TEST REPORT

UL 62368-1

Audio/video, information and communication technology equipment - Part 1: Safety requirements

Applicant's Name ..... :	Nanchang Montary Industrial Co.,Ltd.
Address .....:	1002 Room,Nanchang, Jiangxi, China Changqing Guomao Building, No8 Hongcheng Road,
Manufacturer ....:	Nanchang Montary Industrial Co.,Ltd.
Address .... :	1002 Room,Nanchang, Jiangxi, China Changqing Guomao Building, No8 Hongcheng Road,
Test specification	
Standard.....:	UL 62368-1:2019
Procedure deviation .....:	N/A
Non-standard test method .....:	N/A
Test item description ..... :	Makeup table
Trademark .....:	N/A
Model and/or type reference .....:	W2699P345799/W2699P345800/W2699P345801/W2699P345802/ W2699P345803/W2699P345804
.	
Additional models..... :	N/A
Rating(s)..... :	AC 100-240/50-60Hz
Date of receipt of test item..... :	Aug. 20, 2025
Date(s) of performance of tests..... :	Aug. 20, 20255 to Aug. 27, 2025
Testing Laboratory Name .....:	JieKe (Shenzhen) Testing Techonlogy Co.,Ltd.
Address .....:	4A06, No.93, Qianjin Second Road,81 District, Hexi Community, Xixiang Street, Bao'an District, Shenzhen, China
Testing location ..... :	Room 201, No.20, East of Houjie Avenue, Houjie, Dongguan, Guangdong, China Street, Bao'an District, Shenzhen, China
Test case verdicts	
Test case does not apply to the test object :	N/A
Test item does meet the requirement:	P(ass)
Test item does not meet the requirement:	F(ail)

Name and address of the testing laboratory : **JieKe (Shenzhen) Testing Techonlogy Co.,Ltd.**
4A06, No.93, Qianjin Second Road,81 District, Hexi Community, Xixiang Street, Bao'an District, Shenzhen, China

Test by : Signature/Report writer — Aug. 27, 2025Date

Review by: Signature/Report Reviewer — Aug. 27, 2025Date

Approved by: Signature/TechnicalSupervisor — Aug. 27, 2025Date

Copy of marking plate:

