Report No. EN 83058 M0A0
MET Project No. 83058

Test Report issued under the responsibility of:

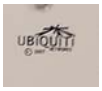
MET Laboratories, Inc.

TEST REPORT

EN 60950-1
Information technology equipment – Safety – Part 1: General requirements

Report Number. ..... :	EN 83058 M0A0
Date of issue ..... :	May 23, 2011
Total number of pages	75 pages
CB Testing Laboratory..... :	MET Laboratories, Inc.
Address ..... :	914 West Patapsco Ave, Baltimore, MD 21230, USA
Applicant's name..... :	Ubiquiti Networks, Inc.
Address ..... :	91 E. Tasman Drive San Jose, CA 95134
Manufacturer's name..... :	Ubiquiti Networks, Inc.
Address ..... :	91 E. Tasman Drive San Jose, CA 95134
Test specification:	CE
Standard ..... :	EN 60950-1: 2006, Am 1: 2010 EN 60950-22: 2006
Test procedure ..... :	CB Scheme
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

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.

Test item description .....:	3G to WiFI and Ethernet Bridge
Trade Mark .....:	
Manufacturer .....:	Ubiquiti Network, Inc.
Model/Type reference .....:	3GStation
Ratings .....:	24 VDC, 0.5 A, with Listed LPS of POE power adapter

Testing procedure and testing location:			
☒	**CB Testing Laboratory**:	MET Laboratories, Inc.	
Testing location/ address .....:		914 West Patapsco Ave, Baltimore MD 21230, USA	
	Tested by (name + signature).....:		
	Approved by (name + signature).....:	Cedric Valiente	
☒	**Associated CB Laboratory:**	MET Laboratories, Inc.	
Testing location/ address .....:		33439 Western Ave. Union City, CA 94587	
	Tested by (name + signature).....:	Masoom Ramzi	
	Approved by (name + signature).....:	Nader Tabesh	

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

Enclosure 1: Other Country National And Group Differences, pg 44

Enclosure 2: Photographs (Figures) pg 71

Summary of testing:

Tests performed (name of test and test clause):		**Testing location:**
1.7.13	Marking Durability Test	33439 Western Ave. Union City, CA 94587 USA
1.6.2	Input Current Test	
4.5.1	Temperature Test	
4.2.6	Drop Test	

Summary of compliance with National Differences

List of countries addressed: AT, BE, CH, CN, CZ, DE, DK, FI, GB, KR, JP, NL, NO, SE, SG, SL, & US.

Group Differences are applicable for CENELEC member countries: Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom and CENELEC affiliate member countries: Turkey.

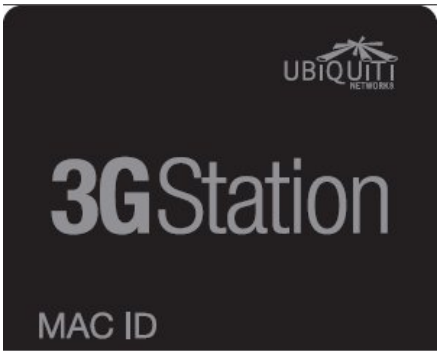
☒ The product fulfils the requirements of EN60950-1: 2006 + A1:2010

☒At the time of issuing this test report, not all countries are listed for IEC 60950-1:2005, 2nd Edition Am1 2009. Therefore this test report includes the US and Canadian national differences for IEC 60950-1: 2006 2nd edition.

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.

(Additional requirements for markings. See 1.7 NOTE)



Test item particulars.....:	
Equipment mobility.....:	stationary
Connection to the mains.....:	not directly connected to the mains
Operating condition.....:	continuous
Access location .....:	operator accessible
Over voltage category (OVC) .....:	other: DC
Mains supply tolerance (%) or absolute mains supply values .....:	+20%, and –15%
Tested for IT power systems .....:	No
IT testing, phase-phase voltage (V) .....:	
Class of equipment .....:	Class III
Considered current rating of protective device as part of the building installlation (A) .....:	20
Pollution degree (PD) .....:	PD 2
IP protection class .....:	IP2
Altitude during operation (m) .....:	14m
Altitude of test laboratory (m) .....:	14m
Mass of equipment (kg) .....:	0.165
Possible test case verdicts:	
- test case does not apply to the test object..... :	N/A (or N)
- test object does meet the requirement..... :	P (Pass)
- test object does not meet the requirement ..... :	F (Fail)
Testing..... :	
Date of receipt of test item..... :	04/30/2011
Date(s) of performance of tests..... :	05/02/2011

General remarks:

The test results presented in this report relate only to the object tested.
This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.
"(see Enclosure #)" refers to additional information appended to the report.
"(see appended table)" refers to a table appended to the report.

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

- The product is stationary, Pollution Degree II, Class III
- Product is not certified for outdoor use in this certification.
- Powered by POE by a Listed LPS Power adapter .
- Disconnect device is part of Listed LPS power adaptor.
- The equipment was submitted and tested for a maximum manufacturer recommended ambient temperature of 40 ºC.
- All safety instructions and instillation instructions are provided in the user manual attached with every product.

Manufacturer's Declaration per sub-clause 6.2.5 of IECEE 02:

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)……..: Ubiquiti Network, Inc.
91 E. Tasman Drive
San Jose, CA 95134

General product information:

3GStation

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)			

EN 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
1	**GENERAL**		P
1.5	**Components**		P
1.5.1	General		P
1.5.2	Evaluation and testing of components	Components certified to IEC harmonized Standards and checked for correct application. Components not certified are used in accordance with their ratings and they comply with applicable parts of IEC60950 and the relevant component Standards.	P
1.5.3	Thermal controls	No such thermal controls.	N/A
1.5.4	Transformers	Part of Listed Power supply	N/A
1.5.5	Interconnecting cables	Not Provided.	N/A
1.5.6	Capacitors bridging insulation	No bridging.	N/A
1.5.7	Resistors bridging insulation	No bridging	N/A
1.5.7.1	Resistors bridging functional, basic or supplementary insulation	Functional insulation. No bridging.	NA
1.5.7.2	Resistors bridging double or reinforced insulation between a.c. mains and other circuits	No bridging	N/A
1.5.7.3	Resistors bridging double or reinforced insulation between a.c. mains and antenna or coaxial cable	No bridging	N/A
1.5.8	Components in equipment for IT power systems	Part of Listed Power Adapter	N/A
1.5.9	Surge suppressors	Not used.	NA
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	DC Unit	N/A
1.6.2	Input current	Test Conducted (see appended table 1.6.2)	P
1.6.3	Voltage limit of hand-held equipment	Not hand held equipment	N/A

EN 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.6.4	Neutral conductor	Not AC powered	N/A
1.7	**Marking and instructions**		P
1.7.1	Power rating and identification markings		N/A
1.7.1.1	Power rating marking	Not marked	N/A
	Multiple mains supply connections.....:		N/A
	Rated voltage(s) or voltage range(s) (V) .....:	24VDC (POE)	P
	Symbol for nature of supply, for d.c. only.....:		N/A
	Rated frequency or rated frequency range (Hz) ...:	DC unit	N/A
	Rated current (mA or A) .....:	0.5 A	P
1.7.1.2	Identification markings	See below	P
	Manufacturer's name or trade-mark or identification mark .....:		P
	Model identification or type reference .....:	3GStation	P
	Symbol for Class II equipment only .....:	Not a class II equipment	N/A
	Other markings and symbols .....:		N/A
1.7.2	Safety instructions and marking	Covered in user manual	P
1.7.2.1	General		P
1.7.2.2	Disconnect devices	Part of Listed adaptor	P
1.7.2.3	Overcurrent protective device	Part of Listed adaptor	P
1.7.2.4	IT power distribution systems	Not connected to IT Power systems.	N/A
1.7.2.5	Operator access with a tool	Operator does not need tools for access.	N/A
1.2.7.6	Ozone	No Ozone	N/A
1.7.3	Short duty cycles	Unit is for continuous operation.	N/A
1.7.4	Supply voltage adjustment .....:	Auto ranging Part of Listed Power Adaptor .	N/A
	Methods and means of adjustment; reference to installation instructions .....:		N/A
1.7.5	Power outlets on the equipment .....:	No power outlet.	NA
1.7.6	Fuse identification (marking, special fusing characteristics, cross-reference) .....:	No operator-accessible fusing.	N/A
1.7.7	Wiring terminals	No wiring terminal	N/A
1.7.7.1	Protective earthing and bonding terminals .....:		N/A

EN 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.7.7.2	Terminals for a.c. mains supply conductors	No such terminals.	N/A
1.7.7.3	Terminals for d.c. mains supply conductors	RJ45 connector	N/A
1.7.8	Controls and indicators	Product does not have any controls or indicators effecting safety	N/A
1.7.8.1	Identification, location and marking ..... :	Clearly marked	N/A
1.7.8.2	Colours ..... :	Not used	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 ..... :	None used.	NA
1.7.11	Durability	Test Conducted	P
1.7.12	Removable parts	None used	N/A
1.7.13	Replaceable batteries ..... :	No batteries	N/A
	Language(s) ..... :		—
1.7.14	Equipment for restricted access locations ..... :	Not intended for restricted location	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	- Power to the unit is provided by a Listed LPS of POE adaptor. No hazardous voltage levels in operator access area. - Access area is at SELV circuit.	P
2.1.1.1	Access to energized parts	No accessible energized hazardous parts. Less than 15VA	N/A
	Test by inspection ..... :	Access area is at SELV circuit.	P
	Test with test finger (Figure 2A) ..... :		N/A
	Test with test pin (Figure 2B) ..... :		N/A
	Test with test probe (Figure 2C) ..... :	Product does not have TNV-3 connector.	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

