



Test Report issued under the responsibility of:



TEST REPORT IEC 60950-1 Information technology equipment – Safety – Part 1: General requirements	
Report Number	251006 – 2345690 (-2502294)
Date of issue.....	April 24, 2012
Total number of pages.....	57 pages
CB Testing Laboratory	CSA International
Address.....	178 Rexdale Blvd, Toronto, Ontario, Canada, M9W 1R3
Applicant's name	TelcoBridges Inc.
Address.....	91 De La Barre (Suite 1), Boucherville, Quebec, Canada, J4B 2X6
Manufacturer's name	TelcoBridges Inc.
Address.....	91 De La Barre (Suite 1), Boucherville, Quebec, Canada, J4B 2X6
Test specification:	
Standard	IEC 60950-1:2005 (Second Edition), Am 1: 2009 and EN 60950-1:2006 + A11:2009+A1:2010+A12:2012
Test procedure	CB Scheme – National Deviations: AU, CA, CH, DE, DK, ES, FI, GB, IE, KR, NO, NZ, SE, US and Common Modifications.
Non-standard test method.....	N/A
Test Report Form No	IEC60950_1B
Test Report Form(s) Originator	SGS Fimko Ltd
Master TRF	Dated 2010-04
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Test item description	Tmedia Media Gateway Series
Trade Mark	None
Manufacturer	TelcoBridges Inc.
Model/Type reference.....	TMG800 (1U BOX)/TMP800(1U BOX), TMG3200/TMP6400 (1U BOX and 2U BOX) and TMG5800/TMP5900 (2U BOX) (See General Information for rating of each gateway module)
Ratings.....	100-240Vac, 47-63Hz, 2.8A max or -46 to -65Vdc, 2.8A max

Testing procedure and testing location:		
X	CB Testing Laboratory:	CSA International
Testing location/ address		178 Rexdale Blvd, Toronto, Ontario, Canada, M9W 1R3
Tested by (name + signature)		A. Yeung P. Eng. <i>A. Yeung P. Eng.</i>
Approved by (name + signature) ..		Eddie Chau <i>Eddie Chau</i>

CB Report	<i>57 pages</i>
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Summary of testing:

See Att. 8-1 to 8-30

Summary of compliance with National Differences

National Deviations:

National & Group Differences as listed in the CB Bulletin No. 112A have been checked.

AU/AZ (Australia and New Zealand), CA/US (Canada and United States), CN (China), CH (Switzerland), DE (Germany), DK (Denmark), ES (Spain), FI (Finland), GB(United Kingdom), IE (Ireland), JP (Japan), KR (Korea), NO(Norway), SE (Sweden), SG (Singapore), and Group Differences.

The product fulfils the requirements of IEC 60950-1:2005 (Second Edition), Am 1: 2009

IEC 60950-1 2 nd edition /Am1			
Clause	Requirement + Test	Result - Remark	Verdict

Copy of marking plate

See Att. 3-1 to 3-6

IEC 60950-1 2 nd edition /Am1			
Clause	Requirement + Test	Result - Remark	Verdict

General product information:

The TelcoBridges Tmedia Media Gateway Series is carrier-grade media gateway that meets the needs of service providers looking to drive convergence between TDM and IP networks, consolidating multiple devices for signaling, connectivity and IVR with a single device.

The Tmedia Media Gateway Series consists of three groups, Low Density, High Density and High Density with PC Server. The High Density can come in 1U or 2U form factors. The Low Density has only 1U form factory and the High Density with PC Server has only 2U form factors.

The High Density 2U Series has two power supply slots that it can be configured with one or two AC or DC power supplies. Each power supply has an independent power input source. The second power supply is redundant to provide a backup and load sharing purpose.

The Tmedia Media Gateway Series models are:

Low Density – TMG800 (1U BOX)

High Density – TMG3200/TMP6400 (1U BOX) and TMG3200/TMP6400 (2U BOX)

High Density with PC Server – TMG5800/TMP5900 (2U BOX)

Note: The main difference between the TMG and TMP versions is that the TMP has not software installed.

The differences between 1U and 2U versions are the chassis, power supply and the fan module.

The Tmedia Media Gateway Series normal configurations are:

Low Density – 8x Trunk E1/T1, 3x 10/100/1G Ethernet ports, DSP Processing, 1 Voip Module

High Density – 16x E1/T1, 4x 10/100/1G Ethernet, MBL port, Linux host processor, Dual Voip Module

High Density with PC Server – Same as High Density with Intel dual quad core Xeon cpu and special software

IEC 60950-1 2 nd edition /Am1			
Clause	Requirement + Test	Result - Remark	Verdict

General product information: (Continue.....)

The following power assembly configurations are possible:

- Two redundant AC power assemblies (TMG3200/TMP6400 (2U BOX) and TMG5800/TMP5900 (2U BOX)
- Two redundant DC power assemblies (TMG3200/TMP6400 (2U BOX) and TMG5800/TMP5900 (2U BOX)
- One DC power assembly TMG800 (1U BOX)/TMP800(1U BOX) and TMG3200/TMP6400 (1U BOX)

There are no direct connections to a Telecommunication Network (TNV).

Each of the gateway modules is rated as follows:

Tmedia Media Gateway Series; TMG800 (1U BOX), Rated:100-240 Vac, 47-63 Hz, 0.6A or -46 to -65Vdc, 1.5A
 Tmedia Media Gateway Series; TMP800 (1U BOX), Rated:100-240 Vac, 47-63 Hz, 0.6A or -46 to -65Vdc, 1.5A

Tmedia Media Gateway Series; TMG3200 (1U BOX), Rated: -46 to -65Vdc, 2.8A
 TMP6400 (1U BOX), Rated: -46 to -65Vdc, 2.6A

Tmedia Media Gateway Series; TMG3200 (2U BOX), Rated: 100-240Vac, 47-63Hz, 1.1A or -46 to -65Vdc, 2.8A
 Tmedia Media Gateway Series; TMP6400 (2U BOX), Rated: 100-240Vac, 47-63Hz, 1.0A or -46 to -65Vdc, 2.6A

Tmedia Media Gateway Series; TMG5800 (2U BOX), Rated: 100-240Vac, 47-63Hz, 2.8A
 Tmedia Media Gateway Series; TMP5900 (2U BOX), Rated: 100-240Vac, 47-63Hz, 2.8A

The equipment is rated for a maximum ambient temperature of 55 deg. C.

Conditions of Acceptability

Product shall provide marking and manuals for country required language

Product shall provide country approved power supply cord and plug

IEC 60950-1 2 nd edition /Am1			
Clause	Requirement + Test	Result - Remark	Verdict

Test item particulars			
Equipment mobility : <input checked="" type="checkbox"/> movable <input type="checkbox"/> hand-held <input type="checkbox"/> transportable <input type="checkbox"/> stationary <input type="checkbox"/> for building-in <input type="checkbox"/> direct plug-in			
Connection to the mains : <input type="checkbox"/> pluggable equipment <input type="checkbox"/> type A <input type="checkbox"/> type B <input type="checkbox"/> permanent connection <input checked="" type="checkbox"/> detachable power supply cord <input type="checkbox"/> non-detachable power supply cord <input type="checkbox"/> not directly connected to the mains			
Operating condition : <input checked="" type="checkbox"/> continuous <input type="checkbox"/> rated operating / resting time:			
Access location : <input checked="" type="checkbox"/> operator accessible <input type="checkbox"/> restricted access location			
Over voltage category (OVC) : <input checked="" type="checkbox"/> OVC I <input type="checkbox"/> OVC II <input type="checkbox"/> OVC III <input type="checkbox"/> OVC IV <input type="checkbox"/> other:			
Mains supply tolerance (%) or absolute mains supply values			
Tested for IT power systems : <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
IT testing, phase-phase voltage (V)			
Class of equipment : <input checked="" type="checkbox"/> Class I <input type="checkbox"/> Class II <input type="checkbox"/> Class III <input type="checkbox"/> Not classified			
Considered current rating of protective device as part of the building installation (A)			
Pollution degree (PD) : <input checked="" type="checkbox"/> PD 1 <input type="checkbox"/> PD 2 <input type="checkbox"/> PD 3			
IP protection class : IPX0			
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..... : September, 2010			
Date(s) of performance of tests..... : October, 2010			
General remarks:			
The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory. "(see Enclosure #)" refers to additional information appended to the report. "(see appended table)" refers to a table appended to the report.			
Throughout this report a <input type="checkbox"/> comma / <input type="checkbox"/> point is used as the decimal separator.			

