TEST REPORT

Applicant:	PITE TECH. INC.
Address of Applicant:	4/F, Bldg A, Chiwan Industrial Park, Shaodi Rd., Chiwan, Shekou Area, Shenzhen, China

Equipment Under Test (EUT)

Product Name:	LOAD BANK
Model No.:	PITE 3932T, PITE 398X(X=0-9)
Applicable standards:	EN 61010-1:2010
Date of sample receipt:	April 12, 2018
Date of Test:	April 12, 2018 To May 29, 2018
Date of report issued:	May 29, 2018
Test Result :	PASS

The CE mark as shown below can be used, under the responsibility of the manufacturer, after completion of an EU Declaration of Conformity and compliance with all relevant EU Directives.

Authorized Signature

Kevin Wang
Laboratory Manager

EBO assures objectivity and justness of the test, and fulfill the duty of confidentiality for applicant's information. Applicant should undertake responsibility for the authenticity of submitted sample and information. The result(s) shown in this report refer only to the sample(s) tested. The test results only reflect the evaluation of the sample under test and are not authorized for other purposes. EBO do not accept any liability to you for any loss arising out of or in connection with this report, in contract, tort, by statute or otherwise. This report is invalid without signatures of approver and special seal for inspection of EBO, or it has been reproduced in full or part. This report shall not be published as advertisement without the approval of EBO. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. This document is issued by the company under its General Conditions of Service accessible at http://www.ebotest.com/zjyb/318.html.

TEST REPORT

EN 61010-1

Safety requirements for electrical equipment for measurement, control, and laboratory use Part 1: General requirements

Administrative Data

Report Reference No. ..... :	EBO1804058-E152
Testing laboratory……..:	Shenzhen EBO Technology Co., Ltd.
Address……..……..:	A506, Financial Port Building, Xin'an Sixth Road, 82th District, Bao'an, Shenzhen, China.
Tested by (name and signature) ..... :	Bernie Xia
Approved by (name and signature).. :	Kevin wang
Date of issue ..... :	May 29, 2018
Contents..... :	50 Pages.

Test Specification

Standard	EN 61010-1:2010
Test procedure..... :	CE-LVD
Non-standard test method ..... :	--
Directive ..... :	EN 61010-1:2010

Applicant's name ..... :	PITE TECH. INC.
Address..... :	4/F, Bldg A, Chiwan Industrial Park, Shaodi Rd., Chiwan, Shekou Area, Shenzhen, China
Manufacturer name……..... :	PITE TECH. INC.
Address……..... :	4/F, Bldg A, Chiwan Industrial Park, Shaodi Rd., Chiwan, Shekou Area, Shenzhen, China

Test item description..... :	LOAD BANK

Model and/or type reference……:	PITE 3932T, PITE 398X(X=0-9)
Model Tested……:	PITE 3932T
Rating(s) ..... :	Input: AC 220-240V, 50Hz

Test item particulars:

Type of item tested……..…….....:	Safety Evaluation
Description of equipment function……..…..:	LOAD BANK
Overall size of the equipment (L x W x H)…....:	See instruction
Mass of the equipment (kg)……..…....:	/
Accessories and detachable parts included in the evaluation……..:	--
Option……..……..…..:	--

Test case verdicts:

Test case does not apply to the test object…....:	N(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……..…....:	April 12, 2018
Date (s) of performance of tests……..…..:	April 12, 2018 To May 29, 2018

Summary of Testing:

LOAD BANK product has been tested and found in compliance with EN 61010-1:2010 requirement.

General product information:

LOAD BANK , powered by AC 230V mains use

Copy of marking plate:

Product Name: LOAD BANK
Model no.: PITE 3932T ta=40°C
Input: AC 220-240V, 50Hz

PITE TECH. INC.

4/F, Bldg A, Chiwan Industrial Park, Shaodi Rd., Chiwan, Shekou Area, Shenzhen, China

S/N:XXXXXX Importer:XXXXXX Address:XXXXXX
Made In China

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Clause	Requirement + Test	Result - Remark	Verdict
4	TESTS		--
4.4	Testing in single fault conditions		--
4.4.1	Fault tests	(see Form A.1)	P
4.4.2	Application of single fault conditions		--
4.4.2.1	Single fault conditions not covered by 4.4.2.2 to 4.4.2.14		--
4.4.2.2	Protective impedance		N
4.4.2.3	Protective conductor		-
4.4.2.4	Equipment or parts for short-term or intermittent operation		N
4.4.2.5	Motors		--
	- Stopped while fully energized		N
	- Prevented from starting		N
	- One phase interrupted (multi-phase)		N
4.4.2.6	Capacitors		N
4.4.2.7	Mains transformers		P
4.4.2.7.2	Short circuit	Ref2	P
4.4.2.7.3	Overload	Ref2	P
4.4.2.8	Outputs		N
4.4.2.9	Equipment for more than one supply		N
4.4.2.10	Cooling	Form A.26A , Ref3	--
	- air holes closed	Form A.26A	P
	- fans stopped	Form A.26A , Ref4	P
	- coolant stopped		N
	- loss of cooling liquid		N
4.4.2.11	Heating devices		N
	- timer overridden		N
	- temperature controller overridden		N
4.4.2.12	Insulation between circuits and parts	Checked by design	P
4.4.2.13	Interlocks		N
4.4.2.14	Voltage selectors		N
4.4.3	Duration of tests		--
4.4.4	Conformity after application of fault conditions		N

5	MARKING AND DOCUMENTATION		-
5.1.1	Required equipment markings		-
	– visible from the exterior; or	yes	P
	– visible after removing cover or opening door		N
	– visible after removal from a rack or panel		N
	Not put on parts which can be removed by an operator	Yes it on back-panel	P
5.1.2	Identification		P
	Equipment is identified by:	See below	-

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Clause	Requirement + Test	Result - Remark	Verdict
5.1.2a)	Manufacturer's or supplier's name or trademark	In the instruction	P
5.1.2b)	Model number, name or other means	Refer to marking	P
	Manufacturing location identified	By serial number	P
5.1.3	Mains supply		P
	Equipment is marked as follows:		-
5.1.3a)	Nature of supply:		P
	1) A.C. rated mains frequency or range of frequencies:	50Hz	P
	2) d.c. with symbol 1		N
5.1.3b)	rated supply voltage(s) or range:	220-240V~	P
5.1.3c)	Max. rated power (W or VA)or input current:		P
	The measured value not more than 110 %		P
	If more than one voltage range:		N
	Separate values marked; or	One range	N
	Values differ by less than 20 %		N
5.1.3d)	operator-set for different rated supply voltages:	No applied	N
	Indicates the equipment set voltage		N
	portable equipment indication is visible from the exterior		N
	Changing the setting changes the indication		N
5.1.3e)	Accessory mains socket-outlets accepting standard mains plugs are marked:	No applied	N
	With the voltage if it is different from the mains supply voltage :		N
	For use only with specific equipment		N
	If not marked for specific equipment it is marked with:		N
	The maximum rated current or power; or		N
	Symbol 14 with full details in the documentation		P
5.1.4	Fuses		N
	Operator replaceable fuse marking (see also 5.4.5) :		N
5.1.5	Terminals, connections and operating devices	Only concern safety	P
5.1.5.1	General		--
	Where necessary for safety, indication of purpose of terminals, connectors, controls and indicators marked		N
	If insufficient space, symbol 14 used		N
	Push-buttons and actuators of emergency stop devices and indicators:	No such function	--
	- Used only to indicate a warning of danger; or		N
	- The need for urgent action		N

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Clause	Requirement + Test	Result - Remark	Verdict
	- Coloured red		N
	- Coded as specified in IEC 60073		N
	Supplementary means of coding provided, if meaning of colour relates (see IEC 60073):		--
	- to safety of persons; or		N
	- safety of the environment		N
5.1.5.2	Terminals		--
	Mains supply terminals identified	Inlet was used	P
	Other terminal marking:		--
5.1.5.2a)	Functional earth terminals (symbol 5 used)	No terminal	N
5.1.5.2b)	Protective conductor terminals:		--
	Symbol 6 is placed close to or on the terminal; or		N
	Part of appliance inlet		N
5.1.5.2c)	Terminals of measuring and control circuits (symbol 7 used)	None	N
5.1.5.2d)	Hazardous live terminals supplied from the interior	None	N
	Standard mains socket outlet; or		N
	Ratings marked; or		N
	Symbol 14 used		P
5.1.6	Switches and circuit breakers		--
	If disconnecting device, on or off position marked	On or off position marked	P
	If push-button used as power supply switch:		--
	- Symbol 9 and 15 used for on-position		N
	- Symbol 10 and 16 used for off-position		N
	- Pair of symbols 9, 15 and 10, 16 close together		N
5.1.7	Equipment protected by double insulation or reinforced insulation	Class I equipment	P
	Protected throughout (symbol 11 used)	Class I equipment	P
	Only partially protected (symbol 11 not used)		N
5.1.8	Field-wiring terminal boxes	No applied	N
	If terminal or enclosure exceeds 60 °C:		N
	Cable temperature rating marked		N
	Marking visible or beside terminal		N
5.2	Warning markings	None required or provided.	N
	Visible when ready for normal use	visible	N
	Are near or on applicable parts	Near the applicable parts	N
	Symbols and text correct dimensions and colour:		--
	a) symbols min 2,75 mm and text 1,5 mm high and contrasting in colour with background		N

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Clause	Requirement + Test	Result - Remark	Verdict
	b) symbols and text moulded, stamped or engraved in material min. 2,0 mm high and		N
	0,5 mm depth or raised if not contrasting in colour		N
	If necessary marked with symbol 14		N
	Statement to isolate or disconnect		N
5.3	Durability of markings		P
	The required markings remain clear and legible in normal use	(see Form A.3)	P
5.4	Documentation		--
5.4.1	General		--
	Equipment is accompanied by documentation for safety purposes for operator or responsible body		P
	Safety documentation for service personnel authorized by the manufacturer		P
	Documentation necessary for safe operation is provided in printed media or files		P
	in electronic media if available at any time		P
	Documentation includes:		--
5.4.1a)	Intended use		P
5.4.1b)	Technical specification		P
5.4.1c)	name and address of manufacturer or supplier		P
5.4.1d)	information specified in 5.4.2 to 5.4.6		P
5.4.1e)	information to mitigate residual RISK (see also subclause 17)		P
5.4.1f)	accessories for safe operation of the equipment specified		P
5.4.1g)	guidance provided to check correct function of the equipment, if incorrect reading may cause a HAZARD from harmful or corrosive substances of HAZARDOUS live parts		P
5.4.1h)	instructions for lifting and carrying		N
	Warning statements and a clear explanation of warning symbols:		--
	Provided in the documentation; or		N
	Information is marked on the equipment		N
5.4.2	Equipment ratings	See below	P
	Documentation includes:	See below	P
5.4.2a)	Supply voltage or voltage range		P
	Frequency or frequency range		P
	Power or current rating		P
5.4.2b)	Description of all input and output connections in accordance to 6.6.1 a)		P

