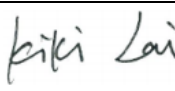
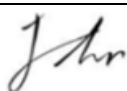




Test Report issued under the responsibility of:



TEST REPORT IEC 60950-1 Information technology equipment – Safety – Part 1: General requirements	
Report Number..... :	ESTS-P22071206
Date of issue..... :	2022-08-31
Total number of pages	80 pages
Name of Testing Laboratory preparing the Report	EST Technology Co., Ltd.
Applicant's name	Shenzhen KTC Commercial Display Technology Co., Ltd.
Address..... :	The B district of the first floor, third floor and fourth floor, 1# Building, NO. 4023, Wuhe Street, Bantian, longgang District, Shenzhen City, Guangdong Province, China
Test specification:	
Standard	IEC 60950-1:2005, AMD1:2009, AMD2:2013
Test procedure	CB Scheme
Non-standard test method	N/A
Test Report Form No. :	IEC60950_1G
Test Report Form(s) Originator :	SGS Fimko Ltd
Master TRF	Dated 2019-07-02
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If this Test Report Form is used by non-IECEE members, the IECEE/IEC logo and the reference to the CB Scheme procedure shall be removed.	
This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.	
General disclaimer:	
The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Issuing CB Testing Laboratory. The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.	

Test item description	LCD MONITOR	
Trade Mark	NEC	
Manufacturer	Sharp NEC Display Solutions, Ltd. 4-28, Mita 1-chome, Minato-ku, Tokyo, 108-0073 Japan	
Model/Type reference	E868	
Ratings	Input: 100-240V~, 50/60Hz, 3.7-1.5A	
Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):		
☒	EST Technology Co., Ltd.	EST Technology Co., Ltd.
Testing location/ address	Chilingxiang, Qishantou, Santun, Houjie, Dongguan, Guangdong, China	
Tested by (name, function, signature)	Kiki Lai/ Project handler	
Approved by (name, function, signature)...	John Lan / Reviewer	
☐	Testing procedure: CTF Stage 1:	N/A
Testing location/ address	N/A	
Tested by (name, function, signature)		
Approved by (name, function, signature)...		
☐	Testing procedure: CTF Stage 2:	N/A
Testing location/ address	N/A	
Tested by (name + signature)		
Witnessed by (name, function, signature) ..		
Approved by (name, function, signature)...		
☐	Testing procedure: CTF Stage 3:	N/A
☐	Testing procedure: CTF Stage 4:	N/A
Testing location/ address	N/A	
Tested by (name, function, signature)		
Witnessed by (name, function, signature) ..		
Approved by (name, function, signature)...		
Supervised by (name, function, signature) :		

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

- Attachment 1: Photo documentation (24 pages)
- Attachment 2: National difference (56 pages)
- Attachment 3: J3000 (H25) documentation (2 pages)

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

Clause(s)	Test(s)
1.6.2	Input Current Test
1.7.11	Durability of Marking Test
2.1.1.1	Access to energized parts
2.1.1.7	Discharge of Capacitors
2.2.2	SELV limits for Normal Conditions
2.2.3	SELV limits for Abnormal Conditions
2.4.2	Limited current circuits
2.5	Limited Power Sources
2.6.3.4	Resistance of Earthing Circuit
2.9.2	Humidity Conditioning
2.10.2	Working Voltage over Insulation
2.10.3 & 2.10.4	Clearance and creepage distance measurements
4.1	Stability
4.2.2	Steady force test, 10 N
4.2.4	Steady force test, 250 N
4.2.5	Impact Test
4.2.10	Wall and Ceiling Mounted Equipment
4.3.2	Handle loading test
4.3.8	Batteries
4.5.2	Maximum Temperature Test
4.5.5	Ball Pressure Test
5.1.6	Touch Current and PE current
5.2	Electric Strength Test
5.3	Fault Condition Test

Remark:

1. The EUT passed the above all tests.

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:

Australia, Japan, New Zealand, Singapore, United States and Canada, Korea.

- ☒ The product fulfils the requirements of Australia / New Zealand - Differences to AS/NZS 60950.1:2015
- ☒ The product fulfils the requirements of national differences for Japan according to J60950-1(H29)
- ☒ The product fulfils the requirements of national differences according to Singapore Consumer Protection (Safety Requirements) – Information Booklet - Chapter 7 (Safety Authority's Requirements)
- ☒ The product fulfils the requirements of national differences according to UL 60950-1-07 (Second Edition) + A1: 2011 + A2: 2014
- ☒ The product fulfils the requirements of national differences according to CAN/CSA-C22.2 NO. 60950-1-07, Amd 1:2011, Amd 2:2014
- ☒ The product fulfils the requirements of national differences for Korea according to K 60950-1(2011-12)

Copy of marking plate:

The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.

NEC E868

VOLTS Вольт 输入电压 輸入電壓 : 100-240V~
AMPERES Ампер 电流 電流 : 3.7-1.5A
FREQUENCY Частота 工作频率 工作頻率 : 50/60Hz

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

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

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

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

VAROITUS: LAITE ON LIITETTÄVÄ SUOJAKOSKETTIMILLA VARUSTETTUUN PISTORASIAAN.
VARNING: APPARATENS SKALL ANSLUTAS TILL JORDAT UTGÅG.
ADVASEL: APPARATET MÅ TILKOPLES JORDET STIKKONTAKT.
ADVASEL: APPARATETS STIKPROP SKAL TILSLUTTES EN STIKKONTAKT
 MED JORD SOM GIVER FORBINDELSE TIL STIKPROPPENS JORD.

⚠️ **注意:** 请勿打开后盖, 小心高压电击。机内并无用户配件。
 ⚠️ **注意:** 請勿打開後蓋, 小心高壓電擊。機內並無用戶配件。
 ⚠️ **警語:** 使用過度恐傷害視力。

사용상 주의사항 감전의 위험 및 제품의 손상이 발생할 수
 있으므로 제품의 커버를 열지 마십시오.
 인증 서비스 센터 전화 번호: 080-022-1155 (호성ITX주식회사)
 *본 라벨과 전화번호는 국내 규정 내에서 적절한 목적으로만
 사용되어야 합니다.

FCC THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES.
 OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:
 (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND
 (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED,
 INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRABLE OPERATION.
 CAN ICES-003(B) / NMB-003(B)

تنبيه
 تجنب فتح الغطاء العلوي للجهاز منعاً للتعرض لصدمة كهربائية.
 لا يحتوي الجهاز على أجزاء داخلية قابلة للصيانة من قبل المستخدم.

Manufactured under license from Dolby Laboratories. Dolby, Dolby Audio, and
 the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

LCD MONITOR

ЖК-монитор

液晶显示器 彩色显示器
 모니터 (86인치 LCD 모니터)
 (MODEL / Модель / 型号 / 型號 / 모델명 : E868)

FOR JAPAN ONLY

警告

高圧注意
サービスマン以外の方は分解しないでください。内部には高電圧部分があり、万一さわると危険です。

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

定格電圧 : 100V-240V~
 定格電流 : 3.7-1.5A
 定格周波数 : 50/60Hz

IP30

UL LISTED
 E227390
 I.T.E.

TÜV RHEINLAND
 ZERTIFIZIERT
Besert geprüft
 Sicherheit
 Regelmäßige
 Produktions-
 überwachung
 www.tuv.com
 ID 023504681

SAFETY MARK
 ??????-??

CE

UKCA

EAC

**R33051
RoHS**

VCCI

Cd

G

**Dolby
AUDIO**

HDMI

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

Contact address for EMEA
 Sharp NEC Display Solutions Europe GmbH
 Landshuter Allee 12-14, 80637 Munich, Germany

Contact address for UK
 Sharp Electronics (Europe) Limited
 4 Furzeground Way, Stockley Park, Uxbridge, Middlesex, UB11 1EZ, United Kingdom
 生產廠: 惠州市康冠科技有限公司 生產廠: 惠州市康冠科技有限公司
 生產地址: 广东省惠州市惠城区三栋镇惠南高科技产业园广泰路 38 号
 ИЗГОТОВИТЕЛЬ / 제조: HUIZHOU KTC TECHNOLOGY Co., Ltd.

Portrait

TOP

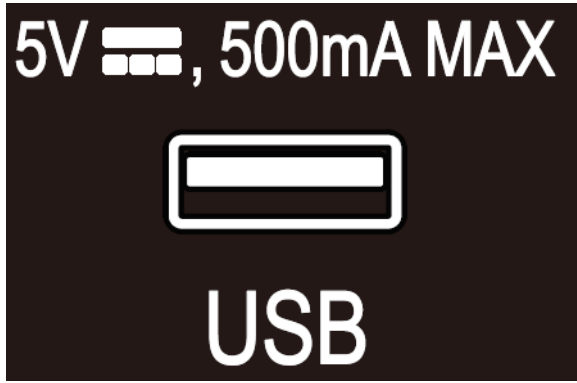
Landscape

TOP

中国制造 中國製造
 MADE IN CHINA FABRIQUE EN CHINE
 FABRICADO EN CHINA Сделано в Китае

For USB Type-C and USB Type-A ports output marking

TRF No. IEC60950_1G

 5V , 3A MAX  POWER SUPPLY OUT	 5V , 500mA MAX  USB
--	--

Note:

1. The above markings are the minimum requirements by the safety standard. For the final production samples, additional markings which do not give rise to misunderstanding may be added.
2. When this apparatus is vended to Europe, the CE marking, WEEE symbol, manufacture/import name and address should be added in the making plate, at the same time, The CE marking and WEEE symbol should be at least 5.0mm and 7.0mm respectively in height.
3. For some special national requirement, the USB ports rating shall be provided on marking but will not listed in page 2 ratings.

Test item particulars.....:	
Equipment mobility.....:	☐ movable ☐ hand-held ☐ transportable ☒ stationary ☐ for building-in ☐ direct plug-in
Connection to the mains.....:	☒ pluggable equipment ☒ type A ☐ type B ☐ permanent connection ☒ detachable power supply cord ☐ non-detachable power supply cord ☐ not directly connected to the mains
Operating condition.....:	☒ continuous ☐ rated operating / resting time:
Access location	☒ operator accessible ☐ restricted access location
Over voltage category (OVC)	☐ OVC I ☒ OVC II ☐ OVC III ☐ OVC IV ☐ other:
Mains supply tolerance (%) or absolute mains supply values	±10% (requested by client)
Tested for IT power systems	☐ Yes ☒ No
IT testing, phase-phase voltage (V)	N/A
Class of equipment	☒ Class I ☐ Class II ☐ Class III ☐ Not classified
Considered current rating of protective device as part of the building installation (A)	Building: 16A (20A for North America); Equipment: 8A
Pollution degree (PD)	☐ PD 1 ☒ PD 2 ☐ PD 3
IP protection class	IP30
Altitude during operation (m)	Up to 5000m
Altitude of test laboratory (m)	Below 2000m
Mass of equipment (kg)	Approx. 50.35kg (include stand base: 4.45kg)
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	2022-07-01
Date (s) of performance of tests	2022-07-01 to 2022-07-25
General remarks:	
"(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report. Throughout this report a ☐ comma / ☒ point is used as the decimal separator.	

Manufacturer's Declaration per sub-clause 4.2.5 of IEC60950-1:			
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided		☒ Yes ☐ Not applicable	
When differences exist; they shall be identified in the General product information section.			
Name and address of factory (ies) : 1) Huizhou KTC Technology Co., Ltd. NO.38 Guangtai Road, Huinan HI-TECH Industrial Park, Huizhou City, Guangdong Province, China 2) Shenzhen KTC Commercial Display Technology Co., Ltd. The B district of the first floor, third floor and fourth floor, 1# Building, NO. 4023, Wuhe Street, Bantian, longgang District, Shenzhen City, Guangdong Province, China			
General product information: 1. The equipment is Class I 86" LCD MONITOR. 2. The equipment is configured with following ports: HDMI1 (ARC), HDMI2, HDMI3, VGA IN, AUDIO IN, USB Type-A, LAN, RS-232C, POWER SUPPLY OUT (USB Type-C), HEADPHONE, SPDIF OUT, AV IN. 3. External metal enclosure used as fire enclosure, mechanical enclosure and electrical enclosure fixed by screws. 4. This equipment is intended to be operated under altitude up to 5000m, so the clearance is multiplied by the altitude correction factors of 1.48. 5. The suitable power supply cord shall be provided and evaluated during national approval. 6. The monitor can be used in the portrait and landscape position, and inclination angle $\pm 30^\circ$. When using the monitor in the portrait position, it should be rotated counterclockwise so that the right side is moved to the top and the left side is moved to the bottom, details see user manual. 7. The attachment of J3000(H25) is for information only. 8. For information only since the ND/GD TRF latest revision does not match the latest revision of IEC Standard TRF used for evaluation" and ND/GD TRFs attached to the CBTR. This applies for ISRAEL, China.			
Model Differences: N/A			
Abbreviations used in the report:			
- normal conditions	N.C.	- single fault conditions	S.F.C
- functional insulation	OP	- basic insulation	BI
- double insulation	DI	- supplementary insulation	SI
- between parts of opposite polarity	BOP	- reinforced insulation	RI
Indicate used abbreviations (if any)			

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
1	GENERAL		P
1.5	Components		P
1.5.1	General		P
	Comply with IEC 60950-1 or relevant component standard	(see appended tables 1.5.1)	P
1.5.2	Evaluation and testing of components	Components which are certified to IEC and/or national standards are used correctly within their ratings. Non-certified components are checked for correct application, used within their ratings, tested as part of the equipment and subjected to applicable tests of the component standard. Components not covered by IEC standards are tested under the conditions present in the equipment.	P
1.5.3	Thermal controls		N/A
1.5.4	Transformers	Transformers used are suitable for their intended application and comply with the relevant requirements of the standard and particularly Annex C in power board	P
1.5.5	Interconnecting cables		P
1.5.6	Capacitors bridging insulation	X and Y capacitor according to IEC 60384-14	P
1.5.7	Resistors bridging insulation		P
1.5.7.1	Resistors bridging functional, basic or supplementary insulation	Resistors after fuse bridging functional insulation	P
1.5.7.2	Resistors bridging double or reinforced insulation between a.c. mains and other circuits		N/A
1.5.7.3	Resistors bridging double or reinforced insulation between a.c. mains and antenna or coaxial cable		N/A
1.5.8	Components in equipment for IT power systems		N/A
1.5.9	Surge suppressors	Approved varistor used	P
1.5.9.1	General	Comply to Annex Q	P
1.5.9.2	Protection of VDRs	Protected by a current fuse before the varistor.	P
1.5.9.3	Bridging of functional insulation by a VDR	RV2 between L and N after fuse	P
1.5.9.4	Bridging of basic insulation by a VDR	No such construction	N/A

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

1.5.9.5	Bridging of supplementary, double or reinforced insulation by a VDR	No such construction	N/A
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1.6	Power interface		P
1.6.1	AC power distribution systems	TN power system	P
1.6.2	Input current	(see appended table 1.6.2)	P
1.6.3	Voltage limit of hand-held equipment	This appliance is not hand-held equipment.	N/A
1.6.4	Neutral conductor		P

1.7	Marking and instructions		P
1.7.1	Power rating and identification markings	See below	P
1.7.1.1	Power rating marking		P
	Multiple mains supply connections.....:	Single power source	N/A
	Rated voltage(s) or voltage range(s) (V)	See copy of marking plate	P
	Symbol for nature of supply, for d.c. only.....:	AC supply only.	N/A
	Rated frequency or rated frequency range (Hz) ...:	See copy of marking plate	P
	Rated current (mA or A)	See copy of marking plate	P
1.7.1.2	Identification markings		P
	Manufacturer's name or trade-mark or identification mark	See copy of marking plate	P
	Model identification or type reference	See page 2	P
	Symbol for Class II equipment only	Class I equipment	N/A
	Other markings and symbols	Additional symbol or marking does not give rise to misunderstanding.	P
1.7.1.3	Use of graphical symbols		P
1.7.2	Safety instructions and marking	English version provided. (Version in other language will be provided when submitted for national approval)	P
1.7.2.1	General		P
1.7.2.2	Disconnect devices	Appliance inlet serves as disconnect device.	N/A
1.7.2.3	Overcurrent protective device	Not such equipment.	N/A
1.7.2.4	IT power distribution systems		N/A
1.7.2.5	Operator access with a tool		N/A
1.7.2.6	Ozone	Not such equipment.	N/A
1.7.3	Short duty cycles	Equipment is designed for continuous operation.	N/A

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.7.4	Supply voltage adjustment	No voltage selector.	N/A
	Methods and means of adjustment; reference to installation instructions		N/A
1.7.5	Power outlets on the equipment	No power outlets provided.	N/A
1.7.6	Fuse identification (marking, special fusing characteristics, cross-reference)	Built-in fuse used on power board, marking provided on PCB: FP1 T8AH/ 250VAC	P
1.7.7	Wiring terminals	See only below.	P
1.7.7.1	Protective earthing and bonding terminals	Class I equipment, protective earthing symbol marked on the appliance inlet. A symbol IEC 60417-5017 (2006- 08) is marked on metal chassis adjacent to screw type protective bonding terminal.	P
1.7.7.2	Terminals for a.c. mains supply conductors	The equipment is provided with appliance inlet.	N/A
1.7.7.3	Terminals for d.c. mains supply conductors	No such terminals.	N/A
1.7.8	Controls and indicators		P
1.7.8.1	Identification, location and marking		N/A
1.7.8.2	Colours		N/A
1.7.8.3	Symbols according to IEC 60417.....	1. A two-position power switch provided, and use the symbols "I" and "O" to indicate the "ON" and "OFF" positions. 2. A stand-by switch provided, and indicated by symbol "⏻".	P
1.7.8.4	Markings using figures		N/A
1.7.9	Isolation of multiple power sources	Single power source	N/A
1.7.10	Thermostats and other regulating devices		N/A
1.7.11	Durability	The marking plate has no curling and is not able to be removed easily. Laser marking method engraved marking on enclosure. Also, maybe use with rating label instead of laser marking method.	P
1.7.12	Removable parts	No removable part	N/A
1.7.13	Replaceable batteries	Alkaline batteries for remote control is exchangeable. Warning sentence is printed in manual.	P

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Language(s)	English. Versions in other languages have to be provided during the corresponding national approvals.	—
1.7.14	Equipment for restricted access locations	Not intended for use in restricted access locations.	N/A

2	PROTECTION FROM HAZARDS		P
2.1	Protection from electric shock and energy hazards		P
2.1.1	Protection in operator access areas	No access with test finger and test pin to any parts with only basic insulation to ELV or hazardous voltage.	P
2.1.1.1	Access to energized parts	See above.	P
	Test by inspection	See above.	P
	Test with test finger (Figure 2A)	See above.	P
	Test with test pin (Figure 2B)	See above.	P
	Test with test probe (Figure 2C)	No TNV	N/A
2.1.1.2	Battery compartments	No TNV circuits within a battery compartment	N/A
2.1.1.3	Access to ELV wiring	No ELV wiring in operator accessible area.	N/A
	Working voltage (V_{peak} or V_{rms}); minimum distance through insulation (mm)		—
2.1.1.4	Access to hazardous voltage circuit wiring	No hazardous voltage wiring in operator accessible area.	N/A
2.1.1.5	Energy hazards	No energy hazard in operator access area. (see appended table 2.1.1.5.)	P
2.1.1.6	Manual controls	No conductive shafts of operating knobs, handles, levers and the like.	N/A
2.1.1.7	Discharge of capacitors in equipment		P
	Measured voltage (V); time-constant (s).....	Plug pin measured: 373Vpk, 37% V_{peak} =138.01V, Voltage measured after 1s=Max. 26V, test voltage: 264V; Overall capacity: CX3=0.68 μ F.	—
2.1.1.8	Energy hazards – d.c. mains supply	Connected to a.c. mains.	N/A
	a) Capacitor connected to the d.c. mains supply ..		N/A
	b) Internal battery connected to the d.c. mains supply :		N/A
2.1.1.9	Audio amplifiers	Comply with 2.1.1.1	P

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
2.1.2	Protection in service access areas	No operator accessible area that needs to be accessed by the use of a tool.	N/A
2.1.3	Protection in restricted access locations	Not intended for use in restricted access locations.	N/A

2.2	SELV circuits		P
2.2.1	General requirements	The secondary accessible circuits were tested as SELV. See 2.2.2 to 2.2.4.	P
2.2.2	Voltages under normal conditions (V)	Between any conductors of the SELV circuits 42.4 V peak or 60 V d.c. are not exceeded. See appended table 2.2.	P
2.2.3	Voltages under fault conditions (V)	Single fault did not cause excessive voltage in accessible SELV circuits. Limits of 71V peak and 120Vpeak. were not exceeded within 0.2 seconds and limits 42.4V peak and 60V d.c. were not exceeded for longer than 0.2 seconds.	P
2.2.4	Connection of SELV circuits to other circuits	See sub-clauses 2.2.2 and 2.2.3. No direct connection between SELV and any primary circuits.	P

2.3	TNV circuits		N/A
2.3.1	Limits		N/A
	Type of TNV circuits.....		—
2.3.2	Separation from other circuits and from accessible parts		N/A
2.3.2.1	General requirements		N/A
2.3.2.2	Protection by basic insulation		N/A
2.3.2.3	Protection by earthing		N/A
2.3.2.4	Protection by other constructions		N/A
2.3.3	Separation from hazardous voltages		N/A
	Insulation employed		—
2.3.4	Connection of TNV circuits to other circuits		N/A
	Insulation employed		—
2.3.5	Test for operating voltages generated externally		N/A

2.4	Limited current circuits		P
------------	---------------------------------	--	----------

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
2.4.1	General requirements		P
2.4.2	Limit values	0.7mA	P
	Frequency (Hz)	60	—
	Measured current (mA)	0.132mA	—
	Measured voltage (V)	0.066mV	—
	Measured circuit capacitance (nF or μ F)	CY1=680pF	—
2.4.3	Connection of limited current circuits to other circuits		P

2.5	Limited power sources		P
	a) Inherently limited output		P
	b) Impedance limited output		N/A
	c) Regulating network or IC current limiter, limits output under normal operating and single fault condition		P
	Use of integrated circuit (IC) current limiters		N/A
	d) Overcurrent protective device limited output	(see appended table 2.5)	P
	Max. output voltage (V), max. output current (A), max. apparent power (VA)	(see appended table 2.5)	—
	Current rating of overcurrent protective device (A) :	(see appended table 2.5)	—

2.6	Provisions for earthing and bonding		P
2.6.1	Protective earthing		P
2.6.2	Functional earthing		N/A
	Use of symbol for functional earthing		N/A
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	Power cord not provided	P
	Rated current (A), cross-sectional area (mm ²), AWG	Max. rated current of equipment is 3.7 A, cross-sectional area is min. 0.75 mm ² or min. 18 AWG.	—
2.6.3.3	Size of protective bonding conductors	Protective bonding conductor has sufficient current carrying capacity, also see sub-clause 2.6.3.4.	P
	Rated current (A), cross-sectional area (mm ²), AWG	See sub-clause 2.6.3.4	—
	Protective current rating (A), cross-sectional area (mm ²), AWG	See clause 2.6.3.4	—
2.6.3.4	Resistance of earthing conductors and their terminations; resistance (Ω), voltage drop (V), test	Earthing pin of appliance inlet to metal enclosure farthest:	P

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Clause	Requirement + Test	Result - Remark	Verdict
	current (A), duration (min)	0.0166Ω, 0.531V, 32A, 2mins; 0.0182Ω, 0.728V, 40A, 2mins	
2.6.3.5	Colour of insulation.....	Yellow/Green.	P
2.6.4	Terminals		P
2.6.4.1	General	The earthing terminal in the appliance inlet is regarded as the main protective earthing terminal.	P
2.6.4.2	Protective earthing and bonding terminals		P
	Rated current (A), type, nominal thread diameter (mm)	Max. rated current of equipment is 3.7 A, screw type, min. nominal thread diameter is 4.0mm.	—
2.6.4.3	Separation of the protective earthing conductor from protective bonding conductors	Protective earthing conductor is in appliance inlet, and green/yellow wire is provided for protective bonding conductor from appliance inlet to metal chassis	P
2.6.5	Integrity of protective earthing		P
2.6.5.1	Interconnection of equipment	Not depending on interconnection for protective earthing.	N/A
2.6.5.2	Components in protective earthing conductors and protective bonding conductors	No switch or overcurrent protective device in protective earthing or bonding conductor	P
2.6.5.3	Disconnection of protective earth	Appliance inlet used for disconnection of protective earth.	P
2.6.5.4	Parts that can be removed by an operator	The protective earthing connection is made earlier and broken later than the supply connection.	P
2.6.5.5	Parts removed during servicing		P
2.6.5.6	Corrosion resistance	All safety earthing connections comply with Annex J.	P
2.6.5.7	Screws for protective bonding	Self-tapping and spaced thread screws are not used to provide protective bonding	P
2.6.5.8	Reliance on telecommunication network or cable distribution system	No TNV circuit.	N/A
2.7	Overcurrent and earth fault protection in primary circuits		P

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Clause	Requirement + Test	Result - Remark	Verdict
2.7.1	Basic requirements	The equipment relies on fuse or circuit breaker of the wall outlet protection of the building installation in regard to L to N short-circuits and earth fault. A built-in fuse in power board provided as overcurrent protection device (see 5.3)	P
	Instructions when protection relies on building installation	Pluggable equipment type A.	N/A
2.7.2	Faults not simulated in 5.3.7	The protection devices are well dimensioned and mounted.	P
2.7.3	Short-circuit backup protection	Building installation is considered as providing short-circuit backup protection.	P
2.7.4	Number and location of protective devices	Overcurrent protection by one built-in fuse.	P
2.7.5	Protection by several devices	Protection provided by one fuse only	N/A
2.7.6	Warning to service personnel.....	No service work necessary.	N/A

2.8	Safety interlocks		N/A
2.8.1	General principles		N/A
2.8.2	Protection requirements		N/A
2.8.3	Inadvertent reactivation		N/A
2.8.4	Fail-safe operation		N/A
	Protection against extreme hazard		N/A
2.8.5	Moving parts		N/A
2.8.6	Overriding		N/A
2.8.7	Switches, relays and their related circuits		N/A
2.8.7.1	Separation distances for contact gaps and their related circuits (mm)		N/A
2.8.7.2	Overload test		N/A
2.8.7.3	Endurance test		N/A
2.8.7.4	Electric strength test		N/A
2.8.8	Mechanical actuators		N/A

2.9	Electrical insulation		P
2.9.1	Properties of insulating materials	Natural rubber, asbestos or hygroscopic material not used.	P
2.9.2	Humidity conditioning		P
	Relative humidity (%), temperature (°C)	93% R.H., 40°C, 120 h (By client requested)	—

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Clause	Requirement + Test	Result - Remark	Verdict
2.9.3	Grade of insulation	See above.	P
2.9.4	Separation from hazardous voltages	The adequate levels of safety insulation provided and maintained to comply with the requirements of this standard.	P
	Method(s) used	b)(Method 1) and e) (Method 3) used.	—

2.10	Clearances, creepage distances and distances through insulation		P
2.10.1	General	See below	P
2.10.1.1	Frequency	Considered	P
2.10.1.2	Pollution degrees	2	P
2.10.1.3	Reduced values for functional insulation	Considered	P
2.10.1.4	Intervening unconnected conductive parts	Considered	P
2.10.1.5	Insulation with varying dimensions	No such insulation	N/A
2.10.1.6	Special separation requirements	No such construction consideration	N/A
2.10.1.7	Insulation in circuits generating starting pulses	No such circuit.	N/A
2.10.2	Determination of working voltage		P
2.10.2.1	General	The rms and the peak voltage were measured with unit connected to a 240V TN power system.	P
2.10.2.2	RMS working voltage	(See appended table 2.10.2)	P
2.10.2.3	Peak working voltage	(See appended table 2.10.2)	P
2.10.3	Clearances	See below and advantage of annex G is not considered.	P
2.10.3.1	General	Considered.	P
2.10.3.2	Mains transient voltages		P
	a) AC mains supply	240V a.c. and Overvoltage Category II	P
	b) Earthed d.c. mains supplies		N/A
	c) Unearthed d.c. mains supplies		N/A
	d) Battery operation		N/A
2.10.3.3	Clearances in primary circuits	(see appended table 2.10.3 and 2.10.4)	P
2.10.3.4	Clearances in secondary circuits	Sub-clause 5.3.4 c) considered.	P
2.10.3.5	Clearances in circuits having starting pulses	No such circuits within equipment	N/A
2.10.3.6	Transients from a.c. mains supply	Normal transient voltage	P

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Clause	Requirement + Test	Result - Remark	Verdict
		considered (Overvoltage category II for primary circuit).	
2.10.3.7	Transients from d.c. mains supply		N/A
2.10.3.8	Transients from telecommunication networks and cable distribution systems		N/A
2.10.3.9	Measurement of transient voltage levels		N/A
	a) Transients from a mains supply		N/A
	For an a.c. mains supply		N/A
	For a d.c. mains supply		N/A
	b) Transients from a telecommunication network :		N/A
2.10.4	Creepage distances	See appended table 2.10.3 and 2.10.4.	P
2.10.4.1	General	Considered	P
2.10.4.2	Material group and comparative tracking index	Material group IIIb is assumed to be used.	P
	CTI tests	See above	—
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	See below.	P
2.10.5.2	Distances through insulation	(see appended table 2.10.5)	P
2.10.5.3	Insulating compound as solid insulation	No such construction used.	N/A
2.10.5.4	Semiconductor devices	Approved opto-couplers used	P
2.10.5.5.	Cemented joints	No such construction.	N/A
2.10.5.6	Thin sheet material – General		P
2.10.5.7	Separable thin sheet material		P
	Number of layers (pcs)	Min. 2 layers	—
2.10.5.8	Non-separable thin sheet material	Not such material.	N/A
2.10.5.9	Thin sheet material – standard test procedure		N/A
	Electric strength test		—
2.10.5.10	Thin sheet material – alternative test procedure		P
	Electric strength test	(see appended table 5.2)	—
2.10.5.11	Insulation in wound components	Approved triple insulation wire used	P
2.10.5.12	Wire in wound components		P
	Working voltage		P
	a) Basic insulation not under stress		N/A
	b) Basic, supplementary, reinforced insulation		N/A
	c) Compliance with Annex U	(see Annex U)	P

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Clause	Requirement + Test	Result - Remark	Verdict
	Two wires in contact inside wound component; angle between 45° and 90°	By tube and insulation tape	P
2.10.5.13	Wire with solvent-based enamel in wound components		N/A
	Electric strength test		—
	Routine test		N/A
2.10.5.14	Additional insulation in wound components		P
	Working voltage	See appended table C.2 in Measurement Section.	P
	- Basic insulation not under stress	Considered.	P
	- Supplementary, reinforced insulation	See sub-clause 2.10.5.2 and 2.10.5.6	P
2.10.6	Construction of printed boards	See below.	P
2.10.6.1	Uncoated printed boards	(see appended table 2.10.3 and 2.10.4)	P
2.10.6.2	Coated printed boards	No coated printed boards.	N/A
2.10.6.3	Insulation between conductors on the same inner surface of a printed board	No multi-layer PCBs provided.	N/A
2.10.6.4	Insulation between conductors on different layers of a printed board	No multi-layer PCBs provided.	N/A
	Distance through insulation		N/A
	Number of insulation layers (pcs).....	Single layer PCB	N/A
2.10.7	Component external terminations		N/A
2.10.8	Tests on coated printed boards and coated components	No such boards and components	N/A
2.10.8.1	Sample preparation and preliminary inspection		N/A
2.10.8.2	Thermal conditioning		N/A
2.10.8.3	Electric strength test		N/A
2.10.8.4	Abrasion resistance test		N/A
2.10.9	Thermal cycling		N/A
2.10.10	Test for Pollution Degree 1 environment and insulating compound		N/A
2.10.11	Tests for semiconductor devices and cemented joints		N/A
2.10.12	Enclosed and sealed parts	No hermetically sealed component.	N/A
3	WIRING, CONNECTIONS AND SUPPLY		P
3.1	General		P

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Clause	Requirement + Test	Result - Remark	Verdict
3.1.1	Current rating and overcurrent protection	All internal wires are UL recognized. Cross-sectional area of internal wiring is suitable for current intended to be carried.	P
3.1.2	Protection against mechanical damage	Wires do not touch sharp edges which could damage the insulation and cause hazard.	P
3.1.3	Securing of internal wiring	The wires are secured by quick connector so that a loosening of the terminal connection is unlikely	P
3.1.4	Insulation of conductors	The insulation of the individual conductors suitable for the application and the working voltage. For the insulation material see 3.1.1.	P
3.1.5	Beads and ceramic insulators	Not used.	N/A
3.1.6	Screws for electrical contact pressure	No such screws provided.	N/A
3.1.7	Insulating materials in electrical connections	All current carrying connections are metal to metal.	N/A
3.1.8	Self-tapping and spaced thread screws	No self-tapping screws are used.	N/A
3.1.9	Termination of conductors	All conductors are reliable secured.	P
	10 N pull test	Force of 10 N applied to the termination points of the conductors.	P
3.1.10	Sleeving on wiring		N/A

3.2	Connection to a mains supply		P
3.2.1	Means of connection		P
3.2.1.1	Connection to an a.c. mains supply	Appliance inlet provided.	P
3.2.1.2	Connection to a d.c. mains supply		N/A
3.2.2	Multiple supply connections	Only one supply connection.	N/A
3.2.3	Permanently connected equipment	Not permanently connected equipment.	N/A
	Number of conductors, diameter of cable and conduits (mm)		—
3.2.4	Appliance inlets	Approved appliance inlet used.	P
3.2.5	Power supply cords		P
3.2.5.1	AC power supply cords		P
	Type	(See appended table 1.5.1)	—

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Clause	Requirement + Test	Result - Remark	Verdict
	Rated current (A), cross-sectional area (mm ²), AWG	(See appended table 1.5.1)	—
3.2.5.2	DC power supply cords	AC Source.	N/A
3.2.6	Cord anchorages and strain relief		N/A
	Mass of equipment (kg), pull (N)		—
	Longitudinal displacement (mm)		—
3.2.7	Protection against mechanical damage		N/A
3.2.8	Cord guards	No cord guards	N/A
	Diameter or minor dimension D (mm); test mass (g)		—
	Radius of curvature of cord (mm)		—
3.2.9	Supply wiring space	Not permanent connection or non-detachable power cord type.	N/A

3.3	Wiring terminals for connection of external conductors		N/A
3.3.1	Wiring terminals		N/A
3.3.2	Connection of non-detachable power supply cords		N/A
3.3.3	Screw terminals		N/A
3.3.4	Conductor sizes to be connected		N/A
	Rated current (A), cord/cable type, cross-sectional area (mm ²)		—
3.3.5	Wiring terminal sizes		N/A
	Rated current (A), type, nominal thread diameter (mm)		—
3.3.6	Wiring terminal design		N/A
3.3.7	Grouping of wiring terminals		N/A
3.3.8	Stranded wire		N/A

3.4	Disconnection from the mains supply		P
3.4.1	General requirement	Disconnect device provided.	P
3.4.2	Disconnect devices	Appliance inlet used as disconnect device.	P
3.4.3	Permanently connected equipment	Not permanently connected equipment.	N/A
3.4.4	Parts which remain energized	There is no parts remained with hazardous voltage or energy in the equipment when equipment is separated from AC mains.	N/A
3.4.5	Switches in flexible cords	No flexible cords.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
3.4.6	Number of poles - single-phase and d.c. equipment	The coupler disconnects both poles simultaneously.	P
3.4.7	Number of poles - three-phase equipment	Single phase equipment.	N/A
3.4.8	Switches as disconnect devices		N/A
3.4.9	Plugs as disconnect devices		N/A
3.4.10	Interconnected equipment	No interconnections using hazardous voltages.	N/A
3.4.11	Multiple power sources	Only one supply connection provided.	N/A

3.5	Interconnection of equipment		P
3.5.1	General requirements	This power supply is not considered for connection to TNV.	P
3.5.2	Types of interconnection circuits	Interconnection circuits of SELV through the connectors. No ELV interconnection circuits.	P
3.5.3	ELV circuits as interconnection circuits	No ELV interconnection	N/A
3.5.4	Data ports for additional equipment	Data ports is supplied by a limited power source that complies with subclause 2.5.	P

4	PHYSICAL REQUIREMENTS		P
4.1	Stability		P
	Angle of 10°	This appliance is of a stable mechanical construction and does not overbalance when tilted to an angle of 10° from its normal upright position.	P
	Test force (N)	Equipment is not a floor standing unit.	N/A

4.2	Mechanical strength		P
4.2.1	General	See below. After tests, unit comply with 2.1.1, 2.6.1, 2.10 and 4.4.1.	P
	Rack-mounted equipment.		N/A
4.2.2	Steady force test, 10 N	10N applied to components other than parts serving as an enclosure.	P
4.2.3	Steady force test, 30 N	No internal enclosure.	N/A
4.2.4	Steady force test, 250 N	250N applied to enclosure. No energy or other hazards.	P

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Clause	Requirement + Test	Result - Remark	Verdict
4.2.5	Impact test	1.3m, 500g, 3times, After the test, no damage to insulation. No energy hazards or damage to the enclosure integrity was observed.	P
	Fall test		P
	Swing test		N/A
4.2.6	Drop test; height (mm)		N/A
4.2.7	Stress relief test		N/A
4.2.8	Cathode ray tubes	No CRT in the unit.	N/A
	Picture tube separately certified		N/A
4.2.9	High pressure lamps	No high pressure lamp provided.	N/A
4.2.10	Wall or ceiling mounted equipment; force (N)	An additional force of 137.7Kg*9.8N/kg=1350N (3 times the mass of the unit) was applied	P

4.3	Design and construction		P
4.3.1	Edges and corners	Edges and corners of the enclosure are rounded.	P
4.3.2	Handles and manual controls; force (N)	For UL 60950-1: Total force: 50.35kg x 4 x 9.8kg/N=1974N. 1) Tested for each of four handles: 494N; 2) Tested for each of two eyebolt brackets: 987N.	P
4.3.3	Adjustable controls	No such controls provided.	N/A
4.3.4	Securing of parts	All parts secured properly. Spring washers used for securing screws which are for earthing purpose.	P
4.3.5	Connection by plugs and sockets		P
4.3.6	Direct plug-in equipment	Not such equipment.	N/A
	Torque		—
	Compliance with the relevant mains plug standard		N/A
4.3.7	Heating elements in earthed equipment	No heating elements provided.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
4.3.8	Batteries	Alkaline batteries are considered safe under short circuiting conditions and therefore are not tested for discharge; nor are such batteries tested for leakage under storage conditions. Ultracapacitor (RTC cap. CSE1 on main board) are rechargeable. See below for details.	P
	- Overcharging of a rechargeable battery	See table 4.3.8	P
	- Unintentional charging of a non-rechargeable battery		N/A
	- Reverse charging of a rechargeable battery		N/A
	- Excessive discharging rate for any battery	See table 4.3.8	P
4.3.9	Oil and grease	No heating elements provided.	N/A
4.3.10	Dust, powders, liquids and gases	Equipment in intended use not considered to be exposed to these.	N/A
4.3.11	Containers for liquids or gases	No container for liquid or gas.	N/A
4.3.12	Flammable liquids	No such flammable liquid.	N/A
	Quantity of liquid (l)		N/A
	Flash point (°C)		N/A
4.3.13	Radiation		P
4.3.13.1	General	See 4.3.13.5	P
4.3.13.2	Ionizing radiation		N/A
	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	Not emit significant UV significant radiation	N/A
	Part, property, retention after test, flammability classification		N/A
4.3.13.4	Human exposure to ultraviolet (UV) radiation		N/A
4.3.13.5	Lasers (including laser diodes) and LEDs		P
4.3.13.5.1	Lasers (including laser diodes)		N/A
	Laser class		—

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Clause	Requirement + Test	Result - Remark	Verdict
4.3.13.5.2	Light emitting diodes (LEDs)	1) The LED only used for indicating, which is considered as low power & inherently exempt group according to IEC 62471. 2) The luminance of LED panel does not exceed 10^4 cd/m ² , the radiation does not exceed the exposure limits given in 4.3 of IEC 62471:2006	—
4.3.13.6	Other types		N/A

4.4	Protection against hazardous moving parts		N/A
4.4.1	General	No moving parts	N/A
4.4.2	Protection in operator access areas		N/A
	Household and home/office document/media shredders		N/A
4.4.3	Protection in restricted access locations		N/A
4.4.4	Protection in service access areas		N/A
4.4.5	Protection against moving fan blades		N/A
4.4.5.1	General		N/A
	Not considered to cause pain or injury. a).....		N/A
	Is considered to cause pain, not injury. b)		N/A
	Considered to cause injury. c)		N/A
4.4.5.2	Protection for users		N/A
	Use of symbol or warning		N/A
4.4.5.3	Protection for service persons		N/A
	Use of symbol or warning		N/A

4.5	Thermal requirements		P
4.5.1	General	No exceeding temperature.	P
4.5.2	Temperature tests	(see appended table 4.5)	P
	Normal load condition per Annex L	(see appended table 1.6.2)	—
4.5.3	Temperature limits for materials	(see appended table 4.5)	P
4.5.4	Touch temperature limits	(see appended table 4.5)	P
4.5.5	Resistance to abnormal heat	(see appended table 4.5.5)	P

