CENTRE OF TESTING SERVICE INTERNATIONAL

OPERATE ACCORDING TO ISO/IEC 17025

LVD TEST REPORT

TEST REPORT NUMBER : CNB3150617-00301-L-D

CTS (Ningbo) Testing Service Technology Co., Ltd.
Fl.2 South, HuoJu Building, No.181 CangHai Rd., Jiangdong Hi-tech Park
Ningbo

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CTS (Ningbo) Testing Service Technology Co., Ltd.
Fl.2 south Huoju Building, No.181 canghai Rd., Jiangdong High-tech Park Ningbo China
Tel：+86-574-87912121 (16 lines) Fax：+86-574-87907993
Complaint line：+86-574-87908003 E-mail：cts@cts-lab.com

1 General Information

1.1 Notes

The purpose of conformity testing is to increase the probability of adherence to the essential requirements or conformity specifications, as appropriate.
The complexity of the technical specifications, however, means that full and thorough testing is impractical for both technical and economic reasons.
Furthermore, there is no guarantee that a test sample which has Passed all the relevant tests conforms to a specification (only telecommunication products).
Neither is there any guarantee that such a test sample will interwork with other genuinely open systems.

The existence of the tests nevertheless provides the confidence that the test sample possesses the qualities as maintained and that its performance generally conforms to representative cases of communications equipment.

The test results of this test report relate exclusively to the item tested as specified in 1.5.
The test report may only be reproduced or published in full.
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1.2 Tester

Tested by:

19 June 2015	Jazz Zheng	Jazz zheng
Date	Name	Signature

Reviewed by:

19 June 2015	Jivin Xing	Jivin Xing
Date	Name	Signature

Approved by:

19 June 2015	Lei zhang	Lei zhang
Date	Name	Signature

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1.3 Testing laboratory

1.3.1 Location

CTS (Ningbo) Testing Service Technology Co., Ltd.
Fl. 2 South Huoju Building No. 181. Canghai Rd. Jiangdong High-tech. Park
Ningbo China
Telephone: + 86-574-87912121
Telefax : + 86-574-87907993

1.3.2 Test location, where different from CTS:

Name: ./.
Street: ./.
Town: ./.
Country: ./.
Telephone: ./.
Fax: ./.
Teletex: ./.

1.4 Application details

1.4.1 Details of applicant

Name :YUEQING QIANWEI ELECTRIC CO.,LTD
Street : NO.31 HUANCHENG EAST ROAD,HOUJIE INDUSTRY ZONE LIUSHI
Town : WENZHOU CITY ZHEJIANG PROVINCE
Country : CHINA
Telephone : +86-0577-27829888
Fax : +86-0577-62796216
Teletex : ./.
Contact : HUANGCHAO
Telephone : +86-0577-27829888

1.4.2 Details of wanted approval holder

Name : YUEQING QIANWEI ELECTRIC CO.,LTD
Street : NO.31 HUANCHENG EAST ROAD,HOUJIE INDUSTRY ZONE LIUSHI
Town : WENZHOU CITY ZHEJIANG PROVINCE
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Telephone : +86-0577-27829888

1.4.3 Manufacturer

Name : YUEQING QIANWEI ELECTRIC CO.,LTD
Street : NO.31 HUANCHENG EAST ROAD,HOUJIE INDUSTRY ZONE LIUSHI
Town : WENZHOU CITY ZHEJIANG PROVINCE
Country : CHINA

1.4.4 Dates of application

Date of receipt of application : 17 June 2015

Date of receipt of test item : 17 June 2015

Date of test : 17 June 2015——19 June 2015

1.5 Test item Description

1.5.1 Description of test item

Type of product : SWITCHING POWER SUPPLY

Model/Type reference （Test EUT） : S

Following identical model（s） : S-10, S-20, S-(15)25, S-(35)40, S-(50)60, S-75, S-100(120), S-(145)150, S-201, S-240, S-300(350), S-500, S-600(800), S-1000(1200), S-50-24

1.5.2 Test item particulars

Test item ..... :	SWITCHING POWER SUPPLY
Trade Mark..... :	Q&W、QWIFM、BALTOVENTS、WESTA
Manufacture ..... :	YUEQING QIANWEI ELECTRIC CO.,LTD
Rated Frequency ..... :	□ 50Hz; □ 60Hz; ☒ 50/60Hz; □ DC; □ Other:
Rated Power(Current) ..... :	115VAC 16A， 230VAC 9A
Mains supply tolerance (%)……:	---
Class of equipment ..... :	☒ Class I; □ Class II; □ Class III; □ Not classified;
Degree of Protection ..... :	☒ IP20
Pollution degree (PD)..... :	□ PD 1; ☒ PD 2; □ PD 3
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; ☒ Other: terminal
Operating condition..... :	☒ continuous; □ rated operating / resting time:
Altitude during operation (m).... :	< 2000 m
Instructions language..... :	☒ English; □ French; □ Other:

(all information was provided by the applicant or detected at the sample)
Please see also attachment

1.6 Test standards

EN 61204-7：2006+A11:2009

Information technology equipment – Safety –
Part 1: General requirements

2 Technical test

2.1 Summary of test results

No deviations from the technical specification(s) were ascertained in the course of the tests performed. ☒

2.2 Test environment

Temperature:	18 ... 25 °C
Relative humidity content:	20 ... 75 %
Air pressure:	860 ... 1030 hPa
Details of power supply:	AC110V---AC240V 50/60Hz
Other parameters:	---

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2.3 Conformity verification - Summary of inspection

Clause	Summary of inspection	Test result		
		N.A.	Pass	Fail
1	General	☐	☒	☐
2	Protection from hazards	☐	☒	☐
3	Wiring, connections and supply	☐	☒	☐
4	Physical requirements	☐	☒	☐
5	Electrical requirements and simulated abnormal conditions	☐	☒	☐
6	Connection to telecommunication networks	☒	☐	☐
7	Connection to cable distribution systems	☒	☐	☐
Annexes		☐	☒	☐

Test case verdicts
N.A.: Test case does not apply to the test object
Pass: Test item does meet the requirement
Fail: Test item does not meet the requirement

3 Test results basic standard(s)

3.1 Particulars: test item vs. Test requirements

IEC 61204-7: 2005 (2nd Edition) and/or EN 61204-7:2006+A11:2009 Information technology equipment – Safety – Part 1: General requirements	
Possible test case verdicts:	
- test case does not apply to the test object	N(N/A)
- test object does meet the requirement	P(Pass)
- test object does not meet the requirement	F(Fail)
Test specification:	
Standard	☒ EN 61204-7: 2006+A11:2009
Test procedure	LVD COC approval.
Non-standard test method	N/A
Test Report Form No	EN 61204_7C
Test Report Form(s) Originator	Centre of Testing Service
Master TRF	Dated Feb 2010
Copyright blank test report	Centre of Testing Service

General remarks:

"(see remark #)" refers to a remark appended to the report.

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

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

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 testing laboratory.

There are no any difference among the original model except for the model name .

And it is the same as the basic model S which in the original test report No. CNB3121024-00392-L-R1.

No need to conduct any test.

Copy of marking plate:

SWITCHING POWER SUPPLY
MODEL: S
115V/230VAC 16A/9A 50/60Hz
Output：24V⎓ 42A

CE SELV

YUEQING QIANWEI ELECTRIC CO.,LTD

QWIFM

SWITCHING POWER SUPPLY

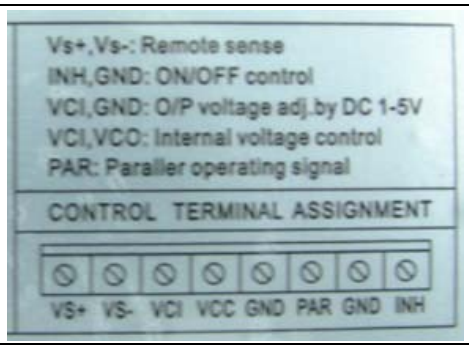
MODEL: S

115V/230VAC 16A/9A 50/60Hz

Output：24V⎓ 42A

CE SELV

YUEQING QIANWEI ELECTRIC CO.,LTD



BALTOVENTS

SWITCHING POWER SUPPLY

MODEL: S

115V/230VAC 16A/9A 50/60Hz

Output：24V⎓ 42A

CE SELV

YUEQING QIANWEI ELECTRIC CO.,LTD

WESTA

SWITCHING POWER SUPPLY

MODEL: S

115V/230VAC 16A/9A 50/60Hz

Output： 24V⎓ 42A

CE **SELV**

YUEQING QIANWEI ELECTRIC CO.,LTD

3.2 General requirements and results

IEC/EN 61204-7			
Clause	Requirement - Test	Result - Remark	Verdict
1	**GENERAL**		—
1.5	Components		P
1.5.1	General		P
	Comply withIEC 61204 or relevant component standard		P
1.5.2	Evaluation and testing of components		P
1.5.3	Thermal controls	Thermal protector	P
1.5.4	Transformers		N
1.5.5	Interconnecting cables		P
1.5.6	Capacitors bridging insulation	X2 capacitor	P
1.5.7	Resistors bridging insulation		N
1.5.7.1	Resistors bridging functional, basic or supplementary insulation	Y1 capacitor	P
1.5.7.2	Resistors bridging double or reinforced insulation between a.c. mains and other circuits		N
1.5.7.3	Resistors bridging double or reinforced insulation between a.c. mains and antenna or coaxial cable		N
1.5.7.4	Accessible parts		P
1.5.8	Components in equipment for IT power systems		P
1.5.9	Surge suppressors		P
1.5.9.1	General		P
1.5.9.2	Protection of VDRs		P
1.5.9.3	Bridging of functional insulation by a VDR		P
1.5.9.4	Bridging of basic insulation by a VDR		N
1.5.9.5	Bridging of supplementary, double or reinforced insulation by a VDR		N
1.6	Power interface		P
1.6.1	AC power distribution systems		N
1.6.2	Input current	(see appended table 1.6.2)	P
1.6.3	Voltage limit of hand-held equipment		N
1.6.4	Neutral conductor		P

IEC/EN 61204-7			
Clause	Requirement - Test	Result - Remark	Verdict
1.7	Marking and instructions		P
1.7.1	Power rating		P
	Rated voltage(s) or voltage range(s) (V) ..... :	115V /230VAC	P
	Symbol for nature of supply, for d.c. only ..... :		N
	Rated frequency or rated frequency range (Hz) ... :	50/60	P
	Rated current (mA or A) ..... :	115V /230VAC 16/9A	P
	Manufacturer's name or trade-mark or identification mark ..... :	YUEQING QIANWEI ELECTRIC CO.,LTD	P
	Model identification or type reference ..... :	S	P
	Symbol for Class II equipment only ..... :		N
	Other markings and symbols ..... :		P
1.7.2	Safety instructions and marking	**SELV**	P
1.7.2.1	General		P
1.7.2.2	Disconnect devices		N
1.7.2.3	Overcurrent protective device		P
1.7.2.4	IT power distribution systems		P
1.7.2.5	Operator access with a tool		N
1.7.2.6	Ozone		N
1.7.3	Short duty cycles		N
1.7.4	Supply voltage adjustment ..... :		P
	Methods and means of adjustment; reference to installation instructions ..... :		P
1.7.5	Power outlets on the equipment ..... :		N
1.7.6	Fuse identification (marking, special fusing characteristics, cross-reference) ..... :	See CDF	P
1.7.7	Wiring terminals		P
1.7.7.1	Protective earthing and bonding terminals ..... :		P
1.7.7.2	Terminals for a.c. mains supply conductors		P
1.7.7.3	Terminals for d.c. mains supply conductors		N
1.7.8	Controls and indicators		P
1.7.8.1	Identification, location and marking ..... :		P
1.7.8.2	Colours ..... :		N
1.7.8.3	Symbols according to IEC 60417 ..... :		N

