TÜV
PRODUCT SERVICE

Attachment No. 1

National and Group Differences for IEC 60950-1 1st Ed. as per CB Bulletin No. 107A (2004)

Countries Included: See overview on following page

Attachment contains

Cover page:	1 page
National and Group Differences:	32 pages
Total:	33 pages

Explanation for Abbreviations:

Possible Verdicts: **P** = Pass, **F**= Fail, **N** = Not Applicable

Remarks:

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

National & Group Differences per CB Bulletin 107A OC (2001):
IEC 60950-1 1st Edition (2001) Information technology equipment
including electrical business equipment

COUNTRY	GROUP DIFFER.	NAT'L DIFFER.	NAT'L STANDARD	TESTED	PAGE
AR Argentina	–	–	–	--	--
AT Austria	YES	–	EN 60950-1:2001	--	--
AU Australia		Yes	AS 60950.1-2003	YES	3
BE Belgium	YES	–	EN 60950-1:2001	--	--
BR Brazil	–	–	–	--	--
CA Canada	–	YES	CAN/CSA C22.2 NO. 60950-1/UL60950-1	YES	10
CH Switzerland	YES	YES	–	--	--
CN China	–	–	–	--	--
CZ Czech Republic	–	–	–	--	--
DE Germany	YES	YES	EN 60950-1:2001	YES	15
DK Denmark	YES	YES	EN 60950-1:2001	YES	17
ES Spain	–	–	–	--	--
FI Finland	YES	YES	EN 60950-1:2001	YES	18
FR France	YES	–		--	--
GB United Kingdom	YES	YES	BS EN 60950-1:2001	YES	20
GR Greece	YES		EN 60950-1:2001	--	--
HU Hungary	–	–	–	--	--
IE Ireland	–	–	–	--	--
IL Israel	–	–	–	--	--
IN India	--	--	IS 13252:2003	--	--
IT Italy	–	–	–	--	--
JP Japan	–	–	–	--	--
KR Korea	–	YES	K60950	YES	21
MY Malaysia	--	--	--	--	--
NL The Netherlands	YES	–	–	--	--
NO Norway	YES	YES	EN 60950-1:2001	YES	22
PL Poland	–	–	–	--	--
PT Portugal	–	–	–	--	--
RU Russian Federation	–	–	–	--	--
SE Sweden	YES	YES	SS-EN 60950-1	YES	24
SI Slovenia	–	–	–	--	--
SK Slovakia	–	–	–	--	--
SG Singapore	–	–	–	--	--
TR Turkey	–	–	–	--	--
UA Ukraine	--	--	--	--	--
US United States	–	YES	UL 60950-1	YES	26
ZA South Africa	–	–	–	--	--

Clause	Requirement - Test	Result - Remark	Verdict
AU			P
ZZ.1 Introduction			N
	This Annex sets out variations between this Standard and IEC 60950-1:2001. These variations indicate national variations for purposes of the IECEE CB Scheme and will be published in the IECEE CB Bulletin. These variations are indicated within the body of the Standard.	Overall acceptance has to be evaluated during the national approval process.	N
ZZ.2	**Variations**		N
	The variations are as follows :		N
1.2	Between the definitions for 'Person, service' and 'Range, rated frequency' insert the following: l ignition source 1.2.12.201	Inserted.	N
1.2.12.15	After the definition of 1.2.12.15, add the following:	Added.	N
	1.2.12.201 potential ignition source: Possible fault which can start a fire if the open-circuit voltage measured across an interruption or faulty contact exceeds a value of 50 V (peak) a.c. or d.c. and the product of the peak value of this voltage and the measured r.m.s current under normal operating conditions exceeds 15 VA.		N
	Such a faulty contact or interruption in an electrical connection includes those which may occur in conductive patterns on printed boards.		N
	NOTE 201 An electronic protection circuit may be used to prevent such a fault from becoming a POTENTIAL IGNITION SOURCE.		N
	NOTE 202 This definition is from AS/NZS 60065:2003.		N
1.5.1	Add the following to the end of first paragraph: 'or the relevant Australian/New Zealand Standard'.	Added.	P
1.5.2.	Add the following to the end of first and third dash items: 'or the relevant Australian/New Zealand Standard'.	Added.	P
2.1	Delete the Note.		N
3.2.3	Delete Note 2.		N

Clause	Requirement - Test	Result - Remark	Verdict
3.2.5.1	Modify Table 3B as follows: Delete the first four rows and replace with	Power supply cord is not provided. See last page.	N
	<table><tr><td rowspan="2">RATED CURRENT OF EQUIPMENT A</td><td colspan="2">Minimum conductor sizes</td></tr><tr><td>Nominal cross-sectional area mm²</td><td>AWG or kcmil [cross-sectional area in mm²] see note 2</td></tr><tr><td>Over 0.2 up to and including 3</td><td>0,5 [1)]</td><td>18 [0,8]</td></tr><tr><td>Over 3 up to and including 7.5</td><td>0,75</td><td>16 [1,3]</td></tr><tr><td>Over 7.5 up to and including 10</td><td>(0,75)[2)] 1,00</td><td>16 [1,3]</td></tr><tr><td>Over 10 up to and including 16</td><td>(1,0)[3)] 1,5</td><td>14 [2]</td></tr><tr><td colspan="3">Replace footnote 1) with the following: 1) This nominal cross-sectional area is only allowed for Class II appliances if the length of the power supply cord, measured between the point where the cord, or cord guard, enters the appliance, and the entry to the plug does not exceed 2 m (0.5 mm² three-core supply flexible cords are not permitted; see AS/NZS 3191). Delete Note 1.</td></tr></table>		N
4.3.6	Replace paragraph three with: Equipment with a plug portion, suitable for insertion into a 10 A 3-pin flat-pin socket-outlet complying with AS/NZS 3112, shall comply with the requirements in AS/NZS 3112 for equipment with integral pins for insertion into socket-outlets.	This unit is not direct plug in equipment.	N
4.3.13.5	Add the following to the end of the first paragraph: ‘, or AS/NZS 2211.1’.“.		N
4.7	Add the following paragraph: For alternative tests refer to Clause 4.7.201.		N
4.7.201	Add the following after Clause 4.7.3.6.		N
	4.7.201 Resistance to fire – Alternative tests		N
	4.7.201.1 General Parts of non-metallic material shall be resistant to ignition and spread of fire.		N
	This requirement does not apply to decorative trims, knobs and other parts unlikely to be ignited or to propagate flames originating from inside the apparatus, or the following: Components that are contained in an enclosure having a flammability category of FV-0 according to AS/NZS 4695.707 and having openings only for the connecting wires filling the openings completely, and for ventilation not exceeding 1 mm in width regardless of length.		N
	The following parts which would contribute negligible fuel to a fire: small mechanical parts, the mass of which does not exceed 4 g, such as mounting parts, gears, cams, belts and bearings; small electrical components, such as capacitors with a volume not exceeding 1 750 mm3, integrated circuits, transistors and optocoupler packages, if these components are mounted on material of flammability category FV-1, or better, according to AS/NZS 4695.707.		N