IEC 60950-1 2 nd edition /Am1			
Clause	Requirement + Test	Result - Remark	Verdict

Report Revision Record

Edition 1: *October 15, 2010; CSA Application No. CB 251006 - 2345690 (Toronto Office)*

Issued by A. Yeung P. Eng. Reviewed by Eddie Chau

CB Certificate CA/12325/CSA issued.

Edition 2: *April 24, 2012; CSA Application No. CB 251006 - 2502294 (Toronto Office)*

Issued by A. Yeung P. Eng. Reviewed by Eddie Chau

Report re-issued (to cover alternate certified power supply)

Test Data added: Att. 8-31 to 8 -39

Labels added: Att. 3-3 to 3-6

CB Certificate CA/12325M1/CSA issued.

IEC 60950-1 2nd edition /Am1			
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 table 1.5.1)	P
1.5.2	Evaluation and testing of components		
1.5.3	Thermal controls		P
1.5.4	Transformers	Transformers are in the approved power supply	P
1.5.5	Interconnecting cables	SELV interconnecting cables are minimum flammability VW-1 rated	P
1.5.6	Capacitors bridging insulation	Capacitors in the approved power supply	P
1.5.7	Resistors bridging insulation	Investigated in the approved power supply	P
1.5.7.1	Resistors bridging functional, basic or supplementary insulation		N/A
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
1.5.7.4	Accessible parts		N/A
1.5.8	Components in equipment for IT power systems		N/A
1.5.9	Surge suppressors		N/A
1.5.9.1	General		N/A
1.5.9.2	Protection of VDRs		N/A
1.5.9.3	Bridging of functional insulation by a VDR		N/A
1.5.9.4	Bridging of basic insulation by a VDR		N/A
1.5.9.5	Bridging of supplementary, double or reinforced insulation by a VDR		N/A
1.6	Power interface		P
1.6.1	AC power distribution systems	TN and IT Power Systems	P
1.6.2	Input current	(see appended table 1.6.2)	P
1.6.3	Voltage limit of hand-held equipment	Not hand-held equipment	N/A
1.6.4	Neutral conductor	Investigated in the approved power supply	P
1.7	Marking and instructions		P

IEC 60950-1 2 nd edition /Am1			
Clause	Requirement + Test	Result - Remark	Verdict
1.7.1	Power rating and identification markings		P
1.7.1.1	Power rating marking	100-240Vac or -46 - -65Vdc, 2.8Aac max or -2.8Adc max	P
	Multiple mains supply connections.....:		N/A
	Rated voltage(s) or voltage range(s) (V)	100-240Vac or -46 - -65Vdc	P
	Symbol for nature of supply, for d.c. only.....:		P
	Rated frequency or rated frequency range (Hz) ...:	47-63 Hz	P
	Rated current (mA or A)	2.8Aac max or -2.8Adc max	P
1.7.1.2	Identification markings	TelcoBridges Inc.	P
	Manufacturer's name or trade-mark or identification mark	TelcoBridges Inc.	P
	Model identification or type reference	Tmedia Media Gateway Series	P
	Symbol for Class II equipment only		N/A
	Other markings and symbols		N/A
1.7.2	Safety instructions and marking		P
1.7.2.1	General		P
1.7.2.2	Disconnect devices	On/Off switch is part of the power supply approval	P
1.7.2.3	Overcurrent protective device	part of the power supply approval	P
1.7.2.4	IT power distribution systems		P
1.7.2.5	Operator access with a tool		N/A
1.2.7.6	Ozone		N/A
1.7.3	Short duty cycles		N/A
1.7.4	Supply voltage adjustment		N/A
	Methods and means of adjustment; reference to installation instructions		N/A
1.7.5	Power outlets on the equipment		N/A
1.7.6	Fuse identification (marking, special fusing characteristics, cross-reference)	part of the power supply approval	N/A
1.7.7	Wiring terminals		P
1.7.7.1	Protective earthing and bonding terminals	Appliance inlet and Earthing Terminal are used	P
1.7.7.2	Terminals for a.c. mains supply conductors	Appliance inlet used	P
1.7.7.3	Terminals for d.c. mains supply conductors	DC terminal block used	P

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Clause	Requirement + Test	Result - Remark	Verdict
1.7.8	Controls and indicators		N/A
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.....		N/A
1.7.8.4	Markings using figures		N/A
1.7.9	Isolation of multiple power sources		N/A
1.7.10	Thermostats and other regulating devices		N/A
1.7.11	Durability		P
1.7.12	Removable parts	No required marking placed on removable parts	P
1.7.13	Replaceable batteries		N/A
	Language(s)		—
1.7.14	Equipment for 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	Access to SELV only	P
2.1.1.1	Access to energized parts		P
	Test by inspection	Protection is established by approval power supply	P
	Test with test finger (Figure 2A)	No access to above mentioned parts	P
	Test with test pin (Figure 2B)	No access to above mentioned parts	P
	Test with test probe (Figure 2C)	No access to TNV circuit	N/A
2.1.1.2	Battery compartments	No battery compartments	N/A
2.1.1.3	Access to ELV wiring	No ELV wiring	N/A
	Working voltage (V _{peak} or V _{rms}); minimum distance through insulation (mm)	NOT applicable	—
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	P
2.1.1.6	Manual controls		N/A
2.1.1.7	Discharge of capacitors in equipment	Investigated in approved power supply and tested with the EUT	P
	Measured voltage (V); time-constant (s).....	< 1 second	—

IEC 60950-1 2 nd edition /Am1			
Clause	Requirement + Test	Result - Remark	Verdict
2.1.1.8	Energy hazards – d.c. mains supply		P
	a) Capacitor connected to the d.c. mains supply ...:		P
	b) Internal battery connected to the d.c. mains supply		N/A
2.1.1.9	Audio amplifiers	See cl. 2.1.1.1 See separate test report IEC/EN 60065	N/A
2.1.2	Protection in service access areas		N/A
2.1.3	Protection in restricted access locations		N/A

2.2	SELV circuits		P
2.2.1	General requirements	Investigated in approved power supply	P
2.2.2	Voltages under normal conditions (V)	Below SELV limits	P
2.2.3	Voltages under fault conditions (V)	Below SELV limits	P
2.2.4	Connection of SELV circuits to other circuits	SELV to SELV	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		P
2.3.2.2	Protection by basic insulation		P
2.3.2.3	Protection by earthing		P
2.3.2.4	Protection by other constructions		P
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

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Clause	Requirement + Test	Result - Remark	Verdict