IEC/EN 61204-7			
Clause	Requirement - Test	Result - Remark	Verdict
1.7.8.4	Markings using figures ..... :		N
1.7.9	Isolation of multiple power sources ..... :		N
1.7.10	Thermostats and other regulating devices ..... :		N
1.7.11	Durability		P
1.7.12	Removable parts		P
1.7.13	Replaceable batteries ..... :		N
	Language(s) .....:		—
1.7.14	Equipment for restricted access locations ..... :		N

2	**PROTECTION FROM HAZARDS**		—
2.1	Protection from electric shock and energy hazards		—
2.1.1	Protection in operator access areas		P
2.1.1.1	Access to energized parts		P
	Test by inspection ..... :		P
	Test with test finger (Figure 2A) ..... :		P
	Test with test pin (Figure 2B) ..... :		P
	Test with test probe (Figure 2C) ..... :		P
2.1.1.2	Battery compartments		N
2.1.1.3	Access to ELV wiring		N
	Working voltage (Vpeak or Vrms); minimum distance through insulation (mm)	(see appended table 2.10.5)	—
2.1.1.4	Access to hazardous voltage circuit wiring		N
2.1.1.5	Energy hazards ..... :		N
2.1.1.6	Manual controls		P
2.1.1.7	Discharge of capacitors in equipment		P
	Measured voltage (V); time-constant (s) ..... :	25V peak 1s	—
2.1.1.8	Energy hazards – d.c. mains supply		N
	a) Capacitor connected to the d.c. mains supply .. :		N
	b) Internal battery connected to the d.c. mains supply ..... :		N
2.1.1.9	Audio amplifiers ..... :		N
2.1.2	Protection in service access areas		N
2.1.3	Protection in restricted access locations		N

2.2	SELV circuits	—

IEC/EN 61204-7			
Clause	Requirement - Test	Result - Remark	Verdict
2.2.1	General requirements		P
2.2.2	Voltages under normal conditions (V) ..... :	DC24V	P
2.2.3	Voltages under fault conditions (V) ..... :	DC37,6V	P
2.2.4	Connection of SELV circuits to other circuits ..... :		P

2.3	TNV circuits		—
2.3.1	Limits	No such parts	N
	Type of TNV circuits ..... :		—
2.3.2	Separation from other circuits and from accessible parts		N
2.3.2.1	General requirements		N
2.3.2.2	Protection by basic insulation		N
2.3.2.3	Protection by earthing		N
2.3.2.4	Protection by other constructions ..... :		N
2.3.3	Separation from hazardous voltages		N
	Insulation employed..... :		—
2.3.4	Connection of TNV circuits to other circuits		N
	Insulation employed..... :		—
2.3.5	Test for operating voltages generated externally		N

2.4	Limited current circuits		—
2.4.1	General requirements		P
2.4.2	Limit values	2mA	P
	Frequency (Hz)..... :		—
	Measured current (mA)..... :		—
	Measured voltage (V) ..... :		—
	Measured circuit capacitance (nF or µF)..... :		—
2.4.3	Connection of limited current circuits to other circuits		P

2.5	Limited power sources		—
	a) Inherently limited output		N
	b) Impedance limited output		N
	c) Regulating network limited output under normal		N

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IEC/EN 61204-7			
Clause	Requirement - Test	Result - Remark	Verdict
	operating and single fault condition		
	d) Overcurrent protective device limited output		N
	Max. output voltage (V), max. output current (A), max. apparent power (VA)..... :		—
	Current rating of overcurrent protective device (A)		—

2.6	Provisions for earthing and bonding		—
2.6.1	Protective earthing		P
2.6.2	Functional earthing		N
2.6.3	Protective earthing and protective bonding conductors		P
2.6.3.1	General		P
2.6.3.2	Size of protective earthing conductors		P
	Rated current (A), cross-sectional area (mm^2), AWG ..... :	16A，1,0 mm^2	—
2.6.3.3	Size of protective bonding conductors		P
	Rated current (A), cross-sectional area (mm^2), AWG ..... :		—
2.6.3.4	Resistance of earthing conductors and their terminations; resistance (Ω), voltage drop (V), test current (A), duration (min)..... :	0,044Ω	P
2.6.3.5	Colour of insulation ..... :	green-and-yellow	P
2.6.4	Terminals		P
2.6.4.1	General		P
2.6.4.2	Protective earthing and bonding terminals		P
	Rated current (A), type, nominal thread diameter (mm)..... :	16A 4,0mm	—
2.6.4.3	Separation of the protective earthing conductor from protective bonding conductors		N
2.6.5	Integrity of protective earthing		P
2.6.5.1	Interconnection of equipment		P
2.6.5.2	Components in protective earthing conductors and protective bonding conductors		P
2.6.5.3	Disconnection of protective earth		P
2.6.5.4	Parts that can be removed by an operator		P
2.6.5.5	Parts removed during servicing		P
2.6.5.6	Corrosion resistance		P

IEC/EN 61204-7			
Clause	Requirement - Test	Result - Remark	Verdict
2.6.5.7	Screws for protective bonding		P
2.6.5.8	Reliance on telecommunication network or cable distribution system		P

2.7	Overcurrent and earth fault protection in primary circuits		—
2.7.1	Basic requirements		P
	Instructions when protection relies on building installation		P
2.7.2	Faults not simulated in 5.3.7		P
2.7.3	Short-circuit backup protection		P
2.7.4	Number and location of protective devices ..... :		P
2.7.5	Protection by several devices		N
2.7.6	Warning to service personnel ..... :		P

2.8	Safety interlocks		—
2.8.1	General principles		P
2.8.2	Protection requirements		P
2.8.3	Inadvertent reactivation		N
2.8.4	Fail-safe operation		P
2.8.5	Moving parts		N
2.8.6	Overriding		N
2.8.7	Switches and relays		P
2.8.7.1	Contact gaps (mm) ..... :		P
2.8.7.2	Overload test		P
2.8.7.3	Endurance test		P
2.8.7.4	Electric strength test		P
2.8.8	Mechanical actuators		P

2.9	Electrical insulation		—
2.9.1	Properties of insulating materials		P
2.9.2	Humidity conditioning		P
	Relative humidity (%), temperature (°C) ..... :	25.0°C 93%	—
2.9.3	Grade of insulation	functional insulation is required for the EUT	P
2.9.4	Separation from hazardous voltages	Method 1	P

IEC/EN 61204-7			
Clause	Requirement - Test	Result - Remark	Verdict
	Method(s) used ..... :	REINFORCED INSULATION	—

2.10	Clearances, creepage distances and distances through insulation		—
2.10.1	General	(see appended table 2.10.3 and 2.10.4)	P
2.10.1.1	Frequency ..... :	50/60Hz	P
2.10.1.2	Pollution degrees ..... :	Pollution degree 2	P
2.10.1.3	Reduced values for functional insualtion		N
2.10.1.4	Intervening unconnected conductive parts		N
2.10.1.5	Insulation with varying dimensions		N
2.10.1.6	Special separation requirements		N
2.10.1.7	Insulation in circuits generating starting pulses		N
2.10.2	Determination of working voltage		P
2.10.2.1	General		P
2.10.2.2	RMS working voltage	230V	P
2.10.2.3	Peak working voltage	325,2V	P
2.10.3	Clearances	see appended table 2.10.3	P
2.10.3.1	General		P
2.10.3.2	Mains transient voltages		P
	a) AC mains supply ..... :		P
	b) Earthed d.c. mains supplies ..... :		N
	c) Unearthed d.c. mains supplies ..... :		N
	d) Battery operation ..... :		N
2.10.3.3	Clearances in primary circuits		P
2.10.3.4	Clearances in secondary circuits		P
2.10.3.5	Clearances in circuits having starting pulses		N
2.10.3.6	Transients from a.c. mains supply ..... :		P
2.10.3.7	Transients from d.c. mains supply ..... :		N
2.10.3.8	Transients from telecommunication networks and cable distribution systems ..... :		N
2.10.3.9	Measurement of transient voltage levels		N
	a) Transients from a mains suplply		N
	For an a.c. mains supply ..... :		N
	For a d.c. mains supply ..... :		N

IEC/EN 61204-7			
Clause	Requirement - Test	Result - Remark	Verdict
	b) Transients from a telecommunication network :		N
2.10.4	Creepage distances		P
2.10.4.1	General		P
2.10.4.2	Material group and caomparative tracking index	Material group IIIb	P
	CTI tests..... :	Material group IIIb is assumed to be used	—
2.10.4.3	Minimum creepage distances	(see appended table 2.10.3 and 2.10.4)	P
2.10.5	Solid insulation		P
2.10.5.1	General		P
2.10.5.2	Distances through insulation		P
2.10.5.3	Insulating compound as solid insulation		P
2.10.5.4	Semiconductor devices		N
2.10.5.5.	Cemented joints		N
2.10.5.6	Thin sheet material – General		P
2.10.5.7	Separable thin sheet material		P
	Number of layers (pcs) ..... :	2 layers	—
2.10.5.8	Non-separable thin sheet material		N
2.10.5.9	Thin sheet material – standard test procedure		P
	Electric strength test		—
2.10.5.10	Thin sheet material – alternative test procedure		P
	Electric strength test		—
2.10.5.11	Insulation in wound components		N
2.10.5.12	Wire in wound components		N
	Working voltage ..... :		N
	a) Basic insulation not under stress ..... :		N
	b) Basic, supplemetary, reinforced insulation ..... :		N
	c) Compliance with Annex U ..... :		N
	Two wires in contact inside wound component; angle between 45° and 90° ..... :		N
2.10.5.13	Wire with solvent-based enamel in wound components		N
	Electric strength test		—
	Routine test		N
2.10.5.14	Additional insulation in wound components		N

IEC/EN 61204-7			
Clause	Requirement - Test	Result - Remark	Verdict
	Working voltage ..... :		N
	- Basic insulation not under stress ..... :		N
	- Supplemetary, reinforced insulation ..... :		N
2.10.6	Construction of printed boards		P
2.10.6.1	Uncoated printed boards		P
2.10.6.2	Coated printed boards		N
2.10.6.3	Insulation between conductors on the same inner surface of a printed board		P
2.10.6.4	Insulation between conductors on different layers of a printed board		N
	Distance through insulation		N
	Number of insulation layers (pcs) ..... :		N
2.10.7	Component external terminations		P
2.10.8	Tests on coated printed boards and coated components		N
2.10.8.1	Sample preparation and preliminary inspection		N
2.10.8.2	Thermal conditioning		N
2.10.8.3	Electric strength test		N
2.10.8.4	Abrasion resistance test		N
2.10.9	Thermal cycling		N
2.10.10	Test for Pollution Degree 1 environment and insulating compound		N
2.10.11	Tests for semiconductor devices and cemented joints		N
2.10.12	Enclosed and sealed parts		N