Clause	Requirement - Test	Result - Remark	Verdict
	NOTE In considering how to minimize propagation of fire and what 'small parts' are, account should be taken of the cumulative effect of small parts adjacent to each other for the possible effect of propagating fire from one part to another. Compliance shall be checked by the tests of 4.7.201.2, 4.7.201.3, 4.7.201.4 and 4.7.201.5.		N
	For the base material of printed boards, compliance shall be checked by the test of 4.7.201.5. The tests shall be carried out on parts of non-metallic material which have been removed from the apparatus. When the glow-wire test is carried out, the parts shall be placed in the same orientation as they would be in normal use. These tests are not carried out on internal wiring.		N
	4.7.201.2 Testing of non-metallic materials Parts of non-metallic material shall be subject to the glow-wire test of AS/NZS 60695.2.11 which shall be carried out at 550°C. Parts for which the glow-wire test cannot be carried out, such as those made of soft or foamy material, shall meet the requirements specified in ISO 9772 for category FH-3 material. The glow-wire test shall be not carried out on parts of material classified at least FH-3 according to ISO 9772 provided that the sample tested was not thicker than the relevant part.		N
	4.7.201.3 Testing of insulating materials Parts of insulating material supporting POTENTIAL IGNITION SOURCES shall be subject to the glow-wire test of AS/NZS 60695.2.11 which shall be carried out at 750°C		N
	The test shall be also carried out on other parts of insulating material which are within a distance of 3mm of the connection.		N
	NOTE Contacts in components such as switch contacts are considered to be connections.		N
	For parts which withstand the glow-wire test but produce a flame, other parts above the connection within the envelope of a vertical cylinder having a diameter of 20 mm and a height of 50 mm shall be subjected to the needle-flame test. However, parts shielded by a barrier which meets the needle-flame test shall not be tested.		N

Clause	Requirement - Test	Result - Remark	Verdict
	The needle-flame test shall be made in accordance with AS/NZS 4695.2.2 with the following modifications:		N
	<table><tr><td>Clause of AS/NZS 4695.2.2</td><td>Change</td></tr><tr><td>5 Severities</td><td>Replace with: The duration of application of the test flame shall be 30 s ±1 s.</td></tr><tr><td>8 Test procedure</td><td></td></tr><tr><td>8.2</td><td>Replace the first sentence with: The specimen shall be arranged so that the flame can be applied to a vertical or horizontal edge as shown in the examples of figure 1.</td></tr><tr><td>8.4</td><td>The first paragraph does not apply. Addition: If possible, the flame shall be applied at least 10 mm from a corner.</td></tr><tr><td>8.5</td><td>Replace with: The test shall be made on one specimen. If the specimen does not withstand the test, the test may be repeated on two further specimens, both of which shall then withstand the test.</td></tr><tr><td>10 Evaluation of test results</td><td>Replace with: The duration of burning (t_b) shall not exceed 30 s. However, for printed circuit boards, it shall not exceed 15 s.</td></tr></table>		N
	The needle-flame test shall not be carried out on parts of material classified as V-0 or V-1 according to IEC 60695-11-10, provided that the sample tested was not thicker than the relevant part.		N
	4.7.201.4 Testing in the event of non-extinguishing material If parts, other than enclosures, do not withstand the glow wire tests of 4.7.201.3, by failure to extinguish within 30 s after the removal of the glow-wire tip, the needle-flame test detailed in 4.7.201.3 shall be made on all parts of non-metallic material which are within a distance of 50 mm or which are likely to be impinged upon by flame during the tests of 4.7.201.3. Parts shielded by a separate barrier which meets the needle-flame test need not be tested.		N
	NOTE 1 - If the enclosure does not withstand the glow-wire test the equipment is considered to have failed to meet the requirements of Clause 4.7.201 without the need for consequential testing.		N
	NOTE 2 - If other parts do not withstand the glow-wire test due to ignition of the tissue paper and if this indicates that burning or glowing particles can fall onto an external surface underneath the equipment, the equipment is considered to have failed to meet the requirements of Clause 4.7.201 without the need for consequential testing.		N

Clause	Requirement - Test	Result - Remark	Verdict
	NOTE 3 - Parts likely to be impinged upon by the flame are considered to be those within the envelope of a vertical cylinder having a radius of 10 mm and a height equal to the height of the flame, positioned above the point of the material supporting, in contact with, or in close proximity to, connections.		N
	4.7.201.5 Testing of printed boards The base material of printed boards shall be subjected to the needle-flame test of Clause 4.7.201.3. The flame shall be applied to the edge of the board where the heat sink effect is lowest when the board is positioned as in normal use. The flame shall not be applied to an edge, consisting of broken perforations, unless the edge is less than 3 mm from a POTENTIAL IGNITION SOURCE.		N
	The test is not carried out if the — Printed board does not carry any POTENTIAL IGNITION SOURCE; Base material of printed boards, on which the available apparent power at a connection exceeds 15 VA operating at a voltage exceeding 50 V and equal or less than 400 V (peak) a.c. or d.c. under normal operating conditions, is of flammability category FV-1 or better according to AS/NZS 4695.707, or the printed boards are protected by an enclosure meeting the flammability category FV-0 according to AS/NZS 4695.707, or made of metal, having openings only for connecting wires which fill the openings completely; or Base material of printed boards, on which the available apparatus power at a connection exceeds 15 VA operating at a voltage exceeding 400 V (peak) a.c. or d.c. under normal operating conditions, and base material of printed boards supporting spark gaps which provides protection against overvoltages, is of flammability category FV-0 according to AS/NZS 4695.707 or the printed boards are contained in a metal enclosure, having openings only for connecting wires which fill the openings completely. Compliance shall be determined using the smallest thickness of the material.		N
	NOTE – Available apparent power is the maximum apparent power which can be drawn from the supplying circuit through a resistive load whose value is chosen to maximise the apparent power for more than 2 min when the circuit supplied is disconnected.		N