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Clause	Requirement + Test	Result - Remark	Verdict
5.4.2c)	RATING of insulation of external circuits in accordance to 6.6.1 b)	Class I for main supply Reinforced isolation	P
5.4.2d)	Statement of the range of environmental conditions (see 1.4)		P
5.4.2e)	Degree of protection (IEC 60529)	Class I	P
5.4.2f)	If impact rating less than 5 J:		--
	IK code in accordance to IEC 62262 marked; or		N
	symbol 14 of table 1 marked, with		N
	RATED energy level and test method stated		N
5.4.3	Equipment installation		P
	Documentation includes instructions for:		P
5.4.3a)	Assembly, location and mounting		P
5.4.3b)	Protective earthing	Page 4	P
5.4.3c)	Connections to supply	Page 4	P
5.4.3d)	permanently connected equipment:		--
	1) Supply wiring requirements		N
	2) If external switch or circuit-breaker, requirements and location recommendation		N
5.4.3e)	Ventilation requirements		P
5.4.3f)	Special services (e. g. air, cooling liquid)		N
5.4.3g)	Maximum sound power level		N
5.4.4	Equipment operation		P
	Instructions for use include:		P
5.4.4a)	Identification of operating controls		P
5.4.4b)	Positioning for disconnection	By switch symbol 1/0	P
5.4.4c)	Interconnection		P
5.4.4d)	Specification of intermittent operation limits	No limit	P
5.4.4e)	Explanation of symbols used		P
5.4.4f)	Replacement of consumable materials		N
5.4.4g)	Cleaning and decontamination (see 11.2)		N
5.4.4h)	Listing of any poisonous or injurious gases and quantities		N
5.4.4i)	Risk-reduction procedures relating to flammable liquids		P
5.4.4j)	RISK reduction procedures relating burn from surfaces permitted to exceed limits of 10.1		N
	Additional precautions for IEC 60950 conforming equipment in regard to moistures and liquids		P
	A statement about protection impairment if used in a manner not specified by the manufacturer		P
5.4.5	Equipment maintenance and Service		P
	Instructions for responsible body include:		P
	Instructions sufficient in detail permitting safe maintenance and inspection and continued safety:		P

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Clause	Requirement + Test	Result - Remark	Verdict
	Instruction against the use of detachable mains supply cord with inadequate rating	3A 250V	P
	Specific battery type of user replaceable batteries		N
	Any manufacturer specified parts		N
	Rating and characteristics of fuses		N
	Instructions include following subjects permitting safe servicing and continued safety:	No such service	--
5.4.5a)	product specific RISKS may affect service personal		N
5.4.5b)	protective measures for these RISKS		N
5.4.5c)	verification of the safe state after repair		N
5.4.6	Integration into systems or effects resulting from special conditions		N
	Aspects described in documentation		N
6	**PROTECTION AGAINST ELECTRIC SHOCK**		**--**
6.1	General	(see Form A.14 and A.15)	--
6.1.1	Requirements		--
	Protection against electric shock maintained in normal condition and single fault condition	Case of protect bonding removed	P
	Accessible parts not hazardous live	Below 24V/3A	P
	Voltage, current, charge or energy below the limits in normal condition and in single fault condition between:		--
	Accessible parts and earth		P
	Two Accessible Parts On Same Piece Of The Equipment Within A Distance Of 1,8 M		N
	Conformity is checked by the determination of 6.2 and 6.3 followed by the tests of 6.4 to 6.11		P
6.1.2	Exceptions	No exceptions.	N
	Following hazardous live parts may be accessible to an operator:		--
6.1.2a)	parts of lamps and lamp sockets after lamp removal		N
6.1.2b)	parts to be replaced by operator only by the use of tool and warning marking		N
	Those parts not hazardous live 10 s after interruption of supply	(see Form A.5)	N
	Capacitance test if charge is received from internal capacitor	(see Form A.4 and A.5)	N
6.2	Determination of accessible parts	(see Form A.4)	--
6.2.1	General		--

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Clause	Requirement + Test	Result - Remark	Verdict
	Unless obviously determination of accessible parts as specified in 6.2.2 to 6.2.4	By 6.3.1 (a) all parts are not hazardous except main inlet	P
6.2.2	Examination		N
	- With jointed test finger (as specified B.2)		N
	- With rigid test finger (as specified B.1) and a force of 10 N		N
6.2.3	Openings above parts that are hazardous live		N
	- test pin with length of 100 mm and 4 mm in diameter applied		N
6.2.4	Openings for pre-set controls		N
	- test pin with length of 100 mm and 3 mm in diameter applied		N
6.3	Limit values for accessible parts		N
6.3.1	Levels in normal condition	(see Form A.5)	--
6.3.1a)	Voltage limits less than 33 V r.m.s. and 46,7 V peak or 70 V d.c.	24V, 3A	P
	for wet locations voltage limits less than 16 V r.m.s. and 22,6 V peak or 35 V d.c.	No wet	N
	Voltages are not hazardous live the levels of:		--
6.3.1b)	Current less than 0,5 mA r.m.s. for sinusoidal, 0,7 mA peak non-sinusoidal or mixed frequencies or 2 mA d.c. when measured with measuring circuit A.1 or A.2 if less than 100 Hz	By a) passed	N
	for wet locations measuring circuit A.4 used		N
	70 mA r.m.s. when measured with circuit A.3 for higher frequencies		N
6.3.1c)	Levels of capacitive charge or energy less:		--
	45 μC for voltages up to 15 kV peak or d.c. or line A of Figure 3		N
	350 mJ stored energy for voltages above 15 kV peak or d.c.		N
6.3.2	Levels in single fault condition	(see Form A.6)	--
6.3.2a)	Voltage limits less than 55 V r.m.s. and 78 V peak or 140 V d.c.	Case of protect bonding removed 77V peak (50Hz/230V)	P
	for wet locations voltage limits less than 33 V r.m.s. and 46,7 V peak or 70 V d.c.		N
	Voltages are not hazardous live the levels of:		--

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Clause	Requirement + Test	Result - Remark	Verdict
6.3.2b)	Current less than 3,5 mA r.m.s. for sinusoidal, 5 mA peak non-sinusoidal or mixed frequencies or 15 mA d.c. when measured with measuring circuit A.1 or A.2 if less than 100 Hz	0.005mA (50Hz/230V)	P
	for wet locations measuring circuit A.4 used		N
	500 mA r.m.s. when measured with circuit A.3 for higher frequencies		N
6.3.2c)	Levels of capacitive charge or energy less line B of Figure 3		N
6.4	Primary means of protection		--
6.4.1	accessible parts prevented from being hazardous live by one or more of following means:		--
6.4.1a)	enclosures or protective barriers (see 6.4.2)		N
6.4.1b)	basic insulation (see 6.4.3)		N
6.4.1c)	Impedance (see 6.4.4)		N
6.4.2	enclosures or protective barriers	(see Form A.15 and A.16)	--
	- meet rigidity requirements of 8.1	Yes	P
	- meet requirements for basic insulation, if protection is provided by insulation		N
	- meet requirements of 6.7 for creepage and - clearances between accessible parts and - hazardous live parts, if protection is provided by - limited access		N
6.4.3	Basic Insulation	(see Form A.15 and A.16)	--
	- meet clearance, creepage distance and solid - insulation requirements of 6.7	Used devices are fit for all requirements	P
6.4.4	Impedance	(see Form A.12 and A.15)	--
	Impedance used as primary means of protection meets all of following requirements:		--
6.4.4a)	limits current or voltage to level of 6.3.2	(see Form A.6)	N
6.4.4b)	rated for maximum working voltage and the amount of power it will dissipate		N
6.4.4c)	clearance, creepage distance between terminations of the impedance meet requirements of basic insulation of 6.7	(see Form A.15)	N
6.5	Protection in single fault condition		-
6.5.1	accessible parts are prevented from becoming hazardous live by the primary means of protection and supplemented by one of:		-
6.5.1a)	protective bonding (see 6.5.2)	5mohm	P
6.5.1b)	supplementary insulation (see 6.5.3)	Reinforcement	P

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Clause	Requirement + Test	Result - Remark	Verdict
6.5.1c)	automatic disconnection of the supply (see 6.5.5)		N
6.5.1d)	current- or voltage-limiting device (see 6.5.6)		N
	Alternatively one of the single means of protection is used:		--
6.5.1e)	reinforced insulation (see 6.5.3)	4KV tested for AC-DC	P
6.5.1f)	protective impedance (see 6.5.4)		N
6.5.2	PROTECTIVE BONDING	(see Form A.9)	P
6.5.2.1	accessible conductive parts, may become hazardous live in single fault condition:		--
	Bonded to the protective conductor terminal; or		P
	Separated by conductive screen or barrier bonded to protective conductor terminal		N
6.5.2.2	Integrity of protective bonding		--
6.5.2.2a)	protective bonding consists of directly connected structural parts or discrete conductors or both; and withstands thermal and dynamic stresses	Using short wire terminal contact between case and inlet, and using direct contact between PSU and case.	P
6.5.2.2b)	Soldered connections:		--
	Independently secured against loosening		N
	Not used for other purposes		N
6.5.2.2c)	Screw connections are secured	M4	P
6.5.2.2d)	protective bonding not interrupted; or		P
	exempted as removable part carries mains supply input connection	Main switch disconnect AC only	P
6.5.2.2e)	Any movable protective bonding connection specifically designed, and meets 6.5.2.4	No move	N
6.5.2.2f)	No external metal braid of cables used (not regarded as protective bonding)		N
6.5.2.2g)	if mains supply passes through:		--
	Means provided for passing protective conductor; Impedance meets 6.5.2.4		N
6.5.2.2h)	Protective conductors bare or insulated, if insulated, green/yellow Exceptions:	See Ref1	P
	earthing braids;		N
	internal protective conductors etc.;		N
	Green/yellow not used for other purposes		P
	terminal suitable for connection of a protective conductor, and meets 6.5.2.3		P
6.5.2.3	PROTECTIVE CONDUCTOR TERMINAL		--
6.5.2.3a)	Contact surfaces are metal	Steel	P
6.5.2.3b)	Appliance inlet used		P

