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TEST REPORT

IEC 60950-1

Information technology equipment – Safety – Part 1: General requirements

Report Number.....: 303846

Date of issue...... 2016-02-25

Total number of pages 41

Applicant's name Ascom Sweden AB

Address: Grimbodalen 2, SE-402 76 Göteborg, Sweden

Test specification:

Standard.....: IEC 60950-1:2005 (Second Edition) + Am 1:2009 + Am 2:2013

Test procedure: CB Scheme

Non-standard test method: N/A

 Test Report Form No.
 IEC60950_1F

 Test Report Form(s) Originator
 SGS Fimko Ltd

 Master TRF
 Dated 2014-02

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This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.

General disclaimer:

The test results presented in this report relate only to the object tested.

This report shall not be reproduced, except in full, without the written approval of the Issuing CB Testing Laboratory. The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.









Test	Testing procedure and testing location:				
\boxtimes	CB Testing Laboratory:	Nemko AS			
Test	ing location/ address:	Gaustadalléen 30 NO-0373 Oslo Norway			
	Associated CB Testing Laboratory:				
Test	ing location/ address:				
Test	ed by (name + signature):	Ole Morten Aaslund	Ole Morben askund		
App	roved by (name + signature):	Hans-Eirik Lie	Ole Morben asslund		
	-	I			
Ш	Testing procedure: TMP/CTF Stage 1:				
Test	ing location/ address:				
Test	ed by (name + signature):				
App	roved by (name + signature):				
П	Testing procedure: WMT/CTF Stage 2:				
Tool					
rest	ing location/ address:				
Test	ed by (name + signature):				
Witn	essed by (name + signature):				
App	roved by (name + signature):				
		1	-		
	Testing procedure: SMT/CTF Stage 3 or 4:				
Testing location/ address:					
Tested by (name + signature):					
Witnessed by (name + signature):					
App	roved by (name + signature):				
Sup	ervised by (name + signature):				
		l	1		





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

- 1) Photos (10 pages)
- 2) European group differences and national differences (19 pages)
- 3) Australia / New Zealand national differences (8 pages)
- 4) USA differences (5 pages)
- 5) Canada differences (5 pages)

Summary of testing:

This test report is an upgrade of previous test report order no. 193634 and amendment report order no. 249607, due to addition of Amd 2 of IEC 60950-1.

Test condition for equipment under test	This unit was tested as a part of a system. In order to test under normal conditions, the H952T/ and U952T-A/ was connected/tested with the following units:
	T981RI (Receiver Interface) T938D (Data modem) T942C (Central unit) U982 (Alarm Receiver) T941OM (Output module) T941AM32, T941AM8 (Alarm module) T938RM (Reference module) T938BC2 (Bus transformer) U914T, U914D, H914T, H914D (Pager)
Clause 5.3	All testing performed with a rigid external power supply (0-80V/0-150A).
	The power source is specified to comply with a maximum current of 20A, included in installation manual.
	All testing performed with an external power supply, limited to max 20A.
Clause 4.6/4.7 (Fire enclosure)	The enclosure material used complies with requirement for fire enclosure and is rated 5VB. The openings complies with requirement for a fire enclosure.
Tests performed (name of test and test clause):	Testing location:
 1.6.2 Electrical data 1.7.11 Marking durability 4.2.10 Wall or ceiling mounted equipment 4.5 Thermal requirements 5.3 Abnormal operating and fault conditions 7.4.2 Voltage surge test 	Nemko AS Gaustadalléen 30 NO-0373 Oslo Norway





Summary of compliance with National Differences:

List of countries addressed

- 1) All CENELEC members as listed in EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013
- 2) Australia / New Zealand Differences according to online CB bulletin, last modified 2011-05-06
- 3) USA Differences according to online CB bulletin, last updated 2014-01-24
- 4) Canada Differences according to online CB bulletin, last updated 2014-09-13
- □ The product fulfils the requirements of EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013





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 Certification Bodies that own these marks.

H952T/XX



Made by Ascom (Sweden) AB, Sweden

yyWww

Grimbodalen 2 417 49 Gothenburg

This device complies whit Part 15 of the FCC Rules. Operation is subjected to the following two conditions: (1) this device may cause harmful interference, and (2) this dévice must accept any interference received, including interference that may cause undesired operations.

Type U952T-Axxx/XX

Freq. 12345

FCC ID: O4MU952T

IC: 3724A-12065

12,5 Vdc; 2,5A

0000000

Manufactured by Ascom (Sweden) AB, Sweden

This device complies with Part 15 of the FCC Rules. Operation is subjected to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any modifications made to this device that is not approved by the supplier may void the authority granted to the user by FCC to operate the equipment.

This class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la Classe B conforme á lanorme NMB-003 du Canada.





Calibration	All instruments used in the tests given in this test report are collibrated and
Calibration	All instruments used in the tests given in this test report are calibrated and
	traceable to national or international standards.
	Further information about traceability will be given on request.
Measurement	Measurement uncertainties are calculated for all instruments and instrument
uncertainty	set-ups given in this report. Calculations are based on the principles given in
	the standard EA-4/02 (Dec. 1999), IEC Guide 115:2007, Nemko routine L227
	and other relevant internal Nemko-procedures.
	Further information about measurement uncertainties will be given on request.
Evaluation of results If not explicitly stated otherwise in the standard, the test is passed if measured value is equal to or below (above) the limit line, regardles	
	measurement uncertainty. If the measured value is above (below) the limit line,
	the test is not passed - ref IEC Guide 115:2007, and Nemko routine L220. The
	instrumentation accuracy is within limits agreed by IECEE-CTL (ref. Nemko
	routine L227).