Clause	Requirement - Test	Result - Remark	Verdict
6.2.2	Add the symbol NZ in the right hand margin beside the first paragraph.	No TNV.	N
	Add the following after the first paragraph: In Australia (this variation does not apply in New Zealand), compliance with 6.2.2 shall be checked by the tests of both 6.2.2.1 and 6.2.2.2.		N
	Delete the note.		N
6.2.2.1	Add the symbol NZ in the right hand margin beside the first paragraph including Note 1.	No TNV.	N
	Delete Note 2		N
	Add the following after the first paragraph: In Australia (this variation does not apply in New Zealand), the electrical separation is subjected to 10 impulses of alternating polarity, using the impulse test generator of annex N for 10/700µs impulses. The interval between successive impulses is 60 s and the initial voltage, Uc, is: for 6.2.1 a):7.0 kV for hand-held telephones and for headsets and 2.5 kV for other equipment; and for 6.2.1 b) and 6.2.1 c):1.5 kV.		N
	NOTE 201 – The 7 kV impulse simulates lightning surges on typical rural and semi-rural network lines.		N
	NOTE 202 – The value of 2.5 kV for 6.2.1 a) was chosen to ensure the adequacy of the insulation concerned and does not necessarily simulate likely overvoltages.		N
6.2.2.2	Add the symbol NZ in the right hand margin beside the second paragraph.	No TNV.	N
	Delete the Note.		
	Add the following after the second paragraph: In Australia (this variation does not apply in New Zealand), the a.c. test voltage is: for 6.2.1 a):3 kV; and for 6.2.1 b) and 6.2.1 c):1.5 kV.		N
	NOTE 201 – Where there are capacitors across the insulation under test, it is recommended that d.c. test voltages are used.		N
	NOTE 202 – The 3 kV and 1.5 kV values have been determined considering the low frequency induced voltages from the power supply distribution system.		N

Clause	Requirement - Test	Result - Remark	Verdict
Annex P	Add the following Normative References to Annex P:		N
	IEC 60065, Audio, Video and similar electronic apparatus—Safety requirements		N
	AS/NZS 3191, Approval and test specification—Electric flexible cords		N
	AS/NZS 3112, Approval and test specification—Plugs and socket-outlets		N
	AS/NZS 4695.707, Fire hazard testing of electrotechnical products—Methods of test for the determination of the flammability of solid electrical insulating materials when exposed to an igniting source		N

Clause	Requirement - Test	Result - Remark	Verdict
CA			P
	Canada and the United States of America have adopted a single, bi-national standard, CAN/CSA C22.2 No. 60950-1/UL60950-1, First Edition, which is based on IEC 60950-1, First Edition. Effective April 1, 2003, this standard may be used for product certification immediately, however, the previous version of the standard may also be used until April 1, 2005. Note: The previous version is CAN/CSA C22.2 No.60950-00/UL 60950 Third Edition, based on IEC 60950, 3rd Edition. Refer to the "IEC 60950, 3rd Edition, CA" section of this CB bulletin for the national differences in this version of the standard. This bi-national standard should be consulted for further details on the Special National Conditions and Other Differences summarized below.	Overall acceptance has to be evaluated during the national approval process.	P
	SPECIAL NATIONAL CONDITIONS		P
	Those requirements are identified as Special National Conditions since they are directly related to the Canadian Electrical code (CEC), Part 1 and the Canadian Building Code, which are referenced in legislation and which form the basis for the rules and practices followed in electrical and other building installations in Canada. Notes:		P
	- "CEC" denotes Canadian Electrical Code.		P
	- "NEC" denotes US National Electrical Code.		P
	- Due to common Canadian and US national differences, products that are in compliance with the Canadian national differences are also considered in compliance with the US national differences.		P
1.1.1	All equipment is to be designed to allow installation in accordance with the National Electrical Code (NEC), ANSI/NFPA 70, the Canadian Electrical Code (CEC), Part I, CAN/CSA C22.1, and when applicable, the National Electrical Safety Code, IEEE C2. Also, unless marked or otherwise identified, installation is allowed per the Standard for the Protection of Electronic Computer/Data-Processing Equipment, ANSI/NFPA 75.		P
1.4.14	For Pluggable Equipment Type A, the protection in the installation is assumed to be 20A.	Considered.	P
1.5.5	For lengths exceeding 3.05 m, external interconnecting flexible cord and cable assemblies are required to be a suitable cable type (e.g. DP, CL2) specified in the NEC.	The external interconnecting flex cable is not over than 3.05m.	N

Clause	Requirement - Test	Result - Remark	Verdict
	For lengths 3.05 m or less, external interconnecting flexible cord and cable assemblies that are not types specified in the NEC are required to have special construction features and identification markings.		P
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.	Single phase equipment.	N
	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."		N
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.	No such fuse used.	N
2.7.1	Suitable NEC/CEC branch circuit protection rated at the maximum circuit rating is required for all standard supply outlets, receptacles and medium-base or smaller lampholders if the supply branch circuit protection is not suitable.		N
	Power distribution transformers distributing power at 100 volts or more, and rated 10 kVA or more, require transformer overcurrent protection.		N
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.		P
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 provided. See last page.	N
3.2.3	Permanent connection of equipment to the mains supply by a power supply cord is not permitted, except for certain equipment, such as ATMs.		N
3.2.5	Power supply cords are required to be no longer than 4.5 m in length.	Power supply cord is not provided. See last page.	N
	Flexible power supply cords are required to be compatible with Article 400 of the NEC, and Tables 11 and 12 of the CEC.		N
3.2.9	Permanently connected equipment is required to have a suitable wiring compartment and wire bending space.	Not permanently connected.	N