3	**WIRING, CONNECTIONS AND SUPPLY**		—
3.1	General		—
3.1.1	Current rating and overcurrent protection		P
3.1.2	Protection against mechanical damage		P
3.1.3	Securing of internal wiring		P
3.1.4	Insulation of conductors		P
3.1.5	Beads and ceramic insulators		N
3.1.6	Screws for electrical contact pressure		N
3.1.7	Insulating materials in electrical connections		P
3.1.8	Self-tapping and spaced thread screws		N

IEC/EN 61204-7			
Clause	Requirement - Test	Result - Remark	Verdict
3.1.9	Termination of conductors		P
	10 N pull test		P
3.1.10	Sleeving on wiring		P

3.2	Connection to a mains supply		—
3.2.1	Means of connection		P
3.2.1.1	Connection to an a.c. mains supply		P
3.2.1.2	Connection to a d.c. mains supply		N
3.2.2	Multiple supply connections		N
3.2.3	Permanently connected equipment		N
	Number of conductors, diameter of cable and conduits (mm) .....:		—
3.2.4	Appliance inlets		N
3.2.5	Power supply cords		N
3.2.5.1	AC power supply cords		N
	Type .....:		—
	Rated current (A), cross-sectional area (mm^2), AWG .....:		—
3.2.5.2	DC power supply cords		N
3.2.6	Cord anchorages and strain relief		N
	Mass of equipment (kg), pull (N) .....:		—
	Longitudinal displacement (mm) .....:		—
3.2.7	Protection against mechanical damage		N
3.2.8	Cord guards		N
	Diameter or minor dimension D (mm); test mass (g) .....:		—
	Radius of curvature of cord (mm).....:		—
3.2.9	Supply wiring space		N

3.3	Wiring terminals for connection of external conductors		—
3.3.1	Wiring terminals		P
3.3.2	Connection of non-detachable power supply cords		N
3.3.3	Screw terminals		P
3.3.4	Conductor sizes to be connected		P
	Rated current (A), cord/cable type, cross-sectional	16A, 1,0 mm^2	—

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Clause	Requirement - Test	Result - Remark	Verdict
	area (mm^2) ..... :		
3.3.5	Wiring terminal sizes		P
	Rated current (A), type, nominal thread diameter (mm) ..... :	16A 4,0 mm	—
3.3.6	Wiring terminal design		P
3.3.7	Grouping of wiring terminals		N
3.3.8	Stranded wire		N

3.4	Disconnection from the mains supply		—
3.4.1	General requirement		N
3.4.2	Disconnect devices		N
3.4.3	Permanently connected equipment		N
3.4.4	Parts which remain energized		N
3.4.5	Switches in flexible cords		N
3.4.6	Number of poles - single-phase and d.c. equipment		N
3.4.7	Number of poles - three-phase equipment		N
3.4.8	Switches as disconnect devices		N
3.4.9	Plugs as disconnect devices		N
3.4.10	Interconnected equipment		N
3.4.11	Multiple power sources		N

3.5	Interconnection of equipment		—
3.5.1	General requirements		P
3.5.2	Types of interconnection circuits ..... :	SELV	P
3.5.3	ELV circuits as interconnection circuits		P
3.5.4	Data ports for additional equipment		N

4	**PHYSICAL REQUIREMENTS**		—
4.1	Stability		—
	Angle of 10°		P

4.2	Mechanical strength		—
4.2.1	General		P
4.2.2	Steady force test, 10 N		P

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Clause	Requirement - Test	Result - Remark	Verdict
4.2.3	Steady force test, 30 N		P
4.2.4	Steady force test, 250 N		P
4.2.5	Impact test		P
	Fall test		P
	Swing test		N
4.2.6	Drop test; height (mm) ..... :	750mm	P
4.2.7	Stress relief test		P
4.2.8	Cathode ray tubes		N
	Picture tube separately certified ..... :		N
4.2.9	High pressure lamps		N
4.2.10	Wall or ceiling mounted equipment; force (N) ..... :		N

4.3	Design and construction		—
4.3.1	Edges and corners		P
4.3.2	Handles and manual controls; force (N).....:		N
4.3.3	Adjustable controls		P
4.3.4	Securing of parts		P
4.3.5	Connection by plugs and sockets		P
4.3.6	Direct plug-in equipment		N
	Torque ..... :		—
	Compliance with the relevant mains plug standard ..... :		N
4.3.7	Heating elements in earthed equipment		N
4.3.8	Batteries		N
	- Overcharging of a rechargeable battery		N
	- Unintentional charging of a non-rechargeable battery		N
	- Reverse charging of a rechargeable battery		N
	- Excessive discharging rate for any battery		N
4.3.9	Oil and grease		P
4.3.10	Dust, powders, liquids and gases		P
4.3.11	Containers for liquids or gases		N
4.3.12	Flammable liquids ..... :		N
	Quantity of liquid (l) ..... :		N
	Flash point (°C) ..... :		N

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Clause	Requirement - Test	Result - Remark	Verdict
4.3.13	Radiation		N
4.3.13.1	General		N
4.3.13.2	Ionizing radiation		N
	Measured radiation (pA/kg) ..... :		—
	Measured high-voltage (kV) ..... :		—
	Measured focus voltage (kV) ..... :		—
	CRT markings ..... :		—
4.3.13.3	Effect of ultraviolet (UV) radiation on materials		N
	Part, property, retention after test, flammability classification ..... :		N
4.3.13.4	Human exposure to ultraviolet (UV) radiation ..... :		N
4.3.13.5	Laser (including LEDs)		N
	Laser class ..... :	1	—
4.3.13.6	Other types ..... :		N

4.4	Protection against hazardous moving parts		—
4.4.1	General		P
4.4.2	Protection in operator access areas ..... :		P
4.4.3	Protection in restricted access locations ..... :		N
4.4.4	Protection in service access areas		N

4.5	Thermal requirements		P
4.5.1	General		P
4.5.2	Temperature tests		P
	Normal load condition per Annex L ..... :		—
4.5.3	Temperature limits for materials		P
4.5.4	Touch temperature limits		P
4.5.5	Resistance to abnormal heat ..... :		P

4.6	Openings in enclosures		P
4.6.1	Top and side openings		P
	Dimensions (mm) ..... :		—
4.6.2	Bottoms of fire enclosures		N
	Construction of the bottomm, dimensions (mm) .. :		—

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Clause	Requirement - Test	Result - Remark	Verdict
4.6.3	Doors or covers in fire enclosures		N
4.6.4	Openings in transportable equipment		N
4.6.4.1	Constructional design measures		N
	Dimensions (mm) ..... :		—
4.6.4.2	Evaluation measures for larger openings		N
4.6.4.3	Use of metallized parts		N
	Conditioning temperature (°C), time (weeks) ..... :		—

4.7	Resistance to fire		P
4.7.1	Reducing the risk of ignition and spread of flame		P
	Method 1, selection and application of components wiring and materials		P
	Method 2, application of all of simulated fault condition tests		N
4.7.2	Conditions for a fire enclosure		P
4.7.2.1	Parts requiring a fire enclosure		P
4.7.2.2	Parts not requiring a fire enclosure		N
4.7.3	Materials		P
4.7.3.1	General		P
4.7.3.2	Materials for fire enclosures		P
4.7.3.3	Materials for components and other parts outside fire enclosures		N
4.7.3.4	Materials for components and other parts inside fire enclosures		P
4.7.3.5	Materials for air filter assemblies		N
4.7.3.6	Materials used in high-voltage components		N

5	**ELECTRICAL REQUIREMENTS AND SIMULATED ABNORMAL CONDITIONS**		—
5.1	Touch current and protective conductor current		P
5.1.1	General		P
5.1.2	Configuration of equipment under test (EUT)		P
5.1.2.1	Single connection to an a.c. mains supply		P
5.1.2.2	Redundant multiple connections to an a.c. mains supply		P
5.1.2.3	Simultaneous multiple connections to an a.c. mains supply		N

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Clause	Requirement - Test	Result - Remark	Verdict
5.1.3	Test circuit		P
5.1.4	Application of measuring instrument		P
5.1.5	Test procedure		P
	Supply voltage (V) ..... :	230	—
	Measured touch current (mA) ..... :	0,06	—
	Max. allowed touch current (mA) ..... :	3,5	—
	Measured protective conductor current (mA) ..... :	0,12	—
	Max. allowed protective conductor current (mA) .. :	3,5	—
5.1.7	Equipment with touch current exceeding 3,5 mA		N
5.1.7.1	General ..... :		N
5.1.7.2	Simultaneous multiple connections to the supply		N
5.1.8	Touch currents to telecommunication networks and cable distribution systems and from telecommunication networks		P
5.1.8.1	Limitation of the touch current to a telecommunication network or to a cable distribution system		P
	Supply voltage (V) ..... :	230	—
	Measured touch current (mA) ..... :	0,05	—
	Max. allowed touch current (mA) ..... :	0,25	—
5.1.8.2	Summation of touch currents from telecommunication networks		N
	a) EUT with earthed telecommunication ports ..... :		N
	b) EUT whose telecommunication ports have no reference to protective earth		N

5.2	Electric strength		—
5.2.1	General	(see appended table 5.2)	P
5.2.2	Test procedure		P

5.3	Abnormal operating and fault conditions		P
5.3.1	Protection against overload and abnormal operation		P
5.3.2	Motors		P
5.3.3	Transformers		N
5.3.4	Functional insulation ..... :		P

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Clause	Requirement - Test	Result - Remark	Verdict
5.3.5	Electromechanical components		P
5.3.6	Audio amplifiers in ITE ..... :		N
5.3.7	Simulation of faults		P
5.3.8	Unattended equipment		N
5.3.9	Compliance criteria for abnormal operating and fault conditions		P
5.3.9.1	During the tests		P
5.3.9.2	After the tests		P

6	**CONNECTION TO TELECOMMUNICATION NETWORKS**		—
6.1	Protection of telecommunication network service persons, and users of other equipment connected to the network, from hazards in the equipment		N
6.1.1	Protection from hazardous voltages		N
6.1.2	Separation of the telecommunication network from earth		N
6.1.2.1	Requirements		N
	Supply voltage (V) ..... :		—
	Current in the test circuit (mA) ..... :		—
6.1.2.2	Exclusions ..... :		N

6.2	Protection of equipment users from overvoltages on telecommunication networks		—
6.2.1	Separation requirements	No such parts	N
6.2.2	Electric strength test procedure		N
6.2.2.1	Impulse test		N
6.2.2.2	Steady-state test		N
6.2.2.3	Compliance criteria		N

6.3	Protection of the telecommunication wiring system from overheating		N
	Max. output current (A) ..... :		—
	Current limiting method ..... :		—

7	**CONNECTION TO CABLE DISTRIBUTION SYSTEMS**		—
7.1	General	No such parts	N
7.2	Protection of cable distribution system service persons, and users of other equipment connected to the system, from hazardous voltages in the		N

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Fl.2 south Huoju Building, No.181 canghai Rd., Jiangdong High-tech Park Ningbo China
Tel：+86-574-87912121 (16 lines) Fax：+86-574-87907993
Complaint line：+86-574-87908003 E-mail：cts@cts-lab.com