Test item particulars::		
Equipment mobility:	[] movable [] hand-held [] transportable [X] stationary [] for building-in [] direct plug-in	
Connection to the mains:	[] pluggable equipment [] type A [] type B [] permanent connection [] detachable power supply cord [] non-detachable power supply cord [X] not directly connected to the mains	
Operating condition:	[X] continuous [] rated operating / resting time:	
Access location:	[X] operator accessible [] restricted access location	
Over voltage category (OVC)	[] OVC I [] OVC II [] OVC III [] OVC IV [X] other: Class III equipment	
Mains supply tolerance (%) or absolute mains supply values	+/-10%	
Tested for IT power systems	N/A	
IT testing, phase-phase voltage (V)	N/A	
Class of equipment:	[] Class I [] Class II [X] Class III [] Not classified	
Considered current rating of protective device as part of the building installation (A)	N/A	
Pollution degree (PD)	[] PD 1 [X] PD 2 [] PD 3	
IP protection class	Min. IP20	
Altitude during operation (m)	Max. 2000	
Altitude of test laboratory (m)	100	
Mass of equipment (kg):	< 1.0 Dimensions: 275 mm by 130 mm by 60 mm	





Possible test case verdicts:			
- test case does not apply to the test object:	N/A		
- test object does meet the requirement:	P (Pass)		
- test object does not meet the requirement:	F (Fail)		
Testing:			
Date of receipt of test item:	December 2011 (initial order no. 193634)		
Date (s) of performance of tests:	December 2011 – March 2012 (initial order no. 193634)		
General remarks:			
"(See Enclosure #)" refers to additional information ap "(See appended table)" refers to a table appended to the state of	ne report.		
Manufacturer's Declaration per sub-clause 4.2.5 of	IECEE 02:		
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided			
been provided:			
When differences exist; they shall be identified in t	I		





General product information:

The equipment under tests is a Terminal transmitter is part of the On-site Paging (OSP) - and Personal Security (PSS) Systems. It operates either in the HF range (H952T/...) or in the UHF range (U952T-A.../..) Output power can be adjusted to comply with regulations of applicable authorities. The transmitter is housed in a 900 module plastic box with a metal heat sink and shield cover at the top. The RF input will connect to an external antenna.

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The equipment is wall mounted and provided with screws for mounting.

Installation is done by a service person.

Maximum recommended ambient (Tmra): 55°C

Connection to the supply: Internal screw terminals

1.1.2 – Additional requirements:

Exposure to extreme temperatures, excessive dust, moisture or vibration; to flammable gasses; to corrosive or explosive atmospheres:

This equipment is intended to operate in a "normal" environment (Offices and homes).

Electromedical equipment connected to the patient:

This equipment is not an electromedical equipment intended to be physically connected to a patient.

Equipment used in vehicles, ships or aircrafts, in tropical countries, or at elevations > 2000m: This equipment is intended to operate in a "normal" environment (Offices and homes).

Abbreviations used in the report:

normal conditionsfunctional insulationdouble insulation	N.C. OP DI	single fault conditionsbasic insulationsupplementary insulation	S.F.C BI SI
 between parts of opposite polarity 	ВОР	- reinforced insulation	RI

Indicate used abbreviations (if any)





IEC 60950-1				
Clause	Requirement + Test	Resul	t - Remark	Verdict
	•	•		

1 GENERAL	Р
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1.5	Components		
1.5.1	General	-	Р
	Comply with IEC 60950-1 or relevant component standard	(see appended tables 1.5.1)	Р
1.5.2	Evaluation and testing of components	Certified components are used in accordance with their ratings, certifications and they comply with applicable parts of this standard. Components not certified are used in accordance with their ratings and they comply with applicable parts of IEC 60950-1 and the relevant component standard. Components, for which no relevant IEC-standard exists, have been tested under the conditions occurring in the equipment, using applicable parts of IEC 60950-1.	P
1.5.3	Thermal controls	No thermal controls.	N/A
1.5.4	Transformers	No isolating transformer in the equipment.	N/A
1.5.5	Interconnecting cables	No interconnecting cables.	N/A
1.5.6	Capacitors bridging insulation	Class III equipment.	N/A
1.5.7	Resistors bridging insulation	Class III equipment.	N/A
1.5.7.1	Resistors bridging functional, basic or supplementary insulation	No requirements for functional insulation in SELV circuits.	N/A
1.5.7.2	Resistors bridging double or reinforced insulation between a.c. mains and other circuits	Class III equipment.	N/A
1.5.7.3	Resistors bridging double or reinforced insulation between a.c. mains and antenna or coaxial cable	Class III equipment.	N/A
1.5.8	Components in equipment for IT power systems	Class III equipment.	N/A
1.5.9	Surge suppressors	Class III equipment.	N/A
1.5.9.1	General	-	N/A
1.5.9.2	Protection of VDRs	-	N/A
1.5.9.3	Bridging of functional insulation by a VDR	-	N/A
1.5.9.4	Bridging of basic insulation by a VDR	-	N/A
1.5.9.5	Bridging of supplementary, double or reinforced insulation by a VDR	-	N/A





	IEC 60950-1				
Clause	Requirement + Test	Result - Remark	Verdict		
1.6	Power interface		Р		
1.6.1	AC power distribution systems	Class III equipment.	N/A		
1.6.2	Input current	See appended table 1.6.2. Results provided for reference only.	Р		
1.6.3	Voltage limit of hand-held equipment	Not hand-held.	N/A		
1.6.4	Neutral conductor	Class III equipment.	N/A		