EN 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Working voltage (Vpeak or Vrms); minimum distance through insulation (mm)		—
2.1.1.4	Access to hazardous voltage circuit wiring	No wiring at hazardous voltage	N/A
2.1.1.5	Energy hazards ..... :	No Energy hazardous. Less than 15 VA	N/A
2.1.1.6	Manual controls	None affecting safety	N/A
2.1.1.7	Discharge of capacitors in equipment	Not direct connection to mains	N/A
	Measured voltage (V); time-constant (s)..... :		—
2.1.1.8	Energy hazards – d.c. mains supply	Not connected direct to main. Covered by a Listed POE adapter	N/A
	a) Capacitor connected to the d.c. mains supply .. :		N/A
	b) Internal battery connected to the d.c. mains supply ..... :	No internal battery	N/A
2.1.1.9	Audio amplifiers ..... :	No audio amplifier	N/A
2.1.2	Protection in service access areas	No service access area	N/A
2.1.3	Protection in restricted access locations	No restricted access area	N/A
2.2	**SELV circuits**		P
2.2.1	General requirements	SELV, covered by a Listed LPS of POE adaptor. (see appended table 2.2)	P
2.2.2	Voltages under normal conditions (V) ..... :	SELV, covered by a Listed LPS of POE adaptor.	P
2.2.3	Voltages under fault conditions (V) ..... :	SELV, covered by a Listed LPS of POE adaptor.	P
2.2.4	Connection of SELV circuits to other circuits ..... :	SELV connected to SELV only	P
2.3	**TNV circuits**		N/A
2.3.1	Limits	No TNV circuitry	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

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Clause	Requirement + Test	Result - Remark	Verdict
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**		N/A
2.4.1	General requirements	Not evaluated	N/A
2.4.2	Limit values		N/A
	Frequency (Hz) ..... :		—
	Measured current (mA) ..... :		—
	Measured voltage (V) ..... :		—
	Measured circuit capacitance (nF or µF) ..... :		—
2.4.3	Connection of limited current circuits to other circuits		N/A
2.5	**Limited power sources** Covered by a Listed LPS of POE Adapter		P
	a) Inherently limited output		N/A
	b) Impedance limited output		N/A
	c) Regulating network limited output under normal operating and single fault condition	Covered by Listed Power over Ethernet Adapter	P
	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		
2.6	**Provisions for earthing and bonding**		N/A
2.6.1	Protective earthing	-Class III equipment -Powered by an external Listed LPS power adapter with SELV outputs	N/A
2.6.2	Functional earthing	Not considered	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
2.6.3	Protective earthing and protective bonding conductors	Covered by a Listed Power over Ethernet Adapter	N/A
2.6.3.1	General		N/A
2.6.3.2	Size of protective earthing conductors	Covered by a Listed Power over Ethernet Adapter	N/A
	Rated current (A), cross-sectional area (mm^2), AWG..... :		—
2.6.3.3	Size of protective bonding conductors	Covered by a Listed Power over Ethernet Adapter	N/A
	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)..... :		N/A
2.6.3.5	Colour of insulation ..... :		N/A
2.6.4	Terminals		N/A
2.6.4.1	General		N/A
2.6.4.2	Protective earthing and bonding terminals		N/A
	Rated current (A), type, nominal thread diameter (mm)..... :		—
2.6.4.3	Separation of the protective earthing conductor from protective bonding conductors		N/A
2.6.5	Integrity of protective earthing		N/A
2.6.5.1	Interconnection of equipment		N/A
2.6.5.2	Components in protective earthing conductors and protective bonding conductors		N/A
2.6.5.3	Disconnection of protective earth		N/A
2.6.5.4	Parts that can be removed by an operator		N/A
2.6.5.5	Parts removed during servicing		N/A
2.6.5.6	Corrosion resistance		N/A
2.6.5.7	Screws for protective bonding		N/A
2.6.5.8	Reliance on telecommunication network or cable distribution system		N/A
2.7	**Overcurrent and earth fault protection in primary circuits** Not directly connected to primary power		N/A
2.7.1	Basic requirements		N/A

EN 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Instructions when protection relies on building installation		N/A
2.7.2	Faults not simulated in 5.3.7		N/A
2.7.3	Short-circuit backup protection		N/A
2.7.4	Number and location of protective devices ..... :		N/A
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	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, materials containing asbestos and hygroscopic materials are not used as insulation	P
2.9.2	Humidity conditioning		N/A
	Relative humidity (%), temperature (°C) ..... :		—
2.9.3	Grade of insulation	Functional	P
2.9.4	Separation from hazardous voltages	No hazardous voltage. Less than 15 VA	N/A
	Method(s) used ..... :		—

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Clause	Requirement + Test	Result - Remark	Verdict

2.10	**Clearances, creepage distances and distances through insulation** Product is powered by a Listed LPS of POE adapter with SELV output, and rated less than 15 VA		P
2.10.1	General	product is rated less than 15 VA	P
2.10.1.1	Frequency ..... :	DC unit.	N/A
2.10.1.2	Pollution degrees ..... :	2	P
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	None considered	N/A
2.10.1.6	Special separation requirements	None considered	N/A
2.10.1.7	Insulation in circuits generating starting pulses	No such circuits	N/A
2.10.2	Determination of working voltage	24 VDC	P
2.10.2.1	General	Rated DC voltage	P
2.10.2.2	RMS working voltage		N/A
2.10.2.3	Peak working voltage		N/A
2.10.3	Clearances	Covered by a Listed Power over Ethernet Adapter	P
2.10.3.1	General	Functional	P
2.10.3.2	Mains transient voltages	Not directly connected to mains. Covered by a Listed Power Adaptor	N/A
	a) AC mains supply ..... :	Covered by a Listed Power over Ethernet Adapter	N/A
	b) Earthed d.c. mains supplies ..... :		N/A
	c) Unearthed d.c. mains supplies ..... :		N/A
	d) Battery operation ..... :	No battery	N/A
2.10.3.3	Clearances in primary circuits	Part of a Listed Power over Ethernet Adaptor, No primary circuitry	N/A
2.10.3.4	Clearances in secondary circuits		P
2.10.3.5	Clearances in circuits having starting pulses	No such circuits	N/A
2.10.3.6	Transients from a.c. mains supply ..... :	No directly connected to AC mains	N/A
2.10.3.7	Transients from d.c. mains supply ..... :	Covered by a Listed Power over Ethernet Adapter	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
2.10.3.8	Transients from telecommunication networks and cable distribution systems ..... :	No such connections	N/A
2.10.3.9	Measurement of transient voltage levels	Covered by a Listed Power over Ethernet Adapter	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		P
2.10.4.1	General		P
2.10.4.2	Material group and comparative tracking index		P
	CTI tests..... :	Material group IIIb is assumed to be used	—
2.10.4.3	Minimum creepage distances	(see appended table 2.10.3 and 2.10.4)	P
2.10.5	**Solid insulation**	No solid insulation is employed.	N/A
2.10.5.1	General		N/A
2.10.5.2	Distances through insulation		N/A
2.10.5.3	Insulating compound as solid insulation		N/A
2.10.5.4	Semiconductor devices		N/A
2.10.5.5.	Cemented joints		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		—
2.10.5.10	Thin sheet material – alternative test procedure		N/A
	Electric strength test		—
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

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Clause	Requirement + Test	Result - Remark	Verdict
	Two wires in contact inside wound component; angle between 45° and 90° ..... :		N/A
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		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	94V-0	N/A
2.10.6.2	Coated printed boards		N/A
2.10.6.3	Insulation between conductors on the same inner surface of a printed board		N/A
2.10.6.4	Insulation between conductors on different layers of a printed board		N/A
	Distance through insulation		N/A
	Number of insulation layers (pcs) ..... :		N/A
2.10.7	**Component external terminations**	No such termination	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		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

3	**WIRING, CONNECTIONS AND SUPPLY** No internal wires are employed	N/A
3.1	General	N/A

EN 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
3.1.1	Current rating and overcurrent protection		N/A
3.1.2	Protection against mechanical damage		N/A
3.1.3	Securing of internal wiring		N/A
3.1.4	Insulation of conductors		N/A
3.1.5	Beads and ceramic insulators		N/A
3.1.6	Screws for electrical contact pressure		N/A
3.1.7	Insulating materials in electrical connections		N/A
3.1.8	Self-tapping and spaced thread screws		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**		N/A
3.2.1	Means of connection	-Not directly connected to mains -Powered by an external PoE Listed Power Adaptor with SELV outputs	N/A
3.2.1.1	Connection to an a.c. mains supply	Powered by an external PoE Listed Power Adaptor with SELV outputs	N/A
3.2.1.2	Connection to a d.c. mains supply		N/A
3.2.2	Multiple supply connections	Powered up by an external PoE Listed Power Adaptor with SELV outputs	N/A
3.2.3	Permanently connected equipment		N/A
	Number of conductors, diameter of cable and conduits (mm) .....:	Addressed in the manual	—
3.2.4	Appliance inlets	Does not have	N/A
3.2.5	Power supply cords		N/A
3.2.5.1	AC power supply cords		N/A
	Type .....:		—
	Rated current (A), cross-sectional area (mm^2), AWG .....:		—
3.2.5.2	DC power supply cords		N/A
3.2.6	Cord anchorages and strain relief		N/A
	Mass of equipment (kg), pull (N) .....:		—
	Longitudinal displacement (mm) .....:		—