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Clause	Requirement - Test	Result - Remark	Verdict
	equipment		
7.3	Protection of equipment users from overvoltages on the cable distribution system		N
7.4	Insulation between primary circuits and cable distribution systems		N
7.4.1	General		N
7.4.2	Voltage surge test		N
7.4.3	Impulse test		N

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Tel：+86-574-87912121 (16 lines) Fax：+86-574-87907993
Complaint line：+86-574-87908003 E-mail：cts@cts-lab.com

3.3 Annex as stated in the standards

IEC/EN 61204-7			
Clause	Requirement - Test	Result - Remark	Verdict
A	ANNEX A, TESTS FOR RESISTANCE TO HEAT AND FIRE		N
A.1	Flammability test for fire enclosures of movable equipment having a total mass exceeding 18 kg, and of stationary equipment (see 4.7.3.2)		N
A.1.1	Samples.....:		—
	Wall thickness (mm) .....:		—
A.1.2	Conditioning of samples; temperature (°C) .....:		N
A.1.3	Mounting of samples .....:		N
A.1.4	Test flame (see IEC 60695-11-3)		N
	Flame A, B, C or D .....:		—
A.1.5	Test procedure		N
A.1.6	Compliance criteria		N
	Sample 1 burning time (s) .....:		—
	Sample 2 burning time (s) .....:		—
	Sample 3 burning time (s) .....:		—
A.2	Flammability test for fire enclosures of movable equipment having a total mass not exceeding 18 kg, and for material and components located inside fire enclosures (see 4.7.3.2 and 4.7.3.4)		N
A.2.1	Samples, material.....:		—
	Wall thickness (mm) .....:		—
A.2.2	Conditioning of samples; temperature (°C) .....:		N
A.2.3	Mounting of samples .....:		N
A.2.4	Test flame (see IEC 60695-11-4)		N
	Flame A, B or C .....:		—
A.2.5	Test procedure		N
A.2.6	Compliance criteria		N
	Sample 1 burning time (s) .....:		—
	Sample 2 burning time (s) .....:		—
	Sample 3 burning time (s) .....:		—
A.2.7	Alternative test acc. to IEC 60695-11-5, cl. 5 and 9		N
	Sample 1 burning time (s) .....:		—
	Sample 2 burning time (s) .....:		—

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Tel：+86-574-87912121 (16 lines) Fax：+86-574-87907993
Complaint line：+86-574-87908003 E-mail：cts@cts-lab.com

IEC/EN 61204-7			
Clause	Requirement - Test	Result - Remark	Verdict
	Sample 3 burning time (s) .....:		—
A.3	Hot flaming oil test (see 4.6.2)		N
A.3.1	Mounting of samples		N
A.3.2	Test procedure		N
A.3.3	Compliance criterion		N

B	ANNEX B, MOTOR TESTS UNDER ABNORMAL CONDITIONS (see 4.7.2.2 and 5.3.2)		N
B.1	General requirements		N
	Position .....:		—
	Manufacturer .....:		—
	Type .....:		—
	Rated values .....:		—
B.2	Test conditions		N
B.3	Maximum temperatures		N
B.4	Running overload test		N
B.5	Locked-rotor overload test	(see appended table 5.3)	N
	Test duration (days) .....:		—
	Electric strength test: test voltage (V) .....:		—
B.6	Running overload test for d.c. motors in secondary circuits		N
B.6.1	General		N
B.6.2	Test procedure		N
B.6.3	Alternative test procedure		N
B.6.4	Electric strength test; test voltage (V) .....:		N
B.7	Locked-rotor overload test for d.c. motors in secondary circuits		N
B.7.1	General		N
B.7.2	Test procedure		N
B.7.3	Alternative test procedure		N
B.7.4	Electric strength test; test voltage (V) .....:		N
B.8	Test for motors with capacitors		N
B.9	Test for three-phase motors		N
B.10	Test for series motors		N
	Operating voltage (V) .....:		—

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Clause	Requirement - Test	Result - Remark	Verdict
C	ANNEX C, TRANSFORMERS (see 1.5.4 and 5.3.3)		N
	Position .....:		—
	Manufacturer .....:		—
	Type .....:		—
	Rated values .....:		—
	Method of protection..... :		—
C.1	Overload test		N
C.2	Insulation		N
	Protection from displacement of windings..... :		N
D	ANNEX D, MEASURING INSTRUMENTS FOR TOUCH-CURRENT TESTS (see 5.1.4)		N
D.1	Measuring instrument		N
D.2	Alternative measuring instrument		N
E	ANNEX E, TEMPERATURE RISE OF A WINDING (see 1.4.13)		N
F	ANNEX F, MEASUREMENT OF CLEARANCES AND CREEPAGE DISTANCES (see 2.10 and Annex G)		N
G	ANNEX G, ALTERNATIVE METHOD FOR DETERMINING MINIMUM CLEARANCES		N
G.1	Clearances		N
G.1.1	General		N
G.1.2	Summary of the procedure for determining minimum clearances		N
G.2	Determination of mains transient voltage (V)		N
G.2.1	AC mains supply .....:		N
G.2.2	Earthed d.c. mains supplies .....:		N
G.2.3	Unearthed d.c. mains supplies .....:		N
G.2.4	Battery operation .....:		N
G.3	Determination of telecommunication network transient voltage (V) .....:		N
G.4	Determination of required withstand voltage (V)		N

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Clause	Requirement - Test	Result - Remark	Verdict
G.4.1	Mains transients and internal repetitive peaks .....:		N
G.4.2	Transients from telecommunication networks .....:		N
G.4.3	Combination of transients		N
G.4.4	Transients from cable distribution systems		N
G.5	Measurement of transient voltages (V)		N
	a) Transients from a mains supply		N
	For an a.c. mains supply		N
	For a d.c. mains supply		N
	b) Transients from a telecommunication network		N
G.6	Determination of minimum clearances .....:		N

H	ANNEX H, IONIZING RADIATION (see 4.3.13)	N

J	ANNEX J, TABLE OF ELECTROCHEMICAL POTENTIALS (see 2.6.5.6)		N
	Metal(s) used .....:		—

K	ANNEX K, THERMAL CONTROLS (see 1.5.3 and 5.3.8)		N
K.1	Making and breaking capacity		N
K.2	Thermostat reliability; operating voltage (V) .....:		N
K.3	Thermostat endurance test; operating voltage (V) .....:		N
K.4	Temperature limiter endurance; operating voltage (V) .....:		N
K.5	Thermal cut-out reliability		N
K.6	Stability of operation		N

L	ANNEX L, NORMAL LOAD CONDITIONS FOR SOME TYPES OF ELECTRICAL BUSINESS EQUIPMENT (see 1.2.2.1 and 4.5.2)		P
L.1	Typewriters		N
L.2	Adding machines and cash registers		N
L.3	Erasers		N
L.4	Pencil sharpeners		N
L.5	Duplicators and copy machines		N
L.6	Motor-operated files		N
L.7	Other business equipment		P

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Clause	Requirement - Test	Result - Remark	Verdict
M	ANNEX M, CRITERIA FOR TELEPHONE RINGING SIGNALS (see 2.3.1)		N
M.1	Introduction		N
M.2	Method A		N
M.3	Method B		N
M.3.1	Ringing signal		N
M.3.1.1	Frequency (Hz) .....:		—
M.3.1.2	Voltage (V) .....:		—
M.3.1.3	Cadence; time (s), voltage (V) .....:		—
M.3.1.4	Single fault current (mA) .....:		—
M.3.2	Tripping device and monitoring voltage .....:		N
M.3.2.1	Conditions for use of a tripping device or a monitoring voltage		N
M.3.2.2	Tripping device		N
M.3.2.3	Monitoring voltage (V) .....:		N
N	ANNEX N, IMPULSE TEST GENERATORS (see 1.5.7.2, 1.5.7.3, 2.10.3.9, 6.2.2.1, 7.3.2, 7.4.3 and Clause G.5)		N
N.1	ITU-T impulse test generators		N
N.2	IEC 60065 impulse test generator		N
P	ANNEX P, NORMATIVE REFERENCES		—
Q	ANNEX Q, Voltage dependent resistors (VDRs) (see 1.5.9.1)		N
	a) Preferred climatic categories .....:		N
	b) Maximum continuous voltage .....:		N
	c) Pulse current .....:		N
R	ANNEX R, EXAMPLES OF REQUIREMENTS FOR QUALITY CONTROL PROGRAMMES		N
R.1	Minimum separation distances for unpopulated coated printed boards (see 2.10.6.2)		N
R.2	Reduced clearances (see 2.10.3)		N
S	ANNEX S, PROCEDURE FOR IMPULSE TESTING (see 6.2.2.3)		N

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Tel：+86-574-87912121 (16 lines) Fax：+86-574-87907993
Complaint line：+86-574-87908003 E-mail：cts@cts-lab.com See Reverse For Terms And Conditions of Service

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Clause	Requirement - Test	Result - Remark	Verdict
S.1	Test equipment		N
S.2	Test procedure		N
S.3	Examples of waveforms during impulse testing		N

T	ANNEX T, GUIDANCE ON PROTECTION AGAINST INGRESS OF WATER (see 1.1.2)		N
			—

U	ANNEX U, INSULATED WINDING WIRES FOR USE WITHOUT INTERLEAVED INSULATION (see 2.10.5.4)		N
			—

V	ANNEX V, AC POWER DISTRIBUTION SYSTEMS (see 1.6.1)		N
V.1	Introduction		N
V.2	TN power distribution systems		N

W	ANNEX W, SUMMATION OF TOUCH CURRENTS		N
W.1	Touch current from electronic circuits		N
W.1.1	Floating circuits		N
W.1.2	Earthed circuits		N
W.2	Interconnection of several equipments		N
W.2.1	Isolation		N
W.2.2	Common return, isolated from earth		N
W.2.3	Common return, connected to protective earth		N

X	ANNEX X, MAXIMUM HEATING EFFECT IN TRANSFORMER TESTS (see clause C.1)		N
X.1	Determination of maximum input current		N
X.2	Overload test procedure		N

Y	ANNEX Y, ULTRAVIOLET LIGHT CONDITIONING TEST (see 4.3.13.3)		N
Y.1	Test apparatus .....:		N
Y.2	Mounting of test samples .....:		N
Y.3	Carbon-arc light-exposure apparatus .....:		N
Y.4	Xenon-arc light exposure apparatus .....:		N

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Clause	Requirement - Test	Result - Remark	Verdict
Z	ANNEX Z, OVERVOLTAGE CATEGORIES (see 2.10.3.2 and Clause G.2)		P
AA	ANNEX AA, MANDREL TEST (see 2.10.5.8)		N
BB	ANNEX BB, CHANGES IN THE SECOND EDITION		—