4.6	Openings in enclosures		P
4.6.1	Top and side openings		P

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Clause	Requirement + Test	Result - Remark	Verdict
	Dimensions (mm)	1) For all operating position, no openings exceed 5 mm in any dimension: Round holes diameter with approx. 2.4mm and 1.8mm. 2) For all operating position, no portion of the side of metal fire enclosure falls within the area traced out by the 5° angle in Figure 4E	—
4.6.2	Bottoms of fire enclosures		P
	Construction of the bottom, dimensions (mm) ..	For all operating position, metal bottoms of fire enclosures conforming to the dimensional limits of line 5 in Table 4D (Metal bottom minimum thickness: 0.81mm, Maximum diameter of holes: 1.8mm, Minimum spacing of holes centre to centre: 3.1mm)	—
4.6.3	Doors or covers in fire enclosures		N/A
4.6.4	Openings in transportable equipment	Not transportable equipment.	N/A
4.6.4.1	Constructional design measures		N/A
	Dimensions (mm)		—
4.6.4.2	Evaluation measures for larger openings		N/A
4.6.4.3	Use of metallized parts		N/A
4.6.5	Adhesives for constructional purposes	No adhesives for constructional purposes.	N/A
	Conditioning temperature (°C), time (weeks).....		—

4.7	Resistance to fire		P
4.7.1	Reducing the risk of ignition and spread of flame	Use of materials with the required flammability classes.	P
	Method 1, selection and application of components wiring and materials	(see appended table 4.7)	P
	Method 2, application of all of simulated fault condition tests		N/A
4.7.2	Conditions for a fire enclosure		P
4.7.2.1	Parts requiring a fire enclosure	With having the following parts: • Components in primary • Components in secondary (not supplied by LPS, and not applied all fault condition test). Fire enclosure necessary. All of the components are covered by fire enclosure: metal enclosure	P

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Clause	Requirement + Test	Result - Remark	Verdict
4.7.2.2	Parts not requiring a fire enclosure		P
4.7.3	Materials		P
4.7.3.1	General	PCB rated V-1 or better.	P
4.7.3.2	Materials for fire enclosures	Metal enclosure used as fire enclosure	P
4.7.3.3	Materials for components and other parts outside fire enclosures		P
4.7.3.4	Materials for components and other parts inside fire enclosures	Internal components except small parts are V-2, HF-2 or better.	P
4.7.3.5	Materials for air filter assemblies	No air filter assemblies	N/A
4.7.3.6	Materials used in high-voltage components	No high-voltage components used.	N/A

5	ELECTRICAL REQUIREMENTS AND SIMULATED ABNORMAL CONDITIONS		P
5.1	Touch current and protective conductor current		P
5.1.1	General	See sub-clauses 5.1.2 to 5.1.7.	P
5.1.2	Configuration of equipment under test (EUT)	EUT has only one mains connection.	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		N/A
5.1.2.3	Simultaneous multiple connections to an a.c. mains supply		N/A
5.1.3	Test circuit	Equipment of figure 5A used.	P
5.1.4	Application of measuring instrument	Using measuring instrument in annex D.	P
5.1.5	Test procedure	Applied.	P
5.1.6	Test measurements	See appended table 5.1	P
	Supply voltage (V)	See appended table 5.1	—
	Measured touch current (mA)	See appended table 5.1	—
	Max. allowed touch current (mA)	See appended table 5.1	—
	Measured protective conductor current (mA)	See appended table 5.1	—
	Max. allowed protective conductor current (mA)...	See appended table 5.1	—
5.1.7	Equipment with touch current exceeding 3,5 mA	Touch current does not exceed 3.5mA.	N/A
5.1.7.1	General		N/A
5.1.7.2	Simultaneous multiple connections to the supply		N/A
5.1.8	Touch currents to telecommunication networks and cable distribution systems and from telecommunication networks	No TNV.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
5.1.8.1	Limitation of the touch current to a telecommunication network or to a cable distribution system		N/A
	Supply voltage (V)		—
	Measured touch current (mA)		—
	Max. allowed touch current (mA)		—
5.1.8.2	Summation of touch currents from telecommunication networks		N/A
	a) EUT with earthed telecommunication ports		N/A
	b) EUT whose telecommunication ports have no reference to protective earth		N/A
5.2	Electric strength		P
5.2.1	General	(see appended table 5.2)	P
5.2.2	Test procedure	(see appended table 5.2)	P
5.3	Abnormal operating and fault conditions		P
5.3.1	Protection against overload and abnormal operation	(see appended table 5.3)	P
5.3.2	Motors		N/A
5.3.3	Transformers	(see appended Annex C and table 5.3)	P
5.3.4	Functional insulation	By short-circuited, results see appended table 5.3.	P
5.3.5	Electromechanical components	No electromechanical component.	N/A
5.3.6	Audio amplifiers in ITE	(see appended table 5.3.)	P
5.3.7	Simulation of faults	(see appended table 5.3.)	P
5.3.8	Unattended equipment	No such equipment.	N/A
5.3.9	Compliance criteria for abnormal operating and fault conditions	(see appended table 5.3.)	P
5.3.9.1	During the tests	No fire occurred beyond the equipment, no molten metal emitted and no deformation of enclosure.	P
5.3.9.2	After the tests	Electric strength test made.	P
6	CONNECTION TO TELECOMMUNICATION NETWORKS		N/A
6.1	Protection of telecommunication network service persons, and users of other equipment connected to the network, from hazards in the equipment		N/A
6.1.1	Protection from hazardous voltages		N/A
6.1.2	Separation of the telecommunication network from earth		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
6.1.2.1	Requirements		N/A
	Supply voltage (V)		—
	Current in the test circuit (mA)		—
6.1.2.2	Exclusions		N/A
6.2	Protection of equipment users from overvoltages on telecommunication networks		N/A
6.2.1	Separation requirements		N/A
6.2.2	Electric strength test procedure		N/A
6.2.2.1	Impulse test		N/A
6.2.2.2	Steady-state test		N/A
6.2.2.3	Compliance criteria		N/A
6.3	Protection of the telecommunication wiring system from overheating		N/A
	Max. output current (A)		—
	Current limiting method		—
7	CONNECTION TO CABLE DISTRIBUTION SYSTEMS		N/A
7.1	General		N/A
7.2	Protection of cable distribution system service persons, and users of other equipment connected to the system, from hazardous voltages in the equipment		N/A
7.3	Protection of equipment users from overvoltages on the cable distribution system		N/A
7.4	Insulation between primary circuits and cable distribution systems		N/A
7.4.1	General		N/A
7.4.2	Voltage surge test		N/A
7.4.3	Impulse test		N/A
A	ANNEX A, TESTS FOR RESISTANCE TO HEAT AND FIRE		N/A
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
A.1.1	Samples		—
	Wall thickness (mm).....		—
A.1.2	Conditioning of samples; temperature (°C)		N/A
A.1.3	Mounting of samples		N/A
A.1.4	Test flame (see IEC 60695-11-3)		N/A
	Flame A, B, C or D		—

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
A.1.5	Test procedure		N/A
A.1.6	Compliance criteria		N/A
	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
A.2.1	Samples, material :		—
	Wall thickness (mm)..... :		—
A.2.2	Conditioning of samples; temperature (°C) :		
A.2.3	Mounting of samples :		N/A
A.2.4	Test flame (see IEC 60695-11-4)		N/A
	Flame A, B or C :		—
A.2.5	Test procedure		N/A
A.2.6	Compliance criteria		N/A
	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/A
	Sample 1 burning time (s)..... :		—
	Sample 2 burning time (s)..... :		—
	Sample 3 burning time (s)..... :		—
A.3	Hot flaming oil test (see 4.6.2)		N/A
A.3.1	Mounting of samples		N/A
A.3.2	Test procedure		N/A
A.3.3	Compliance criterion		N/A
B	ANNEX B, MOTOR TESTS UNDER ABNORMAL CONDITIONS (see 4.7.2.2 and 5.3.2)		N/A
B.1	General requirements		N/A
	Position :		—
	Manufacturer :		—
	Type :		—
	Rated values :		—
B.2	Test conditions		N/A
B.3	Maximum temperatures		N/A
B.4	Running overload test		N/A

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
B.5	Locked-rotor overload test		N/A
	Test duration (days)		—
	Electric strength test: test voltage (V)		—
B.6	Running overload test for d.c. motors in secondary circuits		N/A
B.6.1	General		N/A
B.6.2	Test procedure		N/A
B.6.3	Alternative test procedure		N/A
B.6.4	Electric strength test; test voltage (V)		N/A
B.7	Locked-rotor overload test for d.c. motors in secondary circuits		N/A
B.7.1	General		N/A
B.7.2	Test procedure		N/A
B.7.3	Alternative test procedure		N/A
B.7.4	Electric strength test; test voltage (V)		N/A
B.8	Test for motors with capacitors		N/A
B.9	Test for three-phase motors		N/A
B.10	Test for series motors		N/A
	Operating voltage (V)		—

C	ANNEX C, TRANSFORMERS (see 1.5.4 and 5.3.3)		P
	Position	See table 1.5.1	—
	Manufacturer	See table 1.5.1	—
	Type	See table 1.5.1	—
	Rated values	See table 1.5.1	—
	Method of protection	By protection circuit	—
C.1	Overload test	(see appended table 5.3)	P
C.2	Insulation	See below	P
	Protection from displacement of windings	By bobbin, margin tape and insulation tape	P

D	ANNEX D, MEASURING INSTRUMENTS FOR TOUCH-CURRENT TESTS (see 5.1.4)		P
D.1	Measuring instrument		P
D.2	Alternative measuring instrument		N/A

E	ANNEX E, TEMPERATURE RISE OF A WINDING (see 1.4.13)		N/A
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IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

F	ANNEX F, MEASUREMENT OF CLEARANCES AND CREEPAGE DISTANCES (see 2.10 and Annex G)		P
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G	ANNEX G, ALTERNATIVE METHOD FOR DETERMINING MINIMUM CLEARANCES		N/A
G.1	Clearances		N/A
G.1.1	General		N/A
G.1.2	Summary of the procedure for determining minimum clearances		N/A
G.2	Determination of mains transient voltage (V)		N/A
G.2.1	AC mains supply		N/A
G.2.2	Earthed d.c. mains supplies		N/A
G.2.3	Unearthed d.c. mains supplies		N/A
G.2.4	Battery operation		N/A
G.3	Determination of telecommunication network transient voltage (V)		N/A
G.4	Determination of required withstand voltage (V)		N/A
G.4.1	Mains transients and internal repetitive peaks		N/A
G.4.2	Transients from telecommunication networks		N/A
G.4.3	Combination of transients		N/A
G.4.4	Transients from cable distribution systems		N/A
G.5	Measurement of transient voltages (V)		N/A
	a) Transients from a mains supply		N/A
	For an a.c. mains supply		N/A
	For a d.c. mains supply		N/A
	b) Transients from a telecommunication network		N/A
G.6	Determination of minimum clearances		N/A

H	ANNEX H, IONIZING RADIATION (see 4.3.13)		N/A
J	ANNEX J, TABLE OF ELECTROCHEMICAL POTENTIALS (see 2.6.5.6)		P
	Metal(s) used	The combined electrochemical potential is below 0.6 V.	—

K	ANNEX K, THERMAL CONTROLS (see 1.5.3 and 5.3.8)		N/A
K.1	Making and breaking capacity		N/A
K.2	Thermostat reliability; operating voltage (V)		N/A
K.3	Thermostat endurance test; operating voltage (V)		N/A
K.4	Temperature limiter endurance; operating voltage (V)		N/A

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

K.5	Thermal cut-out reliability		N/A
K.6	Stability of operation		N/A

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/A
L.2	Adding machines and cash registers		N/A
L.3	Erasers		N/A
L.4	Pencil sharpeners		N/A
L.5	Duplicators and copy machines		N/A
L.6	Motor-operated files		N/A
L.7	Other business equipment	(See 1.6.2)	P

M	ANNEX M, CRITERIA FOR TELEPHONE RINGING SIGNALS (see 2.3.1)		N/A
M.1	Introduction		N/A
M.2	Method A		N/A
M.3	Method B		N/A
M.3.1	Ringing signal		N/A
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/A
M.3.2.1	Conditions for use of a tripping device or a monitoring voltage		N/A
M.3.2.2	Tripping device		N/A
M.3.2.3	Monitoring voltage (V)		N/A

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/A
N.1	ITU-T impulse test generators		N/A
N.2	IEC 60065 impulse test generator		N/A

P	ANNEX P, NORMATIVE REFERENCES		—
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Q	ANNEX Q, Voltage dependent resistors (VDRs) (see 1.5.9.1)		P
	- Preferred climatic categories	See table 1.5.1	P
	- Maximum continuous voltage	See table 1.5.1	P

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Clause	Requirement + Test	Result - Remark	Verdict
	- Combination pulse current	See table 1.5.1	P
	Body of the VDR Test according to IEC60695-11-5.....		N/A
	Body of the VDR. Flammability class of material (min V-1).....	See table 1.5.1	P
R	ANNEX R, EXAMPLES OF REQUIREMENTS FOR QUALITY CONTROL PROGRAMMES		N/A
R.1	Minimum separation distances for unpopulated coated printed boards (see 2.10.6.2)		N/A
R.2	Reduced clearances (see 2.10.3)		N/A
S	ANNEX S, PROCEDURE FOR IMPULSE TESTING (see 6.2.2.3)		N/A
S.1	Test equipment		N/A
S.2	Test procedure		N/A
S.3	Examples of waveforms during impulse testing		N/A
T	ANNEX T, GUIDANCE ON PROTECTION AGAINST INGRESS OF WATER (see 1.1.2)		N/A
		See separate test report	—
U	ANNEX U, INSULATED WINDING WIRES FOR USE WITHOUT INTERLEAVED INSULATION (see 2.10.5.4)		P
		Certified triple insulated wire used.	—
V	ANNEX V, AC POWER DISTRIBUTION SYSTEMS (see 1.6.1)		P
V.1	Introduction		P
V.2	TN power distribution systems		P
W	ANNEX W, SUMMATION OF TOUCH CURRENTS		N/A
W.1	Touch current from electronic circuits		N/A
W.1.1	Floating circuits		N/A
W.1.2	Earthed circuits		N/A
W.2	Interconnection of several equipments		N/A
W.2.1	Isolation		N/A
W.2.2	Common return, isolated from earth		N/A
W.2.3	Common return, connected to protective earth		N/A

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
X	ANNEX X, MAXIMUM HEATING EFFECT IN TRANSFORMER TESTS (see clause C.1)		N/A
X.1	Determination of maximum input current		N/A
X.2	Overload test procedure		N/A
Y	ANNEX Y, ULTRAVIOLET LIGHT CONDITIONING TEST (see 4.3.13.3)		N/A
Y.1	Test apparatus		N/A
Y.2	Mounting of test samples		N/A
Y.3	Carbon-arc light-exposure apparatus		N/A
Y.4	Xenon-arc light exposure apparatus		N/A
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/A
BB	ANNEX BB, CHANGES IN THE SECOND EDITION		N/A
CC	ANNEX CC, Evaluation of integrated circuit (IC) current limiters		N/A
CC.1	General		N/A
CC.2	Test program 1.....		N/A
CC.3	Test program 2.....		N/A
CC.4	Test program 3.....		N/A
CC.5	Compliance.....		N/A
DD	ANNEX DD, Requirements for the mounting means of rack-mounted equipment		N/A
DD.1	General		N/A
DD.2	Mechanical strength test, variable N.....		N/A
DD.3	Mechanical strength test, 250N, including end stops.....		N/A
DD.4	Compliance.....		N/A
EE	ANNEX EE, Household and home/office document/media shredders		N/A
EE.1	General		N/A
EE.2	Markings and instructions		N/A
	Use of markings or symbols.....		N/A
	Information of user instructions, maintenance and/or servicing instructions.....		N/A
EE.3	Inadvertent reactivation test.....		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
EE.4	Disconnection of power to hazardous moving parts:		N/A
	Use of markings or symbols.....:		N/A
EE.5	Protection against hazardous moving parts		N/A
	Test with test finger (Figure 2A):		N/A
	Test with wedge probe (Figure EE1 and EE2):		N/A

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

1.5.1	TABLE: List of critical components					P
Object/part No.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s) of conformity ¹⁾	
Mains cord set (Saudi Arabia) (Optional)	--	--	--	--	--	
Plug	I-Sheng	SP-62	3A/5A/10A/13A, 250V	BS 1363-1; SASO 2203:2018	CVC	
(Alternative)	I-Sheng	SP-65	3A/5A/10A, 250V	BS 1363-1; SASO 2203:2018	CVC	
(Alternative)	Interchangeable	Interchangeabl e	3A/5A/10A/13A, 250V	BS 1363-1; SASO 2203:2018	CVC or other certification marks	
Cord	I-Sheng	H05VV-F	3X0.75mm ² , 3X1.0mm ² , 3X1.5mm ²	EN 50525-2-11; IEC 60227-5	VDE	
(Alternative)	I-Sheng	H03VV-F	3X0.75mm ²	EN 50525-2-11; IEC 60227-5	VDE	
(Alternative)	I-Sheng	H05RR-F	3X0.75mm ²	EN 50525-2-21; IEC 60245-4	VDE	
(Alternative)	Interchangeable	Interchangeabl e	3X0.75mm ² , 3X1.0mm ² , 3X1.5mm ²	EN 50525-2-11; IEC 60227-5; IEC 60245-4	VDE or other certification marks	
Connector	I-Sheng	IS-14	10A, 250Vac	IEC 60320-1	ENEC	
(Alternative)	Interchangeable	Interchangeabl e	10A, 250Vac	IEC 60320-1	ENEC or other certification marks	
Metal enclosure	Interchangeable	Interchangeabl e	Min. 0.81mm thickness	--	--	
Base stand (optional)	Interchangeable	Interchangeabl e	Metal, two provided,	--	--	
LCD panel	SHENZHEN KTC COMMERCIAL DISPLAY TECHNOLOGY CO., LTD	K860WD97	85.6 inch TFT LCD, with LED backlight, Power consumption: Total 228.5W(Typ.)[Logic 9.6W(mosaic 7X5)/BL 218.9W]	IEC 60950-1	Tested with appliance	
Speaker	Interchangeable	Interchangeabl e	Two speakers, each 6 ohm, 12W max.	--	--	
AC inlet (CN1)	Zhe Jiang Bei Er Jia Electronic Co., Ltd.	ST-A01-001L, ST-A01-002L, ST-A01-003J, ST-A01-003K	10A, 250Vac, Standard sheet C14 type, min. 70°C	IEC/EN/UL 60320- 1	VDE, UL	

IEC 60950-1					
Clause	Requirement + Test		Result - Remark		Verdict
(Alternative)	Zhe Jiang Bei Er Jia Electronic Co., Ltd.	ST-A01-003JC, ST-A01-003JD, ST-A01-003JE, ST-A01-003JK, ST-A01-003JL	10A, 250Vac, Standard sheet C14 type, min. 70°C	IEC/EN/UL 60320-1	VDE, UL
(Alternative)	LECI Electronics Co., Ltd	DB-14, DB-14-1, DB-14-2, DB-14-3, DB-14-5	10A, 250Vac, Standard sheet C14 type, min. 70°C	IEC/EN/UL 60320-1	VDE, UL
(Alternative)	Yueqing Yanhui Electronic Co., Ltd	DB-14	10A, 250Vac, Standard sheet C14 type, min. 70°C	IEC/EN/UL 60320-1	VDE, UL
(Alternative)	Steady Electronics Corporation	2107	10A, 250Vac, Standard sheet C14 type, min. 70°C	IEC/EN/UL 60320-1	VDE, UL
Power switch	ZHE JIANG BEI ER JIA ELECTRONIC CO LTD	PS8A	VDE: 6(4)A, 250Vac; UL: 8A 250Vac, 10A 125Vac; min. 105°C, Endurance minimum 10000 cycle, PD2, Glow-wire test 850°C	IEC/EN 61058-1; UL 61058-1	VDE, UL
(Alternative)	ZHE JIANG BEI ER JIA ELECTRONIC CO LTD	PS8A-11	VDE: 12(4)A 250Vac, 8A/108A 250Vac; UL: 12(6)A, 125/250Vac; min. 125°C, Endurance minimum 10000 cycle, PD2, Glow-wire test 850°C	IEC/EN 61058-1; UL 61058-1	VDE, UL
(Alternative)	Zhejiang Yuyang Technology Co., Ltd.	RS-2206	6(4)A, 250Vac, min. 85°C, Endurance minimum 10000 cycle, PD2, Glow-wire test 850°C	IEC/EN 61058-1; UL 61058-1	TUV, UL
(Alternative)	Zhejiang LECI Electronics Co., Ltd.	RS601 series	VDE: 6(4)A 250Vac, 8/108A 250Vac; UL: 10.1A 125Vac, 6A 250Vac; min. 105°C, Endurance minimum 10000 cycle, PD2, Glow-wire test 850°C	IEC/EN 61058-1; UL 61058-1	VDE, UL

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Clause	Requirement + Test		Result - Remark		Verdict
Primary lead wire (AC inlet to power switch)	DONGGUAN ZELONGKANG WIRE CO., LTD	1617	600V, 22 AWG, 105°C, VW-1	UL 758	UL
(Alternative)	Interchangeable	Interchangeable	Min. 300V, min. 22AWG, min. 80°C, VW-1	UL 758	UL
Primary lead wire (Power switch to power board)	DONGGUAN ZELONGKANG WIRE CO., LTD	1617	600V, 22 AWG, 105°C, VW-1	UL 758	UL
(Alternative)	Interchangeable	Interchangeable	Min. 300V, min. 22 AWG, min. 80°C, VW-1	UL 758	UL
Protective bonding wire	DONGGUAN ZELONGKANG WIRE CO., LTD	1015	600V, 18 AWG, 105°C, VW-1	UL 758	UL
(Alternative)	Interchangeable	Interchangeable	Min. 300V, min. 18 AWG, min. 80°C, VW-1	UL 758	UL
Internal secondary wire (Power board output)	Interchangeable	Interchangeable	Min. 300V, min. 22 AWG, min. 80°C, VW-1	UL 758	UL
Internal secondary wire (except power board output)	Interchangeable	Interchangeable	Min. 30V, min. 32 AWG, min. 80°C, VW-1	UL 758	UL
PCB (except power board)	Shenzhen Stariver Circuits Co Ltd	SR-01	V-0, 125°C	UL 796	UL
(Alternative)	Interchangeable	Interchangeable	V-1 or better, min. 105°C	UL 796	UL
RTC. Cap. (CSE1)	Korchip Corporation	DCLT5R5105CF	1.0F, 5.5V, max. charge current 50mA, max. discharge current 70mA	IEC 60950-1	Tested with appliance
For power board model: MP410DM-E868	--	--	--	--	--
PCB	Interchangeable	Interchangeable	V-1 or better, min. 130°C	UL 796	UL
AC connector (CN101)	CKM Electronics Co Ltd	3962WR-5PF-EVN-HF	Min. 250V, min. 7A, min. 85°C	UL 1977	UL

IEC 60950-1					
Clause	Requirement + Test		Result - Remark		Verdict
(Alternative)	Weli Sheng Terminal Industrial Co Ltd	M5-I39606R	Min. 250V, min. 7A, min. 110°C	UL 1977	UL
Current fuse (FP1)	Suzhou Walter Electronic Co. Ltd.	TSC	T8AH, 250Vac	IEC/EN 60127-1; IEC/EN 60127-2; UL 248-1; UL 248-14	VDE, UL
(Alternative)	Conquer Electronics Co., Ltd.	UDA, UDA-A	T8AH, 250Vac	IEC/EN 60127-1; IEC/EN 60127-2; UL 248-1; UL 248-14	VDE, UL
(Alternative)	UL: HOLLYLAND CO LTD, VDE: Hollyland Company Limited	50CT	T8AH, 250Vac	IEC/EN 60127-1; IEC/EN 60127-2; UL 248-1; UL 248-14	VDE, UL
(Alternative)	XC ELECTRONICS (SHENZHEN) CORP LTD	5H	T8AH, 250Vac	IEC/EN 60127-1; IEC/EN 60127-2; UL 248-1; UL 248-14	VDE, UL
Varistor ((RV2) (optional)	Thinking Electronic Industrial Co Ltd	TVR14681	Min. 300Vac, min. 105 °C, (tested by UL for 6KV/3KA combination pulse), Coating rated V-0	IEC 61051-1; IEC 61051-2; IEC 61051-2-2; UL 1449	VDE, UL
(Alternative)	Centra Science Corp.	CNR-14D681K	Min. 300Vac, min. 105 °C, (tested by UL for 6KV/3KA combination pulse), Coating rated V-0	IEC 61051-1; IEC 61051-2; IEC 61051-2-2; UL 1449	VDE, UL
(Alternative)	BestBright Electronics Co. Ltd	681KD14	Min. 300Vac, min. 105 °C, (tested by UL for 6KV/3KA combination pulse), Coating rated V-0	IEC 61051-1; IEC 61051-2; IEC 61051-2-2; UL 1449	VDE, UL
(Alternative)	BESTBRIGHT ELECTRONICS CO LTD	14D681K	Min. 300Vac, min. 105 °C, (tested by UL for 6KV/3KA combination pulse), Coating rated V-0	IEC 61051-1; IEC 61051-2; IEC 61051-2-2; UL 1449	VDE, UL
(Alternative)	Guangdong Huiwan Electronics Technology Co., LTD.	VDE: V-681K-14 DEH; UL: V-681K-14D H, V-681K-14E H	Min. 300Vac, min. 105 °C, (tested by UL for 6KV/3KA combination pulse), Coating rated V-0	IEC 61051-1; IEC 61051-2; IEC 61051-2-2; UL 1449	VDE, UL

IEC 60950-1					
Clause	Requirement + Test			Result - Remark	Verdict
X-capacitor (CX3) (optional)	Shenzhen Jinghao Capacitor Co., Ltd.	CBB62B	Max. 0.68 μ F $\pm$ 10%, min. 250Vac, min. 100°C, X2 type	IEC/EN/UL 60384-14	VDE, UL
(Alternative)	Europtronic (SuZhou)Co. Ltd.	MPX	Max. 0.68 μ F $\pm$ 20%, min. 250Vac, min. 100°C, X2 type	IEC/EN/UL 60384-14	VDE, UL
(Alternative)	Europtronic (SuZhou)Co. Ltd.	MPX2	Max. 0.68 μ F $\pm$ 20%, min. 250Vac, min. 100°C, X2 type	IEC/EN/UL 60384-14	VDE, UL
(Alternative)	Xiamen Faratronic Co., Ltd.	MKP62	Max. 0.68 μ F $\pm$ 20%, min. 250Vac, min. 100°C, X2 type	IEC/EN/UL 60384-14	VDE, UL
(Alternative)	Nistrionics(Jiang xi) Co., Ltd.	MPR	Max. 0.68 μ F $\pm$ 20%, min. 250Vac, min. 100°C, X2 type	IEC/EN/UL 60384-14	VDE, UL
(Alternative)	Yangzhou Nissei Electronics Co.,Ltd.	MP1	Max. 0.68 μ F $\pm$ 20%, min. 250Vac, min. 100°C, X2 type	IEC/EN/UL 60384-14	VDE, UL
(Alternative)	Shenzhen Yimanfeng Science And Technology Co., Ltd.	MPX/MKP	Max. 0.68 μ F $\pm$ 10%, min. 250Vac, min. 100°C, X2 type	IEC/EN/UL 60384-14	VDE, UL
(Alternative)	Ultra Tech Xiphi Enterprise Co. Ltd.	HQX	Max. 0.68 μ F $\pm$ 20%, min. 250Vac, min. 100°C, X2 type	IEC/EN/UL 60384-14	VDE, UL
Y-capacitor (CY3, CY4) (optional)	Walsin Technology Corp	VDE: AH; UL: AH Series (#)(&)	Each rated max. 470pF $\pm$ 20%, min. 250Vac, min. 125°C, Y1 type,	IEC/EN/UL 60384-14	VDE, UL
(Alternative)	Yinan Don's Electronic Component Co.,Ltd.	CT81	Each rated max. 470pF $\pm$ 20%, min. 250Vac, min. 125°C, Y1 type,	IEC/EN/UL 60384-14	VDE, UL
(Alternative)	TDK CORPORATION	CD	Each rated max. 470pF $\pm$ 20%, min. 250Vac, min. 125°C, Y1 type,	IEC/EN/UL 60384-14	VDE, UL
(Alternative)	Xiamen Wanming Electronics Co., Ltd.	HJ	Each rated max. 470pF $\pm$ 20%, min. 250Vac, min. 125°C, Y1 type,	IEC/EN/UL 60384-14	VDE, UL
(Alternative)	KunShan WanSheng Electronics Co., Ltd	CT7	Each rated max. 470pF $\pm$ 20%, min. 250Vac, min. 125°C, Y1 type,	IEC/EN/UL 60384-14	VDE, UL

IEC 60950-1					
Clause	Requirement + Test		Result - Remark		Verdict
(Alternative)	Guangdong Huiwan Electronics Technology Co., LTD.	AR	Each rated max. 470pF±20%, min. 250Vac, min. 125°C, Y1 type,	IEC/EN/UL 60384-14	VDE, UL
Y-capacitor (CY1) (optional)	Walsin Technology Corp	VDE: AH; UL: AH Series (#)(&)	Max. 680pF±20%, min. 250Vac, min. 125°C, Y1 type,	IEC/EN/UL 60384-14	VDE, UL
(Alternative)	Yinan Don's Electronic Component Co.,Ltd.	CT81	Max. 680pF±20%, min. 250Vac, min. 125°C, Y1 type,	IEC/EN/UL 60384-14	VDE, UL
(Alternative)	TDK CORPORATION	CD	Max. 680pF±20%, min. 250Vac, min. 125°C, Y1 type,	IEC/EN/UL 60384-14	VDE, UL
(Alternative)	Xiamen Wanming Electronics Co., Ltd.	HJ	Max. 680pF±20%, min. 250Vac, min. 125°C, Y1 type,	IEC/EN/UL 60384-14	VDE, UL
(Alternative)	KunShan WanSheng Electronics Co., Ltd	CT7	Max. 680pF±20%, min. 250Vac, min. 125°C, Y1 type,	IEC/EN/UL 60384-14	VDE, UL
(Alternative)	Guangdong Huiwan Electronics Technology Co., LTD.	AR	Max. 680pF±20%, min. 250Vac, min. 125°C, Y1 type,	IEC/EN/UL 60384-14	VDE, UL
Bleeder resistor (RX1, RX2, RX3, RX4, RX5, RX6, RX7, RX8)	Interchangeable	Interchangeable	Each rated 75kohm-200kohm, min. 1/4W	--	--
ICX (UP2)	Monolithic Power Systems	HF81	230V AC (Tested for 85~265V AC), 50/60 Hz (Tested for 47~63Hz). Total X capacitance: 100nF-5µF, Total Series Resistance: 150kohm-1.5Mohm	IEC 60950-1; IEC/EN 62368-1	CB by NEMKO (Certif. No. NO81152, NO101308, NO110178)
(Alternative)	Power Integrations, Inc.	CAP200DG	230V AC nominal (tested for 85-265V AC, 47-63Hz). Total X capacitance: 100nF-6µF, Total Series Resistance: 142kohm-7.5Mohm	IEC 60950-1; IEC/EN 62368-1	CB by NEMKO (Certif. No. NO82701/A1 NO112245)

IEC 60950-1					
Clause	Requirement + Test		Result - Remark		Verdict
Relay (RLY1)	Sanyou Corporation Limited	SRD-S-112DM	Contact: min.10A, min. 250VAC; Coil voltage: 12Vdc; min.105 °C; Electrical endurance: min. 10000 switching cycles	IEC/EN 61810-1; UL 508; UL 60947-1; UL 60947-4-1; IEC 62368-1 Clause G.2.2	VDE, UL, TUV
(Alternative)	Xiamen Hongfa Electroacoustic Co., Ltd.	HF3FA/012-HSTF	Contact: min.10A, min. 250VAC; Coil voltage: 12Vdc; min.85 °C; Electrical endurance: min. 10000 switching cycles	IEC/EN 61810-1; UL 508; UL 60947-1; UL 60947-4-1; IEC 62368-1 Clause G.2.2	VDE, UL
Thermistor (RT2)	Interchangeable	Interchangeable	NTC, rated 2.5Ω at 25°C, min. 6A	--	--
Thermistor (RT1)	Interchangeable	Interchangeable	NTC, rated 15Ω at 25°C, min. 2A	--	--
Bridge Diode (BD4, BD5)	Interchangeable	Interchangeable	Min. 8A, min. 800V	--	--
Electrolytic (CP18, CP19)	Interchangeable	Interchangeable	Each rated max. 150μF, min. 450V, min. 105°C	--	--
MOSFET (QP1, QP4)	Interchangeable	Interchangeable	Min. 500 V, min. 9 A.	--	--
MOSFET (QH6, QH8)	Interchangeable	Interchangeable	Min. 500 V, min. 6 A.	--	--
MOSFET (QH3, QH4, QF4)	Interchangeable	Interchangeable	Min. 600 V, min. 3 A.	--	--
Limit current resistor (RP23, RP26)	Interchangeable	Interchangeable	Each rated min. 75mohm, min. 1/4W	--	--
Limit current resistor (RP1, RP25)	Interchangeable	Interchangeable	Each rated min. 100mohm, min. 1/4W	--	--
Limit current resistor (RF58, RF60, RF61)	Interchangeable	Interchangeable	Each rated min. 2.0ohm, min. 1/4W	--	--
Limit current resistor (RF56, RF57, RF55)	Interchangeable	Interchangeable	Each rated min. 1.5ohm, min. 1/4W	--	--

IEC 60950-1					
Clause	Requirement + Test		Result - Remark		Verdict
Opto-coupler (PF1, PF2, PF3, PH1, PH2, PH3, PH4, PH5)	Lite-On Technology Corporation	LTV-817, LTV- 817M	Dti. $\geq 0.4\text{mm}$, Ext. Cr. & Cl. $\geq$ 7.0mm, min. 110°C, Isolation voltage of 5300 Vrms	IEC/EN 60747-5-5; UL 1577	VDE, UL
(Alternative)	EVERLIGHT Electronics Co., Ltd	EL817, EL817V	Dti. $\geq 0.4\text{mm}$, Ext. Cr. & Cl. $\geq$ 7.6mm, min. 110°C, Isolation voltage of 5300 Vrms	IEC/EN 60747-5-5; UL 1577	VDE, UL
(Alternative)	COSMO Electronics Corp.	K1010	Dti. $\geq 0.4\text{mm}$, Ext. Cr. & Cl. $\geq$ 6.5mm, min. 110°C, Isolation voltage of 5000 Vrms	IEC/EN 60747-5-5; UL 1577	VDE, UL
(Alternative)	VDE: CT Micro International Corporation; UL: CT Microelectronics Far East Ltd	CT817	Dti. $\geq 0.4\text{mm}$, Ext. Cr. & Cl. $\geq$ 7.0mm, min. 110°C, Isolation voltage of 5000 Vrms	IEC/EN 60747-5-5; UL 1577	VDE, UL
(Alternative)	Shenzhen Orient Components Co. Ltd.	ORPC817, ORPC817M	Dti. $\geq 0.4\text{mm}$, Ext. Cr. & Cl. $\geq$ 7.6mm, min. 110°C, Isolation voltage of 5000 Vrms	IEC/EN 60747-5-5; UL 1577	VDE, UL
Filter Choke (LP11)	Shenzhen MEGMEET Electrical Co., Ltd.	MR240-24S- L101A	Min. 130°C	IEC 60950-1	Tested with appliance
- Triple Insulation wire	Guangzhou Wanbao Electronic Material Co Ltd	DTM-B	Min. 130°C	IEC/EN 62368-1; UL 2353	VDE, UL
(Alternative)	Furukawa Electric Co., Ltd.	TEX-E	Min. 130°C	IEC/EN 62368-1; UL 2353	VDE, UL
- Base board	Interchangeable	Interchangeabl e	V-0, min. 130°C	UL 94	UL
Filter Choke (LP10A, LP22)	Shenzhen MEGMEET Electrical Co., Ltd.	SQ3120-8.0mH	Min. 130°C	IEC 60950-1	Tested with appliance

IEC 60950-1					
Clause	Requirement + Test		Result - Remark		Verdict
- Bobbin	CHANG CHUN PLASTICS CO LTD	T375HF	PMC, V-0, 150°C, min. thickness: 0.43mm.	UL 94	UL
- Magnet wire	Interchangeable	Interchangeable	Min. 130°C	UL1446	UL
PFC Inductor (LP1A, LP3A)	Shenzhen MEGMEET Electrical Co., Ltd.	POT4020-200uH	Min. 130°C	IEC 60950-1	Tested with appliance
- Bobbin	SUMITOMO BAKELITE CO LTD	PM-9823	PMC, V-0, 150°C, min. thickness: 0.15mm.	UL 94	UL
- Magnet wire	Interchangeable	Interchangeable	Min. 155°C	UL1446	UL
- Triple Insulation wire	SHENZHEN KAIZHONG HEDONG NEW MATERIALS CO LTD	TIW-F	Min. 155°C	IEC/EN 62368-1; UL 2353	VDE, UL
(Alternative)	GREAT LEOFLON INDUSTRIAL CO LTD	TRW(F)*	Min. 155°C	IEC/EN 62368-1; UL 2353	VDE, UL
- Insulation tape	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	CT*(b)(g)	Min. 130°C	UL 510A	UL
Transformer (TH1)	Shenzhen MEGMEET Electrical Co., Ltd	EE3515-12V	Class B	Applicable part according to IEC 60950-1 and UL 1446	Tested in appliance.
-Insulation system	Shenzhen MEGMEET Electrical Co., Ltd	Y-B	Class B	UL 1446	UL
- Magnet wire	Asia Insulation Materials Inc	xUEWF*\$, QA-x/155*	Min. 130°C.	UL 1446	UL
- Bobbin	SUMITOMO BAKELITE CO LTD	PM-9630	Phenolic, V-0, min. 0.71 mm thickness, 150 °C.	UL 94	UL
- Insulation Tape	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	CT* (b)(g)	180°C.	UL 510A	UL
- Triple Insulation Wire	SHENZHEN KAIZHONG HEDONG NEW MATERIALS CO LTD	TIW-B*	130°C	IEC/EN 62368-1; UL 2353	VDE, UL

IEC 60950-1					
Clause	Requirement + Test			Result - Remark	Verdict
- Varnish	SUZHOU TAIHU ELECTRIC ADVANCED MATERIAL CO LTD	T-4260(a)	Min. 130°C.	UL 224	UL
Transformer (TF2)	Shenzhen MEGMEET Electrical Co., Ltd	EQ3314-5V11A	Class F	Applicable part according to IEC 60950-1 and UL 1446	Tested in appliance.
-Insulation system	Shenzhen MEGMEET Electrical Co., Ltd	G-F	Class F	UL 1446	UL
- Magnet wire	Interchangeable	MW79, MW80, MW82, MW83, MW85	Min.155°C.	UL 1446	UL
- Bobbin	SUMITOMO BAKELITE CO LTD	PM-9630	Phenolic, V-0, min. 0.71 mm thickness, 150 °C.	UL 94	UL
- Insulation Tape	P LEO&CO LED	1K7170	220°C.	UL 510A	UL
- Triple Insulation Wire	E&B TECHNOLOGY CO LTD	E&B-XXX*YYYYZF	155°C.	IEC/EN 62368-1; UL 2353	VDE, UL
-Tube	CHANGYUAN ELECTRONICS GROUP CO LTD	CB-TT-T	200°C	UL 224	UL
- Varnish	ELANTAS PDG, Inc.	V1630FS	155°C.	UL 224	UL
Transformer (TH2, TH3)	Shenzhen MEGMEET Electrical Co., Ltd	ETD29-40V-60V-80V	Class F	Applicable part according to IEC 60950-1 and UL 1446	Tested in appliance.
-Insulation system	Shenzhen MEGMEET Electrical Co., Ltd	M-F	Class F	UL 1446	UL
- Magnet wire	Interchangeable	MW79, MW80	Min.155°C.	UL 1446	UL
- Bobbin	SUMITOMO BAKELITE CO LTD	PM-9630	Phenolic, V-0, min. 0.71 mm thickness, 150 °C.	UL 94	UL
- Insulation Tape	P LEO&CO LED	1K7170	220°C.	UL 510A	UL
-Tube	GREAT HOLDING INDUSTRIAL CO LTD	TFT	200°C.	UL 224	UL

IEC 60950-1					
Clause	Requirement + Test			Result - Remark	Verdict
- Varnish	ELANTAS PDG, Inc.	V1630FS	Min. 130°C.	UL 224	UL
- Case	CHANG CHUN PLASTICS CO LTD	4130	PBT, V-0, min. 0.74 mm thickness, 140 °C.	UL 94	UL
Supplementary information: 1) Provided evidence ensures the agreed level of compliance. See OD-CB2039. 2) License available upon request.					