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Clause	Requirement + Test	Result - Remark	Verdict
3.2.7	Protection against mechanical damage	Not exposed to sharp points or cutting edges within or on the surface of the equipment.	P
3.2.8	Cord guards	Not supplied.	N/A
	Diameter or minor dimension D (mm); test mass (g) ..... :		—
	Radius of curvature of cord (mm) ..... :		—
3.2.9	Supply wiring space	Covered by a Listed Power over Ethernet Adapter	P
3.3	**Wiring terminals for connection of external conductors**		N/A
3.3.1	Wiring terminals	No 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		N/A
3.4.2	Disconnect devices	Part of Listed Power over Ethernet Adapter	P
3.4.3	Permanently connected equipment		N/A
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		N/A
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		N/A
3.4.10	Interconnected equipment		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
3.4.11	Multiple power sources	No multiple connection	N/A
3.5	**Interconnection of equipment**		P
3.5.1	General requirements		P
3.5.2	Types of interconnection circuits .....:	SELV to SELV	P
3.5.3	ELV circuits as interconnection circuits	No ELV.	N/A
3.5.4	Data ports for additional equipment		N/A
4	**PHYSICAL REQUIREMENTS** No hazardous voltage present in equipment. Equipment is powered with 24 V DC, 0.5 A by a listed POE adapter. No physical test required.		N/A
4.1	Stability		N/A
	Angle of 10°	No potential hazards due to instability	N/A
	Test force (N) .....:		N/A
4.2	**Mechanical strength**		P
4.2.1	General		N/A
	Rack-mounted equipment.		N/A
4.2.2	Steady force test, 10 N		N/A
4.2.3	Steady force test, 30 N		N/A
4.2.4	Steady force test, 250 N		N/A
4.2.5	Impact test		N/A
	Fall test		N/A
	Swing test		N/A
4.2.6	Drop test; height (mm) .....:	Test conducted	P
4.2.7	Stress relief test		N/A
4.2.8	Cathode ray tubes	Product does not have Cathode ray tubes.	N/A
	Picture tube separately certified .....:	.	N/A
4.2.9	High pressure lamps	Product does not have high pressure lamps	N/A
4.2.10	Wall or ceiling mounted equipment; force (N) .....:	Product is not mounted on wall or ceiling	N/A
4.2.11	Rotating solid media		N/A
	Test to cover on the door……..:		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
4.3	**Design and construction**		P
4.3.1	Edges and corners	Edges and corners are rounded and smooth.	P
4.3.2	Handles and manual controls; force (N) ..... :	No handles.	N/A
4.3.3	Adjustable controls	No such controls.	N/A
4.3.4	Securing of parts	Unit is held together by holding tabs and screws.	P
4.3.5	Connection by plugs and sockets	No such connections	N/A
4.3.6	Direct plug-in equipment	Not direct plug-in.	N/A
	Torque ..... :		—
	Compliance with the relevant mains plug standard ..... :		N/A
4.3.7	Heating elements in earthed equipment	No heating elements.	N/A
4.3.8	Batteries	No battery	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
	- Excessive discharging rate for any battery		N/A
4.3.9	Oil and grease	No oil or grease is used	N/A
4.3.10	Dust, powders, liquids and gases	Equipment does not produce dust, no use of liquid or gases	N/A
4.3.11	Containers for liquids or gases	None used	N/A
4.3.12	Flammable liquids ..... :	None used	N/A
	Quantity of liquid (l) ..... :		N/A
	Flash point (°C) ..... :		N/A
4.3.13	Radiation		N/A
4.3.13.1	General		N/A
4.3.13.2	Ionizing radiation	No such 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 such radiation	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	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		N/A
4.3.13.5.1	Lasers (including laser diodes)		N/A
	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**		N/A
4.4.1	General	No moving parts	N/A
4.4.2	Protection in operator access areas ..... :	There are no moving parts, and no hazardous voltages in operator access area.	N/A
	Household and home/office document/media shredders	No moving parts	N/A
4.4.3	Protection in restricted access locations ..... :	No moving parts	N/A
4.4.4	Protection in service access areas		N/A
4.4.5	Protection against moving fan blades	No fan	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		P

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Clause	Requirement + Test	Result - Remark	Verdict
4.5.2	Temperature tests	Test Conducted Annex L.7 applies. Operated in the most unfavourable way of operation given in the operation instructions until steady conditions established.	P
	Normal load condition per Annex L ..... :	There are no thermoplastic parts on which parts at Hazardous Voltages are directly mounted.	—
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** No opening in enclosure		N/A
4.6.1	Top and side openings	No top or side opening	N/A
	Dimensions (mm) ..... :		—
4.6.2	Bottoms of fire enclosures		N/A
	Construction of the bottom, dimensions (mm) ..... :		—
4.6.3	Doors or covers in fire enclosures	No doors. Cover provided as part of plastic enclosure	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 metalized parts		N/A
4.6.5	Adhesives for constructional purposes	No adhesives.	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	Power in the unit is rated less than 15 VA. Method 1 was used.	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

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Clause	Requirement + Test	Result - Remark	Verdict
4.7.2	Conditions for a fire enclosure	Power in the unit is rated less than 15 VA.	P
4.7.2.1	Parts requiring a fire enclosure	None	N/A
4.7.2.2	Parts not requiring a fire enclosure	Power in the unit is rated less than 15 VA.	N/A
4.7.3	Materials		P
4.7.3.1	General	Power in the unit is rated less than 15 VA. The propagation of fire is limited through the selection of materials.	P
4.7.3.2	Materials for fire enclosures	EUT powered up by external Listed POE power Adaptor with SELV output	N/A
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	Components are mounted on a PCB rated 94V-0.	P
4.7.3.5	Materials for air filter assemblies	No air filter	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** No hazardous voltage present in the equipment, 24 VDC		N/A
5.1	**Touch current and protective conductor current**		N/A
5.1.1	General	Equipment is powered by an external POE listed power adapter. Class III equipment	N/A
5.1.2	Configuration of equipment under test (EUT)		N/A
5.1.2.1	Single connection to an a.c. mains supply	Not directly connected to mains	N/A
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		N/A
5.1.4	Application of measuring instrument	Power in the unit is rated less than 15 VA	N/A
5.1.5	Test procedure	Power in the unit is rated less than 15 VA	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
5.1.6	Test measurements	Power in the unit is rated less than 15 VA	N/A
	Supply voltage (V) ..... :		—
	Measured touch current (mA) ..... :		—
	Max. allowed touch current (mA) ..... :		—
	Measured protective conductor current (mA) ..... :		—
	Max. allowed protective conductor current (mA) .. :		—
5.1.7	Equipment with touch current exceeding 3,5 mA		N/A
5.1.7.1	General ..... :	Power in the unit is rated less than 15 VA	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 telecommunication circuitry	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**		N/A
5.2.1	General		N/A
5.2.2	Test procedure		N/A

5.3	**Abnormal operating and fault conditions**		N/A
5.3.1	Protection against overload and abnormal operation	Product is powered by a listed POE adapter with SELV output	N/A
5.3.2	Motors	No motor	N/A
5.3.3	Transformers	Transformer part of the listed POE adapter	N/A
5.3.4	Functional insulation ..... :		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
5.3.5	Electromechanical components	No electromechanical components	N/A
5.3.6	Audio amplifiers in ITE .....:	No audio amplifiers	N/A
5.3.7	Simulation of faults		N/A
5.3.8	Unattended equipment		N/A
5.3.9	Compliance criteria for abnormal operating and fault conditions		N/A
5.3.9.1	During the tests		N/A
5.3.9.2	After the tests		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
6	**CONNECTION TO TELECOMMUNICATION NETWORKS** No connection to telecommunication network		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		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	No connection to telecommunication network	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** No connection to telecommunication network		N/A
	Max. output current (A) ..... :		—
	Current limiting method ..... :		—
7	**CONNECTION TO CABLE DISTRIBUTION SYSTEMS**		N/A
7.1	General	No connection to cable distribution systems	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

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Clause	Requirement + Test	Result - Remark	Verdict
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)	Power in the unit less than 15 VA	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)..... :		—

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Clause	Requirement + Test	Result - Remark	Verdict
	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)** No motors incorporated		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
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

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Clause	Requirement + Test	Result - Remark	Verdict
B.10	Test for series motors		N/A
	Operating voltage (V) ..... :		—
C	**ANNEX C, TRANSFORMERS (see 1.5.4 and 5.3.3)** No transformers		N/A
	Position ..... :		—
	Manufacturer ..... :		—
	Type ..... :		—
	Rated values ..... :		—
	Method of protection ..... :		—
C.1	Overload test		N/A
C.2	Insulation		N/A
	Protection from displacement of windings ..... :		N/A
D	**ANNEX D, MEASURING INSTRUMENTS FOR TOUCH-CURRENT TESTS (see 5.1.4)** EUT powered up by an external Listed POE Power Adaptor with SELV outputs.		N/A
D.1	Measuring instrument		N/A
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)** Covered by the use of a Listed POE Adapter		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

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Clause	Requirement + Test	Result - Remark	Verdict
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)**		N/A
	Metal(s) used ..... :		—
K	**ANNEX K, THERMAL CONTROLS (see 1.5.3 and 5.3.8)** Product does not have thermal control		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		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

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Clause	Requirement + Test	Result - Remark	Verdict
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		P
M	**ANNEX M, CRITERIA FOR TELEPHONE RINGING SIGNALS (see 2.3.1)** No telephone ringing signals		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)** No telephone ringing signals or cable distribution system		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)** Covered by a listed POE adapter		N/A
	a) Preferred climatic categories ..... :		N/A
	b) Maximum continuous voltage ..... :	Covered by a Listed POE adapter	N/A
	c) Pulse current ..... :		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
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)**	No telephone ringing	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
		Only IPX0 is considered	—
U	**ANNEX U, INSULATED WINDING WIRES FOR USE WITHOUT INTERLEAVED INSULATION (see 2.10.5.4)**		N/A
			—
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
W	**ANNEX W, SUMMATION OF TOUCH CURRENTS**	Informative	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

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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)** No Ultraviolet		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	Power is less than 15 VA	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	Not such equipment	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

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Clause	Requirement + Test	Result - Remark	Verdict

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

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])
Figure 1 shows external view of the Product					
Enclosure	Any	Any	Plastic	UL 94V-0	UL, CSA
	Dimension: Equipment: 13.62 x 8.98 x 2.91 cm Stand: 6.6 x 4.46 x 1.93 cm				
RJ 45 Connecter	Engineering Thermoplastic	Any	Flammability rating: 94V-0; Contacts: Ph/Bz	UL 94	UL, CSA
PCB	Any	Any	Flammability 94v-0	ANSI/UL 94	UL, CSA
Power Adapter	Ubiquity Networks	UBI-POE-24-1	Listed, Input: AC 100-240V, 50/60 Hz, 0.55A Output: DC, 24V, 1A	ANZI/ UL 60950-1	UL, CSA, TUV

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

Supplementary information:

[1)] Provided evidence ensures the agreed level of compliance. See OD-CB2039.