2.4	Limited current circuits		N/A
2.4.1	General requirements		N/A
2.4.2	Limit values		N/A
	Frequency (Hz)		—
	Measured current (mA)		—
	Measured voltage (V)		—
	Measured circuit capacitance (nF or μ F)		—
2.4.3	Connection of limited current circuits to other circuits		N/A

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

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Clause	Requirement + Test	Result - Remark	Verdict

2.6	Provisions for earthing and bonding		P
2.6.1	Protective earthing		P
2.6.2	Functional earthing	Functional earthing separated from hazardous voltage by doubled or reinforced insulation in approved power supply.	P
2.6.3	Protective earthing and protective bonding conductors	Power cord provided meets national approval	P
2.6.3.1	General	The power supply cord shall be provided with national approval.	N/A
2.6.3.2	Size of protective earthing conductors		P
	Rated current (A), cross-sectional area (mm ²), AWG	Cross sectional area of 0.75mm ² minimum	—
2.6.3.3	Size of protective bonding conductors		P
	Rated current (A), cross-sectional area (mm ²), AWG		—
	Protective current rating (A), cross-sectional area (mm ²), AWG		
2.6.3.4	Resistance of earthing conductors and their terminations; resistance (Ω), voltage drop (V), test current (A), duration (min)	(See appended table 2.6.3.4)	P
2.6.3.5	Colour of insulation	Evaluated in the approved power supply	P
2.6.4	Terminals	Appliance inlet used	P
2.6.4.1	General	Detached power supply cord used	P
2.6.4.2	Protective earthing and bonding terminals	Appliance inlet used	P
	Rated current (A), type, nominal thread diameter (mm)		—
2.6.4.3	Separation of the protective earthing conductor from protective bonding conductors	Approved AC inlet is used	P

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Clause	Requirement + Test	Result - Remark	Verdict

2.6.5	Integrity of protective earthing	Earthing terminal	P
2.6.5.1	Interconnection of equipment	SELV connections only	N/A
2.6.5.2	Components in protective earthing conductors and protective bonding conductors	No switches or fuses in earthing conductor	P
2.6.5.3	Disconnection of protective earth	Appliance inlet used	P
2.6.5.4	Parts that can be removed by an operator	None	N/A
2.6.5.5	Parts removed during servicing	No removable part in protective earthing path	P
2.6.5.6	Corrosion resistance	No risk of corrosion	P
2.6.5.7	Screws for protective bonding	Screws secured by more than two-pitch threads	P
2.6.5.8	Reliance on telecommunication network or cable distribution system		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

2.7	Overcurrent and earth fault protection in primary circuits		P
2.7.1	Basic requirements		P
	Instructions when protection relies on building installation		P
2.7.2	Faults not simulated in 5.3.7		P
2.7.3	Short-circuit backup protection	Product is pluggable Type B equipment, building installation is considered as providing short-circuit back-up protection.	P
2.7.4	Number and location of protective devices	Power supply is approved component.	P
2.7.5	Protection by several devices		N/A
2.7.6	Warning to service personnel		N/A

2.8	Safety interlocks		N/A
2.8.1	General principles	No safety interlocks provided	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	(see appended table 5.2)	N/A
2.8.8	Mechanical actuators		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

2.9	Electrical insulation		
2.9.1	Properties of insulating materials	No natural rubber, hygroscopic materials and materials containing asbestos used as insulation, approved power supply used	P
2.9.2	Humidity conditioning		N/A
	Relative humidity (%), temperature (°C)		—
2.9.3	Grade of insulation		P
2.9.4	Separation from hazardous voltages		P
	Method(s) used		—

IEC 60950-1 2 nd edition /Am1			
Clause	Requirement + Test	Result - Remark	Verdict

2.10	Clearances, creepage distances and distances through insulation		
2.10.1	General	Evaluated during the power supply certification	P
2.10.1.1	Frequency		N/A
2.10.1.2	Pollution degrees		N/A
2.10.1.3	Reduced values for functional insulation		N/A
2.10.1.4	Intervening unconnected conductive parts		N/A
2.10.1.5	Insulation with varying dimensions		N/A
2.10.1.6	Special separation requirements		N/A
2.10.1.7	Insulation in circuits generating starting pulses		N/A
2.10.2	Determination of working voltage	Evaluated during the power supply certification	P
2.10.2.1	General		P
2.10.2.2	RMS working voltage		P
2.10.2.3	Peak working voltage		P
2.10.3	Clearances	Evaluated during the power supply certification	P
2.10.3.1	General		P
2.10.3.2	Mains transient voltages	Evaluated during the power supply certification	P
	a) AC mains supply		P
	b) Earthed d.c. mains supplies		P
	c) Unearthed d.c. mains supplies		N/A
	d) Battery operation		N/A
2.10.3.3	Clearances in primary circuits	Functional insulation only (see appended table 2.10.3 and 2.10.4)	P
2.10.3.4	Clearances in secondary circuits	(see appended table 2.10.3 and 2.10.4)	N/A
2.10.3.5	Clearances in circuits having starting pulses	(see appended table 2.10.3 and 2.10.4)	N/A
2.10.3.6	Transients from a.c. mains supply		N/A
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

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

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Clause	Requirement + Test	Result - Remark	Verdict
2.10.5.13	Wire with solvent-based enamel in wound components		N/A
	Electric strength test	(see appended table 2.10.5)	—
	Routine test		N/A
2.10.5.14	Additional insulation in wound components		N/A
	Working voltage		N/A
	- Basic insulation not under stress		N/A
	- Supplementary, reinforced insulation		N/A
2.10.6	Construction of printed boards		N/A
2.10.6.1	Uncoated printed boards	(see appended table 2.10.3 and 2.10.4)	N/A
2.10.6.2	Coated printed boards	(see appended table 2.10.3 and 2.10.4)	N/A
2.10.6.3	Insulation between conductors on the same inner surface of a printed board	(see appended table 2.10.3 and 2.10.4)	N/A
2.10.6.4	Insulation between conductors on different layers of a printed board		N/A
	Distance through insulation	(see appended table 2.10.5)	N/A
	Number of insulation layers (pcs)		N/A
2.10.7	Component external terminations	(see appended table 2.10.3 and 2.10.4)	N/A
2.10.8	Tests on coated printed boards and coated 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	(see appended table 5.2)	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		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

3	WIRING, CONNECTIONS AND SUPPLY		P
3.1	General		P
3.1.1	Current rating and overcurrent protection	Adequate cross sectional areas on internal wiring. The approved power supply provided overcurrent protection	P
3.1.2	Protection against mechanical damage	Internal wiring is protected from damage, smooth and free of sharp edges	P
3.1.3	Securing of internal wiring	Internal wiring are reliably routed and secured where appropriate	P
3.1.4	Insulation of conductors	Adequate insulation, certified wiring used	P
3.1.5	Beads and ceramic insulators	None used	N/A
3.1.6	Screws for electrical contact pressure	No contact pressure through insulation material	N/A
3.1.7	Insulating materials in electrical connections	Not used	N/A
3.1.8	Self-tapping and spaced thread screws	Not used	N/A
3.1.9	Termination of conductors		N/A
	10 N pull test		N/A
3.1.10	Sleeving on wiring		N/A

3.2	Connection to a mains supply		P
3.2.1	Means of connection	An appliance inlet for connection of a detachable power cord is approved	P
3.2.1.1	Connection to an a.c. mains supply	An appliance inlet for connection of a detachable power cord is approved	P
3.2.1.2	Connection to a d.c. mains supply	DC terminals for connection of a power cord is approved	P
3.2.2	Multiple supply connections	AC and/or DC supply connections	P
3.2.3	Permanently connected equipment	permanently connected for DC power cord	P
	Number of conductors, diameter of cable and conduits (mm)		—
3.2.4	Appliance inlets	Appliance inlet complies with IEC 60320 and is part of approved power supply	P

