

TEST REPORT
IEC 950
Safety of information technology equipment

Report

Compiled by: Mike Harris

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Contents: 33 pages

This TRF is based on a blank test report that was prepared by KEMA using information obtained from the TRF originator (see below).

Testing laboratory

Name: Compliance Department Co.

Address: 106 Banks Street, San Francisco, CA 94110 USA

Testing location: same

Client

Name: AllMotion, Inc.

Address: 29504 Union City Boulevard, Union City, CA 94587 USA

Test specification

Standard: EN 60950-1

Test procedure: CE

Procedure deviation: N.A.

Non-standard test method: N.A.

Test Report Form/blank test report

Test Report Form No.: I950__D/97-06

TRF originator: FIMKO

Master TRF: reference No. I950 D, dated 97-02

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Test item

Description: Stepping motor and servo controllers

Trademark: EZ Stepper, EZ Servo, EZ Controller, Stepper-Stick

Model and/or type reference: 1000* Series (may be followed by characters)

Manufacturer: AllMotion, Inc.

Rating(s): 5 V/0.5 A to 40 V/4 A input; 5 V/0.5 A to 20 V/7 A to 1000 V/0.024 A output

Copy of marking plate with company name, series, model (example)

AllMotion
1000 SERIES
EZHR17EN

Copy of company logo



Particulars: test item vs. test requirements

Equipment mobility..... : ~~movable / hand held / stationary / fixed / permanent connection / direct plug-in / for building-in~~

Operating condition..... : continuous / ~~short time / intermittent~~

Tested for IT power systems : ~~Yes~~ / No

IT testing, phase-phase voltage (V)..... : 30 V rms, 42.4 V pk, 60 V dc maximum

Class of equipment : ~~Class I / Class II / Class III~~

Mass of equipment (kg) :

Protection against ingress of water..... : None – open

Test case verdicts

Test case does not apply to the test object : N(.A.) tests to be performed in end use

Test item does meet the requirement..... : ~~P(ass)~~

Test item does not meet the requirement..... : ~~F(ail)~~

..... :

Testing

Date of receipt of test item : N/A

Date(s) of performance of test : N/A

..... :

General remarks

This test report shall not be reproduced except in full without the written approval of the testing laboratory.

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

"(see Enclosure #)" refers to an Enclosure appended to the report.

"(see appended table)" refers to a table appended to the report.

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

General product information:

These are open board and USB module component motor and servo controllers for controlling the actions of motors and servos.

IEC 950			
Clause	Requirement + Test	Result - Remark	Verdict

1	GENERAL		
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1.5	Components		
1.5.1	Comply with EN 60950 or relevant component standard	(see appended table)	P
1.5.2	Evaluation and testing of components		N
	Dimensions (mm) of mains plug for direct plug-in . :		N
	Torque and pull test of mains plug for direct plug-in; torque (Nm); pull (N)		N
1.5.3	Transformers		N
1.5.4	Flammability class of high voltage components (component; manufacturer; flammability)		N
1.5.5	Interconnecting cables		N
1.5.6	Mains capacitors		N

1.6	Power interface		
1.6.1	Steady state input current	(see appended table)	N
	Current deviation during normal operating cycle		N
1.6.2	Voltage limit of hand-held equipment		N
1.6.3	Neutral conductor insulated from earth and body		N
1.6.4	Components in equipment intended for IT power system		N
1.6.5	Mains supply tolerance (V)		N

IEC 950			
Clause	Requirement + Test	Result - Remark	Verdict

1.7	Marking and instructions		P
1.7.1	Rated voltage (V)		N
	Symbol of nature of supply for d.c.		N
	Rated frequency (Hz)		N
	Rated current (A)		N
	Manufacturer		Y
	Trademark		N
	Type/model		Y
	Symbol of Class II		N
	Certification marks		Y
1.7.2	Safety instructions		N
1.7.3	Short duty cycles		N
1.7.4	Marking for voltage setting/frequency setting		N
1.7.5	Marking at power outlets		N
1.7.6	Marking at fuseholders		N
1.7.7.1	Protective earthing terminals		N
1.7.7.2	Terminal for external primary power supply conductors		N
1.7.8.1	Identification and location of switches and controls :		N
1.7.8.2	Colours of controls and indicators		N
1.7.8.3	Symbols according to IEC 417		N
1.7.8.4	Figures used for marking		N
1.7.8.5	Location of markings and indications for switches and controls		N
1.7.9	Isolation of multiple power sources		N
1.7.10	Instructions for installation to IT power system		N