1.5.1	TABLE: 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..... :

supplementary information

1.6.2	TABLE: Electrical data (in normal conditions)					P
U (V)	I (A)	Irated (A)	P (W)	Fuse #	Ifuse (A)	Condition/status
20.4V	0.127A	0.5	2.60W			Maximum Load/ Normal
24.0V	0.111A	0.5	2.63W			Maximum Load/ Normal
28.8V	0.121A	0.5	3.42W			Maximum Load/ Normal

Supplementary information:

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

2.1.1.5 c) 1)	TABLE: max. V, A, VA test	N/A

Voltage (rated) (V)	Current (rated) (A)	Voltage (max.) (V)	Current (max.) (A)	VA (max.) (VA)
supplementary information: Covered by a POE Listed power supply, product is rated less than 15 VA				

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	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: Covered by a POE Listed power supply , product is rated less than 15 VA	

EN 60950-1			
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	N/A

Location	RMS voltage (V)	Peak voltage (V)	Comments

supplementary information: Covered by a POE Listed power supply , product is rated less than 15 VA

2.10.3 and 2.10.4	TABLE: Clearance and creepage distance measurements	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: Covered by a Listed POE power adapter , product is rated less than 15 VA

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

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

4.3.8	TABLE: Batteries									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:										Verdict
- Chemical leaks										
- Explosion of the battery										
- Emission of flame or expulsion of molten metal										
- Electric strength tests of equipment after completion of tests										
Supplementary information:										

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

4.3.8	TABLE: Batteries	N/A
Battery category ..... :	(Lithium, NiMh, NiCad, Lithium Ion …)	
Manufacturer ..... :		
Type / model..... :		
Voltage ..... :		
Capacity ..... :	mAh	
Tested and Certified by (incl. Ref. No.)..... :		
Circuit protection diagram:		

MARKINGS AND INSTRUCTIONS (1.7.12, 1.7.15)	
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) .....:	20.4					—
	Ambient T_{min} (°C) .....:	21.7					—
	Ambient T_{max} (°C) .....:	22.9					—
Maximum measured temperature T of part/at::		T (°C)					Allowed T_{max} (°C)
RJ45 Connector		34.2	51.3				90
PCB near RJ45 connector		47.4	64.5				90
EUT: Enclosure – top		30.1	47.2				70
Ambient		22.9	40				70
Supplementary information: All temperatures have been normalized / corrected by adding +17.1 ºC to all readings, 40 – 22.9 = +17.1 º C							

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

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

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:					

5.1	TABLE: touch current measurement		N/A

Measured between:	Measured (mA)	Limit (mA)	Comments/conditions
supplementary information:			

5.2	TABLE: Electric strength tests, impulse tests and voltage surge tests			N/A
Test voltage applied between:		Voltage shape (AC, DC, impulse, surge)	Test voltage (V)	Breakdown Yes / No
Functional:				
Basic/supplementary:				
Reinforced:				
Supplementary information: Product is powered by a Listed LPS of POE adapter with SELV output, and rated less than 15 VA				

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

5.3	TABLE: Fault condition tests						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	

C.2	TABLE: transformers						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:							

C.2	TABLE: transformers	N/A
Transformer		

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

List of test equipment used:

Company Name	Ubiquit Network
Project #	3GStation
Model # of Unit	83058
Project Engineer	Masoom Ramzi
Date	05/09/2011

Asset Number:	Equipment Type:	Manufacturer Name:	Model Number:	Calibration Date:	Calibration Due Date:
3U1047	DC Power Supply	Xantrex	XDC80-75	FVBU	FVBU
3U1050	Hipot Tester	Biddle	230425	03/25/11	03/25/12
3U1055	Benchtop Temperature Meter	Omega	MDSSi8	07/13/10	07/13/11
3U1063	Digital Power Analyzer	Valhalla Scientific	2101	10/19/10	10/19/11
3U1061	Test Floor	MET (in-house)	N/A	08/28/10	08/28/11
3U1076	Therm/Clock/Humidity Monitor (use time funct.)	Control Company	06-662-4	12/09/09	12/09/11
3U1094	Ambient Monitor/Recorder	Omega	OM-CP-PRHTEMP2000	03/08/11	03/08/12

*NCR = No Calibration Required.

*FVBU = Functional Verification Before Use. Instrument is used with calibrated instruments.

Enclosure 1: Other Country National And Group Differences

IEC60950_1B - ATTACHMENT EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES			
Clause	Requirement + Test	Result - Remark	Verdict

ATTACHMENT TO TEST REPORT IEC 60950-1
EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES

Information technology equipment – Safety –

PART 1: GENERAL REQUIREMENTS

Differences according to .....:	EN 60950-1:2006/A11:2009/A1:2010
Attachment Form No.....:	EU_GD_IEC60950_1B
Attachment Originator.....:	SGS Fimko Ltd
Master Attachment.....:	Date (2010-04)

EN 60950-1:2006/A11:2009/A1:2010 – CENELEC COMMON MODIFICATIONS

IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN)			
Clause	Requirement + Test	Result - Remark	Verdict
Contents	Add the following annexes: Annex ZA (normative) Normative references to international publications with their corresponding European publications Annex ZB (normative) Special national conditions		P
General	Delete all the "country" notes in the reference document (IEC 60950-1:2005) according to the following list: 1.4.8 Note 2; 1.5.1 Note 2 & 3; 1.5.7.1 Note 1.5.8 Note 2; 1.5.9.4 Note; 1.7.2.1 Note 4, 5 & 6 2.2.3 Note; 2.2.4 Note; 2.3.2 Note 2.3.2.1 Note 2; 2.3.4 Note 2; 2.6.3.3 Note 2 & 3 2.7.1 Note; 2.10.3.2 Note 2; 2.10.5.13 Note 3 3.2.1.1 Note; 3.2.4 Note 3.; 2.5.1 Note 2 4.3.6 Note 1 & 2; 4.7 Note 4; 4.7.2.2 Note 4.7.3.1Note 2; 5.1.7.1 Note 3 & 4; 5.3.7 Note 1 6 Note 2 & 5; 6.1.2.1 Note 2; 6.1.2.2 Note 6.2.2 Note; 6.2.2.1 Note 2; 6.2.2.2 Note 7.1 Note 3; 7.2 Note; 7.3 Note 1 & 2 G.2.1 Note 2; Annex H Note 2		P
General (A1:2010)	Delete all the "country" notes in the reference document (IEC 60950-1:2005/A1:2010) according to the following list: 1.5.7.1 Note; 6.1.2.1 Note 2 6.2.2.1 Note 2; EE.3 Note		P

Enclosure 1: Other Country National And Group Differences

IEC60950_1B - ATTACHMENT EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES			
Clause	Requirement + Test	Result - Remark	Verdict
IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN)			
Clause	Requirement + Test	Result - Remark	Verdict
1.3.Z1	Add the following subclause: 1.3.Z1 Exposure to excessive sound pressure The apparatus shall be so designed and constructed as to present no danger when used for its intended purpose, either in normal operating conditions or under fault conditions, particularly providing protection against exposure to excessive sound pressures from headphones or earphones. NOTE Z1 A new method of measurement is described in EN 50332-1, Sound system equipment: Headphones and earphones associated with portable audio equipment - Maximum sound pressure level measurement methodology and limit considerations - Part 1: General method for "one package equipment", and in EN 50332-2, Sound system equipment: Headphones and earphones associated with portable audio equipment - Maximum sound pressure level measurement methodology and limit considerations - Part 2: Guidelines to associate sets with headphones coming from different manufacturers.	Product not intended to produce sound	N/A
1.5.1	Add the following NOTE: NOTE Z1 The use of certain substances in electrical and electronic equipment is restricted within the EU: see Directive 2002/95/EC		P
1.7.2.1 (A1:2010)	In addition, for a PORTABLE SOUND SYSTEM, the instructions shall include a warning that excessive sound pressure from earphones and headphones can cause hearing loss.	No sound system	N/A
2.7.1	Replace the subclause as follows: Basic requirements To protect against excessive current, short-circuits and earth faults in PRIMARY CIRCUITS, protective devices shall be included either as integral parts of the equipment or as parts of the building installation, subject to the following, a), b) and c): a) except as detailed in b) and c), protective devices necessary to comply with the requirements of 5.3 shall be included as parts of the equipment; b) for components in series with the mains input to the equipment such as the supply cord, appliance coupler, r.f.i. filter and switch, short-circuit and earth fault protection may be provided by protective devices in the building installation;		P

Enclosure 1: Other Country National And Group Differences

IEC60950_1B - ATTACHMENT EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES			
Clause	Requirement + Test	Result - Remark	Verdict
IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN)			
Clause	Requirement + Test	Result - Remark	Verdict
	c) it is permitted for PLUGGABLE EQUIPMENT TYPE B or PERMANENTLY CONNECTED EQUIPMENT, to rely on dedicated overcurrent and short-circuit protection in the building installation, provided that the means of protection, e.g. fuses or circuit breakers, is fully specified in the installation instructions. If reliance is placed on protection in the building installation, the installation instructions shall so state, except that for PLUGGABLE EQUIPMENT TYPE A the building installation shall be regarded as providing protection in accordance with the rating of the wall socket outlet.	Not such equipment	N/A
2.7.2	This subclause has been declared 'void'.		P
3.2.3	Delete the NOTE in Table 3A, and delete also in this table the conduit sizes in parentheses.	Deleted	P
3.2.5.1	Replace "60245 IEC 53" by "H05 RR-F"; "60227 IEC 52" by "H03 VV-F or H03 VVH2-F"; "60227 IEC 53" by "H05 VV-F or H05 VVH2-F2". In Table 3B, replace the first four lines by the following: Up to and including 6 | 0,75 [a)] | Over 6 up to and including 10| (0,75) [b)] 1,0 | Over 10 up to and including 16| (1,0) [c)] 1,5 | In the conditions applicable to Table 3B delete the words "in some countries" in condition [a)]. In NOTE 1, applicable to Table 3B, delete the second sentence.	Replaced	P
3.3.4	In Table 3D, delete the fourth line: conductor sizes for 10 to 13 A, and replace with the following: Over 10 up to and including 16 | 1,5 to 2,5 | 1,5 to 4 | Delete the fifth line: conductor sizes for 13 to 16 A		N/A
4.3.13.6 (A1:2010)	Replace the existing NOTE by the following: NOTE Z1 Attention is drawn to: 1999/519/EC: Council Recommendation on the limitation of exposure of the general public to electromagnetic fields 0 Hz to 300 GHz, and 2006/25/EC: Directive on the minimum health and safety requirements regarding the exposure of workers to risks arising from physical agents (artificial optical radiation).	No such agents used	N/A