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

1.5.1	TABLE: Opto Electronic Devices	P
Manufacturer : See appended table 1.5.1(component list)		
Type : See appended table 1.5.1(component list)		
Separately tested : Tested with appliance		
Bridging insulation..... : RI		
External creepage distance..... : See appended table 1.5.1(component list)		
Internal creepage distance..... : See appended table 1.5.1(component list)		
Distance through insulation..... : See appended table 1.5.1(component list)		
Tested under the following conditions..... :		
Input : Tested with appliance		
Output..... : Tested with appliance		
supplementary information:		

1.6.2	TABLE: Electrical data (in normal conditions)						P
U (V/Hz)	I (A)	Irated (A)	P (W)	Fuse #	Ifuse (A)	Condition/status	
Test condition: HDMI mode							
90/50	3.243	--	291.9	FP1	3.243	Max. normal load	
90/60	3.241	--	291.4	FP1	3.241	Max. normal load	
100/50	2.921	3.7	290.4	FP1	2.921	Max. normal load	
100/60	2.908	3.7	289.6	FP1	2.908	Max. normal load	
240/50	1.262	1.5	285.9	FP1	1.262	Max. normal load	
240/60	1.258	1.5	285.4	FP1	1.258	Max. normal load	
264/50	1.165	--	285.6	FP1	1.165	Max. normal load	
264/60	1.157	--	284.7	FP1	1.157	Max. normal load	
Test condition: AV mode							
90/50	3.236	--	291.6	FP1	3.236	Max. normal load	
90/60	3.234	--	291.0	FP1	3.234	Max. normal load	
100/50	2.913	3.7	290.0	FP1	2.913	Max. normal load	
100/60	2.906	3.7	288.8	FP1	2.906	Max. normal load	
240/50	1.255	1.5	285.1	FP1	1.255	Max. normal load	
240/60	1.251	1.5	284.7	FP1	1.251	Max. normal load	
264/50	1.160	--	284.9	FP1	1.160	Max. normal load	

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Clause	Requirement + Test				Result - Remark	Verdict
264/60	1.152	--	284.1	FP1	1.152	Max. normal load
Test condition: VGA +Audio IN mode						
90/50	3.234	--	291.5	FP1	3.234	Max. normal load
90/60	3.234	--	290.9	FP1	3.234	Max. normal load
100/50	2.911	3.7	289.9	FP1	2.911	Max. normal load
100/60	2.907	3.7	288.8	FP1	2.907	Max. normal load
240/50	1.251	1.5	284.9	FP1	1.251	Max. normal load
240/60	1.250	1.5	284.6	FP1	1.250	Max. normal load
264/50	1.158	--	284.7	FP1	1.158	Max. normal load
264/60	1.150	--	284.0	FP1	1.150	Max. normal load
Test condition: USB Type-A mode						
90/50	3.200	--	288.0	FP1	3.200	Max. normal load
90/60	3.194	--	287.7	FP1	3.194	Max. normal load
100/50	2.880	3.7	286.4	FP1	2.880	Max. normal load
100/60	2.871	3.7	285.8	FP1	2.871	Max. normal load
240/50	1.236	1.5	282.0	FP1	1.236	Max. normal load
240/60	1.243	1.5	281.7	FP1	1.243	Max. normal load
264/50	1.142	--	281.7	FP1	1.142	Max. normal load
264/60	1.152	--	282.0	FP1	1.152	Max. normal load
supplementary information:						
Max. normal load: 1kHz sine wave signal input, adjust volume to 1/8 Non-clipped output power. The video signal is three vertical bar signals, adjust the brightness and contrast to maximum value. Speaker voltage: 2.12Vrms, USB Type-A load: 5Vdc, 500mA ; USB Type-C load: 5Vdc, 3A.						

2.1.1.5 c) 1)	TABLE: max. V, A, VA test				P
Voltage (rated) (V)	Current (rated) (A)	Voltage (max.) (V)	Current (max.) (A)	VA (max.) (VA)	
USB Type-A output:					
5V	0.5	5.19	0.6	2.43	
USB Type-C output:					
5V	3.0	5.18	3.0	11.01	
For Power Board:					
5V (+5V)	--	5.10	8.2	33.3	
5V (5VSB)	--	5.14	8.0	33.0	
12V (+12V)	--	12.13	10.0	107.8	

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Clause	Requirement + Test	Result - Remark	Verdict

supplementary information:

Note: No energy hazard in operator access area.

1) All accessible ports powered from power board, So the results of power board output were considered to be representative of all accessible ports.

2) Supplied by 264V/60Hz.

2.1.1.5 c) 2)	TABLE: stored energy	N/A
Capacitance C (μF)	Voltage U (V)	Energy E (J)
--	--	--
--	--	--
supplementary information: --		

2.2	TABLE: evaluation of voltage limiting components in SELV circuits			P
Component (measured between)	max. voltage (V) (normal operation)		Voltage Limiting Components	
	V peak	V d.c.		
TH1 pin 5,6 to 8,9	26.8	--	--	
After RH38 to TH1 pin 5,6	26.0	--	--	
After QH13 to TH1 pin 5,6	--	12.13	QH13	
TH1 pin 5,6 to 10,11	26.8	--	--	
After RH44 to TH1 pin 5,6	26.0	--	--	
After QH12 to TH1 pin 5,6	--	12.13	QH12	
TF2 pin 1,2 to pin 4,5	30.6	--	--	
After RF51 to TF2 pin 1,2	29.8	--	--	
After DF13/DF16 to TF2 pin 1,2	--	5.14	DF13, DF16	
Fault test performed on voltage limiting components	Voltage measured (V) in SELV circuits (V peak or V d.c.)			
QH13/QH12 pin 2-3 SC	0V (Unit shutdown immediately)			
DF13/DF16 SC	0V (Unit shutdown immediately)			
supplementary information:				
Supplied by 240V/60Hz				
SC=Short circuit.				
The secondary accessible circuits were tested as SELV				

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

2.5	TABLE: Limited power sources					P
Circuit output tested:						
Note: Measured Uoc (V) with all load circuits disconnected:						
Components	Test condition (Single fault)	Uoc (V)	I _{sc} (A)		VA	
			Meas.	Limit	Meas.	Limit
HDMI 1 port (CON807) Pin 18 to GND	Normal	3.98	0	8	0	100
HDMI 1 port (CON807) Pin others to GND	Normal	0	0	8	0	100
HDMI 2 port (CON806) Pin 18 to GND	Normal	3.98	0	8	0	100
HDMI 2 port (CON806) Pin others to GND	Normal	0	0	8	0	100
HDMI 3 port (CON805) Pin 18 to GND	Normal	3.29	0	8	0	100
HDMI 3 port (CON805) Pin others to GND	Normal	0	0	8	0	100
VGA port (CON11) Pin 9 to GND	Normal	4.90	0	8	0	100
VGA port (CON11) Pin others to GND	Normal	0	0	8	0	100
AUDIO IN port (CON13) All pins to GND	Normal	0	0	8	0	100
USB Type-A port (CON04) Pin + to -	Normal	5.19	0.6	8	2.43	100
USB Type-A port (CON04) Pin + to -	Single Fault (U1312 pin 1 to pin 5 short)	5.19 (USB Type-A normal operation)	5.9 (USB Type-A normal operation)	8	16.0 (USB Type-A normal operation)	100
AV IN port (CON15) all Pin to GND	Normal	0	0	8	0	100
SPDIF OUT port (CON03) all Pin 2 to GND	Normal	5.10	4.3	8	16.6	100

IEC 60950-1						
Clause	Requirement + Test			Result - Remark		Verdict
SPDIF OUT port (CON03) all Pin 2 to GND	Single fault (U1371 pin 11,12,13-4,5,6,7 short)	5.10	6.3	8	14.6	100
SPDIF OUT port (CON03) Pin others to GND	Normal	0	0	8	0	100
HEADPHONE port (CON809) all Pin to GND	Normal	0	0	8	0	100
USB Type-C port (CON808) Pin + to -	Normal	5.18	3.0	8	11.01	100
USB Type-C port (CON808) Pin + to -	Single Fault (U1375 pin 1 to pin 5 short)	5.18 (USB Type-C normal operation)	4.8 (USB Type-C normal operation)	8	14.1 (USB Type-C normal operation)	100
RS-232C port (CON30) all Pin to GND	Normal	0	0	8	0	100
LAN port (CON650) all Pin to GND	Normal	0	0	8	0	100
IR&KEY &LED port (J1203) pin 13-7, 11, 23	Normal	2.30	0.13	8	0.30	100
IR&KEY &LED port (J1203) pin 13-7, 11, 23	Single fault (JM1 pin 1, 3- 12,14 short)	0	0	8	0	100
IR&KEY &LED port (J1203) pin 16-7, 11, 23	Normal	5.11	0	8	0	100
IR&KEY &LED port (J1203) pin 16-7, 11, 23	Single fault (JM1 pin 1, 3- 12,14 short)	0	0	8	0	100
IR&KEY &LED port (J1203) pin 16-7, 11, 23	Single fault (U1371 pin 11,12,13-4,5,6,7 short)	5.11	0	8	0	100
supplementary information:						
Supplied by 264Vac, 60Hz.						

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

2.10.2	Table: working voltage measurement			P
Location	Peak voltage (V)	RMS voltage (V)	Comments	
Test with 240Vac, 60Hz	--	--	--	
Transformer TH2 pin 8-2	280	144	--	
Transformer TH2 pin 8-5	408	257	--	
Transformer TH2 pin 12-2	332	178	--	
Transformer TH2 pin 12-5	484	264	Max. Peak and RMS voltage	
Transformer TH3 pin 8-2	300	162	--	
Transformer TH3 pin 8-5	464	193	--	
Transformer TH3 pin 12-2	316	169	--	
Transformer TH3 pin 12-5	500	250	Max. Peak and RMS voltage	
Transformer TH1 pin 5,6-3	388	236	--	
Transformer TH1 pin 5,6-4	232	145	--	
Transformer TH1 pin 8,9-3	388	232	--	
Transformer TH1 pin 8,9-4	248	149	--	
Transformer TH1 pin 10,11-4	408	248	Max. Peak and RMS voltage	
Transformer TH1 pin 10,11-3	224	145	--	
Transformer TF2 pin 1,2-6	512	308	--	
Transformer TF2 pin 1,2-9	408	301	--	
Transformer TF2 pin 1,2-10	428	170	--	
Transformer TF2 pin 1,2-11	340	170	--	
Transformer TF2 pin 4,5-6	528	308	Max. Peak and RMS voltage	
Transformer TF2 pin 4,5-9	440	301	--	
Transformer TF2 pin 4,5-10	400	170	--	
Transformer TF2 pin 4,5-11	344	170	--	
PF1 pin 1-3	324	161	--	
PF1 pin 1-4	333	162	--	
PF1 pin 2-3	328	162	--	
PF1 pin 2-4	322	164	--	
PF2 pin 1-3	334	165	--	
PF2 pin 1-4	329	161	--	
PF2 pin 2-3	340	166	--	

IEC 60950-1			
Clause	Requirement + Test		Verdict
PF2 pin 2-4	344	161	--
PF3 pin 1-3	344	163	--
PF3 pin 1-4	334	164	--
PF3 pin 2-3	340	166	--
PF3 pin 2-4	324	162	--
PH1 pin 1-3	344	173	--
PH1 pin 1-4	345	170	--
PH1 pin 2-3	340	173	--
PH1 pin 2-4	353	175	--
PH2 pin 1-3	350	176	--
PH2 pin 1-4	354	172	--
PH2 pin 2-3	355	176	--
PH2 pin 2-4	344	173	--
PH3 pin 1-3	348	175	--
PH3 pin 1-4	344	170	--
PH3 pin 2-3	343	172	--
PH3 pin 2-4	340	170	--
PH4 pin 1-3	342	175	--
PH4 pin 1-4	341	173	--
PH4 pin 2-3	347	171	--
PH4 pin 2-4	346	173	--
PH5 pin 1-3	342	170	--
PH5 pin 1-4	344	174	--
PH5 pin 2-3	340	170	--
PH5 pin 2-4	344	173	--
CY1 primary to secondary	340	171	--
CY4 primary to secondary	342	240	--
Test with 100Vac, 60Hz	--	--	--
Transformer TH2 pin 8-2	272	137	--
Transformer TH2 pin 8-5	388	200	--
Transformer TH2 pin 12-2	336	172	--
Transformer TH2 pin 12-5	408	260	Max. Peak and RMS voltage
Transformer TH3 pin 8-2	260	139	--

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Clause	Requirement + Test	Result - Remark	Verdict
Transformer TH3 pin 8-5	316	162	--
Transformer TH3 pin 12-2	280	139	--
Transformer TH3 pin 12-5	336	173	Max. Peak and RMS voltage
Transformer TH1 pin 5,6-3	396	239	--
Transformer TH1 pin 5,6-4	236	149	--
Transformer TH1 pin 8,9-3	388	230	--
Transformer TH1 pin 8,9-4	248	152	--
Transformer TH1 pin 10,11-4	408	249	Max. Peak and RMS voltage
Transformer TH1 pin 10,11-3	224	147	--
Transformer TF2 pin 1,2-6	516	353	Max. Peak and RMS voltage
Transformer TF2 pin 1,2-9	408	346	--
Transformer TF2 pin 1,2-10	240	71.4	--
Transformer TF2 pin 1,2-11	148	68.5	--
Transformer TF2 pin 4,5-6	508	351	--
Transformer TF2 pin 4,5-9	436	346	--
Transformer TF2 pin 4,5-10	212	70.6	--
Transformer TF2 pin 4,5-11	156	69.4	--
supplementary information: --			
Input voltage:240Vac/100Vac, 60Hz;			

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)	
L-N before fuse FP1 (F)*	420	250	2.3	4.4	2.5	4.4	
Different polarity of trace under FP1 (F)*	420	250	2.3	4.2	2.5	4.2	
Primary circuit to metal enclosure (B)*	528	353	3.3	5.0	3.6	5.0	
PCB trace under CY3 (B)*	420	250	3.0	7.8	3.0	7.8	
PCB trace under CY4 (B)*	420	250	3.0	7.8	3.0	7.8	
PCB trace of UP2 to earth (R)*	420	250	6.0	8.9	6.0	8.9	
PCB trace under CY1 (R)*	420	250	6.0	7.9	6.0	7.9	
PCB trace under PF1, PF2 and PF3 (R)*	420	250	6.0	8.2	6.0	8.2	
PCB trace under PH1, PH2, PH3, PH4 and PH5 (R)*	420	250	6.0	8.2	6.0	8.2	

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Clause	Requirement + Test			Result - Remark		Verdict
PCB trace under TH1 (R)*	420	250	6.0	>10.0	6.0	>10.0
PCB trace under TF2 (R)*	528	353	6.6	>10.0	7.1	>10.0
PCB trace under TH2/TH3 (R)*	500	264	6.6	10.0	6.6	10.0
Transformer TH1 (core considered as floating):						
Primary winding to secondary winding (R)*	420	250	6.0	6.7	6.0	6.7
Core to primary winding (B)*	420	250	3.0	3.6	3.0	3.6
Core to secondary winding (S)*	420	250	3.0	3.6	3.0	3.6
Core to primary trace (B)*	420	250	3.0	7.6	3.0	7.6
Core to secondary trace (S)*	420	250	3.0	6.6	3.0	6.6
Transformer TF2 (core considered as secondary):						
Primary winding to secondary winding (R)*	528	353	6.6	10.0	7.1	10.0
Core to primary winding (R)*	528	353	6.6	10.0	7.1	10.0
Transformer TH2/TH3 (core considered as floating):						
Primary winding to secondary winding (R)*	500	264	6.6	6.9	6.6	6.9
Core to primary winding (B)*	500	264	3.3	5.0	3.3	5.0
Core to secondary winding (S)*	500	264	3.3	5.0	3.3	5.0
supplementary information:						
1. The maximum operating altitude of 5000m. Therefore the requirements of IEC 60664-1 for clearances were considered and the required clearance was multiplied with an altitude correction factor of 1.48.						
2. Unless otherwise specified, the worst case conditions of Cl. & Cr. in above mentioned locations have been considered and listed.						
3. *: F = Functional insulation, B = Basic insulation, S = Supplementary insulation; R = Reinforced insulation.						

2.10.5	TABLE: Distance through insulation measurements					P
Distance through insulation (DTI) at/of:	U peak (V)	U rms (V)	Test voltage (V)	Required DTI (mm)	DTI (mm)	
Opto-coupler	420	250	AC 3000	0.4	1)	
Bobbin of transformers TH2/TH3	500 (max.)	264 (max.)	AC 3000	0.4	1)	
Case of transformers TH2/TH3	500 (max.)	264 (max.)	AC 3000	0.4	1)	
Insulation tape of transformers TH2/TH3	500 (max.)	264 (max.)	AC 3000	Minimum 2 layers	Minimum 2 layers	
Bobbin of transformer TH1	420	250	AC 3000	0.4	1)	

IEC 60950-1					
Clause	Requirement + Test			Result - Remark	Verdict
Insulation tape of transformer TH1	420	250	AC 3000	0.4	1)
Bobbin of transformer TF2	528	353	AC 3000	0.4	1)
Insulation tape of transformer TF2	528	353	AC 3000	Minimum 2 layers	Minimum 2 layers
supplementary information:					
1) refer to appended table 1.5.1 for detail.					

4.3.8	TABLE: Batteries								P
The tests of 4.3.8 are applicable only when appropriate battery data is not available									P
Is it possible to install the battery in a reverse polarity position?					No				P
	Non-rechargeable batteries			Rechargeable batteries					
	Discharging		Un-intentional charging	Charging		Discharging		Reversed charging	
	Meas. current	Manuf. Specs.		Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.
Max. current during normal condition	--	--	--	3mA	50mA	0.7uA	70mA	--	--
Max. current during fault condition (RS7 short)	--	--	--	3mA	50mA	0.7uA	70mA	--	--
Max. current during fault condition (US3 pin 3-8 short)	--	--	--	9mA	50mA	320uA	70mA	--	--
Test results:									Verdict
- Chemical leaks					No				P
- Explosion of the battery					No				P
- Emission of flame or expulsion of molten metal					No				P
- Electric strength tests of equipment after completion of tests					Yes				P
Supplementary information:									

4.3.8	TABLE: Batteries	P
Battery category: --		

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Clause	Requirement + Test	Result - Remark	Verdict
Manufacturer.....: Korchip Corporation Type / model.....: DCLT5R5105CF Voltage.....: 5.5V Capacity.....: -- Tested and Certified by (incl. Ref. No.).....: -- Circuit protection diagram: --			

MARKINGS AND INSTRUCTIONS (1.7.13)

Location of replaceable battery	
Language(s)	
Close to the battery	
In the servicing instructions	
In the operating instructions	

4.5	TABLE: Thermal requirements					P
	Supply voltage (V)	See below	See below	See below	See below	—
	Ambient T _{min} (°C)	--	--	--	--	—
	Ambient T _{max} (°C)	--	--	--	--	—
Maximum measured temperature T of part/at.....:		T (°C)				Allowed T _{max} (°C)
Test conditions:		90V/50Hz	264V/50Hz	90V/50Hz	264V/50Hz	--
		Landscape position	Landscape position	Portrait position	Portrait position	
AC inlet		46.9	48.3	51.3	49.6	70
Input wire		49.2	50.3	54.6	53.4	80
Earth wire		47.5	51.3	57.0	55.4	80
AC connector CN101		50.5	51.1	59.7	57.2	85
Line chock of LP11 winding		54.2	55.0	67.5	61.4	130
X-capacitor CX3		58.3	60.2	67.3	64.8	100
Line chock of LP22 winding		58.2	59.4	75.3	65.6	130
PCB under RT1		60.8	61.6	76.1	72.9	130
PCB under RT2		58.5	59.3	73.3	74.1	130
PCB under BD4		68.1	68.6	86.0	70.5	130
Varistor RV2		59.5	60.5	74.1	69.4	105
Line chock of LP10A winding		70.3	70.8	82.7	72.3	130
Relay RLY1 winding		61.7	64.1	75.8	74.9	130

IEC 60950-1					
Clause	Requirement + Test			Result - Remark	Verdict
Relay RLY1 body	60.4	61.8	74.6	72.1	85
E-capacitor CP19 body	53.7	54.6	65.8	65.5	105
PCB under DP4	69.6	70.2	77.6	80.7	130
PCB under QP4	72.9	73.5	80.9	84.2	130
Line chock of LP1A winding	72.8	73.3	78.0	68.9	130
Line chock of LP3A winding	74.8	75.7	79.6	72.3	130
PCB under QH8	79.5	80.6	88.1	88.1	130
TH2 winding	102.8	100.5	100.2	99.6	130
TH2 core	102.7	99.7	96.7	96.3	130
TH3 winding	89.3	90.3	93.3	93.6	130
TH3 core	90.2	88.8	91.9	92.5	130
TH1 winding	70.1	70.9	70.6	72.7	110
TH1 core	68.0	67.5	71.7	71.6	110
TF2 winding	68.7	69.2	78.9	79.0	130
TF2 core	67.1	68.3	76.0	76.0	130
Opto-coupler PH2 body	65.4	66.2	61.1	60.9	110
Opto-coupler PH3 body	67.5	68.2	63.2	63.0	110
Opto-coupler PF3 body	54.9	55.8	66.1	66.2	110
Y-capacitor CY1 body	56.8	57.2	65.8	65.7	125
E-capacitor CF27 body	62.9	64.0	62.4	62.5	105
PCB under DF16	72.2	72.9	76.6	76.8	130
E-capacitor CH22 body	55.1	58.0	63.5	62.9	105
PCB under QH12	65.0	65.6	60.7	60.8	130
E-capacitor CH24 body	70.4	71.3	65.3	65.0	105
PCB under DH4	93.4	93.8	89.2	89.1	130
PCB under UA1 (main board)	65.8	67.3	62.4	62.7	105
PCB under U1312 (main board)	62.1	62.4	62.9	62.4	105
PCB under U1375 (main board)	69.8	68.9	68.1	67.9	105
E-capacitor CSE1 body (main board)	55.0	55.4	55.8	56.0	For ref.
PCB under heat-sink near U201 (main board)	66.7	68.9	65.0	72.4	105
Internal wire	58.5	59.5	55.4	54.9	80

IEC 60950-1					
Clause	Requirement + Test			Result - Remark	Verdict
Metal Enclosure near TH1	50.8	51.1	51.1	51.4	70
Metal Enclosure near TH3	44.9	45.9	47.0	47.0	70
Panel surface	48.7	49.5	46.9	46.9	80
Power switch	46.7	46.3	47.1	46.7	85
Handle	44.7	45.6	46.4	46.3	60
Button	45.9	45.6	46.3	45.8	85
Ambient	40.0	40.0	40.0	40.0	--
Test conditions:	90V/50Hz	90V/50Hz	90V/50Hz	90V/50Hz	--
	Landscape position (inclined +30°)	Landscape position (inclined - 30°)	Portrait position (inclined +30°)	Portrait position (inclined -30°)	
AC inlet	48.3	47.0	48.4	50.0	70
Input wire	50.2	49.1	52.6	53.3	80
Earth wire	52.0	51.0	57.9	55.6	80
AC connector CN101	51.7	50.2	56.1	58.4	85
Line chock of LP11 winding	55.8	54.3	66.3	65.1	130
X-capacitor CX3	55.6	59.8	66.3	64.9	100
Line chock of LP22 winding	60.5	58.2	72.9	72.8	130
PCB under RT1	62.7	60.7	77.1	74.6	130
PCB under RT2	60.6	58.3	73.8	69.8	130
PCB under BD4	70.9	67.9	86.2	84.7	130
Varistor RV2	62.2	59.2	73.3	72.8	105
Line chock of LP10A winding	72.8	70.4	82.3	81.4	130
Relay RLY1 winding	63.8	63.2	75.6	75.1	130
Relay RLY1 body	62.5	61.1	74.5	73.6	85
E-capacitor CP19 body	54.9	53.9	61.1	64.4	105
PCB under DP4	71.8	69.2	76.6	76.7	130
PCB under QP4	75.3	72.4	80.8	79.9	130
Line chock of LP1A winding	74.1	73.1	73.7	77.2	130
Line chock of LP3A winding	76.8	74.9	79.9	78.3	130
PCB under QH8	81.4	80.6	88.5	87.1	130
TH2 winding	100.7	102.8	100.4	99.4	130

IEC 60950-1					
Clause	Requirement + Test			Result - Remark	Verdict
TH2 core	100.3	100.8	96.7	95.9	130
TH3 winding	90.6	91.0	93.0	92.4	130
TH3 core	89.8	89.9	91.4	91.0	130
TH1 winding	71.4	70.3	70.2	69.8	110
TH1 core	69.5	69.3	71.2	70.8	110
TF2 winding	69.9	68.8	77.6	77.4	130
TF2 core	68.3	67.5	74.6	74.4	130
Opto-coupler PH2 body	66.2	64.9	61.8	60.7	110
Opto-coupler PH3 body	68.6	67.1	63.9	62.8	110
Opto-coupler PF3 body	56.0	54.9	64.2	65.6	110
Y-capacitor CY1 body	57.9	57.0	63.3	64.5	125
E-capacitor CF27 body	63.8	63.4	62.4	61.9	105
PCB under DF16	74.0	72.4	74.5	76.4	130
E-capacitor CH22 body	58.0	57.4	62.3	63.3	105
PCB under QH12	66.3	64.5	63.1	60.2	130
E-capacitor CH24 body	71.4	70.9	68.7	65.4	105
PCB under DH4	94.6	92.2	90.5	88.7	130
PCB under UA1 (main board)	67.3	65.6	63.6	62.0	105
PCB under U1312 (main board)	61.6	62.0	62.6	62.4	105
PCB under U1375 (main board)	69.0	69.7	67.9	67.4	105
E-capacitor CSE1 body (main board)	54.2	55.3	54.8	55.3	For ref.
PCB under heat-sink near U201 (main board)	69.1	67.6	66.2	64.1	105
Internal wire	59.9	58.8	56.4	54.7	80
Metal Enclosure near TH1	51.0	49.6	50.7	50.6	70
Metal Enclosure near TH3	45.8	44.9	46.5	46.4	70
Panel surface	49.8	49.2	46.8	46.5	80
Power switch	46.3	45.7	46.8	46.6	85
Handle	45.6	45.4	46.1	45.9	60
Button	45.4	44.8	45.6	45.5	85
Ambient	40.0	40.0	40.0	40.0	--

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Clause		Requirement + Test			Result - Remark		Verdict
Simulated abnormal operating conditions:		264V/50Hz, Portrait position	264V/50Hz, Portrait position	264V/50Hz, Portrait position	264V/50Hz, Portrait position	--	
		Speaker max. non-clipped	One speaker short	Ventilation blocked	USB output overload		
TH2 winding		104.6	99.0	115.6	100.0	200	
TH2 core		103.6	95.8	110.5	96.6	200	
TH3 winding		98.3	89.3	99.9	94.1	200	
TH3 core		96.6	88.4	98.8	92.8	200	
TH1 winding		77.8	69.0	77.6	73.2	175	
TH1 core		74.7	66.6	74.2	72.0	175	
TF2 winding		81.6	76.4	81.0	79.3	200	
TF2 core		80.1	71.4	78.9	76.3	200	
Ambient		40.0	40.0	40.0	40.0	--	
Simulated abnormal operating conditions:		264V/50Hz, Portrait position	264V/50Hz, Portrait position	264V/50Hz, Portrait position	--	--	
		Transformer TF2 overload	Transformer TH1 overload	Transformer TH2/TH3 overload	--		
TH2 winding		105.9	105.2	115.0	--	200	
TH2 core		102.7	103.3	112.6	--	200	
TH3 winding		97.5	102.7	100.0	--	200	
TH3 core		95.4	100.9	97.7	--	200	
TH1 winding		76.8	83.8	75.6	--	175	
TH1 core		74.1	79.8	74.3	--	175	
TF2 winding		83.4	82.9	81.0	--	200	
TF2 core		81.3	79.8	78.7	--	200	
Ambient		40.0	40.0	40.0	--	--	
supplementary information:							
Temperature T of winding:	t ₁ (°C)	R ₁ (Ω)	T101 (°C)	R ₂ (Ω)	T (°C)	Allowed T _{max} (°C)	Insulation class
--	--	--	--	--	--	--	--
supplementary information:							
Tamb = Ambient.							

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Clause	Requirement + Test	Result - Remark	Verdict

- The temperatures were measured under worst normal mode defined in 1.2.2.1 and as described in sub-clause 1.6.2 and at voltages as described above.
- The maximum ambient temperature permitted by the manufacturer's specification is 40°C.
- Max. normal load: Test with HDMI mode, 1kHz sine wave signal input, adjust volume to 1/8 Non-clipped output power. The video signal is three vertical bar signals, adjust the brightness and contrast to maximum value. Speaker voltage: 2.12Vrms; USB Type-A load: 5Vdc, 500mA ; USB Type-C load: 5Vdc, 3A.

Winding components providing safety isolation:

- Class B Tmax = 120 °C - 10 °C = 110 °C. Class F Tmax = 140 °C - 10 °C = 130 °C (For normal temperature measurements).
- Class B Tmax = 175 °C, Class F Tmax = 200 °C (For abnormal temperature measurements).

4.5.5	TABLE: Ball pressure test of thermoplastic parts		P
	Allowed impression diameter (mm):	≤ 2 mm	—
Part		Test temperature (°C)	Impression diameter (mm)
AC connector (CN101): CKM Electronics Co Ltd / 3962WR-5PF-EVN-HF (material: Toray Industries Inc./ CM3004-V0(rg))		125	1.1
AC connector (CN101): CKM Electronics Co Ltd / 3962WR-5PF-EVN-HF (material: E I Dupont De Nemours & Co Inc./ HTNFR52G30NH(r6))		125	1.0
AC connector (CN101): Weli Sheng Terminal Industrial Co Ltd/ M5-I39606R (material: BASF CORP/ KR4205)		125	1.3
AC connector (CN101): Weli Sheng Terminal Industrial Co Ltd/ M5-I39606R (material: ASAHI KASEI CORP/FG172)		125	1.2
Case of transformer: CHANG CHUN PLASTICS CO LTD / 4130		125	0.9
supplementary information:			
Phenolic bobbin material used in Transformers and Line chocks, which acceptable without test.			

4.7	TABLE: Resistance to fire					P
Part	Manufacturer of material	Type of material	Thickness (mm)	Flammability class	Evidence	
--	--	--	--	--	--	
supplementary information:						
See table 1.5.1						

5.1	TABLE: touch current measurement			P
Measured between:	Measured (mA)	Limit (mA)	Comments/conditions	
Line to accessible ports	0.16	3.5	System on; Switch "e" opened.	
Neutral to accessible ports	0.16	3.5	System on; Switch "e" opened.	
Line to accessible ports	0.01	0.25	System on; Switch "e" closed.	

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Clause	Requirement + Test		Verdict
Neutral to accessible ports	0.01	0.25	System on; Switch "e" closed.
Line to metal enclosure	0.16	3.5	System on; Switch "e" opened.
Neutral metal enclosure	0.16	3.5	System on; Switch "e" opened.
Line to LCD Panel/Plastic control panel (with metal foil)	0.01	0.25	System on; Switch "e" closed.
Neutral to LCD Panel/Plastic control panel (with metal foil)	0.01	0.25	System on; Switch "e" closed.
supplementary information:			
Supplied with 264V/60Hz. CY3=CY4=470pF, CY1=680pF.			

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
Functional:				
L and N of input (with fuse opened)		AC	1500	No
Basic/supplementary:				
Line / Neutral to earth		AC	1500	No
L/N & metal enclosure		AC	1803	No
Core to primary winding of Transformers TH2/TH3		AC	1740	No
Core to secondary winding of Transformers TH2/TH3		AC	1740	No
Core to primary winding of Transformer TH1		AC	1500	No
Core to secondary winding of Transformer TH1		AC	1500	No
Reinforced:				
L/N & accessible ports		AC	3000	No
L/N & LCD panel wrapped with metal foil		AC	3000	No
Primary winding to secondary winding of Transformers TH2/TH3		AC	3000	No
Primary winding to secondary winding of Transformer TH1		AC	3000	No
Primary winding to secondary winding of Transformer TF2		AC	3000	No
Core to primary winding of Transformer TF2		AC	3000	No
Insulation tape used in and around all transformers (single layer, all sources)		AC	3000	No
Bobbin of all transformers		AC	3000	No
Case of Transformers TH2/TH3		AC	3000	No
supplementary information:				

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Clause	Requirement + Test	Result - Remark	Verdict

- 1) Core of transformer TF2 was considered as secondary, core of transformers TH1, TH2 and TH3 were considered as floating conductor.
- 2) Tests after humidity treatment, heating test, and for unit primary to secondary, primary to enclosure electric strength after each fault condition test.
- 3) Tests were performed on product with each source listed in table 1.5.1.

5.3	TABLE: Fault condition tests					P
	Ambient temperature (°C)		25°C if not identified		—	
	Power source for EUT: ManuFacterer, model/type, output rating		--		—	
Component No.	Fault	Supply voltage (V)	Test time	Fuse #	Fuse current (A)	Observation
Test condition: HDMI mode						
USB Type-A output	S-C	264	30min	FP1	1.142	USB Type-A output shutdown immediately, others normal operation, recoverable, no hazard.
USB Type-C output	S-C	264	30min	FP1	1.012	USB Type-C output shutdown immediately, others normal operation, recoverable, no hazard.
Speaker	Max. non-clipped	264	1h59min	FP1	1.227	Unit normal operation, no hazard. all safeguards remained effective during and after abnormal condition.
One speaker	S-C	264	1h22min	FP1	1.150	Speakers shutdown immediately, others normal operation, Recoverable when fault removed, no hazard, all safeguards remained effective during and after abnormal condition.
Ventilation	Blocked	264	2h01min	FP1	1.165	Unit normal operation, no hazard. all safeguards remained effective during and after abnormal condition.
USB Type-A output	O-L	264	2h50min	FP1	1.165 → 1.170 → 1.142	USB Type-A output overload to 0.6A and USB shutdown at 0.7A, others normal operation, Recoverable when fault removed, no hazard, all safeguards remained effective during and after abnormal condition.

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Clause	Requirement + Test				Result - Remark	Verdict
USB Type-C output	O-L	264	30min	FP1	1.165 → 1.012	USB Type-C output cannot overload, when overload USB Type-C shutdown immediately, others normal operation, Recoverable when fault removed, no hazard, all safeguards remained effective during and after abnormal condition.
Transformer TF2 (Across CF27)	O-L	264	4h27min	FP1	1.165 → 1.210 → 1.230 → 0.048	Transformer overload to 2.7A and shutdown at 2.8A, Recoverable when fault removed, no hazard. all safeguards remained effective during and after abnormal condition.
Transformer TH1 (Across CH22)	O-L	264	6h12min	FP1	1.165 → 1.309 → 0.048	Transformer overload to 3.1A and shutdown at 3.2A, Recoverable when fault removed, no hazard. all safeguards remained effective during and after abnormal condition.
Transformer TH2/TH3 (Across CH24)	O-L	264	3h46min	FP1	1.165 → 1.441 → 0.271	Transformer overload to 1.0A and panel shutdown at 1.1A, others normal operation, Recoverable when fault removed, no hazard. all safeguards remained effective during and after abnormal condition.
RV2	S-C	264	1s	FP1	0	Fuse FP1 opened immediately, no hazard.
BD4 pin 1-2	S-C	264	1s	FP1	0	Fuse FP1 opened immediately, no hazard.
CP18	S-C	264	1s	FP1	0	Fuse FP1 opened immediately, no hazard.
QP4 pin G-S	S-C	264	30min	FP1	0.047	Unit shutdown immediately and recoverable, no hazard.
QP4 pin G-D	S-C	264	1s	FP1	0	Fuse FP1 opened immediately, QP4 damaged, no hazard.

IEC 60950-1						
Clause	Requirement + Test				Result - Remark	Verdict
QP4 pin D-S	S-C	264	1s	FP1	0	Fuse FP1 opened immediately, QP4 damaged, no hazard..
RP25	S-C	264	30min	FP1	1.165	Unit normal operation, no hazard.
QP1 pin G-S	S-C	264	30min	FP1	0.042	Unit shutdown immediately and recoverable, no hazard.
QP1 pin G-D	S-C	264	1s	FP1	0	Fuse FP1 opened immediately, QP1 damaged, no hazard.
QP1 pin D-S	S-C	264	1s	FP1	0	Fuse FP1 opened immediately, QP1 damaged, no hazard.
RP23	S-C	264	30min	FP1	1.165	Unit normal operation, no hazard.
QH6 pin G-S	S-C	264	30min	FP1	0.272	The panel shutdown immediately, others normal operation, recoverable, no hazard.
QH6 pin G-D	S-C	264	1s	FP1	0	Fuse FP1 opened immediately, QH6 damaged, no hazard.
QH6 pin D-S	S-C	264	1s	FP1	0	Fuse FP1 opened immediately, QH6 damaged, no hazard.
QH8 pin G-S	S-C	264	30min	FP1	0.270	The panel shutdown immediately, others normal operation, recoverable, no hazard.
QH8 pin G-D	S-C	264	1s	FP1	0	Fuse FP1 opened immediately, QH6 and QH8 damaged, no hazard.
QH8 pin D-S	S-C	264	1s	FP1	0	Fuse FP1 opened immediately, QH6 and QH8 damaged, no hazard.
QH3 pin G-S	S-C	264	30min	FP1	0.048	Unit shutdown immediately and recoverable, no hazard.
QH3 pin G-D	S-C	264	1s	FP1	0	Fuse FP1 opened immediately, QH3 damaged, no hazard.
QH3 pin D-S	S-C	264	1s	FP1	0	Fuse FP1 opened immediately, QH3 damaged, no hazard.

IEC 60950-1						
Clause	Requirement + Test				Result - Remark	Verdict
QF4 pin G-S	S-C	264	30min	FP1	0.047	Unit shutdown immediately and recoverable, no hazard.
QF4 pin G-D	S-C	264	1s	FP1	0	Fuse FP1 opened immediately, QF4 damaged, no hazard.
QF4 pin D-S	S-C	264	1s	FP1	0	Fuse FP1 opened immediately, QF4 damaged, no hazard.
RF55	S-C	264	30min	FP1	1.165	Unit normal operation, no hazard.
UH4 pin 12-10	S-C	264	30min	FP1	0.278	The panel shutdown immediately, others normal operation, recoverable, no hazard.
UH4 pin 12-3	S-C	264	30min	FP1	0.280	The panel shutdown immediately, others normal operation, recoverable, no hazard.
UH4 pin 12-4	S-C	264	30min	FP1	0.276	The panel shutdown immediately, others normal operation, recoverable, no hazard.
UH1 pin 12-10	S-C	264	30min	FP1	0.050	Unit shutdown immediately and recoverable, no hazard.
UH1 pin 12-3	S-C	264	30min	FP1	0.052	Unit shutdown immediately and recoverable, no hazard.
UH1 pin 12-4	S-C	264	30min	FP1	0.046	Unit shutdown immediately and recoverable, no hazard.
UF3 pin 8-2	S-C	264	30min	FP1	0.042	Unit shutdown immediately and recoverable, no hazard.
UF3 pin 8-1	S-C	264	30min	FP1	0.042	Unit shutdown immediately and recoverable, no hazard.
UP4 pin 8-7	S-C	264	30min	FP1	0.047	Unit shutdown immediately and recoverable, no hazard.
UP4 pin 8-6	S-C	264	30min	FP1	0.045	Unit shutdown immediately and recoverable, no hazard.

IEC 60950-1						
Clause	Requirement + Test				Result - Remark	Verdict
UP1 pin 8-7	S-C	264	30min	FP1	0.050	Unit shutdown immediately and recoverable, no hazard.
UP1 pin 8-6	S-C	264	30min	FP1	0.047	Unit shutdown immediately and recoverable, no hazard.
PF1 pin 1-2	S-C	264	30min	FP1	0.045	Unit shutdown immediately and recoverable, no hazard.
PF1 pin 3-4	S-C	264	30min	FP1	1.165	Unit normal operation, no hazard.
PF1 pin 1	O-C	264	30min	FP1	0.046	Unit shutdown immediately and recoverable, no hazard.
PF1 pin 3	O-C	264	30min	FP1	1.165	Unit normal operation, no hazard.
PF2 pin 1-2	S-C	264	30min	FP1	0.047	Unit shutdown immediately and recoverable, no hazard.
PF2 pin 3-4	S-C	264	30min	FP1	1.165	Unit normal operation, no hazard.
PF2 pin 1	O-C	264	30min	FP1	0.049	Unit shutdown immediately and recoverable, no hazard.
PF2 pin 3	O-C	264	30min	FP1	1.165	Unit normal operation, no hazard.
PF3 pin 1-2	S-C	264	30min	FP1	0.046	Unit shutdown immediately and recoverable, no hazard.
PF3 pin 3-4	S-C	264	30min	FP1	1.165	Unit normal operation, no hazard.
PF3 pin 1	O-C	264	30min	FP1	0.045	Unit shutdown immediately and recoverable, no hazard.
PF3 pin 3	O-C	264	30min	FP1	1.165	Unit normal operation, no hazard.
PH3 pin 1-2	S-C	264	30min	FP1	0.046	Unit shutdown immediately and recoverable, no hazard.
PH3 pin 3-4	S-C	264	30min	FP1	1.165	Unit normal operation, no hazard.
PH3 pin 1	O-C	264	30min	FP1	0.048	Unit shutdown immediately and recoverable, no hazard.

IEC 60950-1						
Clause	Requirement + Test			Result - Remark		Verdict
PH3 pin 3	O-C	264	30min	FP1	1.165	Unit normal operation, no hazard.
PH1 pin 1-2	S-C	264	30min	FP1	0.272	The panel shutdown immediately, others normal operation, recoverable, no hazard.
PH1 pin 3-4	S-C	264	30min	FP1	0.276	The panel shutdown immediately, others normal operation, recoverable, no hazard.
PH1 pin 1	O-C	264	30min	FP1	0.272	The panel shutdown immediately, others normal operation, recoverable, no hazard.
PH1 pin 3	O-C	264	30min	FP1	0.271	The panel shutdown immediately, others normal operation, recoverable, no hazard.
PH2 pin 1-2	S-C	264	30min	FP1	0.274	The panel shutdown immediately, others normal operation, recoverable, no hazard.
PH2 pin 3-4	S-C	264	30min	FP1	0.273	The panel shutdown immediately, others normal operation, recoverable, no hazard.
PH2 pin 1	O-C	264	30min	FP1	0.275	The panel shutdown immediately, others normal operation, recoverable, no hazard.
PH2 pin 3	O-C	264	30min	FP1	0.276	The panel shutdown immediately, others normal operation, recoverable, no hazard.
PH4 pin 1-2	S-C	264	30min	FP1	0.045	Unit shutdown immediately and recoverable, no hazard.
PH4 pin 3-4	S-C	264	30min	FP1	0.052	Unit shutdown immediately and recoverable, no hazard.
PH4 pin 1	O-C	264	30min	FP1	0.048	Unit shutdown immediately and recoverable, no hazard.
PH4 pin 3	O-C	264	30min	FP1	0.049	Unit shutdown immediately and recoverable, no hazard.