Makeup table
Model: W2699P345799
Rating:input：AC 100-240/50-60Hz

Nanchang Montary Industrial Co.,Ltd.
DATE CODE: YYMM
CONFORMS TO UL STD 62368-1

UL 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
4	**GENERAL REQUIREMENTS**		p
4.1.1	Acceptance of materials, components and subassemblies		p
4.1.2	Use of components		p
4.1.15	Markings and instructions	See Annex F	p
4.4.5	Safety interlocks		N/A
4.5	Explosion	No explosion	P
5	**ELECTRICALLY-CAUSED INJURY**		P
5.2	Classification of electrical energy sources		N/A
5.2.1	Electrical energy source classifications		P
5.2.2	ES1, ES2 and ES3 limits		P
5.2.2.2	Steady-state voltage and current		P
5.2.2.3	Capacitor		N/A
5.2.2.4	Single pulses		N/A
5.2.2.5	Repetitive pulses		N/A
5.2.2.6	Ringing signals		N/A
5.2.2.7	Audio signals		N/A
5.3	Protection against electrical energy sources		P
5.3.2.2	Safeguards between ES2 and ordinary persons		N/A
5.3.2.3	Safeguards between ES3 and ordinary persons		N/A
5.3.3.2	Safeguards between ES3 and instructed persons		N/A
5.3.4.2	Safeguards between ES3 and skilled persons		N/A
5.3.5.2	Safeguard between ES1, ES2 and ES3		N/A
5.3.5.3	Protection of ES2 against ES3		N/A
5.3.6.1	Accessibility to electrical energy sources and safeguards for ordinary persons		N/A
	Accessibility to electrical energy sources and safeguards for instructed persons are prevented from access to.....:		N/A
5.3.6.2	Contact requirements Air gap (mm)..... :		N/A
5.3.6.4	Terminals for connecting stripped wire		N/A
5.4	Insulation materials and requirements		N/A
5.4.1.2	Properties of insulating material		N/A
5.4.1.3	Humidity conditioning		N/A
	Relative humidity (%).....:		N/A
	Temperature (°C),..... :		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Duration (h)..... :		N/A
5.4.1.4	Maximum operating temperature for insulating materials		N/A
5.4.1.5	Pollution degree		N/A
5.4.1.6	Insulation in transformers with varying dimensions		N/A
5.4.1.7	Insulation in circuits generating starting pulses		N/A
5.4.1.8	Determination of working voltage		N/A
5.4.1.9	Insulating surfaces		N/A
5.4.1.10	Thermoplastic parts on which conductive metallic parts are directly mounted		N/A
5.4.2	Clearances		N/A
5.4.2.3	Determining clearance using required withstand voltage		N/A
	a) a.c. mains transient voltage.....:		N/A
	b) d.c. mains transient voltage .....:		N/A
	c) external circuit transient voltage .....:		N/A
	d) transient voltage determined by measurement.....		
5.4.2.4	Determining the adequacy of a clearance using an electric strength test		N/A
5.4.2.5	Multiplication factors for clearances and test voltages		N/A
5.4.2.6	Measurement of transient voltage levels		N/A
5.4.3	Creepage distances		N/A
5.4.3.1	General		N/A
5.4.4	Solid insulation		N/A
5.4.4.2	Minimum distance through insulation		N/A
5.4.4.3	Insulation compound forming solid insulation		N/A
5.4.4.4	Solid insulation in semiconductor devices		N/A
5.4.4.5	Cemented joints		N/A
5.4.4.6	Thin sheet material		N/A
5.4.4.6.1	General requirements		N/A
5.4.4.6.2	Separable thin sheet material		N/A
5.4.4.6.3	Non-separable thin sheet material		N/A
5.4.4.6.4	Standard test procedure for non-separable thin sheet material		N/A
5.4.4.6.5	Mandrel test		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
5.4.4.7	Solid insulation in wound components		N/A
5.4.4.9	Solid insulation at frequencies >30 kHz		N/A
	High frequency peak working voltage V_{PW} (V)..... :		N/A
	Total thickness *d*(mm)..... :		N/A
	Breakdown electric field strength E_p (kV/mm)..... :		N/A
	Reduction Factor K_R (kV/mm)..... :		N/A
	Breakdown electric field strength E_F ..... :		N/A
	Actual electric strength V_W (kV) ..... :		N/A
5.4.5	Antenna terminal insulation		N/A
5.4.5.1	General		N/A
5.4.5.2	Voltage surge test		N/A
	Insulation resistance (M)..... :		N/A
5.4.6	Insulation of internal wire as part of supplementary safeguard		N/A
5.4.7	Tests for semiconductor components and for cemented joints		N/A
5.4.8	Humidity conditioning		P
	Relative humidity (%).....:	93	—
	Temperature (°C) .....:	25	—
	Duration (h).....:	48	—
5.4.9	Electric strength test		N/A
5.4.11	Insulation between external circuits and earthed circuitry		N/A
5.4.11.1	Exceptions to separation between external circuits and earth		N/A
5.4.11.2	Requirements		N/A
	Rated operating voltage U_{op} (V)……..:		N/A
	Nominal voltage U_{pea} (V)……..:		N/A
	Max increase due to variation U_{sp} ..... :		N/A
	Max increase due to ageing U_{sa} ..... :		N/A
	$U_{op}=U_{peak}+U_{sp}+U_{sa}$..... :		N/A
5.5	Components as safeguards		N/A
5.5.1	General		N/A
5.5.2	Capacitors and RC units		N/A
5.5.2.2	Safeguards against capacitor discharge after disconnection of a connector		N/A
5.5.3	Transformers		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
5.5.4	Optocouplers		N/A
5.5.5	Relays		N/A
5.5.6	Resistors		
5.5.7	SPD's		
5.6	Protective conductor		N/A
5.6.2	Requirement for protective conductors		N/A
5.6.3	Requirement for protective earthing conductors		N/A
	Protective earthing conductor size (mm2)		—
5.6.4	Requirement for protective bonding conductors		N/A
5.6.5	Terminals for protective conductors		N/A
5.6.5.1	Requirement		N/A
5.6.5.2	Fault current-carrying protective conductors		N/A
5.6.5.2.3	Protective earthing conductor size (mm^2) .....:		N/A
	Protective bonding conductor size (mm^2).....:		N/A
5.6.6	Protective conductors used as supplementary safeguard		N/A
5.6.6.1	Requirement		N/A
5.6.6.2	Test Method Resistance		N/A
5.6.7	Reliable earthing		N/A
5.7	Prospective touch voltage, touch current and protective conductor current		--
5.7.2	Measuring devices and networks		P
5.7.3	Equipment set-up, supply connections and earth connections		P
	System of interconnected equipment (separate connections/single connection)..... :	Stand alone equipment	—
	Multiple connections to mains (one connection at a time/simultaneous connections)..... :		—
5.7.4	Unearthed conductive accessible parts		N/A
5.7.5	Earthed accessible conductive parts		N/A
5.7.6	Protective conductor current		N/A
	Supply Voltage (V)..... :		N/A
	Measured current (mA)..... :		N/A
	Instructional Safeguard		N/A
5.7.7	Prospective touch voltage and touch current due to external circuits		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	a) Equipment with earthed external circuits Measured current (mA).....:		N/A
	B) Equipment whose external circuits are not referenced to earth. Measured current (mA)..... :		N/A
6	**ELECTRICALLY- CAUSED FIRE**		P
6.2	Classification of power sources (PS) and potential ignition sources (PIS)		N/A
6.2.2	Power source circuit classifications		N/A
6.2.2.1	General		N/A
6.2.2.2	Power measurement for worst-case load fault		N/A
6.2.2.3	Power measurement for worst-case power source fault		N/A
6.2.2.4	PS1		N/A
6.2.2.5	PS2		P
6.2.2.6	PS3		N/A
6.2.3	Classification of potential ignition sources		N/A
6.2.3.1	Arcing PIS		N/A
6.2.3.2	Resistive PIS		N/A
6.3	Safeguards against fire under normal operating conditions and abnormal operating conditions		P
6.3.1	Requirements		P
6.4	Safeguards against fire under single fault conditions		P
6.4.1	Protection Method	Method of “control of fire spread” is used.	P
6.4.2	Reduction of the likelihood of ignition under single fault conditions in PS1 circuits		P
6.4.3	Reduction of the likelihood of ignition under single fault conditions in PS2 and PS3 circuits		P
6.4.3.1	General		P
6.4.3.2	Supplementary Safeguards		P
	Special conditions if conductors on printed boards are opened or peeled		N/A
6.4.3.3	Single Fault Conditions		P
	Special conditions for temperature limited by fuse		N/A
6.4.4	Control of fire spread in PS1 circuits		N/A
6.4.5	Control of fire spread in PS2 circuits		P
6.4.5.2	Supplementary safeguards		P
6.4.6	Control of fire spread in PS3 circuit		P
6.4.7	Separation of combustible materials from a PIS		P