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Clause	Requirement + Test	Result - Remark	Verdict
3.2.5	Power supply cords	Power supply cord not provided	N/A
3.2.5.1	AC power supply cords	Not provided with the power supply cords	N/A
	Type		—
	Rated current (A), cross-sectional area (mm ²), AWG		—
3.2.5.2	DC power supply cords	Not provided with the power supply cords	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		N/A
	Diameter or minor dimension D (mm); test mass (g)		—
	Radius of curvature of cord (mm)		—
3.2.9	Supply wiring space		N/A
3.3	Wiring terminals for connection of external conductors		
3.3.1	Wiring terminals	Appliance inlet used	N/A
3.3.2	Connection of non-detachable power supply cords	DC terminals of approved power supply	P
3.3.3	Screw terminals	DC terminals of approved power supply	P
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

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Clause	Requirement + Test	Result - Remark	Verdict

3.4	Disconnection from the mains supply		P
3.4.1	General requirement	Appliance coupler used	P
3.4.2	Disconnect devices	Appliance coupler used	P
3.4.3	Permanently connected equipment	Per User manual for DC power connections	P
3.4.4	Parts which remain energized		N/A
3.4.5	Switches in flexible cords		N/A
3.4.6	Number of poles - single-phase and d.c. equipment	The appliance coupler disconnects both poles simultaneously	P
3.4.7	Number of poles - three-phase equipment		N/A
3.4.8	Switches as disconnect devices		N/A
3.4.9	Plugs as disconnect devices	The appliance coupler is regarded as the disconnect device, no marking is required	N/A
3.4.10	Interconnected equipment	No interconnection of hazardous voltages	N/A
3.4.11	Multiple power sources	Per User manual on multiple power connections	P

3.5	Interconnection of equipment		P
3.5.1	General requirements	Considered	P
3.5.2	Types of interconnection circuits	SELV circuits	P
3.5.3	ELV circuits as interconnection circuits	No ELV interconnection	N/A
3.5.4	Data ports for additional equipment		P

4	PHYSICAL REQUIREMENTS		P
4.1	Stability		P
	Angle of 10°	Stable, rack mount	P
	Test force (N)	Not floor standing unit	P

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Clause	Requirement + Test	Result - Remark	Verdict

4.2	Mechanical strength		P
4.2.1	General	Metal enclosure used	P
	Rack-mounted equipment.		N/A
4.2.2	Steady force test, 10 N		P
4.2.3	Steady force test, 30 N		P
4.2.4	Steady force test, 250 N		P
4.2.5	Impact test		P

	Fall test		P
	Swing test		P
4.2.6	Drop test; height (mm)		N/A
4.2.7	Stress relief test		N/A
4.2.8	Cathode ray tubes		N/A
	Picture tube separately certified	(see separate test report or attached certificate)	N/A
4.2.9	High pressure lamps		N/A
4.2.10	Wall or ceiling mounted equipment; force (N)		N/A
4.2.11	Rotating solid media		N/A
	Test to cover on the door.....		N/A
4.3	Design and construction		P
4.3.1	Edges and corners	No shape edges	P
4.3.2	Handles and manual controls; force (N)	No intended handles, part of the mounting bracket	N/A
4.3.3	Adjustable controls	None provided	N/A
4.3.4	Securing of parts		P
4.3.5	Connection by plugs and sockets		N/A
4.3.6	Direct plug-in equipment	Not direct plug-in equipment	N/A
	Torque		—
	Compliance with the relevant mains plug standard		N/A
4.3.7	Heating elements in earthed equipment		N/A
4.3.8	Batteries	(see appended tables 4.3.8)	N/A
	- Overcharging of a rechargeable battery		N/A
	- Unintentional charging of a non-rechargeable battery		N/A
	- Reverse charging of a rechargeable battery		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	- Excessive discharging rate for any battery		N/A
4.3.9	Oil and grease	Insulation not exposed to oil or grease	N/A
4.3.10	Dust, powders, liquids and gases		N/A
4.3.11	Containers for liquids or gases		N/A
4.3.12	Flammable liquids	No flammable liquids	N/A
	Quantity of liquid (l)		N/A
	Flash point (°C)		N/A
4.3.13	Radiation	All visible LEDs are below Class 1 and operate at a wavelength in the <700nm level	P
4.3.13.1	General		N/A
4.3.13.2	Ionizing radiation	No ionized 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	No ultraviolet 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)	(see separate test report of IEC/EN 60825-1 / IEC/EN 60825-2)	
	Laser class		—
4.3.13.5.2	Light emitting diodes (LEDs)		
4.3.13.6	Other types		N/A
4.4	Protection against hazardous moving parts		P
4.4.1	General	DC fans are located in protected area	P
4.4.2	Protection in operator access areas	No operator access	P
	Household and home/office document/media shredders	(see Annex EE)	N/A
4.4.3	Protection in restricted access locations	Not in restricted access locations	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
4.4.4	Protection in service access areas	Unintentional contact with DC fans is unlikely and DC fans are of SELV type with low power level	P
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

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Clause	Requirement + Test	Result - Remark	Verdict

4.5	Thermal requirements		P
4.5.1	General		P
4.5.2	Temperature tests		P
	Normal load condition per Annex L		—
4.5.3	Temperature limits for materials	(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	No Top and side openings	N/A
	Dimensions (mm)		—
4.6.2	Bottoms of fire enclosures	No openings on the bottom	N/A
	Construction of the bottom, dimensions (mm) ..		—
4.6.3	Doors or covers in fire enclosures	No Door and enclosure is metal	N/A
4.6.4	Openings in 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		N/A
	Conditioning temperature (°C), time (weeks).....		—
4.7	Resistance to fire - Enclosure is metal		P
4.7.1	Reducing the risk of ignition and spread of flame	Appropriate use of components and suitable construction. No excessive temperature, no easily burning materials employed.	P
	Method 1, selection and application of components wiring and materials	Investigated in approved power supply	P
	Method 2, application of all of simulated fault condition tests		N/A
4.7.2	Conditions for a fire enclosure	Fire enclosure required	P
4.7.2.1	Parts requiring a fire enclosure	The fire enclosure is required to cover all parts	P
4.7.2.2	Parts not requiring a fire enclosure	Fire enclosure required	P

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Clause	Requirement + Test	Result - Remark	Verdict

4.7.3	Materials		P
4.7.3.1	General	Metal enclosure provided	P
4.7.3.2	Materials for fire enclosures	Metal enclosure provided	P
4.7.3.3	Materials for components and other parts outside fire enclosures	None	N/A
4.7.3.4	Materials for components and other parts inside fire enclosures	Certified components used or components which are mounted on PCB rated minimum V-1, safety relevant components are used within their specified temperature limits, other plastic parts are sufficiently rated	P
4.7.3.5	Materials for air filter assemblies	None used	N/A
4.7.3.6	Materials used in high-voltage components	No high-voltage components	N/A