IEC 60950-1						
Clause	Requirement + Test				Result - Remark	Verdict
PH5 pin 1-2	S-C	264	30min	FP1	0.046	Unit shutdown immediately and recoverable, no hazard.
PH5 pin 3-4	S-C	264	30min	FP1	0.048	Unit shutdown immediately and recoverable, no hazard.
PH5 pin 1	O-C	264	30min	FP1	0.042	Unit shutdown immediately and recoverable, no hazard.
PH5 pin 3	O-C	264	30min	FP1	0.047	Unit shutdown immediately and recoverable, no hazard.
TH1 pin 3-4	S-C	264	30min	FP1	0.046	Unit shutdown immediately and recoverable, no hazard.
TH1 pin 5,6-8,9	S-C	264	30min	FP1	0.045	Unit shutdown immediately and recoverable, no hazard.
TH1 pin 5,6-10,11	S-C	264	30min	FP1	0.046	Unit shutdown immediately and recoverable, no hazard.
QH12 pin 2-3	S-C	264	30min	FP1	0.046	Unit shutdown immediately and recoverable, no hazard.
QH13 pin 2-3	S-C	264	30min	FP1	0.045	Unit shutdown immediately and recoverable, no hazard.
CH22	S-C	264	30min	FP1	0.048	Unit shutdown immediately and recoverable, no hazard.
TF2 pin 6-9	S-C	264	30min	FP1	0.044	Unit shutdown immediately and recoverable, no hazard.
TF2 pin 10-11	S-C	264	30min	FP1	0.046	Unit shutdown immediately and recoverable, no hazard.
TF2 pin 1,2-4,5	S-C	264	30min	FP1	0.046	Unit shutdown immediately and recoverable, no hazard.
DF13 pin 1,3-2	S-C	264	30min	FP1	0.047	Unit shutdown immediately and recoverable, no hazard.
CF36	S-C	264	30min	FP1	0.048	Unit shutdown immediately and recoverable, no hazard.

IEC 60950-1						
Clause	Requirement + Test				Result - Remark	Verdict
TH2/TH3 pin 2-5	S-C	264	30min	FP1	1.165	Unit normal operation, no hazard.
TH2/TH3 pin 8-12	S-C	264	30min	FP1	0.275	The panel shutdown immediately, others normal operation, recoverable, no hazard.
DH5 pin 1-2	S-C	264	30min	FP1	0.272	The panel shutdown immediately, others normal operation, recoverable, no hazard.
DH6 pin 2-3	S-C	264	30min	FP1	0.274	The panel shutdown immediately, others normal operation, recoverable, no hazard.
CH26	S-C	264	30min	FP1	0.273	The panel shutdown immediately, others normal operation, recoverable, no hazard.
LED "+" to "-"	S-C	264	30min	FP1	0.275	The panel shutdown immediately, others normal operation, recoverable, no hazard.
LED "+" to CN201 "+12V"	S-C	264	30min	FP1	0.045	Unit shutdown immediately and recoverable, no hazard.
LED "+" to CN201 "+5V"	S-C	264	30min	FP1	0.047	Unit shutdown immediately and recoverable, no hazard.
LED "+" to CN201 "+5VSB"	S-C	264	30min	FP1	0.045	Unit shutdown immediately and recoverable, no hazard.
UA1 pin 27,28-25	S-C	264	30min	FP1	1.150	Speakers shutdown immediately, others normal operation, Recoverable when fault removed, no hazard, all safeguards remained effective during and after abnormal condition.
supplementary information:						

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

The unit passed 3000V hi-pot test between primary and secondary, Unit primary to unit enclosure with metal foil after single fault test above. Single fault did not cause excessive voltage in accessible SELV circuits.

1). In fault column, s-c=short-circuited, o-c=open-circuited, o-l=over-loaded.

2). Transformer winding and core:

Limit temperature for Class B is 175°C;

Limit temperature for Class F is 200°C.

3). For component damaged without fuse opened condition have been repeated twice (three tests total) with same result.

4). The same as result test conducted on all fuse sources, all fuse sources see table 1.5.1 for details.

5). Max. normal load: Test with HDMI mode, 1kHz sine wave signal input, adjust volume to 1/8 Non-clipped output power. The video signal is three vertical bar signals, adjust the brightness and contrast to maximum value. Speaker voltage: 2.12Vrms; USB Type-A load: 5Vdc, 500mA ; USB Type-C load: 5Vdc, 3A.

6) For T-couple and Temp.(°C), see table 4.5 for details.

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

C.2	TABLE: transformers (TH1)							P
Loc.	Tested insulation	Working voltage peak / V (2.10.2)	Working voltage rms / V (2.10.2)	Required electric strength (5.2)	Required clearanc e / mm (2.10.3)	Required creepage distance / mm (2.10.4)	Required distance thr. insul. (2.10.5)	
Primary winding to secondary winding	Reinforced insulation	420	250	AC 3000V	6.0	6.0	0.4	
Core to primary winding	Basic insulation	420	250	AC 1500V	3.0	3.0	N/A	
Core to secondary winding	Supplemen tary insulation	420	250	AC 1500V	3.0	3.0	0.4	
Loc.	Tested insulation			Test voltage/ V	Measure d clearanc e / mm	Measured creepage dist./ mm	Measured distance thr. insul. / mm; number of layers	
Primary winding to secondary winding	Reinforced insulation			AC 3000V	6.7	6.7	Min. 2 layers insulation tape, and min. 0.4mm thickness of bobbin	
Core to primary winding	Basic insulation			AC 1500V	3.6	3.6	N/A	
Core to secondary winding	Supplementary insulation			AC 1500V	3.6	3.6	Min. 2 layers insulation tape	
Supplementary information:								
See transformer SPEC.								
For transformer (TF2)								
Loc.	Tested insulation	Working voltage peak / V (2.10.2)	Working voltage rms / V (2.10.2)	Required electric strength (5.2)	Required clearanc e / mm (2.10.3)	Required creepage distance / mm (2.10.4)	Required distance thr. insul. (2.10.5)	
Primary winding to secondary winding	Reinforced insulation	528	353	AC 3000V	6.6	7.1	0.4	
Core to primary winding	Reinforced insulation	528	353	AC 3000V	6.6	7.1	0.4	

IEC 60950-1							
Clause	Requirement + Test			Result - Remark			Verdict
Loc.	Tested insulation			Test voltage/ V	Measure d clearanc e / mm	Measured creepage dist./ mm	Measured distance thr. insul. / mm; number of layers
Primary winding to secondary winding	Reinforced insulation			AC 3000V	10.0	10.0	TIW used
Core to primary winding	Reinforced insulation			AC 3000V	10.0	10.0	TIW used
Supplementary information:							
See transformer SPEC.							
For transformer (TH2/TH3)							
Loc.	Tested insulation	Working voltage peak / V (2.10.2)	Working voltage rms / V (2.10.2)	Required electric strength (5.2)	Required clearanc e / mm (2.10.3)	Required creepage distance / mm (2.10.4)	Required distance thr. insul. (2.10.5)
Primary winding to secondary winding	Reinforced insulation	500	264	AC 3000V	6.6	6.6	0.4
Core to primary winding	Basic insulation	500	264	AC 1740V	3.3	3.3	N/A
Core to secondary winding	Supplemen tary insulation	500	264	AC 1740V	3.3	3.3	0.4
Loc.	Tested insulation			Test voltage/ V	Measure d clearanc e / mm	Measured creepage dist./ mm	Measured distance thr. insul. / mm; number of layers
Primary winding to secondary winding	Reinforced insulation			AC 3000V	6.9	6.9	Min. 0.4mm thickness of bobbin and case
Core to primary winding	Basic insulation			AC 1740V	5.0	5.0	N/A
Core to secondary winding	Supplementary insulation			AC 1740V	5.0	5.0	Min. 0.4mm thickness of bobbin and case
Supplementary information:							
See transformer SPEC.							

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

C.2	TABLE: transformers	P										
Transformer : (TH1)												
2. 外形尺寸(MECHANICAL DIMENSION/UNIT:mm)												
主视图 侧视图 底视图 顶视图 <table><tr><td colspan="2">25REF</td></tr><tr><td colspan="2">EE3515-12V</td></tr><tr><td colspan="2">MEGMEET EE35-011</td></tr><tr><td>Y-B 00 YYWW XX</td><td>REV. A01</td></tr><tr><td>PIN1</td><td>PIN4</td></tr></table>			25REF		EE3515-12V		MEGMEET EE35-011		Y-B 00 YYWW XX	REV. A01	PIN1	PIN4
25REF												
EE3515-12V												
MEGMEET EE35-011												
Y-B 00 YYWW XX	REV. A01											
PIN1	PIN4											
工艺要求及备注:												
1、磁芯开气隙, 气隙磁芯装于骨架顶部, 磁芯外包14mm高温胶带2TS。												
2、焊点不高于骨架凸点。												
3、真空浸油。磁芯中柱点软胶固定												
4、两磁芯结合处点胶固定, 共4点;												
产品1-4脚顶部骨架与磁心结合处点胶固定, 共一点; (如图所示)。												
5、装磁芯前,在骨架两侧装磁芯位置各贴二层高温胶带24(W)*30(L)mm*1pcs过桥胶带, 隔开绕组与磁芯。												
6、标签(白底黑字, PET材质)贴于顶部, 字底朝1-4脚侧, “YYWW” 为年周, “XX” 流水码。												
3. 电原理图(SCHEMATIC)												
PRI 4 3 2 1 N1 N2 SEC 10/11 5/6 8/9 N3 N4 • WINDING START												

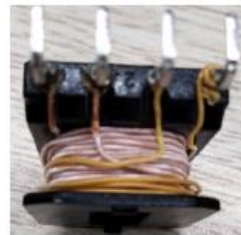
IEC 60950-1

Clause	Requirement + Test	Result - Remark	Verdict
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Winding No (组别)	Margin Tape (擋牆膠帶)		Wire 线材	Turns 圈數	端子/PIN		绝缘胶带 TAPE (BLACK)	套管/Tube		备注 NOTE
	PIN 側	TOP 側			入IN	出OUT		入IN	出OUT	
N1	A SECTION		UEWF $\phi 0.10\text{mm} \times 18\text{P}$ (USTC)	54Ts	4	3	/	/	/	1, 2
N2	A SECTION		TIW-B $\phi 0.30\text{mm} \times 1\text{P}$	6Ts	2	1	/	/	/	2, 5
N3	B SECTION		UEWF $\phi 0.15\text{mm} \times 65\text{P}$ (USTC)	3Ts	10/11	5/6	/	/	/	1, 2, 3, 4
N4			UEWF $\phi 0.15\text{mm} \times 65\text{P}$ (USTC)	3Ts	5/6	8/9	/	/	/	

注解:

- 1、使用丝包线;
- 2、绕线均匀平整;线材不可交叉打结或损伤;
- 3、PIN5/6; PIN8/9; PIN10/11可不连锡;
进出线不可走底部槽(须满足安规距离要求)。
- 4、N3/N4分开绕制, 绕完N3再绕N4;
- 5、使用三层绝缘线。

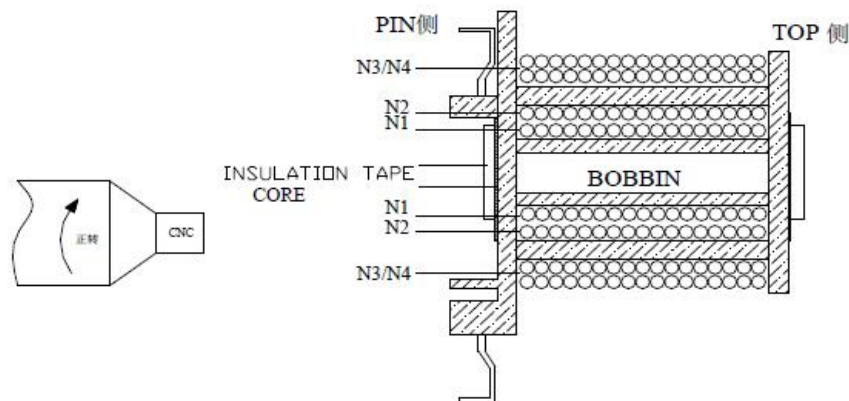


N2起线靠顶部密绕



5. 内部结构图(WINDING CONSTRUCTION)

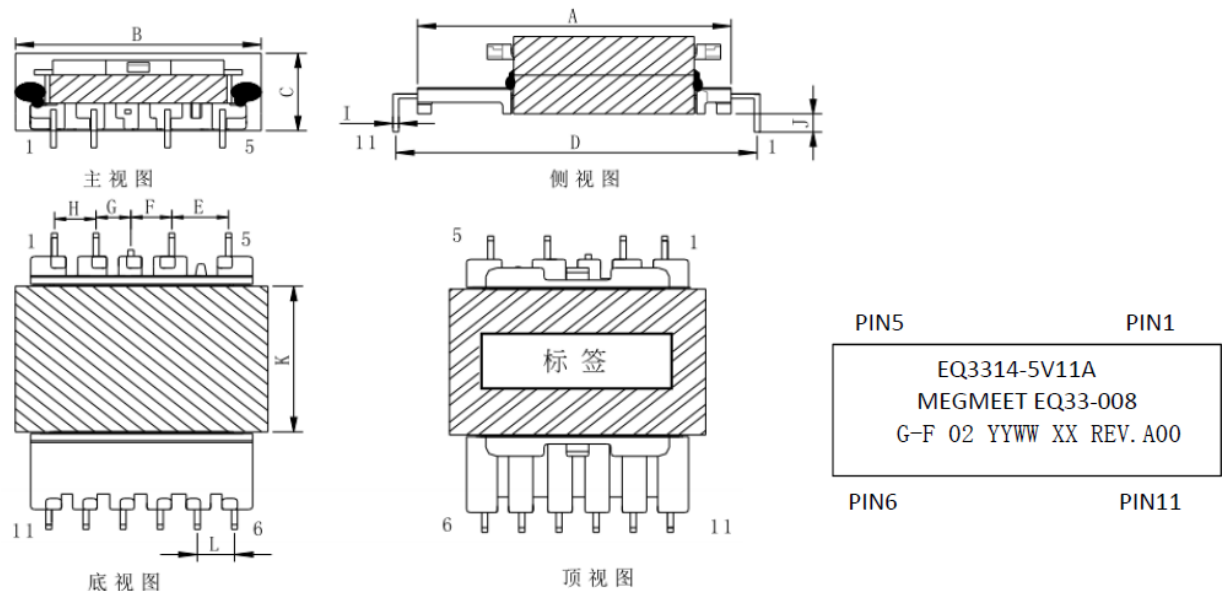
所有绕组从针脚侧看为顺时针绕线 (N1不交叉)



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

Transformer : (TF2)

2. 外形尺寸(MECHANICAL DIMENSION/UNIT:mm)

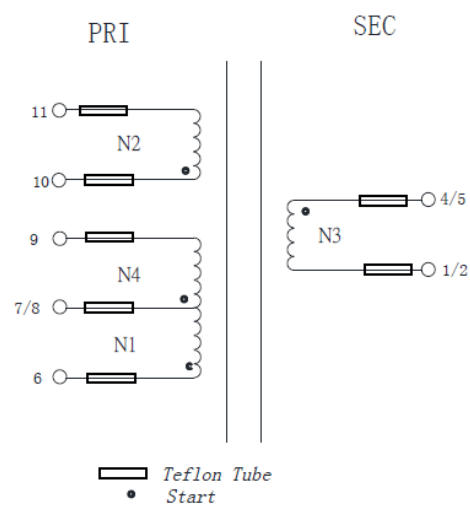


A	B	C	D	E	F	G
43.4±1.0	34.5±1.0	14.8 MAX	50±0.5	7.6±0.3	5.5±0.3	4.7±0.3
H	I	J	K	L		
5.6±0.3	SQ0.8±0.1	3.2±0.4	25±1	5.0±0.3		

工艺要求及备注:

- 1、PIN3剪掉;
- 2、磁芯开气隙,并装于骨架顶部,磁芯可先用10mm的高温胶带3圈固定,然后包25mm的茶色双层复合高温胶带包1.3圈;
- 3、磁芯中柱点软胶,产品真空浸油,烘干处理;
- 4、在磁芯与磁芯结合处点胶固定,胶点与骨架相连,共4点(如图);
- 6、产品如图所示在顶部激光喷码,字底朝6-11侧(YYWW:年周,XX:流水码)。

3. 电原理图(SCHEMATIC)



IEC 60950-1

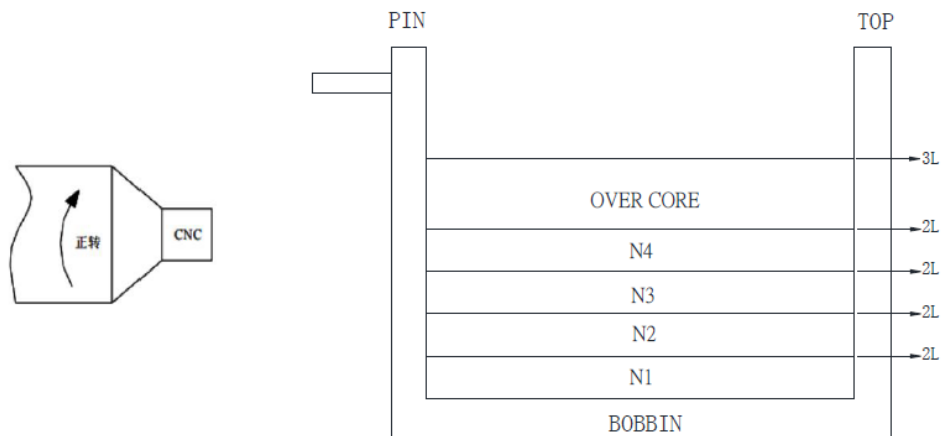
Clause	Requirement + Test	Result - Remark	Verdict
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4. 绕线明细表(WINDING STEPS)

Winding No (组别)	Margin Tape (擋牆膠帶)		Wire 线材	Turns 圈數	端子/PIN		绝缘胶带 茶色高温	套管/Tube		备注 NOTE
					入 IN	出 OUT		入 IN	出 OUT	
N1	/	/	E&B-Φ0.40mm*1P	13TS	6	7	2TS	CB-TT	CB-TT	1. 3. 5
N2	/	/	E&B-Φ0.30mm*1P	7TS	10	11	2TS	CB-TT	CB-TT	1. 2. 3
N3	/	/	2UEWF Φ0.15mm*60P*2C	2TS	4/5	1/2	2TS	CB-TT	CB-TT	1. 4
N4	/	/	E&B-Φ0.40mm*1P	13TS	8	9	2TS	CB-TT	CB-TT	1. 3. 5

NOTE: 1、平整密绕; 2、疏绕; 3、使用三层绝缘线;
4、使用M-F绞合线; 5、PIN7、PIN8可连锡也可以不连锡。

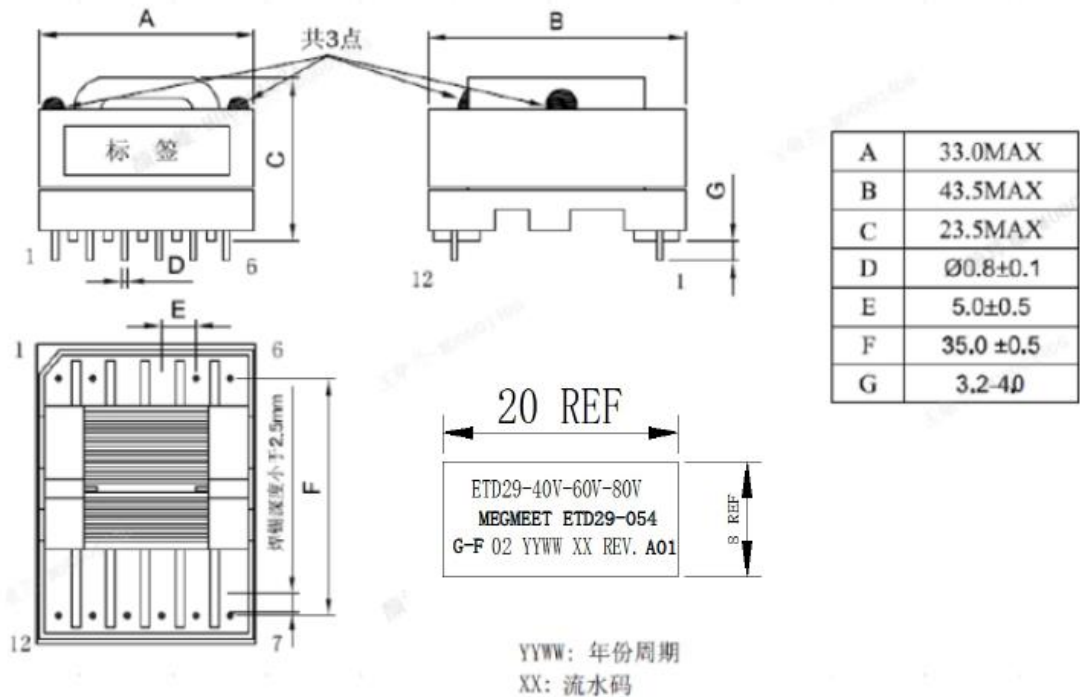
5. 内部结构图(WINDING CONSTRUCTION) 入轴方向, 从PIN脚看为顺时针绕线



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

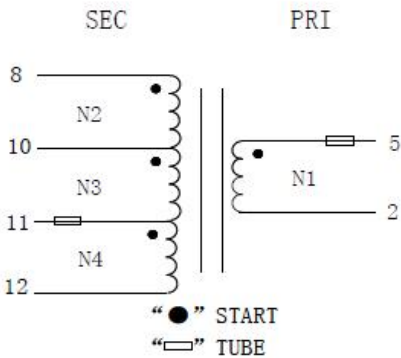
Transformer : (TH2, TH3):

2. MECHANICAL DIMENSION(UNIT:mm) 外形尺寸



- 工艺要求及备注:
- 1、骨架缺PIN9。
 - 2、磁芯需研磨，装于PIN7-12,磁芯中柱点软胶固定，顶部磁芯接合处和次级顶部点胶固定（共3点）。
 - 3、磁芯包9.5mm高温胶带3圈固定，焊点不高于骨架挡板。
 - 4、产品真空含浸
 - 5、标签(白底黑字，材质PET)或喷码于产品PIN1-6边，字朝底部，“YYWW”表示年份周期，“XX”为流水码

3.SCHEMATIC 电气原理图:



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

4、WINDING绕线明细表：

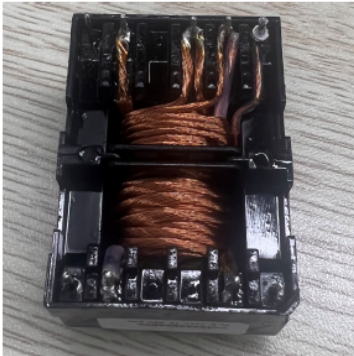
Winding No (组别)	Margin Tape (擋牆膠帶)		Wire 线材	Turns 圈數	端子/PIN		绝缘 胶带 TAPE	套管/Tube		备注NOTE
	顶端	PIN 端			入IN	出OUT		入IN	出OUT	
N1	/	/	UEW-F $\varnothing$ 0.15mm*35*1P	24	5	2	/	TFL	/	1, 2, 5
N2	/	/	UEW-F $\varnothing$ 0.15mm*40*1P	10	8	10	/	/	/	1, 3, 5
N3	/	/	UEW-F $\varnothing$ 0.15mm*40*1P	5	10	11	/	/	/	1, 4, 5
N4	/	/	UEW-F $\varnothing$ 0.15mm*25*1P	5	11	12	/	TFL	/	1, 4, 5

注解：

1. 使用绞合线； 2. N1密绕三层，最后一层居中密绕； 3. N2密绕一层，第二层疏绕； 4. 均匀绕线
5. 绕线排列整齐，并均匀分布；漆包线不得打结，不交叉重叠，不损伤漆皮；

