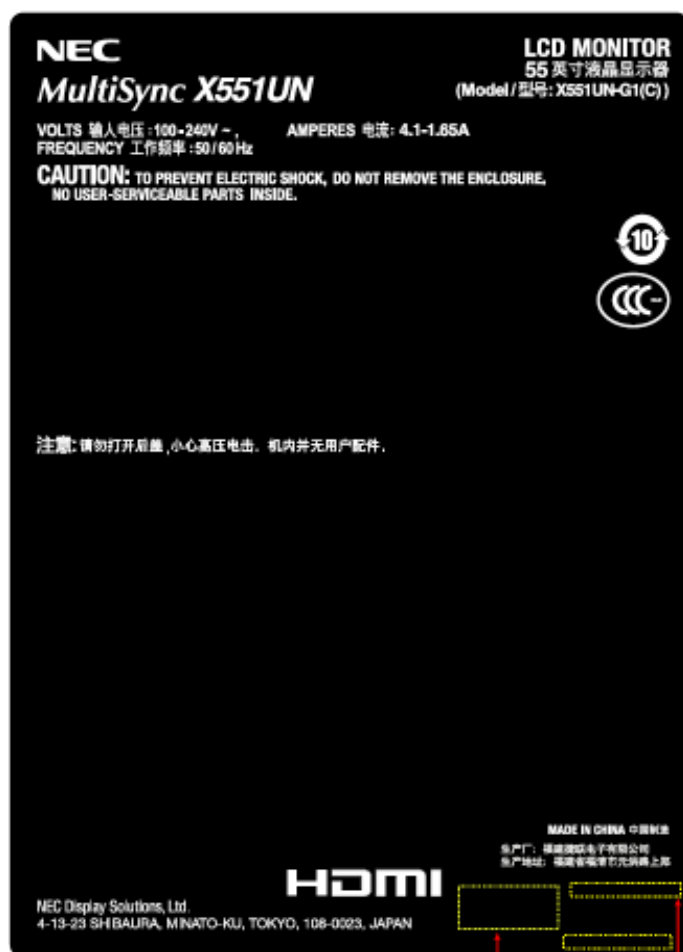
Additionally, the National Differences for AR, AU, AT, BE, CA, CH, CN, CZ, DE, DK, FI, FR, GB, GR, HU, IL, IN, IT, KE, KR, MY, NL, NO, PL, SE, SG, SI, SK, US have been tested according IEC 60950-1:2001 for customer required. JP has been tested according to IEC 60950:1999 for customer required.

The product has been tested for compliance with requirements of A11:2009 of EN 60950-1:2006.

Copy of marking plate:

(Representative)





Note: The above label is a 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 ☒ for building-in ☐ direct plug-in
Connection to the mains	☒ pluggable equipment ☐ 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	$\pm 10 \%$
Tested for IT power systems	☒ Yes ☐ No
IT testing, phase-phase voltage (V)	230 V for Norway
Class of equipment	☒ Class I ☐ Class II ☐ Class III ☐ Not classified
Considered current rating (A)	16 or 20 (North America)
Pollution degree (PD)	☐ PD 1 ☒ PD 2 ☐ PD 3
IP protection class	IPX0
Altitude during operation (m)	Up to 3000
Altitude of test laboratory (m)	Less than 2000
Mass of equipment (kg)	For models L550UG, X551UN-G1(C), MultiSync X551UN: 37.7 (with base); 2.2 (base)
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	April, 2011
Date(s) of performance of tests	April, 2011
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.

Note: This TRF includes EN Group Differences together with National Differences and Special National Conditions, if any. All Differences are located in the Appendix to the main body of this TRF.

Throughout this report a point is used as the decimal separator.

General product information:

Description of change(s):

1. Add models as L550UG, X551UN-G1(C) and MultiSync X551UN that are similar to previous model L650U9 except for the following:
 - a. Enclosure shape.
 - b. Base stand.
 - c. Panel module.
 - d. Extend board type B.
 - e. Model designation.
 - f. Input rating.