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Clause	Requirement + Test	Result - Remark	Verdict
6.4.7.1	General		N/A
6.4.7.2	Separation by distance		N/A
6.4.7.3	Separation by a fire barrier		N/A
6.4.8	Fire enclosures and fire barriers		P
6.4.8.1	Fire enclosure and fire barrier material properties		N/A
6.4.8.1.1	Requirements for a fire barrier		N/A
6.4.8.1.2	Requirements for a fire enclosure		N/A
6.4.8.2	Constructional requirements for a fire enclosure and a fire barrier		N/A
6.4.8.2.1	Fire enclosure and fire barrier openings		N/A
6.4.8.2.2	Fire barrier dimensions		N/A
6.4.8.2.3	Fire Enclosure dimensions, top openings (mm) .. :		N/A
	Needle Flame test		N/A
6.4.8.2.4	Bottom Openings in Fire Enclosure, condition met a), b) and/or c): dimensions (mm) ..... :		N/A
6.4.8.2.5	Integrity of the fire enclosure, condition met: a), b) or c): dimensions (mm) ..... :		N/A
6.4.8.3	Separation of PIS from fire enclosure and fire barrier distance (mm) or flammability rating..... :		N/A
6.5	Internal and external wiring		P
6.5.1	General		P
6.5.2	Cross-sectional area (mm^2) .....:		--
6.5.3	Requirements for interconnection to building wiring		P
6.6	Safeguards against fire due to connection to additional equipment		P
	External port limited to PS2 or complies with Clause Q.1		P
7	**INJURY CAUSED BY HAZARDOUS SUBSTANCES**		P
7.2	Reduction of exposure to hazardous substances		P
7.5	Use of instructional safeguards and instructions		P
	Instruction Safeguard (ISO 7010)		N/A
8	**MECHANICALLY-CAUSED INJURY**		P
8.1	General		P
8.2	Mechanical energy source classifications		P
8.3	Protection against mechanical energy sources		P
8.4	Safeguards against parts with sharp edges and corners		P
8.4.1	Safeguards		P
8.5	Safeguards against moving parts		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
8.5.1	MS2 or MS3 part required to be accessible for the function of the equipment		N/A
8.5.2	Instructional Safeguard..... :		N/A
8.5.4	Special categories of equipment comprising moving parts		N/A
8.5.4.1	Large data storage equipment		N/A
8.5.4.2	Equipment having electromechanical device for destruction of media		N/A
8.5.4.2.1	Safeguards and Safety Interlocks		N/A
8.5.4.2.2	Instructional safeguards against moving parts		N/A
	Instructional Safeguard..... :		N/A
8.5.4.2.3	Disconnection from the supply		N/A
8.5.4.2.4	Probe type and force (N)..... :		N/A
8.5.5	High Pressure Lamps	No high pressure lamps	N/A
8.5.5.1	Energy Source Classification		N/A
8.5.5.2	High Pressure Lamp Explosion Test		N/A
8.6	Stability		N/A
8.6.1	Product classification		N/A
	Instructional Safeguard..... :		N/A
8.6.2	Static stability for floor standing equipment		N/A
8.6.2.2	Static stability test		N/A
	Applied Force..... :		N/A
8.6.2.3	Downward Force Test		N/A
8.6.3	Relocation stability test		N/A
	Unit configuration during 10° tilt		
8.6.4	Glass slide test		N/A
8.6.5	Horizontal force test (Applied Force).....:		N/A
	Position of feet or movable parts.....:		N/A
8.7	Equipment mounted to wall or ceiling		N/A
8.7.1	Mounting Means (Length of screws (mm) and mounting surface) ..... :		N/A
8.7.2	Direction and applied force..... :		N/A
8.8	Handles strength		N/A
8.8.1	Classification		N/A
8.8.2	Applied Force ..... :		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
8.9	Wheels or casters attachment requirements		N/A
8.9.1	Classification		N/A
8.9.2	Applied force..... :		N/A
8.10	Carts, stands and similar carriers		P
8.10.1	General		P
8.10.2	Marking and instructions		P
	Instructional Safeguard..... :		P
8.10.3	Cart, stand or carrier loading test and compliance		N/A
	Applied force..... :		N/A
8.10.4	Cart, stand or carrier impact test		N/A
8.10.5	Mechanical stability		N/A
	Applied horizontal force (N)..... :		N/A
8.10.6	Thermoplastic temperature stability (℃).....:		N/A
8.11	Mounting means for rack mounted equipment		N/A
8.11.2	Product Classification		N/A
8.11.3	Mechanical strength test, variable N.....		N/A
8.12	Mechanical strength test 250N, including end stops		N/A
	Telescoping or rod antennas.....		N/A
9	**THERMAL BURN INJURY**		P
9.2	Thermal energy source classifications	Refer to Energy Source identification and classification table for thermal energy source	P
9.3	Protection against thermal energy sources		P
9.4	Requirements for safeguards		N/A
9.4.1	Equipment safeguard		P
9.4.1.2	Temperatures on Accessible Surfaces		P
9.4.2	Instructional safeguard ..... :		N/A
B	**NORMAL OPERATING CONDITION TESTS, ABNORMAL OPERATING CONDITION TESTS AND SINGLE FAULT CONDITION TESTS**		P
B.2	Normal Operating Conditions		P
B.2.1	General requirements		P
	Audio Amplifiers and equipment with audio amplifiers	Not such equipment.	N/A
B.2.3	Supply voltage and tolerances	Rated voltage 10 %	P