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Clause	Requirement + Test	Result - Remark	Verdict
6.5.2.3c)	For rewirable cords and permanently connected equipment, protective conductor terminal is close to mains supply terminals		N
6.5.2.3d)	If no MAINS supply is required, any protective conductor terminal:		--
	Is near terminals of circuit for which protective earthing is necessary		N
	External if other terminals external		N
6.5.2.3e)	Equivalent current-carrying capacity to mains supply terminals	(see Form A.7)	N
6.5.2.3f)	If plug-in, makes first and breaks last	Yes, by structure	P
6.5.2.3g)	If also used for other bonding purposes, protective conductor:		--
	Applied first;		N
	Secured independently;		N
	Unlikely to be removed by servicing		N
6.5.2.3h)	protective conductor of measuring circuit:		--
	Current rating equivalent to measuring circuit terminal;	Nichifu TMEDN 630809-FA 15A for 1.25mm2 wire	P
	protective bonding: not interrupted by any switch or interrupting device	yes	P
6.5.2.3i)	functional earth terminals allow independent connection		N
6.5.2.3j)	If a binding screw used for protective conductor terminal:		--
	Suitable size for bond wire	AWG16 used	P
	Not smaller than M 4	M4	P
	At least 3 turns of screw engaged	6turns	P
	Passes tightening torque test	(see Form A.8)	P
6.5.2.3k)	Contact pressure not capable being reduced by deformation of materials		N
6.5.2.4	Impedance of protective bonding of plug-connected equipment	(see Form A.9)	--
	Impedance between protective conductor terminal and each accessible part where protective bonding is specified, is:		--
	- less than 0,1 Ohm; or	0.05ohm	P
	- less than 0,2 Ohm if equipment is provided with non-detachable cord		N
6.5.2.5	Bonding impedance of permanently connected equipment	(see Form A.10)	--

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Clause	Requirement + Test	Result - Remark	Verdict
6.5.2.6	Transformer protective bonding screen	(see Form A.11)	--
	Transformer provided with screen for protective bonding:		--
	screen bonding consists of directly connected structural parts or discrete conductors or both; and withstands thermal and dynamic stresses (see 6.5.2.2 a)		N
	screen bonding with soldered connection (see 6.5.2.2 b) is:		N
	- Independently secured against loosening		N
	- Not used for other purposes		N
6.5.3	supplementary and reinforced insulation		N
	Meet clearance, creepage distance and solid insulation requirements of 6.7		N
6.5.4	Protective Impedance	(see Form A.12)	N
	Limits current or voltage to level of 6.3.1 in normal and to level of 6.3.2 in single fault condition		N
	clearance, creepage distance between terminations of the impedance meet requirements of double or reinforced insulation of 6.7	(see Form A.15)	N
	The protective impedance consists of one or more of the following:	(see TABLE 1 and Form A.12)	--
6.5.4a)	appropriate single component suitable for safety and reliability for protection, it is:		--
	rated twice the maximum working voltage		N
	resistor rated for twice the power dissipation for maximum working voltage		N
6.5.4b)	combination of components		N
	Single electronic device not used as protective impedance		N
6.5.5	Automatic disconnection of the supply		N
6.5.5a)	rated to disconnect the load within time specified in Figure 2		N
6.5.5b)	rated for the maximum load conditions of the equipment		N
6.5.6	Current- or voltage-limiting devices	(see Form A.12)	N
	Device complies with all of:		--
6.5.6a)	rated to limit the current or voltage to the level of 6.3.2	(see Form A.6)	N
6.5.6b)	rated for the maximum working voltage; and		N
	rated for the maximum operational current if applicable		N

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Clause	Requirement + Test	Result - Remark	Verdict
6.5.6c)	clearance, creepage distance between terminations of the impedance meet requirements of supplementary insulation of 6.7	(see Form A.14, A.15)	N
6.6	Connections to external circuits		N
6.6.1	Connections do not cause accessible parts of the following to become hazardous live in normal condition or single fault condition:		--
	The external circuits		N
	The equipment		N
	Protection achieved by separation of circuits; or		N
	Short circuit of separation does not cause a Hazard		N
	Instructions or markings include:		--
	1) rated conditions for terminal		N
	2) Required rating of external circuit insulation		N
6.6.2	terminals for external circuits		N
	terminals which receive a charge from an internal capacitor are not hazardous live after 10 s of interrupting supply connection	(see Form A.5)	N
6.6.3	Circuits with terminals which are hazardous live		N
	These circuits are:		N
	Not connected to accessible conductive parts; or		N
	Connected to accessible conductive parts, but are not mains circuits and have one terminal contact at earth potential		N
	No accessible conductive parts are hazardous live		N
6.6.4	Accessible terminals for stranded conductors		N
6.6.4a)	No risk of accidental contact because:		N
	Located or shielded		N
	Self-evident or marked whether connected to accessible conductive parts		N
6.6.4b)	Accessible terminals will not work loose		N
6.7	Insulation requirment		N
6.7.1	The nature of insulation		--
6.7.1.1	Insulation between accessible parts or between separate circuits consist of clearances, creepage distances and solid insulation if provided as protection against a hazard		N
6.7.1.2	Clearances		--

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Clause	Requirement + Test	Result - Remark	Verdict
	Required clearances reflecting factors of 6.7.1.1		N
	Equipment rated for operating altitude greater than 2000 m correction factor of Table 3 of 61010-1 applied		N
6.7.1.3	Creepage Distances		--
	Required creepage distances reflecting factors of 6.7.1.1 a) to d)		N
	CTI material group reflected by requirements		N
	CTI test performed		N
6.7.1.4	Solid insulation		--
	Required solid insulation reflecting factors of 6.7.1.1 a) to d)		N
6.7.1.5	Requirements for insulation according to type of circuit		--
6.7.1.5a)	6.7.2 mains circuits of overvoltage category II up to nominal supply voltage of 300 V	230V	P
6.7.1.5b)	6.7.3 secondary circuits separated from circuits defined in a) by transformer		N
6.7.1.5c)	k.1 mains circuits of overvoltage category iii and iv or overvoltage category ii over 300 v		N
6.7.1.5d)	K.2 secondary circuits separated from circuits defined in c) by transformer		N
6.7.1.5e)	K.3 circuits having one or more of:		--
	maximum transient overvoltage is limited to known level below the level of mains circuit		N
	maximum transient overvoltage above the level of mains circuit		N
	working voltage is the sum of more than one circuit or a mixed voltage		N
	working voltage includes recurring peak voltage, may include non-sinusoidal or non-periodic waveform		N
	working voltage with a frequency above 30 kHz		N
6.7.2	Insulation for mains circuits of overvoltage category II with a nominal supply voltage up to 300 V	230V	P
6.7.2.1	Clearances And Creepage Distances		--
	Values for mains circuits of Table 4 are met		N
	Coatings to achieve reduction to pollution degree 1 comply with requirements of Annex H		N
6.7.2.2	Solid insulation		--
6.7.2.2.1	Withstands electrical and mechanical stresses in normal use and all rated environmental conditions of 1.4		N

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Clause	Requirement + Test	Result - Remark	Verdict
	Equipment passed voltage tests of 6.8.3 with values of Table 5		N
	Complies as applicable:		--
6.7.2.2.1a)	enclosure or protective barrier of Clause 8		N
6.7.2.2.1b)	moulded and potted parts requirements of 6.7.2.2.2		N
6.7.2.2.1c)	inner layers of printed wiring boards requirements of 6.7.2.2.3		N
6.7.2.2.1d)	thin-film insulation requirements of 6.7.2.2.4		N
6.7.2.2.2	Moulded and potted parts		--
	Conductors between same two layers are separated by at least 0,4 mm after moulding is completed		N
6.7.2.2.3	Inner insulating layers of printed wiring boards		--
	Separated by at least 0,4 mm between same two layers		N
	reinforced insulation have adequate electric strength; one of following methods used:		--
6.7.2.2.3a)	thickness of insulation is at least 0,4 mm		N
6.7.2.2.3b)	insulation is assembled of minimum two separate layers, each rated for test voltage of table 5 for basic insulation		N
6.7.2.2.3c)	insulation is assembled of minimum two separate layers, where the combination is rated for test voltage of Table 5 for reinforced insulation		N
6.7.2.2.4	Thin-film insulation		--
	Conductors between same two layers are separated by applicable clearances and creepage distance of 6.7.2.1		N
	reinforced insulation have adequate electric strength; one of following methods used:		--
6.7.2.2.4a)	thickness through the insulation at least 0,4 mm		N
6.7.2.2.4b)	insulation is assembled of min two separate layers, each rated for test voltage of table 5 for basic insulation		N
6.7.2.2.4c)	insulation is assembled of min three separate layers, where the combination of two layers passed voltage tests of 6.8.3 with values of Table 5 for reinforced insulation		N
6.7.3	Insulation for secondary circuits derived from mains circuits of overvoltage category II up to 300 V	230V	P
6.7.3.1	Secondary circuits where separation from mains circuits is achieved by a transformer providing:		--