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

Change	Testing	Comments
1.	• Input test • Earthing test • Humidity test • Cl./Cr. Distances measurements • Stability test • Impact test • Steady force test • Loading test • Heating test • Openings evaluation • Abnormal test	New models as L550UG, X551UN-G1(C) and MultiSync X551UN are similar to previous model L650U9. Models L550UG, X551UN-G1(C) and MultiSync X551UN are identical except model designation. See cover page with bold type, copy of marking plate and table 1.7.1 for details. See appended table for test results, appended table 1.5.1 for sources and photo documentation for details.

Other comments:

Factories:

Refer to test report No. 11024491 001.

The manufacturer's declaration, that the samples tested represent the products from each factory, is available.

History of amendments and modifications:

Ref. No. 11024491 001, dated April 7, 2011 (original test report)

Ref. No. 11024491 002, dated April 19, 2011 (modification)

Attachments to this Test Report:

- Photo Documentation

IEC/EN 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.7.1	Power rating	The power rating marking is provided and is readily visible in operator access area.	P
	Rated voltage(s) or voltage range(s) (V)	See the copy of marking plate.	P
	Symbol for nature of supply, for d.c. only	Mains from AC source.	N/A
	Rated frequency or rated frequency range (Hz)	See the copy of marking plate.	P
	Rated current (mA or A)	See the copy of marking plate.	P
	Manufacturer's name or trade-mark or identification mark	See the copy of marking plate.	P
	Model identification or type reference	See the copy of marking plate.	P
	Symbol for Class II equipment only	The equipment is Class I equipment.	N/A
	Other markings and symbols	Other markings and symbols do not give rise to misunderstanding.	P
2.9.2	Humidity conditioning	Tested for 120 hrs.	P
	Relative humidity (%), temperature (°C)	95 %, 40 °C	—
4.1	Stability		P
	Angle of 10°	Not over balance in any position.	P
4.2.1	General	See below. After the tests, the equipment complies with the requirements of subclauses 2.1.1, 2.6.1 and 2.10.	P
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	For outer enclosure are tested. After subjected 250 N, no energy or other hazards.	P
4.2.5	Impact test	For outer enclosure are tested. No hazard as result from the steel ball impact test.	P
	Fall test	See above.	P

IEC/EN 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Swing test	See above.	P
4.2.10	Wall or ceiling mounted equipment; force (N):	Add an additional force of 105.9 kg (3 times the mass of the unit and the mass is 35.3 kg without base) was applied to the unit with the VESA adaptor kit. The unit withstood the load test without damages or breaks from the VESA adaptor kit. VESA compatible wall mounting kit, 400 × 400 mm distance, four M6 size with 12 mm length screws to secure.	P
4.3.2	Handles and manual controls; force (N).....:	50 N. Following test for customer's request. Four handles provided, add additional force 1383.3 N (3 times the mass of the unit without base). No loosen and no hazard results.	P

IEC/EN 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	Mark(s) of conformity ^{1.}
LCD Monitor (for models L550UG, X551UN-G1(C) and MultiSync X551UN):					
LCD Panel Module	Samsung	LTx550rz ²⁾	55" LCD Panel, 24Vdc, 9.9A or 8.3A (LED driver board); 12Vdc (control board)	IEC 60950-1: 2005	CB by TÜV SÜD
- Inverter board	Samsung	SSL550_0D6B	24Vdc	IEC 60950-1: 2005	CB by TÜV SÜD
Metal enclosure	--	--	Metal, thickness: 0.81mm min.	--	--
Stand base (two sets) (Optional)	--	--	HB or batter and metal, total weight: 2.2 kg; one set weight: 1.1 kg	UL 94	UL
Supplementary information:					
1. An asterisk indicates a mark that assures the agreed level of surveillance.					
2. Definition of model LTx550rz: x may be from A to Z, denoting for final application type; 550 may denote for panel size; r may be from A to Z, denoting for pixel number of TFT LCD product; z denotes the minor difference of interface method, revision number or customer spec with/without hyphen and may comprise 0 to 9 or A to Z and it can be made up by a maximum length of four alphanumeric characters.					