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Clause	Requirement + Test	Result - Remark	Verdict
1.7.11	Instructions when protection relies on building installation		N
1.7.12	Marking when leakage current exceeds 3,5 mA		N
1.7.13	Indication at thermostats and regulating devices		N
1.7.14	Language of safety markings/instructions		N
	Language		N
1.7.15	Durability and legibility		Y
1.7.16	Removable parts		N
1.7.17	Warning text for replaceable lithium batteries		N
	Language		
1.7.18	Operator access with a tool		N
1.7.19	Equipment for restricted access locations		N

IEC 950			
Clause	Requirement + Test	Result - Remark	Verdict

2	PROTECTION FROM HAZARDS		P
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2.1	Protection against electric shock and energy hazards		P
2.1.1	Access to energized parts	Provided by end-use	N
2.1.2	Protection in operator access areas	Provided by end-use	N
	Test by inspection		N
	Test with test finger		N
	Test with test pin		N
2.1.3.1	Insulation of internal wiring in an ELV circuit accessible to operator		N
	Working voltage (V); distance (mm) through insulation		N
2.1.3.2	Operator accessible insulation of internal wiring at hazardous voltage		N
2.1.4.1	Protection in service access areas	Provided by end-use	N
2.1.4.2	Protection in restricted access locations		N
2.1.5	Energy hazard in operator access area	Provided by end-use	N
2.1.6	Clearances behind conductive enclosures		N
2.1.7	Shafts of manual controls		N
2.1.8	Isolation of manual controls		N
2.1.9	Conductive casings of capacitors		N
2.1.10	Risk of electric shock from stored charge on capacitors connected to mains circuit		N
	Time-constant (s); measured voltage (V)		

IEC 950			
Clause	Requirement + Test	Result - Remark	Verdict

2.2	Insulation		P
2.2.1	Methods of insulation		N
2.2.2	Properties of insulating materials		N
2.2.3	Humidity treatment		N
	Humidity (%)		
	Temperature (0C)		
2.2.4	Requirements for insulation	(see appended table 2.9, 5.1 and 5.3)	N
2.2.5	Insulation parameters		N
2.2.6	Categories of insulation		N
2.2.7.1	General rules for working voltages		N
2.2.7.2	Clearances in primary circuits		N
2.2.7.3	Clearances in secondary circuits		N
2.2.7.4	Creepage distances		N
2.2.7.5	Electric strength tests		N
2.2.8.1	Bridging capacitors		N
2.2.8.2	Bridging resistors		N
2.2.8.3	Accessible parts		N

IEC 950			
Clause	Requirement + Test	Result - Remark	Verdict

2.3	Safety extra-low voltage (SELV) circuits		P
2.3.1	Voltage (V) of SELV circuits under normal operating conditions and after a single fault	Provided by end-use	
2.3.2	Voltage (V) between any two conductors of SELV circuit(s) and for Class I equipment between any conductor of SELV circuit and equipment protective earthing terminal under normal operating conditions	Provided by end-use	N
2.3.3	Voltage (V) of SELV in the event of a single failure of basic or supplementary insulation or of a component	Provided by end-use	
	Method used for separation		N
2.3.4	Additional constructional requirements		N
2.3.5	Connection of SELV circuits to other circuits		N
2.3.8	Construction of SELV circuits		N
2.3.9	SELV circuits connected to other circuits		N

2.4	Limited current circuits		N
2.4.2	Frequency (Hz)		
	Measured current (mA)		
2.4.3	Measured voltage (V)		
	Measured capacitance (TF)		
2.4.4	Measured voltage (V)		
	Measured charge (TC)		
2.4.5	Measured voltage (V)		
	Measured energy (mJ)		
2.4.6	Limited current circuit supplied from or connected to other circuits		

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Clause	Requirement + Test	Result - Remark	Verdict