Clause	Requirement - Test	Result - Remark	Verdict
3.3	Wiring terminals and associated spacings for field wiring connections shall comply with CSA C22.2 No. 0.	No field wiring connection.	N
3.3.3	Wire binding screws are not permitted to attach conductors larger than 10 AWG (5.3 mm^2).	No wire binding screws used.	N
3.3.4	Terminals for permanent wiring, including protective earthing terminals, are required to be suitable for U.S./Canadian wire gauge sizes, rated 125 percent of the equipment rating, and be specially marked when specified (1.7.7).	Not permanently connected.	N
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 such device.	N
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.	Plug or appliance inlet used as a disconnect device.	N
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
4.3.12	The maximum quantity of flammable liquid stored in equipment is required to comply with NFPA 30.		N
4.3.13	Equipment with lasers is required to meet the Code of Federal Regulations 21 CFR 1040 (and the Canadian Radiation Emitting Devices Act, REDR C1370).	No laser.	N
4.7	For computer room applications, automated information storage systems with combustible media greater than 27 cubic feet are required to have a provision for connection of either automatic sprinklers or a gaseous agent extinguishing system with an extended discharge.		N
4.7.3.1	For computer room applications, enclosures with combustible material measuring greater than 0.9 m^2 or a single dimension greater than 1.8 m are required to have a flame spread rating of 50 or less. For other applications, enclosures with the same dimensions require a flame spread rating of 200 or less.		N
Annex H	Equipment that produces ionizing radiation is required to comply with the Code of Federal Regulations, 21 CFR 1020 (and the Canadian Radiation Emitting Devices Act, REDR C1370).	No CRT provided.	N

Clause	Requirement - Test	Result - Remark	Verdict
	OTHER DIFFERENCES		P
	The following key national differences are based on requirements other than national regulatory requirements. The bi-national standard (CAN/CSA C22.2 No. 60950-1/UL 60950-1, First Edition) referenced above should be consulted for further details on the national differences summarized below.		P
1.5.1	Components of equipment must be suitable for the application, and must comply with the requirements of the equipment standard and the applicable national (Canadian and/or U.S.) component or material standards, as far as they may apply.	See IEC 60950-1 test report appended table 1.5.1.	P
	The acceptance will be based on the following:	See below.	P
	I) A component Certified by a Canadian or U.S. National Certification Body (NCB) to a Canadian or U.S. component standard will be checked for correct application and use in accordance with its specified rating. Where necessary, it will also be subject to the applicable tests of the equipment standard.	See IEC 60950-1 test report appended table 1.5.1.	P
	J) A component, which has a CB Test Certificate for compliance with a relevant IEC component standard, will be checked for correct application and use in accordance with its specified ratings. Where necessary, it will also be subject to the applicable tests of the equipment standard, and to the applicable tests of the Canadian and/or U.S. component or material standard, under the conditions occurring in the equipment.	See IEC 60950-1 test report appended table 1.5.1.	P
	K) A component, which has no approval as in A) or B) above or which is used not in accordance with its specified ratings, will be subject to the applicable tests of the equipment standard, and to the applicable tests of the Canadian and/or U.S. component or material standard, under the conditions occurring in the equipment.		N
	L) Some components may require annual re-testing, which may be carried out by the manufacturer, CSA International or another laboratory		N
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 30 mA d.c. under normal operating conditions.	No TNV circuits.	N
2.3.2	In the event of a single fault, the limits of 2.2.3 apply to SELV Circuits and accessible conductive parts.		N

Clause	Requirement - Test	Result - Remark	Verdict
2.6.3.3	When subject to impedance testing, protective earthing and bonding are required to be subjected to the additional test conditions specified.	See IEC 60950-1 test report appended table 2.6.3.3.	P
3.2.1.2	Equipment connected to a centralized d.c. power system, and having one pole of the DC mains input terminal connected to the main protective earthing terminal in the equipment, is required to comply with special earthing, wiring, marking and installation instructions requirements.	Not connect to DC power.	N
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 CRT provided.	N
4.3.2	Equipment with handles is required to comply with special loading tests.	No handles provided.	N
5.1.8.3	Equipment intended to receive telecommunication ringing signals is required to comply with a special touch current measurement tests.	Not intended to receive telecommunication ringing signal.	N
6.2.1	Enamel coating on winding wire not considered electrical separation unless subjected to special investigation.	No enamel coating provided.	N
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.	Not intended to connect to telecommunication network.	N
6.5	Equipment connected to a telecommunications network and supplied with an earphone intended to be held against, or in the ear is required to comply with special acoustic pressure tests.	Dto.	N
M.2	Continuous ringing signals up to 16 mA only are permitted if the equipment is subjected to special installation and performance restrictions.		N