5、WINDING/内部结构图

从PIN1侧看逆时针绕，N1出入线不交叉。



图片仅供参考绕线方向

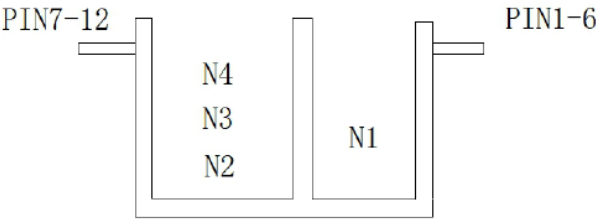




Photo 1 External view



Photo 2 External view

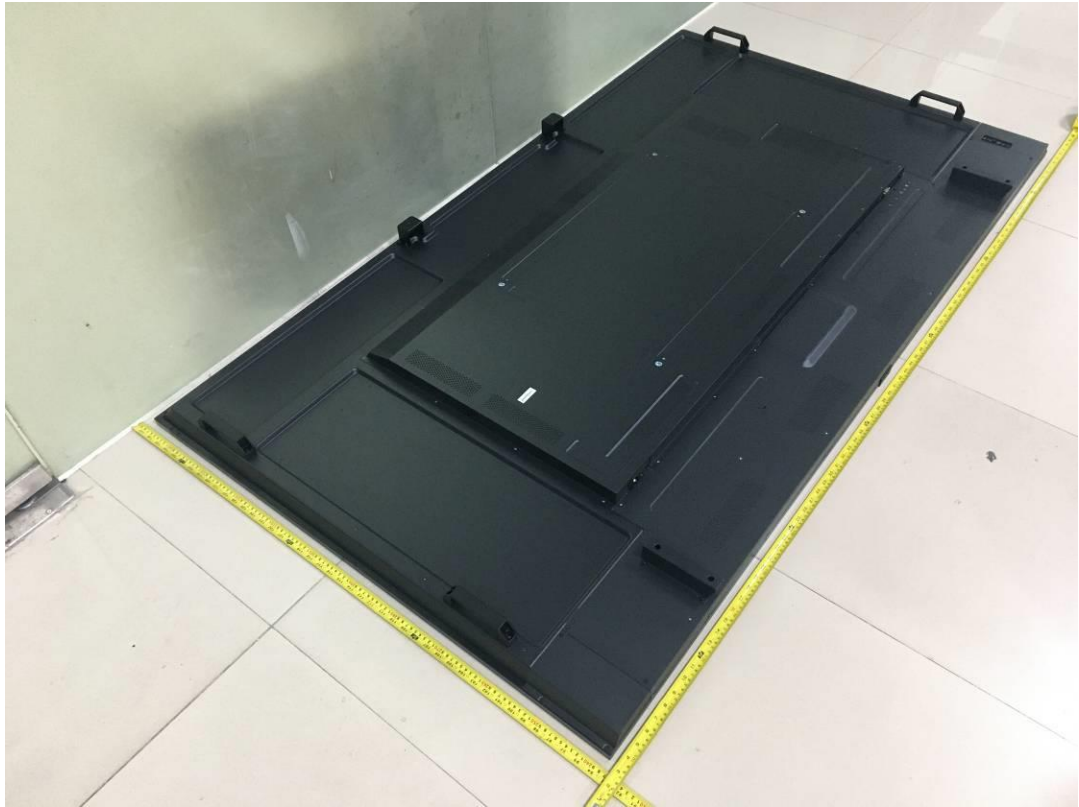


Photo 3 External view

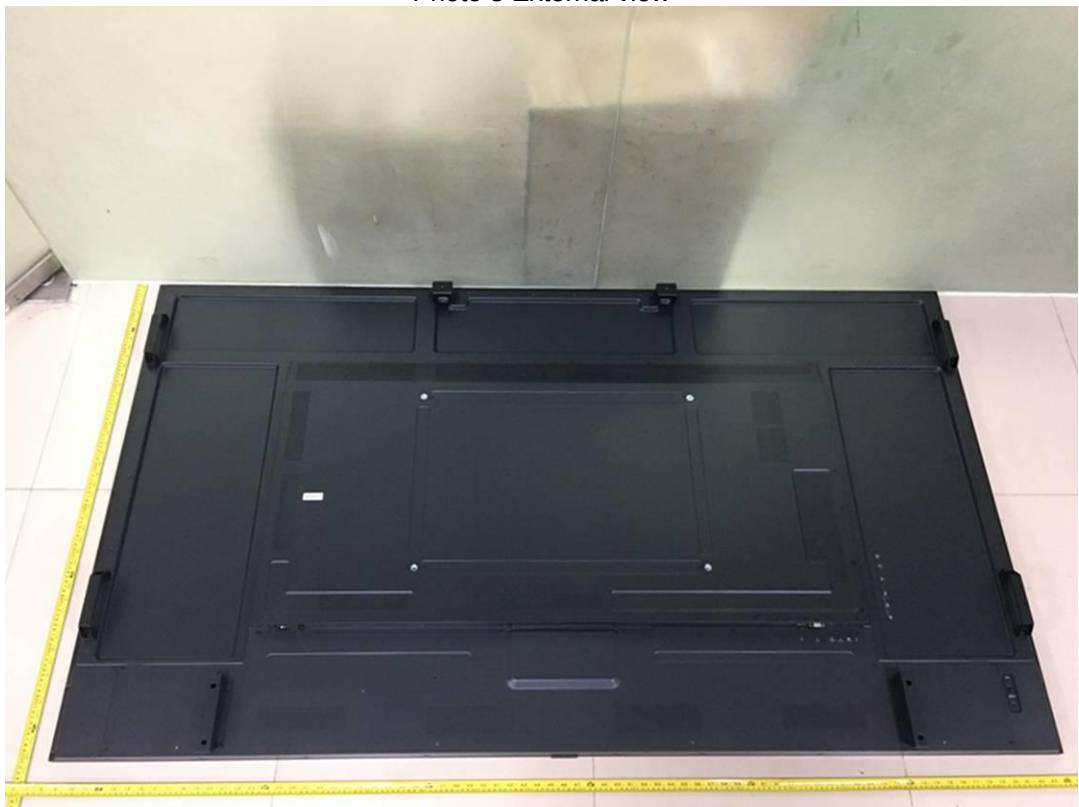


Photo 4 External view



Photo 5 Terminal view



Photo 6 Terminal view



Photo 7 Terminal view

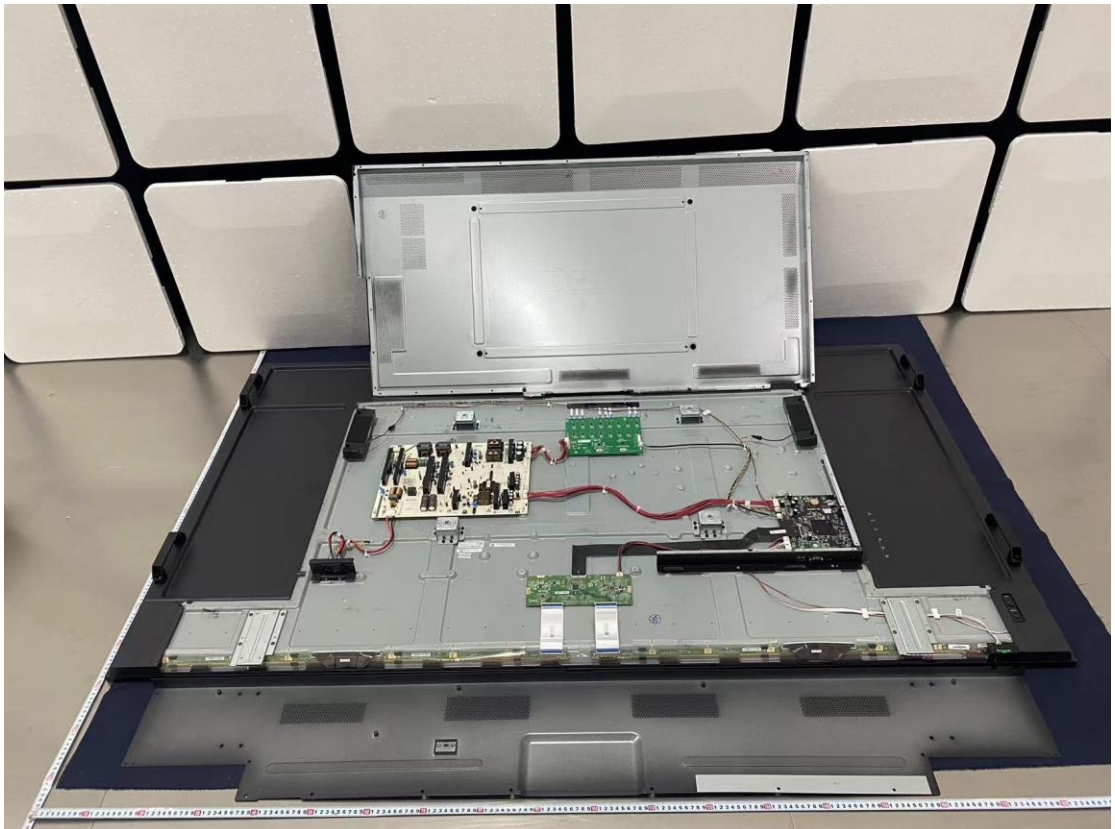


Photo 8 Internal view

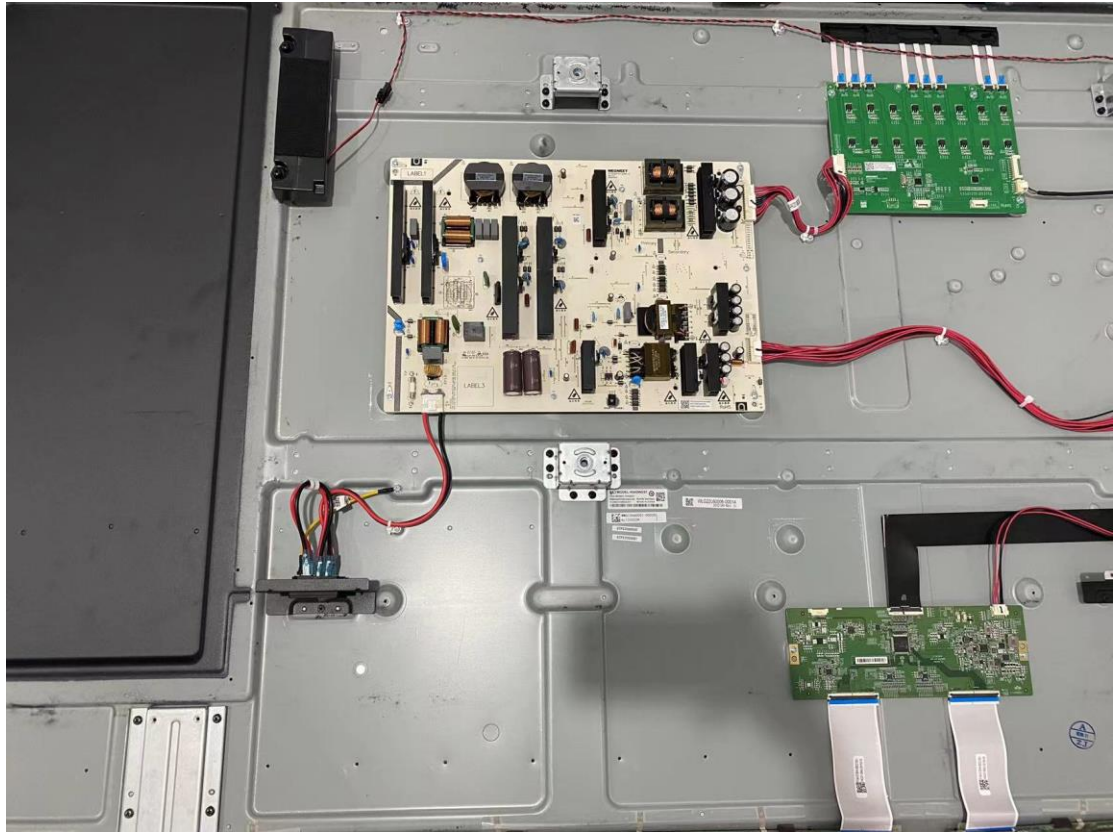


Photo 9 Internal view

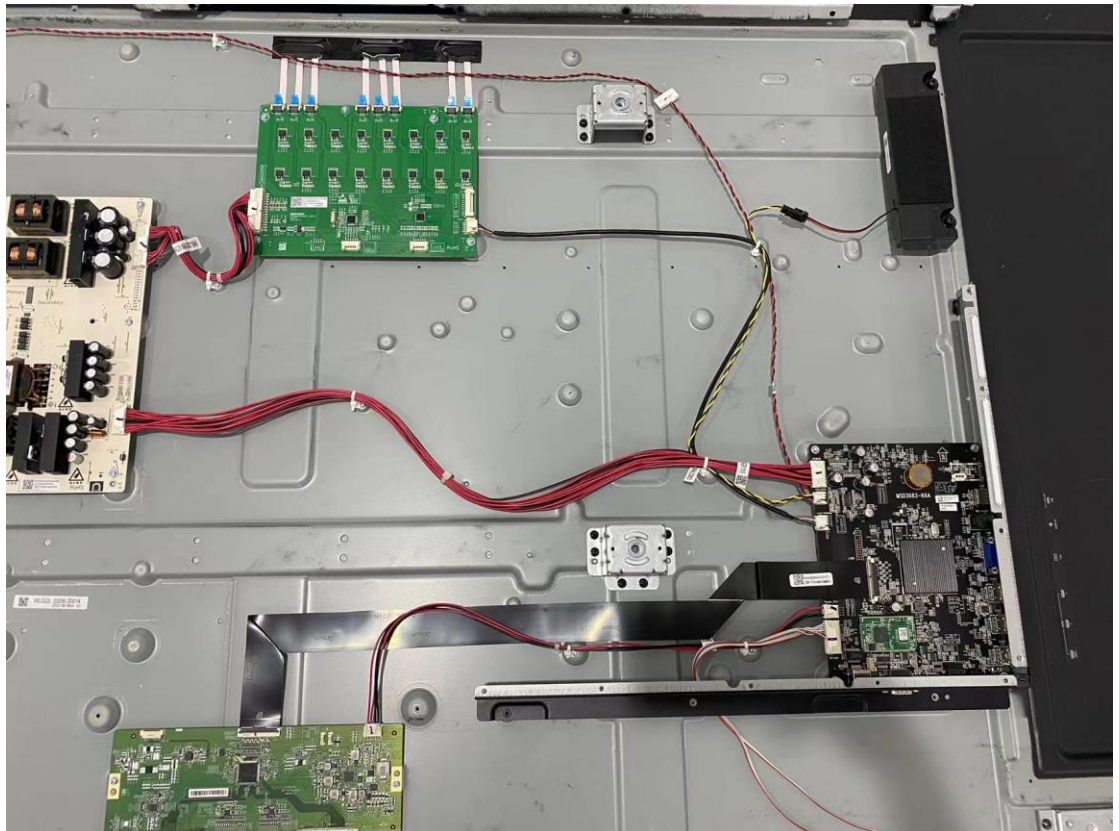


Photo 10 Internal view

ATTACHMENT 1 Photo Documentation

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Report No.: ESTS-P22071206

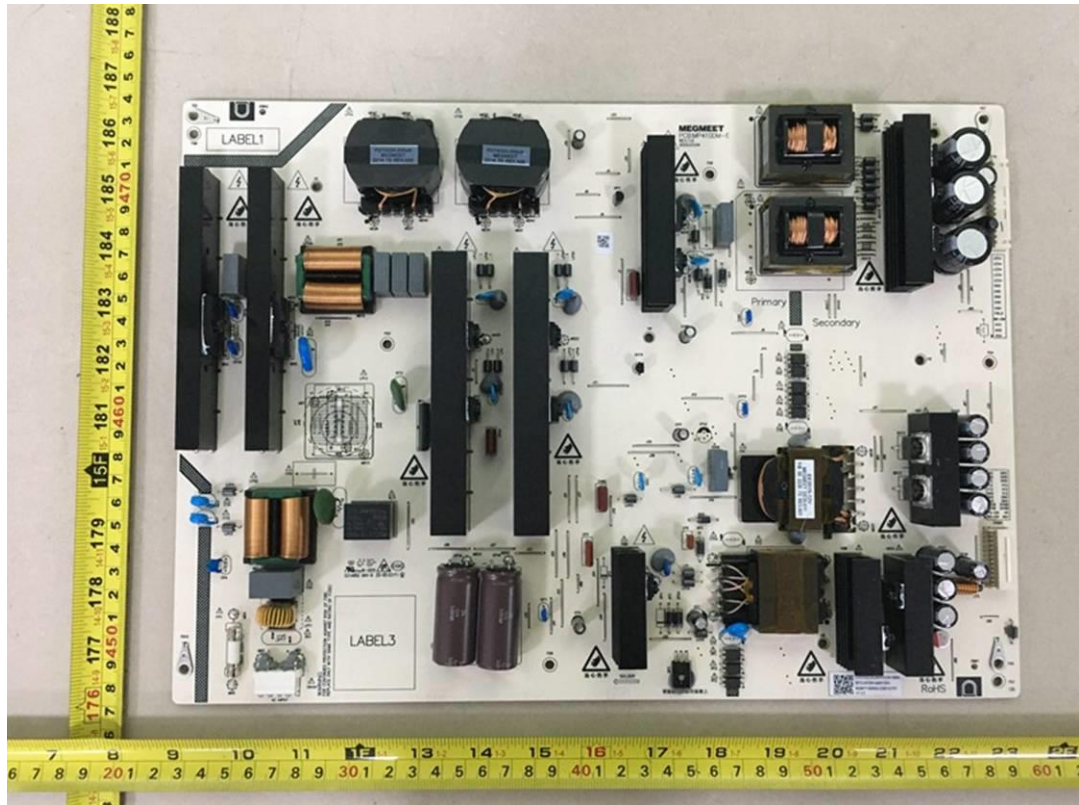


Photo 11 Power board view

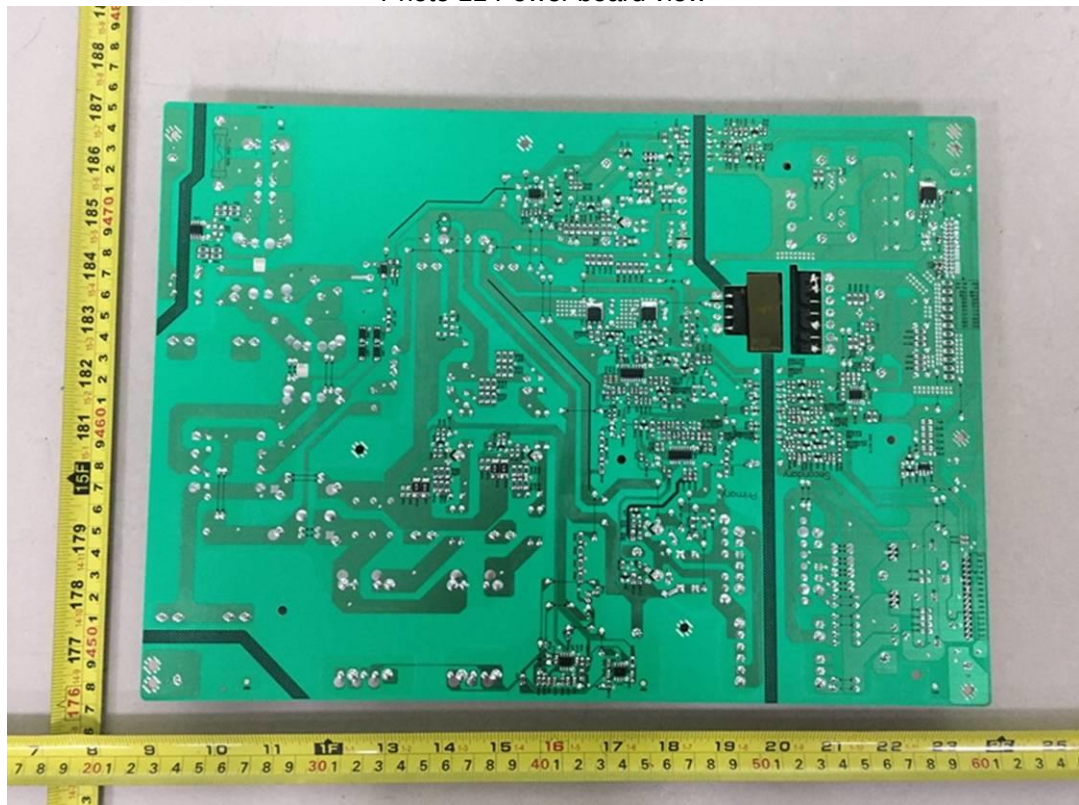


Photo 12 Power board view

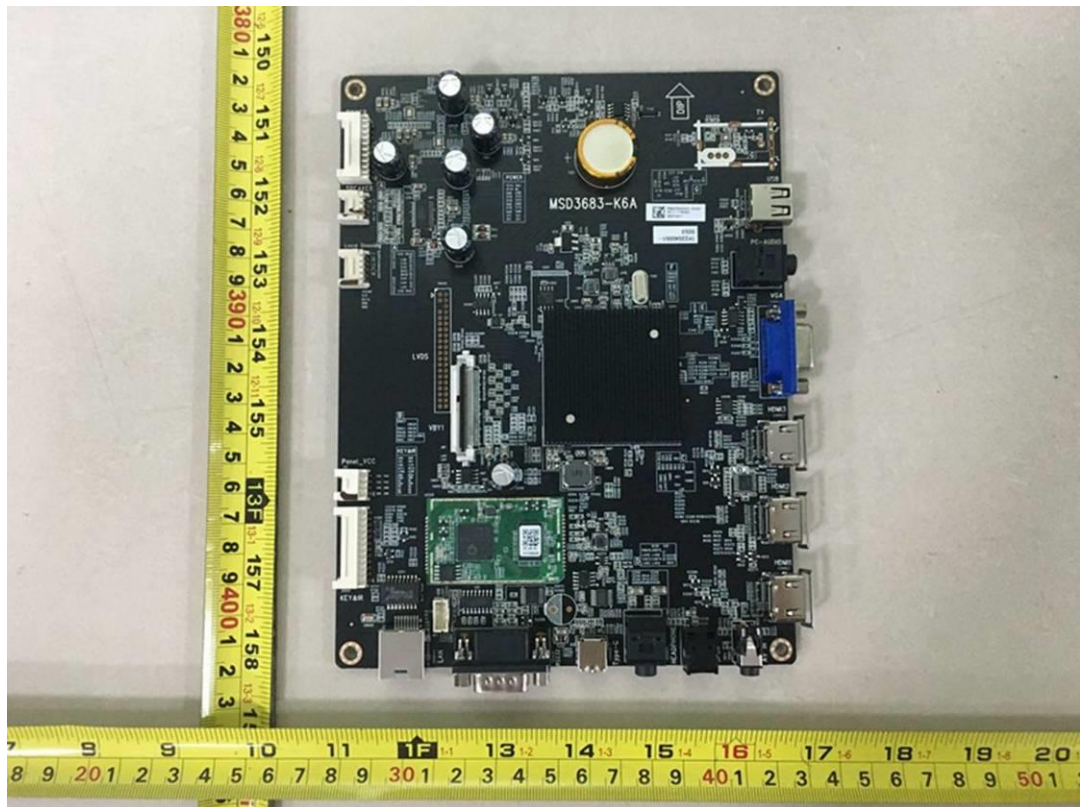


Photo 13 Main board view

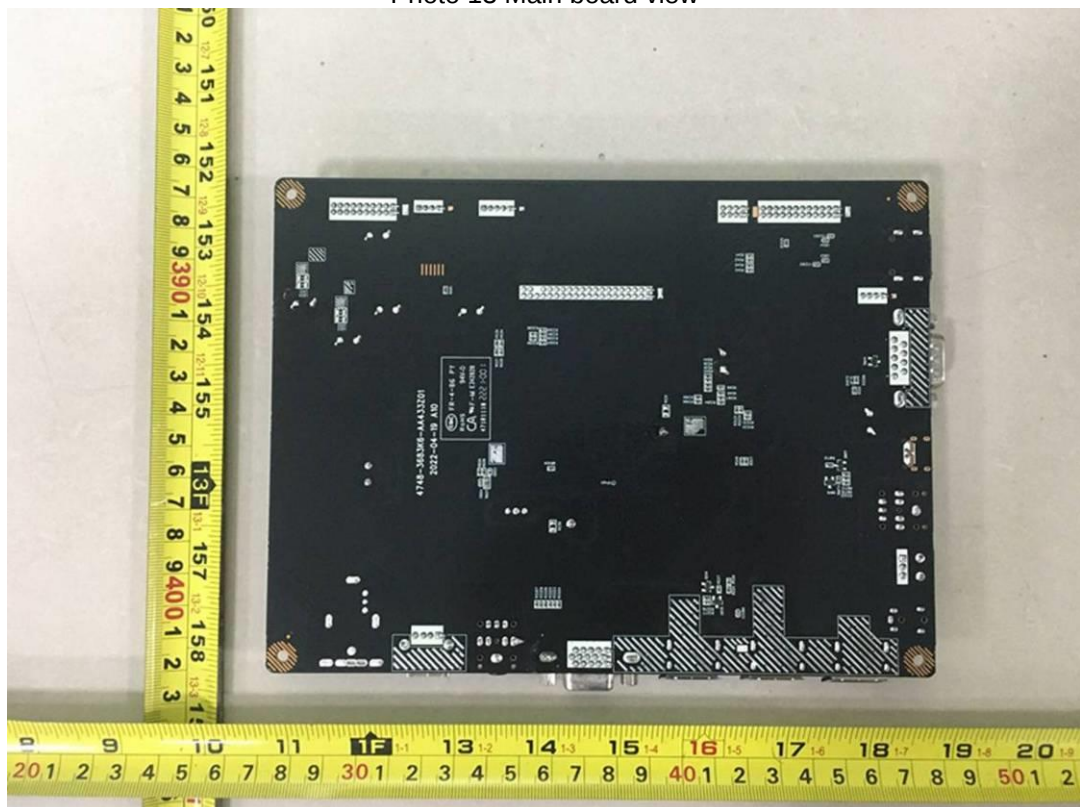


Photo 14 Main board view

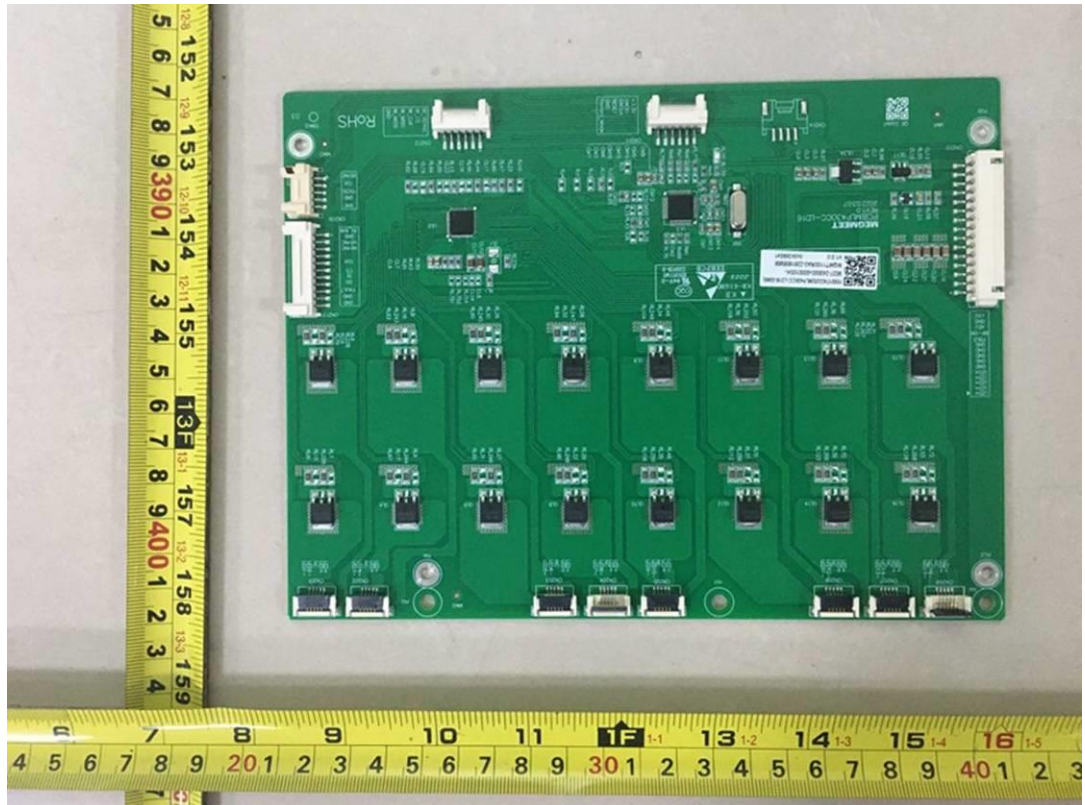


Photo 15 Local dimming board view

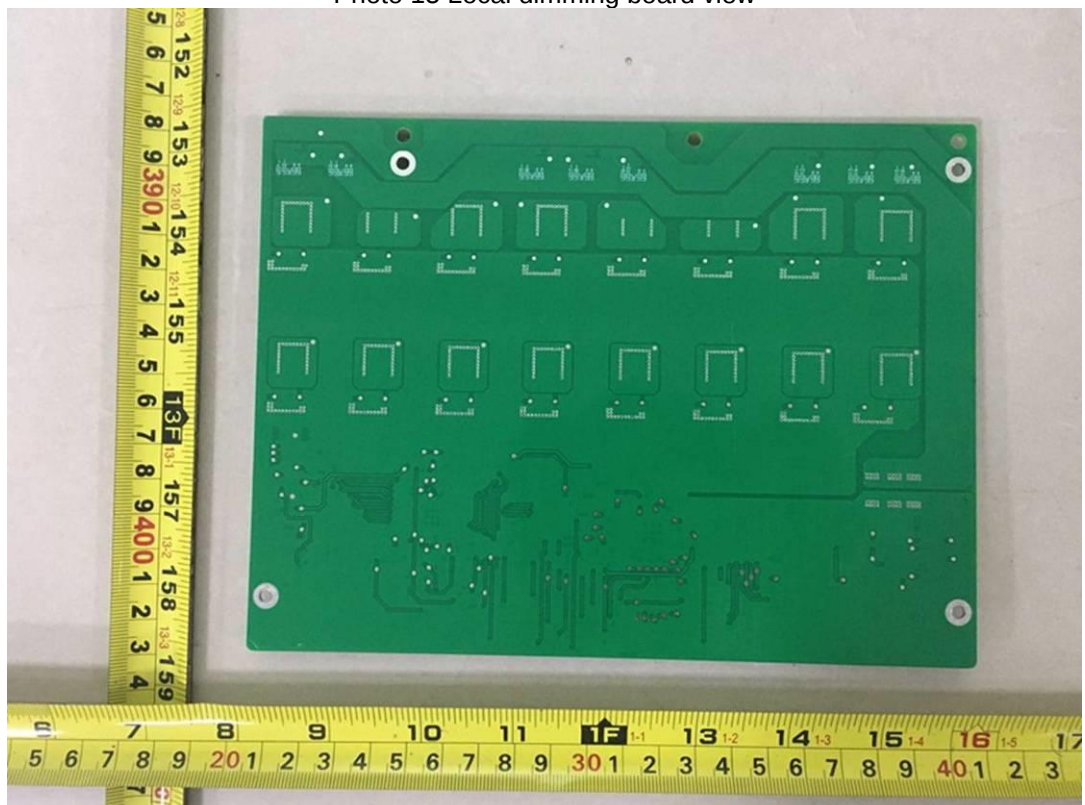


Photo 16 Local dimming board view

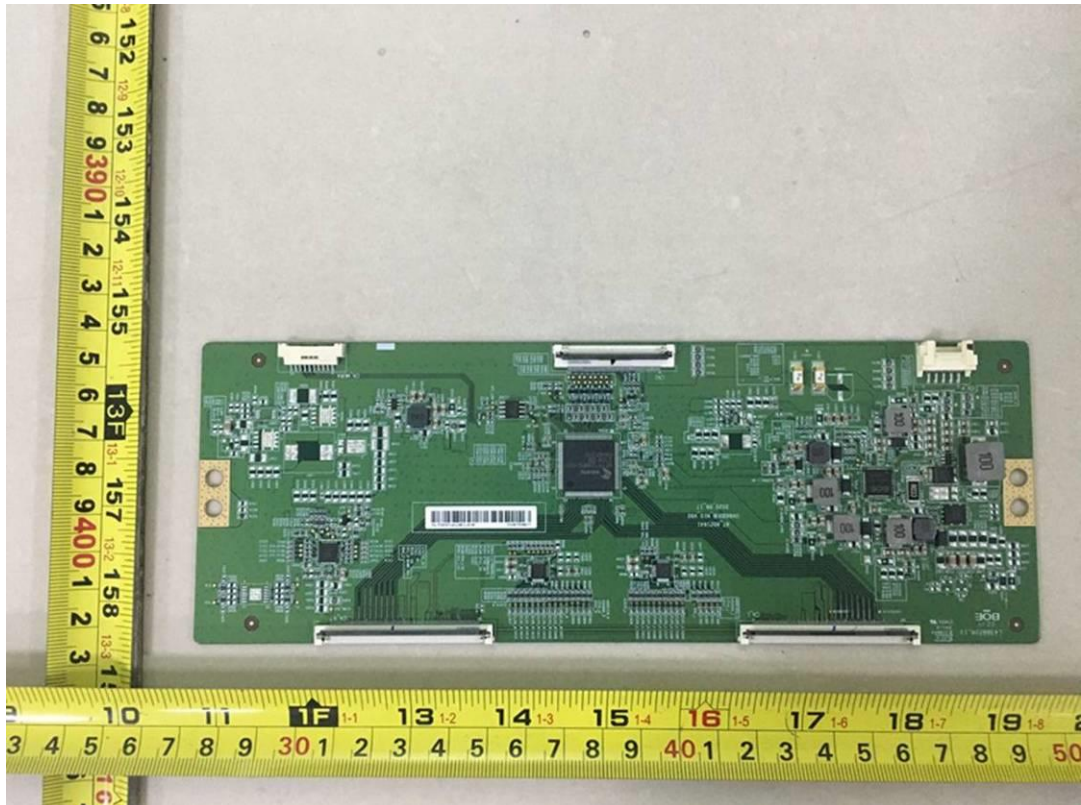


Photo 17 T CON board view

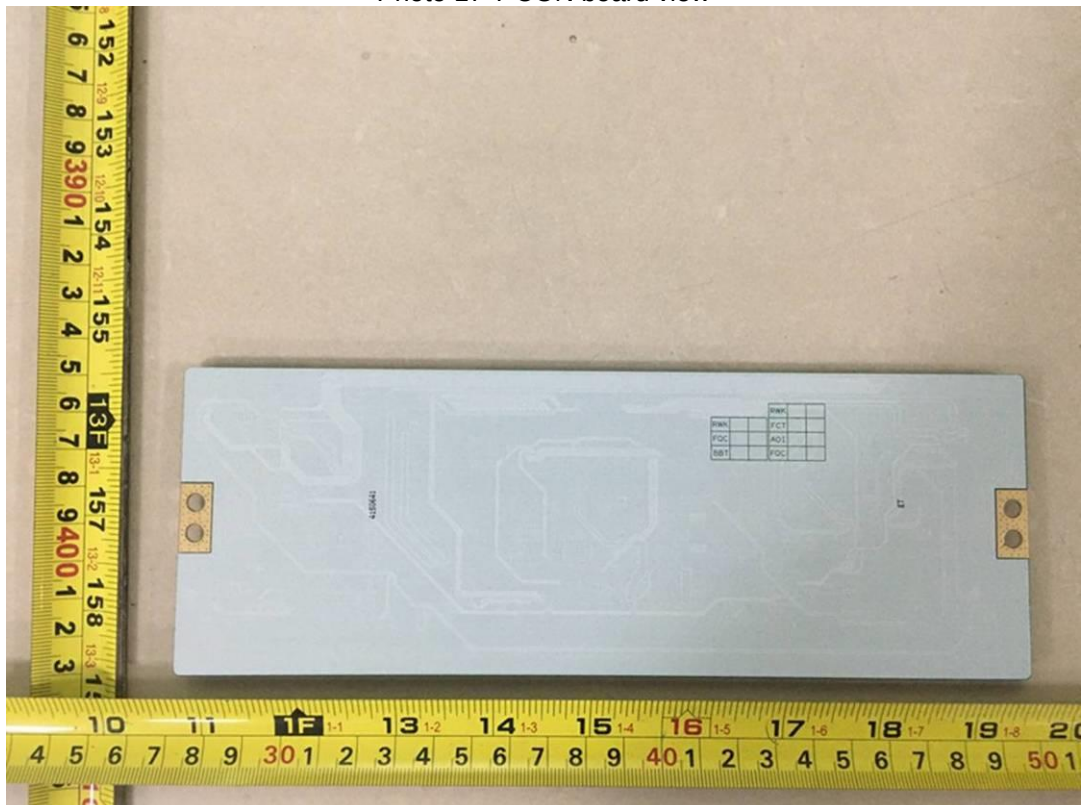


Photo 18 T CON board view



Photo 19 Base stand view



Photo 20 Base stand view



Photo 21 Remote control

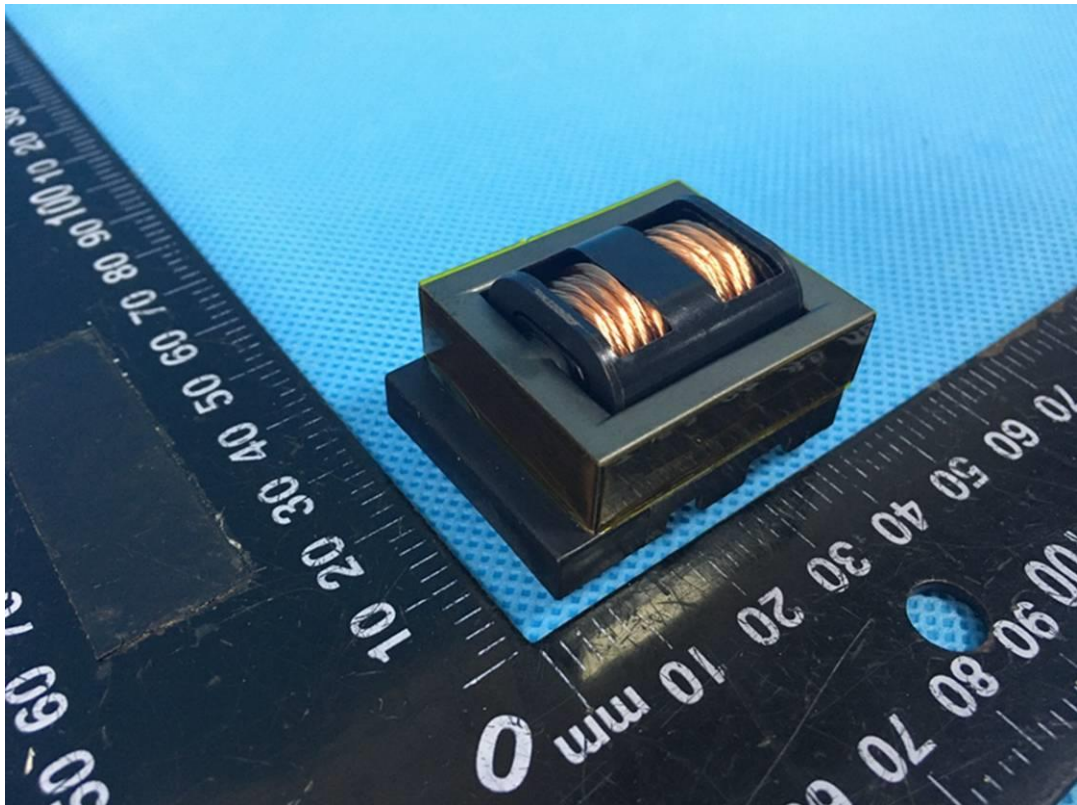


Photo 22 Transformer TH2/TH3 view

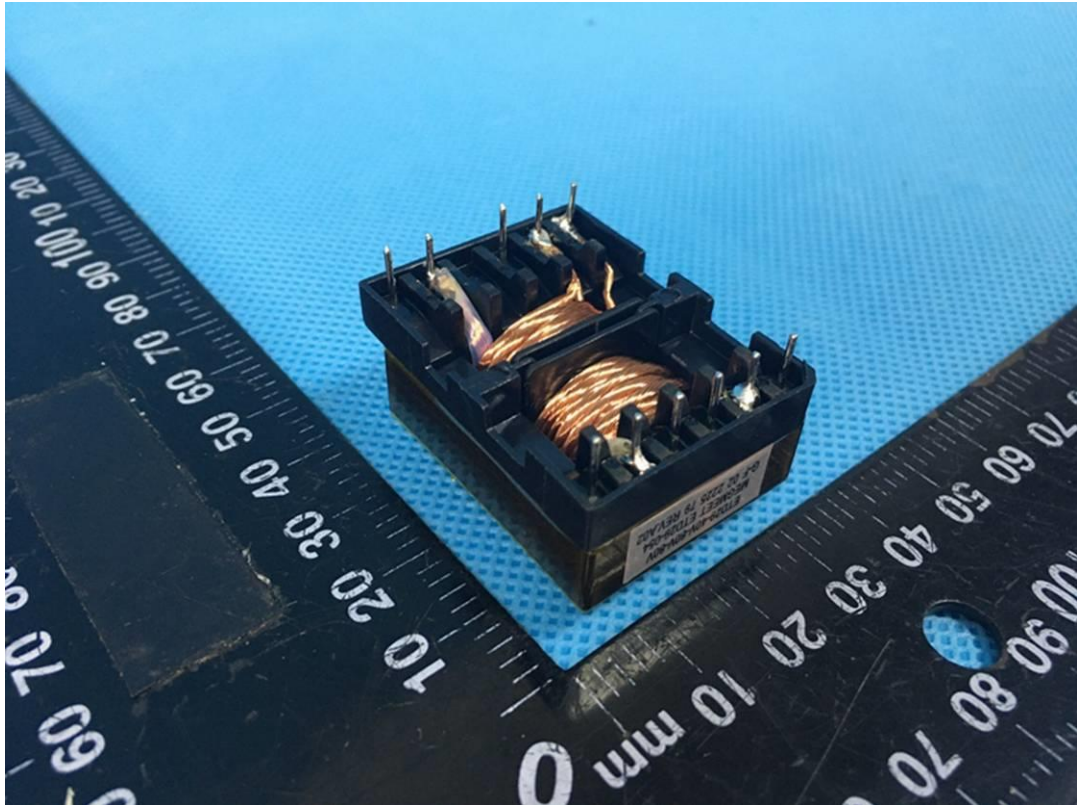


Photo 23 Transformer TH2/TH3 view

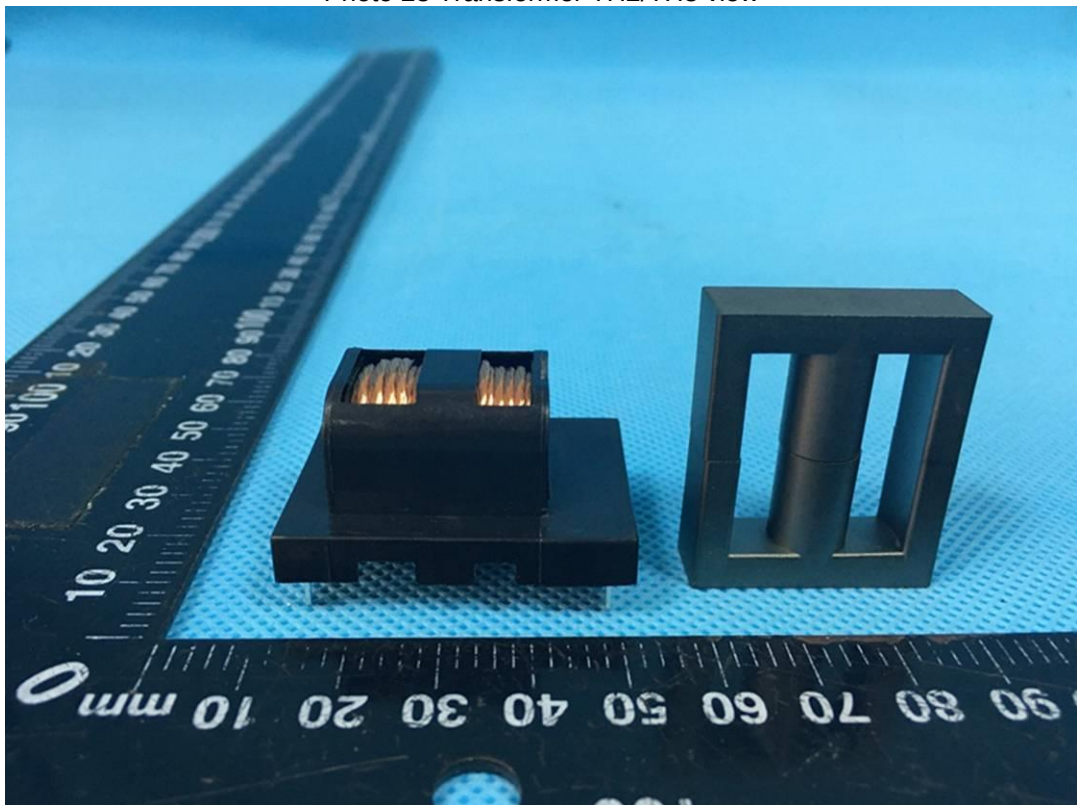


Photo 24 Transformer TH2/TH3 view

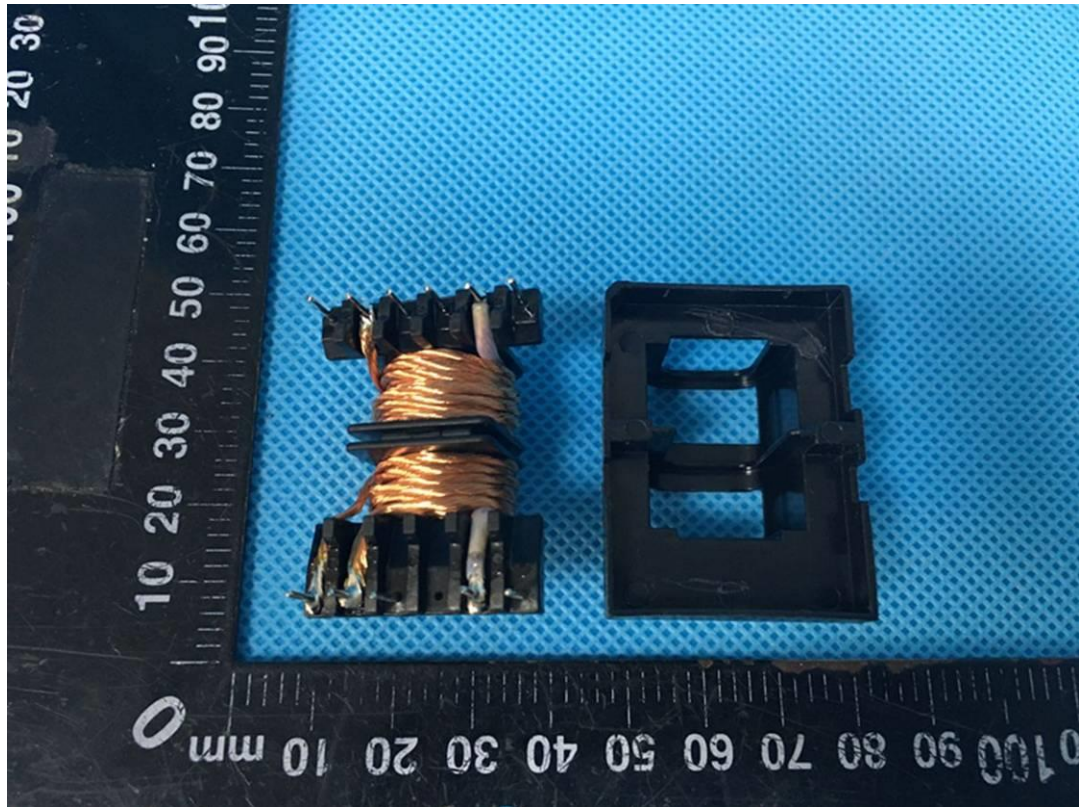


Photo 25 Transformer TH2/TH3 view



Photo 26 Transformer TH2/TH3 view



Photo 27 Transformer TH2/TH3 view

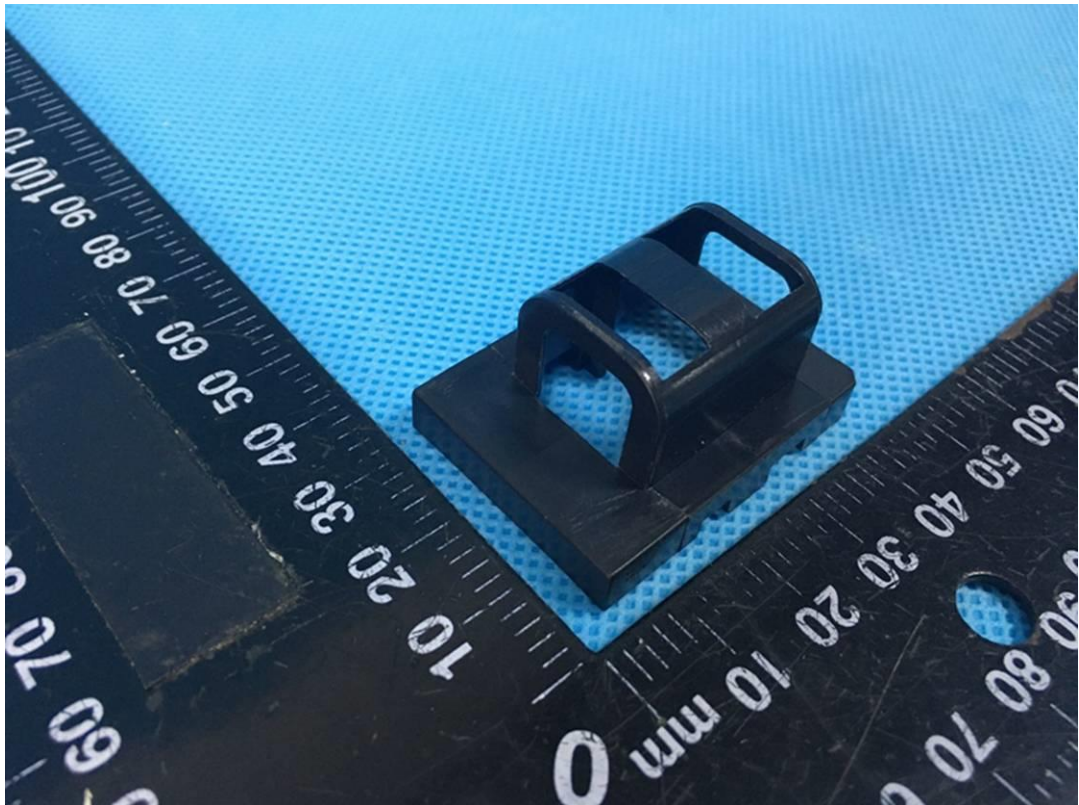


Photo 28 Transformer TH2/TH3 view

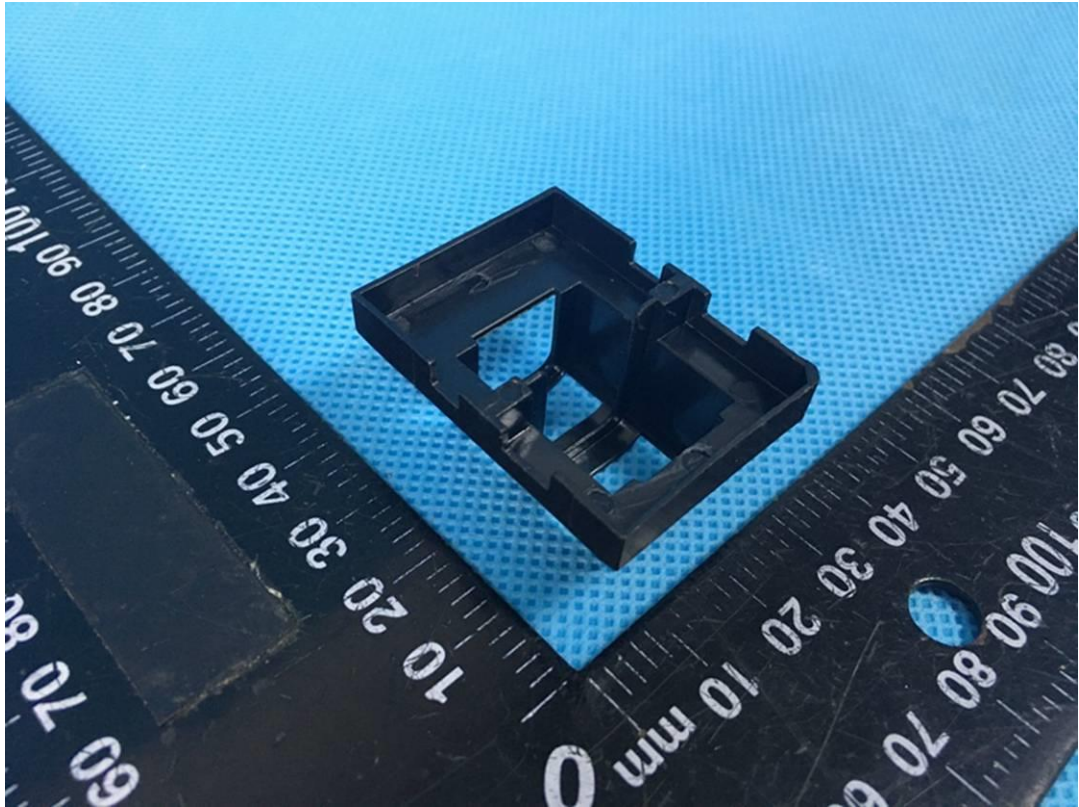


Photo 29 Transformer TH2/TH3 view

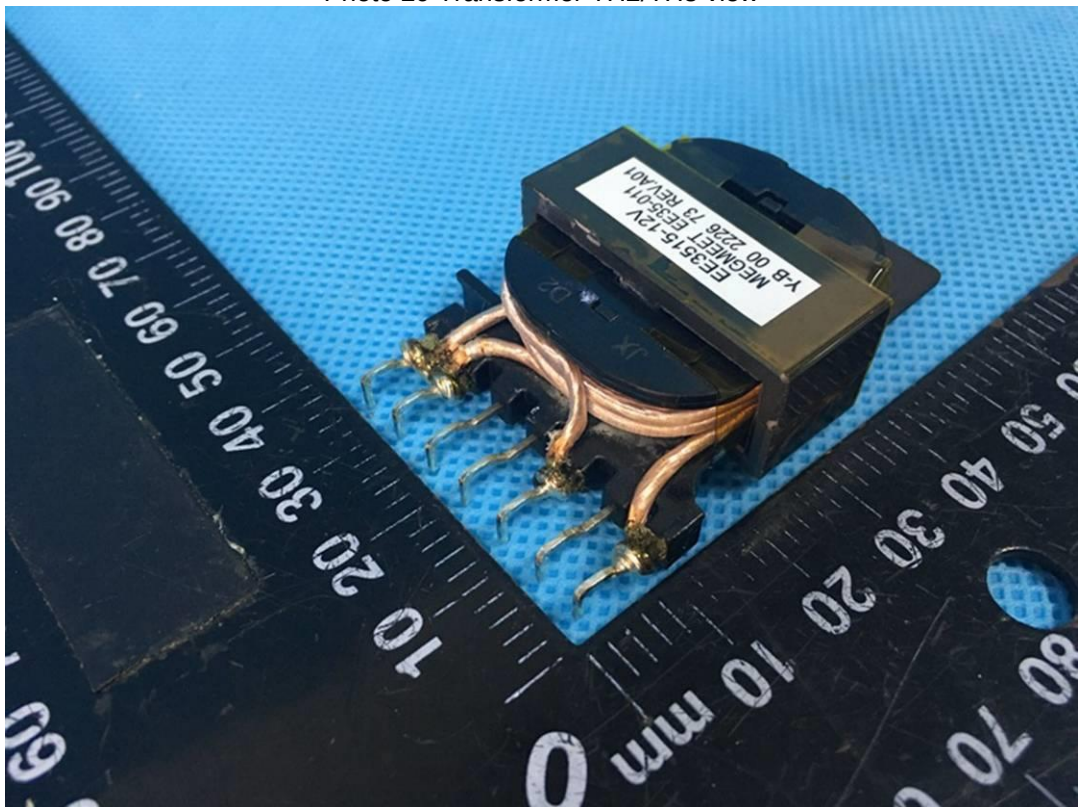


Photo 30 Transformer TH1 view

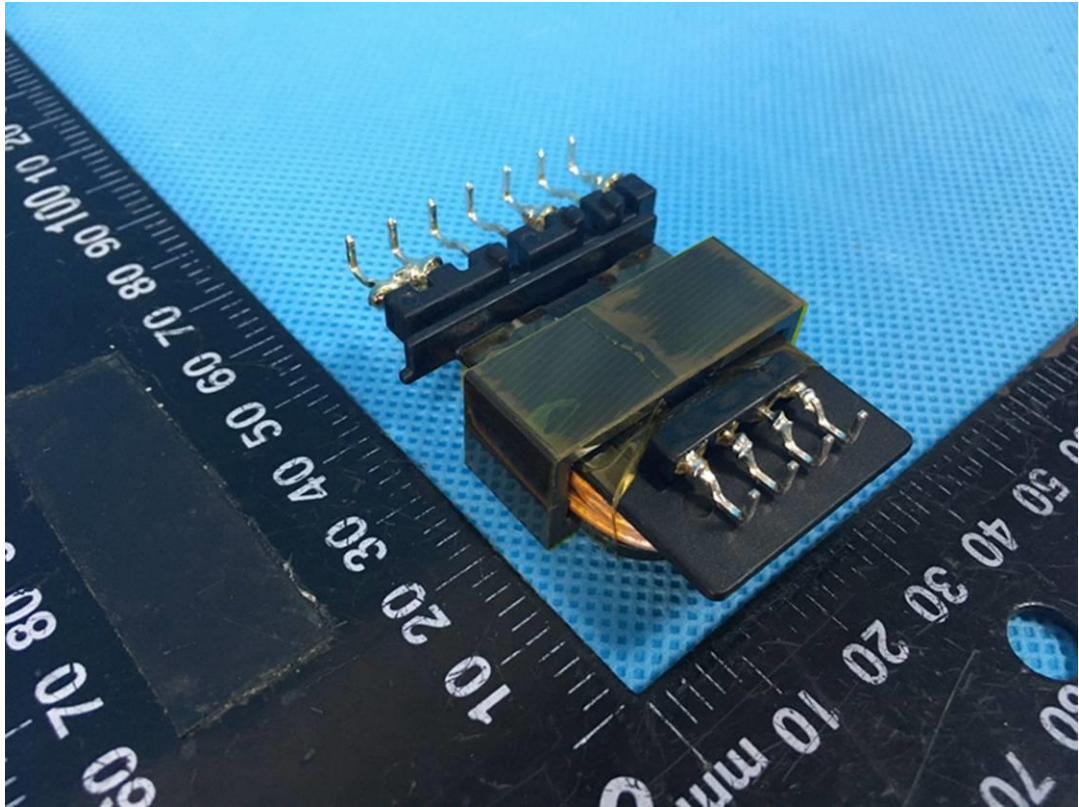


Photo 31 Transformer TH1 view

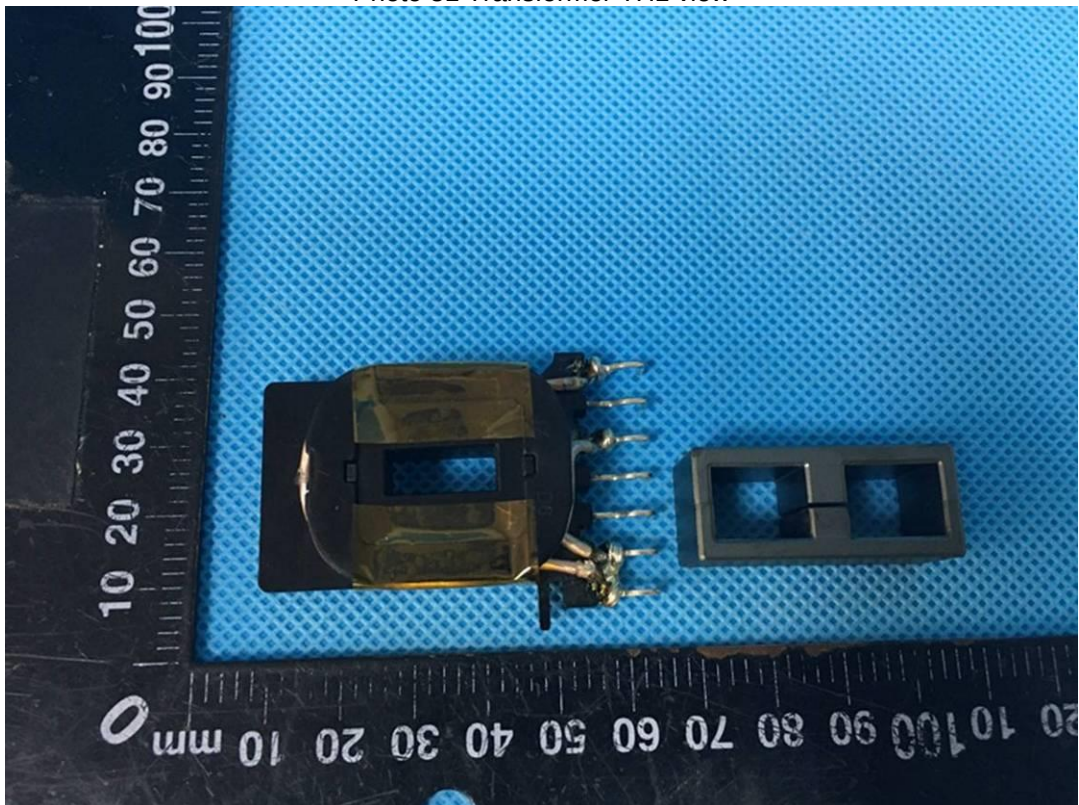


Photo 32 Transformer TH1 view

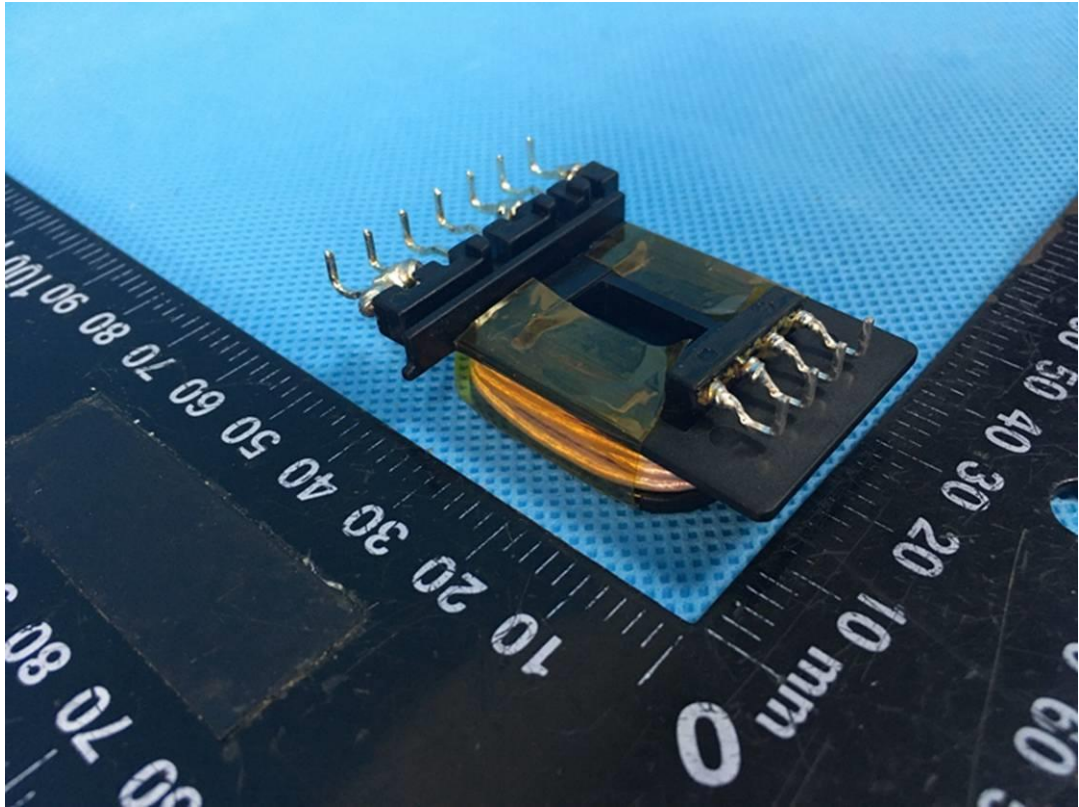


Photo 33 Transformer TH1 view



Photo 34 Transformer TH1 view

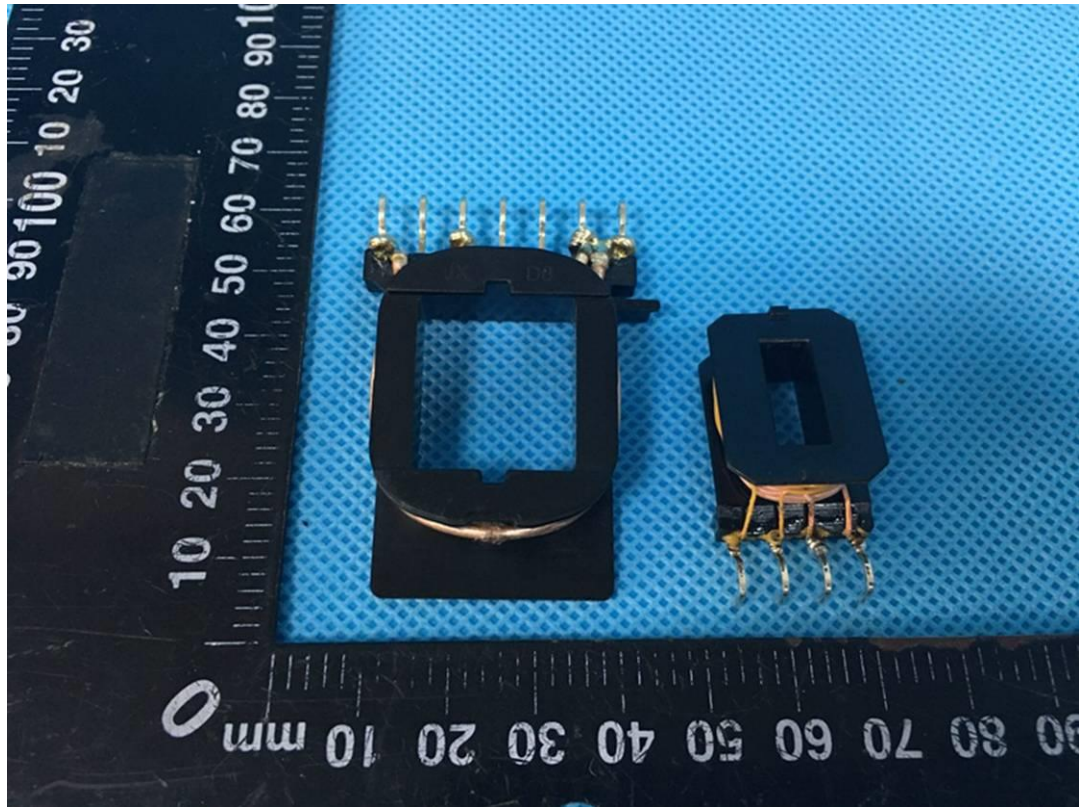


Photo 35 Transformer TH1 view



Photo 36 Transformer TH1 view

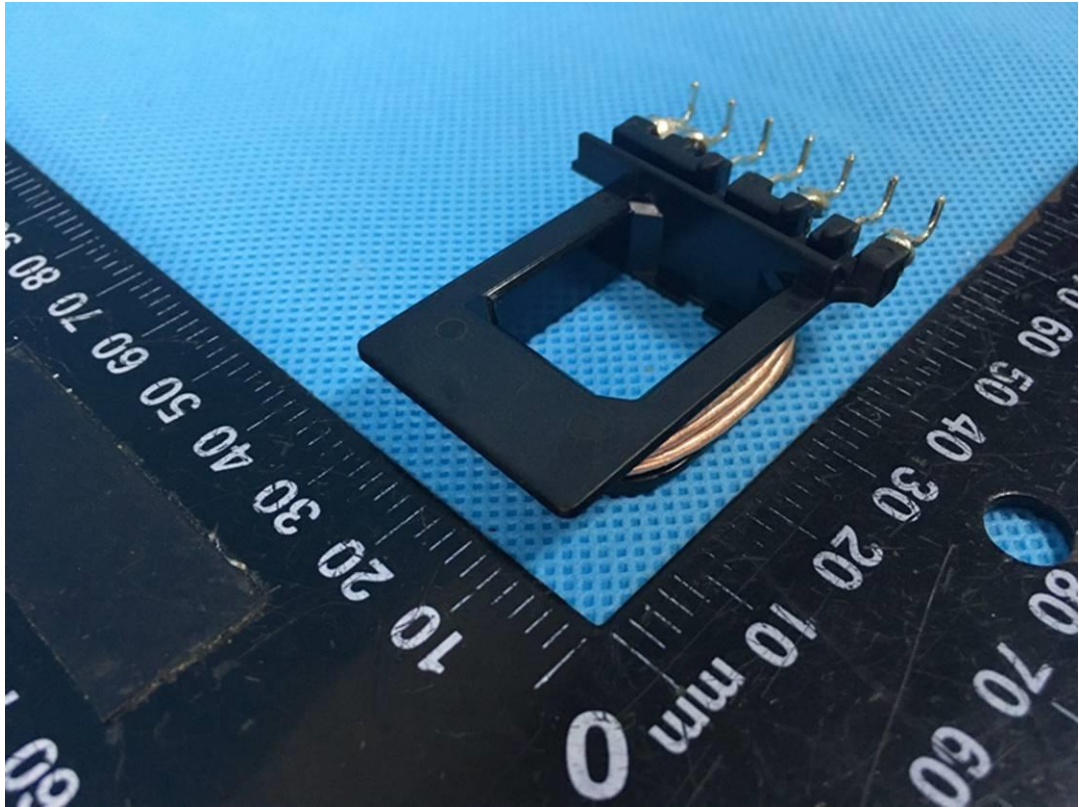


Photo 37 Transformer TH1 view

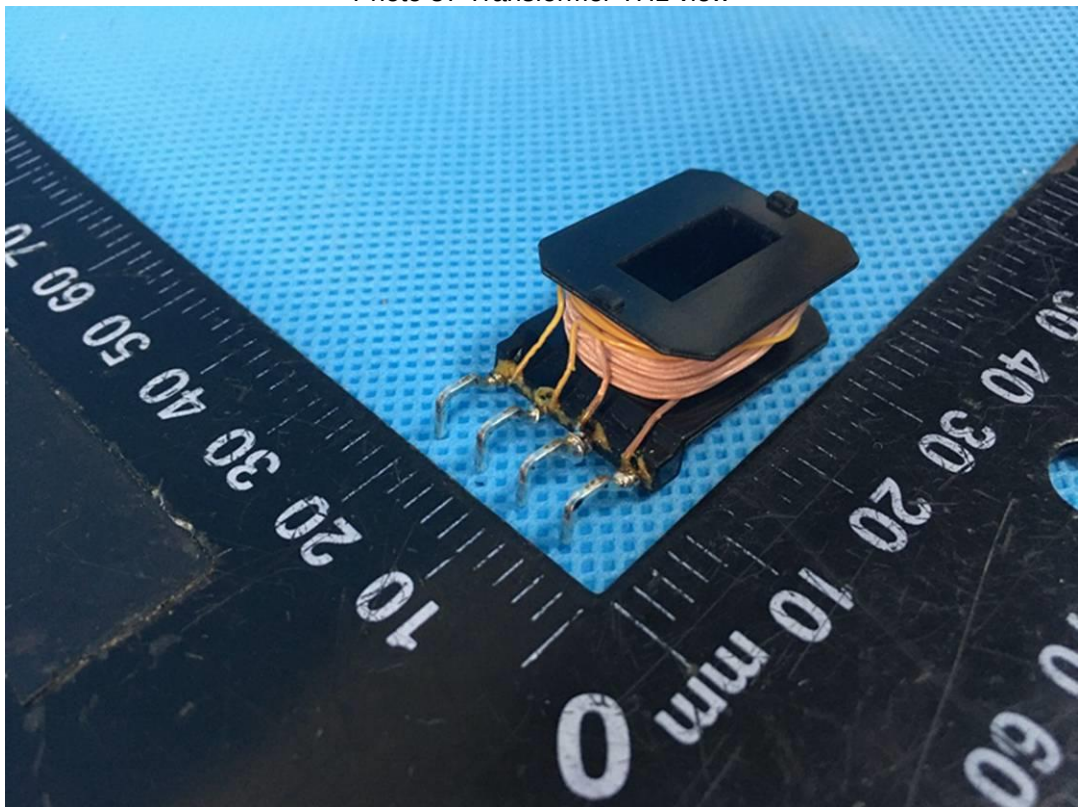


Photo 38 Transformer TH1 view

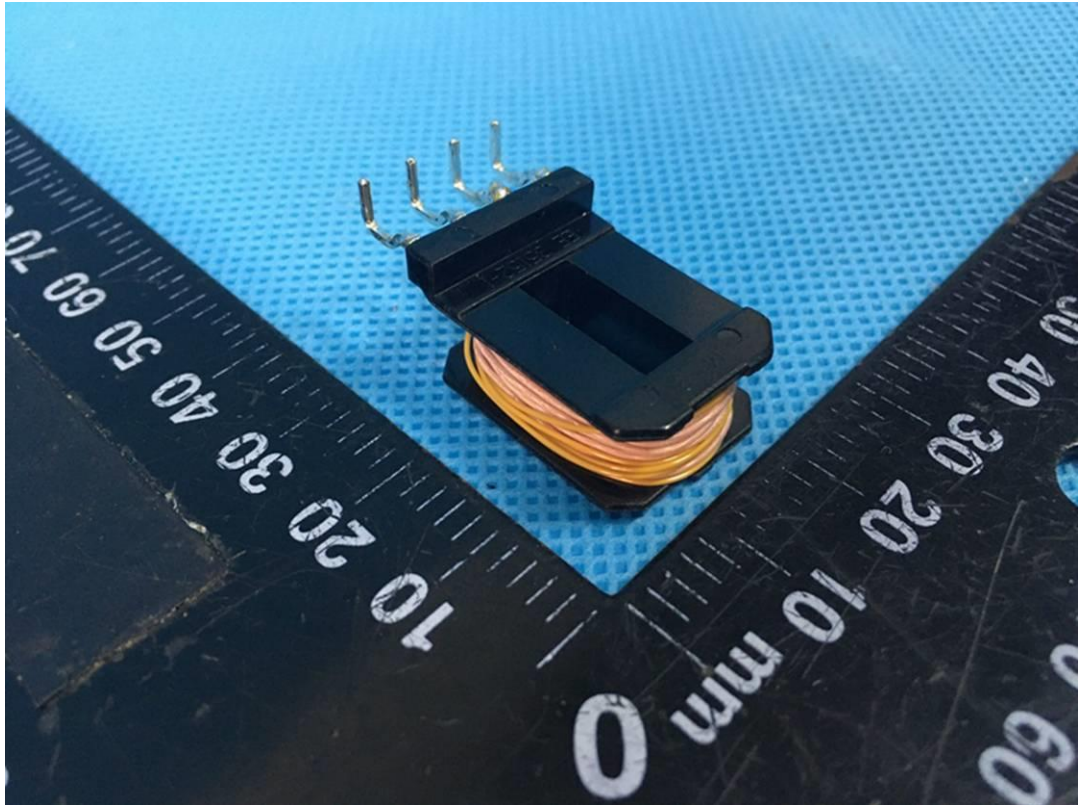


Photo 39 Transformer TH1 view

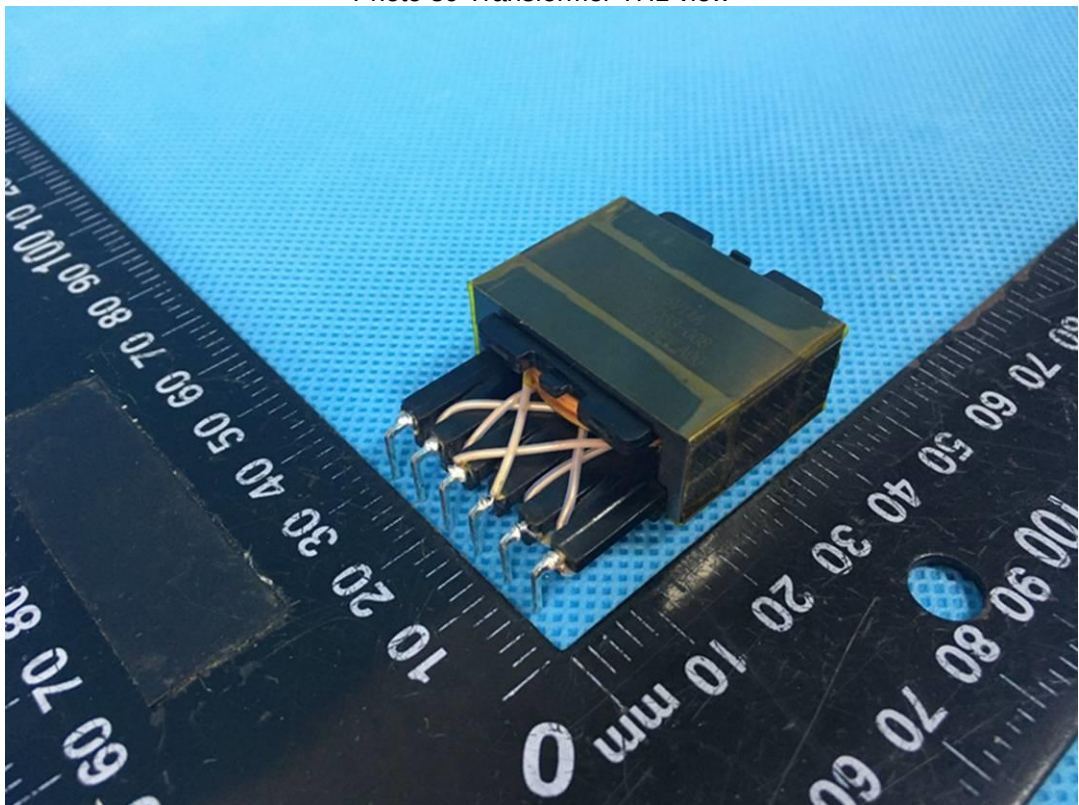