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Clause	Requirement + Test	Result - Remark	Verdict
B.2.5	Input test		N/A
B.3	Simulated abnormal operating conditions		P
B.3.1	General requirements		P
B.3.2	Covering of ventilation openings		N/A
B.3.3	D.C. mains polarity test		N/A
B.3.4	Setting of voltage selector	No such voltage selector	N/A
B.3.5	Maximum load at output terminals		P
B.3.6	Reverse battery polarity	No batteries used	N/A
B.3.7	Abnormal operating conditions as specified in Clause E.2.		N/A
B.3.8	Safeguards functional during and after abnormal operating conditions	All safeguards remained effective.	P
B.4	Simulated single fault conditions		P
B.4.2	Temperature controlling device open or short-circuited	No such controlling device	N/A
B.4.3	Motor tests	No motors used	N/A
B.4.3.1	Motor blocked or rotor locked increasing the internal ambient temperature		N/A
B.4.4	Short circuit of functional insulation		P
B.4.4.1	Short circuit of clearances for functional insulation		P
B.4.4.2	Short circuit of creepage distances for functional insulation		P
B.4.4.3	Short circuit of functional insulation on coated printed boards		N/A
B.4.5	Short circuit and interruption of electrodes in tubes and semiconductors		P
B.4.6	Short circuit or disconnect of passive components		P
B.4.7	Continuous operation of components	Not intermittent or short-time operation equipment	N/A
B.4.8	Class 1 and Class 2 energy sources within limits during and after single fault conditions		N/A
B.4.9	Battery charging under single fault conditions....	No batteries used	N/A
D	**TEST GENERATORS**		N/A
D.1	Impulse test generators		N/A
D.2	Antenna interface test generator		N/A
D.3	Electronic pulse generator		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
E	**TEST CONDITIONS FOR EQUIPMENT CONTAINING AUDIO AMPLIFIERS**		N/A
E.1	Audio amplifier normal operating conditions		N/A
	Audio signal voltage (V).....		
	Rated load impedance (Ω)		
E.2	Audio amplifier abnormal operating conditions		N/A
F	**EQUIPMENT MARKINGS, INSTRUCTIONS, AND INSTRUCTIONAL SAFEGUARDS**		P
F.1	General requirements		P
	Instructions – Language	Instructions in English are checked	
F.2	Letter symbols and graphical symbols		P
F.2.1	Letter symbols according to IEC60027-1	Letter symbols for quantities andunits are compliance with IEC60027-1	P
F.2.2	Graphic symbols IEC, ISO or manufacturer specific	Graphic symbols are compliancewith IEC 60417 or ISO 3864-2 orISO 7000	P
F.3	Equipment markings		P
F.3.1	Equipment marking locations	Located on the enclosure surface	P
F.3.2	Equipment identification markings		P
F.3.2.1	Manufacturer identification	See copy of marking plate	—
F.3.2.2	Model identification		—
F.3.3	Equipment rating markings		P
F.3.3.1	Equipment with direct connection to mains		P
F.3.3.2	Equipment without direct connection to mains		N/A
F.3.3.3	Nature of supply voltage	See copy of marking plate	—
F.3.3.4	Rated voltage.....	See copy of marking plate	—
F.3.3.4	Rated frequency	See copy of marking plate	—
F.3.3.6	Rated current or rated power.....	See copy of marking plate	—
F.3.3.7	Equipment with multiple supply connections	No multiple supply connection	N/A
F.3.4	Voltage setting device	No such device	N/A
F.3.5	Terminals and operating devices	See below.	P
F.3.5.1	Mains appliance outlet and socket-outlet markings	No such devices on the equipment.	N/A
F.3.5.2	Switch position identification marking.....	No such switch on the equipment	N/A
F.3.5.3	Replacement fuse identification and rating markings		P