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Clause	Requirement + Test	Result - Remark	Verdict
	– reinforced insulation		P
	– double insulation		N
	– screen connected to the protective conductor terminal		N
6.7.3.2	Clearances		--
6.7.3.2a)	meet the values of Table 6 for basic insulation and supplementary insulation; or		N
	twice the values of Table 6 for reinforced Insulation		N
6.7.3.2b)	pass the voltage tests of 6.8 with values of Table 6;	(see Form A.18)	--
	with following adjustments:		--
	values for reinforced insulation are 1,6 times the values for basic insulation		N
	if operating altitude is greater than 2000 m values of clearances multiplied with factor of Table 3		N
	minimum clearance is 0,2 mm for pollution degree 2 and 0,8 mm for pollution degree 3		N
6.7.3.3	Creepage Distances		--
	Based on working voltage meets the values of table 7 for basic and supplementary insulation		N
	Values for reinforced insulation are twice the values of basic insulation		N
	Coatings to achieve reduction to pollution degree 1 comply with requirements of Annex H		N
6.7.3.4	Solid insulation		--
6.7.3.4.1	Withstands electrical and mechanical stresses in normal use and all rated environmental conditions of 1.4		--
6.7.3.4.1a)	Equipment passed voltage test of 6.8.3.1 for 5 s with values of table 6 for basic and supplementary insulation		N
	values for reinforced insulation are 1,6 times the values of basic insulation		N
6.7.3.4.1b)	If working voltage exceeds 300 v, equipment passed voltage test of 6.8.3.1 for 1 min with a test voltage of 1,5 times working voltage for basic or supplementary insulation		N
	value for reinforced insulation are twice the working voltage		N
	Complies as applicable:		--

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Clause	Requirement + Test	Result - Remark	Verdict
	enclosure or protective barrier of Clause 8		N
	moulded and potted parts requirements of 6.7.3.4.2		N
	inner layers of printed wiring boards requirements of 6.7.3.4.3		N
	thin-film insulation requirements of 6.7.3.4.4		N
6.7.3.4.2	Moulded and potted parts		--
	Conductors between same two layers are separated by applicable distances of Table 8		N
6.7.3.4.3	Inner insulation layers of printed wiring boards		--
	Separated by at least by applicable distances of Table 8 between same two layers		N
	reinforced insulation have adequate electric strength; one of following methods used:		--
6.7.3.4.3a)	thickness at least applicable distance of Table 8		N
6.7.3.4.3b)	insulation is assembled of minimum two separate layers, each rated for test voltage of table 6 for basic insulation		N
6.7.3.4.3c)	insulation is assembled of min two separate layers, where the combination is rated for 1,6 times the test voltage of Table 6		N
6.7.3.4.4	Thin-film insulation		--
	Conductors between same two layers are separated by applicable clearances and creepage distance of 6.7.3.2 and 6.7.3.3		N
	reinforced insulation have adequate electric strength; one of following methods used:		--
6.7.3.4.4a)	thickness at least applicable distance of Table 8		N
6.7.3.4.4b)	insulation is assembled of min. two separate layers, each rated for test voltage of table 6 for basic insulation		N
6.7.3.4.4c)	insulation is assembled of min. three separate layers, where the combination of two layers passed voltage tests with 1,6 time values of Table 6:		--
	a.c. test of 6.8.3.1; or		N
	d.c. test of 6.8.3.2 for circuits stressed only by d.c. voltages		N
6.8	Procedure for voltage tests		N
6.9	Constructional requirements for protection against electric shock		--

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Clause	Requirement + Test	Result - Remark	Verdict
6.9.1	If a failure could cause a hazard:		--
6.9.1a)	Security of wiring connections		N
6.9.1b)	Screws securing removable covers		N
6.9.1c)	Accidental loosening		N
6.9.1d)	clearances and creepage distances not reduced below the values of basic insulation by loosening of parts or wires		N
6.9.2	Insulating materials		--
	Material not to be used for safety relevant insulation:		--
6.9.2a)	easily damaged materials not used		P
6.9.2b)	non-impregnated hygroscopic materials not used		P
6.9.3	Colour coding		--
	Green-and-yellow insulation shall not be used except:		--
6.9.3a)	protective earth conductors;		N
6.9.3b)	protective bonding conductors;		P
6.9.3c)	potential equalization conductors;		N
6.9.3d)	functional earth conductors		N
6.10	Connection to mains supply source and connections between parts of equipment		N
6.10.1	Mains supply cords		--
	rated for maximum equipment current (see 5.1.3 c)		N
	Cable complies with IEC 60227 or IEC 60245		N
	Heat-resistant if likely to contact hot parts		N
	Temperature rating (cord and inlet).....:		--
	Green/yellow used only for connection to protective conductor terminals		N
	Detachable cords with IEC 60320 mains connectors:		N
	Conform to IEC 60799; or		N
	Have the current rating of the mains connector		N
6.10.2	Fitting of non-detachable mains supply cords		--
6.10.2.1	Cord entry		--
6.10.2.1a	Inlet or bushing smoothly rounded; or		N
6.10.2.1b	Insulated cord guard protruding ≥5D		N
6.10.2.2	Cord anchorage		--
	Protective earth conductor is the last to take the strain		N
6.10.2.2a	cord is not clamped by direct pressure from a screw		N
6.10.2.2b	knots are not used		N

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Clause	Requirement + Test	Result - Remark	Verdict
6.10.2.2c	cannot push the cord into the equipment to cause a hazard		N
6.10.2.2d	no failure of cord insulation in anchorage with metal parts		N
6.10.2.2e	not to be loosened without a tool		N
6.10.2.2f	cord replacement does not cause a hazard and method of strain relief is clear		N
	Push-pull and or torque test	(see Form A.19)	N
6.10.3	Plugs and connectors		--
	mains supply plugs, connectors etc., conform with relevant specifications		P
	If equipment supplied at voltages below 6.3.2.a) or from a sole source:		--
	Plugs of supply cords do not fit mains sockets above rated supply voltage		P
	mains type plugs used only for connection to mains supply		P
	Plug pins which receive a charge from an internal capacitor	(see Form A.5)	P
	Accessory mains socket outlets:		--
6.10.3a)	marking if accepts a standard mains supply plug (see 5.1.3e)		N
6.10.3b)	input has a protective earth conductor if outlet has earth terminal contact		N
6.11	Disconnection from supply source		P
6.11.1	Disconnects all current carrying conductors	provided which disconnects all	P
6.11.2	Exceptions		N
6.11.3	Requirements according to type of equipment		--
6.11.3.1	Permanently connected equipment and multi-phase equipment		N
	Employs switch or circuit-breaker		N
	If switch or circuit-breaker is not part of the equipment, documentation specifies:		--
6.11.3.1a	Switch or circuit-breaker to be included in building installation		N
6.11.3.1b	suitable location easily reached		N
6.11.3.1c	marking as disconnecting for the equipment		N
6.11.3.2	Single-phase cord-connected equipment		P
	Equipment is provided with one of the following:		--
6.11.3.2a	Switch or circuit-breaker; or		P

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Clause	Requirement + Test	Result - Remark	Verdict
6.11.3.2b	Appliance coupler (disconnectable without tool); or		P
6.11.3.2c	Separable plug (without locking device)		N
6.11.4	Disconnecting devices		--
6.11.4.1	Disconnecting device part of equipment		--
	Electrically close to the supply		P
	Power-consuming components not electrically located between the supply source and the disconnecting device		P
	Except electromagnetic interference suppression circuits permitted to be located on the supply side of the disconnecting device		P
6.11.4.2	Switches and circuit-breakers		--
	When used as disconnection device:		--
	Meets IEC 60947-1 and IEC 60947-3		P
	Marked to indicate function.....:		--
	Not incorporated in mains cord		P
	Does not interrupt protective earth conductor		P
6.11.4.3	Appliance couplers and plugs		N
	Where an appliance coupler or separable plug is used as the disconnecting device (see 6.11.3.2):		--
	Readily identifiable and easily reached by the operator		N
	Single-phase portable equipment cord length not more than 3 m		N
	protective earth conductor connected first and disconnected last		N
7	**PROTECTION AGAINST MECHANICAL HAZARDS**		**--**
7.1	Equipment does not cause a mechanical hazard in normal nor in single fault condition		P
	Conformity is checked by 7.2 to 7.7		--
7.2	Sharp edges		P
	Easily touched parts are smooth and rounded		P
	Do not cause injury during normal use and		P
	Do not cause injury during single fault condition		P
7.3	Moving parts		N
7.3.1	hazards from moving parts limited to a tolerable level with the conditions specified in 7.3.2 and 7.3.5		N
	Risk assessment in accordance with 7.3.3 carried out		N
7.3.2	Exceptions		N

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Clause	Requirement + Test	Result - Remark	Verdict
	Access to hazardous moving parts permitted under following circumstances:		--
7.3.2a)	obviously intended to operate on parts or materials external of the equipment		N
	inadvertent touching of moving parts minimized by equipment design (e .g. guards or handles)		N
7.3.2b)	If operator access is unavoidable outside normal use following precautions have been taken:		--
	access requires tool		N
	statement about training in the instructions		N
	warning markings on covers prohibiting access by untrained operators		N
	or symbol 14 with full details in documentation		N
7.3.3	Risk assessment for mechanical hazards to body parts		N
	Risk is reduced to a tolerable level by protective measures as specified in table 12		N
	Minimum protective measures:		--
	Low level measures		N
	Moderate measures		N
	Stringent measures		N
7.3.4	Limitation of force and pressure	(see Form A.20)	N
	following levels are met in normal and single fault condition:		--
	Continuous contact pressure below 50 N / cm^2 with force below 150 N		N
	Temporary force below 250 N for an area at least of 3 cm^2 for a maximum duration of 0,75 s		N
7.3.5	Gap limitations between moving parts	(see Form A.20)	N
7.3.5.1	Access normally allowed		--
	If levels of 7.3.4 exceeded and body part may be inserted minimum gap as specified in table 13 assured in normal and in single fault condition		N
7.3.5.2	Access normally prevented		--
	Maximum gap as specified in table 14 assured in normal and in single fault condition		N
7.4	Stability		P
	Equipment not secured to building structure is physical stable		P
	Stability maintained after opening of drawers etc. by automatic means, or		N
	warning marking requires the application of means		N

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Clause	Requirement + Test	Result - Remark	Verdict
	Compliance checked by following tests as applicable:		--
7.4a)	10° tilt test for other than handheld equipment	Comply with requirements	P
7.4b)	multi-directional force test for equipment exceeds height of 1 m and mass of 25 kg		N
7.4c)	downward force test for floor-standing equipment		N
7.4d)	overload test with 4 times maximum load for castor or support that supports greatest load		N
7.4e)	castor or support that supports greatest load removed from equipment		N
7.5	Provisions for lifting and carrying	None provided.	N
7.5.1	Equipment more than 18 kg :		
	Has means for lifting or carrying; or		N
	Directions in documentation		N
7.5.2	Handles and grips		--
	Handles or grips withstand four times weight		N
7.5.3	Lifting devices and supporting parts		--
	rated for maximum load; or		N
	tested with four times maximum static load		N
7.6	Wall mounting		N
	Mounting brackets withstand four times weight		N
7.7	Expelled parts	No applied	N
	Equipment contains or limits the energy		N
	Protection not removable without the aid of a tool		N