2.5	Provisions for earthing		N
2.5.1	Class I equipment		
	Warning label for service personnel		
2.5.2	Protective earthing in Class II equipment		
2.5.3	Switches/fuses in earthing conductors		
2.5.4	Assured earthing connection for Class I equipment in systems comprising Class I and Class II equipment		
2.5.5	Green/yellow insulation		
2.5.6	Continuity of earth connections		
2.5.7	Making and breaking of protective earthing connections		
2.5.8	Disconnection protective earthing connections		
2.5.9	Protective earthing terminals for fixed supply conductors or for non-detachable power supply cords		
2.5.10	Corrosion resistance		
2.5.11	Resistance (A) of protective earthing conductors $\leq 0,1 \text{ A}$		
	Test current (A)		

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Clause	Requirement + Test	Result - Remark	Verdict

2.6	Disconnection from primary power		N
2.6.1	General requirements		
2.6.2	Type of disconnect device		
2.6.3	Disconnect device in permanently connected equipment		
2.6.4	Parts of disconnect device which remain energized		
2.6.5	Switches in flexible cords		
2.6.6	Disconnection of both poles simultaneously in single-phase equipment		
2.6.7	Disconnection of all phase conductors of supply in three-phase equipment		
2.6.8	Marking of switch acting as disconnect device		
2.6.9	Installation instructions if plug on power supply cord acts as disconnect device		
	Language		
2.6.11	Interconnected equipment		
2.6.12	Multiple power sources		

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Clause	Requirement + Test	Result - Remark	Verdict

2.7	Overcurrent and earth fault protection in primary circuits		N
2.7.1	Basic requirements		
2.7.2	Protection against faults not covered in 5.4		
2.7.3	Short-circuit backup protection		
2.7.4	Number and location of protective devices :		
2.7.5	Protection by several devices		
2.7.6	Warning to service personnel		

2.8	Safety interlocks		N
2.8.2	Design		
2.8.3	Protection against inadvertent reactivation		
2.8.4	Reliability		
2.8.5	Overriding an interlock		
2.8.6.1	Contact gap (mm) :		
2.8.6.2	Switch performing 50 cycles		
2.8.6.3	Electric strength test: test voltage (V) :		
2.8.7	Protection against overstress		

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Clause	Requirement + Test	Result - Remark	Verdict

2.9	Clearances, creepage distances and distances through insulation		N
	Nominal voltage (V)		
	General		
2.9.2	Clearances		
2.9.2.1	Clearances in primary circuits	(see appended table 2.9.2 and 2.9.3)	
2.9.2.2	Clearances in secondary circuits	(see appended table 2.9.2 and 2.9.3)	
2.9.3	Creepage distances	(see appended table 2.9.2 and 2.9.3)	
	CTI tests		
2.9.4.1	Minimum distances through insulation	(see appended table 2.9.4)	
2.9.4.2	Thin sheet material		
	Number of layers (pcs)		
	Electrical strength test: test voltage (V)		
2.9.4.3	Printed boards		
	Distance through insulation	(see appended table 2.9.4)	
	Electric strength test at voltage for thin sheet insulating material	(see appended table 5.3)	
	Number of layers (pcs)		
2.9.4.4	Wound components without interleaved insulation	(see appended table 2.9.4 and 5.3 and Annex U)	
	Number of layers (pcs)		
	Two wires in contact inside component; angle between 45° and 90°		
	Routine testing for finished component		
2.9.5	Distances on coated printed boards	(see appended table 2.9.4)	
	Routine testing for electric strength		

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Clause	Requirement + Test	Result - Remark	Verdict

2.9.6	Enclosed and sealed parts	(see appended table 5.3)	
	Temperature T1 (0C)		
	Humidity %		
2.9.7	Spacings filled by insulating compound	(see appended table 2.9.4 and 5.3)	
	Temperature T1 (0C)		
	Humidity %		
2.9.8	Component external terminations	(see appended table 2.9.2 and 2.9.3)	
2.9.9	Insulation with varying dimensions	(see appended table 2.9.2 and 2.9.3 and 2.9.4)	

2.10	Interconnection of equipment		N
2.10.1	General requirements		
2.10.2	Type of interconnection circuits		
2.10.3	ELV circuits as interconnection circuits		