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Clause	Requirement + Test	Result - Remark	Verdict
F.3.5.4	Replacement battery identification marking	No batteries.	N/A
F.3.5.5	Terminal marking location		
F.3.6	Equipment markings related to equipment classification		P
F.3.6.1	Class I Equipment		N/A
F.3.6.1.1	Protective earthing conductor terminal		P
F.3.6.1.2	Neutral conductor terminal		N/A
F.3.6.1.3	Protective bonding conductor terminals		N/A
F.3.6.2	Class II equipment (IEC60417-5172)		N/A
F.3.6.2.1	Class II equipment with or without functional earth		N/A
F.3.6.2.2	Class II equipment with functional earth terminal marking		N/A
F.3.7	Equipment IP rating marking		
F.3.8	External power supply output marking	See copy of marking plate.	P
F.3.9	Durability, legibility and permanence of marking	Marking label is tested in appliance	P
F.3.10	Test for permanence of markings	After test, the marking remain legible, it was not possible to remove marking plate and no curling observed.	P
F.4	Instructions		P
	a) Equipment for use in locations where children not likely to be present - marking		N/A
	b) Instructions given for installation or initial use		N/A
	c) Equipment intended to be fastened in place		N/A
	d) Equipment intended for use only in restricted access area		N/A
	e) Audio equipment terminals classified as ES3 and other equipment with terminals marked in accordance F.3.6.1		N/A
	f) Protective earthing employed as safeguard		N/A
	g) Protective earthing conductor current exceeding ES 2 limits		N/A
	h) Symbols used on equipment		P
	i) Permanently connected equipment not provided with all-pole mains switch		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	j) Replaceable components or modules providing safeguard function		N/A
F.5	Instructional safeguards	Instructional safeguard is not required.	N/A
	Where “instructional safeguard” is referenced in the test report it specifies the required elements, location of marking and/or instruction		N/A