Enclosure 1: Other Country National And Group Differences

IEC60950_1B - ATTACHMENT EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES			
Clause	Requirement + Test	Result - Remark	Verdict
IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN)			
Clause	Requirement + Test	Result - Remark	Verdict
	Standards taking into account mentioned Recommendation and Directive which demonstrate compliance with the applicable EU Directive are indicated in the OJEC.		N/A
Annex H	Replace the last paragraph of this annex by: At any point 10 cm from the surface of the OPERATOR ACCESS AREA, the dose rate shall not exceed 1 µSv/h (0,1 mR/h) (see NOTE). Account is taken of the background level. Replace the notes as follows: NOTE These values appear in Directive 96/29/Euratom. Delete NOTE 2.		N/A
Bibliography	Additional EN standards.		—
ZA	**NORMATIVE REFERENCES TO INTERNATIONAL PUBLICATIONS WITH THEIR CORRESPONDING EUROPEAN PUBLICATIONS**		—
ZB ANNEX (normative) **SPECIAL NATIONAL CONDITIONS (EN)**			
Clause	Requirement + Test	Result - Remark	Verdict
1.2.4.1	In **Denmark**, certain types of Class I appliances (see 3.2.1.1) may be provided with a plug not establishing earthing conditions when inserted into Danish socket-outlets.	Not Class I equipment	N/A
1.2.13.14	In **Norway** and **Sweden**, for requirements see 1.7.2.1 and 7.3 of this annex.		N/A
1.5.7.1	In **Finland, Norway** and **Sweden**, resistors bridging BASIC INSULATION in CLASS I PLUGGABLE EQUIPMENT TYPE A must comply with the requirements in 1.5.7.1. In addition when a single resistor is used, the resistor must withstand the resistor test in 1.5.7.2.	Not Class I equipment	N/A
1.5.8	In **Norway**, due to the IT power system used (see annex V, Figure V.7), capacitors are required to be rated for the applicable line-to-line voltage (230 V).	EUT powered up by external Listed Power Adapter with SELV outputs.	N/A
1.5.9.4	In **Finland**, **Norway** and **Sweden**, the third dashed sentence is applicable only to equipment as defined in 6.1.2.2 of this annex.		N/A

Enclosure 1: Other Country National And Group Differences

IEC60950_1B - ATTACHMENT EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES			
Clause	Requirement + Test	Result - Remark	Verdict
ZB ANNEX (normative) **SPECIAL NATIONAL CONDITIONS (EN)**			
Clause	Requirement + Test	Result - Remark	Verdict
1.7.2.1	In **Finland**, **Norway** and **Sweden**, CLASS I PLUGGABLE EQUIPMENT TYPE A intended for connection to other equipment or a network shall, if safety relies on connection to protective earth or if surge suppressors are connected between the network terminals and accessible parts, have a marking stating that the equipment must be connected to an earthed mains socket-outlet. The marking text in the applicable countries shall be as follows: In Finland: "Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan" In Norway: “Apparatet må tilkoples jordet stikkontakt” In Sweden: “Apparaten skall anslutas till jordat uttag” In **Norway** and **Sweden**, the screen of the cable distribution system is normally not earthed at the entrance of the building and there is normally no equipotential bonding system within the building. Therefore the protective earthing of the building installation need to be isolated from the screen of a cable distribution system. It is however accepted to provide the insulation external to the equipment by an adapter or an interconnection cable with galvanic isolator, which may be provided by e.g. a retailer. The user manual shall then have the following or similar information in Norwegian and Swedish language respectively, depending on in what country the equipment is intended to be used in: “Equipment connected to the protective earthing of the building installation through the mains connection or through other equipment with a connection to protective earthing – and to a cable distribution system using coaxial cable, may in some circumstances create a fire hazard. Connection to a cable distribution system has therefore to be provided through a device providing electrical isolation below a certain frequency range (galvanic isolator, see EN 60728-11).”	Not class I equipment	N/A

Enclosure 1: Other Country National And Group Differences

IEC60950_1B - ATTACHMENT EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES			
Clause	Requirement + Test	Result - Remark	Verdict
ZB ANNEX (normative) **SPECIAL NATIONAL CONDITIONS (EN)**			
Clause	Requirement + Test	Result - Remark	Verdict
	NOTE In Norway, due to regulation for installations of cable distribution systems, and in Sweden, a galvanic isolator shall provide electrical insulation below 5 MHz. The insulation shall withstand a dielectric strength of 1,5 kV r.m.s., 50 Hz or 60 Hz, for 1 min. Translation to Norwegian (the Swedish text will also be accepted in Norway): "Utstyr som er koplet til beskyttelsesjord via nettplugg og/eller via annet jordtilkoplet utstyr – og er tilkoplet et kabel-TV nett, kan forårsake brannfare. For å unngå dette skal det ved tilkopling av utstyret til kabel-TV nettet installeres en galvanisk isolator mellom utstyret og kabel- TV nettet." Translation to Swedish: "Utrustning som är kopplad till skyddsjord via jordat vägguttag och/eller via annan utrustning och samtidigt är kopplad till kabel-TV nät kan i vissa fall medföra risk för brand. För att undvika detta skall vid anslutning av utrustningen till kabel-TV nät galvanisk isolator finnas mellan utrustningen och kabel-TV nätet."	No cable distribution system	N/A
1.7.5	In **Denmark**, socket-outlets for providing power to other equipment shall be in accordance with the Heavy Current Regulations, Section 107-2-D1, Standard Sheet DK 1-3a, DK 1-5a or DK 1-7a, when used on Class I equipment. For STATIONARY EQUIPMENT the socket-outlet shall be in accordance with Standard Sheet DK 1-1b or DK 1-5a. For **CLASS II EQUIPMENT** the socket outlet shall be in accordance with Standard Sheet DKA 1-4a.	No socket- outlet	N/A
2.2.4	In **Norway**, for requirements see 1.7.2.1, 6.1.2.1 and 6.1.2.2 of this annex.		P
2.3.2	In **Finland**, **Norway** and **Sweden** there are additional requirements for the insulation. See 6.1.2.1 and 6.1.2.2 of this annex.		P
2.3.4	In **Norway**, for requirements see 1.7.2.1, 6.1.2.1 and 6.1.2.2 of this annex.		P
2.6.3.3	In the **United Kingdom**, the current rating of the circuit shall be taken as 13 A, not 16 A.		N/A
2.7.1	In the **United Kingdom**, to protect against excessive currents and short-circuits in the PRIMARY CIRCUIT of DIRECT PLUG-IN EQUIPMENT, tests according to 5.3 shall be conducted, using an external protective device rated 30 A or 32 A. If these tests fail, suitable protective devices shall be included as integral parts of the DIRECT PLUG-IN EQUIPMENT, so that the requirements of 5.3 are met.	Not direct plug-in equipment	N/A

Enclosure 1: Other Country National And Group Differences

IEC60950_1B - ATTACHMENT EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES			
Clause	Requirement + Test	Result - Remark	Verdict
ZB ANNEX (normative) **SPECIAL NATIONAL CONDITIONS (EN)**			
Clause	Requirement + Test	Result - Remark	Verdict
2.10.5.13	In **Finland**, **Norway** and **Sweden**, there are additional requirements for the insulation, see 6.1.2.1 and 6.1.2.2 of this annex.	Not a Class I equipment	N/A
3.2.1.1	In **Switzerland**, supply cords of equipment having a RATED CURRENT not exceeding 10 A shall be provided with a plug complying with SEV 1011 or IEC 60884-1 and one of the following dimension sheets: SEV 6532-2.1991 Plug Type 15 3P+N+PE 250/400 V, 10 A SEV 6533-2.1991 Plug Type 11 L+N 250 V, 10 A SEV 6534-2.1991 Plug Type 12 L+N+PE 250 V, 10 A In general, EN 60309 applies for plugs for currents exceeding 10 A. However, a 16 A plug and socket-outlet system is being introduced in Switzerland, the plugs of which are according to the following dimension sheets, published in February 1998: SEV 5932-2.1998: Plug Type 25 , 3L+N+PE 230/400 V, 16 A SEV 5933-2.1998:Plug Type 21, L+N, 250 V, 16A SEV 5934-2.1998: Plug Type 23, L+N+PE .250 V, 16 A	Cords not part of the investigation	N/A
3.2.1.1	In **Denmark**, supply cords of single-phase equipment having a rated current not exceeding13 A shall be provided with a plug according to the Heavy Current Regulations, Section 107-2-D1. CLASS I EQUIPMENT provided with socket-outlets with earth contacts or which are intended to be used in locations where protection against indirect contact is required according to the wiring rules shall be provided with a plug in accordance with standard sheet DK 2-1a or DK 2-5a. If poly-phase equipment and single-phase equipment having a RATED CURRENT exceeding 13 A is provided with a supply cord with a plug, this plug shall be in accordance with the Heavy Current Regulations, Section 107-2-D1 or EN 60309-2.	Cords not part of the investigation	N/A

Enclosure 1: Other Country National And Group Differences

IEC60950_1B - ATTACHMENT EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES			
Clause	Requirement + Test	Result - Remark	Verdict
ZB ANNEX (normative) **SPECIAL NATIONAL CONDITIONS (EN)**			
Clause	Requirement + Test	Result - Remark	Verdict
3.2.1.1	In **Spain**, supply cords of single-phase equipment having a rated current not exceeding 10 A shall be provided with a plug according to UNE 20315:1994. Supply cords of single-phase equipment having a rated current not exceeding 2,5 A shall be provided with a plug according to UNE-EN 50075:1993. CLASS I EQUIPMENT provided with socket-outlets with earth contacts or which are intended to be used in locations where protection against indirect contact is required according to the wiring rules, shall be provided with a plug in accordance with standard UNE 20315:1994. If poly-phase equipment is provided with a supply cord with a plug, this plug shall be in accordance with UNE-EN 60309-2.	Cords not part of the investigation	N/A
3.2.1.1	In the **United Kingdom**, apparatus which is fitted with a flexible cable or cord and is designed to be connected to a mains socket conforming to BS 1363 by means of that flexible cable or cord and plug, shall be fitted with a 'standard plug' in accordance with Statutory Instrument 1768:1994 - The Plugs and Sockets etc. (Safety) Regulations 1994, unless exempted by those regulations. NOTE 'Standard plug' is defined in SI 1768:1994 and essentially means an approved plug conforming to BS 1363 or an approved conversion plug.	Cords not part of the investigation	N/A
3.2.1.1	In **Ireland**, apparatus which is fitted with a flexible cable or cord and is designed to be connected to a mains socket conforming to I.S. 411 by means of that flexible cable or cord and plug, shall be fitted with a 13 A plug in accordance with Statutory Instrument 525:1997 - National Standards Authority of Ireland (section 28) (13 A Plugs and Conversion Adaptors for Domestic Use) Regulations 1997.	Cords not part of the investigation	N/A
3.2.4	In **Switzerland**, for requirements see 3.2.1.1 of this annex.		N/A
3.2.5.1	In the **United Kingdom**, a power supply cord with conductor of 1,25 mm2 is allowed for equipment with a rated current over 10 A and up to and including 13 A.	Cords not part of the investigation	N/A