2.11	Limited power source		N
	Use of limited power source		

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Clause	Requirement + Test	Result - Remark	Verdict

3	WIRING, CONNECTIONS AND SUPPLY		N
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3.1	General		N
3.1.1	Cross-sectional area of internal wiring/interconnecting cables	(see appended table 5.1)	N
	Protection of internal wiring and interconnecting cables		N
3.1.2	Wireways		N
3.1.3	Fixing of internal wiring		N
3.1.4	Fixing of uninsulated conductors		N
3.1.5	Insulation of internal wiring	(see appended table 5.3)	N
3.1.6	Wires coloured green/yellow only for protective earth connection		N
3.1.7	Fixing of beads and similar ceramic insulators		N
3.1.8	Required electrical contact pressure		N
3.1.9	Reliable electrical connections		N
3.1.10	End of stranded conductor		N
3.1.11	Use of spaced thread screws/thread-cutting screws		N

3.2	Connection to primary power		N
3.2.1	Type of connection		N
	Design of product with more than one supply connection		N
3.2.2	Provision for permanent connection		N
	Size (mm) of cables and conduits		N
3.2.3	Appliance inlet		N
3.2.4	Type and cross-sectional area (mm ²) of power supply cord		N
3.2.5	Cord anchorage		N
	Test: 25 times; 1 s; pull (N)		

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Clause	Requirement + Test	Result - Remark	Verdict
	Longitudinal displacement ≤ 2 mm		N
3.2.6	Protection of power supply cord		N
3.2.7	Cord guard		N
	D (mm)		
	Test: mass (g)		
	Radius of curvature of the cord $\leq 1,5 D$		N
3.2.8	Supply wiring space		N

3.3	Wiring terminals for external power supply conductors		N
3.3.1	Terminals		N
3.3.2	Special non-detachable cord		N
	Type of connection		
	Pull test at 5 N		N
3.3.3	Screws and nuts		N
3.3.4	Fixing of conductors		N
3.3.5	Connection of connectors		N
3.3.6	Size of terminals		N
	Nominal thread diameter (mm)		N
3.3.7	Protection against damage of conductors		N
3.3.8	Terminal location		N
3.3.9	Test with 8 mm stranded wire		N

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Clause	Requirement + Test	Result - Remark	Verdict

4	PHYSICAL REQUIREMENTS		N
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4.1	Stability and mechanical hazards		N
4.1.1	Stability tests		N
	Angle of 100		N
	Test: force (N)		N
4.1.2	Protection against personal injury		N
4.1.3	Warning and means provided for stopping the moving part		N
4.1.4	Edges and corners		N
4.1.5	Enclosure of a high pressure lamp		N

4.2	Mechanical strength and stress relief		N
4.2.1	General		N
4.2.2	Internal enclosures 30 N \pm 3 N; 5 s		N
4.2.3	External enclosures 250 N \pm 10 N; 5 s		N
4.2.4	Steel ball tests		N
	Fall test		N
	Swing test		N
4.2.5	Drop test		N
4.2.6	Heat test for enclosures of moulded or formed thermoplastic materials: 7 h; T (0C)		N
4.2.7	Compliance criteria		N
4.2.8	Mechanical strength of cathode ray tubes		N

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Clause	Requirement + Test	Result - Remark	Verdict
4.3	Construction details		N
4.3.1	Changing of setting for different power supply voltages		N
4.3.2	Adjustment of accessible control devices		N
4.3.4	Prevention of dangerous concentration of dust, powder, liquid and gas		N
4.3.5	Fixing of knobs, grips, handles, levers		N
	Test: force (N)		N
4.3.6	Driving belts/couplings shall not ensure electrical insulation		N
4.3.7	Retaining of sleeves		N
4.3.9	Protection of loosening parts		N
4.3.11	Resistance to oil and grease		N
4.3.12	Protection against harmful concentration of ionizing radiation, ultraviolet light, laser or flammable gases (for laser see IEC 825-1)		N
4.3.13	Securing of screwed connections		N
4.3.15	Openings in the top of enclosure		N
	Dimensions (mm)		N
4.3.16	Openings in the sides of enclosure		N
	Dimensions (mm)		N
4.3.17	Interchangeable plugs and sockets		N
4.3.18	Torque test for direct plug-in equipment		N
	Additional torque (Nm)		N
4.3.19	Protection against excessive pressure		N
4.3.20	Protection of heating elements in Class I equipment		N
4.3.21	Protection of lithium batteries		N
	Construction of protection circuit		N