Photo 40 Transformer TF2 view

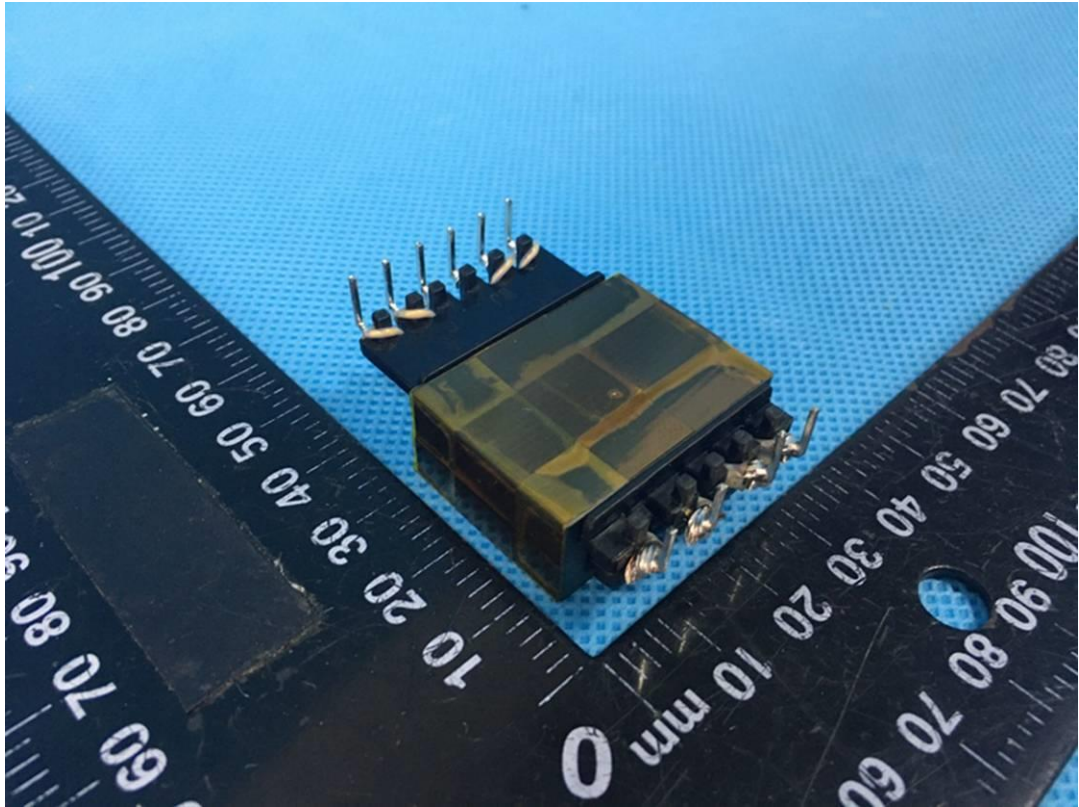


Photo 41 Transformer TF2 view

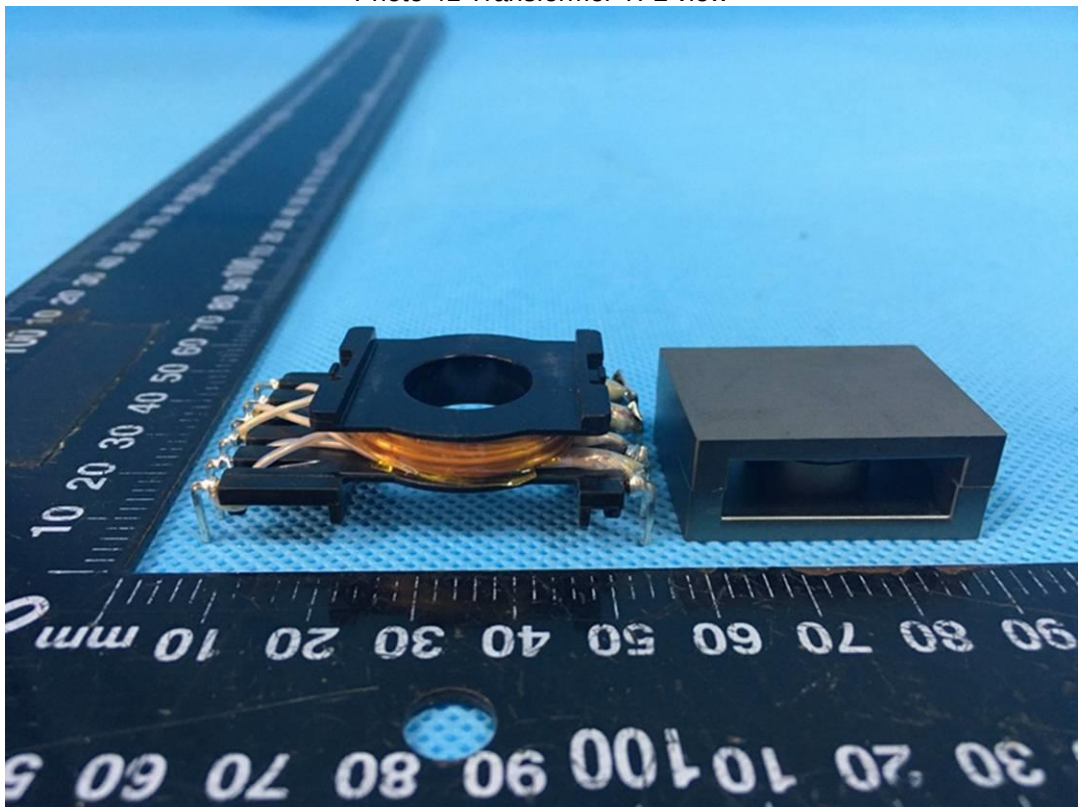


Photo 42 Transformer TF2 view

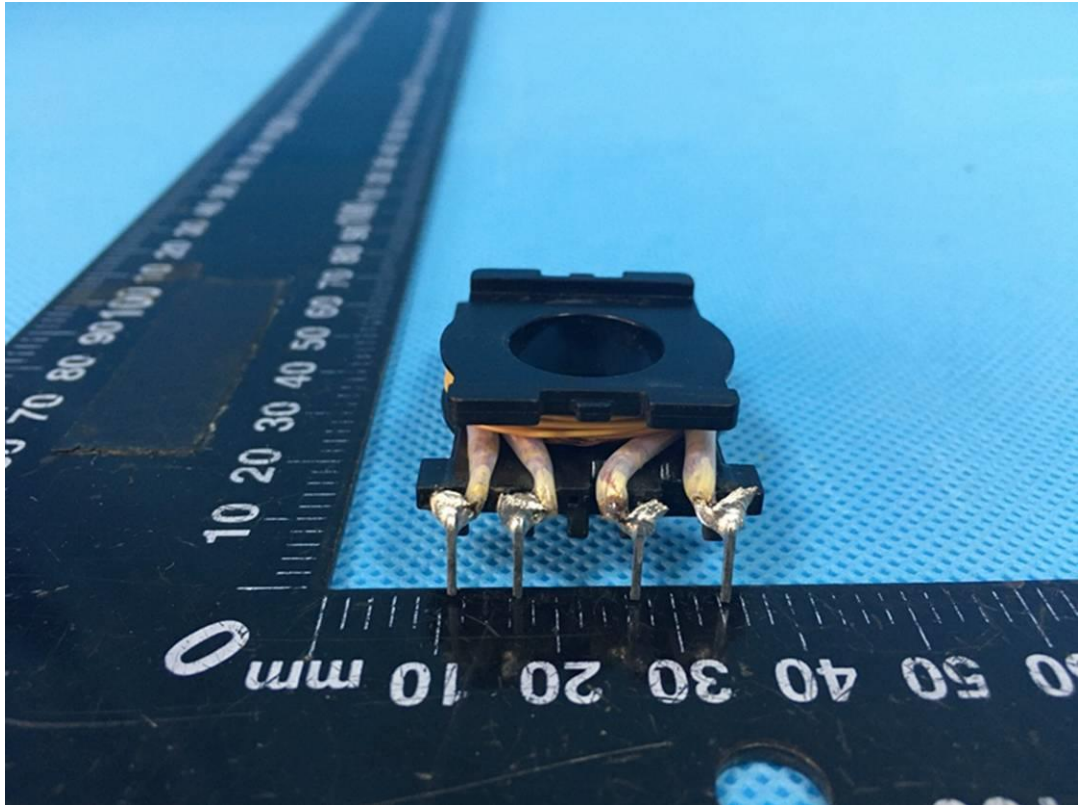


Photo 43 Transformer TF2 view

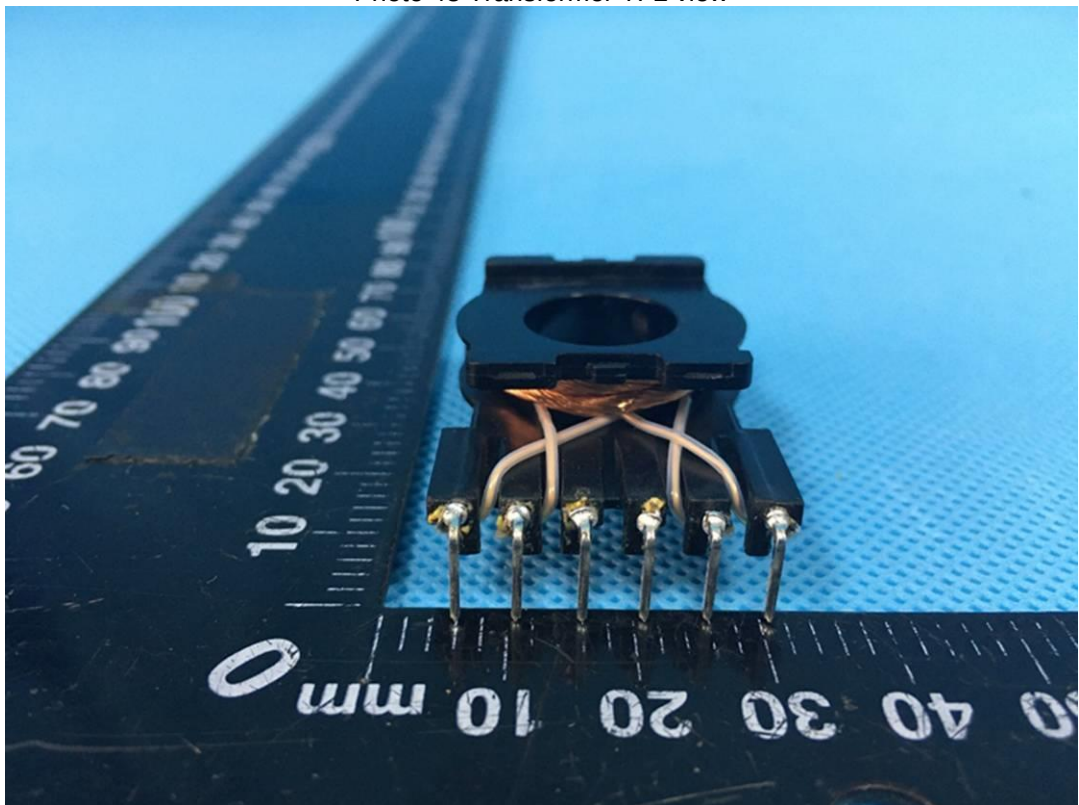


Photo 44 Transformer TF2 view

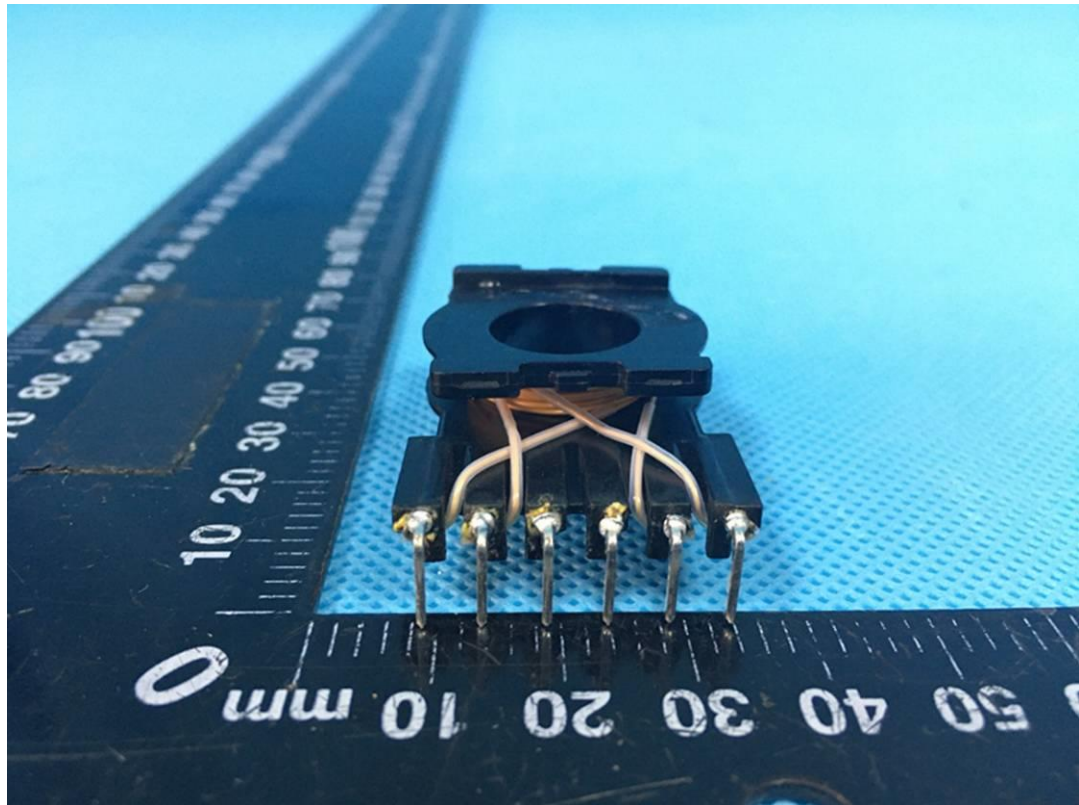


Photo 45 Transformer TF2 view

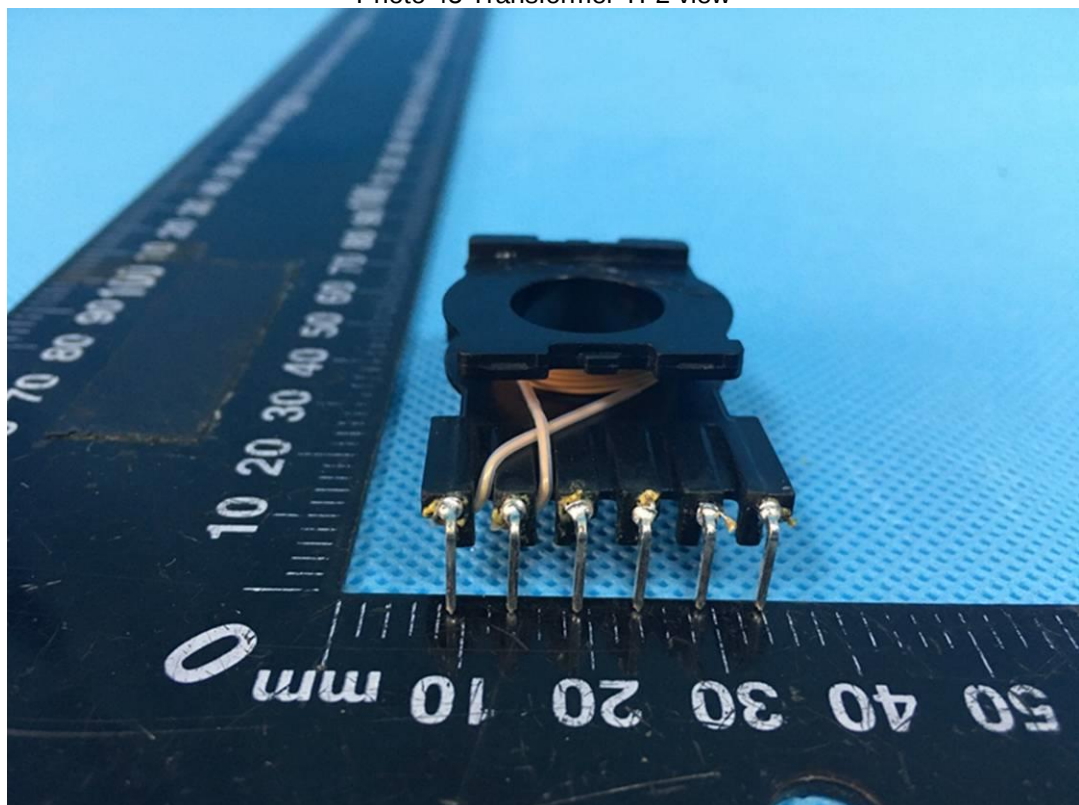


Photo 46 Transformer TF2 view

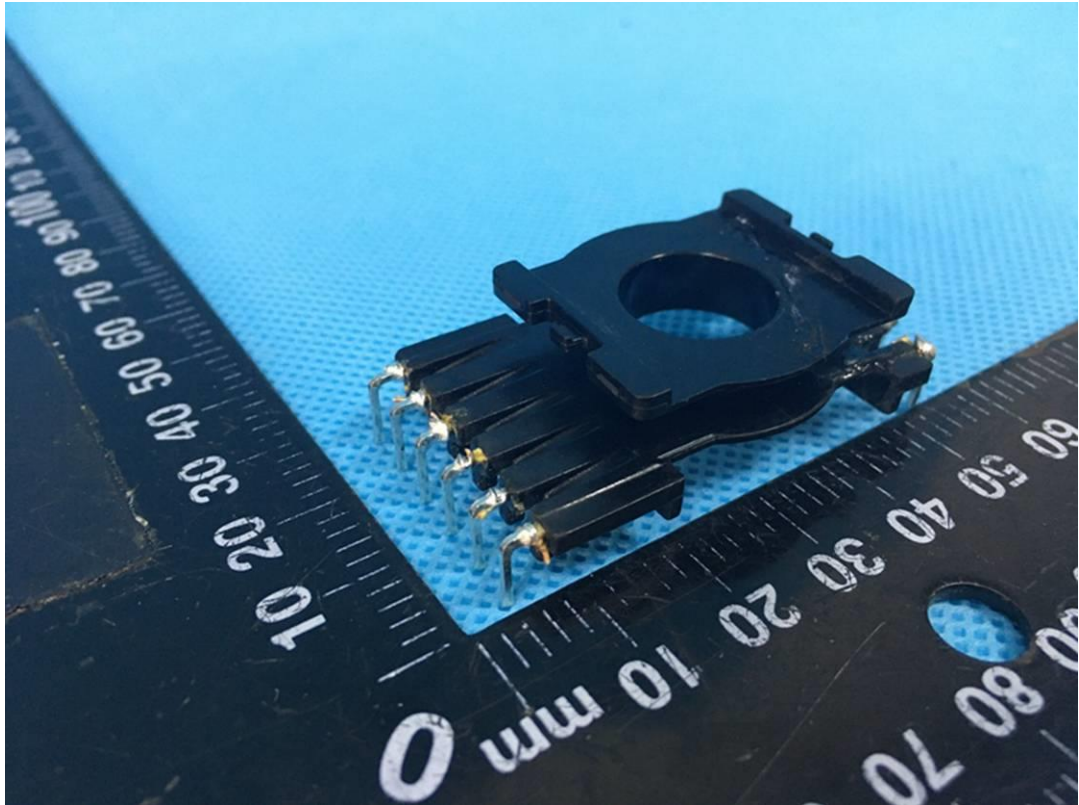


Photo 47 Transformer TF2 view

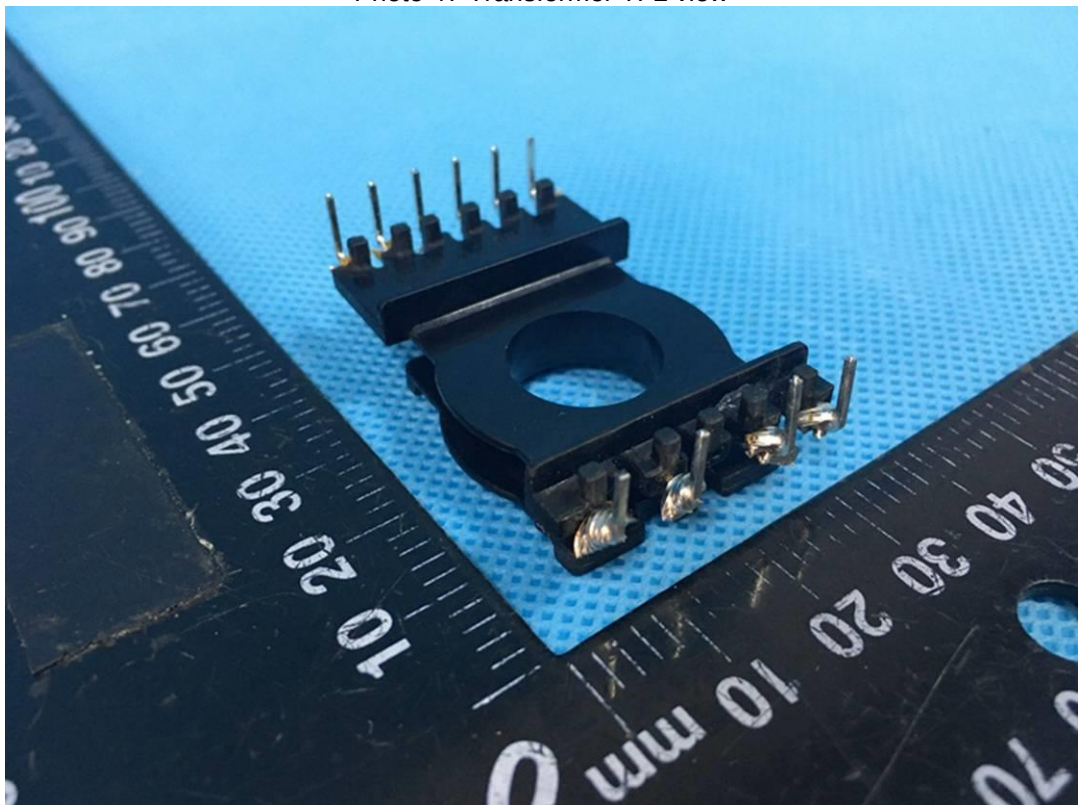


Photo 48 Transformer TF2 view

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
ATTACHMENT TO TEST REPORT IEC 60950-1 with A1: 2009 and A2:2013 JAPAN NATIONAL DIFFERENCES Information technology equipment – Safety – Part 1: General requirements			
Differences according to : J60950-1 (H29)			
Attachment Form No. : JP_ND_IEC60950_1G			
Attachment Originator : JQA			
Master Attachment : 2017-11			
Copyright © 2017 IEC System for Conformity Testing and Certification of Electrical Equipment (IECEE), Geneva, Switzerland. All rights reserved.			
	National Differences		
1.2.4.1	Add the following new notes. Note: Even if the equipment is designed as Class I, the equipment is regarded as CLASS 0I EQUIPMENT (see 1.2.4.3A) when 2-pin adaptor with earthing lead wire or cord set having 2-pin plug with earthing lead wire is provided or recommended.	Shall be evaluated during the national approval.	N/A
1.2.4.3A	Add the following new clause. 1.2.4.3A CLASS 0I EQUIPMENT Equipment having attachment plug without earthing blade, where protection against electric shock is achieved by: - using BASIC INSULATION, and - providing either of the following a) or b) in order to connect those conductive parts that might assume a HAZARDOUS VOLTAGES in the event of BASIC INSULATION fault to the PROTECTIVE EARTHING CONDUCTOR in the building wiring. a) Provision of 2-pin plug with earthing lead including the condition of that 2-pin adaptor with earthing lead wire is provided or recommended. b) Provision of an independent earthing terminal, when 2-core mains cord (without earthing conductor) is used. Note – CLASS 0I EQUIPMENT may have a part constructed with Double Insulation or Reinforced Insulation.		N/A
1.3.2	Add the following notes after the first paragraph: Note 1 Transportable or similar equipment that are relocated frequently for intended usage should not be designed as Class I or CLASS 0I EQUIPMENT unless it is intended to be		N/A