Enclosure 1: Other Country National And Group Differences

IEC60950_1B - ATTACHMENT EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES			
Clause	Requirement + Test	Result - Remark	Verdict
ZB ANNEX (normative) **SPECIAL NATIONAL CONDITIONS (EN)**			
Clause	Requirement + Test	Result - Remark	Verdict
3.3.4	In the **United Kingdom**, the range of conductor sizes of flexible cords to be accepted by terminals for equipment with a RATED CURRENT of over 10 A up to and including 13 A is: • 1,25 mm^2 to 1,5 mm^2 nominal cross-sectional area.	Cords not part of the investigation	N/A
4.3.6	In the **United Kingdom**, the torque test is performed using a socket outlet complying with BS 1363 part 1:1995, including Amendment 1:1997 and Amendment 2:2003 and the plug part of DIRECT PLUG-IN EQUIPMENT shall be assessed to BS 1363: Part 1, 12.1, 12.2, 12.3, 12.9, 12.11, 12.12, 12.13, 12.16 and 12.17, except that the test of 12.17 is performed at not less than 125 °C. Where the metal earth pin is replaced by an Insulated Shutter Opening Device (ISOD), the requirements of clauses 22.2 and 23 also apply.	Not direct plug-in equipment	N/A
4.3.6	In **Ireland**, DIRECT PLUG-IN EQUIPMENT is known as plug similar devices. Such devices shall comply with Statutory Instrument 526:1997 - National Standards Authority of Ireland (Section 28) (Electrical plugs, plug similar devices and sockets for domestic use) Regulations, 1997.	Not direct plug-in equipment	N/A
5.1.7.1	In **Finland**, **Norway** and **Sweden** TOUCH CURRENT measurement results exceeding 3,5 mA r.m.s. are permitted only for the following equipment: • STATIONARY PLUGGABLE EQUIPMENT TYPE A that is intended to be used in a RESTRICTED ACCESS LOCATION where equipotential bonding has been applied, for example, in a telecommunication centre; and has provision for a permanently connected PROTECTIVE EARTHING CONDUCTOR; and is provided with instructions for the installation of that conductor by a SERVICE PERSON; • STATIONARY PLUGGABLE EQUIPMENT TYPE B; • STATIONARY PERMANENTLY CONNECTED EQUIPMENT.	Covered by external LPS POE adaptor	N/A

Enclosure 1: Other Country National And Group Differences

IEC60950_1B - ATTACHMENT EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES			
Clause	Requirement + Test	Result - Remark	Verdict
ZB ANNEX (normative) **SPECIAL NATIONAL CONDITIONS (EN)**			
Clause	Requirement + Test	Result - Remark	Verdict
6.1.2.1 (A1:2010)	In **Finland**, **Norway** and **Sweden**, add the following text between the first and second paragraph of the compliance clause: If this insulation is solid, including insulation forming part of a component, it shall at least consist of either - two layers of thin sheet material, each of which shall pass the electric strength test below, or - one layer having a distance through insulation of at least 0,4 mm, which shall pass the electric strength test below. Alternatively for components, there is no distance through insulation requirements for the insulation consisting of an insulating compound completely filling the casing, so that CLEARANCES and CREEPAGE DISTANCES do not exist, if the component passes the electric strength test in accordance with the compliance clause below and in addition - passes the tests and inspection criteria of 2.10.11 with an electric strength test of 1,5 kV multiplied by 1,6 (the electric strength test of 2.10.10 shall be performed using 1,5 kV), and - is subject to ROUTINE TESTING for electric strength during manufacturing, using a test voltage of 1,5 kV.		P

Enclosure 1: Other Country National And Group Differences

IEC60950_1B - ATTACHMENT EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES			
Clause	Requirement + Test	Result - Remark	Verdict
ZB ANNEX (normative) **SPECIAL NATIONAL CONDITIONS (EN)**			
Clause	Requirement + Test	Result - Remark	Verdict
	It is permitted to bridge this insulation with an optocoupler complying with 2.10.5.4 b). It is permitted to bridge this insulation with a capacitor complying with EN 60384-14:2005, subclass Y2. A capacitor classified Y3 according to EN 60384-14:2005, may bridge this insulation under the following conditions: - the insulation requirements are satisfied by having a capacitor classified Y3 as defined by EN 60384-14, which in addition to the Y3 testing, is tested with an impulse test of 2,5 kV defined in EN 60950-1:2006, 6.2.2.1; - the additional testing shall be performed on all the test specimens as described in EN 60384-14; - the impulse test of 2,5 kV is to be performed before the endurance test in EN 60384-14, in the sequence of tests as described in EN 60384-14.		N/A
6.1.2.2	In **Finland**, **Norway** and **Sweden**, the exclusions are applicable for PERMANENTLY CONNECTED EQUIPMENT, PLUGGABLE EQUIPMENT TYPE B and equipment intended to be used in a RESTRICTED ACCESS LOCATION where equipotential bonding has been applied, e.g. in a telecommunication centre, and which has provision for a permanently connected PROTECTIVE EARTHING CONDUCTOR and is provided with instructions for the installation of that conductor by a SERVICE PERSON.	Not permanently connected equipment	N/A
7.2	In **Finland**, **Norway** and **Sweden**, for requirements see 6.1.2.1 and 6.1.2.2 of this annex. The term TELECOMMUNICATION NETWORK in 6.1.2 being replaced by the term CABLE DISTRIBUTION SYSTEM.	Not cable distribution system	N/A
7.3	In **Norway** and **Sweden**, for requirements see 1.2.13.14 and 1.7.2.1 of this annex.		N/A
7.3	In **Norway**, for installation conditions see EN 60728-11:2005.		N/A

Enclosure 1: Other Country National And Group Differences

ATTACHMENT TO TEST REPORT IEC 60950-1
FINLAND NATIONAL DIFFERENCES
Information technology equipment – Safety –
PART 1: GENERAL REQUIREMENTS

Differences according to ..... : EN 60950-1:2006/A11:2009/A1:2010

Attachment Form No..... : FI_ND_IEC60950_1B
Attachment Originator..... : SGS Fimko Ltd
Master Attachment..... : Date (2010-04)

	National Differences		
General	See also Group Differences (EN 60950-1:2006/A11/A1)		
1.5.7.1	In **Finland** resistors bridging BASIC INSULATION in CLASS I PLUGGABLE EQUIPMENT TYPE A must comply with the requirements in 1.5.7.1. In addition when a single resistor is used, the resistor must withstand the resistor test in 1.5.7.2.		N/A
1.5.9.4	In **Finland,** the third dashed sentence is applicable only to equipment as defined in 6.1.2.2 of this annex.	Not permanently connected equipment	N/A
1.7.2.1	In **Finland**, CLASS I PLUGGABLE EQUIPMENT TYPE A intended for connection to other equipment or a network shall, if safety relies on connection to protective earth or if surge suppressors are connected between the network terminals and accessible parts, have a marking stating that the equipment must be connected to an earthed mains socket-outlet. The marking text in Finland shall be as follows: "Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan"	Not a class I equipment	N/A
2.3.2	In **Finland,** there are additional requirements for the insulation. See 6.1.2.1 and 6.1.2.2 of this annex.	Not permanently connected equipment	N/A
2.10.5.13	In **Finland,** there are additional requirements for the insulation, see 6.1.2.1 and 6.1.2.2 of this annex.	Not permanently connected equipment	N/A

Enclosure 1: Other Country National And Group Differences

5.1.7.1	In **Finland,** TOUCH CURRENT measurement results exceeding 3,5 mA r.m.s. are permitted only for the following equipment: • STATIONARY PLUGGABLE EQUIPMENT TYPE A that - is intended to be used in a RESTRICTED ACCESS LOCATION where equipotential bonding has been applied, for example, in a telecommunication centre; and - has provision for a permanently connected PROTECTIVE EARTHING CONDUCTOR; and - is provided with instructions for the installation of that conductor by a SERVICE PERSON; • STATIONARY PLUGGABLE EQUIPMENT TYPE B; • STATIONARY PERMANENTLY CONNECTED EQUIPMENT.	Covered by external LPS POE adaptor	N/A
6.1.2.1 (A1:2010)	In **Finland,** add the following text between the first and second paragraph of the compliance clause: If this insulation is solid, including insulation forming part of a component, it shall at least consist of either - two layers of thin sheet material, each of which shall pass the electric strength test below, or - one layer having a distance through insulation of at least 0,4 mm, which shall pass the electric strength test below. Alternatively for components, there is no distance through insulation requirement for the insulation consisting of an insulating compound completely filling the casing, so that CLEARANCES and CREEPAGE DISTANCES do not exist, if the component passes the electric strength test in accordance with the compliance clause below and in addition - passes the tests and inspection criteria of 2.10.11 with an electric strength test of 1,5 kV multiplied by 1,6 (the electric strength test of 2.10.10 shall be performed using 1,5 kV), and - is subject to ROUTINE TESTING for electric strength during manufacturing, using a test voltage of 1,5 kV.		P

Enclosure 1: Other Country National And Group Differences

	It is permitted to bridge this insulation with an optocoupler complying with 2.10.5.4 b). It is permitted to bridge this insulation with a capacitor complying with EN 60384-14:2005, subclass Y2. A capacitor classified Y3 according to EN 60384-14:2005, may bridge this insulation under the following conditions: - the insulation requirements are satisfied by having a capacitor classified Y3 as defined by EN 60384-14:2005 which in addition to the Y3 testing, is tested with an impulse test of 2,5 kV defined in EN 60950-1:2006, 6.2.2.1; - the additional testing shall be performed on all the test specimens as described in EN 60384-14:2005; - the impulse test of 2,5 kV is to be performed before the endurance test in EN 60384-14:2005, in the sequence of tests as described in EN 60384-14:2005.		N/A
6.1.2.2	In **Finland,** the exclusions are applicable for PERMANENTLY CONNECTED EQUIPMENT, PLUGGABLE EQUIPMENT TYPE B and equipment intended to be used in a RESTRICTED ACCESS LOCATION where equipotential bonding has been applied, e.g. in a telecommunication centre, and which has provision for a permanently connected PROTECTIVE EARTHING CONDUCTOR and is provided with instructions for the installation of that conductor by a SERVICE PERSON.	Not permanently connected equipment	N/A
7.2	In **Finland,** for requirements see 6.1.2.1 and 6.1.2.2 of this annex. The term TELECOMMUNICATION NETWORK in 6.1.2 being replaced by the term CABLE DISTRIBUTION SYSTEM.	Not cable distribution system	N/A