8	**RESISTANCE TO MECHANICAL STRESSES**		**-**
8.1	Equipment does not cause a hazard when subjected to mechanical stresses in normal use	A enclosure is made from steel plate. It is enough robust to clear following test.	P
	Normal protection level is 5 J		P
	Levels below 5 J but not less than 1 J are acceptable if all of following criteria are met:		--
8.1a)	lower level justified by risk assessment of manufacturer		N
8.1b)	equipment installed in its intended application is not easily touched		N
8.1c)	only occasional access during normal use		N
8.1d)	IK code in accordance to IEC 62262 marked or symbol 14 used with full information in the documentation		N

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Clause	Requirement + Test	Result - Remark	Verdict
	for non-metallic enclosures rated below 2 ° C ambient temperature value chosen for minimum rated temperature		N
	impact energies between IK values, the IK code marked for nearest lower value		N
	Conformity is checked by performing following tests:		--
	1) static test of 8.2.1		N
	2) impact test of 8.2.2 with 5 J except for hand-held equipment		N
	if impact energy not selected to 5 J alternate method of IEC 62262 used		N
	3) drop test of 8.3.1 or 8.3.2 except for fixed equipment and equipment with mass over 100 kg		N
	Equipment rated with an impact rating of IK 08 that obviously meets the criteria		--
	After the tests inspection with following results:		--
	- hazardous live parts above the limits of 6.3.2 not accessible	checked	P
	- insulation pass the voltage tests of 6.8	checked	P
	i) no leaks of corrosive and harmful substances	checked	P
	ii) enclosure shows no cracks resulting in a hazard	checked	P
	iii) clearances not less than their permitted values	checked	P
	iv) insulation of internal wiring remains undamaged	checked	P
	v) protective barriers not damaged or loosened	checked	P
	vi) No moving parts exposed, except permitted by 7.3		N
	vii) no damage which could cause spread of fire	checked	P
8.2	Enclosure rigidity tests		P
8.2.1	Static test	By design, it is cleared	P
	- 30 N with 12 mm rod to each part of enclosure	checked	P
	- in case of doubt test conducted at maximum rated ambient temperature	checked	P
8.2.2	Impact test	By design, it is cleared	P
	Impact applied to any part of enclosure causing a hazard if damaged	checked	P
	Impact energy level and corresponding IK code.....:		--
	Non-metallic enclosures cooled to minimum rated ambient temperature if below 2 ° C		N
8.3	Drop test		N
8.3.1	Other than hand-held and direct-plug-in equipment		N

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Clause	Requirement + Test	Result - Remark	Verdict
	Tests conducted with a drop height or angle of..... :		--
8.3.2	hand-held and direct-plug-in equipment		--
	Non-metallic enclosures cooled to minimum rated ambient temperature if below 2 ° C		N
	Drop test conducted with an height of 1 m		N
9	**PROTECTION AGAINST THE SPREAD OF FIRE**		**--**
9.1	No spread of fire in normal and single fault condition		P
	mains supplied equipment meets requirements of 9.6 additionally		P
	Conformity is checked by minimum one or a combination of the following (see Figure 11):	(see Form A.22)	--
	a) single fault test of 4.4; or	(see Form A.1)	P
	b) Application of 9.2 (eliminating or reducing the sources of ignition); or		--
	c) Application of 9.3 (containment of fire within the equipment)		--
9.2	Eliminating or reducing the sources of ignition within the equipment		P
	a) 1) Limited-energy circuit (see 9.4); or		--
	b) 2) basic insulation provided for parts of different potential; or	(see Form A.14 and A.18)	--
	Bridging the insulation does not cause ignition	(see Form A.1)	--
	c) Surface temperature of liquids and parts (see 9.5)		--
	d) No ignition in circuits designed to produce heat	(see Form A.1)	P
9.3	Containment of the fire within the equipment, should it occur		P
9.3.1	Spread of fire outside equipment reduced to a tolerable level if:		--
	a) Energizing of the equipment is controlled by an operator held switch		N
	b) enclosure is conform with constructional requirements of 9.3.2; and		P
	Requirements of 9.5 are met		N
9.3.2	Constructional requirements		--
	a) Connectors and insulating material have flammability classification V-2 or better	(see TABLE 1 or Form A.23)	P
	b) Insulated wires and cables are flame retardant (VW-1 or equivalent)	(see TABLE 1 or Form A.23)	P
	c) enclosure meets following requirements:	(see Form A.22)	--

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Clause	Requirement + Test	Result - Remark	Verdict
	1) Bottom and sides in arc of 5 ° (see Figure 13) to non-limited circuits (9.4) meets:		--
	i) no openings; or		**P**
	ii) perforated as specified in table 16; or		--
	iii) metal screen with a mesh; or		--
	iv) baffles as specified in Figure 12		--
	2) Material of enclosure and any baffle or flame barrier is made of:		--
	Metal (except magnesium); or		--
	Non-metallic materials have flammability classification V-1 or better	(see TABLE 1 or Form A.22)	--
	3) enclosure and any baffle or flame barrier have adequate rigidity		P
9.4	Limited-energy circuit	(see Form A.24)	-
9.4a)	Potential not more than 30 r.m.s. and 42.4 V peak, or 60 V dc		N
9.4b)	Current limited by one of following means:		-
	1) Inherently or by impedance; or		--
	2) Overcurrent protective device; or	Fuse on PCB is 5A	N
	3) A regulating network limits also in single fault condition		--
9.4c)	Is separated by at least basic insulation		--
	Fuse or a non adjustable electromechanical device		--
9.5	Requirements for equipment containing or using flammable liquids		N
	Flammable liquids contained in or specified for use with equipment do not cause spread of fire	(see Form A.25)	N
	Risk is reduced to a tolerable level :		--
9.5a)	The temperature of surface or parts in contact with flammable liquids is 25 °C below fire point		N
9.5b)	The quantity of liquid is limited		N
9.5c)	Flames are contained within the equipment		N
	Detailed instructions for risk-reduction provided		N
9.6	Overcurrent protection		N
9.6.1	mains supplied equipment protected		N
	basic insulation between mains parts of opposite polarity provided	(see Form A.14 and A.15)	P
	Devices not in the protective conductor		P
	Fuses or single-pole circuit-breakers not fitted in neutral (multi-phase)		N

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Clause	Requirement + Test	Result - Remark	Verdict
9.6.2	Protection within the equipment		N
	Overcurrent protection device:		--
	Fitted within the equipment; or		N
	Specified in manufacturer's instructions		N
9.6.3	Other equipment		--
	Protection within the equipment		P
10	**EQUIPMENT TEMPERATURE LIMITS AND RESISTANCE TO HEAT**		**--**
10.1	Surface temperature limits for protection against burns		P
	Easily touched surfaces within the limits in normal and in single fault condition:	(see Form A.26A)	--
	– at an specified ambient temperature of 40 ° C	Ref3, Ref4	P
	– for equipment rated above 40 ° C ambient temperature limits not exceeded raised by the difference to 40 ° C		N
	Heated surfaces necessary for functional reasons exceeding specified values:		--
	– Are recognizable as such by appearance or function; or		N
	– Are marked with symbol 13		N
	– Guards are not removable without tool		N
10.2	Temperatures of windings		N
	Limits not exceeded in:	(see Form A.26B)	--
	normal condition		N
	single fault condition		N
10.3	Other temperature measurements	IR Thermo camera	P
	Following measurements conducted if applicable:	(see Form A.26A)	--
10.3a)	Value of 60 °C of field-wiring terminal box not exceeded		N
10.3b)	Surface of flammable liquids and parts in contact with this liquids		N
10.3c)	Surface of non-metallic enclosures		N
10.3d)	Parts made of insulating material supporting parts connected to mains supply	measured	P
10.3e)	Terminals carrying a current more than 0.5 A	measured	P
10.4	Conduct of temperature test		--
10.4.1	Tests conducted under reference test conditions and manufacturer’ s instructions	(see Form A.26A)	P

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Clause	Requirement + Test	Result - Remark	Verdict
10.4.2	Temperature measurement of heating equipment		N
	Tests conducted in test corner	(see Form A.26A)	N
10.4.3	Equipment intended for installation in a cabinet or wall		N
	Equipment built in as specified in installation instructions	(see Form A.26A)	N
10.5	Resistance to heat		--
10.5.1	Integrity of clearance and creepage distances	(see Form A.16)	P
10.5.2	Non-metallic enclosures	(see Form A.27)	N
	Within 10 min after treatment:		--
	No hazardous live parts accessible;		N
	Equipment subjected to suitable stresses of 8.2 and 8.3 complying with criteria of 8.1		N
10.5.3	Insulating material		--
10.5.3a)	Parts supporting parts connected to mains supply	All parts are confirmed	P
10.5.3b)	Terminals carrying a current more than 0.5 A	All parts are confirmed	P
	Examination of material data; or		N
	in case of doubt::		N
	1) Ball pressure test; or	(see Form A.28)	N
	2) Vicat softening testof ISO 306	(see Form A.28)	N
11	**PROTECTION AGAINST HAZARDS FROM FLUIDS**		**--**
11.1	Protection to operators and surrounding area provided by equipment	The equipment must be used in biological laboratory.	P
	All fluids specified by manufacturer considered		N
11.2	Cleaning	(see Form A.30)	N
11.3	Spillage	(see Form A.30)	N
11.4	Overflow	(see Form A.30)	N
11.5	Battery electrolyte		N
	Battery electrolyte leakage presents no hazard		N
11.6	Specially protected equipment	(see Form A.30)	N
11.7	Fluid pressure and leakage		N
11.7.1	Maximum pressure..... :	(see Form A.31)	--
	Maximum pressure of any part does not exceed Prated		N
11.7.2	Leakage and rupture at high pressure		--
	Fluid-containing parts subjected to hydraulic test if.....:	(see Form A.31)	--
	a) product of pressure and volume > 200 kPal; and		N