EN 60950-1:2006 – CENELEC COMMON MODIFICATIONS		
Contents	Add the following annexes: Annex ZA (normative) Normative references to international publications with their corresponding European publications Annex ZB (normative) Special national conditions Annex ZC (informative) A-deviations	P
General	Delete all the “country” notes in the reference document according to the following list: 1.4.8 Note 2; 1.5.1 Note 2 & 3; 1.5.7.1 Note 1.5.8 Note 2; 1.5.9.4 Note; 1.7.2.1 Note 4, 5 & 6 2.2.3 Note; 2.2.4 Note; 2.3.2 Note 2.3.2.1 Note 2; 2.3.4 Note 2; 2.6.3.3 Note 2 & 3 2.7.1 Note; 2.10.3.2 Note 2; 2.10.5.13 Note 3 3.2.1.1 Note; 3.2.4 Note 3.; 2.5.1 Note 2 4.3.6 Note 1 & 2; 4.7 Note 4; 4.7.2.2 Note 4.7.3.1 Note 2; 5.1.7.1 Note 3 & 4; 5.3.7 Note 1 6 Note 2 & 5; 6.1.2.1 Note 2; 6.1.2.2 Note 6.2.2 Note 6.; 2.2.1 Note 2; 6.2.2.2 Note 7.1 Note 3; 7.2 Note; 7.3 Note 1 & 2 G.2.1 Note 2; Annex H Note 2	P
1.3.Z1	Add the following subclause: 1.3.Z1 Exposure to excessive sound pressure The apparatus shall be so designed and constructed as to present no danger when used for its intended purpose, either in normal operating conditions or under fault conditions, particularly providing protection against exposure to excessive sound pressures from headphones or earphones. NOTE Z1 A new method of measurement is described in EN 50332-1, Sound system equipment: Headphones and earphones associated with portable audio equipment - Maximum sound pressure level measurement methodology and limit considerations - Part 1: General method for “one package equipment”, and in EN 50332-2, Sound system equipment: Headphones and earphones associated with portable audio equipment - Maximum sound pressure level measurement methodology and limit considerations - Part 2: Guidelines to associate sets with headphones coming from different manufacturers.	P

IEC/EN 61204-7			
Clause	Requirement - Test	Result - Remark	Verdict
1.5.1	Add the following NOTE: NOTE Z1 The use of certain substances in electrical and electronic equipment is restricted within the EU: see Directive 2002/95/EC		P
1.7.2.1	Add the following NOTE: NOTE Z1 In addition, the instructions shall include, as far as applicable, a warning that excessive sound pressure from earphones and headphones can cause hearing loss		P
2.7.1	Replace the subclause as follows: Basic requirements To protect against excessive current, short-circuits and earth faults in PRIMARY CIRCUITS, protective devices shall be included either as integral parts of the equipment or as parts of the building installation, subject to the following, a), b) and c): a) except as detailed in b) and c), protective devices necessary to comply with the requirements of 5.3 shall be included as parts of the equipment; b) for components in series with the mains input to the equipment such as the supply cord, appliance coupler, r.f.i. filter and switch, short-circuit and earth fault protection may be provided by protective devices in the building installation; c) it is permitted for PLUGGABLE EQUIPMENT TYPE B or PERMANENTLY CONNECTED EQUIPMENT, to rely on dedicated overcurrent and short-circuit protection in the building installation, provided that the means of protection, e.g. fuses or circuit breakers, is fully specified in the installation instructions. If reliance is placed on protection in the building installation, the installation instructions shall so state, except that for PLUGGABLE EQUIPMENT TYPE A the building installation shall be regarded as providing protection in accordance with the rating of the wall socket outlet.		P
2.7.2	This subclause has been declared 'void'.		P
3.2.3	Delete the NOTE in Table 3A, and delete also in this table the conduit sizes in parentheses.		P
3.2.5.1	Replace "60245 IEC 53" by "H05 RR-F"; "60227 IEC 52" by "H03 VV-F or H03 VVH2-F"; "60227 IEC 53" by "H05 VV-F or H05 VVH2-F2". In Table 3B, replace the first four lines by the following: | Up to and including 6 | 0,75 [a)] | | Over 6 up to and including 10 | (0,75) [b)] 1,0 | | Over 10 up to and including 16 | (1,0) [c)] 1,5 | In the conditions applicable to Table 3B delete the words "in some countries" in condition [a)]. In NOTE 1, applicable to Table 3B, delete the second sentence.		P
3.3.4	In Table 3D, delete the fourth line: conductor sizes for 10 to 13 A, and replace with the following:		P

IEC/EN 61204-7			
Clause	Requirement - Test	Result - Remark	Verdict
	| Over 10 up to and including 16 | 1,5 to 2,5 | 1,5 to 4 | Delete the fifth line: conductor sizes for 13 to 16 A.		
4.3.13.6	Add the following NOTE: NOTE Z1 Attention is drawn to 1999/519/EC: Council Recommendation on the limitation of exposure of the general public to electromagnetic fields 0 Hz to 300 GHz. Standards taking into account this Recommendation which demonstrate compliance with the applicable EU Directive are indicated in the OJEC.		P
Annex H	Replace the last paragraph of this annex by: At any point 10 cm from the surface of the OPERATOR ACCESS AREA, the dose rate shall not exceed 1 μSv/h (0,1 mR/h) (see NOTE). Account is taken of the background level. Replace the notes as follows: NOTE These values appear in Directive 96/29/Euratom. Delete NOTE 2.		P
Biblio-graphy	Additional EN standards.		—

ZA	NORMATIVE REFERENCES TO INTERNATIONAL PUBLICATIONS WITH THEIR CORRESPONDING EUROPEAN PUBLICATIONS	—

ZB	SPECIAL NATIONAL CONDITIONS	N
1.2.4.1	In Denmark, certain types of Class I appliances (see 3.2.1.1) may be provided with a plug not establishing earthing conditions when inserted into Danish socket-outlets.	N
1.5.7.1	In Finland, Norway and Sweden, resistors bridging BASIC INSULATION in CLASS I PLUGGABLE EQUIPMENT TYPE A must comply with the requirements in 1.5.7.2.	N
1.5.8	In Norway, due to the IT power system used (see annex V, Figure V.7), capacitors are required to be rated for the applicable line-to-line voltage (230 V).	N
1.5.9.4	In Finland, Norway and Sweden, the third dashed sentence is applicable only to equipment as defined in 6.1.2.2 of this annex.	N
1.7.2.1	In Finland, Norway and Sweden, CLASS I PLUGGABLE EQUIPMENT TYPE A intended for connection to other equipment or a network shall, if safety relies on connection to protective earth or if surge suppressors are connected between the network terminals and accessible parts, have a marking stating that the equipment must be connected to an earthed mains socket-outlet. The marking text in the applicable countries shall be as follows: In Finland: "Laite on liitettävä suojamaadoituskoskettimilla varustettuun pistorasiaan" In Norway: “Apparatet må tilkoples jordet stikkontakt”	N

IEC/EN 61204-7			
Clause	Requirement - Test	Result - Remark	Verdict
	In Sweden: “Apparaten skall anslutas till jordat uttag”		

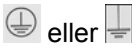
1.7.5	In Denmark, socket-outlets for providing power to other equipment shall be in accordance with the Heavy Current Regulations, Section 107-2-D1, Standard Sheet DK 1-3a, DK 1-5a or DK 1-7a, when used on Class I equipment. For STATIONARY EQUIPMENT the socket-outlet shall be in accordance with Standard Sheet DK 1-1b or DK 1-5a.	N
2.2.4	In Norway, for requirements see 1.7.2.1, 6.1.2.1 and 6.1.2.2 of this annex.	N
2.3.2	In Finland, Norway and Sweden there are additional requirements for the insulation. See 6.1.2.1 and 6.1.2.2 of this annex.	N
2.3.4	In Norway, for requirements see 1.7.2.1, 6.1.2.1 and 6.1.2.2 of this annex.	N
2.6.3.3	In the United Kingdom, the current rating of the circuit shall be taken as 13 A, not 16 A.	N
2.7.1	In the United Kingdom, to protect against excessive currents and short-circuits in the PRIMARY CIRCUIT of DIRECT PLUG-IN EQUIPMENT, tests according to 5.3 shall be conducted, using an external protective device rated 30 A or 32 A. If these tests fail, suitable protective devices shall be included as integral parts of the DIRECT PLUG-IN EQUIPMENT, so that the requirements of 5.3 are met.	N
2.10.5.13	In Finland, Norway and Sweden, there are additional requirements for the insulation, see 6.1.2.1 and 6.1.2.2 of this annex.	N
3.2.1.1	In Switzerland, supply cords of equipment having a RATED CURRENT not exceeding 10 A shall be provided with a plug complying with SEV 1011 or IEC 60884-1 and one of the following dimension sheets: SEV 6532-2.1991 Plug Type 15 3P+N+PE 250/400 V, 10 A SEV 6533-2.1991 Plug Type 11 L+N 250 V, 10 A SEV 6534-2.1991 Plug Type 12 L+N+PE 250 V, 10 A In general, EN 60309 applies for plugs for currents exceeding 10 A. However, a 16 A plug and socket-outlet system is being introduced in Switzerland, the plugs of which are according to the following dimension sheets, published in February 1998: SEV 5932-2.1998 Plug Type 25 3L+N+PE 230/400 V, 16 A SEV 5933-2.1998 Plug Type 21 L+N 250 V, 16 A SEV 5934-2.1998 Plug Type 23 L+N+PE 250 V, 16 A	N
3.2.1.1	In Denmark, supply cords of single-phase equipment having a rated current not exceeding13 A shall be provided with a plug according to the Heavy Current Regulations, Section 107-2-D1. CLASS I EQUIPMENT provided with socket-outlets with earth contacts or which are intended to be used in locations where protection against indirect contact is required according to the wiring rules shall be provided with a plug in accordance with standard sheet DK 2-1a or DK 2-5a. If poly-phase equipment and single-phase equipment having a RATED CURRENT exceeding 13 A is provided with a supply cord with a plug, this plug shall be in accordance with the Heavy Current Regulations, Section 107-2-D1 or EN 60309-2.	N

IEC/EN 61204-7			
Clause	Requirement - Test	Result - Remark	Verdict
3.2.1.1	In Spain, supply cords of single-phase equipment having a rated current not exceeding 10 A shall be provided with a plug according to UNE 20315:1994. Supply cords of single-phase equipment having a rated current not exceeding 2,5 A shall be provided with a plug according to UNE-EN 50075:1993. CLASS I EQUIPMENT provided with socket-outlets with earth contacts or which are intended to be used in locations where protection against indirect contact is required according to the wiring rules, shall be provided with a plug in accordance with standard UNE 20315:1994. If poly-phase equipment is provided with a supply cord with a plug, this plug shall be in accordance with UNE-EN 60309-2.		N
3.2.1.1	In the United Kingdom, apparatus which is fitted with a flexible cable or cord and is designed to be connected to a mains socket conforming to BS 1363 by means of that flexible cable or cord and plug, shall be fitted with a 'standard plug' in accordance with Statutory Instrument 1768:1994 - The Plugs and Sockets etc. (Safety) Regulations 1994, unless exempted by those regulations. NOTE 'Standard plug' is defined in SI 1768:1994 and essentially means an approved plug conforming to BS 1363 or an approved conversion plug.		N
3.2.1.1	In Ireland, apparatus which is fitted with a flexible cable or cord and is designed to be connected to a mains socket conforming to I.S. 411 by means of that flexible cable or cord and plug, shall be fitted with a 13 A plug in accordance with Statutory Instrument 525:1997 - National Standards Authority of Ireland (section 28) (13 A Plugs and Conversion Adaptors for Domestic Use) Regulations 1997.		N
3.2.4	In Switzerland, for requirements see 3.2.1.1 of this annex.		N
3.2.5.1	In the United Kingdom, a power supply cord with conductor of 1,25 mm2 is allowed for equipment with a rated current over 10 A and up to and including 13 A.		N
3.3.4	In the United Kingdom, the range of conductor sizes of flexible cords to be accepted by terminals for equipment with a RATED CURRENT of over 10 A up to and including 13 A is: • 1,25 mm^2 to 1,5 mm^2 nominal cross-sectional area.		N
4.3.6	In the United Kingdom, the torque test is performed using a socket outlet complying with BS 1363 part 1:1995, including Amendment 1:1997 and Amendment 2:2003 and the plug part of DIRECT PLUG-IN EQUIPMENT shall be assessed to BS 1363: Part 1, 12.1, 12.2, 12.3, 12.9, 12.11, 12.12, 12.13, 12.16 and 12.17, except that the test of 12.17 is performed at not less than 125 °C. Where the metal earth pin is replaced by an Insulated Shutter Opening Device (ISOD), the requirements of clauses 22.2 and 23 also apply.		N
4.3.6	In Ireland, DIRECT PLUG-IN EQUIPMENT is known as plug similar devices. Such devices shall comply with Statutory Instrument 526:1997 - National Standards Authority of Ireland (Section 28) (Electrical plugs, plug similar devices and sockets for domestic use) Regulations, 1997.		N