Enclosure 1: Other Country National And Group Differences

GERMANY NATIONAL DIFFERENCES			
Clause	Requirement + Test	Result - Remark	Verdict
	In IEC 60950-1:2005/A1 **delete** all the "country" notes according to the following list: - 1.5.7.1: Note - 6.1.2.1: Note 2 - 6.2.2.1: Note 2 - EE.3: Note		P
	For special national conditions, see Annex ZB.		P
1.1.1	**Replace** the text of NOTE 3 by the following NOTE 3 The requirements of EN 60065 may also be used to meet safety requirements for multimedia equipment. See IEC Guide 112, *Guide on the safety of multimedia equipment.* For television sets EN 60065 applies.	Not a multimedia	N/A
1.2.3	**Add** the following definition: **1.2.3.Z1** **PORTABLE SOUND SYSTEM** small battery powered audio equipment: □ whose prime purpose is to listen to recorded or broadcasted sound; and □ that uses headphones or earphones that can be worn in or on or around the ears; and □ that allows the user to walk around NOTE Examples are mini-disk or CD players; MP3 audio players or similar equipment.	Not a portable sound system	N/A
1.7.2.1	**Delete** NOTE Z1. **Add** the following paragraph at the end of the subclause: In addition, for a **PORTABLE SOUND SYSTEM**, the instructions shall include a warning that excessive sound pressure from earphones and headphones can cause hearing loss.	Not a portable sound system	N/A
4.3.13.6	**Replace** the existing NOTE by the following: NOTE Z1 Attention is drawn to : 1999/519/EC: Council Recommendation on the limitation of exposure of the general public to electromagnetic fields 0 Hz to 300 GHz, and 2006/25/EC: Directive on the minimum health and safety requirements regarding the exposure of workers to risks arising from physical agents (artificial optical radiation). Standards taking into account mentioned Recommendation and Directive which demonstrate compliance with the applicable EU Directive are indicated in the OJEC.		N/A
Biblio-graphy	**Add** the following note for the standard indicated: IEC 60908 NOTE Harmonized as EN 60908.		N/A

Enclosure 1: Other Country National And Group Differences

GERMANY NATIONAL DIFFERENCES

Replace the entire Annex ZA by the following: P

Annex ZA
(normative)
Normative references to international publications with their corresponding European publications

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

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
		Insulating, sheathing and covering materials for low-voltage energy cables	EN 50363	Series
		Electrical test methods for low voltage energy cables	EN 50395	2005
		Non electrical test methods for low voltage energy cables	EN 50396	2005
IEC 60065 (mod)	2001	Audio, video and similar electronic apparatus – Safety requirements	EN 60065	2002
A1	2005		A1	2006
A2	-		+ A11 A2 + A12	2008 -
IEC 60068-2-78	-	Environmental testing Part 2-78: Tests – Test Cab: Damp heat, steady state	EN 60068-2-78	-
IEC 60073	-	Basic and safety principles for manmachine interface, marking and identification – Coding principles for indication devices and actuators	EN 60073	-
IEC 60083	-	Plugs and socket-outlets for domestic and similar general use standardized in member countries of IEC	-	-
IEC 60085	2004	Electrical insulation – Thermal classification	EN 60085	2004
IEC 60112	-	Method for determining the proof and comparative tracking indices of insulating materials	EN 60112	-
IEC 60227 (mod)	Series	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750V	HD 21 1)	Series
IEC 60245 (mod)		Series Rubber insulated cables of rated voltages up to and including 450/750V	HD 22 2)	Series

1) The HD 21 series is related to, but not directly equivalent with the IEC 60227 series. Also EN 50363, EN 50395 and EN 50386 are to be taken into account.
2) The HD 22 series is related to, but not directly equivalent with the IEC 60245 series. Also EN 50363, EN 50395 and EN 50386 are to be taken into account.

IEC 60309	Series	Plugs, socket-outlets and couplers for industrial purposes	EN 60309	Series
IEC 60317	Series	Specifications for particular types of winding wires	EN 60317	Series
IEC 60317-43	-	Part 43: Aromatic polyimide tape wrapped round copper wire, class 240	EN 60317-43	-
IEC 60320 (mod)	Series	Appliance couplers for household and similar general purposes	EN 60320	Series
IEC 60364-1 (mod)	2001	Electrical installations of buildings Part 1: Fundamental principles, assessment of general characteristics, definitions	HD 384.1 S2	2001
IEC 60384-14 A1	1993 1995	Fixed capacitors for use in electronic equipment	EN 60384-14	2005

Enclosure 1: Other Country National And Group Differences

GERMANY NATIONAL DIFFERENCES				
		Part 14: Sectional specification: Fixed capacitors for electromagnetic interference suppression and connection to the supply mains		
IEC 60417	Data-base	Graphical symbols for use on equipment	-	-
IEC 60664-1 + A1 + A2	1992 2000 2002	Insulation coordination for equipment within low-voltage systems Part 1: Principles, requirements and tests	EN 60664-1	2003
IEC 60695-2-11	-	Fire hazard testing Part 2-11: Glowing/hot-wire based test methods – Glow-wire flammability test method for end-products	EN 60695-2-11	-
IEC 60695-2-20	-	Part 2-20: Glowing/hot-wire based test methods – Hot-wire coil ignitability – Apparatus, test method and guidance	-	-
IEC 60695-10-2	-	Part 10-2: Guidance and test methods for the minimization of the effects of abnormal heat on electrotechnical products involved in fires – Method for testing products made from non-metallic materials for resistance to heat using the ball pressure test	EN 60695-10-2	-
IEC 60695-10-3		Fire hazard testing Part 10-3: Abnormal heat – Mould stress relief distortion test	EN 60695-10-03	-
		IEC 60695-11-3 - Part 11-3: Test flames – 500 W flames – Apparatus and conformational test methods	-	-
IEC 60695-11-4	-	Part 11-4: Test flames – 50 W flames – Apparatus and conformational test methods	-	-
IEC 60695-11-10 A1	-	Part 11-10: Test flames – 50 W horizontal and vertical flame test methods	EN 60695-11-10	A1
IEC 60695-11-20 A1	-	Part 11-20: Test flames – 500 W flame test methods	EN 60695-11-20 A1	- -
IEC 60730-1 (mod) A1	1999 2003	Automatic electrical controls for household and similar use - Part 1: General requirements	EN 60730-1 A1 + A12 + A13 + A14 + A15 + A16	2000 2004 2003 2004 2005 2007 2007
A2	2007		A2	2008
IEC 60747-5-5	2007	Semiconductor devices – Discrete devices Part 5-5: Optoelectronic devices – Photocouplers	EN 60747-5-5	-
IEC 60825-1	-	Safety of laser products Part 1: Equipment classification, requirements and user's guide	EN 60825-1	
IEC 60825-2	-	Part 2: Safety of optical fiber communication systems	EN 60825-2 A1	- -
IEC/TR 60825-9	-	Part 9: Compilation of maximum permissible exposure to incoherent optical radiation	-	-
IEC 60825-12	-	Part 12: Safety of free space optical communication systems used for transmission of information	EN 60825-12	-
IEC 60851-3	1996	Winding wires – Test methods	EN 60851-3	1996

Enclosure 1: Other Country National And Group Differences

GERMANY NATIONAL DIFFERENCES				
A1 IEC 60851-5 A1 A2	1997 1996 1997 2004	Part 3: Mechanical properties Part 5: Electrical properties	A1 EN 60851-5 A1 A2	1997 1996 1997 2004
IEC 60851-6	1996	Part 6: Thermal properties	EN 60851-6	1996
IEC 60885-1	1987	Electrical test methods for electric cables Part 1: Electrical tests for cables, cords and wires for voltages up to and including 450/750 V	-	-
IEC 60906-1	-	IEC System of plugs and socket-outlet for household and similar purposes Part 1: Plugs and socket-outlets 16 A 250 V a.c.	-	-
IEC 60906-2	-	Part 2: Plugs and socket-outlets 15 A 125 V a.c.	-	-
IEC 60947-1	2004	Low voltage switchgear and control gear Part 1: General rules	EN 60947-1	2004
IEC 60990	1999	Methods of measurement of touch current and protective conductor current	EN 60990	1999
IEC 61051-2	1991	Varistors for use in electronic equipment Part 2: Sectional specification for surge suppression varistors	-	-
IEC 61058-1 (mod)	2000	Switches for appliances Part 1: General requirements	EN 61058-1 3)	2002
IEC 62471 (mod)	-	Photobiological safety of lamps and lamp systems	EN 62471	-
ISO 178	-	Plastics - Determination of flexural properties	EN ISO 178	2003
ISO 179	Series	Plastics - Determination of Charpy impact strength	EN ISO 179	Series
ISO 180	-	Plastics - Determination of Izod impact strength	EN ISO 180	-
ISO 261	-	ISO general-purpose metric screw threads - General plan	-	-
ISO 262	-	ISO general-purpose metric screw threads - Selected sizes for screws, bolts and nuts	-	-
ISO 527	Series	Plastics - Determination of tensile properties	EN ISO 527	Series
ISO 3864	Series	Safety colors and safety signs	-	-
ISO 4892-1	-	Plastics - Methods of exposure to laboratory light sources Part 1: General guidance	EN ISO 4892-1	-
ISO 4892-2	-	Part 2: Xenon-arc sources	EN ISO 4892-2	-
ISO 4892-4	-	Part 4: Open-flame carbon-arc lamps	-	-
ISO 7000	Data-base	Graphical symbols for use on equipment - Index and synopsis	-	-
ISO 8256	-	Plastics - Determination of tensile-impact strength	EN ISO 8256	-
ISO 9772	-	Cellular plastics - Determination of horizontal burning characteristics of small specimens subjected to a small flame	-	-
ISO 9773	-	Plastics - Determination of burning behavior of thin flexible vertical specimens in contact with a small-flame ignition source	EN ISO 9773	-
ITU-T Recommendation K.44	-	Resistibility tests for telecommunication equipment exposed to overvoltages and overcurrents - Basic Recommendation	-	-

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GERMANY NATIONAL DIFFERENCES
3) EN 61058-1:2002 includes A1:2001 to IEC 61058-1:2000.