1.7	Marking and instructions		Р
1.7.1	Power rating and identification markings	The required marking is located on the outside surface of the equipment.	Р
1.7.1.1	Power rating marking	-	Р
	Multiple mains supply connections	Class III equipment.	N/A
	Rated voltage(s) or voltage range(s) (V):	12.5±10% VDC	Р
	Symbol for nature of supply, for d.c. only:	Marked with DC. (H952T/)	Р
	Rated frequency or rated frequency range (Hz):	DC supplied.	N/A
	Rated current (mA or A):	Max 2.5A (U952T-A/) Max 2.0A (H952T/)	Р
1.7.1.2	Identification markings	Refer below.	Р
	Manufacturer's name or trade-mark or identification mark:	Ascom	Р
	Model identification or type reference:	U952T-A/ H952T/ (The symbols "." in model name can be any alphanumeric characters indicating differences not affecting safety)	Р
	Symbol for Class II equipment only:	Class III equipment.	N/A
	Other markings and symbols:	Ref. Copy of marking plate. Additional markings do not give rise to misunderstanding.	Р
1.7.1.3	Use of graphical symbols	Comply with relevant standards.	Р
1.7.2	Safety instructions and marking	No special precautions are necessary.	N/A
1.7.2.1	General	Considered.	Р
1.7.2.2	Disconnect devices	Disconnect device external to the equipment.	Р
1.7.2.3	Overcurrent protective device	Class III equipment.	N/A
1.7.2.4	IT power distribution systems	Class III equipment.	N/A
1.7.2.5	Operator access with a tool	No hazardous parts within the equipment.	N/A





IEC 60950-1				
Clause	Requirement + Test	Result - Remark	Verdict	
1.7.2.6	Ozone	The equipment does not produce ozone.	N/A	
1.7.3	Short duty cycles	The equipment is intended for continuous operation.	N/A	
1.7.4	Supply voltage adjustment:	No voltage selector.	N/A	
	Methods and means of adjustment; reference to installation instructions	-	N/A	
1.7.5	Power outlets on the equipment:	Class III equipment. No power outlets.	N/A	
1.7.6	Fuse identification (marking, special fusing characteristics, cross-reference):	No fuse.	N/A	
1.7.7	Wiring terminals	Refer below.	N/A	
1.7.7.1	Protective earthing and bonding terminals:	Class III equipment.	N/A	
1.7.7.2	Terminals for a.c. mains supply conductors	Class III equipment.	N/A	
1.7.7.3	Terminals for d.c. mains supply conductors	Class III equipment.	N/A	
1.7.8	Controls and indicators	Refer below.	Р	
1.7.8.1	Identification, location and marking	No controls or indicators affecting safety.	N/A	
1.7.8.2	Colours	Only functional indicators use colours.	Р	
1.7.8.3	Symbols according to IEC 60417:	-	N/A	
1.7.8.4	Markings using figures	No controls with different positions.	N/A	
1.7.9	Isolation of multiple power sources	Class III equipment, only one connection to supply.	N/A	
1.7.10	Thermostats and other regulating devices:	No thermostats or other regulating devices.	N/A	
1.7.11	Durability	Marking withstands required tests.	Р	
1.7.12	Removable parts	No marking is placed on removable parts.	Р	
1.7.13	Replaceable batteries:	No batteries.	N/A	
	Language(s):	-	_	
1.7.14	Equipment for restricted access locations:	Equipment not intended for installation in RAL.	N/A	





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

2	PROTECTION FROM HAZARDS		Р
2.1	Protection from electric shock and energy hazards		Р
2.1.1	Protection in operator access areas	Refer below.	N/A
2.1.1.1	Access to energized parts	2.1.1.1 – 2.1.1.7; No ELV, TNV or hazardous voltages in the equipment	N/A
	Test by inspection	-	N/A
	Test with test finger (Figure 2A)	-	N/A
	Test with test pin (Figure 2B)	-	N/A
	Test with test probe (Figure 2C)	-	N/A
2.1.1.2	Battery compartments	-	N/A
2.1.1.3	Access to ELV wiring	-	N/A
	Working voltage (Vpeak or Vrms); minimum distance through insulation (mm)	-	_
2.1.1.4	Access to hazardous voltage circuit wiring	No hazardous voltages in the equipment.	N/A
2.1.1.5	Energy hazards	No energy hazard in operator access area.	N/A
2.1.1.6	Manual controls	No shafts or knobs.	N/A
2.1.1.7	Discharge of capacitors in equipment	Class III equipment.	N/A
	Measured voltage (V); time-constant (s)	-	
2.1.1.8	Energy hazards – d.c. mains supply	Equipment is not intended for connection to d.c. mains.	N/A
	a) Capacitor connected to the d.c. mains supply:	-	N/A
	b) Internal battery connected to the d.c. mains supply :	-	N/A
2.1.1.9	Audio amplifiers	No audio outputs.	N/A
2.1.2	Protection in service access areas	Checked by inspection.	Р
2.1.3	Protection in restricted access locations	Equipment not intended for installation in RAL.	N/A

2.2	2.2 SELV circuits		Р
2.2.1	General requirements	2.2.1 – 2.2.4; The EUT is supplied from a SELV circuit. The equipment contains only SELV circuits and there are no components that could rise voltage above SELV limits in fault condition.	Р
2.2.2	Voltages under normal conditions (V)	Within SELV limits.	Р
2.2.3	Voltages under fault conditions (V)	Within SELV limits.	Р