IEC 950			
Clause	Requirement + Test	Result - Remark	Verdict

4.3.22	Ageing of barrier/screen secured with adhesive		N
	Day 1: temperature (0C); time (weeks)		N
	Day 8/22/57: a) temperature (0C) for 1 h b) temperature (0C) for 4 h c) temperature (0C) over 8 h		N
	Day 9/23/58: a) relative humidity (%) for 72 h b) temperature (0C) for 1 h c) temperature (0C) for 4 h d) temperature (0C) over 8 h		N

4.4	Resistance to fire		P
4.4.1	Methods of achieving resistance to fire		P
4.4.2	Minimizing the risk of ignition		P
	Printed board: manufacturer; type; flammability		P
4.4.3	Flammability of materials and components		P
4.4.3.2	Material and component: manufacturer; type; flammability		P
4.4.3.3	Exemptions		N
4.4.3.4	Wiring harnesses: manufacturer; flammability		N
4.4.3.5	Cord anchorage bushings: manufacturer; flammability		N
4.4.3.6	Air filter assemblies: manufacturer; flammability ...		N
4.4.4	Enclosures and decorative parts: manufacturer; type; flammability		N
4.4.5	Conditions for fire enclosures		N
4.4.5.1	Components requiring fire enclosure: manufacturer; flammability		N
4.4.5.2	Components not requiring fire enclosure		N
4.4.6	Fire enclosure construction		N
4.4.7	Doors or covers in fire enclosures		N
4.4.8	Flammable liquids		N

IEC 950			
Clause	Requirement + Test	Result - Remark	Verdict

5	THERMAL AND ELECTRICAL REQUIREMENTS		N
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5.1	Heating		N
	Heating tests	(see appended table)	N

5.2	Earth leakage current		N
5.2.1	General		N
5.2.2	Leakage current		N
	Test voltage (V)		
	Measured current (mA)		
	Max. allowed current (mA)		
5.2.3	Single-phase equipment		N
	Test voltage (V)		
	Measured current (mA)		
	Max. allowed current (mA)		
5.2.4	Three-phase equipment		N
	Test voltage (V)		
	Measured current (mA)		
	Max. allowed current (mA)		
5.2.5	Equipment with earth leakage current exceeding 3,5 mA		N
	Test voltage (V)		
	Measured current (mA)		
	Max. allowed current (mA)		
	Cross-sectional area (mm ²) of internal protective earthing conductor		
	Warning label		N

IEC 950			
Clause	Requirement + Test	Result - Remark	Verdict

5.3	Electric strength		N
5.3.1	General		N
5.3.2	Test procedure	(see appended table)	N

5.4	Abnormal operating and fault conditions		N
5.4.2	Motors	(see appended table and Annex B)	N
5.4.3	Transformers	(see appended table and Annex C)	N
5.4.4	Compliance of operational insulation		N
	Method used		N
5.4.5	Electromechanical components in secondary circuits	(see appended table)	N
5.4.6	Other components and circuits	(see appended table)	N
5.4.7	Test in any expected condition and foreseeable misuse	(see appended table)	N
5.4.8	Unattended use of equipment having thermostats, temperature limiters etc.	(see appended table)	N
5.4.9	Compliance	(see appended table)	N
5.4.10	Ball-pressure test of thermoplastic parts; impression shall not exceed 2 mm	(see appended table)	N