5.1.7.1	In Finland, Norway and Sweden TOUCH CURRENT measurement results exceeding 3,5 mA r.m.s. are permitted only for the following equipment:	N

IEC/EN 61204-7			
Clause	Requirement - Test	Result - Remark	Verdict
	• STATIONARY PLUGGABLE EQUIPMENT TYPE A that ○ is intended to be used in a RESTRICTED ACCESS LOCATION where equipotential bonding has been applied, for example, in a telecommunication centre; and ○ has provision for a permanently connected PROTECTIVE EARTHING CONDUCTOR; and ○ is provided with instructions for the installation of that conductor by a SERVICE PERSON; • STATIONARY PLUGGABLE EQUIPMENT TYPE B; • STATIONARY PERMANENTLY CONNECTED EQUIPMENT.		
6.1.2.1	In Finland, Norway and Sweden, add the following text between the first and second paragraph of the compliance clause: If this insulation is solid, including insulation forming part of a component, it shall at least consist of either - two layers of thin sheet material, each of which shall pass the electric strength test below, or - one layer having a distance through insulation of at least 0,4 mm, which shall pass the electric strength test below. If this insulation forms part of a semiconductor component (e.g. an optocoupler), there is no distance through insulation requirement for the insulation consisting of an insulating compound completely filling the casing, so that CLEARANCES and CREEPAGE DISTANCES do not exist, if the component passes the electric strength test in accordance with the compliance clause below and in addition - passes the tests and inspection criteria of 2.10.11 with an electric strength test of 1,5 kV multiplied by 1,6 (the electric strength test of 2.10.10 shall be performed using 1,5 kV), and - is subject to ROUTINE TESTING for electric strength during manufacturing, using a test voltage of 1,5 kV. It is permitted to bridge this insulation with a capacitor complying with EN 132400:1994, subclass Y2. A capacitor classified Y3 according to EN 132400:1994, may bridge this insulation under the following conditions: - the insulation requirements are satisfied by having a capacitor classified Y3 as defined by EN 132400, which in addition to the Y3 testing, is tested with an impulse test of 2,5 kV defined in EN 60950-1:2006, 6.2.2.1; - the additional testing shall be performed on all the test specimens as described in EN 132400; - the impulse test of 2,5 kV is to be performed before the endurance test in EN 132400, in the sequence of tests as described in EN 132400.		N
6.1.2.2	In Finland, Norway and Sweden, the exclusions are applicable for PERMANENTLY		N

IEC/EN 61204-7			
Clause	Requirement - Test	Result - Remark	Verdict
	CONNECTED EQUIPMENT, PLUGGABLE EQUIPMENT TYPE B and equipment intended to be used in a RESTRICTED ACCESS LOCATION where equipotential bonding has been applied, e.g. in a telecommunication centre, and which has provision for a permanently connected PROTECTIVE EARTHING CONDUCTOR and is provided with instructions for the installation of that conductor by a SERVICE PERSON.		
7.2	In Finland, Norway and Sweden, for requirements see 6.1.2.1 and 6.1.2.2 of this annex. The term TELECOMMUNICATION NETWORK in 6.1.2 being replaced by the term CABLE DISTRIBUTION SYSTEM.		N
7.3	In Norway and Sweden, there are many buildings where the screen of the coaxial cable is normally not connected to the earth in the building installation.		N
7.3	In Norway, for installation conditions see EN 60728-11:2005.		N

ZC	A-DEVIATIONS (informative)	N
1.5.1	Sweden (Ordinance 1990:944) Add the following: NOTE In Sweden, switches containing mercury are not permitted.	N
1.5.1	Switzerland (Ordinance on environmentally hazardous substances SR 814.081, Annex 1.7, Mercury - Annex 1.7 of SR 814.81 applies for mercury.) Add the following: NOTE In Switzerland, switches containing mercury such as thermostats, relays and level controllers are not allowed.	N
1.7.2.1	Denmark (Heavy Current Regulations) Supply cords of CLASS I EQUIPMENT, which is delivered without a plug, must be provided with a visible tag with the following text: Vigtigt! Lederen med grøn/gul isolation må kun tilsluttes en klemme mærket  If essential for the safety of the equipment, the tag must in addition be provided with a diagram, which shows the connection of the other conductors, or be provided with the following text: “For tilslutning af de øvrige ledere, se medfølgende installationsvejledning.”	N
	Germany (Gesetz über technische Arbeitsmittel und Verbraucherprodukte (Geräte- und Produktsicherheitsgesetz – GPSG) [Law on technical labour equipment and consumer products], of 6th January 2004, Section 2, Article 4, Clause (4), Item 2). If for the assurance of safety and health certain rules during use, amending or maintenance of a technical labour equipment or readymade consumer product are to be followed, a manual in German language has to be delivered when placing the product on the market.	N

IEC/EN 61204-7			
Clause	Requirement - Test	Result - Remark	Verdict
	Of this requirement, rules for use even only by SERVICE PERSONS are not exempted.		
1.7.5	Denmark (Heavy Current Regulations) With the exception of CLASS II EQUIPMENT provided with a socket outlet in accordance with the Heavy Current Regulations, Section 107-2-D1, Standard Sheet DK 1-4a, CLASS II EQUIPMENT shall not be fitted with socket-outlets for providing power to other equipment.		N
1.7.13	Switzerland (Ordinance on chemical hazardous risk reduction SR 814.81, Annex 2.15 Batteries) Annex 2.15 of SR 814.81 applies for batteries.		N
5.1.7.1	Denmark (Heavy Current Regulations, Chapter 707, clause 707.4) TOUCH CURRENT measurement results exceeding 3,5 mA r.m.s. are permitted only for PERMANENTLY CONNECTED EQUIPMENT and PLUGGABLE EQUIPMENT TYPE B.		N
	ANNEX ZA		P

IEC/EN 61204-7			
Clause	Requirement - Test	Result - Remark	Verdict

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC 60065 (mod) A1	2001 2005	Audio, video and similar electronic apparatus - Safety requirements	EN 60065 A1 + A11	2002 2006 2008
A2	- [1]		A2	- [1]
IEC 60068-2-78	- [2]	Environmental testing Part 2-78: Tests - Test Cab: Damp heat, steady state	EN 60068-2-78	2001 [3]
IEC 60073	- [2]	Basic and safety principles for man-machine interface, marking and identification - Coding principles for indication devices and actuators	EN 60073	2002 [3]
IEC 60083	- [2]	Plugs and socket-outlets for domestic and similar general use standardized in member countries of IEC	-	-
IEC 60085	2004	Electrical insulation - Thermal classification	EN 60085	2004
IEC 60112	- [2]	Method for determining the proof and comparative tracking indices of insulating materials	EN 60112	2003 [3]
IEC 60216-4-1	- [2]	Guide for the determination of thermal endurance properties of electrical insulating materials Part 4: Ageing ovens Section 1: Single-chamber ovens	EN 60216-4-1	2006 [3]
IEC 60227 (mod)	Series	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750V	HD 21 [4]	Series
IEC 60245 (mod)	Series	Rubber insulated cables of rated voltages up to and including 450/750V	HD 22 [5]	Series

[1] At draft stage.
[2] Undated reference.
[3] Valid edition at date of issue.
[4] The HD 21 series is related to, but not directly equivalent with the IEC 60227 series.
[5] The HD 22 series is related to, but not directly equivalent with the IEC 60245 series.

IEC/EN 61204-7			
Clause	Requirement - Test	Result - Remark	Verdict

Publication	Year	Title	EN/HD	Year
IEC 60309 (mod)	Series	Plugs, socket-outlets and couplers for industrial purposes	EN 60309	Series
IEC 60317	Series	Specifications for particular types of winding wires	EN 60317	Series
IEC 60317-43	- [2)]	Part 43: Aromatic polyimide tape wrapped round copper wire, class 240	EN 60317-43	1997 [3)]
IEC 60320 (mod)	Series	Appliance couplers for household and similar general purposes	EN 60320	Series
IEC 60364-1 (mod)	2001	Electrical installations of buildings Part 1: Fundamental principles, assessment of general characteristics, definitions	HD 384.1 S2	2001
IEC 60384-14 A1	1993 1995	Fixed capacitors for use in electronic equipment Part 14: Sectional specification: Fixed capacitors for electromagnetic interference suppression and connection to the supply mains	EN 132400 [6)]	1994
IEC 60417	Data-base	Graphical symbols for use on equipment	-	-
IEC 60664-1 + A1 + A2	1992 2000 2002	Insulation coordination for equipment within low-voltage systems Part 1: Principles, requirements and tests	EN 60664-1	2003
IEC 60695-2-11	- [2)]	Fire hazard testing Part 2-11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products	EN 60695-2-11	2001 [3)]
IEC 60695-2-20	- [2)]	Part 2-20: Glowing/hot-wire based test methods - Hot-wire coil ignitability - Apparatus, test method and guidance	-	-
IEC 60695-10-2	- [2)]	Part 10-2: Guidance and test methods for the minimization of the effects of abnormal heat on electrotechnical products involved in fires - Method for testing products made from non-metallic materials for resistance to heat using the ball pressure test	EN 60695-10-2	2003 [3)]
IEC 60695-11-3	- [2)]	Part 11-3: Test flames - 500 W flames - Apparatus and confirmational test methods	-	-
IEC 60695-11-4	- [2)]	Part 11-4: Test flames - 50 W flames - Apparatus and confirmational test methods	-	-
IEC 60695-11-10 A1	- [2)]	Part 11-10: Test flames - 50 W horizontal and vertical flame test methods	EN 60695-11-10 A1	1999 [3)] 2003 [3)]

Verdict: P

[6)] EN 132400, *Sectional Specification: Fixed capacitors for electromagnetic interference suppression and connection to the supply mains (Assessment level D)*, and its amendments are related to, but not directly equivalent to IEC 60384-14. They are superseded by EN 60384-14:2005, which is based on IEC 60384-14:2005.