	IEC 60950-1		
Clause	Requirement + Test	Result - Remark	Verdict
2.2.4	Connection of SELV circuits to other circuits:	SELV circuits are only connected to other SELV circuits.	Р
2.3	TNV circuits		N/A
2.3.1	Limits	No TNV.	N/A
	Type of TNV circuits	-	
2.3.2	Separation from other circuits and from accessible parts	-	N/A
2.3.2.1	General requirements	-	N/A
2.3.2.2	Protection by basic insulation	-	N/A
2.3.2.3	Protection by earthing	-	N/A
2.3.2.4	Protection by other constructions	-	N/A
2.3.3	Separation from hazardous voltages	-	N/A
	Insulation employed	-	_
2.3.4	Connection of TNV circuits to other circuits	-	N/A
	Insulation employed	-	_
2.3.5	Test for operating voltages generated externally	-	N/A
2.4	Limited current circuits		N/A
2.4.1	General requirements	No limited current circuits.	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		N/A





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Clause	Requirement + Test	Result - Remark	Verdict

2.6	Provisions for earthing and bonding		N/A
2.6.1	Protective earthing	Class III equipment, not connected to protective earth.	N/A
2.6.2	Functional earthing	-	N/A
	Use of symbol for functional earthing:	-	N/A
2.6.3	Protective earthing and protective bonding conductors	-	N/A
2.6.3.1	General	-	N/A
2.6.3.2	Size of protective earthing conductors	-	N/A
	Rated current (A), cross-sectional area (mm²), AWG	-	_
2.6.3.3	Size of protective bonding conductors	-	N/A
	Rated current (A), cross-sectional area (mm²), AWG	-	_
	Protective current rating (A), cross-sectional area (mm²), 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



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Clause	Requirement + Test	Result - Remark	Verdict

2.7	Overcurrent and earth fault protection in primary circuits		N/A
2.7.1	Basic requirements	Class III equipment.	N/A
	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 required.	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		Р
2.9.1	Properties of insulating materials	Neither natural rubber, materials containing asbestos nor hygroscopic materials are used as insulation. No driving belts or couplings used.	Р
2.9.2	Humidity conditioning	No hygroscopic materials used.	N/A
	Relative humidity (%), temperature (°C)	-	
2.9.3	Grade of insulation	Insulation is considered to be functional.	Р
2.9.4	Separation from hazardous voltages	Class III equipment.	N/A
	Method(s) used	-	





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Clause	Requirement + Test	Result - Remark	Verdict
			ı
2.10	Clearances, creepage distances and distances the	1	Р
2.10.1	General	2.10.1 – 2.10.12; Class III equipment. All insulation is considered functional only, ref. 5.3.4 c).	P
2.10.1.1	Frequency:	-	N/A
2.10.1.2	Pollution degrees:	-	N/A
2.10.1.3	Reduced values for functional insulation	-	N/A
2.10.1.4	Intervening unconnected conductive parts	-	N/A
2.10.1.5	Insulation with varying dimensions	-	N/A
2.10.1.6	Special separation requirements	-	N/A
2.10.1.7	Insulation in circuits generating starting pulses	-	N/A
2.10.2	Determination of working voltage	-	N/A
2.10.2.1	General	-	N/A
2.10.2.2	RMS working voltage	-	N/A
2.10.2.3	Peak working voltage	-	N/A
2.10.3	Clearances	-	N/A
2.10.3.1	General	-	N/A
2.10.3.2	Mains transient voltages	-	N/A
	a) AC mains supply	-	N/A
	b) Earthed d.c. mains supplies:		N/A
	c) Unearthed d.c. mains supplies:	-	N/A
	d) Battery operation	-	N/A
2.10.3.3	Clearances in primary circuits	-	N/A
2.10.3.4	Clearances in secondary circuits	Only functional insulation in secondary circuits. Refer 5.3.4 c).	Р
2.10.3.5	Clearances in circuits having starting pulses	-	N/A
2.10.3.6	Transients from a.c. mains supply:	-	N/A
2.10.3.7	Transients from d.c. mains supply:	-	N/A
2.10.3.8	Transients from telecommunication networks and cable distribution systems:	-	N/A
2.10.3.9	Measurement of transient voltage levels	-	N/A
	a) Transients from a mains supply	-	N/A
	For an a.c. mains supply	-	N/A
	For a d.c. mains supply	-	N/A
	b) Transients from a telecommunication network :	-	N/A
2.10.4	Creepage distances	-	N/A
2.10.4.1	General	-	N/A





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Clause	Requirement + Test	Result - Remark	Verdict	
2.10.4.2	Material group and comparative tracking index	-	N/A	
	CTI tests	-		
2.10.4.3	Minimum creepage distances	-	N/A	
2.10.5	Solid insulation	-	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	
	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	-	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	





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Clause	Requirement + Test	Result - Remark	Verdict		
2.10.6.4	Insulation between conductors on different layers	_	N/A		
2.10.0.4	of a printed board		IN/A		
	Distance through insulation	-	N/A		
	Number of insulation layers (pcs)	-	N/A		
2.10.7	Component external terminations	-	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		





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Clause	Requirement + Test	Result - Remark	Verdict

WIRING, CONNECTIONS AND SUPPLY		Р
General		Р
Current rating and overcurrent protection	Adequate cross sectional areas on internal wiring.	Р
Protection against mechanical damage	Wireways are smooth and free from edges. Wires are adequately fixed to prevent excessive strain on wire and terminals and avoiding damage to the insulation of the conductors.	Р
Securing of internal wiring	Internal wiring is secured against excessive strain, loosening of terminals and damage to the conductor insulation.	Р
Insulation of conductors	Insulation on internal conductors is considered to be of adequate quality and suitable for the application and the working voltage involved.	Р
Beads and ceramic insulators	No beads or similar ceramic insulators on conductors.	N/A
Screws for electrical contact pressure	No screws used for electrical contact pressure.	N/A
Insulating materials in electrical connections	No contact pressure through insulating material.	N/A
Self-tapping and spaced thread screws	None used for electrical connections.	N/A
Termination of conductors	Terminations cannot become displaced so that clearances and creepage distances can be reduced. Insulation is only functional.	N/A
10 N pull test	-	N/A
Sleeving on wiring	No wiring with sleeving.	N/A
	Current rating and overcurrent protection Protection against mechanical damage Securing of internal wiring Insulation of conductors Beads and ceramic insulators Screws for electrical contact pressure Insulating materials in electrical connections Self-tapping and spaced thread screws Termination of conductors 10 N pull test	Current rating and overcurrent protection Adequate cross sectional areas on internal wiring.