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Clause	Requirement + Test	Result - Remark	Verdict
	b) pressure > 50 kPa		N
	Parts of refrigerating systems meets pressure-related requirements of IEC 60335-24 or IEC 60335-2-89		N
11.7.3	Leakage from low-pressure parts	(see Form A.32)	N
11.7.4	Overpressure safety device		N
	Does not operate in normal use		N
11.7.4a)	Connected as close as possible to parts intended to be protected		N
11.7.4b)	Easy access for inspection, maintenance and repair		N
11.7.4c)	Adjustment only with tool		N
11.7.4d)	No discharge towards person		N
11.7.4e)	No hazard from deposit of discharged material		N
11.7.4f)	Adequate discharge capacity		N
11.7.4g)	No shut-off valve between overpressure safety device and protected parts		N

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Clause	Requirement + Test	Result - Remark	Verdict
12	**Protection against radiation, including laser sources, and against sonic and ultrasonic pressure**		**N**
12.1	Equipment provides protection		N
12.2	Equipment producing ionizing radiation		N
12.2.1	Ionizing radiation	(see Form A.33)	N
12.2.1.1	Equipment meets the following requirements:		--
	a) if intended to emit radiation meets requirements of 12.2.1.2; or		N
	tested, classified and marked in accordance to IEC 60405		N
	b) if only emits stray radiation meets requirements of 12.2.1.3		N
12.2.1.2	Equipment intended to emit radiation		--
	Effective dose rate of radiation measured..... :		--
	If dose rate exceeds 5 μSv/h marked with the following:		--
	a) symbol 17 (ISO 361)		N
	b) abbreviations of the radionuclides.....:		--
	c) with maximum dose at 1 m; or.....:		--
	with dose rate value between 1 μSv/h and 5 μSv/h in m..... :		--
12.2.1.3	Equipment not intended to emit radiation	(see Form A.34)	--
	Limit for unintended stray radiation of 1 μSv/h at any easily reached point kept ..... :		--
12.2.2	Accelerated electrons		--
	Compartments opened only by the use of a tool		N
12.3	Ultra-violet (UV) radiation		N
	No unintentional hazardous escape of UV radiation:		--
	- checked by inspection; and		N
	- evaluation of RISK assessment documentation		N
12.4	Micro-wave radiation		N
	Power density does not exceed 10 W/m2 :		N
12.5	Sonic and ultrasonic pressure		N
12.5.1	Sound level	(see Form A.35)	N
	no hazardous sound emission		N
	Maximum sound pressure level measured and calculated for maximum sound power level as specified in ISO 3746 or ISO 9614-1		N
	Instruction describes measures for protection		N

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Clause	Requirement + Test	Result - Remark	Verdict
12.5.2	Ultrasonic pressure	(see Form A.36)	N
	Equipment not intended to emit ultrasound does not exceed limit of 110 dB between 20 kHz and 100 kHz		N
	Equipment intended to emit ultrasound:		N
	Outside useful beam does not exceed limit of 110 dB between 20 kHz and 100 kHz		N
	If inside useful beam above values exceeded:		--
	Marked with Symbol 14 of table 1		N
	and following information in the documentation:		--
	a) dimensions of useful beam		N
	b) area where ultrasonic pressure exceed 110 dB		N
	c) maximum sound pressure inside beam area		N
12.6	Laser sources		N
	Equipment meets requirements of IEC 60825-1		N
13	**PROTECTION AGAINST LIBERATED GASES AND SUBSTANCES, EXPLOSION AND IMPLOSION**		**N**
13.1	Poisonous and injurious gases and substances		N
	No poisonous or injurious gases or substances liberated in normal condition		N
	Attached data/test reports demonstrate conformityc		N
13.2	Explosion and implosion		--
13.2.1	Components		--
	Components liable to explode:		--
	Pressure release device provided; or		N
	Apparatus incorporates operator protection (see also 7.7)		N
	Pressure release device:		--
	Discharge without danger		N
	Cannot be obstructed		N
13.2.2	Batteries and battery charging	(see Form A.37)	--
	If explosion or fire hazard could occur:		--
	Protection incorporated in the equipment; or		N
	Instructions specify batteries with built-in protection		N
	In case of wrong type of battery used:		--
	No hazard; or		N
	Warning by marking and within instructions		N
	Equipment with means to charge rechargeable batteries:		--

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Clause	Requirement + Test	Result - Remark	Verdict
	Warning against the charging of non-rechargeable batteries; and		N
	Type of rechargeable battery indicated; or		N
	Symbol 14 used		N
	Battery compartment design		N
	Single component failure		N
	Polarity reversal test		N
13.2.3	Implosion of cathode ray tubes		N
	If maximum face dimensions > 160 mm :		N
	Intrinsically protected and correctly mounted; or		N
	enclosure provides protection:		--
	If non-intrinsically protected:		--
	Screen not removable without tool		N
	If glass screen, not in contact with surface of tube		N
14	**COMPONENTS AND SUBASSEMBLIES**		**--**
14.1	General	See below	P
	Where safety is involved, components meet relevant requirements	(see TABLE 1)	P
14.2	Motors	Stepper motor	P
14.2.1	Motor temperatures		P
	Does not present a hazard when stopped or prevented form starting; or		P
	Protected by overtemperature or thermal protection device conform with 14.3		P
14.2.2	Series excitation motors		N
	Connected direct to device, if overspeeding causes a hazard		N
14.3	Overtemperature protection devices	Not used	N
	Devices operating in a single fault condition	(see Form A.38)	N
14.3a)	Reliable function is ensured		N
14.3b)	Rated to interrupt maximum current and voltage		N
14.3c)	Does not operate in normal use		N
	If self-resetting device used to prevent a hazard, protected part requires intervention before restarting		N
14.4	Fuse holders		--
	No access to hazardous live parts		P
14.5	Mains voltage selecting devices		N
	Accidental change not possible		N

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Clause	Requirement + Test	Result - Remark	Verdict
14.6	Mains transformers tested outside equipment	(see Form A.39 and A.40)	N
14.7	Printed circuit boards		--
	Data shows conformity with V-1 of IEC 60695-11-10 or better; or		P
	Test shows conformity with V-1 of IEC 60695-11-10 or better	(see Form A.23)	P
	Not applicable for printed wiring boards with limited-energy circuits (9.4)		N
14.8	Circuits or components used as transient overvoltage limiting devices		--
	Test conducted between each pair of mains supply terminals	(see Form A.41)	N
	No hazard resulting from rupture or overheating of the component:		--
	- no bridging of safety relevant insulation		N
	- no heat to other parts above the self-ignition points		N
15	**PROTECTION BY INTERLOCKS**		**N**
15.1	Interlocks are designed to remove a hazard before operator exposed		N
15.2	Prevention of reactivation		N
15.3	Reliability		-
	Single fault unlikely to occur; or		N
	Cannot cause a hazard		N
16	**HAZARDS RESULTING FROM APPLICATION**		**--**
16.1	reasonably foreseeable misuse		P
	No hazards arising from settings not intended and not described in the instructions		P
	Other cases of reasonably foreseeable misuse addressed by risk assessment		P
16.2	Ergonomic aspects		N
	Factors giving rise to a hazard the risk assessment is reflecting those aspects:		--
	a) limitation of body dimensions		P
	b) displays and indicators		P
	c) accessibility and conventions of controls		N
	d) arrangement of terminals		P
17	**RISK ASSESSMENT**		**P**
	risk assessment conducted, if hazard might arise and not covered by Clauses 6 to 16		--

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Clause	Requirement + Test	Result - Remark	Verdict
	tolerable risk achieved by iterative documented process covering the following:		--
	a) risk analysis	Human error for use	P
	Identifies hazards and estimates risk	Short and Misconnection	P
	b) risk evaluation		P
	Plan to judge acceptability of resulting risk level based on the estimated severity and likelihood of a risk	By design evaluation	P
	c) risk reduction	By circuit design and document	P
	Initial risk reduced by counter measures;		N
	Repeated risk evaluation without new risks introduced	Twice tested	P
	risks remaining after risk assessment addressed in instructions to responsible body:		--
	Information contained how to mitigate these risks	In documents	P
	Following principles in methods of risk reduction applied by manufacturer in given order:		--
	1) risks eliminated or reduced as far as possible	By design	P
	2) Protective measures taken for risks that cannot be eliminated	By test	P
	3) User information about residual risk due to any defect of the protective measures		N
	Indication of particular training is required		N
	Specification of the need for personal protective equipment		N
	Conformity checked by evaluation of the risk assessment documentation		P
ANNEX F	ROUTINE TESTS		--
	Manufacturer ´s declaration	REF5	P
ANNEX H	QUALIFICATION OF CONFORMAL COATINGS FOR PROTECTION AGAINST POLLUTION		N
H.1	General		
	Conformal coatings meet the requirements of Clause H.2 and H.3.		
H.2	Technical properties		
	Technical properties of conformal coatings are suitable for the intended application. In particular:		
	a) Manufacturer indicate that it is a coating for PWBs;		

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Clause	Requirement + Test	Result - Remark	Verdict
	b) rated operating temperature include the temperature range of the indicated application;		
	c) CTI, insulation resistance and dielectric strength are suitable for the intended application;		
	d) Coating have adequate uv resistance, if it is exposed to sunlight;		
	e) Flammability rating of the coating is at least the required flammability rating of the applied PWB.		
H.3	Qualification of coatings	(see Form A.42)	
	Coating complies with the conformity requirements.		
ANNEX K	INSULATION REQUIREMENTS NOT COVERED BY CLAUSE 6.7	(see Form A.15 and A.18)	N

4.4	**TABLE: Testing in SINGLE FAULT CONDITION – Results**				**Form A.1**	P
Test subclause	Fault No.	Fault description	Td 4.4.3 (NOTE)	How was test terminated Comments		Meets 4.4.4
	1	Protective bonding fault	10min	Less than 10mohm difference, no affecting function		P
	2	Fan stop	2hour	Temperature riseup about 10C, no affecting function		P
	3	Ventilation hole close	2hour	Temperature riseup about 3C, no affecting function		P
	4	Short circuit (secondly output is shorted)	10min	Power Supply Unit was shut down, no fire		P
NOTE Td = Test duration in hh:mm:ss Record dielectric strength test on Form A.18 and temperature tests on Form A.26A and or A.26B. Record in the comments column for each test whether carried out during or after single fault condition.						
Supplementary information: After all faults, system is functionally normal working .						