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	installed by service personnel. Note 2 Considering wiring circumstance in Japan, equipment intended to be installed where the provision for earthing connection is unlikely should not be designed as Class I or CLASS 0I EQUIPMENT unless it is intended to be installed by service personnel.		
1.5.1	Replace the first paragraph with the follows: Where safety is involved, components shall comply either with the requirements of this standard, with the safety aspects of the relevant JIS component standard, or IEC component standards, or components shall have equivalent to or better properties than these. Replace Note 1 with the following: Note 1 Components complying with the interpretation of Ministerial Ordinance on stipulating technical requirements for the Electrical Appliance is regarded to have equivalent to or better performance. Note 2 JIS or an IEC component standard is considered relevant only if the component in question clearly falls within its scope. Add the following after the last paragraph: For an appliance connector that is able to fit with appliance inlet compatible with the standard sheet of IEC 60320-1 or JIS C 8283-1, the size of the connector shall comply with relevant standard sheet of IEC 60320-1 or JIS C 8283-1. A power supply cord set complying with JIS C 8286 is regarded to comply with this requirement. Note 3 A power supply cord set provided with appliance connector that is able to fit with appliance inlet compatible with the standard sheet of IEC 60320-1 or JIS C 8283-1 should comply with JIS C 8286.		P
1.5.2	Add the following Note 2 after the 4th dashed paragraph: Note 2 See 1.7.5A when Type C.14 appliance coupler rated 10 A per JIS C 8283-1 is used with an equipment rated not more than 125 V and rated more than 10 A.		N/A
1.5.5	Add the following Note after the last paragraph: NOTE An interconnection cord sets provided with interconnecting coupler for mains supply complying with JIS C 8283-2-2 should comply with JIS C 8286.		N/A
1.5.9.1	Add the following in the last of NOTE 1.		N/A

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	Gas discharge tube connected in series with VDR may be used.		
1.7	Replace EE.2 and EE.4 with the following: JA.1 Shredder warning JA.3 Shredder power disconnection		N/A
1.7.1.2	Replace first and second dashed paragraphs with the followings: - manufacturer's or responsible company's name or trade-mark or identification mark; - manufacturer's or responsible company's model identification or type reference;		P
1.7.2.1	Add the following after the second paragraph. Instruction or equipment marking regarding safety shall be written in Japanese unless otherwise permitted in this standard.		N/A
1.7.2.5	Replace the last sentence with the following: An acceptable marking for an electric shock hazard is (6.2.4 of JIS S 0101). 		N/A
1.7.5	Replace the second paragraph with the following. Socket-outlets conforming to JISC8282-1 are examples of standard power supply outlets.		N/A
1.7.5A	Add the following new clause after 1.7.5. 1.7.5A Power supply cord set If appliance coupler according to IEC60320-1, C.14(rated current: 10A) is used in equipment whose rated voltage is less than 125V and rated current is over 10A, the following instruction or equivalent shall be described in the operating instruction. " Use only designated cord set attached in this equipment" <i>Example in Japanese:</i> "この機器に同こん(細)した指定の電源コードセットだけを使用して下さい。" If appliance coupler is used for connection to the mains and if the cord set is not provided within the package for the		N/A

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	equipment, suitable information regarding to the cord set shall be described in the operating instruction Note Since the combination of appliance inlet with earthing pin and two-core cord set (without earthing conductor) is special, the cord set should be attached in the equipment and the operating <i>instruction should provide the information that the cord set is exclusively used with the equipment and not allowed to use with other equipment.</i>		
1.7.14A	Add the following new clause after 1.7.14. 1.7.14A Marking for CLASS 0I EQUIPMENT For CLASS 0I EQUIPMENT, the following or equivalent instructions shall be marked. - the following instruction shall be marked on the mains plug or on the visible place of the main body “Provide an earthing connection” <i>Example in Japanese:</i> “必ず接地接続を行ってください。” - the following instruction shall be marked on the visible place of the main body or written in the operating instructions: “Provide an earthing connection before the mains plug is connected to the mains. And, when disconnecting the earthing connection, be sure to disconnect after pulling out the mains plug from the mains.” <i>Example in Japanese:</i> 接地接続は必ず、電源プラグを電源につなぐ前に行ってください。 また、接地接続を外す場合は、必ず電源プラグを電源から切り離してから行ってください。	Shall be evaluated during the national approval.	N/A
1.7.14B	Add the following new clause after 1.7.14A 1.7.14B Protective earthing conductor used for CLASS 0I EQUIPMENT For CLASS 0I EQUIPMENT provided with independent main protective earthing terminal, where the cord for the protective earthing connection is not provided within the package for the equipment, the suitable information for the protective earthing connection shall be provided in the operating instruction. (See		N/A

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	2.6.3.2)		
2.1.1.1	Replace item b) of 2.1.1.1 with the following. b) A test with the test finger, Figure 2A, which shall not contact parts described above when applied to openings in the ENCLOSURES after removal of parts that can be detached by an OPERATOR, including fuseholders, and with OPERATOR access doors and covers open. It is permitted to leave lamps in place for this test. Connectors that can be separated by an OPERATOR, other than those complying with JIS C 8303 or JIS C 8285 or IEC 60309 series or JIS C 8283 series or IEC 60320 series, shall also be tested during disconnection. But even if the connector does not comply with these standards, the one having equivalent to or better performance need not be tested during disconnection. Note 4 Connectors complying with Appendix 4 of the interpretation of Ministerial Ordinance on stipulating technical requirements for the Electrical Appliance is regarded to have equivalent to or better performance.		P
2.5	Replace "IEC 60730-1" with "JIS C 9730-1" (in item b)).		N/A
2.6.2	Delete the following line. • the symbol , IEC 60417-5018 (2011-07);		N/A
2.6.3.2	Add the following after the first paragraph. However where the single core conductor is used for protective earthing lead or earthing cord for CLASS 0I EQUIPMENT, either of the following condition shall be met. - Use of annealed copper wire with 1.6 mm diameter or corrosion-inhibiting metal wire having equivalent to or more strength and thickness. - Single core cord or single core cable with 1.25 mm² or more cross-sectional area		N/A
2.6.3.5	Add the following after the first paragraph. However this requirement does not apply to internal conductor of the cord set that is covered by the sheath of mains cord and is formed together with mains plug and appliance connector.		N/A
2.6.4.2	Replace the first paragraph with the following. Equipment required to have protective earthing shall have a		N/A

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	main protective earthing terminal. For equipment with a DETACHABLE POWER SUPPLY CORD, the earthing terminal in the appliance inlet is regarded as the main protective earthing terminal. However, for CLASS 0I EQUIPMENT provided with the separate main protective earthing terminal other than appliance inlet, the separate main protective earthing terminal may be treated as mains protective earthing terminal.		
2.6.5.4	Replace the first sentence with the following. Protective earthing connections of CLASS I EQUIPMENT shall make earlier and break later than the supply connections in each of the following: Add the following after last paragraph: Note For CLASS 0I EQUIPMENT, 1.7.14A is applied instead of this requirement.		N/A
2.6.5.8A	Add the following new clause after 2.6.5.8 2.6.5.8A Earthing of CLASS 0I EQUIPMENT Plugs with a lead wire for earthing shall not be used for equipment having a rated voltage exceeding 150V. For plugs with a lead wire for earthing, the lead wire shall not be earthed by a clip. CLASS 0I EQUIPMENT shall be provided with an earthing terminal or lead wire for earthing in the external location where easily visible.	Shall be evaluated during the national approval.	N/A
2.7.6	Replace "ISO 3864, No. 5036" with "6.2.4 of JIS S 0101".		N/A
2.10.3.1	Replace the 8th paragraph with the following The above minimum CLEARANCE for connectors do not apply to connectors that comply with JIS C 8285, IEC60309 series of standards, JIS C 8283 series of standards, IEC60320 series of standards, JIS C 8303, or even if it does not comply with the above standards but the one having equivalent to or better performance and dimension which comply with JIS C 8283 series of standards, JIS C 8303 or IEC 60309-2. Note Connectors complying with Appendix 4 of the interpretation of Ministerial Ordinance on stipulating technical requirements for the Electrical Appliance is regarded to have equivalent to or better performance.		N/A
2.10.3.2 Table 2J	In Japan, the value of the main power supply transient voltage for the nominal ac main power supply voltage of 100 V is determined by applying the row of AC main power supply voltage 150 V.		P

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
2.10.4.3	Replace the 6th paragraph with the following The above minimum CREEPAGE DISTANCE for connectors do not apply to connectors that comply with JIS C 8285, IEC60309 series of standards, JIS C 8283 series of standards, IEC60320 series of standards, JIS C 8303, or even if it does not comply with the above standards but the one having equivalent to or better performance and dimension which comply with JIS C 8283 series of standards, JIS C 8303 or IEC 60309-2. Note Connectors complying with Appendix 4 of the interpretation of Ministerial Ordinance on stipulating technical requirements for the Electrical Appliance is regarded to have equivalent to or better performance.		N/A
2.10.9	Replace "1.4.5" in the third paragraph with "1.4.12".		N/A
3.2.3	Add the following after the third paragraph. Table 3A applies when cables complying JIS C 3662 series of standards or JIS C 3663 series of standards are used. In case of other cables, cable entries shall be so designed that the cable could be fitted in a conduit.		N/A
3.2.4	Add the following as 4th dashed paragraph. - be so constructed that mechanical stress shall not transmit to the soldering part of inlet terminal during insertion or removal of the connector except that the body of the inlet is secured and is secured not only soldering.		P
3.2.5.1	Add the following after Note 3: Note 4 In Japan, mains cords having equivalent to or better electro-mechanical and fire safety performance as above and complying with Appendix 1 of the interpretation of Ministerial Ordinance on stipulating technical requirements for the Electrical Appliance can be used. Replace the paragraph after Note 3 with the following. For equipment required to have protective earthing, a PROTECTIVE EARTHING CONDUCTOR shall be included in the MAINS SUPPLY cord except for CLASS 0I EQUIPMENT having separate protective earthing conductor from mains cord. Add the following after the second paragraph after Note 3: Note 5 For the cross-sectional area of mains cord described in Note 4, relevant Japanese wiring regulation can be applied.	Shall be evaluated during the national approval.	N/A

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
3.2.5A	Add the following new clause after 3.2.5 3.2.5A AC mains plug Mains plug for PLUGGABLE EQUIPMENT TYPE A shall comply with JIS C 8282-1 or equivalent to or better performance. Power supply cord set complying with JIS C 8286 is regarded to meet the requirements. Mains plug with fuse link for PLUGGABLE EQUIPMENT TYPE A shall comply with JIS C 8282-2-1 or equivalent to or better performance. Note Mains plug complying with Appendix 4 of the interpretation of Ministerial Ordinance on stipulating technical requirements for the Electrical Appliance is regarded to have equivalent to or better performance.		N/A
3.3.4 Table 3D	Add the following note to Table 3D: Note For cables other than those complying with JIS C 3662 series of standards or JIS C 3663 series of standards, the terminals shall be suitable for the size of the intended cables.		N/A
3.3.7	Add the following after the first sentence: This requirement is not applicable to the external earthing terminal of CLASS 0I EQUIPMENT.		N/A
4.2.8	Add the following after the first paragraph: Note Intrinsically protected picture tube is required to comply with JIS C 6965 in clause 18 of JIS C 6065. No intrinsically protected picture tube which is out of scope of JIS C 6965 is required to test according to sub-clause 18.2 of JIS C 6065.		N/A
4.3.4	Add the following after the first sentence: This requirement also applies to those connections in CLASS 0I EQUIPMENT, where CLEARANCE or CREEPAGE DISTANCES over BASIC INSULATION would be reduced to less than the values specified in 2.10.		N/A
4.3.5	Replace the first dashed paragraph with the following. Within a manufacturer's unit or system, plugs and sockets likely to be used by the OPERATOR or by a SERVICE PERSON shall not be employed in a manner likely to create a hazard due to misconnection. In particular, connectors complying with IEC 60320/JIS C 8283 series of standards or JIS C 8303 or JIS C 8358 shall not be used for SELV CIRCUITS or TNV CIRCUITS. Keying, location or, in the case of connectors accessible only to a SERVICE PERSON, clear markings are permitted to meet the requirement.		N/A
4.3.6	Replace the 1st paragraph with the following		N/A

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	DIRECT PLUG-IN EQUIPMENT shall not impose undue stress on the socket-outlet. The mains plug part shall comply with the standard for the relevant mains plug. (see 3.2.5A)		
4.4.2	Replace the paragraph with the following: HOUSEHOLD AND HOME/OFFICE DOCUMENT/MEDIA SHREDDERS shall also comply with Annex JA.		N/A
4.5.3	Add the following note to footnote b) of Table 4B: NOTE In case no data for the material is available, Appendix 4, 1. (1). b. 3 of the Interpretation on the Ministerial Ordinance stipulating Technical Specifications for Electrical Appliances is regarded as maximum temperature limit of the material.		N/A
5.1.3	Add a note after the first paragraph as follows: Note – Attention should be drawn to that majority of three-phase power system in Japan is of delta connection, and therefore, in that case, test is conducted using the test circuit from IEC 60990, figure 13.		N/A

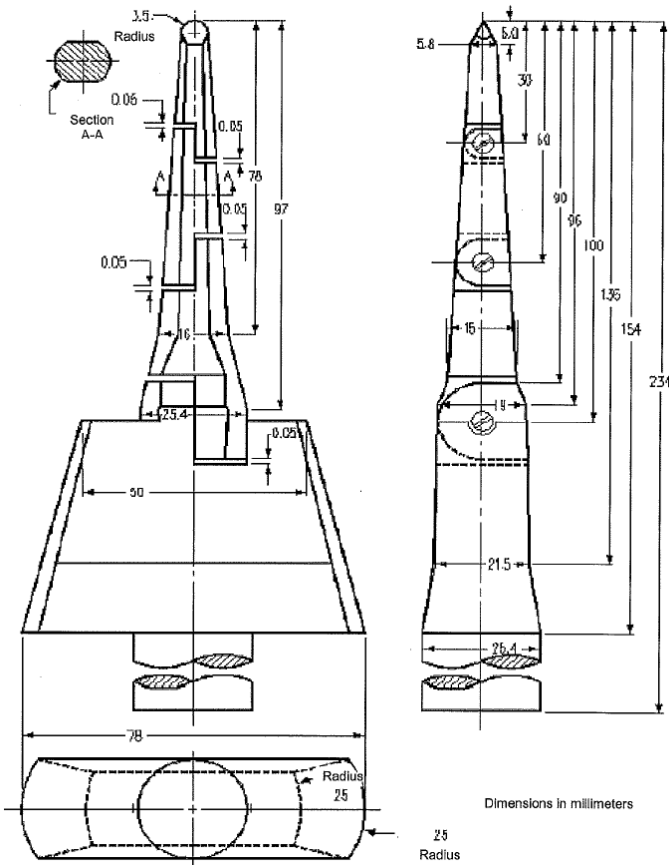
IEC60950_1G ATTACHMENT						
Clause	Requirement + Test				Result - Remark	Verdict
5.1.6	Replace Table 5A. as follows					P
	Type of equipment	Terminal A of measuring instrument connected to:	Maximum TOUCH CURRENT mA r.m.s. ^a	Maximum PROTECTIVE CONDUCTOR CURRENT		
	ALL equipment	Accessible parts and circuits not connected to protective earth ^b	0,25	-		
	HAND-HELD	Main protective earthing terminal of CLASS I EQUIPMENT	0,75	-		
		Main protective earthing terminal of CLASS 0 I EQUIPMENT	0,5	-		
	MOVABLE (other than HAND_HELD, but including TRANSPORTABLE EQUIPMENT)	Main protective earthing terminal of CLASS I EQUIPMENT	3,5	-		
		Main protective earthing terminal of CLASS 0 I EQUIPMENT	1.0	-		
	STATIONARY, PLUGGABLE TYPE A	Main protective earthing terminal of CLASS I EQUIPMENT	3,5	-		
		Main protective earthing terminal of CLASS 0 I EQUIPMENT	1,0	-		
	ALL other STATIONARY EQUIPMENT - not subject to the conditions of	Main protective earthing terminal of CLASS I EQUIPMENT	3.5 -	- 5 % of input current		

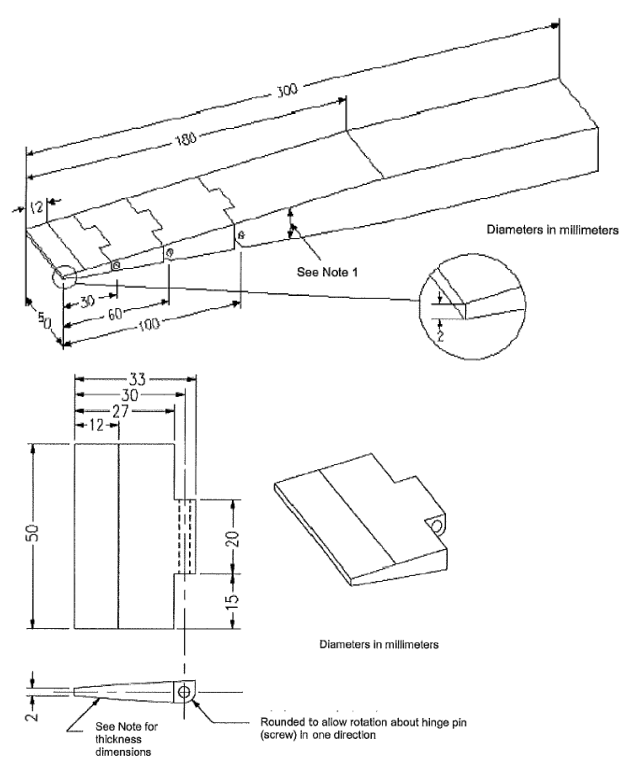
IEC60950_1G ATTACHMENT						
Clause	Requirement + Test				Result - Remark	Verdict
	5.1.7 - subject to the conditions of 5.1.7	Main protective earthing terminal of CLASS 0 I EQUIPMENT	1.0 -	- -		
	a If peak values of TOUCH CURRENT are measured, the maximum values are obtained by multiplying the r.m.s.values in the table by 1,414. b Some unearthed accessible parts are covered in 1.5.6 and 1.5.7 and the requirements of 2.4 apply. These may be different from those in 5.1.6.					
Annex G	Replace the paragraph before Table G.2 with the following The above minimum CLEARANCE for connectors do not apply to connectors that comply with JIS C 8285, IEC60309 series of standards, JIS C 8283 series of standards, IEC60320 series of standards, JIS C 8303, and 1.5.1 of this standard in which dimension is comply with JIS C 8283 series, JIS C 8303 or IEC 60309-2.					N/A
Annex V V.1	Replace “3.1.2”in the first line of V.1 with “312” in the first line.					P

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
Annex W W.1	Replace the third sentence in the first paragraph with the following: Floating circuits can exist in CLASS I EQUIPMENT, CLASS 0I EQUIPMENT and earthed circuits can exist in CLASS II EQUIPMENT.		N/A
Annex BB	This annex is not applicable.		N/A
Annex CC CC.2	Replace the third dashed paragraph with the following: - 10 000 cycles of turning enable on and off with the input connected to a capacitor rated 425 uF ± 10 uF and shorting the output;		N/A
CC.3	Add note at end of CC.3: Note: The fast blow fuse should be the one complying with JIS C 6575-2.		N/A
CC.4	Replace the 2nd dashed paragraph with the following: - 10 000 cycles of turning enable on and off with a 100 Ω ± 5 Ω resistor and a 425 uF ± 10 uF capacitor in parallel with the output; Replace the 4th dashed paragraph with the following: - 10 000 cycles of turning enable on and off with the input connected to a capacitor rated 425 uF ± 10 uF and shorting the output; Replace the 5th dashed paragraph with the following: -10 000 cycles of turning the input pin on and off with a capacitor rated 425 uF ± 10 uF connected to the input supply while keeping enable active and shorting the output; Replace the 6th dashed paragraph with the following: -10 000 cycles of turning the input pin on and off with an ferrite-core inductor having 350 mH ± 10 mH inductance at 1 kHz and less than 1 Ω d.c. resistance connected to the input supply and return while keeping enable active and shorting the output; Replace the 10th dashed paragraph with the following: -3 cycles of exposing the device (not energized) to 70 °C ± 2 °C for 24 h; followed by at		N/A

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	least 1 h at room ambient; followed by at least 3 h at $-30\text{ }^{\circ}\text{C} \pm 2\text{ }^{\circ}\text{C}$; followed by 3 h at room ambient; Replace the 11th dashed paragraph with the following: –10 cycles of exposing the device (while energized) to $50\text{ }^{\circ}\text{C} \pm 2\text{ }^{\circ}\text{C}$ for 10 min; followed by 10 min at $0\text{ }^{\circ}\text{C} \pm 2\text{ }^{\circ}\text{C}$ with a 5 min period of transition from one state to the other;		
Annex EE	Replace Annex EE with the following Annex JA. Annex JA (normative) Document shredding machines HOUSEHOLD AND HOME/OFFICE DOCUMENT/MEDIA SHREDDERS shall additionally comply with the requirements of this annex. JA.1 Markings and instructions The symbol  (JIS S 0101:2000, 6.2.1) and the following precautions for use shall be marked on readily visible part adjacent to document feed opening. The marking shall be clearly legible, permanent, and easily discernible; 子供が使用することによって、傷害などの危害が発生するおそれがある。 (that use by infants/children may cause a hazard of injury etc.) 文書投入口に手を触れることによって、細断機構に引き込まれるおそれがある。 (that a hand can be drawn into the mechanical section for shredding when touching the document-slot) 文書投入口に衣類が触れることによって、細断機構に引き込まれるおそれがある。 ; (that clothing can be drawn into the mechanical section for shredding when touching the document-slot) 文書投入口に髪の毛が触れることによって、細断機構に引き込まれるおそれがある。 ; (that hairs can be drawn into the mechanical section for shredding when touching the document-slot) - in case of equipment incorporating a commutator motor, 可燃性ガスを噴射することによって引火又は爆発するおそれがある。		N/A

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	(that equipment may catch fire or explode by spraying of flammable gas.) JA.2 Inadvertent reactivation Any safety interlock that can be operated by means of the test finger, Figure JA.1, is considered to be likely to cause inadvertent reactivation of the hazard. Compliance is checked by inspection and, where necessary, by a test with the test finger, Figure JA.1. JA.3 Disconnection from the mains supply Document shredding machines shall incorporate an isolating switch complying with sub-clause 3.4.2 as the device disconnecting the power of hazardous moving parts. For this switch, two-position (single-use) switch or multi-position (multifunction) switch (e.g., slide switch) may be used. If two-position switch, the positions for "ON" and "OFF" shall be indicated in accordance with sub-clause 1.7.8. If multi-position switch, the position for "OFF" shall be indicated in accordance with sub-clause 1.7.8 and other positions shall be indicated with proper terms or symbols. Compliance is checked by inspection. JA.4 Protection against hazardous moving parts Any warning shall not be used instead of the structure for preventing access to hazardous moving parts. Document shredding machines shall comply with the following requirements. Insert the test finger, Figure JA.1, into all openings in MECHANICAL ENCLOSURES without applying appreciable force. It shall not be possible to touch hazardous moving parts with the test finger. This consideration applies to all sides of MECHANICAL ENCLOSURES when the equipment is mounted as intended. Before testing with the test finger, remove the parts detachable without a tool. Insert the wedge-probe, Figure JA.2, into the document-slot. And, against all directions of openings, if straight-cutting type, a force of 45 N shall apply to the probe, and 90 N if cross-cutting type. In this case, the weight of the probe is to be factored into the overall applied force. Before testing with the wedge-probe, remove the parts detachable without a tool. It shall not be possible to touch any hazardous moving parts, including the shredding roller or the mechanical section for shedding, with the probe.		N/A

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	 Figure JA.1 Test finger		

IEC60950_1G ATTACHMENT											
Clause	Requirement + Test	Result - Remark	Verdict								
	 (Details of the tip of wedge) <table><thead><tr><th>Distance from the tip (mm)</th><th>Thickness of probe (mm)</th></tr></thead><tbody><tr><td>0</td><td>2</td></tr><tr><td>12</td><td>4</td></tr><tr><td>180</td><td>24</td></tr></tbody></table> Note 1 - The thickness of the probe varies linearly, with slope changes at the respective points shown in the table. Note 2 -The allowable dimensional tolerance of the probe is; for ≤ 25 mm: ± 0.13 mm for > 25 mm: ± 0.3 mm.	Distance from the tip (mm)	Thickness of probe (mm)	0	2	12	4	180	24		N/A
Distance from the tip (mm)	Thickness of probe (mm)										
0	2										
12	4										
180	24										
Figure JA.2 Wedge-probe											

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
ATTACHMENT TO TEST REPORT IEC 60950-1 (AUSTRALIA/NEW ZEALAND) NATIONAL DIFFERENCES (Information technology equipment-safety)			
Differences according to: AS/NZS 60950.1:2015			
TRF template used: IECEE OD-2020-F3, Ed. 1.1			
Attachment Form No.: AU_NZ_ND_IEC60950_1G			
Attachment Originator: JAS-ANZ			
Master Attachment: 2021-04-19			
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	National Differences		P
Appendix ZZ	Variations to IEC 60950-1, Ed 2.2 (2013) for Australia and New Zealand		P
1.2	DEFINITIONS		P
	After definition 'PERSON, SERVICE', insert the following new definition: POTENTIAL IGNITION SOURCE.....1.2.12.201		P
1.5	COMPONENTS		P
1.5.1	1.First paragraph, insert the following text after the words 'IEC component standard: or the relevant Australian/New Zealand Standard 2In the Note, insert the following text after the word standard: or the relevant Australian/New Zealand Standard 3Sec ond paragraph, delete the words 'without further evaluation'		P

IEC60950_1G ATTACHMENT																
Clause	Requirement + Test		Result - Remark	Verdict												
1.5.2	1First paragraph, insert the following text after the word 'standard' or an Australian/New Zealand Standard 2First paragraph, second dash item, second line, insert the following text after the word 'standard' or an Australian/New Zealand Standard 3First paragraph, second dash item, last line, insert the following text after the word 'standard': or an Australian/New Zealand Standard			P												
1.7	MARKINGS AND INSTRUCTIONS			P												
1.7.1.3	Delete existing text and <i>replace</i> with the following: Graphical symbols placed on the equipment as a requirement of this standard, shall be in accordance with IEC 60417 or ISO 3864-2 or ISO 7000, if available. In the absence of suitable symbols, the manufacturer may design specific graphical symbols. Symbols as required by this standard placed on the equipment shall be explained in the user manual			P												
2.9	ELECTRICAL INSULATION			P												
2.9.2	Variation Second paragraph, <i>delete</i> the word 'designated'			P												
3.2.5	POWER SUPPLY CORDS			N/A												
Table 3B	Variation 1. <i>Del</i> ete the first four rows and replace with the following: <table><tr><td>Over 0.2 up to and including 3</td><td>0.5^a</td><td>18 [0.8]</td></tr><tr><td>Over 3 up to and including 7.5</td><td>0.75</td><td>16 [1.3]</td></tr><tr><td>Over 7.5 up to including 10</td><td>(0.75)^b 1.00</td><td>16 [1.3]</td></tr><tr><td>Over 10 up to including 16</td><td>(1.0)^c 1.5</td><td>14 [2]</td></tr></table>		Over 0.2 up to and including 3	0.5 ^a	18 [0.8]	Over 3 up to and including 7.5	0.75	16 [1.3]	Over 7.5 up to including 10	(0.75) ^b 1.00	16 [1.3]	Over 10 up to including 16	(1.0) ^c 1.5	14 [2]		N/A
Over 0.2 up to and including 3	0.5 ^a	18 [0.8]														
Over 3 up to and including 7.5	0.75	16 [1.3]														
Over 7.5 up to including 10	(0.75) ^b 1.00	16 [1.3]														
Over 10 up to including 16	(1.0) ^c 1.5	14 [2]														

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	2. <i>Delete</i> NOTE 1 and renumber existing NOTE 2 as 'NOTE'		N/A
	3. <i>Delete</i> Footnote ^a and replace with the following: ^a This nominal cross-sectional area is only allowed for Class II appliances if the length of the power supply cord, measured between the point where the cord, or cord guard, enters the appliance, and the to the plug does not exceed 2 m (0,5 mm ² three-core supply flexible cords are not permitted; see AS/NZS 3191)		N/A
4.3	DESIGN AND CONSTRUCTION		N/A
4.3.6	Variation <i>Delete</i> the third paragraph and <i>replace</i> with the following:		N/A
	<i>Equipment with a plug portion, suitable for insertion into a 10 A 3-pin flat-pin socket-outlet complying with AS/NZS 3112 shall comply with the requirements in AS/NZS 3112 for equipment with integral pins for insertion into socket-outlets</i>		N/A
4.3.8	Addition Eighth paragraph, <i>insert</i> the following new note after the first dash item:		N/A
	NOTE 6.201 In cases where the voltage source is provided by power from an unassociated power source, consideration should be given to the effects of possible single fault conditions in the unassociated equipment. If the power source is unknown then it should be assumed that the maximum limit of SELV may be applied to the source input under assumed single fault conditions in the source when assessing the charging circuit in the equipment under test.		
4.3.13.5.1	Variation <i>Delete</i> the first paragraph and <i>replace</i> with the following: Except as permitted below, equipment shall be classified and labelled according to IEC 60825-1 or AS/NZS 60825.1, IEC 60825-2 or AS/NZS 60825.2 and IEC 60825-12, as applicable		N/A

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	Third paragraph, first sentence, after 'IEC 60825-1', <i>insert</i> the following text: or AS/NZS 60825.1		N/A
	Fourth paragraph, after 'IEC 60825-1', <i>insert</i> the following text: or AS/NZS 60825.1		N/A
4.7	RESISTANCE TO FIRE		N/A
4.7	Addition At the end of Clause 4.7, <i>insert</i> the following text: For alternate tests refer to Clause 4.7.201		N/A
6	CONNECTION TO TELECOMMUNICATIONS NETWORKS		N/A
6.2.2	Variation For Australia only, <i>delete</i> the first paragraph and Note, and <i>replace</i> with the following: In Australia only, compliance with 6.2.2 shall be checked by the tests of both 6.2.2.1 and 6.2.2.2		N/A
6.2.2.1	Variation For Australia only, <i>delete</i> the first paragraph including the Notes, and <i>replace</i> with the following: In Australia only, the electrical separation is subjected to 10 impulses of alternating polarity, using the impulse test generator Reference 1 of Table N.1. The interval between successive impulses is 60 s and the initial voltage, U_c , is: (i) for 6.2.1 a): 7.0 kV for hand-held telephones and for headsets and 2.5 kV for other equipment; and (ii) For 6.2.1 b) and 6.2.1 c): 1.5kV		N/A
	NOTE 201 The 7 kV impulse simulates lightning surges on typical rural and semi-rural network lines		N/A
	NOTE 202 The value of 2.5 kV for 6.2.1 a) was chosen to ensure the adequacy of the insulation concerned and does not necessarily simulate likely overvoltages		N/A

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
6.2.2.2	Variation For Australia only, delete the second paragraph including the Note, and replace with the following: In Australia only, the a.c. test voltage is (i)for 6.2.1 a): 3kV; and (ii)for 6.2.1b) and 6.2.1c): 1.5kV		N/A
	NOTE 201 Where there are capacitors across the insulation under test, it is recommended that d.c. test voltages are used.		N/A
	NOTE 202 The 3 kV and 1.5 kV values have been determined considering the low frequency induced voltages from the power supply distribution system.		N/A
7	CONNECTION TO CABLE DISTRIBUTION NETWORK		N/A
7.3	Addition Add the following before the first paragraph: Equipment providing functions that fall only within the scope of AS/NZS 60065 and that incorporate a PSTN interface, are not required to comply with this Clause where the only ports provided on the equipment, in addition to a coaxial cable connection and a PSTN interface, are audio or video ports and analogue or data ports not intended to be used for telecommunications purposes		N/A
Annex P	Addition Add the following Normative References: AS/NZS 3191, Electric flexible cords AS/NZS 3112, Approval and test specification—Plugs and socket-outlets		P

	Special national conditions (if any)	N/A
1.2.12	FLAMMABILITY	N/A
1.2.12.15	Addition After Clause 1.2.12.15, insert the following new clause:	N/A

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
1.2.12.201	POTENTIAL IGNITION SOURCE Possible fault which can start a fire if the open-circuit voltage measured across an interruption or faulty contact exceeds a value of 50 V (peak) a.c. or d.c. and the product of the peak value of this voltage and the measured r.m.s. current under normal operating conditions exceeds 15 VA		N/A
	Such a faulty contact or interruption in an electrical connection includes those which may occur in CONDUCTIVE PATTERNS on PRINTED BOARDS		N/A
	NOTE 1 An electronic protection circuit may be used to prevent such a fault from becoming a POTENTIAL IGNITION SOURCE		N/A
	NOTE 2 This definition is from AS/NZS 60065:2012, Clause 2.8.11.		N/A
4	PHYSICAL REQUIREMENTS		N/A
4.1	Addition After Clause 4.1, <i>insert</i> new Clause 4.1.201 as follows:		N/A
4.1.201	Display devices used for television purposes Display devices which may be used for television purposes, with a mass of 7 kg or more, shall comply with the requirements for stability and mechanical hazards, including the additional stability requirements for television receivers, specified in AS/NZS 60065		N/A
4.3	DESIGN AND CONSTRUCTION		N/A
4.3.8	Addition After Clause 4.3.8, <i>add</i> the following new clause as follows		N/A
4.3.8.201	Products containing coin/button cell batteries and batteries designated R1 The requirements of AS/NZS 60065:2012 Amendment 1:2015, Clause 14.10.201 apply for this Clause.		N/A
4.7	RESISTANCE TO FIRE		N/A
4.7.3.6	Addition After Clause 4.7.3.6, <i>add</i> new clauses as follows:		N/A
4.7.201	Resistance to fire—Alternative tests		N/A

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
4.7.201.1	General Parts of non-metallic material shall be resistant to ignition and spread of fire. This requirement does not apply to decorative trims, knobs and other parts unlikely to be ignited or to propagate flames from inside the apparatus, or the following: a) Components that are contained in an enclosure having a flammability category of V-0 according to AS/NZS 60695.11.10 and having openings only for the connecting wires filling the openings completely, and for ventilation not exceeding 1 mm in width regardless of length.		N/A
	b) The following parts which would contribute negligible fuel to a fire: – small mechanical parts, the mass of which does not exceed 4 g, such as mounting parts, gears, cams, belts and bearings; – small electrical components, such as capacitors with a volume not exceeding 1,750 mm ³ , integrated circuits, transistors and optocoupler packages, if these components are mounted on material of flammability category V-1, or better, according to AS/NZS 60695.11.10		N/A
	NOTE In considering how to minimize propagation of fire and what 'small parts' are, account should be taken of the cumulative effect of small parts adjacent to each other for the possible effect of propagating the fire from one part to another		N/A
	<i>Compliance shall be checked by the tests of 4.7.201.2, 4.7.201.3, 4.7.201.4 and 4.7.201.5</i>		N/A
	<i>For the base material of printed boards, compliance shall be checked by the test of 4.7.201.5</i>		
	The tests shall be carried out on parts of non-metallic material which have been removed from the apparatus. When the glow-wire test is carried out, the parts shall be placed in the same orientation as they would be in normal use. These tests are not carried out on internal wiring		N/A

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
4.7.201.2	Testing of non-metallic materials Parts of non-metallic material shall be subject to the glow-wire test of AS/NZS 60695.2.11 which shall be carried out at 550°C Parts for which the glow-wire test cannot be carried out, such as those made of soft or foamy material, shall meet the requirements specified in ISO 9772 for category FH-3 material. The glow-wire test shall be not carried out on parts of material classified at least FH-3 according to ISO 9772 provided that the sample tested was not thicker than the relevant part.		N/A
4.7.201.3	Testing of insulating materials Parts of insulating material supporting POTENTIAL IGNITION SOURCES shall be subject to the glow-wire test of AS/NZS 60695.2.11 which shall be carried out at 750°C. The test shall be also carried out on other parts of insulating material which are within a distance of 3 mm of the connection. NOTE Contacts in components such as switch contacts are considered to be connections. For parts which withstand the glow-wire test but produce a flame, other parts above the connection within the envelope of a vertical cylinder having a diameter of 20 mm and a height of 50 mm shall be subjected to the needle-flame test. However, parts shielded by a barrier which meets the needle-flame test shall not be tested. The needle-flame test shall be made in accordance with AS/NZS 60695.11.5 with the following modifications:		N/A

IEC60950_1G ATTACHMENT					
Clause	Requirement + Test			Result - Remark	Verdict
	Clause of AS/NZS 60695.11.5		Change		N/A
	9 Test procedure				
	9.2 Application of Needle-flame	<i>Delete</i> the first and second paragraphs and <i>replace</i> with the following: The specimen shall be arranged so that the flame can be applied to a vertical or horizontal edge as shown in the examples of Figure 1. If possible the flame shall be applied at least 10 mm from a corner. The duration of application of the test flame shall be 30 s ± 1 s			
	9.3 Number of test specimens	<i>Delete</i> existing text and <i>replace</i> with the following: The test shall be made on one specimen. If the specimen does not withstand the test, the test may be repeated on two further specimens, both of which shall withstand the test.			
	11 Evaluation of test results	<i>Delete</i> existing text and <i>replace</i> with the following: The duration of burning (tb) shall not exceed 30 s. However, for printed circuit boards, it shall not exceed 15s			

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	The needle-flame test shall not be carried out on parts of material classified as V-0 or V-1 according to AS/NZS 60695.11.10, provided that the sample tested was not thicker than the relevant part		N/A
4.7.201.4	Testing in the event of non-extinguishing material If parts, other than enclosures, do not withstand the glow wire tests of 4.7.201.3 by failure to extinguish within 30 s after the removal of the glow-wire tip, the needle-flame test detailed in 4.7.201.3 shall be made on all parts of non-metallic material which are within a distance of 50 mm or which are likely to be impinged upon by flame during the tests of 4.7.201.3. Parts shielded by a separate barrier which meets the needle-flame test need not be tested.		N/A
	NOTE 1 If the enclosure does not withstand the glow-wire test the equipment is considered to have failed to meet the requirements of Clause 4.7.201 without the need for consequential testing.		N/A
	NOTE 2 If other parts do not withstand the glow-wire test due to ignition of the tissue paper and if this indicates that burning or glowing particles can fall onto an external surface underneath the equipment, the equipment is considered to have failed to meet the requirements of Clause 4.7.201 without the need for consequential testing		N/A
	NOTE 3 Parts likely to be impinged upon by the flame are considered to be those within the envelope of a vertical cylinder having a radius of 10 mm and a height equal to the height of the flame, positioned above the point of the material supporting, in contact with, or in close proximity to, connections.		N/A
4.7.201.5	Testing of printed boards The base material of printed boards shall be subjected to the needle-flame test of Clause 4.7.201.3. The flame shall be applied to the edge of the board where the heat sink effect is lowest when the board is positioned as in normal use. The flame shall not be applied to an edge, consisting of broken perforations, unless the edge is less than 3 mm from a POTENTIAL IGNITION SOURCE.		N/A

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	The test is not carried out if the – Printed board does not carry any POTENTIAL IGNITION SOURCE; – Base material of printed boards, on which the available apparent power at a connection exceeds 15 VA operating at a voltage exceeding 50 V and equal or less than 400 V (peak) a.c. or d.c. under normal operating conditions, is of flammability category V-1 or better according to AS/NZS 60695.11.10, or the printed boards are protected by an enclosure meeting the flammability category V-0 according to AS/NZS 60695.11.10, or made of metal, having openings only for connecting wires which fill the openings completely; or – Base material of printed boards, on which the available apparatus power at a connection exceeds 15 VA operating at a voltage exceeding 400 V (peak) a.c. or d.c. under normal operating conditions, and base material of printed boards supporting spark gaps which provides protection against overvoltages, is of flammability category V-0 according to AS/NZS 60695.11.10 or the printed boards are contained in a metal enclosure, having openings only for connecting wires which fill the openings completely <i>Compliance shall be determined using the smallest thickness of the material.</i>		N/A
	NOTE Available apparent power is the maximum apparent power which can be drawn from the supplying circuit through a resistive load whose value is chosen to maximise the apparent power for more than 2 m when the circuit supplied is disconnected.		N/A