Clause	Requirement - Test	Result - Remark	Verdict
DE			P
1.7.12	**Germany** (Gesetz über technische Arbeitsmittel (Gerätesicherheitsgesetz) [Law on technical labour equipment {Equipment safety law}], of 23 rd October 1992, Article 3, 3 rd paragraph, 2 nd sentence, together with the "Allgemeine Verwaltungsvorschrift zur Durchführung des Zweiten Abschnitts des Gerätesicherheitsgesetzes" [General administrative regulation on the execution of the Second Section of the Equipment safety law], of 10 th January 1996, article 2, th paragraph, item 2).	See last page.	N
	Directions for use with rules to prevent certain hazards for (among others) maintenance of the technical labour equipment, also for imported technical labour equipment shall be written in the German language.	See last page.	N
	NOTE Of this requirement, rules for use even only by service personnel are not exempted.		N
Annex H	**Germany** (Regulation on protection against hazards by X-ray, of 8 th January 1987, Article 5 [Operation of X-ray emission source], clauses 1 to 4)	No X-ray.	N
	a) A licence is required by those who operate an X-ray emission source.	Dto.	N
	b) A licence in accordance with clause 1 is not required by those who operate an X-ray emission source on which the electron acceleration voltage does not exceed 20 kV if	Dto.	N
	1) the local dose rate at a distance of 0,1 m from the surface does not exceed 1 _ Sv/h, and	Dto.	N
	2) it is adequately indicated on the X-ray emission source that i) X-rays are generated, and ii) the electron acceleration voltage must not exceed the maximum value stipulated by the manufacturer or importer.	Dto.	N
	c) A licence in accordance with clause 1 is also not required by persons who operate an X-ray emission source on which the electron acceleration voltage exceeds 20 kV if	Dto.	N
	1) the X-ray emission source has been granted a type approval, and	Dto.	N

Clause	Requirement - Test	Result - Remark	Verdict
	2) it is adequately indicated on the X-ray emission source that i) X-rays are generated, ii) the device stipulated by the manufacturer or importer guarantees that the maximum permissible local dose rate in accordance with the type approval is not exceeded, and iii) the electron acceleration voltage must not exceed the maximum value stipulated by the manufacturer or importer.	No X-ray.	N
	d) Furthermore, a licence in accordance with clause 1 is also not required by persons who operate X-ray emission sources on which the electron acceleration voltage does not exceed 30 kV if	Dto.	N
	1) the X-rays are generated only by intrinsically safe CRTs complying with Enclosure III, No. 6,	Dto.	N
	2) the values stipulated in accordance with Enclosure III, No. 6.2 are limited by technical measures and specified in the device, and	Dto.	N
	3) it is adequately indicated on the X-ray emission source that the X-rays generated are adequately screened by the intrinsically safe CRT.	Dto.	N

Clause	Requirement - Test	Result - Remark	Verdict
DK			P
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.	Appliance inlet used. See last page.	N
1.7.5	In **Denmar**k, 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.	See last page.	N
3.2.1.1	In **Denmar**k, supply cords of single-phase equipment having a rated current not exceeding 13 A shall be provided with a plug according to the Heavy Current Regulations,Section 107-2-D1.	Power supply cord is not provided. See last page.	N
	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.	Not provide socket-outlet.	N
	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	Power supply cord is not provided. See last page.	N
1.7.2	Supply cords of CLASS I EQUIPMENT, which is delivered without a plug, must be provided with a visible tag with the following text: If essential for the safety of the equipment, the tag must in addition be provided with a diagram, which shows the connection of the other conductors, or be provided with the following text: "For tilslutning af de øvrige ledere, se medfølgende installationsvejledning."	Power supply cord is not provided. See last page.	N
1.7.5	**Denmark** (Heavy Current Regulations) CLASS II EQUIPMENT shall not be fitted with socket-outlets for providing power to other equipment.	This unit is class I equipment.	N

Clause	Requirement - Test	Result - Remark	Verdict
FI			P
1.7.2	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 the applicable countries shall be as follows: "Laite on liitettävä suojamaadoituskoskettimilla varustettuun pistorasiaan "	This unit is not intended connects to network circuit. No surge suppressors are connected between the network terminals and accessible parts. See last page.	N
6.1.2.1	In **Finland,** add the following text between the first and second paragraph: If this insulation is solid, including insulation forming part of a component, it shall at least consist of either	No connection to telecommunication network.	N
	- two layers of thin sheet material, each of which shall pass the electric strength test below, or		N
	- one layer having a distance through insulation of at least 0,4 mm, which shall pass the electric strength test below. If this insulation forms part of a semiconductor component (e.g. an optocoupler), there is no distance through insulation requirement for the insulation consisting of an insulating compound completely filling the casing, so that CLEARANCES and CREEPAGE DISTANCES do not exist, if the component passes the electric strength test in accordance with the compliance clause below and in addition		N
	- passes the tests and inspection criteria of 2.10.8 with an electric strength test of 1,5 kV multiplied by 1,6 (the electric strength test of 2.10.7 shall be performed using 1,5 kV), and		N
	- is subject to ROUTINE TESTING for electric strength during manufacturing, using a test voltage of 1,5 kV.		N
	It is permitted to bridge this insulation with a capacitor complying with EN 132400:1994, subclass Y2. A capacitor classified Y3 according to EN 132400:1994, may bridge this insulation under the following conditions:		N
	- the insulation requirements are satisfied by having a capacitor classified Y3 as defined by EN 132400, which in addition to the Y3 testing, is tested with an impulse test of 2,5 kV defined in EN 60950:2000, 6.2.2.1;		N

Clause	Requirement - Test	Result - Remark	Verdict
	- the additional testing shall be performed on all the test specimens as described in EN 132400;		N
	- the impulse test of 2,5 kV is to be performed before the endurance test in EN 132400, in the sequence of tests as described in EN 132400.		N
6.1.2.2	In **Finland**, the exclusions are applicable for PERMANENTLY CONNECTED EQUIPMENT and 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.	No connection to telecommunication network.	N
7.1	In **Finland,** requirements according to this annex, 6.1.2.1 and 6.1.2.2 apply with the term TELECOMMUNICATION NETWORK in 6.1.2 being replaced by the term CABLE DISTRIBUTION SYSTEM.	No connection to cable distribution network.	N

Clause	Requirement - Test	Result - Remark	Verdict
GB			P
2.6.3.3	In the **United Kingdom**, the current rating of the circuit shall be taken as 13 A, not 16 A.	Overall acceptance has to be evaluated during the national approval process.	N
2.7.1	In the **United Kingdom**, to protect against excessive currents and short-circuits in the PRIMARY CIRCUIT of DIRECT PLUGIN EQUIPMENT, protective devices shall be included as integral parts of the DIRECT PLUG-IN EQUIPMENT. 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.	This equipment is not direct plug-in type.	N
	NOTE 'Standard plug' is defined in SI 1768:1994 and essentially means an approved plug conforming to BS 1363 or an approved conversion plug.	Dto.	N
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.	Not provide power supply cord. See last page.	N
3.3.4	In the **United Kingdom**, the range of conductor sizes of flexible cords to be accepted by terminals for equipment with a RATED CURRENT of over 10 A up to and including 13 A is: - 1,25 mm 2 to 1,5 mm2 nominal cross-sectional area.	Dto.	N
4.3.6	In the **United Kingdom**, the torque test is performed using a socket outlet complying with BS 1363 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, 12.16 and 12.17, except that the test of 12.17 is performed at not less than 125℃.	This equipment is not direct plug-in type.	N