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Clause	Requirement + Test	Result - Remark	Verdict

3.2	Connection to a mains supply	Connection to a mains supply	
3.2.1	Means of connection	Class III equipment. The EUT is connected to a SELV through an internal separately certified terminal block with reference J02.	N/A
3.2.1.1	Connection to an a.c. mains supply	-	N/A
3.2.1.2	Connection to a d.c. mains supply	-	N/A
3.2.2	Multiple supply connections	-	N/A
3.2.3	Permanently connected equipment	-	N/A
	Number of conductors, diameter of cable and conduits (mm):	-	_
3.2.4	Appliance inlets	-	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 (mm²), 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):	-	_
3.2.7	Protection against mechanical damage	-	N/A
3.2.8	Cord guards	-	N/A
	Diameter or minor dimension D (mm); test mass (g)	-	_
	Radius of curvature of cord (mm):	-	
3.2.9	Supply wiring space	-	N/A

3.3	Wiring terminals for connection of external conductors		N/A
3.3.1	Wiring terminals	Class III equipment. The EUT is connected to a SELV through an internal separately certified terminal block with reference J02.	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 (mm²)	-	_





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Clause	Requirement + Test	Result - Remark	Verdict	
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		N/A
3.4.1	General requirement	Class III equipment.	N/A
3.4.2	Disconnect devices	-	N/A
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
3.4.11	Multiple power sources	-	N/A

3.5	Interconnection of equipment		Р
3.5.1	General requirements	Refer below.	Р
3.5.2	Types of interconnection circuits:	SELV circuits only.	Р
3.5.3	ELV circuits as interconnection circuits	No ELV.	N/A
3.5.4	Data ports for additional equipment	No data ports supplying power to additional equipment.	N/A





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Clause	Requirement + Test	Result - Remark	Verdict

4	PHYSICAL REQUIREMENTS		Р
4.1	Stability		N/A
	Angle of 10°	Wall mounted equipment.	N/A
	Test force (N)	Not a floor standing unit.	N/A

4.2	Mechanical strength		Р
4.2.1	General	Complies with the requirement also after tests described have been applied.	Р
	Rack-mounted equipment.	Not a rack-mounted equipment.	N/A
4.2.2	Steady force test, 10 N	No hazardous voltages or parts.	N/A
4.2.3	Steady force test, 30 N	No hazardous voltages or parts.	N/A
4.2.4	Steady force test, 250 N	No hazardous voltages or parts.	N/A
4.2.5	Impact test	No hazardous voltages or parts.	N/A
	Fall test	No hazardous voltages or parts.	N/A
	Swing test	No hazardous voltages or parts.	N/A
4.2.6	Drop test; height (mm):	Drop test not applicable.	N/A
4.2.7	Stress relief test	No hazardous voltages or parts.	N/A
4.2.8	Cathode ray tubes	No CRT in the equipment.	N/A
	Picture tube separately certified:	-	N/A
4.2.9	High pressure lamps	No high pressure lamp used.	N/A
4.2.10	Wall or ceiling mounted equipment; force (N):	Test is performed at 50N.	Р





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Clause	Requirement + Test	Result - Remark	Verdict

4.3	Design and construction		Р
4.3.1	Edges and corners	All edges and corners are rounded and/or smoothed.	Р
4.3.2	Handles and manual controls; force (N):	No handles or manual controls.	N/A
4.3.3	Adjustable controls	No adjustable controls.	N/A
4.3.4	Securing of parts	No hazardous voltages inside.	N/A
4.3.5	Connection by plugs and sockets	SELV connectors do not comply with IEC 60320 or IEC 60083. Connector(s) (are) is only accessible to service persons, adequate marking provided.	Р
4.3.6	Direct plug-in equipment	Class III equipment.	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 batteries.	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	Insulation is not exposed to oil, grease etc.	N/A
4.3.10	Dust, powders, liquids and gases	The equipment does not generate dust or use powders, liquids or gases.	N/A
4.3.11	Containers for liquids or gases	The equipment does not contain liquids or gases.	N/A
4.3.12	Flammable liquids:	The equipment does not contain flammable liquids.	N/A
	Quantity of liquid (I):	-	N/A
	Flash point (°C):	-	N/A
4.3.13	Radiation	Refer below.	Р
4.3.13.1	General	Refer below.	Р
4.3.13.2	Ionizing radiation	The equipment does not generate ionizing radiation.	N/A
	Measured radiation (pA/kg):	-	_
	Measured high-voltage (kV):	-	_
	Measured focus voltage (kV):	-	_





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 Clause
 Requirement + Test
 Result - Remark
 Verdict

	CRT markings:	-	_
4.3.13.3	Effect of ultraviolet (UV) radiation on materials	The equipment does not generate UV radiation.	N/A
	Part, property, retention after test, flammability classification:	-	N/A
4.3.13.4	Human exposure to ultraviolet (UV) radiation:	The equipment does not generate UV radiation.	N/A
4.3.13.5	Lasers (including laser diodes) and LEDs	Refer below.	Р
4.3.13.5.1	Lasers (including laser diodes)	No laser in the equipment.	N/A
	Laser class:	-	
4.3.13.5.2	Light emitting diodes (LEDs)	LEDs are diffused type.	Р
4.3.13.6	Other types:		N/A