5	ELECTRICAL REQUIREMENTS AND SIMULATED ABNORMAL CONDITIONS		P
5.1	Touch current and protective conductor current		P
5.1.1	General	(see appended Table 5.1)	P
5.1.2	Configuration of equipment under test (EUT)		P
5.1.2.1	Single connection to an a.c. mains supply		P
5.1.2.2	Redundant multiple connections to an a.c. mains supply		N/A
5.1.2.3	Simultaneous multiple connections to an a.c. mains supply		N/A
5.1.3	Test circuit		P
5.1.4	Application of measuring instrument		P
5.1.5	Test procedure	Per standard	P
5.1.6	Test measurements		P
	Supply voltage (V)		—
	Measured touch current (mA)		—
	Max. allowed touch current (mA)		—
	Measured protective conductor current (mA)		—
	Max. allowed protective conductor current (mA) ..		—

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Clause	Requirement + Test	Result - Remark	Verdict
5.1.7	Equipment with touch current exceeding 3,5 mA	Not exceeding 3.5mA	P
5.1.7.1	General		P
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		N/A
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		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	(see appended Annex B)	N/A
5.3.3	Transformers	(see appended Annex C)	N/A
5.3.4	Functional insulation	Method c) used	P
5.3.5	Electromechanical components	No electromechanical components	N/A
5.3.6	Audio amplifiers in ITE	See separate test report IEC/EN 60065	N/A
5.3.7	Simulation of faults	blocked air intake vents	P
5.3.8	Unattended equipment	None	N/A
5.3.9	Compliance criteria for abnormal operating and fault conditions	Considered in approved power supplies	P
5.3.9.1	During the tests		P
5.3.9.2	After the tests		P

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Clause	Requirement + Test	Result - Remark	Verdict

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
6.1.2.1	Requirements	(see appended table 5.2)	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	(see appended table 5.2)	N/A
6.2.2.2	Steady-state test	(see appended table 5.2)	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	(see appended table 5.2)	N/A
7.4.3	Impulse test	(see appended table 5.2)	N/A

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Clause	Requirement + Test	Result - Remark	Verdict

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		—
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)		N/A
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).....		—

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Clause	Requirement + Test	Result - Remark	Verdict
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	(see appended table 5.3)	N/A
B.4	Running overload test	(see appended table 5.3)	N/A
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	(see appended table 5.3)	N/A
B.9	Test for three-phase motors	(see appended table 5.3)	N/A
B.10	Test for series motors		N/A
	Operating voltage (V)		—

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Clause	Requirement + Test	Result - Remark	Verdict
C	ANNEX C, TRANSFORMERS (see 1.5.4 and 5.3.3) - Part of the approved Power Supply used		N/A
	Position		—
	Manufacturer		—
	Type		—
	Rated values		—
	Method of protection		—
C.1	Overload test	(see appended table 5.3)	N/A
C.2	Insulation	Evaluated during the power supply certification	P
	Protection from displacement of windings	Evaluated during the power supply certification	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
F	ANNEX F, MEASUREMENT OF CLEARANCES AND CREEPAGE DISTANCES (see 2.10 and Annex G)		N/A
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

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Clause	Requirement + Test	Result - Remark	Verdict
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)		N/A
	Metal(s) used		—
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
K.5	Thermal cut-out reliability		N/A
K.6	Stability of operation	(see appended table 5.3)	N/A
L	ANNEX L, NORMAL LOAD CONDITIONS FOR SOME TYPES OF ELECTRICAL BUSINESS EQUIPMENT (see 1.2.2.1 and 4.5.2)		N/A
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		N/A
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)		—

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Clause	Requirement + Test	Result - Remark	Verdict
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		—
Q	ANNEX Q, Voltage dependent resistors (VDRs) (see 1.5.9.1)		N/A
	a) Preferred climatic categories		N/A
	b) Maximum continuous voltage		N/A
	c) Pulse current		N/A
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)		N/A
		See separate test report	—
V	ANNEX V, AC POWER DISTRIBUTION SYSTEMS (see 1.6.1)		N/A
V.1	Introduction		N/A
V.2	TN power distribution systems		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

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

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)		N/A
AA	ANNEX AA, MANDREL TEST (see 2.10.5.8)		N/A
BB	ANNEX BB, CHANGES IN THE SECOND EDITION		—

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

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

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Clause	Requirement + Test	Result - Remark	Verdict
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
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

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Clause	Requirement + Test	Result - Remark	Verdict

Models: TMP800(1U BOX)/TMG800 (1U BOX) – AC/DC (1 of 2)

1.5.1	TABLE: Critical Component List			
Object/part No.	Manufacturer/ trademark	type/model	Technical data	mark(s) of conformity ¹⁾
+ Chassis / assembly	TelcoBridges	Dimension: approx. 11 (D) by 17.4 (W) by 1.8 (H) inch Part#: 2000-90063	Material: Metal sheet; various thickness; Finish: 0.9mm Satin Coat; Secured with screws	See Att. 2-1 to 2-4; Att. 4-1 to 4-7
+ 3 Fan holder	Various	Dimension: approx. 0.5 (D) by 5.8 (W) by 1.6 (H) inch Part#: 2000-90062	Material: Metal sheet; various thickness; Finish: 0.9mm Satin Coat; Secured with screws	See Att. 2-4 and 2-7; Att. 4-8
Power supply, DC	SunPower	DC-DC, Switching power supply Part#: SDX-6250-48	Rating: 40-65V; 9Amax; Various output voltages; Total: 250WMax	UL, E129733 TUV, CE See Att. 2-14; Att. 6-1 to 6-3
Alternate	EMACS	Part#: H1U-6250P	Rating: 100-240 Vac, 47-63 Hz, 4.0A-2.0A, 250 Watts (max.)	cULus
Fan (x3)	Sunon	GM Series High Speed 40mm 17 CFM Vapo Bearing 8 Motor Pole Fan; Part#: GM1204PQV1- 8A	Rating: 12 VDC; Dimensions: 40 x 40 x 28 mm	UL See Att. 2-7
+ Motherboard	Various	Material: FR-4; Measured 10.9 by 8.7 by 0.06 inch thick approx.; 6-layer Part#: 1700-00063	94V-0	UL94 V-0 See Att. 2-5 and 2-6

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Clause	Requirement + Test	Result - Remark	Verdict

Models: TMP800(1U BOX)/TMG800 (1U BOX) – AC/DC (2 of 2)

1.5.1	TABLE: Critical Component List			
Object/part No.	Manufacturer/ trademark	type/model	Technical data	mark(s) of conformity ¹⁾
+ Connector; J2	Molex	4.2mm pitch mini-fit Jr. Header, Dual row, vertical, 20 circuits; Part#: 39-29-9202	Housing: PA Polyamide Nylon 6/6; 94V-2	UL, E29179; CSA, LR19980; TUV, R72081037 See Att. 6-4 to 6-5
+ Connector; J4	Bel Stewart	EMI-RFI shielded, ESD grounded, 2 port PCB Harmonica CAT 5 Jack, Non-flange Part#: SS-7188S-A-PGA-BA	Housing; Thermoplastic; 94V-0	UL See Att. 6-6
+ Connector; J5, J6	Amphenol	High speed RJ45, modular jack, 8 position, 8 contacts, shielded with LEDs; 1 port or 2 ports Part#: RJHS-5381 and RJHSE-5381-02	Housing: Thermoplastic, PA 4/6; 94V0	UL See Att. 6-7 to 6-8
+ Connector; J10, J13	Amphenol	4 ports, high speed, modular jack, 8 position, 8 contacts, shielded with LEDs. Part#: RJHSE-5381-04	Housing: Thermoplastic, PA 4/6; 94V0	UL See Att. 6-9
+ DC-DC convertors; PS1-PS7	Texas Instruments	PTH series DC/DC convertor, Input non-isolated wide output adjust power module; Part#: PTV05020W, PTH05050W, PTV03020W, PTH03050W;	Meets 94V-0	SELV UL, CSA, VDE
+ Heatsink	Radian Heatsinks	Black ICE Series; Full Bricks Dimensions: 4.6'' x 2.4'' x 0.45'' Part#: HS1596EB	Material: Fin Aluminum with black anodize plating	Evaluated with product; See Att. 2-5
+ Protection device; F2-F33	Tyco	PolySwitch, PTC Device Part#: TRF250-145U	Rating: 60Vdc, 3A; Fault voltage: 250Vrms	UL, CSA, TUV; See Att. 2-5 and Att. 6-10