5.1.3c)	TABLE: Mains supply		Form A.3	P
	Marked rating :	100-240~	V	—
	Phase :	one		—
	Frequency :	50	Hz	—
	Start Current :	-	A	—
	Power :	-	W	—
	Start Power :	---	VA	—

Test

Test No.	Voltage V	Frequency Hz	Current A(fuse)	Power in W	Power in VA	Comments
1	230	50	--	--	---	The measured value shall not exceed the marked value by more than 10%

Note: Measurements are only required for marked ratings.

Supplementary information:

5.3	TABLE: Durability of markings	**Form A.3**	P

Marking method (see NOTE)	Agent
1) Paper label applied	A Water
2) Label of painted on metal surface	B Isopropyl alcohol
3) Label of painted on non metal surface	C (specify agent)
4) Warning marking	D (specify agent)
5) No applied	E (specify agent)
NOTE – Where applicable include print method, label material, ink or paint type, fixing method, adhesive and surface to which marking is fixed.	

Marking location	Marking method (see above)
Identification (5.1.2)	1
Mains supply (5.1.3)	N
Fuses (5.1.4)	4
terminals and operating devices (5.1.5.1)	N
Measuring circuit terminals (5.1.5.2)	N
Switches and cricuit breakers (5.1.6)	N
Double/reinforced equipment (5.1.7)	N
Field wiring Terminal boxes (5.1.8)	N
Warning marking (5.2)	N
Battery charging (13.2.2)	N

Method	Test agent	Remains legible Verdict	Label loose Verdict	Curled edges Verdict	Comments
1	A	P	P	P	
1	B	P	P	P	
4	A	P	P	P	
4	B	P	P	P	

6	**TABLE: Values in NORMAL CONDITION**											**Form A.5**	**P**
6.1.2	Exceptions									11.2 Cleaning and decontamination			—
6.3.1	Values in NORMAL CONDITION (see NOTE 1)									11.3 Spillage			—
6.6.2	Terminals for external circuit									11.4 Overflow			
6.10.3	Plugs and connections												
Item(see Form A.4)	Voltage			Current				Capacitance		10 s / 5 s test (NOTE)			Comments
	V r.m.s.	V peak	V d.c.	Test Circuit A1	mA r.m.s.	mA d.c.	mA d.c.	µC	mJ	V	µC	mJ	
	508	-	-		1.30	-	-						High-voltage gnd-ac input
	1050	-	-		2.30	-	-						High-voltage gnd-ac input
	1502	-	-		2.78	-	-						High-voltage gnd-ac input
	1470				2.40								Reinforcement isolated A - V+
	1504				2.44								Reinforcement isolated A - V+
	1508				2.45								Reinforcement isolated B - V-
	1510				2.44								Reinforcement isolated B - VNOTE
NOTE-A 10 s test is specified in 6.1.2 a) b). A. 5 s test is specified in 6.10.3. The capacitance level versus voltage below the limits given from figure 3 of IEC 61010-1. Supplementary information: See report also													

6.2	TABLE: Determination of ACCESSIBLE parts		Form A.4	P
6.1.2	Exceptions	---		—
6.2	Determination of accessible parts	---		—

Item	Description	Determination method (NOTE 5)	Exception under 6.1.2 (NOTE 4)
1	AC inlet with filter and fuse	Main Power	P
2	Case surface (no covered metal)	Temperature/ protective resistance	P
3	Case surface (covered by paint)	Temperature	P
4	Open hole for ventilation	Finger,plastic tape (close test)	P

NOTE 1 – Test fingers and pins are to be applied without force unless a force is specified (see 6.2.2)

NOTE 2 – Special consideration should be given to inadequate insulation and high voltage parts (see 6.2)

NOTE 3 – Parts are considered to be accessible if they could be touched in the absence of any covering which is not considered to provide suitable insulation (see 6.4).

NOTE 4 – Capacitor test may be required (see Form A.5).

NOTE 5 – The determination methods are:

V = visual; R = rigid test finger; J = jointed test finger; P3 = pin 3 mm diameter; P4 = pin 4 mm diameter.

Supplementary information:

6.3.2	TABLE: Levels in SINGLE FAULT CONDITION									Form A.8		P
Item	Subclause and	Voltage			Transient (see NOTE)		Current				Capacitance	
(See Form A.4)	fault No. see FormA.1	V r.m	V peak	V d.c.	V	s	Test circuit A1/A2/A3	mA r.m.s	mA peak	mA d.c.	μF (NOTE)	Comments
1	Bonding remove	1500		---	-	-	A1	2.75	0.58			No change
-	Protective terminal Resistance	0.24	-	-	-	-	-	10.0A	-	-	-	5M ohm up
-	Floating ground	-	77V	-	-	-	-	0	-	-	-	open
			0V					12.5u				close
			32V					7u				Human body touching
-	-	-	-	-	-	-	-	-	-	-	-	-

NOTE – Transient voltages must be below the limits given from Figure 1 and the capacitance below the limits from figure 2 of IEC 61010-1.

6.5.2.4	TABLE: Bonding impedance of plug connected equipment	Form A.9	P

accessible part under test	Test current [A]	Voltage attained after 1 min [V]	Calculated resistance (Maximum 0,1 or 0,2Ω) [Ω] (NOTE 1)	Verdict
Bonding wire it self	10.0	0.17	4m ohm	P
Inlet GND to enclosure metal	10.0	0.18	5m ohm	P
Standard main power cord GND to enclosure metal	10.0	0.70	57m ohm	P

6.5.1.4	**TABLE: Bonding impedance of permanently connected equipment**		**N**
ACCESSIBLE part under test	Test current A	Voltage attained after 1 min (maximum 10 V)	Verdict
Supplementary information:			

6.5.1.5	**TABLE: Indirect bonding for measuring and test equipment**	**Form A.11**	**N**
accessible part under test	Voltage attained	Time for voltage to drop to allowable levels	Verdict
a) Voltage limiting device	—	—	—
Supplementary Information:			
accessible part under test	Voltage applied V	Time for device to trip s	Verdict
b) Voltage-sensitive tripping device			
Supplementary Information:			

6.7	TABLE: Clearances and creepage distances	Form A.13	P
8	Mechanical resistance to shock and impact	---	P
10.5.1	Integrity of clearances and creepage distances	A non-operative treatment, in which the equipment, not energized, is stored for 7hour at 70℃±2℃,or at 10℃±2℃ above the temperature measured during the test of 10.5.1	

Location	Measured (initial – 6.7)		Verdict	Mechanical tests (note)			Test at max.	Measured after test (if required)		Verdict	---
(see Form A.5)	creepage distance	clearance	---	Applied force	Rigidity (8.1)	Drop (8.2)	rated ambient	creepage distance	clearance	---	Comments

	mm	mm	---	(6.7) N	Static	Dynamic	Normal	Hand-held/ Plug-in	(10.5.1)	mm	mm	---	---
Primary circuit to metal enclosure	>6.0	>6.0	PASS		N	N	P	N	24.5	---	---	---	---
Power supply was approved													
NOTE – Refer to Form A.12 for dielectric strength tests following the above tests.													

6.8	**TABLE: Dielectric strength tests**		**Form A.14**	**P**
4.4.4.1 b)	Conformity after application of fault conditions1			P
6.4	Protection in normal condition			P
6.5.2	double insulation and reinforced insulation			P
6.6.1	Connections to external circuits			N
6.7.3.1 c)	clearance values – General: reduced clearances for homogeneous construction			P
6.10.2.5	Fitting of non-detachable mains supply cords1			P
8	Mechanical resistance to shock and impact			P
9.1 a) 2)	Eliminating or reducing the sources of ignition within the equipment			P
9.3 c)	Limited-energy circuit			N
11.2	Cleaning1			
11.3	Spillage1			
11.4	Overflow1			
11.6	Specially protected equipment1			
[1] Record the fault, test or treatment applied before the dielectric strength test				
	Test site altitude.....:	1000m		—
	Test voltage correction factor (see Table 10)....:	N/A		—

Location or references from Forms A.2 and A.5	Clause or sub-clause	Humidity Yes/No	Working voltage V	Test voltage r.m.s./peak/d.cV	Comments(clearance mm)	Verdict
Primary to GND	6.4, 6.6	No	240	2121VDC		
Supplementary information:						

6.10.2	**TABLE: Cord anchorage**				**Form A.15**	**N**
Location	Mass kg	Pull N	Verdict	Torque Nm	Verdict	Comment
Supplementary information: The detachable main supply cord is used for supplied with equipment.						

9	TABLE: Protection against the spread of fire		Form A.16	P
Item	Source of HAZARD or area of the equipment considered (circuit, component, liquid etc.)	Protection Method (9a, 9b or 9c)	Protection details	Verdict
1	Printed wiring boards	9c containment of a fire within the equipment.	Applied IEC component approved of flammability class FV-1 or better,or equivalent IEC standard flammability class See table 3	P
Supplementary information:				

9.3.2	TABLE: Constructional requirements	Form A.17	N
14.8	Printed circuit boards	See table 3	
Material tested .....:			—
Generic name .....:			—
Material manufacturer.....:			—
Type .....:			—
Colour .....:			—
Conditioning details.....:			—

		Sample 1	Sample 2	Sample 3
Thickness of specimen	mm			
Duration of flaming after first Application	s			
Duration of flaming plus glowing After second application	s			
Specimen burns to holding clamp	Yes/No			
Cotton ignited	Yes/No			
Sample result	Pass/Fail			

Supplementary information:
Applied IEC component approved of flammability class FV-1 or better,or equivalent IEC standard flammability class See table 3

9.4	TABLE: Limited-energy circuit				Form A.18		N
Item	9.3 a)	9.3 b) Current and power limitation			9.3 c)	Decision	---
or Location (see Form A.16)	Max potential in circuit voltage r.m.s./d.c. V	Max available current A	Max available power VA	Overload protection after 120 s A	Circuit separation	Yes/No	Comments
Supplementary information:							

9.5	TABLE: Requirements for equipment containing or using flammable liquids Form A.19	N
Type of liquid	9.4 Flammable liquids	Verdict

	b) quantity	c) Containment	
Supplementary information:			