IEC/EN 61204-7			
Clause	Requirement - Test	Result - Remark	Verdict

Publication	Year	Title	EN/HD	Year
IEC 60695-11-20 A1	- [2)]	Part 11-20: Test flames - 500 W flame test methods	EN 60695-11-20 A1	1999 [3)] 2003 [3)]
IEC 60730-1 (mod) A1 A2	1999 2003 2007	Automatic electrical controls for household and similar use Part 1: General requirements	EN 60730-1 A1 + A12 + A13 + A14 + A16 A2	2000 2004 2003 2004 2005 2007 2008
IEC 60747-5-5	2007	Semiconductor devices - Discrete devices Part 5-5: Optoelectronic devices - Photocouplers	EN 60747-5-5	- [1)]
IEC 60825-1	- [2)]	Safety of laser products Part 1: Equipment classification, requirements and user's guide	EN 60825-1	2007 [3)]
IEC 60825-2	- [2)]	Part 2: Safety of optical fibre communication systems	EN 60825-2 A1	2004 [3)] 2007 [3)]
IEC/TR 60825-9	- [2)]	Part 9: Compilation of maximum permissible exposure to incoherent optical radiation	-	-
IEC 60825-12	- [2)]	Part 12: Safety of free space optical communication systems used for transmission of information	EN 60825-12	2004 [3)]
IEC 60851-3 A1	1996 1997	Winding wires - Test methods Part 3: Mechanical properties	EN 60851-3 A1	1996 1997
IEC 60851-5 A1 A2	1996 1997 2004	Part 5: Electrical properties	EN 60851-5 A1 A2	1996 1997 2004
IEC 60851-6	1996	Part 6: Thermal properties	EN 60851-6	1996
IEC 60885-1	1987	Electrical test methods for electric cables Part 1: Electrical tests for cables, cords and wires for voltages up to and including 450/750 V	-	-
IEC 60906-1	- [2)]	IEC System of plugs and socket-outlet for household and similar purposes Part 1: Plugs and socket-outlets 16 A 250 V a.c.	-	-
IEC 60906-2	- [2)]	Part 2: Plugs and socket-outlets 15 A 125 V a.c.	-	-
IEC 60947-1	2004	Low voltage switchgear and control gear Part 1: General rules	EN 60947-1	2004
IEC 60990	1999	Methods of measurement of touch current and protective conductor current	EN 60990	1999

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IEC/EN 61204-7			
Clause	Requirement - Test	Result - Remark	Verdict

Publication	Year	Title	EN/HD	Year
IEC 61051-2	1991	Varistors for use in electronic equipment Part 2: Sectional specification for surge suppression varistors	-	-
IEC 61058-1 (mod)	2000	Switches for appliances Part 1: General requirements	EN 61058-1 7)	2002
ISO 178	- 2)	Plastics - Determination of flexural properties	EN ISO 178	2003 3)
ISO 179	Series	Plastics - Determination of Charpy impact strength	EN ISO 179	Series
ISO 180	- 2)	Plastics - Determination of Izod impact strength	EN ISO 180	2000 3)
ISO 261	- 2)	ISO general-purpose metric screw threads - General plan	-	-
ISO 262	- 2)	ISO general-purpose metric screw threads - Selected sizes for screws, bolts and nuts		-
ISO 527	Series	Plastics - Determination of tensile properties	EN ISO 527	Series
ISO 3864	Series	Safety colours and safety signs	-	-
ISO 4892-1	- 2)	Plastics - Methods of exposure to laboratory light sources Part 1: General guidance	EN ISO 4892-1	2000 3)
ISO 4892-2	- 2)	Part 2: Xenon-arc sources	EN ISO 4892-2	2006 3)
ISO 4892-4	- 2)	Part 4: Open-flame carbon-arc lamps	-	-
ISO 7000	Data-base	Graphical symbols for use on equipment - Index and synopsis	-	-
ISO 8256	- 2)	Plastics - Determination of tensile-impact strength	EN ISO 8256	2004 3)
ISO 9772	- 2)	Cellular plastics - Determination of horizontal burning characteristics of small specimens subjected to a small flame	-	-
ISO 9773	- 2)	Plastics - Determination of burning behaviour of thin flexible vertical specimens in contact with a small-flame ignition source	EN ISO 9773	1998 3)
ITU-T Recommendation K.44	- 2)	Resistibility tests for telecommunication equipment exposed to overvoltages and overcurrents - Basic Recommendation	-	-

P

3.4 Tables

IEC/EN 61204-7					
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])
Winding	SUZHOU JUFENG ELECTRICAL INSULATION SYSTEM CO LTD	JF1551-1	CLASS F	---	UL E251322
Thermal protector	Dongyang Shenlong Electrical Component Factory	KSD	250V T110	EN60691	VDE 40027123
Terminal block (Input)	Ninghai Chengguan Fangzheng Rubber & Plastic Hardware Factory	KP-10A	450V 2.5mm2	EN60998-1 EN60998-2-1	VDE 40019217
Capacitor X2	DONGGURN KENISHENG ELECTRONIC CO LTD	MPX	1UF/275V AC	---	VDE 40018798
Switch	Ningbo Master SOKEN Electrical Co.,Ltd	RK1	16A 250V T100	DIN EN 61058-1	VDE 40012988
Internal wire	Shenzhen Mysun Insulation Materials Co.,Ltd	3122	300V 200℃	DIN VDE 0282-3	VDE 40016705
Sleeve	DONGGUAN ASLIPT CO, LTD	SALIPT S-901-600	600V 125℃	UL	UL E209436
Sheathing	DONG GUAN HAI SHENG PLASTIC MANUFACTURE CO LTD	QS1-600	VW-1 600V 105 ℃	---	UL E238728
Relay	Dongguan Sanyou Electrical Appliances Co., Ltd.	SLA-S-112DM	30A 250V	EN61810-1	VDE 40002146
Fuse	Walter Electronic Co.,Ltd	FSD	AC250V /125V	EN 60127-1 EN 60127-2	VDE 40016929
Y capacitance	DONGGURN KENISHENG ELECTRONIC CO LTD	JY	400V AC	---	VDE: 123326

IEC/EN 61204-7					
Clause	Requirement - Test		Result - Remark		Verdict
Terminal block (Output)	SHUN SHENG TERMINAL MFG LTD	6044-BS	250V	---	UL E177314
PCB	E I DUPONT DE NEMOURS & CO INC	NOMEX	V-0	---	UL E34739
[1]) An asterisk indicates a mark which assures the agreed level of surveillance					
Supplementary information:					

1.6.2	TABLE: Electrical data (in normal conditions)					P
U (V)	I (A)	Irated (A)	P (W)	Fuse #	Ifuse (A)	Condition/status
115/50Hz	15,48	16	---	F1	15,48	P
230/50Hz	8,32	9	---	F1	8,32	P
115/60Hz	15,65	16	---	F1	15,65	P
230/60Hz	8,41	9	---	F1	8,41	P
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)
primary and secondary circuits	325,2	230	4,0	5,2	5,0	5,2
Primary circuit to metal surface	325,2	230	1,5	5,8	2,5	5,8
Supplementary information:						

2.10.5	TABLE: Distance through insulation measurements				N
Distance through insulation (DTI) at/of:	U peak (V)	U rms (V)	Test voltage (V)	Required DTI (mm)	DTI (mm)
Enclosure	---	---	---	---	---
Supplementary information:					

4.5	TABLE: Thermal requirements						P
	Supply voltage (V) .....:	230	---	---	---	---	—
	Ambient T_{min} (°C) .....:	22.2	---	---	---	---	—
	Ambient T_{max} (°C) .....:	22.2	---	---	---	---	—
Maximum measured temperature T of part/at::		T (°C)					Allowed T_{max} (°C)
Swith surface		32.6	---	---	---	---	85
Enclosure outside		38.8	---	---	---	---	95
winding		115,7	---	---	---	---	140
X2capacitor		55,7	---	---	---	---	75
Terminal		59,8	---	---	---	---	75
Internal wire		87,9	---	---	---	---	200
Supplementary information:							

Temperature T of winding:	t_1 (°C)	R_1 (Ω)	t_2 (°C)	R_2 (Ω)	T (°C)	Allowed T_{max} (°C)	Insulation class
---	---	---	---	---	---	---	---
Supplementary information:							

4.5.5	TABLE: Ball pressure test of thermoplastic parts		N
	Allowed impression diameter (mm) .....:	≤ 2 mm	—

Part	Test temperature (°C)	Impression diameter (mm)
---	---	---
Supplementary information:		

4.7	TABLE: Resistance to fire					N
Part	Manufacturer of material	Type of material	Thickness (mm)	Flammability class	Evidence	
---	---	---	---	---	---	
Supplementary information:						

CTS (Ningbo) Testing Service Technology Co., Ltd.
Fl.2 south Huoju Building, No.181 canghai Rd., Jiangdong High-tech Park Ningbo China
Tel：+86-574-87912121 (16 lines) Fax：+86-574-87907993
Complaint line：+86-574-87908003 E-mail：cts@cts-lab.com

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
Inpiut to output		AC230	3000	No
Inpiut to metal enclosure		AC230	1500	No
Supplementary information:				

5.3	TABLE: Fault condition tests		P
	Ambient temperature (°C) .....:	21,4	—
	Power source for EUT: Manufacturer, model/type, output rating .....:	---	—

Component No.	Fault	Supply voltage (V)	Test time	Fuse #	Fuse current (A)	Observation
C 1	s-c	230	60 min	F1	zero	F1 operated ,no hazard
C 1	o-c	230	60 min	F1	zero	Power unit did not work ,no danger.
D1	s-c	230	60 min	F1	zero	Power unit did not work ,no danger.
D1	o-c	230	60 min	F1	zero	Power unit did not work ,no danger.
U1	s-c	230	60 min	F1	zero	Power unit did not work ,no danger.
Output terminal	s-c	230	60 min	F1	10,29	Thermal protector operated,no hazard

Supplementary information:

s-c：short circuit

o-c：open circuit

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Attachments

☒ Photo document

☐ BOM

☐ CDF (critical data form)

☐ Copies of certificates of certified components

☐ Instruction manual

☐ Circuit diagram

☐ Explosion block

☐ Other if necessary

----------end of report----------

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Type Designation: SWITCHING POWER SUPPLY; S
Report Number : CNB3150617-00301-L-D

Figure 1 (external view-front)