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





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Clause	Requirement + Test	Result - Remark	Verdict

4.5	Thermal requirements		Р
4.5.1	General	Refer below.	Р
4.5.2	Temperature tests	(see appended table 4.5)	Р
	Normal load condition per Annex L:	Tested in a system. See summary of testing.	_
4.5.3	Temperature limits for materials	(see appended table 4.5)	Р
4.5.4	Touch temperature limits	(see appended table 4.5)	Р
4.5.5	Resistance to abnormal heat:	No thermoplastic parts carrying hazardous voltages.	N/A

4.6	Openings in enclosures		Р
4.6.1	Top and side openings	No top openings in the enclosure. Openings rear side:	Р
	Dimensions (mm):	5.0 x 8.0mm (10 holes)	_
4.6.2	Bottoms of fire enclosures	No openings.	Р
	Construction of the bottom, dimensions (mm):	-	_
4.6.3	Doors or covers in fire enclosures	Cover removable, installation manual applied. Instructions given in manual for mounting/installation, including opening of cover.	Р
4.6.4	Openings in transportable equipment	The unit is not regarded as transportable equipment.	N/A
4.6.4.1	Constructional design measures	-	N/A
	Dimensions (mm):	-	
4.6.4.2	Evaluation measures for larger openings	-	N/A
4.6.4.3	Use of metallized parts	-	N/A
4.6.5	Adhesives for constructional purposes	No adhesive used.	N/A
· <u></u>	Conditioning temperature (°C), time (weeks):	-	_





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Clause	Requirement + Test	Result - Remark	Verdict

4.7	Resistance to fire		Р
4.7.1	Reducing the risk of ignition and spread of flame	Method 1 is used.	Р
	Method 1, selection and application of components wiring and materials	(see appended table 4.7)	Р
	Method 2, application of all of simulated fault condition tests	-	N/A
4.7.2	Conditions for a fire enclosure	Refer below.	Р
4.7.2.1	Parts requiring a fire enclosure	All parts.	Р
4.7.2.2	Parts not requiring a fire enclosure	-	N/A
4.7.3	Materials		Р
4.7.3.1	General	Components and materials have adequate flammability classification. See appended table 1.5.1.	Р
4.7.3.2	Materials for fire enclosures	The enclosure is of 5VB plastic material.	Р
4.7.3.3	Materials for components and other parts outside fire enclosures	Same as for 4.7.3.2.	Р
4.7.3.4	Materials for components and other parts inside fire enclosures	Other materials inside enclosure are minimum V-2 material or small components mounted on PCB of V-0 material.	Р
4.7.3.5	Materials for air filter assemblies	No air filters used.	N/A
4.7.3.6	Materials used in high-voltage components	No high-voltage components.	N/A





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Clause	Requirement + Test	Result - Remark	Verdict

5	ELECTRICAL REQUIREMENTS AND SIMULATED ABNORMAL CONDITIONS		Р
5.1	Touch current and protective conductor current		N/A
5.1.1	General	5.1.1 – 5.1.8.2; Class III equipment supplied by SELV. No TNV circuits.	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	-	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	-	N/A
5.1.5	Test procedure	-	N/A
5.1.6	Test measurements	-	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:	-	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	-	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



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Clause	Requirement + Test	Result - Remark	Verdict
5.2	Electric strength		N/A
5.2.1	General	Class III equipment.	N/A
5.2.2	Test procedure	Class III equipment.	N/A
_			1
5.3	Abnormal operating and fault conditions		Р
5.3.1	Protection against overload and abnormal operation	(see appended table 5.3)	Р
5.3.2	Motors	No motors in the equipment.	N/A
5.3.3	Transformers	No isolating transformers.	N/A
5.3.4	Functional insulation:	Complies with c). Components mounted on V-0 material PCB.	Р
5.3.5	Electromechanical components	No electromechanial components in secondary circuits.	N/A
5.3.6	Audio amplifiers in ITE:	No audio outputs.	N/A
5.3.7	Simulation of faults	(see appended table 5.3)	Р
5.3.8	Unattended equipment	No thermostats, temperature limiters or thermal cut-outs.	N/A
5.3.9	Compliance criteria for abnormal operating and fault conditions	Refer below.	Р
5.3.9.1	During the tests	No fire or molten metal occurred and no deformation of enclosure during the tests	Р
5.3.9.2	After the tests	-	Р
6	CONNECTION TO TELECOMMUNICATION NET	NOBKS	N/A
0	CONNECTION TO TELECOMMICNICATION NET	WORKS	IN//A
6.1	Protection of telecommunication network service equipment connected to the network, from haza		N/A
6.2	Protection of equipment users from overvoltages on telecommunication networks		N/A
6.3	Protection of the telecommunication wiring sys	tem from overheating	N/A





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Clause	Requirement + Test	Result - Remark	Verdict

7	CONNECTION TO CABLE DISTRIBUTION SYSTEMS		
7.1	General	-	Р
7.2	Protection of cable distribution system service persons, and users of other equipment connected to the system, from hazardous voltages in the equipment	Circuits in the equipment intended to be directly connected to a cable distribution system complies with requirements for a TNV-1 circuit.	Р
7.3	Protection of equipment users from overvoltages on the cable distribution system	-	Р
7.4	Insulation between primary circuits and cable distribution systems	The EUT may be connected to an outdoor antenna.	Р
7.4.1	General	Complies, see 7.4.2.	Р
7.4.2	Voltage surge test	Fifty discharges are applied from the impulse test generator at a rate of 12 discharges per minute, with Uc equal to 10kV. Electric strength test performed after this test.	Р
7.4.3	Impulse test	-	N/A