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 VGA mode:							
90 / 50	3.57	--	321	F901	3.57	Maximum normal load	
90 / 60	3.57	--	321	F901	3.57	Maximum normal load	
100 / 50	3.23	4.1	320	F901	3.23	Maximum normal load	
100 / 60	3.23	4.1	320	F901	3.23	Maximum normal load	
240 / 50	1.36	1.65	313	F901	1.36	Maximum normal load	
240 / 60	1.36	1.65	313	F901	1.36	Maximum normal load	
264 / 50	1.26	--	312	F901	1.26	Maximum normal load	
264 / 60	1.26	--	312	F901	1.26	Maximum normal load	
Supplementary information:							
1. The measured input current at rated voltage shall be ≤ 110 % of rated current.							
2. See summary of testing in the test report for the detail max. normal condition.							

IEC/EN 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
2.6.3.4	TABLE: Resistance of earthing measurement		P
Location		Resistance measured (mΩ)	Comments
The earth pin of appliance inlet to metal enclosure		12	Test current at 32 A, for 2 min.
The earth pin of appliance inlet to metal enclosure		15	Test current at 40 A, for 2 min. voltage drop to 0.60 V.
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)	cl (mm)	Required cr (mm)	cr (mm)	
Reinforced:							
Secondary hazardous voltage to user accessible part	120	120	4.6	8.5 ²	4.6	8.5 ²	
Supplementary information:							
1. Other functional insulation according to subclause 5.3.4 c).							
2. Only minimum distance recorded (same as clearance) and the actual distance is much larger.							
3. Altitude correction factor for clearances for an altitude of 3000 m (based on IEC 60664-1:1992): 1.14.							

4.5	TABLE: Thermal requirements			P
	Supply voltage (V)	a) 90 V / 60 Hz (Vertical) b) 90 V / 60 Hz (Horizontal) c) 264 V / 60 Hz (Horizontal)		—
	Ambient T _{min} (°C)	--		—
	Ambient T _{max} (°C)	--		—
Maximum measured temperature T of part/at::		T (°C)		Allowed T _{max} (°C)
Test condition (under VGA mode)		a)	b)	c)
AC inlet near Line		43.5	43.8	41.5
CN901 body		46.5	46.6	43.5
C901 body		59.1	52.8	47.7
PCB near NR901		56.5	51.4	46.7
SW901 coil		67.5	64.9	62.0
L902 coil		59.0	64.8	51.9
L901 coil		59.7	60.9	51.0
				105

IEC/EN 60950-1					
Clause	Requirement + Test	Result - Remark			Verdict
L903 coil		57.1	63.6	50.9	105
C902 body		57.1	62.3	52.3	85
C9804 body		56.4	62.9	54.0	105
PCB near BD901 and BD902		60.2	61.8	50.0	105
L9801 coil		71.8	75.5	64.1	105
L9802 coil		72.3	80.9	67.6	105
PCB near D9802		54.1	56.7	53.9	105
PCB near D9804		50.7	53.5	53.7	105
PCB near Q9101		55.3	65.1	64.0	105
IC9102 body		47.2	66.7	66.2	100
T9102 coil		71.4	86.1	85.1	110
T9102 core		67.7	78.5	76.9	110
T9101 coil		73.3	81.1	78.5	110
T9101 core		67.3	74.8	73.0	110
PCB near Q9162 and Q9164		61.1	68.8	66.4	105
T9301 coil		68.9	75.1	72.0	110
T9301 core		58.1	49.9	46.5	110
C9309 body		57.8	60.0	55.5	85
IC9302 body		56.1	60.5	55.2	100
PCB near D9361		62.7	62.7	60.8	105
PCB near U401 (main board)		61.3	59.7	59.2	105
PCB near U1001 (IF board)		57.8	56.8	56.4	105
Metal enclosure near T9102		42.6	43.5	42.9	70
Panel		47.7	50.0	50.0	95
T1 coil (LED driver board)		--	82.0	70.6	105
T3 coil (LED driver board)		--	80.4	69.4	105
Ambient (actual 23.2 / 23.5 / 23.1 °C)		40	40	40	--
Supplementary information:					
1. The temperatures were measured under the worst case of normal mode defined in sub-clause 1.2.2.1 and as described in sub-clause 1.6.2 at voltages as described above.					
2. With a specified ambient temperature of + 40 °C. Therefore the maximum temperatures measured are recalculated as follows: $T + (40 - T_{amb})$, where T is the maximum temperature measured during test and Tamb is the ambient temperature during the test.					
3. The maximum temperatures are calculated as follows:					
<u>Winding components (with safety isolation):</u>					
- Class B $T_{max} = 120\text{ °C} - 10\text{ °C} = 110\text{ °C}$					