Clause	Requirement - Test	Result - Remark	Verdict
KR			P
1.5.101	Addition Plugs for the connection of the apparatus to the supply mains shall comply with the Korean requirement (KSC 8305 and 8305).	Overall acceptance has to be evaluated during the national approval process.	N
7	Addition EMC The apparatus shall comply with the relevant CISPR standards	The CISPR requirements have to be considered for the end product.	N

Clause	Requirement - Test	Result - Remark	Verdict
NO			P
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).	Mains voltage as reference voltage.	P
1.7.2	In Norway, 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: "Apparatet må tilkoples jordet stikkontakt"	This unit is not intended connects to network circuit. No surge suppressors are connected between the network terminals and accessible parts. See last page.	N
2.2.4	In **Norway**, requirements according to this annex, 1.7.2 and 6.1.2.1 apply.		N
2.3.2	In **Norway**, requirements according to this annex, 6.1.2.1 apply.		N
2.3.3	In **Norwa**y, requirements according to this annex, 1.7.2 and 6.1.2.1 apply.		N
2.3.4	In **Norway**, requirements according to this annex, 1.7.2 and 6.1.2.1 apply.		N
2.10.3.1	In **Norway**, due to the IT power distribution system used (see annex V, Figure V.7), the A.C. MAINS SUPPLY voltage is considered to be equal to the line-to-line voltage and will remain at 230 V in case of a single earth fault.	Mains voltage as reference voltage.	P
6.1.2.1	**In Norway**, add the following text between the first and second paragraph: If this insulation is solid, including insulation forming part of a component, it shall at least consist of either	No TNV circuits.	N
	- two layers of thin sheet material, each of which shall pass the electric strength test below, or		N
	- one layer having a distance through insulation of at least 0,4 mm, which shall pass the electric strength test below.		N
	If this insulation forms part of a semiconductor component (e.g. an optocoupler), there is no distance through insulation requirement for the insulation consisting of an insulating compound completely filling the casing, so that CLEARANCES and CREEPAGE DISTANCES do not exist, if the component passes the electric strength test in accordance with the compliance clause below and in addition		N

Clause	Requirement - Test	Result - Remark	Verdict
	- passes the tests and inspection criteria of 2.10.8 with an electric strength test of 1,5 kV multiplied by 1,6 (the electric strength test of 2.10.7 shall be performed using 1,5 kV), and		N
	- is subject to ROUTINE TESTING for electric strength during manufacturing, using a test voltage of 1,5 kV.		N
	It is permitted to bridge this insulation with a capacitor complying with EN 132400:1994, subclass Y2. A capacitor classified Y3 according to EN 132400:1994, may bridge this insulation under the following conditions:		N
	- the insulation requirements are satisfied by having a capacitor classified Y3 as defined by EN 132400, which in addition to the Y3 testing, is tested with an impulse test of 2,5 kV defined in EN 60950:2000, 6.2.2.1;		N
	- the additional testing shall be performed on all the test specimens as described in EN 132400;		N
	- the impulse test of 2,5 kV is to be performed before the endurance test in EN 132400, in the sequence of tests as described in EN 132400.		N
6.1.2.2	In **Norway**, the exclusions are applicable for PERMANENTLY CONNECTED EQUIPMENT and 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.	This equipment is not permanently and not intended to be used in restricted access location.	N
7.1	In **Norway**, requirements according to this annex, 6.1.2.1 and 6.1.2.2 apply with the term TELECOMMUNICATION NETWORK in 6.1.2 being replaced by the term CABLE DISTRIBUTION SYSTEM.	No connection to cable distribution network.	N
G.2.1	In **Norway**, due to the IT power distribution system used (see annex V, Figure V.7), the A.C. MAINS SUPPLY voltage is considered to be equal to the line-to-line voltage, and will remain at 230 V in case of a single earth fault.	Mains voltage as reference voltage.	P

Clause	Requirement - Test	Result - Remark	Verdict
SE			P
1.5.1	The following is added: **Sweden** (Ordinance (1990:944)		N
	NOTE - In **Sweden**, switches containing mercury such as thermostates, relays and level controllers are not allowed.	No such switch.	N
1.7.2	The following text is added:		N
	NOTE - In **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 shall be in Swedish and as follows: "Apparaten skall anslutas till jordat uttag."	This unit is not intended connects to network circuit. No surge suppressors are connected between the network terminals and accessible parts. See last page.	N
6.1.2.1	The following text is added:	Not connected to TNV circuit.	N
	NOTE - In **Sweden** the following text is added between the first and second paragraph: In **Sweden**, if this insulation is solid, including insulation forming part of a component, it shall at least consist of either		N
	- two layers of thin sheet material, each of which shall pass the electric strength test below, or		N
	- one layer having a distance through insulation of at least 0,4 mm, which shall pass the electric strength test below.		N
	If this insulation forms part of a semiconductor component (e.g. an optocoupler), there is no distance through insulation requirement for the insulation consisting of an insulating compound completely filling the casing, so that clearances and creepage distances do not exist, if the component passes the electric strength test in the accordance with the compliance clause below and in addition:		N
	- passes the test and inspection criteria of IEC 60950-1, 2.10.8 with an electric strength test of 1,5 kV multiplied by 1,6 (the electric strength test of IEC 60950-1, 2.10.7 shall be performed using 1,5 kV); and		N
	- is subject to routine testing for electric strength during manufacturing, using a test voltage of 1,5 kV.		N
	It is permitted to bridge this insulation with a capacitor complying with IEC 60384-14:1993, subclass Y2.		N