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Clause	Requirement + Test	Result - Remark	Verdict

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





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Clause	Requirement + Test	Result - Remark	Verdict
A.3	Hot flaming oil test (see 4.6.2)	-	N/A
A.3.1	Mounting of samples	-	N/A
A.3.2	Test procedure	-	N/A
A.3.3	Compliance criterion	-	N/A
В	ANNEX B, MOTOR TESTS UNDER ABNORMAL (5.3.2)	CONDITIONS (see 4.7.2.2 and	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
B.10	Test for series motors	-	N/A
	Operating voltage (V):	-	





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Clause	Requirement + Test	Result - Remark	Verdict		
С	ANNEX C, TRANSFORMERS (see 1.5.4 and 5.3.3)				
	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 TO (see 5.1.4)	UCH-CURRENT TESTS	N/A		
E	ANNEX E, TEMPERATURE RISE OF A WINDING	(see 1.4.13)	N/A		
			- 1		
F	ANNEX F, MEASUREMENT OF CLEARANCES A (see 2.10 and Annex G)	ND CREEPAGE DISTANCES	N/A		
G	ANNEX G, ALTERNATIVE METHOD FOR DETER CLEARANCES	MINING MINIMUM	N/A		
н	ANNEX H, IONIZING RADIATION (see 4.3.13)		N/A		
J	ANNEX J, TABLE OF ELECTROCHEMICAL POT	ENTIALS (see 2.6.5.6)	N/A		
K	ANNEX K, THERMAL CONTROLS (see 1.5.3 and	5.3.8)	N/A		
L	ANNEX L, NORMAL LOAD CONDITIONS FOR SOBUSINESS EQUIPMENT (see 1.2.2.1 and 4.5.2)	OME TYPES OF ELECTRICAL	Р		
L.1	Typewriters	1-	N/A		
L.2	Adding machines and cash registers	-	N/A		
L.3	Erasers	-	N/A		
L.4	Pencil sharpeners	-	N/A		
L.5	Duplicators and copy machines	-	N/A		
L.6	Motor-operated files	-	N/A		
L.7	Other business equipment	Transmitter	Р		





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Clause	Requirement + Test	Result - Remark	Verdict
M	ANNEX M, CRITERIA FOR TELEPH	ONE RINGING SIGNALS (see 2.3.1)	N/A
N	ANNEX N, IMPULSE TEST GENERA 7.3.2, 7.4.3 and Clause G.5)	ATORS (see 1.5.7.2, 1.5.7.3, 2.10.3.9, 6.2.2.1,	Р
P	ANNEX P, NORMATIVE REFERENCE	CES	_
Q	ANNEX Q, Voltage dependent resis	stors (VDRs) (see 1.5.9.1)	N/A
R	ANNEX R, EXAMPLES OF REQUIR PROGRAMMES	EMENTS FOR QUALITY CONTROL	N/A
S	ANNEX S, PROCEDURE FOR IMPU	LSE TESTING (see 6.2.2.3)	N/A
Т	ANNEX T, GUIDANCE ON PROTEC (see 1.1.2)	TION AGAINST INGRESS OF WATER	N/A
U	ANNEX U, INSULATED WINDING WINSULATION (see 2.10.5.4)	IRES FOR USE WITHOUT INTERLEAVED	N/A
V	ANNEX V, AC POWER DISTRIBUTION	ON SYSTEMS (see 1.6.1)	N/A
W	ANNEX W, SUMMATION OF TOUCH	I CURRENTS	N/A
X	ANNEX X, MAXIMUM HEATING EFF C.1)	ECT IN TRANSFORMER TESTS (see clause	N/A
Υ	ANNEX Y, ULTRAVIOLET LIGHT CO	ONDITIONING TEST (see 4.3.13.3)	N/A
Z	ANNEX Z, OVERVOLTAGE CATEGO	ORIES (see 2.10.3.2 and Clause G.2)	N/A

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Clause	Requirement + Test	Result - Remark	Verdict		
AA	ANNEX AA, MANDREL TEST (see	2.10.5.8)	N/A		
ВВ	ANNEX BB, CHANGES IN THE SECOND EDITION		_		
00	ANNEY CO. E selection of informati	1.			
CC	ANNEX CC, Evaluation of integrate	ed circuit (IC) current limiters	N/A		
DD	ANNEX DD, Requirements for the equipment	mounting means of rack-mounted	N/A		
			<u>'</u>		
EE	ANNEX EE, Household and home	office document/media shredders	N/A		





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Clause	Requirement + Test	Result - Remark	Verdict