J	**INSULATED WINDING WIRES FOR USE WITHOUT INTERLEAVED INSULATION**		P
	General requirements		P
K	**SAFETY INTERLOCKS**		N/A
K.1	General requirements	No safety interlocks inside the EUT	N/A
K.2	Components of safety interlock safeguard mechanism		N/A
K.3	Inadvertent change of operating mode		N/A
K.4	Interlock safeguard override		N/A
K.5	Fail-safe		N/A
	Compliance.....		N/A
K.6	Mechanically operated safety interlocks		N/A
K.6.1	Endurance requirement		N/A
K.6.2	Compliance and Test method		N/A
K.7	Interlock circuit isolation		N/A
K.7.1	Separation distance for contact gaps & interlock circuit elements (type and circuit location)		N/A
K.7.2	Overload test, Current (A)		N/A
K.7.3	Endurance test		N/A
K.7.4	Electric strength test		N/A
L	**DISCONNECT DEVICES**		P
L.1	General requirements		P
L.2	Permanently connected equipment		N/A
L.3	Parts that remain energized	No accessible parts on the supply side of the disconnect device.	P
L.4	Single phase equipment	Disconnect device disconnects all poles simultaneously.	P
L.5	Three-phase equipment		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
L.6	Switches as disconnect devices		N/A
L.7	Plugs as disconnect devices	See instruction for details	P
L.8	Multiple power sources		N/A
M	**EQUIPMENT CONTAINING BATTERIES AND THEIR PROTECTION CIRCUITS**		N/A
M.1	General requirements		N/A
M.2	Safety of batteries and their cells		N/A
M.2.1	Requirements		N/A
M.2.2	Compliance and test method (identify method)..		N/A
M.3	Protection circuits		N/A
M.3.1	Requirements		N/A
M.3.2	Tests		N/A
	- Overcharging of a rechargeable battery		N/A
	- Unintentional charging of a non-rechargeable battery		N/A
	- Reverse charging of a rechargeable battery		N/A
	- Excessive discharging rate for any battery		N/A
M.3.3	Compliance		N/A
M.4	Additional safeguards for equipment containing secondary lithium battery		N/A
M.4.1	General		N/A
M.4.2	Charging safeguards		N/A
M.4.2.1	Charging operating limits		N/A
M.4.2.2a)	Charging voltage, current and temperature		—
M.4.2.2 b)	Single faults in charging circuitry.....		—
M.4.3	Fire Enclosure		N/A
M.4.4	Endurance of equipment containing a secondary lithium battery		N/A
M.4.4.2	Preparation		N/A
M.4.4.3	Drop and charge/discharge function tests		N/A
	Drop		N/A
	Charge		N/A
	Discharge		N/A
M.4.4.4	Charge-discharge cycle test		N/A
M.4.4.5	Result of charge-discharge cycle test		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
M.5	Risk of burn due to short circuit during carrying		N/A
M.5.1	Requirement		N/A
M.5.2	Compliance and Test Method (Test of P.2.3)		N/A
M.6	Prevention of short circuits and protection from other effects of electric current		N/A
M.6.1	Short circuits		N/A
M.6.1.1	General requirements		N/A
M.6.1.2	Test method to simulate an internal fault		N/A
M.6.1.3	Compliance (Specify M.6.1.2 or alternative method)		N/A
M.6.2	Leakage current (mA)		N/A
M.7	Risk of explosion from lead acid and NiCd batteries		N/A
M.7.1	Ventilation preventing explosive gas concentration		N/A
M.7.2	Compliance and test method		N/A
M.8	Protection against internal ignition from external spark sources of lead acid batteries		N/A
M.8.1	General requirements		N/A
M.8.2	Test method		N/A
M.8.2.1	General requirements		N/A
M.8.2.2	Estimation of hypothetical volume Vz (m3/s)		—
M.8.2.3	Correction factors		—
M.8.2.4	Calculation of distance d (mm)		—
M.9	Preventing electrolyte spillage		N/A
M.9.1	Protection from electrolyte spillage		N/A
M.9.2	Tray for preventing electrolyte spillage		N/A
M.10	Instructions to prevent reasonably foreseeable misuse (Determination of compliance: inspection, data review; or abnormal testing)		N/A
N	**ELECTROCHEMICAL POTENTIALS**		N/A
	Metal(s) used.....		—
O	**MEASUREMENT OF CREEPAGE DISTANCES AND CLEARANCES**		P
	Figures O.1 to O.20 of this Annex applied	Measurement is in accordance with applicable figures.	—