IEC 60950-1 2 nd edition /Am1			
Clause	Requirement + Test	Result - Remark	Verdict

Model: TMG3200 / TMP6400 (1U BOX) – DC (1 of 2)

1.5.1	TABLE: Critical Component List			
Object/part No.	Manufacturer/ trademark	type/model	Technical data	mark(s) of conformity ¹⁾
+ Chassis / assembly (1U BOX)	TelcoBridges	Dimension: approx. 15.9 (D) by 16.8 (W) by 1.7 (H) inch Part#: 2000-90033	Material: Metal sheet; various thickness; Finish: 0.9mm Satin Coat; Secured with screws	See Att. 2-10 to 2-13; Att. 4-9 to 4-14
+ 4 Fan holder	Various	Dimension: approx. 0.5 (D) by 5.8 (W) by 1.6 (H) inch Part#: 2000-90035	Material: Metal sheet; various thickness; Finish: 0.9mm Satin Coat; Secured with screws	See Att. 2-13 and 2-17; Att. 4-14
Power supply, DC	SunPower	DC-DC, Switching power supply Part#: SDX-6250-48	Rating: 40-65V; 9Amax; Various output voltages; Total: 250WMax	UL, E129733 TUV, CE See Att. 2-14; Att. 6-1 to 6-3
Fan (x4)	Sunon	GM Series High Speed 40mm 17 CFM Vapo Bearing 8 Motor Pole Fan; Part#: GM1204PQV1-8A	Rating: 12 VDC; Dimensions: 40 x 40 x 28 mm	UL See Att. 2-17
+ Motherboard	Various	Material: FR-4; Measured 13.6 by 11.8 by 1.6mm thick approx.; 14-layer Part#: 1700-00039	94V-0	UL94 V-0 See Att. 2-15 and 2-16
+ Connector; J2	Molex	4.2mm pitch mini-fit Jr. Header, Dual row, vertical, 20 circuits; Part#: 39-29-9202	Housing: PA Polyamide Nylon 6/6; 94V-2	UL, E29179; CSA, LR19980; TUV, R72081037 See Att. 6-4 to 6-5
+ Connector; J4	Bel Stewart	EMI-RFI shielded, ESD grounded, 2 port PCB Harmonica CAT 5 Jack, Non- flange Part#: SS-718802S	Housing; Thermoplastic; 94V-0	UL See Att. 6-6
+ Connector; J7	Amphenol	4 ports, high speed, modular jack, 8 position, 8 contacts, shielded with LEDs. Part#: RJHSE-5381-04	Housing: Thermoplastic, PA 4/6; 94V0	UL See Att. 6-9

IEC 60950-1 2 nd edition /Am1			
Clause	Requirement + Test	Result - Remark	Verdict

Model: TMG3200 / TMP6400 (1U BOX) – DC (2 of 2)

1.5.1				
TABLE: Critical Component List				
Object/part No.	Manufacturer/ trademark	type/model	Technical data	mark(s) of conformity ¹⁾
+ DC-DC convertors; PS1, PS7, PS8	Texas Instruments	PTH series DC/DC convertor, Input non-isolated wide output adjust power module; Part#: PTH05050W,	Meets 94V-0	SELV UL, CSA, VDE
+ DC-DC convertors; PS3, PS4	Texas Instruments	PTV series DC/DC convertor, Input non-isolated wide output adjust power module; Part#: PTV03020W	Meets 94V-0	SELV UL, CSA, VDE
+ DC-DC convertors; PS5, PS6	Texas Instruments	ATH series DC/DC convertor, Input non-isolated wide output adjust power module; Part#: ATH030A0X3	Meets 94V-0	SELV UL, CSA, VDE
+ Heatsink	Radian Heatsinks	Black ICE Series; Full Bricks Dimensions: 4.6'' x 2.4'' x 0.45'' Part#: HS1596EB	Material: Fin Aluminum with black anodize plating	Evaluated with product; See Att. 2-5
+ Display card PCB	Various	Material: FR-4; Measured 7.5 by 1.5 by 0.06 inch thick approx.; 14-layer Part#: 1700-00043	94V-0	UL94 V-0 See Att. 2-24 and 2- 25
+ 16T1/E1 card PCB	Various	Material: FR-4; Measured 63 by 6.5 by 0.06 inch thick approx.; 6- layer Part#: 1700-00044	94V-0	UL94 V-0 See Att. 2-20 and 2- 21
+ Protection device; F1-F64	Tyco	PolySwitch, PTC Device Part#: TRF250-145U	Rating: 60Vdc, 3A; Fault voltage: 250Vrms	UL, CSA, TUV; See Att. 2-20 and Att. 6-10
+ Connector; J1	Molex	High speed RJ45, Stacked modular jack, 2x8 position, shielded with LEDs; Part#: 44520-0003	Housing: Polyester (PBT); 94V0	UL See Att. 6-11 to 6-12

IEC 60950-1 2 nd edition /Am1			
Clause	Requirement + Test	Result - Remark	Verdict

Model: TMG3200 / TMP6400 (2U BOX) - DC/AC (1 of 2)

1.5.1	TABLE: Critical Component List			
Object/part No.	Manufacturer/ trademark	type/model	Technical data	mark(s) of conformity ¹⁾
+ Chassis / assembly (2U BOX)	TelcoBridges	Dimension: approx. 15.9 (D) by 16.8 (W) by 3.5 (H) inch Part#: 2000-90037	Material: Metal sheet; various thickness; Finish: 0.9mm Satin Coat; Secured with screws	See Att. 2-26 to 2-28; Att. 4-15 to 4-20
+ 2 Fan holder	Various	Dimension: approx. 0.45 (D) by 6.7 (W) by 3.1 (H) inch Part#: 2000-90039	Material: Metal sheet; various thickness; Finish: 0.9mm Satin Coat; Secured with screws	See Att. 2-33; Att. 4-21
Power supply, DC	Zippy Technology	Redundancy DC-DC, Switching power supply Part#: DR2G-6350F	Rating: -36 to -72Vdc; 35Amax; Various output voltages; Total: 350WMax	UL, E143756 TUV, CE See Att. 2-28 and 2-29; Att. 6-13 to 6-14
Power supply, AC (Alternate)	iStarUSA	Redundancy AC-DC, Switching power supply Part#: TC-350R2U	Rating: 100-240Vac; 35Amax; Various output voltages; Total: 350WMax	UL, E155314 TUV, CB, CE See Att. 2-30 to 2-32; Att. 6- 15 to 6-20
Fan (x2)	Delta	Ball Bearing type, High Speed 80mm 67 CFM Part#: FFB0812SH	Rating: 12 VDC; Dimensions: 80 x 80 x 25.4 mm; 94V-0	UL, CSA See Att. 2-33 Att. 6-21
+ Motherboard	Various	Material: FR-4; Measured 13.6 by 11.8 by 1.6mm thick approx.; 14- layer Part#: 1700-00039	94V-0	UL94 V-0 See Att. 2-15 and 2-16
+ Connector; J2	Molex	4.2mm pitch mini-fit Jr. Header, Dual row, vertical, 20 circuits; Part#: 39-29-9202	Housing: PA Polyamide Nylon 6/6; 94V-2	UL, E29179; CSA, LR19980; TUV, R72081037 See Att. 6-4 to 6-5
+ Connector; J4	Bel Stewart	EMI-RFI shielded, ESD grounded, 2 port PCB Harmonica CAT 5 Jack, Non-flange Part#: SS-718802S	Housing; Thermoplastic; 94V-0	UL See Att. 6-6