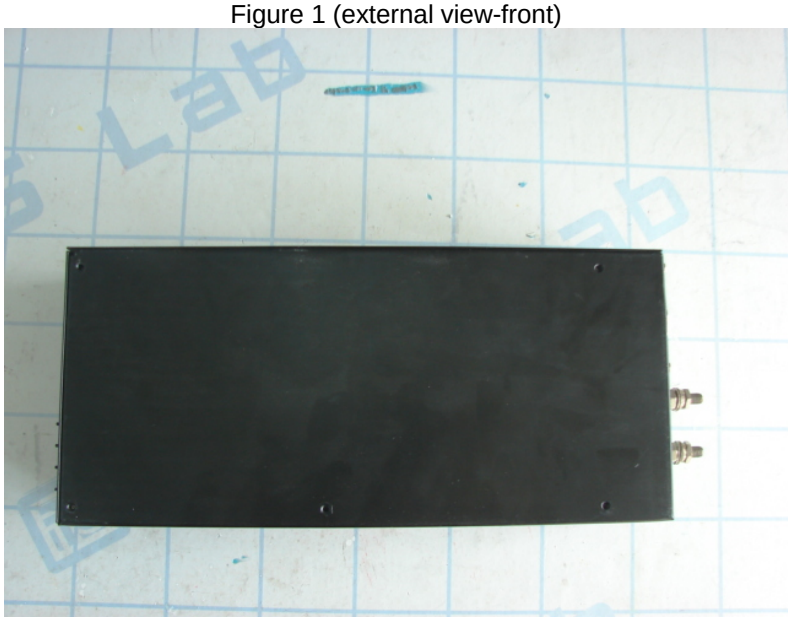

Figure 2 (external view-rear)

Type Designation: SWITCHING POWER SUPPLY; S
Report Number : CNB3150617-00301-L-D

Figure 3 (external view- side-01)

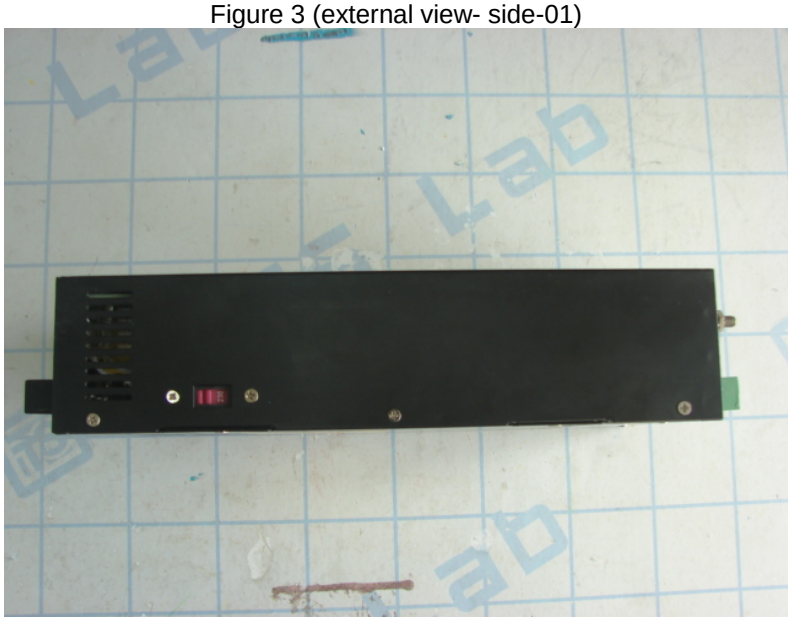

Figure 4 (external view-side-02)

Type Designation: SWITCHING POWER SUPPLY; S
Report Number : CNB3150617-00301-L-D

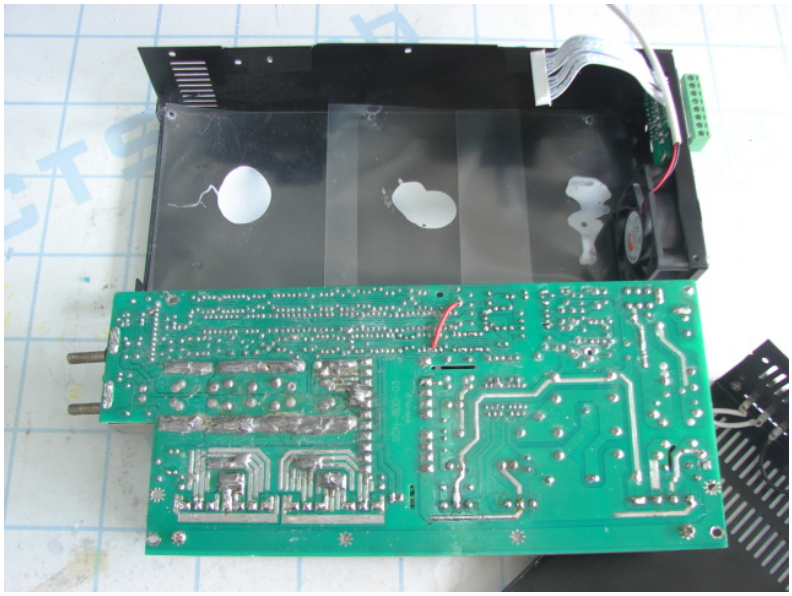

Figure 5 (PCB-view-01)

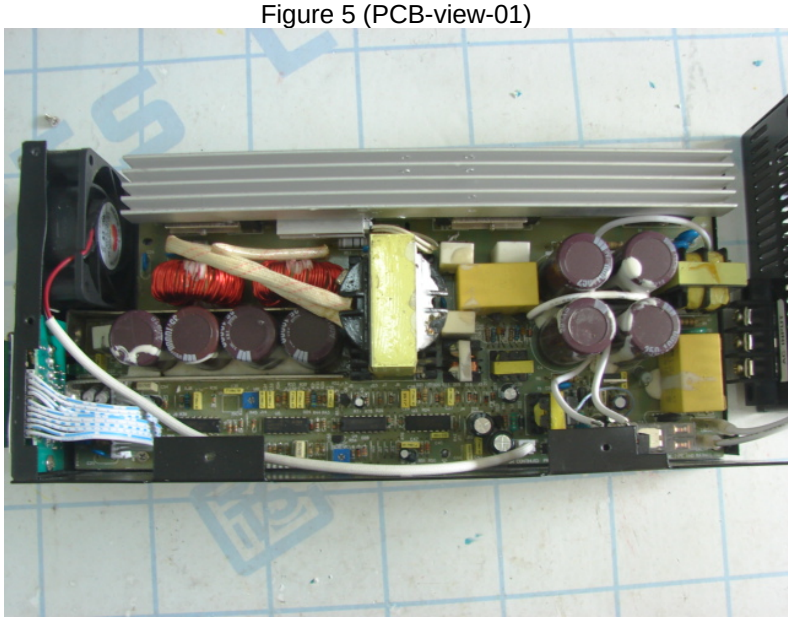

Figure 6 (internal-view-)

Type Designation: SWITCHING POWER SUPPLY; S
Report Number : CNB3150617-00301-L-D

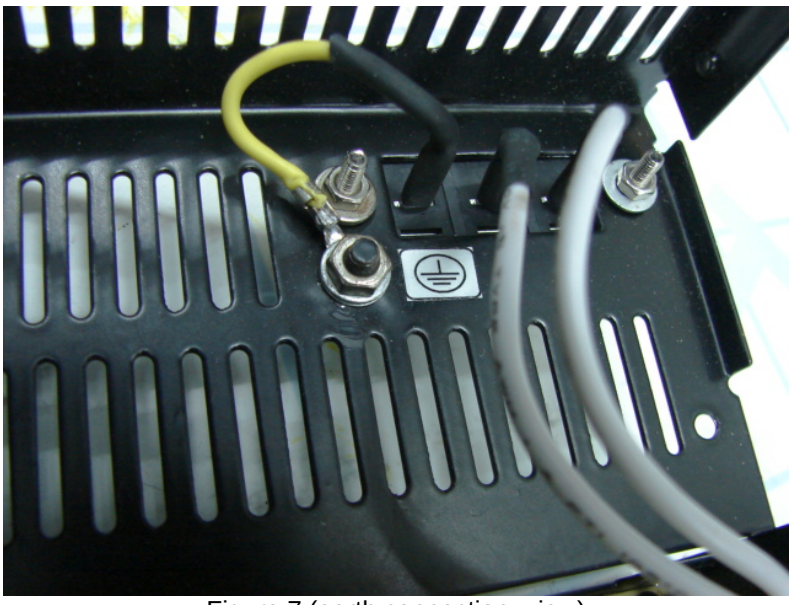

Figure 7 (earth connection -view)

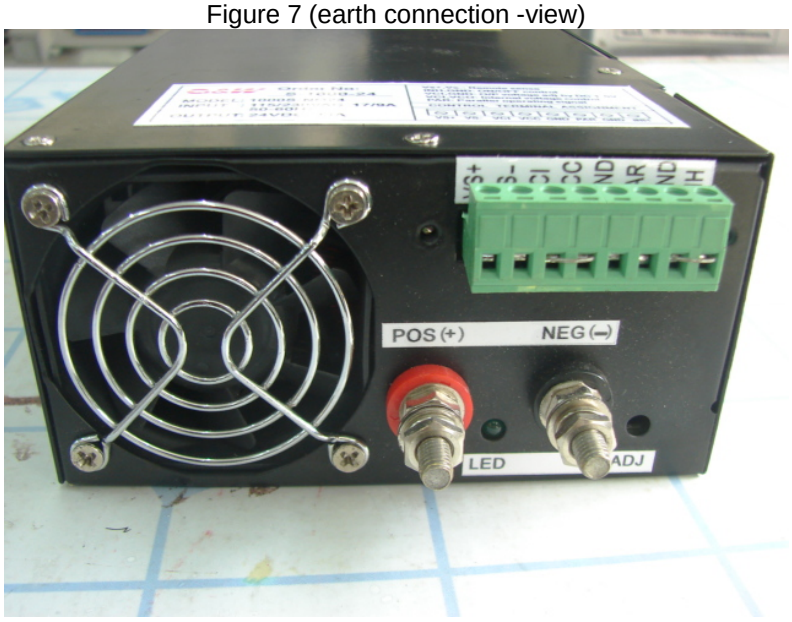

Figure 8 (external view –other side)

Type Designation: SWITCHING POWER SUPPLY; S
Report Number : CNB3150617-00301-L-D

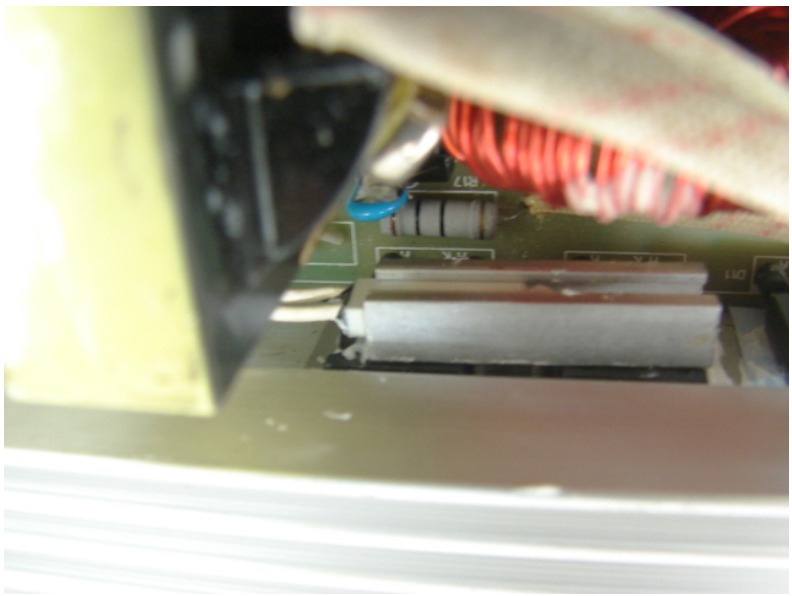

Figure 9 (thermal protector-view)