GERMANY NATIONAL DIFFERENCES			
Clause	Requirement + Test	Result - Remark	Verdict
Annex ZB (normative) **Special National Conditions** **Special national condition**: National characteristic or practice that cannot be changed even over a long period, e.g. climatic conditions, electrical earthing conditions. If it affects harmonization, it forms part of the European Standard or Harmonization Document. For the countries in which the relevant special national apply these provisions are normative, for other countries they are informative. **Add** the following special national condition:			
1.5.7.1	In **Finland, Norway** and **Sweden** No changes needed - Correction of SNC already Part of A11.		p
6.1.2.1	In **Finland, Norway** and **Sweden**, add the following text between the first and second paragraph of the compliance clause: If this insulation is solid, including insulation forming part of a component, it shall at least consist of either - two layers of thin sheet material, each of which shall pass the electric strength test below, or - one layer having a distance through insulation of at least 0,4 mm, which shall pass the electric strength test below. Alternatively for components, there is no distance through insulation requirement for the insulation consisting of an insulating compound completely filling the casing, so that CLEARANCES and CREEPAGE DISTANCES do not exist, if the component passes the electric strength test in accordance with the compliance clause below and in addition - passes the tests and inspection criteria of 2.10.11 with an electric strength test of 1,5 kV multiplied by 1,6 (the electric strength test of 2.10.10 shall be performed using 1,5 kV), and - is subject to ROUTINE TESTING for electric strength during manufacturing, using a test voltage of 1,5 kV. It is permitted to bridge this insulation with an optocoupler complying with 2.10.5.4 b). It is permitted to bridge this insulation with a capacitor complying with EN 60384-14:2005, subclass Y2. A capacitor classified Y3 according to EN	No solid insulation	N/A

Enclosure 1: Other Country National And Group Differences

GERMANY NATIONAL DIFFERENCES			
Clause	Requirement + Test	Result - Remark	Verdict
	60384-14:2005, may bridge this insulation under the following conditions: - the insulation requirements are satisfied by having a capacitor classified Y3 as defined by EN 60384-14, which in addition to the Y3 testing, is tested with an impulse test of 2,5 kV defined in EN 60950-1:2006, 6.2.2.1; - the additional testing shall be performed on all the test specimens as described in EN 60384-14; - the impulse test of 2,5 kV is to be performed before the endurance test in EN 60384-14, in the sequence of tests as described in EN 60384-14.		

KOREA NATIONAL DIFFERENCES			
Clause	Requirement + Test	Result - Remark	Verdict
1.5.101	Plugs for the connection of the apparatus to the supply mains shall comply with the Korean requirement (KSC 8305).		N/A
8 : EMC	The apparatus shall comply with the relevant CISPR standards		N/A

Enclosure 1: Other Country National And Group Differences

UNITED KINGDOM NATIONAL DIFFERENCES			
Clause	Requirement + Test	Result - Remark	Verdict
2.6.3.3	In the **United Kingdom**, the current rating of the circuit shall be taken as 13 A, not 16 A.		P
2.7.1	In the **United Kingdom**, to protect against excessive currents and short-circuits in the PRIMARY CIRCUIT of DIRECT PLUG-IN EQUIPMENT, tests according to 5.3 shall be conducted, using an external protective device rated 30 A or 32 A. If these tests fail, suitable protective devices shall be included as integral parts of the DIRECT PLUG-IN EQUIPMENT, so that the requirements of 5.3 are met.	Not a direct plug-in equipment	N/A
3.2.1.1	In the **United Kingdom**, apparatus which is fitted with a flexible cable or cord and is designed to be connected to a mains socket conforming to BS 1363 by means of that flexible cable or cord and plug, shall be fitted with a 'standard plug' in accordance with Statutory Instrument 1768:1994 - The Plugs and Sockets etc. (Safety) Regulations 1994, unless exempted by those regulations. NOTE 'Standard plug' is defined in SI 1768:1994 and essentially means an approved plug conforming to BS 1363 or an approved conversion plug.		N/A
3.2.5.1	In the **United Kingdom**, a power supply cord with conductor of 1,25 mm^2 is allowed for equipment with a rated current over 10 A and up to and including 13 A.	Power supply cord not part of the evaluation. Recommended in the manual	N/A
3.3.4	In the **United Kingdom**, the range of conductor sizes of flexible cords to be accepted by terminals for equipment with a RATED CURRENT of over 10 A up to and including 13 A is: • 1,25 mm^2 to 1,5 mm^2 nominal cross-sectional area.	Power supply cord not part of the evaluation. Recommended in the manual	N/A
4.3.6	In the **United Kingdom**, the torque test is performed using a socket outlet complying with BS 1363 part 1:1995, including Amendment 1: 1997 and Amendment 2:2003 and the plug part of DIRECT PLUG-IN EQUIPMENT shall be assessed to BS 1363: Part 1, 12.1, 12.2, 12.3, 12.9, 12.11, 12.12, 12.13, 12.16 and 12.17, except that the test of 12.17 is performed at not less than 125 °C. Where the metal earth pin is	Power supply cord not part of the evaluation. Recommended in the manual. No non-detachable power supply cord.	N/A

Enclosure 1: Other Country National And Group Differences

UNITED KINGDOM NATIONAL DIFFERENCES			
Clause	Requirement + Test	Result - Remark	Verdict
	replaced by an Insulated Shutter Opening Device (ISOD), the requirements of clauses 22.2 and 23 also apply.		

Enclosure 1: Other Country National And Group Differences

Canada and the United States of America have adopted a single, bi-national standard, CAN/CSA C22.2 No. 60950-1/UL60950-1, Second Edition, which is based on IEC 60950-1, Second Edition. This bi-national standard should be consulted for further details on the national conditions and differences summarized below. Amendment 1 Differenceces are not published at this time.

SPECIAL NATIONAL CONDITIONS

The following is a summary of the key national differences based on national regulatory requirements, such as the Canadian Electrical Code (CEC) Part and the Canadian Building Code, which are referenced in legislation and which form the basis for the rules and practices followed in electrical and building installations.

CANADIAN AND UNITED STATED DIFFERENCES			
Clause	Requirement + Test	Result - Remark	Verdict
Sub-Clause	**National Condition**		
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.	considered	P
1.4.14	For Pluggable Equipment Type A, the protection in the installation is assumed to be 20A.	Covered by POE Listed power adapter	N/A
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. 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.	Not port of the evaluation	N/A
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. Canada only: 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."	Not an AC system	N/A
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.	No class II outputs	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.	Not operator accessible	N/A
2.7.1	Suitable NEC/CEC branch circuit protection rated at the		N/A

Enclosure 1: Other Country National And Group Differences

CANADIAN AND UNITED STATED DIFFERENCES			
Clause	Requirement + Test	Result - Remark	Verdict
Sub-Clause	**National Condition**		
	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.		
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.	considered	P

Enclosure 1: Other Country National And Group Differences

CANADIAN AND UNITED STATED DIFFERENCES			
Clause	Requirement + Test	Result - Remark	Verdict
Sub-Clause	**National Condition**		
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.	Power supply cord is not part of the evaluation	N/A
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.	EUT powered up by a POE listed power supply	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.	Not permanently connected	N/A
3.2.5	Power supply cords are required to be no longer than 4.5 m in length. US only: and minimum length shall be 1.5 m. Flexible power supply cords are required to be compatible with Tables 11 and 12 of the CEC and Article 400 of the NEC.	Not part of the evaluation	N/A
3.2.9	Permanently connected equipment is required to have a suitable wiring compartment and wire bending space.	Not a permanently connected equipment	P
3.3	Canada only: 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).	Not used	N/A
3.3.4	Terminals for permanent wiring, including protective earthing terminals, are required to be suitable for Canadian/US wire gauge sizes, rated 125 percent of the equipment rating, and be specially marked when specified (1.7.7).	Not a permanently connected equipment	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).	No motor controlled device	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.	No such device	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
4.3.12	The maximum quantity of flammable liquid stored in equipment is required to comply with NFPA 30.	No flammable liquids used	N/A
4.3.13.5	Equipment with lasers is required to meet the Canadian Radiation Emitting Devices Act, REDR C1370 and Code of Federal Regulations 21 CFR 1040, as applicable.	Not such a device	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	Device not intended for computer room	N/A

Enclosure 1: Other Country National And Group Differences

CANADIAN AND UNITED STATED DIFFERENCES			
Clause	Requirement + Test	Result - Remark	Verdict
Sub-Clause	**National Condition**		
	agent extinguishing system with an extended discharge.		
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.	Not such equipment	N/A
Annex H	Equipment that produces ionizing radiation is required to comply with the Canadian Radiation Emitting Devices Act, REDR C1370 and Code of Federal Regulations, 21 CFR 1020, as applicable.	No radiations produced	N/A

OTHER DIFFERENCES

The following key national differences are based on requirements other than national regulatory requirements.

CANADIAN AND UNITED STATED DIFFERENCES			
Clause	Requirement + Test	Result - Remark	Verdict
Sub-Clause	**National Difference**		
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 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.		N/A
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.	No connection to DC Mains Supply	N/A
2.3.1	For TNV-2 and TNV-3 circuits with other than ringing signals and with voltages exceeding 42.4 Vpeak 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	No TNV circuitry	N/A

Enclosure 1: Other Country National And Group Differences

CANADIAN AND UNITED STATED DIFFERENCES			
Clause	Requirement + Test	Result - Remark	Verdict
Sub-Clause	**National Difference**		
	30 mA d.c. under normal operating conditions.		
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.	No TNV circuitry	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.	No protective bonding conductors	N/A
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.	No CRTs	N/A
4.2.11	For equipment intended for mounting on racks and provided with slide/rails allowing the equipment to slide away from the rack for installation, service and maintenance, additional construction, performance and marking requirements are applicable to determine the adequacy of the slide/rails.	Not rack mounting equipment	N/A
4.3.2	Equipment with handles is required to comply with special loading tests.	No handles required.	N/A
5.1.8.3	Equipment intended to receive telecommunication ringing signals is required to comply with a special touch current measurement tests.	No TNV circuitry	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.		N/A
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.	No TNV circuitry	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.	No TNV circuitry	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.	No TNV circuitry	N/A
Annex NAF	Document (paper) shredders likely to be used in a home or home office (Pluggable Equipment Type A plug configuration) are required to comply with additional requirements, including markings/instructions, protection against inadvertent reactivation of a safety interlock, disconnection from the mains supply (via provision of an isolating switch), and protection against operator access (accessibility determined via new accessibility probe & probe/wedge).	Not such equipment	N/A

Enclosure 2: Photographs (Figures)

FIGURES

Figure 1 Shows external view of the 3GStaion

Enclosure 2: Photographs (Figures)

FIGURES (Continued)

Figure 2 Shows internal view of the 3GStaion