Clause	Requirement - Test	Result - Remark	Verdict
	A capacitor classified Y3 according to IEC 60384-14:1993, may bridge this insulation under the following conditions:		N
	The insulation requirements are satisfied by having a capacitor classified Y3 as defined by IEC 60384-14, which in addition to the Y3 testing, is tested with an Impulse test of 2.5kV defined in IEC 60950-1, subclause 6.2.2.1. The additional testing shall be performed on all the test specimens as described in IEC 60384 -14. The Impulse test of 2.5kV is to be performed before the Endurance Test in IEC 60384 -14 in the sequence of tests as described in IEC 60384-14.		N
6.1.2.2	The following text is added:	Not connected to TNV circuit.	N
	In **Sweden** the exclusions are applicable only 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 SERVICE PERSON.	This equipment is not permanently and not intended to be used in restricted access location.	N
7.1	In **Sweden** requirements according to the Swedish deviations to 6.1.2.1 and 6.1.2.2 apply. The term "TELECOMMUNICATION NETWORK" in 6.1.2 is replaced by "CABLE DISTRIBUTION SYSTEM".	No connection to cable distribution network.	N

Clause	Requirement - Test	Result - Remark	Verdict
US			P
	The United States of America and Canada have adopted a single, bi-national standard, CAN/CSA C22.2 No. 60950-1/UL60950-1, First Edition, which is based on IEC 60950-1, First Edition. This bi-national standard should be consulted for further details on the national conditions and differences summarized below.	Overall acceptance has to be evaluated during the national approval process.	P
	SPECIAL NATIONAL CONDITIONS		P
	The following is a summary of the key national differences based on national regulatory requirements, such as the National Electrical Code (NEC), ANSI/NFPA 70-2002, which are referenced in legislation and which form the basis for the rules and practices followed in electrical and building installations.		P
	Sub-Clause National Condition		P
1.1.1	All equipment is to be designed to allow installation in accordance with the National Electrical Code (NEC), ANSI/NFPA 70, the Canadian Electrical Code (CEC), Part I, CAN/CSA C22.1, and when applicable, the National Electrical Safety Code, IEEE C2. Also, unless marked or otherwise identified, installation is allowed per the Standard for the Protection of Electronic Computer/Data-Processing Equipment, ANSI/NFPA 75		P
1.4.14	For Pluggable Equipment Type A, the protection in the installation is assumed to be 20A.	Consider.	P
1.5.5	For lengths exceeding 3.05 m, external interconnecting flexible cord and cable assemblies are required to be a suitable cable type (e.g. DP, CL2) specified in the NEC.	The external interconnecting cable is not over than 3.05m.	N
	For lengths 3.05 m or less, external interconnecting flexible cord and cable assemblies that are not types specified in the NEC are required to have special construction features and identification markings.		P
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.	Single phase equipment.	N

Clause	Requirement - Test	Result - Remark	Verdict
	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."		N
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.	No such fuse used.	N
2.7.1	Suitable NEC/CEC branch circuit protection rated at the maximum circuit rating is required for all standard supply outlets, receptacles and medium-base or smaller lampholders 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 transformer overcurrent protection.		N
3.2	Wiring methods (terminals, leads, etc.) used for the connection of the equipment to the mains shall be in accordance with the NEC/CEC.		N
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 provided. See last page.	N
3.2.3	Permanent connection of equipment to the mains supply by a power supply cord is not 2		N
	Sub-Clause National Condition permitted, except for certain equipment, such as ATMs.		N
3.2.5	Power supply cords are required to be no longer than 4.5 m in length. Flexible power supply cords are required to be compatible with Article 400 of the NEC, and Tables 11 and 12 of the CEC.	Power supply cord is not provided. See last page.	N
3.2.9	Permanently connected equipment is required to have a suitable wiring compartment and wire bending space.	Not permanently connected.	N
3.3	Wiring terminals and associated spacings for field wiring connections shall comply with CSA C22.2 No. 0.	No field wiring connection.	N
3.3.3	Wire binding screws are not permitted to attach conductors larger than 10 AWG (5.3 mm 2).	No wire binding screws.	N
3.3.4	Terminals for permanent wiring, including protective earthing terminals, are required to be suitable for U.S./Canadian wire gauge sizes, rated 125 percent of the equipment rating, and be specially marked when specified (1.7.7).	Not permanently connected.	N

Clause	Requirement - Test	Result - Remark	Verdict
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 such device.	N
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.	Appliance inlet used as a disconnect device.	N
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
4.3.12	The maximum quantity of flammable liquid stored in equipment is required to comply with NFPA 30.		N
4.3.13	Equipment with lasers is required to meet the Code of Federal Regulations 21 CFR 1040 (and the Canadian Radiation Emitting Devices Act, REDR C1370).	No laser.	N
4.7	For computer room applications, automated information storage systems with combustible media greater than 27 cubic feet are required to have a provision for connection of either automatic sprinklers or a gaseous agent extinguishing system with an extended discharge.		N
4.7.3.1	For computer room applications, enclosures with combustible material measuring greater than 0.9 m 2 or a single dimension greater than 1.8 m are required to have a flame spread rating of 50 or less. For other applications, enclosures with the same dimensions require a flame spread rating of 200 or less.		N
Annex H	Equipment that produces ionizing radiation is required to comply with the Code of Federal Regulations, 21 CFR 1020 (and the Canadian Radiation Emitting Devices Act, REDR C1370). 3	No CRT provided.	N