Model: TMG3200 / TMP6400 (2U BOX) - DC/AC (2 of 2)

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Clause	Requirement + Test	Result - Remark	Verdict

1.5.1		TABLE: Critical Component List		
Object/part No.	Manufacturer/ trademark	type/model	Technical data	mark(s) of conformity ¹⁾
+ Connector; J7	Amphenol	4 ports, high speed, modular jack, 8 position, 8 contacts, shielded with LEDs. Part#: RJHSE-5381-04	Housing: Thermoplastic, PA 4/6; 94V0	UL See Att. 6-9
+ DC-DC convertors; PS1, PS7, PS8	Texas Instruments	PTH series DC/DC convertor, Input non-isolated wide output adjust power module; Part#: PTH05050W,	Meets 94V-0	SELV UL, CSA, VDE
+ DC-DC convertors; PS3, PS4	Texas Instruments	PTV series DC/DC convertor, Input non-isolated wide output adjust power module; Part#: PTV03020W	Meets 94V-0	SELV UL, CSA, VDE
+ DC-DC convertors; PS5, PS6	Texas Instruments	ATH series DC/DC convertor, Input non-isolated wide output adjust power module; Part#: ATH030A0X3	Meets 94V-0	SELV UL, CSA, VDE
+ Heatsink	Radian Heatsinks	Black ICE Series; Full Bricks Dimensions: 4.6'' x 2.4'' x 0.45'' Part#: HS1596EB	Material: Fin Aluminum with black anodize plating	Evaluated with product; See Att. 2-5
+ Display card PCB	Various	Material: FR-4; Measured 7.5 by 1.5 by 0.06 inch thick approx.; 14- layer Part#: 1700-00043	94V-0	UL94 V-0 See Att. 2-24 and 2-25
+ 16T1/E1 card PCB	Various	Material: FR-4; Measured 63 by 6.5 by 0.06 inch thick approx.; 6- layer Part#: 1700-00044	94V-0	UL94 V-0 See Att. 2-20 and 2-21
+ Protection device; F1-F64	Tyco	PolySwitch, PTC Device Part#: TRF250-145U	Rating: 60Vdc, 3A; Fault voltage: 250Vrms	UL, CSA, TUV; See Att. 2-20 and Att. 6- 10
+ Connector; J1	Molex	High speed RJ45, Stacked modular jack, 2x8 position, shielded with LEDs; Part#: 44520-0003	Housing: Polyester (PBT); 94V0	UL See Att. 6-11 to 6-12

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Clause	Requirement + Test	Result - Remark	Verdict

Model: TMG5800 / TMP5900 (2U BOX) – AC (1 of 3)

1.5.1	TABLE: Critical Component List			
Object/part No.	Manufacturer/ trademark	type/model	Technical data	mark(s) of conformity ¹⁾
+ Chassis / assembly (2U BOX)	TelcoBridges	Dimension: approx. 15.9 (D) by 16.8 (W) by 3.5 (H) inch Part#: 2000-90069	Material: Metal sheet; various thickness; Finish: 0.9mm Satin Coat; Secured with screws	See Att. 2-35 to 2-38; Att. 4-22 to 4-29
+ 8 Fan holder	Various	Dimension: approx. 0.45 (D) by 6.7 (W) by 3.2 (H) inch Part#: 2000-90039	Material: Metal sheet; various thickness; Finish: 0.9mm Satin Coat; Secured with screws	See Att. 2-40; Att. 4-30
Power supply, AC	iStarUSA	Redundant AC-DC, Switching power supply; 20+4 pin Part#: IS-500R2UP	Rating: 100- 240Vac; Various output voltages; Total: 500WMax	UL, E311876 TUV, CE See Att. 2-38 to 2-39; Att. 6-22 to 6-35
Alternate	EMACS	H1U-6250P	Rating: 100~240 Vac, 47~63 Hz, 4.0A~2.0A	CSA; UL
Fan (x8)	Sunon	GM Series High Speed 40mm 17 CFM Vapo Bearing 8 Motor Pole Fan; Part#: GM1204PQV1-8A	Rating: 12 VDC; Dimensions: 40 x 40 x 28 mm	UL See Att. 2-40
+ Motherboard	Various	Material: FR-4; Measured 13.6 by 11.8 by 1.6mm thick approx.; 14-layer Part#: 1700-00039	94V-0	UL94 V-0 See Att. 2-15 and 2-16
+ Connector; J2	Molex	4.2mm pitch mini-fit Jr. Header, Dual row, vertical, 20 circuits; Part#: 39-29-9202	Housing: PA Polyamide Nylon 6/6; 94V-2	UL, E29179; CSA, LR19980; TUV, R72081037 See Att. 6-4 to 6- 5
+ Connector; J4	Bel Stewart	EMI-RFI shielded, ESD grounded, 2 port PCB Harmonica CAT 5 Jack, Non-flange, Part#: SS-718802S	Housing; Thermoplastic; 94V-0	UL See Att. 6-6

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Clause	Requirement + Test	Result - Remark	Verdict

Model: TMG5800 / TMP5900 (2U BOX) – AC (2 of 3)

1.5.1	TABLE: Critical Component List			
Object/part No.	Manufacturer/ trademark	type/model	Technical data	mark(s) of conformity ¹⁾
+ Connector; J7	Amphenol	4 ports, high speed, modular jack, 8 position, 8 contacts, shielded with LEDs. Part#: RJHSE-5381-04	Housing: Thermoplastic, PA 4/6; 94V0	UL See Att. 6-9
+ DC-DC convertors; PS1, PS7, PS8	Texas Instruments	PTH series DC/DC convertor, Input non-isolated wide output adjust power module; Part#: PTH05050W,	Meets 94V-0	SELV UL, CSA, VDE
+ DC-DC convertors; PS3, PS4	Texas Instruments	PTV series DC/DC convertor, Input non-isolated wide output adjust power module; Part#: PTV03020W	Meets 94V-0	SELV UL, CSA, VDE
+ DC-DC convertors; PS5, PS6	Texas Instruments	ATH series DC/DC convertor, Input non-isolated wide output adjust power module; Part#: ATH030A0X3	Meets 94V-0	SELV UL, CSA, VDE
+ Heatsink	Radian Heatsinks	Black ICE Series; Full Bricks Dimensions: 4.6'' x 2.4'' x 0.45'' Part#: HS1596EB	Material: Fin Aluminum with black anodize plating	Evaluated with product; See Att. 2-5
+ Display card PCB	Various	Material: FR-4; Measured 7.5 by 1.5 by 0.06 inch thick approx.; 14-layer Part#: 1700-00043	94V-0	UL94 V-0 See Att. 2-24 and 2-25

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Clause	Requirement + Test	Result - Remark	Verdict

Model: TMG5800 / TMP5900 (2U BOX) – AC (3 of 3)