10.a	**TABLE : Temperature Measurements**	**Form A.20A**	**P**
10.1	Surface temperature limits - normal condition		P
10.2	Temperature of windings- normal condition and / or signle fault condition		N
10.3	Other temperature measurements		P

Operating conditions:	Normal conditions 264V /50Hz		
Frequency ..... :	50 Hz	Test room ambient temperature (t_a) .....:	22.5 °C
Voltage ..... :	264 V	Test duration .....:	3 h 26 min

Part / Location	t_c °C	t_{max} °C	Verdict	Comments
AC inlet	36.3	50	P	
Power supply body	57.4	70	P	
Internal wire to power supply	45.5	105	P	
Switch	27.2	70	P	
Fan	29.5	60	P	
Enclosure outside near main board	39.3	70	P	
Enclosure(internal surface)	36.2	70	P	
Enclosure(external surface)	34.6	70	P	

10.2	**TABLE: Temperature of windings** **Resistance method Temperature Measurements**	**Form A.20B**	**N**
4.4.2.6	MAINS Transformers		N
14.2.1	Motor temperatures		N

Operating conditions:								
Frequency.....	--- Hz	Test room ambient temperature (t_{a1}/t_{a2})...					/	°C (initial / final)
Voltage	--- V	Test duration					--- h --	min
Part / Designation	R_{cold} Ω	R_{warm} Ω	Current A	t_r K	t_c °C	t_{max} °C	Verdict	Comments

NOTE 1- R_{cold} = initial resistance R_{warm} = final resistance
t_r = temperature rise t_c = t_r corrected (t_c= t_r - { t_{a2} - t_{a1}} + [40 °C or max RATED ambient])
t_{max} = maximum permitted temperature
NOTE 2 - Indicate insulation class (IEC 85) under comments (optional)
NOTE 3 - Record values for NORMAL CONDITION and / or SINGLE FAULT CONDITION in this Form use additional form if necessary

Supplementary information:

10.5.2	**TABLE: Resistance to heat of non-metallic enclosures**	**Form A.21**	**N**
	Test method used:		—
	Non operative treatment		-
	Empty ENCLOSURE		-
	Operative treatment		-
	Temperature during tests		—
	ENCLOSURE samples tested were		—

Description	Material	Comments	Verdict
	Dielectric strength test (6.8)		

Supplementary information:

10.5.3	**TABLE: Insulating Materials**	**Form A.22**	**P**
10.5.3a)	Ballpressure test	--	--
	Max. allowed impression diameter		—

Part	Test temperature °C	Impression Diameter (mm)	Verdict
Plastic terimal	125	1.2	P

Supplementary information:

10.5.3b)	**Vicat softening test (ISO 306)**	**--**	**N**

Part	Vicat softening temperature °C	Thickness of sample (mm)	Verdict

Supplementary information:

8	**TABLE: Mechanical resistance to shock and impact**	**Form A.23**	**P**
11	**Protection against hazards from fluids**	**----**	**P**

Voltage tests can be carried out once after performing the tests of clause **8** and clause **11**. However, if voltage tests are carried out separately after each set of tests, two forms can be used.

	Clause 8 tests				Clause 11 tests							
Location (see form A.5)	Static	Dynamic	Normal	Handheld Plug-in	Cleaning (11.2)	Spillage (11.3)	Overflow (11.4)	IEC 60529 (11.6)	Working voltage V	Test voltage V	Verdict	Comments (Clearance mm)
Enclosure	N	N	P	N	N	N	N	N	N	N	P	4.0

No physical damage to the enclosures which could create a hazard. Critical spacings are provided in the external AC/DC power adapter.

11.7.2	TABLE: Leakage and rupture at high pressure			Form A.24	N
Part	Maximum permissible working pressure MPa	Test pressure MPa	Leakage YES / NO	Burst YES / NO	Comments
Supplementary information:					

11.7.3	Leakage from low-pressure parts		N
Part	Test Pressure MPa	Leakage YES / NO	Comments
Supplementary information:			

12.2.1	TABLE: Ionizing radiation		Form A 25	N
Locations tested	Measured values µSv/h	Verdict	Comments	
Supplementary information:				

12.5.1	TABLE: Sound level		Form A.26	N
Locations tested	Measured values dBA	Calculated maximum sound pressure level		
At operator's normal position and at bystanders' positions				
a)				
b)				
c)				
d)				
e)				
Supplementary information:				

12.5.2	Ultrasonic pressure		N
Locations tested	Measured values		Comments
	dB	kHz	
At OPERATOR'S normal position			
At 1 m from the ENCLOSURE			
a)			
b)			
c)			
d)			
e)			

NOTE – No limit is specified at present, but a limit of 110 dB above the reference pressure value of 20 μPa is under consideration for applicable frequencies between 20 kHz and 100 kHz.
Supplementary information:

13.2.2	**TABLE: Batteries**	**Form A.27**	**N**
	Battery type		
	Battery manufacturer/model/catalogue No.		
	Battery ratings		
	Reverse polarity instalment test		

Single component failures	Verdict	
Component	Open circuit	Short circuit

Supplementary information:

14.3	**TABLE: Overtemperature protection devices**	**Form A.28**	**N**

Reliability test			
Component	Type (note)	Verdict	Comments

NOTE: NSR = non-self-resetting (10 times) NR = non-resetting (1 time) SR = self-resetting (200 times)
Supplementary information:

4.4.2.6	**TABLE: Mains transformer**	**Form A.29**	**N**
4.4.2.6.1	Short circuit		
14.7.1	MAINS transformers tested outside equipment		**N**
Type:			—
Manufacturer:			—
Test in equipment			
Test on bench			
Test repeated inside equipment (see 14.7)			
Optional – Insulation class (IEC 60085) of the lowest RATED winding			—

Winding identification				
Type of Protector for winding (Note 1)				
Elapsed time				
Current, A primary secondary				
Winding temperature, °C primary (see Note 2) secondary				

Tissue paper / cheesecloth OK ? (Pass / Fail)					
Voltage tests (see Note 3)					
primary to secondary	_____ V ____				
primary to core	_____ V ____				
secondary to secondary	_____ V ____				
secondary to core	_____ V ____				
Verdict					

Note 1: Primary fuse - PF / ( ) A
Secondary fuse - SF / ( ) A
Overtemperature protection - OP / ( ) °C
Impedance protection - Z

Note 2: Indicate method of measurement TC = with thermocouple
R = resistance method
If resistance method is used,record resistance in cold and warm condition in FormA.20B!

Note 3: Record the voltage applied and the type of voltage (r.m.s. / d.c. / peak) and for results use NB = no breakdown or B = breakdown

Supplementary information:

1,Applied IEC component approved for MW switch power and see table 3

2,Mains transformer applied in MW switch power and then transformer component accorded with EN standards .

3, As above test is conducted by MW switch power CE report accorded with EN standards.

4.4.2.6	**TABLE: Mains transformer**			**Form A.30**	**N**
14.7.2	Overload tests (for mains transformers)				**N**
Type .....:					—
Manufacturer .....:					—
Test in equipment					
Test on bench					
Test repeated inside equipment (see 14.7)					
Optional – Insulation class (IEC 60085) of the lowest RATED winding .....:					—
Winding identification					
Type of Protector for winding (Note 1)					
Elapsed time					
Current, A primary secondary					
Winding temperature, °C primary (see Note 2) secondary					
Tissue paper / cheesecloth OK ? (Pass / Fail)					
Voltage tests (see Note 3)					
primary to secondary	_____ V ____				

primary to core	_____	V	____				
secondary to secondary	_____	V	____				
secondary to core	_____	V	____				
Verdict							

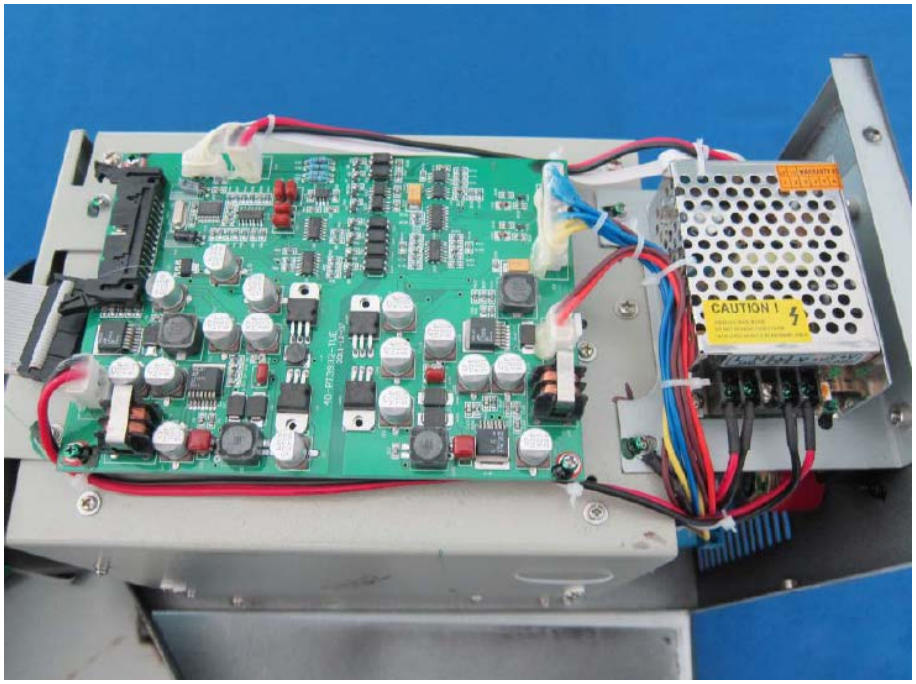
Note 1: Primary fuse - PF / ( ) A
Secondary fuse - SF / ( ) A
Overtemperature protection - OP / ( ) °C
Impedance protection - Z

Note 2: Indicate method of measurement TC = with thermocouple
R = resistance method
If resistance method is used,record resistance in cold and warm condition in FormA.20B!

Note 3: Record the voltage applied and the type of voltage (r.m.s. / d.c. / peak) and for results use NB = no breakdown or B = breakdown

Supplementary information:
1,Applied IEC component approved for MW switch power and see table 3
2,Mains transformer applied in MW switch power and then transformer component accorded with EN standards .
3, As above test is conducted by MW switch power CE report accorded with EN standards.

Photographs of the EUT



(EBO authenticate the photo on original report only)
*** End of Report ***