Clause	Requirement - Test	Result - Remark	Verdict
	OTHER DIFFERENCES		P
	The following key national differences are based on requirements other than national regulatory requirements.		P
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 (U.S. and Canadian) component or material 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, surge suppressors, switches (including interlock switches), thermal cutoffs, thermostats, multi-layer transformer winding wire, tubing, wire connectors, and wire and cables.	See last page. See IEC 60950-1 test report appended table 1.5.1.	P
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 30 mA d.c. under normal operating conditions.	Not connected to TNV circuits.	N
2.3.2	In the event of a single fault, the limits of 2.2.3 apply to SELV Circuits and accessible conductive parts.		N
2.6.3.4	When subject to impedance testing, protective earthing and bonding are required to be subjected to the additional test conditions specified.	See IEC 60950-1 test report appended table 2.6.3.3.	P
3.2.1.2	Equipment connected to a centralized d.c. power system, and having one pole of the DC mains input terminal connected to the main protective earthing terminal in the equipment, is required to comply with special earthing, wiring, marking and installation instruction requirements.	Not connect to DC power.	N
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 CRT provided.	N

Clause	Requirement - Test	Result - Remark	Verdict
4.3.2	Equipment with handles is required to comply with special loading tests.		N
5.1.8.3	Equipment intended to receive telecommunication ringing signals is required to comply with a special touch current measurement tests.	Not connected to TNV circuit.	N
6.2.1	Enamel coating on winding wire not considered electrical separation unless subjected to special investigation.		N
6.4	Equipment intended for connection to telecommunication network outside plant cable is required to be protected against overvoltage from power line crosses in accordance with 6.4 and Annex NAC.		N
6.5	Equipment connected to a telecommunications network and supplied with an earphone intended to be held against, or in the ear is required to comply with special acoustic pressure tests. M.2 Continuous ringing signals up to 16 mA only are permitted if the equipment is subjected to special installation and performance restrictions.		N

Clause	Requirement - Test	Result - Remark	Verdict

	GROUP DIFFERENCES		P
	Delete all the "country" notes in the reference document according to the following list:		P
	<table><tr><td>1.5.1</td><td>Note 2</td><td>1.5.8</td><td>Note 2</td><td>1.6.1</td><td>Note</td></tr><tr><td>1.7.2</td><td>Note 4</td><td>1.7.12</td><td>Note 2</td><td>2.1</td><td>Note</td></tr><tr><td>2.2.3</td><td>Note</td><td>2.2.4</td><td>Note</td><td>2.3.2</td><td>Note 2, Note 7 & Note 8</td></tr><tr><td>2.3.3</td><td>Note 1 & Note 2</td><td>2.3.4</td><td>Note 2 & Note 3</td><td>2.7.1</td><td>Note</td></tr><tr><td>2.10.3.1</td><td>Note 4</td><td>3.2.1.1</td><td>Note</td><td>3.2.3</td><td>Note 1 & Note 2</td></tr><tr><td>3.2.5.1</td><td>Note 2</td><td>4.3.6</td><td>Note 1 & Note 2</td><td>4.7.2.2</td><td>Note</td></tr><tr><td>4.7.3.1</td><td>Note 2</td><td>6.1.2.1</td><td>Note</td><td>6.1.2.2</td><td>Note</td></tr><tr><td>6.2.2</td><td>Note</td><td>6.2.2.1</td><td>Note 2</td><td>6.2.2.2</td><td>Note</td></tr><tr><td>7</td><td>Note 4</td><td>7.1</td><td>Note</td><td></td><td></td></tr><tr><td>G2.1</td><td>Note 1 & Note 2</td><td>Annex H</td><td>Note 2</td><td></td><td></td></tr></table>		P
2.7.1	**Replace** the subclause as follows:	Replaced.	P
	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):		P
	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;	Dto.	P
	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;	Dto.	P
	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.		N
	If reliance is placed on protection in the building installation, the installation instructions shall so state, except that for PLUGGABLE EQUIPMENT TYPE A the building installation shall be regarded as providing protection in accordance with the rating of the wall socket outlet.		P
2.7.2	This subclause has been declared '**void**'.	Void.	N
2.10.2	**Replace** in the first line "(see also 1.4.7)" by "(see also 1.4.8)".	Replaced.	N
3.2.3	**Delete** Note 1 and in Table 3A, **delete** the conduit sizes in parentheses.	Deleted.	N

Clause	Requirement - Test	Result - Remark	Verdict
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".	Replaced.	N
	In Table 3B, **replace** the first four lines by the following: Up to and including 6 | | 0,75 [1] Over 6 up to and including 10 | (0,75) [2] | 1,0 Over 10 up to and including 16 | (1,0) [3] | 1,5	Dto.	N
	In the Conditions applicable to Table 3B **delete** the words "in some countries" in condition 1) . In Note 1, applicable to Table 3B, **delete** the second sentence	Deleted.	N
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	Deleted.	N
	Delete the fifth line: conductor sizes for 13 to 16 A.	Dto.	N
4.3.13.6	**Add** the following note:	Added.	N
	NOTE Attention is drawn to 1999/519/EC: Council Recommendation on the limitation of exposure of the general public to electromagnetic fields 0 Hz to 300 GHz. Standards taking into account this Recommendation are currently under development.		N
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 µ Sv/h (0,1 mR/h) (see note). Account is taken of the background level.	No CRT provides.	N
	Replace the notes as follows:		N
	NOTE These values appear in Directive 96/29/Eurat om. **Delete** Note 2.		N
Annex P	**Replace** the text of this annex by: See annex ZA.	Replaced.	P
Annex Q	**Replace** the title of IEC 61032 by "Protection of persons and equipment by enclosures – Probes for verification".	Replaced.	P
	Add the following notes for the standards indicated:	Added.	P
	IEC 60127 | NOTE Harmonized as EN 60127 (Series) (not modified). IEC 60269-2-1 | NOTE Harmonized as HD 630.2.1 S4:2000 (modified). IEC 60529 | NOTE Harmonized as EN 60529:1991 (not modified). IEC 61032 | NOTE Harmonized as EN 61032:1998 (not modified). IEC 61140 | NOTE Harmonized as EN 61140:2001 (not modified). ITU-T Recommendation K.31 | NOTE In Europe, the suggested document is EN 50083-1.		P

Clause	Requirement - Test	Result - Remark	Verdict

Note: Before placing the products in the different countries, the manufacturer must ensure that:

1. Operating Instructions, Ratings Labels and Warnings Labels written in an Accepted or Official Language of the county in question.

2. The equipment complies with the National Standards and/or Electrical Codes of the country in question.