IEC/EN 60950-1							
Clause	Requirement + Test				Result - Remark		Verdict
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 and 4.6.2	Table: Enclosure opening measurements		P
Location		Size (mm)	Comments
Metal enclosure (for models L550UG, X551UN-G1(C) and MultiSync X551UN)			
Horizontal position			
Top	Max. Ø 4.8	Numerous circular openings. There's no any hazardous voltage or energy hazards present within 5° projections.	
Rear	Max. Ø 4.8	Numerous circular openings. There's no any hazardous voltage or energy hazards present within 5° projections.	
Right	1) Max. Ø 4.8 2) Max. Ø 1.7	1) Numerous circular openings. 2) Numerous circular openings. There's no any hazardous voltage or energy hazards present within 5° projections.	
Left	1) Max. Ø 1.7 2) Max. Ø 1.7	1) Numerous circular openings. 2) Numerous circular openings. There's no any hazardous voltage or energy hazards present within 5° projections.	
Bottom	Max. Ø 1.7 centre to centre min. 3.4 mm, thickness min. 0.81 mm	Numerous circular openings under primary circuit, comply with table 4D.	
Vertical position			
Top	1) Max. Ø 4.8 2) Max. Ø 1.7	1) Numerous circular openings. 2) Numerous circular openings. There's no any hazardous voltage or energy hazards present within 5° projections.	
Rear	Max. Ø 4.8	Numerous circular openings. There's no any hazardous voltage or energy hazards present within 5° projections.	
Right	1) Max. Ø 1.7 2) Max. Ø 1.7	1) Numerous circular openings. 2) Numerous circular openings. There's no any hazardous voltage or energy hazards present within 5° projections.	

IEC/EN 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
Left	Max. $\varnothing$ 4.8	Numerous circular openings. There's no any hazardous voltage or energy hazards present within 5° projections.	
Bottom	Max. $\varnothing$ 1.7 centre to centre min. 3.4 mm, thickness min. 0.81 mm	Numerous circular openings under primary circuit, comply with table 4D.	
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 and earth		DC	2498	No
Reinforced:				
Unit: primary and secondary		DC	4242	No
Supplementary information:				

5.3	TABLE: Fault condition tests					P
	Ambient temperature (°C)		25 °C, if not 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
All ventilation openings (horizontal position)	blocked	240	3 hrs	F901	1.4	Maximum temperature: T9102 Coil: 76.8 °C, T9101 Coil: 70.8 °C, T9301 Coil: 63.4 °C, ambient: 24.1 °C. Unit normal working under thermal equilibrium was reached. No hazards.
Supplementary information:						
1. Maximum temperatures limitation of safety isolation transformers based on a test temperature of 40 °C: Class B $T_{max} = 175\text{ °C} - (40 - 25)\text{ °C} = 160\text{ °C}$						

List of test equipment used:

Clause	Measurement / testing	Testing / measuring equipment / material used	Range used	Calibration date
Supplementary information: No listing of test equipment used necessary for chosen test procedure.				