TA	BLE: List of critic	al components				Р
lo.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)		k(s) of rmity 1)
}-	Various	FR4	V-0	UL 94	UL (E7	3072)
	LG Chemical Ltd	GN-5001RF(T)	5VB, ABS/PC (min 1.5mm), 80°C	UL 94	UL (E6	7171)
	Ria Connect Inc	Type 007	300V, 15A, 22- 12AWG, 125°C Housing material: V-0	UL 1059	UL (E1	21004)
2	Ria Connect Inc	Type 017	300V, 15A, 125°C Housing material: V-0	UL 1059	UL (E1	21004)
	0.	o. Manufacturer/ trademark Various LG Chemical Ltd Ria Connect Inc	trademark Various FR4 LG Chemical Ltd GN-5001RF(T) Ria Connect Inc Type 007	o. Manufacturer/ trademark FR4 V-0 LG Chemical Ltd GN-5001RF(T) SVB, ABS/PC (min 1.5mm), 80°C Ria Connect Inc Type 007 Ria Connect Inc Type 017 Ria Connect Inc Type 017 300V, 15A, 125°C Housing material: V-0 Housing material:	o. Manufacturer/ trademark Type/model Technical data Standard (Edition / year) Various FR4 V-0 UL 94 LG Chemical Ltd GN-5001RF(T) SVB, ABS/PC (min 1.5mm), 80°C Ria Connect Inc Type 007 300V, 15A, 22- 12AWG, 125°C Housing material: V-0 Ria Connect Inc Type 017 300V, 15A, 125°C Housing material: UL 1059 Ria Connect Inc Type 017 Manufacturer/ (Edition / year) UL 94 UL 94 UL 1059	o. Manufacturer/ trademark FR4 V-0 UL 94 UL (E7) LG Chemical Ltd GN-5001RF(T) Ria Connect Inc Type 007 Ria Connect Inc Type 017 Technical data Standard (Edition / year) V-0 UL 94 UL (E7) UL 94 UL (E6) UL 94 UL (E6) UL 94 UL (E6) UL 1059 UL (E1) UL 1059 UL (E1)

Supplementary information:

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

The part no in parentheses are internal reference part no for Ascom.





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Manufactures				
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)						Р
U (V)	I (mA)	Irated (mA)	P (W)	Fuse #	Ifuse (mA)	Condition/statu	S
11.25	2505	-	28.2	-	-	Normal load	
12.5	2450	2500	30.6	-	-	Normal load	
13.75	2445	-	33.6	-	-	Normal load	
Supplemen	tary informa	tion:					
* Max curre	nt rating mo	del T938BC	2				

2.1.1.5 c) TABLE: max. V, A, VA test 1) N/A	
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2.1.1.5 c)	TABLE: stored energy	N/A
2)		

2.5	TABLE: Limited power sources	N/A
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2.10.2	Table: working voltage measurement	N/A
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IEC 60950-1 Verdict Requirement + Test Result - Remark Clause 2.10.3 and **TABLE: Clearance and creepage distance measurements** N/A 2.10.4 2.10.5 **TABLE: Distance through insulation measurements** N/A 4.3.8 **TABLE: Batteries** N/A The tests of 4.3.8 are applicable only when appropriate battery N/A data is not available Is it possible to install the battery in a reverse polarity position? N/A Non-rechargeable batteries Rechargeable batteries Discharging Un-Charging Discharging Reversed intentional charging charging Manuf. Manuf. Meas. Meas. Manuf. Meas. Manuf. Meas. Specs. Specs. Specs. Specs. current current current current Max. current during normal condition Max. current during fault condition Test results: Verdict N/A - Chemical leaks - Explosion of the battery N/A - Emission of flame or expulsion of molten metal N/A - Electric strength tests of equipment after completion of tests N/A

Supplementary information:







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4.3.8	TABLE: Batteries	N/A
Battery category:		
Manufacture	er:	
Type / mode	el:	
Voltage:		
Capacity:		
Tested and Certified by (incl. Ref. No.):		
Circuit protection diagram:		

MARKINGS AND INSTRUCTIONS (1.7.13)		
Location of replaceable battery		
Language(s)		
Close to the battery		
In the servicing instructions		
In the operating instructions		

4.5	TABLE: Thermal requirements				Р		
	Supply voltage (V):	12.5	12.5				_
	Ambient T _{max} (°C)	26.2 *	55 **				_
Maximum measured temperature T of part/at:				T (°C)			Allowed T _{max} (°C)
T100		29.6	58.4				-
Enclosure		27.0	55.8				80 ***
					•		

Supplementary information:

- * Temperatures measured at ambient temperature
- ** Temperatures corrected to 55°C (Recommended maximum temperature)
- *** Material rating

4.5.5 TABLE: Ball pressure test of thermoplastic parts N/A

4.7	TABLE: Resistance to fire					Р	
Part		Manufacturer of material	Type of material	Thickness (mm)	Flammability class	Εν	ridence
Enclosure		LG Chemical Ltd	ABS/PC	Min. 1.5	5VB	UL ((E67171)
Supplementary information:							

5.1	TABLE: touch current measurement	N/A	
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5.2 TABLE: Electric strength tests, impulse tests and voltage surge tests N/A

5.3	TABLE: Fault condition tests							Р
	Ambient temperature (°C):					25		_
	Power source for EUT: Manufacturer, model/type, output rating:					Chroma 6560 (150A, 80V)		_
		_	- .	- "		_	01 (

	<u> </u>							
Component No.	Fault	Supply voltage (Vdc)	Test time	Fuse #	Fuse current (mA)	Observation		
C206 (952SM/FL PCB)	s-c	13.75	30 min	-	0.6	No change. R104/C101 heating up. No hazard.		
C127	S-C	13.75	10 min	-	2.2-0.6	Unit shuts down. L103 heating up. No excessive temperatures.		
C113	S-C	13.75	10 min	-	2.6-0.5	Unit shuts down. VR100 damaged. No hazard.		
C112	s-c	13.75	10 min	-	20-0.5	D100 smoked. No hazard.		
C110	S-C	13.75	2 hrs	-	20	Unit shuts down. No excessive temperatures obtained, terminal J02 slightly higher temp. No hazard.		
Input +/-	Reversed Polarity	13.75	2 hrs	-	20	Unit shuts down. No excessive temperatures obtained, terminal J02 slightly higher temp. No hazard.		

Supplementary information:

s-c = Short circuit.

Power source limited to 20A, power source limitations specified in installation manual.

C.2	TABLE: transformers	N/A	
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