IEC 950			
Clause	Requirement + Test	Result - Remark	Verdict

6	CONNECTION TO TELECOMMUNICATION NETWORKS		N
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6.1	General		N
6.2	TNV circuits		N
6.2.1.1	Limits of the TNV circuits		N
6.2.1.1 a)	TNV-1 circuits		N
6.2.1.1 b)	TNV-2 and TNV-3 circuits		N
6.2.1.2	Separation from other circuits and from accessible parts	(see appended table 2.9.2, 2.9.3 and 2.9.4)	N
	Voltage (V) in SELV circuits, TNV-1 circuits and accessible conductive parts in event of single insulation fault or component failure		N
6.2.1.3	Operating voltages generated externally		N
	Voltage (V) in SELV circuit, TNV-1 circuit or accessible conductive part		N
6.2.1.4	Separation from hazardous voltages		N
	Insulation between TNV circuit and circuit at hazardous voltage	(see appended table 2.9.2, 2.9.3 and 2.9.4)	N
	Method used		N
6.2.1.5	Connection of TNV circuits to other circuits	(see appended table 5.4)	N
	Insulation (mm) between TNV circuit supplied conductively from secondary circuit and hazardous voltage circuit		N
6.2.2.1	Protection against contact with bare conductive parts of TNV-2 and TNV-3 circuits		N
	Test with test finger		N
	Test with test probe		N
6.2.2.2	Battery compartments		N
	Marking next to door/on door		N

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Clause	Requirement + Test	Result - Remark	Verdict

6.3	Protection of telecommunication network service personnel, and users of other equipment connected to the telecommunication network, from hazards in the equipment		N
6.3.1	Protection from hazardous voltages		N
6.3.2	Use of protective earthing		N
	Language of installation instructions		N
6.3.3.1	Insulation between TNV circuit and parts or circuitry that may be earthed	(see appended table 5.3)	N
6.3.3.2	Exclusions		N
6.3.4.1	Limitation of leakage current (mA) to telecommunication network		N
6.3.4.2	Summation of leakage currents from telecommunication network		N

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Clause	Requirement + Test	Result - Remark	Verdict

6.4	Protection of equipment users from voltages on the telecommunication networks		N
6.4.1	Separation requirements		N
6.4.2	Test procedure		N
6.4.2.1	Impulse test: separation between TNV-1 circuits/TNV-3 circuits and:		N
6.4.2.1 a)	unearthed conductive parts/non-conductive parts of the equipment expected to be held or touched during normal use; test at 2,5 kV		N
6.4.2.1 b)	parts and circuitry that can be touched by the test finger except contacts of connectors that cannot be touched by test probe; test at 1,5 kV		N
6.4.2.1 c)	circuitry which is provided for connection of other equipment; test at 1,5 kV		N
6.4.2.2	Electric strength test: separation between TNV-1 circuits/TNV-3 circuits and:		N
6.4.2.2 a)	unearthed conductive parts/non-conductive parts of the equipment expected to be held or touched during normal use; test at 1,5 kV		N
6.4.2.2 b)	parts and circuitry that can be touched by the test finger except contacts of connectors that cannot be touched by test probe; test at 1,0 kV		N
6.4.2.2 c)	circuitry which is provided for connection of other equipment; test at 1,0 kV		N
6.4.2.3	Compliance criteria		N

6.5	Protection of telecommunication wiring system from overheating		N
	Maximum continuous output current (A) :		N

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Clause	Requirement + Test	Result - Remark	Verdict

A	ANNEX A, TESTS FOR RESISTANCE TO HEAT AND FIRE		N
A.1	Flammability test for fire enclosures of moveable equipment having a total mass exceeding 18 kg, and of stationary equipment		N
A.2	Flammability test for fire enclosures of moveable equipment having a total mass not exceeding 18 kg, and for materials located within fire enclosures		N
A.3	High current arcing ignition test		N
A.3.6	Number of arcs		N
A.4	Hot wire ignition test		N
A.4.6	Ignition time (s)		N
A.5	Hot flaming oil test		N
A.6	Flammability test for classifying materials V-0, V-1 or V-2		N
A.7	Flammability test for classifying foamed materials HF-1, HF-2 or HBF		N
A.8	Flammability test for classifying materials HB		N
A.9	Flammability test for classifying materials 5V		N
A	Tested material		N
	Preconditioning: 7 days (168 h); temperature (0C) :		
	Mounting of samples during test		
	Wall thickness		
	Sample 1 burning time		N
	Sample 2 burning time		N
	Sample 3 burning time		N
	Material: compliance with the requirements		N
	Manufacturer of tested material		N
	Type of tested material		
	Additional information		