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
ATTACHMENT TO TEST REPORT IEC 60950-1 U.S.A. NATIONAL DIFFERENCES (Information technology equipment – Safety – Part 1: General requirements)			
Differences according to : UL 60950-1-07(Second Edition) + A1: 2011 + A2: 2014			
TRF template used: : IECEE OD-2020-F3, Ed. 1.1			
Attachment Form No..... : US_ND_IEC60950_1G			
Attachment Originator : UL(US)			
Master Attachment : Dated 2021-03-12			
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	Special national conditions		P
1.1.1	All equipment is designed as to allow installation in accordance with the National Electrical Code (NEC), ANSI/NFPA 70, Canadian Electrical Code (CEC), Part I, CAN/CSA C22.1, and if applicable, the National Electrical Safety Code, IEEE C2		P
	Also, unless marked or otherwise identified, installation is allowed per the Standard for the Protection of Electronic Computer/Data-Processing Equipment, ANSI/NFPA 75		P
1.1.2	Baby monitors are required to additionally comply with ASTM F2951, Consumer Safety Specification for Baby Monitors		N/A
1.4.14	For Pluggable Equipment Type A, the protection in the installation is assumed to be 20A		P
1.5.5	For lengths exceeding 3.05 m, external interconnecting flexible cord and cable assemblies are required to be a suitable cable type (e.g., DP, CL2) specified in the /NEC		N/A
	For lengths 3.05 m or less, external interconnecting flexible cord and cable assemblies that are not types specified in the NEC are required to have special construction features and identification markings		P

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
1.7.1	Equipment for use on a.c. mains supply systems with a neutral and more than one phase conductor (e.g. 120/240 V, 3-wire) require a special marking format for electrical ratings		N/A
	A voltage rating that exceeds an attachment plug cap rating is only permitted if it does not exceed the extreme operating conditions in Table 2 of CAN/CSA C22.2 No. 235, and		P
	- if it is part of a range that extends into the Table 2 "Normal Operating Conditions"		P
	Likewise, a voltage rating is not to be lower than the specified "Normal Operating Conditions," unless it is part of a range that extends into the "Normal Operating Conditions"		N/A
1.7.7	Wiring terminals intended to supply Class 2 outputs in accordance with NEC or CEC Part 1 or NEC are marked with the voltage rating and "Class 2" or equivalent		N/A
	- Marking is located adjacent to the terminals		N/A
	- Marking is visible during wiring		N/A
2.5	Fuse providing Class 2, Limited Power Source, or TNV current limiting is not operator-accessible unless it is not interchangeable		P
2.6	Equipment with isolated ground (earthing) receptacles is in compliance with NEC 250.146(D) and CEC 10-112 and 10-906(8)		N/A
2.7.1	Suitable NEC/CEC branch circuit protection rated at the maximum circuit rating is provided for all standard supply outlets and receptacles (such as supplied in power distribution units) if the supply branch circuit protection is not suitable.		N/A
	Power distribution transformers distributing power at 100 volts or more, and rated 10 kVA or more, provided with special transformer overcurrent protection		N/A
3.2	Wiring methods (terminals, leads, etc.) used for the connection of the equipment to the mains is in accordance with the NEC/CEC		N/A
3.2.1	Attachment plugs of power supply cords are rated not less than 125 percent of the rated current of the equipment		P

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
3.2.1.2	Equipment connected to a centralized d.c. power system, and having one pole of the DC mains input terminal connected to the main protective earthing terminal in the equipment comply with special earthing, wiring, marking and installation instruction requirements		N/A
3.2.3	Permanent connection of equipment to the mains supply by a power supply cord is not permitted, except for certain equipment, such as ATMs		N/A
3.2.5	Power supply cords are no longer than 4.5 m in length		P
	Minimum cord length is 1.5 m, with certain constructions such as external power supplies allowed to consider both input and output cord lengths into the requirement		P
	Flexible power supply cords are compatible with Article 400 of the NEC, and Tables 11 and 12 of the CEC		P
3.2.9	Permanently connected equipment has a suitable wiring compartment and wire bending space		N/A
3.3	Wiring terminals and associated spacings for field wiring connections comply with CSA C22.2 No. 0		N/A
3.3.3	Wire binding screws are not attached with conductors larger than 10 AWG (5.3 mm ²)		N/A
3.3.4	Terminals for permanent wiring, including protective earthing terminals, are suitable for Canadian/US wire gauge sizes, are		N/A
	- rated 125 per cent of the equipment rating, and		N/A
	- are specially marked when specified (1.7.7)		N/A
3.3.5	Revise first column of Table 3E to "Smaller of the RATED CURRENT of the equipment or the PROTECTIVE CURRENT RATING of the circuit under consideration"		N/A
3.4.2	Motor control devices are provided for cord-connected equipment with a motor if the equipment is rated more than 12 A,		N/A
	- or if the motor has a nominal voltage rating greater than 120 V		N/A
	- or is rated more than 1/3 hp (locked rotor current over 43 A)		N/A

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
3.4.8	Vertically-mounted disconnect switches and circuit breakers have the "on" position indicated by the handle in the up position		N/A
3.4.11	For computer room applications, equipment with battery systems capable of supplying 750 VA for five minutes have a battery disconnect means that may be connected to the computer room remote power-off circuit		N/A
4.3.12	The maximum quantity of flammable liquid stored in equipment complies with NFPA 30		N/A
4.3.13.5.1	Equipment with lasers meets the U.S. Code of Federal Regulations 21 CFR 1040 (and the Canadian Radiation Emitting Devices Act, REDR C1370).		N/A
4.7	For computer room applications, automated information storage systems with combustible media greater than 0.76 m ³ (27 cu ft) have a provision for connection of either automatic sprinklers or a gaseous agent extinguishing system with an extended discharge		N/A
4.7.3.1	For computer room applications, enclosures with combustible material measuring greater than 0.9m ² (10 sq ft) or a single dimension greater than 1.8 m (6 ft) have a flame spread rating of 50 or less		N/A
	For other applications, enclosures with the same dimensions require a flame spread rating of 200 or less		N/A
4.7.3.1	Non-metallic enclosures of equipment for use in spaces used for environmental air (plenums) are required to comply with UL 2043		N/A
Annex H	Equipment that produces ionizing radiation complies with U.S. Code of Federal Regulations, 21 CFR 1020 (and the Canadian Radiation Emitting Devices Act, REDR C1370)		N/A
	Other National Differences		P

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
1.5.1	Some components and materials associated with the risk of fire, electric shock, or personal injury have component or material ratings in accordance with the applicable national (Canadian and/or U.S.) component or material standard requirements. These components include: attachment plugs, battery backup systems, battery packs, cathode ray tubes, circuit breakers, communication circuit accessories, connectors (used for current interruption of non-LPS circuits), cord sets and power supply cords, direct plug-in equipment, electrochemical capacitor modules (energy storage modules with ultracapacitors), enclosures (outdoor), flexible cords and cables, fuses (branch circuit), fuseholders, ground-fault current interrupters, industrial control equipment, insulating tape, interconnecting cables, lampholders, limit controls, printed wiring, protectors for communications circuits, receptacles, solid state controls, supplementary protectors, switches (including interlock switches), thermal cut-offs, thermostats, (multi-layer) transformer winding wire, surge protective devices, tubing, vehicle battery adapters, wire connectors, and wire and cables		P
1.6.1.2	A circuit for connection to the DC Mains Supply is classified as a SELV Circuit, TNV-2 Circuit or Hazardous Voltage Circuit depending on the maximum operating voltage of the supply		N/A
	This maximum operating voltage includes consideration of the battery charging "float voltage" associated with the intended supply system, regardless of the marked power rating of the equipment		N/A
2.3.1	For TNV-2 and TNV-3 circuits with other than ringing signals and with voltages exceeding 42.4 V _{peak} or 60 Vd.c., the maximum acceptable current through a 2000 ohm resistor (or greater) connected across the voltage source with other loads disconnected is 7.1 mA peak or 30 mA d.c. under normal operating conditions		N/A
2.3.2.1	In the event of a single fault between TNV and SELV circuits, the limits of 2.2.3 apply to SELV Circuits and accessible conductive parts		N/A

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
2.6.2	Equipment with functional earthing marked with the functional earthing symbol (IEC 60417-6092)		N/A
2.6.3.4	Protective bonding conductors of non-standard protective bonding constructions (e.g., printed circuit traces) may be subjected to the additional limited short circuit test conditions specified		N/A
4.2.8.1	Enclosures around CRTs with a face diameter of 160 mm or more reduce the risk of injury due to the implosion of the CRT		N/A
4.3.2	Equipment with handles complies with special loading tests		N/A
4.3.8	Battery packs for both portable and stationary applications comply with special component requirements		N/A
5.1.8.3	Equipment intended to receive telecommunication ringing signals comply with a special touch current measurement tests		N/A
5.3.7	Internal (e.g., card cage) SELV circuit connectors and printed wiring board connectors that are accessible to the operator and that deliver power are overloaded		N/A
	During abnormal operating testing, if a circuit is interrupted by the opening of a component, the test is repeated twice (three tests total) using new components as necessary		N/A
6.4	Equipment intended for connection to telecommunication network outside plant cable is protected against overvoltage from power line crosses in accordance with 6.4 and Annex NAC		N/A
Annex EE	Articulated accessibility probe (Fig EE.3) is used for assessing accessibility to document/media shredders instead of the Figure 2A test finger		N/A
Annex M.2	Continuous ringing signals up to 16 mA only are permitted if the equipment is subjected to special installation and performance restrictions		N/A
Annex NAD	Equipment connected to a telecommunication and cable distribution networks and supplied with an earphone intended to be held against, or in the ear comply with special acoustic pressure requirements		N/A

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
ATTACHMENT TO TEST REPORT IEC 60950-1 with A1:2009 and A2:2013 CANADA NATIONAL DIFFERENCES Information technology equipment – Safety – Part 1: General requirements			
Differences according to : CAN/CSA-C22.2 No. 60950-1-07, Amd 1:2011, Amd 2:2014			
Attachment Form No..... : CA_ND_IEC60950_1g			
Attachment Originator : CSA			
Master Attachment : Date (2015-05)			
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1.1.1	All equipment is to be designed to allow installation in accordance with the National Electrical Code (NEC), ANSI/NFPA 70, the Canadian Electrical Code (CEC), Part I, CAN/CSA C22.1, and when applicable, the National Electrical Safety Code, IEEE C2. Also, unless marked or otherwise identified, installation is allowed per the Standard for the Protection of Electronic Computer/Data-Processing Equipment, ANSI/NFPA 75.		P
1.1.2	Baby monitors are required to additionally comply with ASTM F2951, Consumer Safety Specification for Baby Monitors.		N/A
1.4.14	For Pluggable Equipment Type A, the protection in the installation is assumed to be 20A:		P
1.5.5	For lengths exceeding 3.05 m, external interconnecting flexible cord and cable assemblies are required to be a suitable cable type (e.g., DP, CL2) specified in the CEC/NEC.		N/A
	For lengths 3.05 m or less, external interconnecting flexible cord and cable assemblies that are not types specified in the CEC/NEC are required to have special construction features and identification markings.		P

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
1.7.1	Equipment for use on a.c. mains supply systems with a neutral and more than one phase conductor (e.g. 120/240 V, 3-wire) require a special marking format for electrical ratings. A voltage rating that exceeds an attachment plug cap rating is only permitted if it does not exceed the extreme operating conditions in Table 2 of CAN/CSA C22.2 No. 235, and if it is part of a range that extends into the Table 2 "Normal Operating Conditions." Likewise, a voltage rating shall not be lower than the specified "Normal Operating Conditions," unless it is part of a range that extends into the "Normal Operating Conditions."		P
1.7.7	Wiring terminals intended to supply Class 2 outputs in accordance with CEC Part 1 or NEC shall be marked with the voltage rating and "Class 2" or equivalent. Marking shall be located adjacent to the terminals and shall be visible during wiring.		N/A
2.5	Where a fuse is used to provide Class 2, Limited Power Source, or TNV current limiting, it shall not be operator-accessible unless it is not interchangeable.		N/A
2.6	Equipment with isolated ground (earthing) receptacles are required to comply with NEC 250.146(D) and CEC 10-112 and 10-906(8).		N/A
2.7.1	Suitable NEC/CEC branch circuit protection rated at the maximum circuit rating is required for all standard supply outlets and receptacles (such as supplied in power distribution units) if the supply branch circuit protection is not suitable. Power distribution transformers distributing power at 100 volts or more, and rated 10 kVA or more, require special transformer overcurrent protection.		N/A
3.2	Wiring methods (terminals, leads, etc.) used for the connection of the equipment to the mains shall be in accordance with the NEC/CEC.		N/A
3.2.1	Power supply cords are required to have attachment plugs rated not less than 125 percent of the rated current of the equipment.		P
3.2.1.2	Equipment connected to a centralized d.c. power system, and having one pole of the DC mains input terminal connected to the main protective earthing terminal in the equipment, is required to comply with special earthing, wiring, marking and installation instruction requirements.		N/A

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
3.2.3	Permanent connection of equipment to the mains supply by a power supply cord is not permitted, except for certain equipment, such as ATMs.		N/A
3.2.5	Power supply cords are required to be no longer than 4.5 m in length. Minimum cord length is required to be 1.5 m, with certain constructions such as external power supplies allowed to consider both input and output cord lengths into the requirement. Flexible power supply cords are required to be compatible with Article 400 of the NEC, and Tables 11 and 12 of the CEC.		P
3.2.9	Permanently connected equipment is required to have a suitable wiring compartment and wire bending space.		N/A
3.3	Wiring terminals and associated spacings for field wiring connections shall comply with CSA C22.2 No. 0		N/A
3.3.3	Wire binding screws are not permitted to attach conductors larger than 10 AWG (5.3 mm ²).		N/A
3.3.4	Terminals for permanent wiring, including protective earthing terminals, are required to be suitable for US/Canadian wire gauge sizes, rated 125 percent of the equipment rating, and be specially marked when specified (1.7.7).		N/A
3.3.5	First column of Table 3E revised to require "Smaller of the RATED CURRENT of the equipment or the PROTECTIVE CURRENT RATING of the circuit under consideration."		N/A
3.4.2	Motor control devices are required for cord-connected equipment with a motor if the equipment is rated more than 12 A, or if the motor has a nominal voltage rating greater than 120 V, or is rated more than 1/3 hp (locked rotor current over 43 A).		N/A
3.4.8	Vertically-mounted disconnect switches and circuit breakers are required to have the "on" position indicated by the handle in the up position.		N/A
3.4.11	For computer room applications, equipment with battery systems capable of supplying 750 VA for five minutes are required to have a battery disconnect means that may be connected to the computer room remote power-off circuit.		N/A

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
4.3.12	The maximum quantity of flammable liquid stored in equipment is required to comply with NFPA 30.		N/A
4.3.13.5.1	Equipment with lasers is required to meet the U.S. Code of Federal Regulations 21 CFR 1040 (and the Canadian Radiation Emitting Devices Act, REDR C1370).		N/A
4.7	For computer room applications, automated information storage systems with combustible media greater than 0.76 m ³ (27 cu ft) are required to have a provision for connection of either automatic sprinklers or a gaseous agent extinguishing system with an extended discharge.		N/A
4.7.3.1	For computer room applications, enclosures with combustible material measuring greater than 0.9 m ² (10 sq ft) or a single dimension greater than 1.8 m (6 ft) are required to have a flame spread rating of 50 or less. For other applications, enclosures with the same dimensions require a flame spread rating of 200 or less.		N/A
	Non-metallic enclosures of equipment for use in spaces used for environmental air (plenums) are required to comply with UL 2043.		N/A
Annex H	Equipment that produces ionizing radiation is required to comply with the U.S. Code of Federal Regulations, 21 CFR 1020 (and the Canadian Radiation Emitting Devices Act, REDR C1370).		N/A
OTHER DIFFERENCES			
The following key national differences are based on requirements other than national regulatory requirements.			

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
1.5.1	Some components and materials associated with the risk of fire, electric shock, or personal injury are required to have component or material ratings in accordance with the applicable national (Canadian and/or U.S.) component or material standard requirements. These components include: attachment plugs, battery packs (rechargeable type, used with transportable equipment), cathode ray tubes, circuit breakers, communication circuit accessories, connectors (used for current interruption of non-LPS circuits), cord sets and power supply cords, direct plug-in equipment, enclosures (outdoor), flexible cords and cables, fuses (branch circuit), fuseholders, ground-fault current interrupters, industrial control equipment, insulating tape, interconnecting cables, lampholders, limit controls, printed wiring, protectors for communications circuits, receptacles, solid state controls, supplementary protectors, switches (including interlock switches), thermal cutoffs, thermostats, (multi-layer) transformer winding wire, transient voltage surge suppressors, tubing, wire connectors, and wire and cables.		P
1.6.1.2	A circuit for connection to the DC Mains Supply is classified as either a SELV Circuit, TNV-2 Circuit or Hazardous Voltage Circuit depending on the maximum operating voltage of the supply. This maximum operating voltage shall include consideration of the battery charging "float voltage" associated with the intended supply system, regardless of the marked power rating of the equipment.		N/A
2.3.1	For TNV-2 and TNV-3 circuits with other than ringing signals and with voltages exceeding 42.4 V _{peak} or 60 V _{d.c.} , the maximum acceptable current through a 2000 ohm resistor (or greater) connected across the voltage source with other loads disconnected is 7.1 mA peak or 30 mA d.c. under normal operating conditions.		N/A
2.3.2.1	In the event of a single fault between TNV and SELV circuits, the limits of 2.2.3 apply to SELV Circuits and accessible conductive parts.		N/A
2.6.2	Equipment with functional earthing is required to be marked with the functional earthing symbol (IEC 60417-6092).		N/A
2.6.3.4	Protective bonding conductors of non-standard protective bonding constructions (e.g., printed circuit traces) may be subjected to the additional limited short circuit test conditions specified.		N/A

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
4.2.8.1	Enclosures around CRTs with a face diameter of 160 mm or more are required to reduce the risk of injury due to the implosion of the CRT.		N/A
4.3.2	Equipment with handles is required to comply with special loading tests.		P
4.3.8	Battery packs for both portable and stationary applications are required to comply with special component requirements.		N/A
5.1.8.3	Equipment intended to receive telecommunication ringing signals is required to comply with a special touch current measurement tests.		N/A
5.3.7	Internal (e.g., card cage) SELV circuit connectors and printed wiring board connectors that are accessible to the operator and that deliver power are to be overloaded. During abnormal operating testing, if a circuit is interrupted by the opening of a component, the test shall be repeated twice (three tests total) using new components as necessary.		P
6.4	Equipment intended for connection to telecommunication network outside plant cable is required to be protected against overvoltage from power line crosses in accordance with 6.4 and Annex NAC.		N/A
Annex EE	UL articulated accessibility probe (Fig EE.3) required for assessing accessibility to document/media shredders instead of the Figure 2A test finger.		N/A
M.2	Continuous ringing signals up to 16 mA only are permitted if the equipment is subjected to special installation and performance restrictions.		N/A
Annex NAD	Equipment connected to a telecommunication and cable distribution networks and supplied with an earphone intended to be held against, or in the ear is required to comply with special acoustic pressure requirements.		N/A

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
ATTACHMENT TO TEST REPORT IEC 60950-1 SINGAPORE NATIONAL DIFFERENCES Information technology equipment – Safety – Part 1: General requirements			
Differences according to: Special National Conditions			
TRF template used: : IECEE OD-2020-F3, Ed. 1.1			
Attachment Form No.: SG_ND_IEC60950_1G			
Attachment Originator: Intertek Testing Services (Singapore) Pte Ltd			
Master Attachment: 2022-07-08			
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	National Differences		
	Not Applicable		
Chapter 4.2	Special national conditions (if any) Controlled goods under the Consumer Protection (Safety Requirements) Registration Scheme (CPS) are required to be tested to additional requirements stipulated by the Consumer Product Safety Office (CPSO) of Enterprise Singapore in Chapter 4.2 of the CPS information booklet. The CPS information booklet is updated on an ongoing basis. At the point of testing, refer to the latest copy of the CPS information booklet for the minimum edition of standard to apply for testing of products under the CPS scheme and any new requirements. Link to CPS information booklet: https://www.consumerproductsafety.gov.sg/files/cps-info-booklet.pdf		N/A
<u>Clause</u> 1	All appliances must be tested to 230 VAC, 50 Hz.		P
2	Circuit diagrams must be indicated with component's values for products tested to IEC 60065 and IEC 60950.		P
4	Appliance fitted with voltage selector shall be tested as follows: Connect appliance to 230 VAC mains with voltage selector switch to settings not suitable for operation at 230 VAC.		N/A

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
5	All appliances (with tropical test requirements in applicable Standards) shall comply with the tropical condition test as stated in the relevant IEC Standards.		P
7	All Class I appliances must be fitted with 3-pin mains plugs that are registered with the CPSO.		N/A
8	a) All Class II appliances must be fitted with 2-pin mains plug complying with EN 50075. b) Class II appliances that are fitted with 3-pin mains plugs must use plugs that are registered with the CPSO.		N/A
9	Detachable power cord set must be listed in the test report critical component list.		N/A
14	AC Adaptor incorporated with 13A socket-outlet to be tested to additional tests clauses 13, 17 and 18 of SS 145-3: 2020.		N/A
15	Supplier who is supplying AC adaptors with detachable interchangeable plug pins must include with its products, written instructions to inform customers on the type of detachable interchangeable plug pins that are approved and suitable to use in Singapore. These instructions are to be submitted to the Conformity Assessment Body for verification when applying for Certificate of Conformity.		N/A
16	For AC Adaptors supplied together with Personal Mobility Devices: 1. Registered Supplier to declare the model of the AC adaptor that is to be used with/ bundled together with the PMDs; 2. Registered Supplier to provide valid IEC 60950-1 or IEC 62368-1 test reports for certification and registration of the declared AC adaptor under the CPS scheme; and 3. Registered Supplier to provide the UL 2272 test report as a supporting document, showing that the listed AC adaptor in the UL 2272 test report is the model declared to be used with/ bundled together with the PMDs.		N/A
18	CD/ DVD ROMs (used in personal computers) to have test certificate showing that CD/DVD ROM drive has complied with IEC 60825- 1.		N/A

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
19	Modem card incorporated in the personal computer must be tested at set level (sub-clauses 5.1 & 6 of IEC 60950) or at component level.		N/A
20	Powerline Ethernet Adaptor incorporated with 13A socket-outlet, to be tested to additional test clauses 13, 17 & 18 of SS 145-3: 2020.		N/A
46	Plasma/LCD display monitor tested to IEC 60950 would require additional test to clauses 9 (related to antenna only), 10.1, 10.2, 10.3 and 12.5 of IEC 60065.		N/A
	Other additional requirements which may be included in Chapter 4.2 of the information booklet in ongoing basis at the time of testing.		N/A

IEC60950_1C ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
ATTACHMENT TO TEST REPORT IEC 60950 - 1, ed2, amd1 ISRAEL NATIONAL DIFFERENCES (INFORMATION TECHNOLOGY EQUIPMENT – SAFETY: GENERAL REQUIREMENTS)			
Differences according to : National standard SI 60950 - 1, ed2, amd1.			
Attachment Form No..... : IL_ND_IEC60950_1C			
Attachment Originator : Standards Institution of Israel			
Master Attachment : Date 2015-12			
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	National Differences		
1.6	Power interface The clause is applicable with the following addition:		P
1.6.1	AC Power distribution systems	See below.	P
	-At the end of the clause, the following note shall be added: Note: In Israel, the clause is subject to the Electricity Law, 1954, its Regulations and updates.		N/A
1.7	Marking and instructions The clause is applicable with the following additions:		N/A
1.7.1	Power rating		N/A
	-Subclause 1.7.201 shall be added after the clause, as follows:		N/A
1.7.201	Marking in the Hebrew language	Compliance shall be evaluated during national approval.	N/A

IEC60950_1C ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	The marking in the Hebrew language shall be in accordance with the Consumer Protection Order (Marking of goods), 1983. In addition to the marking required by clause 1.7.1, the following items shall be marked in the Hebrew language: 1. Name of the apparatus and its commercial designation; 2. Manufacturer's name and his address; if the equipment is imported, the importer's name and his address; 3. Manufacturer's registered trademark, if any; 4. Name of the model and serial number, if any; 5. Country of manufacture. The items shall be marked on the apparatus or on its packaging, or on a label well attached to the apparatus or its packaging, by bonding or sewing, such that the label cannot be easily removed.		N/A
1.7.2	Safety instructions and marking	Compliance shall be evaluated during national approval.	N/A
1.7.2.1	General - The following shall be added at the end of the clause: All the instruction and all the warnings related to safety shall also be written in the Hebrew language.		N/A
- At the end of clause 1, clause 1.201 shall be added as follows:			
1.201	Power consumption in standby mode The equipment shall comply with the requirements of the Energy Sources Regulations (Maximum electrical power in standby mode for domestic and office electrical appliances), 2011, with a permitted deviation of up to 10 %.		N/A
2	Protection from hazards The clause is applicable with the following additions:		N/A

IEC60950_1C ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
2.9.4	Separation from hazardous voltages The following shall be added at the beginning of the clause: According to the Electricity Law, 1954, and the Electricity Regulations (Earthing and protection means from electricity at voltages up to 1,000 V), 1991, in Israel, seven means of protection from electricity are permitted, as follows: 1) Network system earthing - (TN-C-S, TN-S); 2) Network system earthing - (TT); 3) Network Insulation Terre - (IT); 4) Isolated transformer; 5) Safety extra low voltage; 6) Residual current circuit breaker; 7) Reinforced insulation; Double insulation		P
- Clause 2.201 shall be added at the end of clause 2, as follows:			
2.201	Prevention of electromagnetic interference The device shall meet the requirements of the relevant part of the Israeli Standard series, SI 961. If the device contains components for prevention of electromagnetic interference, the devices shall not lower the safety level of the device, as required by this Standard.		N/A
3	Wiring, connections and supply The clause is applicable with the following additions:		N/A
3.2	Connection to a mains supply		N/A
3.2.1	Means of connection		N/A
3.2.1.1	Connection to an a.c. mains supply After the Note, the following note shall be added: Note: In Israel, the supply plug shall comply with the requirements in Israeli Standard, SI 32 Part 1.1.	Compliance shall be evaluated during national approval.	N/A

IEC60950_1C ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
3.2.1.2	Connection to a d.c. mains supply After the first paragraph, the following note shall be added: Note: As of the date of publication of this Standard, there is no Israeli Standard for connection accessories to d.c.		N/A

	Special national conditions (if any)		P
	ANNEX P Normative references		P
	The annex is applicable with the following modifications and additions: In place of some of the International Standards cited in the Standard and noted in this annex, the following Israeli Standards shall apply:		P

IEC60950_1C ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

The referenced International Standard	The substituted Israeli Standard	Comments
IEC 60317 (all parts) ^(b)	SI 1067 Part 1 – Enamelled ^(c) round copper wires with high mechanical properties	The Israeli Standard is identical to the International Electrotechnical Commission Standard, IEC 317-1: 1980-02.
	SI 1067 Part 2 – Self-fluxing enamelled ^(c) round copper wires	The Israeli Standard is identical to the International Electrotechnical Commission Standard, IEC 307-4: 1980-02.
	SI 1067 Part 3 – Enamelled ^(c) round copper wires with a temperature index of 180 °C	The Israeli Standard is identical to the International Electrotechnical Commission Standard, IEC 317-8: 1980-02.
IEC 60320 (all parts) ^(b)	SI 60320 Part 1 – Appliance couplers for household and similar general purposes: General requirements	The Israeli Standard, excluding national modifications and additions noted, is identical to the International Electrotechnical Commission Standard, IEC 60320-1: Second edition: 2001-06.
	SI 60320 Part 2.1 – Appliance couplers for household and similar general purposes: Sewing machine couplers	The Israeli Standard, excluding national modifications and additions noted, is identical to the International Electrotechnical Commission Standard, IEC 60320-2-1: Second edition: 2000-07.
	SI 60320 Part 2.2 – Appliance couplers for household and similar general purposes: Interconnection couplers for household and similar equipment	The Israeli Standard, excluding national modifications and additions noted, is identical to the International Electrotechnical Commission Standard, IEC 60320-2-2: Second edition: 1998-08.
	SI 60320 Part 2.3 – Appliance couplers for household and similar general purposes: appliance coupler with a degree of protection higher than IPXO	The Israeli Standard, excluding national modifications and additions noted, is identical to the International Electrotechnical Commission Standard, IEC 60320-2-3: First edition: 1998-09.
IEC 60364-1: 2001	Electricity Law, 1954, with its Regulations and updates	–

IEC60950_1C ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60730-1: 1999 Amendment 1 (2003)	SI 60730 Part 1 – Automatic electrical controls for household and similar use: General requirements	The Israeli Standard, excluding national modifications and additions noted, is identical to the International Electrotechnical Commission Standard, IEC 60730-1: Edition 3.2: 2007-03.
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The referenced International Standard	The substituted Israeli Standard	Comments
IEC 60825-1	SI 60825 Part 1 – Safety of products: Equipment classification and requirements	The Israeli Standard, excluding national modifications and additions noted, is identical to the International Electrotechnical Commission Standard, IEC 60825-1: Second edition: 2007-03.
IEC 60947-1: 2004	SI 60947 Part 1 – Low-voltage switchgear and controlgear: General rules	The Israeli Standard, excluding national modifications and additions noted, is identical to the International Electrotechnical Commission Standard, IEC 60947-1: Edition 5.0: 2007-06.
IEC 61058-1: 2000	SI 61058 Part 1 – Switches for appliances: General requirements	The Israeli Standard, excluding national modifications and additions noted, is identical to the International Electrotechnical Commission Standard, IEC 61058-1: Edition 3.1: 2001.
ISO 3864 (all parts) ^(b)	SI 3864 Part 1 ^(a) – Graphic symbols -	The Israeli Standard, excluding national modifications and additions noted, is identical to the International Organization for Standardization Standard, ISO 3864-1: First edition: 2002-05-15.

Notes:

(a) The Standard is being revised.

(b) In the International Standard series, there are parts not yet adopted as Israeli Standards. This table notes the relevant Israeli Standards, and in the Comments column, the corresponding parts of the International Standard series.

(c) Not relevant to the translation.

IEC60950_1C ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

- The following shall be added to the annex:	
	Israeli Standards SI 961 (all parts) – Electromagnetic compatibility Israeli Laws, Regulations and documents Electricity Law, 1954, with its Regulations and updates Consumer Protection Order (Marking of goods), 1983, Kovetz HaTakanot 4465 dated 1983-02-24 Energy Sources Regulations (Maximum electrical power in standby mode for domestic and office electrical appliances), 2011

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
ATTACHMENT TO TEST REPORT IEC 60950-1 KOREA NATIONAL DIFFERENCES (Information technology equipment – Safety – Part 1: General requirements)			
Differences according to : K 60950-1(2011-12)			
TRF template used: : IECEE OD-2020-F3, Ed. 1.1			
Attachment Form No. : KR_ND_IEC60950_1G			
Attachment Originator : KTL			
Master Attachment : 2022-05-20			
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1.5.1	Plugs for the connection of the apparatus to the supply mains shall comply with the Korean plug standard sheets(KSC 8305)	Compliance shall be evaluated during national approval.	N/A
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Special national conditions			
Voltage	The marking of rated voltage or rated voltage range, for appliances intended to be connected to the supply mains, shall include 110 V, 220 V or 380 V.		P
Frequency	Only appliances having supply frequency of 60Hz or a frequency range including 60Hz are accepted.		P
Instruction	Instruction manuals shall be in Korean	Compliance shall be evaluated during national approval.	N/A

IEC 60950-1: 2005 ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
ATTACHMENT TO TEST REPORT IEC60950-1: 2005 (CHINA) NATIONAL DIFFERENCES Information technology equipment – Safety Part 1: General requirements			
Differences according to : National standard GB 4943.1-2011			
Attachment Form No. : CN_ND_IEC60950_1A			
Attachment Originator : CQC - HKCC			
Master Attachment : 2020-05			
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	National Differences		
Clause	Requirement – Test	Result - Remark	Verdict
1	GENERAL		P
1.1.2	GB4943.1-2011 applies to equipment used - altitudes not exceeding 5000m above sea level, primarily in regions with moderate or tropical climates. Revise the third dashed paragraph of 1.1.2 as: - equipment intended to be used in vehicles, on board ships or aircraft, at altitudes greater than 5000m;		P
1.4.5	Amend the second paragraph by the following: If the equipment is intended for direct connection to an AC mains supply, the tolerances on RATED VOLTAGE shall be taken as +10% and -10%.		P

Clause	Requirement – Test	Result - Remark	Verdict
1.4.12.1	Tma: The maximum ambient temperature permitted by the manufacturer's specification, or 35 °C, whichever is greater. Add note 1: For equipment not to be operated at tropical climatic conditions, Tma is the maximum ambient temperature permitted by the manufacturer's specification, or 25 °C, whichever is greater. Add note 2: For equipment to be operated at 2000m-5000m above sea level, its temperature test conditions and temperature limits are under consideration.		P
1.5.2	Add a note behind the first dashed paragraph. Note: A component used shall comply with related requirements corresponding altitude of 5000m.		P
1.7	Add a paragraph before the last paragraph: The required marking and instruction should be given in normative Chinese unless otherwise specified.		N/A
1.7.1	Amend dashed paragraph at the fifth paragraph : The RATED VOLTAGE should be 220V (single phase) or 380V (three-phases) for single rated voltage, for RATED VOLTAGE RANGE, it should cover 220V or 380V (three-phases), for multiple RATED VOLTAGES, one of them should be 220V or 380V (three-phases) and set on 220V or 380V (three-phases) when manufactured. And the RATED FREQUENCY or RATED FREQUENCY RANGE should be 50Hz or include 50Hz.		P

Clause	Requirement – Test	Result - Remark	Verdict
1.7.2.1	Add requirements of warning for equipment intended to be used at altitude not exceeding 2000m or at non-tropical climate regions: For equipment intended to be used at altitude not exceeding 2000m, a warning label containing the following or a similar appropriate wording, or a symbol as in annex DD shall fixed to the equipment at readily visible place. "Only used at altitude not exceeding 2000m."  For equipment intended to be used in not-tropical climate regions, a warning label containing the following or a similar appropriate wording, or a symbol as in annex DD shall fixed to the equipment at readily visible place. "Only used in not-tropical climate regions."  If only the symbol used, the explanation of the symbol shall be contained in the instruction manual. The above statements shall be given in a language acceptable to the regions where the apparatus is intended to be used.		N/A
2	PROTECTION FROM HAZARDS		P
2.7.1	Amended the first paragraph as: Protection in PRIMARY CIRCUITS against overcurrent short-circuits and earth faults shall be provided as an integral part of the equipment except special provisions. And the protective device shall meet the requirement of Clause 5.3. Delete note of Clause 2.7.1.		P

Clause	Requirement – Test	Result - Remark	Verdict
2.9.2	First section of Clause 2.9.2 amended as two sections: Where required by 2.9.1, 2.10.8.3, 2.10.10 or 2.10.11, humidity conditioning is conducted for 120 h in a cabinet or room containing air with ambient temperature $40\pm 2^{\circ}\text{C}$ and a relative humidity of $(93\pm 3)\%$. During this conditioning the component or subassembly is not energized. For equipment not to be operated at tropical climatic conditions, Where required by 2.9.1, 2.10.8.3, 2.10.10 or 2.10.11, humidity conditioning is conducted for 48 h in a cabinet or room containing air with a relative humidity of $(93\pm 3)\%$. The temperature of the air, at all places where samples can be located, is maintained within 2°C of any convenient value between 20°C and 30°C such that condensation does not occur. Due to pretreatment of equipment operated at high altitude area is humidity conditioning withstand hot shock, specific requirements are to be considered. Add note: For equipment to be operated at 2000m - 5000m above sea level, assessment and requirement of humidity conditioning for Insulation material properties are considered.		P
2.10.3.1	Amend the third paragraph of Clause 2.10.3.1 to be: These requirements apply for equipment to be operated up to 2000 m above sea level. Forequipment to be operated at more than 2000 m above sea level and up to 5000m above sea level, the minimum CLEARANCE shall be multiplied by the factor 1.48 corresponding altitude of 5000m given in Table A.2 of IEC 60664-1. For equipment to be operated at more than 5000 m above sea level, the minimum CLEARANCE shall be multiplied by the factor given in Table A.2 of IEC 60664-1. Linear interpolation is permitted between the nearest two points in Table A.2. The calculated minimum CLEARANCE using this multiplication factor shall be rounded up to the next higher 0.1 mm increment.		P
2.10.3.3& 2.10.3.4	Add "(applicable for altitude up to 2000m)" in header of Table 2K、2L and 2M.		P

Clause	Requirement – Test	Result - Remark	Verdict
2.10.3.4	Add a new section above Table 2K and in Clause 2.10.3.4: Minimum CLEARANCES determined by above rules apply for equipment to be operated up to 2000m above sea level. For equipment operated at 2000 m - 5000m above sea level, the minimum CLEARANCE shall be multiplied by the factor 1.48 corresponding altitude of 5000m given in Table A.2 of GB/T16935.1 (IEC60664-1) . For equipment to be operated at more than 5000 m above sea level, the minimum CLEARANCE shall be multiplied by the factor given in Table A.2 of GB/T16935.1.		P
3	WIRING, CONNECTIONS AND SUPPLY		P
3.2.1.1	Add a paragraph before the last paragraph: Plugs connected to AC mains supply shall comply with GB 1002 or GB 1003 or GB/T 11918 as applicable.		N/A
4	PHYSICAL REQUIREMENTS		N/A
4.2.8	Clause 4.2.8 cathode ray tubes quoted Clause 18 of GB8898-2011. Delete note of Clause 4.2.8.		N/A
Annex E	TEMPERATURE RISE OF A WINDING		N/A
	Amend last section: For comparison of winding temperaturesdetermined by the resistance method of this annex with the temperature limits of Table 4B, 35°C shall be added to the calculated temperature rise. Add note: for equipment not to be operated at tropical climatic conditions, 25°C shall be added to the calculated temperature rise to compare with the temperature of Table 4B.		N/A

Clause	Requirement – Test	Result - Remark	Verdict
Annex G	ALTERNATIVE METHOD FOR DETERMINING MINIMUM CLEARANCES		N/A
G.6	Change the second section of Clause G.6 to be: For equipment to be operated at 2000m - 5000m above sea level, the minimum CLEARANCE shall be multiplied by the factor 1.48 corresponding altitude of 5000m given in Table A.2 of GB/T16935.1. For equipment to be operated at more than 5000m above sea level, the minimum CLEARANCE shall be multiplied by the factor given in Table A.2 of IEC 60664-1. Linear interpolation is permitted between the nearest two points in Table A.2. The calculated minimum CLEARANCE using this multiplication factor shall be rounded up to the next higher 0.1mm increment.		N/A
Annex DD	Added annex DD: Instructions for the new safety warning labels. DD.1 Altitude warning label  Meaning of the label: Evaluation for apparatus only based on altitude not exceeding 2000m, therefore it's the only operating condition applied for the equipment. There may be some potential safety hazard if the equipment is used at altitude above 2000m. DD.2 Climate warning label  Meaning of the label: Evaluation for apparatus only based on temperate climate condition, therefore it's the only operating condition applied for the equipment. There may be some potential safety hazard if the equipment is used in tropical climate region.		N/A
Annex EE	Added annex EE: Illustration relative to safety explanation in normative Chinese, Tibetan, Mongolian, Zhuang Language and Uighur.		N/A

IEC60950_1G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

Appendix	Appendix 12 J3000 (H25) Special National conditions, National deviation and other information according to MITI Ordinance No. 85.		—
1	General requirement When equipment provides with appliance inlet complying with JIS C 8283-1(2008), soldered parts of appliance inlet is not applied by force during insert or removal of connector. This is not applied when inlet body is fixed itself and not fixed by solder.	Inlet is fixed by adequate mechanical construction, not rely on soldering.	P
2	Requirement for equipment		—
2.1	Heater Appliances When diode is used in parallel at the power sources for adjustment of power consumption, the equipment shall remain safe for operation under open condition of one diode.		N/A
	The current rating of one diode shall be more than main current. The diodes connected in parallel are same type.		N/A
	The heating test specified by clause 11 of JIS C 9335-1(2003) and a specified in applicable individual requirements under open condition of one diode of parallel shall comply with the requirements.		N/A
2.2	Electric heater with glowing heating elements	Not electric stove.	N/A
	Surface treatment by paint or adhesive on protective frame or protective mesh shall not be used.		N/A
	Caution marking like below shall be on - easily visible place of the equipment or - Instruction manual 「注意 当該機器から、使用初期段階で揮発性有機化合物及びカルボニル化合物が最も放散するおそれがあるため、その際には十分換気を行うこと。」		N/A
3	Components used in equipment	No relevant equipment or component.	N/A
3.1	Motor capacitors used in ventilating fan, electric fan, air conditioner, electric washing machine, refrigerator or electric freezer shall be comply with - capacitors with protective elements or protective mechanism complying with JIS C 4908(2007) - P2 capacitor complying with IEC 60252-1(2001) Capacitor complying with below is acceptable		N/A
	Enclosed by metal or ceramic		N/A
	No non-metallic materials within 50 mm from capacitor surface		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Non-metallic material within 50mm from capacitor surface comply with needle frame test of JIS C 9335-1(2003), Annex E		N/A
	Non-metallic material within 50 mm from capacitor surface comply with V-1 test of JIS C 60965-11-10(2006).		N/A
3.2	Plug directly inserted to outlet used refrigerator or electric freezer. Shall comply with - Face contact with outlet shall have CTI with more than 400 according to JIS C 2134(2007) or - Supporting material of blades shall comply with glow wire test by temperature of 750°C according to JIS C 60695-2-11(2004) or JIS C 60695-2-12(2004). Materials having glow wire frame temperature of 775 °C are acceptable.		N/A