1.5.1	TABLE: Critical Component List			
Object/part No.	Manufacturer/ trademark	type/model	Technical data	mark(s) of conformity ¹⁾
+ 16T1/E1 card PCB	Various	Material: FR-4; Measured 63 by 6.5 by 0.06 inch thick approx.; 6-layer Part#: 1700-00044	94V-0	UL94 V-0 See Att. 2-20 and 2-21
+ Protection device; F1-F64	Tyco	PolySwitch, PTC Device Part#: TRF250-145U	Rating: 60Vdc, 3A; Fault voltage: 250Vrms	UL, CSA, TUV; See Att. 2-20 and Att. 6-10
+ Connector; J1	Molex	High speed RJ45, Stacked modular jack, 2x8 position, shielded with LEDs; Part#: 44520-0003	Housing: Polyester (PBT); 94V0	UL See Att. 6-11 to 6-12
+ ATX Adaptor PCB	Various	Material: FR-4; Measured 4.6 by 2.6 by 0.06 inch thick approx.; 4-layer Part#: 1700- 00068	94V-0	UL94 V-0 See Att. 2-47 and 2-48
+ Connector; J3	Amphenol	Single-ports, high speed, modular jack, 8 positions, 8 contacts, shielded with LEDs. Part#: RJHSE-3380	Housing: Thermoplastic, PA 4/6; 94V0	UL See Att. 6-36 and 6-37
+ Connector; J2	Molex	Disk drive power connector; R/A Horizontal Header, right angle; 4 circuits Part#: 53109-0410	Housing: Polyamide Nylon; 94V0	UL See Att. 6-38
+ PCI Express Adaptor PCB	Various	Material: FR-4; Measured 1.55 by 0.8 by 0.06 inch thick approx.; 4-layer Part#: 1700-00069	94V-0	UL94 V-0 See Att. 2-47 and 2-48
Server motherboard	Intel	Computer server board. Part#: S3420gp	94V-0	SELV, Evaluated with product See Att. 2-20 and Att. 6-10

IEC 60950-1 2 nd edition /Am1			
Clause	Requirement + Test	Result - Remark	Verdict

1.5.1	TABLE: Opto Electronic Devices - There is no Opto Electronic Devices	N/A
Manufacturer.....:		
Type.....:		
Separately tested.....:		
Bridging insulation:		
External creepage distance:		
Internal creepage distance:		
Distance through insulation:		
Tested under the following conditions:		
Input.....:		
Output.....:		

IEC 60950-1 2 nd edition /Am1			
Clause	Requirement + Test	Result - Remark	Verdict

1.6.2	TABLE: Electrical data (in normal conditions) - See test data attached					
U (V)	I (A)	I _{rated} (A)	P (W)	Fuse #	I _{fuse} (A)	Condition/status

Supplementary information:

2.1.1.5 c) 1)	TABLE: max. V, A, VA test - See test data attached				
Voltage (rated) (V)	Current (rated) (A)	Voltage (max.) (V)	Current (max.) (A)	VA (max.) (VA)	

supplementary information:

2.1.1.5 c) 2)	TABLE: stored energy - See test data attached		
Capacitance C (μF)	Voltage U (V)	Energy E (J)	

supplementary information:

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Clause	Requirement + Test	Result - Remark	Verdict

2.2	TABLE: evaluation of voltage limiting components in SELV circuits - Conducted under the approved power supply tests		N/A
Component (measured between)	max. voltage (V) (normal operation)		Voltage Limiting Components
	V peak	V d.c.	
Fault test performed on voltage limiting components	Voltage measured (V) in SELV circuits (V peak or V d.c.)		
supplementary information:			

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Clause	Requirement + Test	Result - Remark	Verdict

2.5	TABLE: limited power sources -			N/A	
Circuit output tested:					
Measured Uoc (V) with all load circuits disconnected:					
		I _{sc} (A)		VA	
		Meas.	Limit	Meas.	Limit
Normal condition					
Single fault:					
Single fault:					
Single fault:					
supplementary information:					
Sc=Short circuit, Oc=Open circuit					

2.10.2	Table: working voltage measurement			
Location	RMS voltage (V)	Peak voltage (V)	Comments	
supplementary information:				

IEC 60950-1 2 nd edition /Am1			
Clause	Requirement + Test	Result - Remark	Verdict

2.10.3 and 2.10.4	TABLE: Clearance and creepage distance measurements - Conducted under the approved power supply tests						N/A
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)	
Functional:							
Basic/supplementary:							
Reinforced:							
Supplementary information:							

2.10.5	TABLE: Distance through insulation measurements - Conducted under the approved power supply tests					N/A
Distance through insulation (DTI) at/of:	U peak (V)	U rms (V)	Test voltage (V)	Required DTI (mm)	DTI (mm)	
Supplementary information:						

IEC 60950-1 2 nd edition /Am1									
Clause	Requirement + Test						Result - Remark		Verdict
4.3.8	TABLE: Batteries - There is no battery being used								N/A
The tests of 4.3.8 are applicable only when appropriate battery data is not available									
Is it possible to install the battery in a reverse polarity position?									
	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									
Max. current during fault condition									
Test results:									
- Chemical leaks								Verdict	
- Explosion of the battery									
- Emission of flame or expulsion of molten metal									
- Electric strength tests of equipment after completion of tests									
Supplementary information:									

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Clause	Requirement + Test	Result - Remark	Verdict

4.5	TABLE: Thermal requirements - See test data attached							
	Supply voltage (V)							—
	Ambient T _{min} (°C)							—
	Ambient T _{max} (°C)							—
Maximum measured temperature T of part/at:		T (°C)						Allowed T _{max} (°C)
Supplementary information:								
Temperature T of winding:		t ₁ (°C)	R ₁ (Ω)	t ₂ (°C)	R ₂ (Ω)	T (°C)	Allowed T _{max} (°C)	Insulation class
Supplementary information:								

4.5.5	TABLE: Ball pressure test of thermoplastic parts							N/A
	Allowed impression diameter (mm)	≤ 2 mm						—
Part					Test temperature (°C)	Impression diameter (mm)		
Supplementary information:								

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

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Clause	Requirement + Test	Result - Remark	Verdict

5.1	TABLE: touch current measurement - see test data attached		
Measured between:	Measured (mA)	Limit (mA)	Comments/conditions

5.2	TABLE: Electric strength tests, impulse tests and voltage surge tests - see test data attached		
Test voltage applied between:	Voltage shape (AC, DC, impulse, surge)	Test voltage (V)	Breakdown Yes / No
Functional:			
Basic/supplementary:			
Reinforced:			
Supplementary information:			

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Clause	Requirement + Test	Result - Remark	Verdict

5.3	TABLE: Fault condition tests - Conducted under the evaluation of approved power supply					N/A
	Ambient temperature (°C)					—
	Power source for EUT: Manufacturer, model/type, output rating					—
Component No.	Fault	Supply voltage (V)	Test time	Fuse #	Fuse current (A)	Observation
Supplementary information:						

C.2	TABLE: transformers - Conducted under the evaluation of approved power supply						N/A
Loc.	Tested insulation	Working voltage peak / V (2.10.2)	Working voltage rms / V (2.10.2)	Required electric strength (5.2)	Required clearance / mm (2.10.3)	Required creepage distance / mm (2.10.4)	Required distance thr. insul. (2.10.5)
Loc.	Tested insulation			Test voltage / V	Measured clearance / mm	Measured creepage dist. / mm	Measured distance thr. insul. / mm; number of layers
supplementary information:							

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Clause	Requirement + Test	Result - Remark	Verdict

C.2	TABLE: transformers - Conducted under the evaluation of approved power supply	N/A	
Transformer			