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Clause	Requirement + Test	Result - Remark	Verdict

B	ANNEX B, MOTOR TESTS UNDER ABNORMAL CONDITIONS		N
B.1	General requirements		N
	Position		N
	Manufacturer		
	Type		
	Rated voltage (V) or current (A)		
B.2	Test conditions		N
B.3	Maximum temperatures	(see appended table 5.4)	N
B.4	Running overload test		N
B.5	Locked-rotor overload test		N
	Test duration (days)		N
	Electric strength test: test voltage (V)		
B.6	Running overload test for DC motor in secondary circuits		N
B.7	Locked-rotor overload test for DC motor in secondary circuits		N
B.7.2	Test time (h)		N
B.7.3	Test time (h)		N
B.8	Test for motors with capacitors		N
B.9	Test for three-phase motors		N
B.10	Test for series motors		N
	Test voltage (V)		N

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Clause	Requirement + Test	Result - Remark	Verdict

C	ANNEX C, TRANSFORMERS		N
	Position		
	Manufacturer		
	Type		
	Rated values		
	Temperatures	(see appended table 5.4)	N
	Thermal cut-out	(see appended table 5.1)	N
C.1	Overload test		N
	Conventional transformer		N
C.2	Insulation		N
	Precautions		N
	Retaining of end turns of all windings		N
	Earthing test at 25 A		N
C.3	Electric strength test	(see appended table 5.3)	N

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Clause	Requirement + Test	Result - Remark	Verdict

H	ANNEX H, IONIZING RADIATION		N
	Ionizing radiation		N
	Measured radiation		N
	Measured high-voltage (kV)		N
	Measured focus voltage (kV)		N
	CRT markings		N
	Certified by		N
	Standard used		N

U	ANNEX U, INSULATED WINDING WIRES FOR USE AS MULTIPLE PLAYER INSULATION		N
	See separate test report		N

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Clause	Requirement + Test	Result - Remark	Verdict

1.5.1	TABLE: list of critical components				
object/part No.	manufac- turer/trademark	type/model	technical data	standard	mark(s) of conformity ¹⁾
PWB	Any	Any	Minimum V-2	UL94, 796	UL/equiv
Current protector	Any	Any	5A, 50V max	UL1077	UL/equiv
Connectors	Any	Any	Minimum V-2	UL94	UL/equiv*
Wiring	Any	Any	Minimum V-2 or VW-1	UL758	UL/equiv
Plastic	Any	Any	Minimum V-2	UL94	UL/equiv

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Clause	Requirement + Test	Result - Remark	Verdict

1.6	TABLE: electrical data (in normal conditions)						N
fuse #	I _{rated} (A)	U (V)	P (W)	I (mA)	I _{fuse} (mA)	condition/status	

2.9.2 and 2.9.3	TABLE: clearance and creepage distance measurements						N
clearance cl and creepage distance dcr at/of:	U _p (V)	U r.m.s. (V)	required cl (mm)	cl (mm)	required dcr (mm)	dcr (mm)	

2.9.4.1	TABLE: distance through insulation measurements				N
distance through insulation di at/of:	U r.m.s. (V)	test voltage (V)	required di (mm)	di (mm)	

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Clause	Requirement + Test	Result - Remark	Verdict

5.1	TABLE: temperature rise measurements					N
	test voltage (V)					
	t1 (0C)					
	t2 (0C)					
temperature rise dT of part/at:			dT (K)	required dT (K)		
temperature rise dT of winding:		R ₁ (A)	R ₂ (A)	dT (K)	required dT (K)	insulation class

5.3	TABLE: electric strength measurements			N
	test voltage applied between:		test voltage (V)	

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Clause	Requirement + Test	Result - Remark	Verdict

5.4	TABLE: fault condition tests						N
	ambient temperature (0C)						
	model/type of power supply						
	manufacturer of power supply						
	rated markings of power supply						
No.	component No.	fault	test voltage (V)	test time	fuse No.	fuse current (A)	result
supplementary information							

5.4.10	TABLE: ball pressure test of thermoplastics					N
	required impression diameter (mm)					≤ 2 mm
part					test temperature (0C)	impression diameter (mm)