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Clause	Requirement + Test	Result - Remark	Verdict
P	**SAFEGUARDS AGAINST ENTRY OF FOREIGN OBJECTS AND SPILLAGE OF INTERNAL LIQUIDS**		P
P.1	General requirements	No opening.	P
P.2.2	Safeguards against entry of foreign object		P
	Location and Dimensions (mm)		—
P.2.3	Safeguard against the consequences of entry of foreign object		N/A
P.2.3.1	Safeguards against the entry of a foreign object		N/A
	Openings in transportable equipment		N/A
	Transportable equipment with metalized plastic parts		N/A
P.2.3.2	Openings in transportable equipment in relation to metallized parts of a barrier or enclosure (identification of supplementary safeguard)		N/A
P.3	Safeguards against spillage of internal liquids	No internal liquids.	N/A
P.3.1	General requirements		N/A
P.3.2	Determination of spillage consequences		N/A
P.3.3	Spillage safeguards		N/A
P.3.4	Safeguards effectiveness		N/A
P.4	Metallized coatings and adhesive securing parts	No metallized coatings or adhesive securing parts.	N/A
P.4.2 a)	Conditioning testing		N/A
	Tc (°C)		—
	Tr (°C).....		—
	Ta (°C)		—
P.4.2 b)	Abrasion testing		N/A
P.4.2 c)	Mechanical strength testing.....		N/A
Q	**CIRCUITS INTENDED FOR INTERCONNECTION WITH BUILDING WIRING**		P
Q.1	Limited power sources		P
Q.1.1 a)	Inherently limited output		N/A
Q.1.1 b)	Impedance limited output		P
	- Regulating network limited output under normal operating and simulated single fault condition		P
Q.1.1 c)	Overcurrent protective device limited output		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
Q.1.1 d)	IC current limiter complying with G.9		N/A
Q.1.2	Compliance and test method		P
Q.2	Test for external circuits – paired conductor cable		N/A
	Maximum output current (A)		—
	Current limiting method		—
R	**LIMITED SHORT CIRCUIT TEST**		N/A
R.1	General requirements		N/A
R.2	Determination of the overcurrent protective device and circuit		N/A
R.3	Test method Supply voltage (V) and short- circuit current (A)). .....:		N/A
S	**TESTS FOR RESISTANCE TO HEAT AND FIRE**		N/A
S.1	Flammability test for fire enclosures and fire barrier materials of equipment where the steady state power does not exceed 4 000 W		N/A
	Samples, material.....		—
	Wall thickness (mm)		—
	Conditioning (C)		—
	Test flame according to IEC 60695-11-5 with conditions as set out		N/A
	- Material not consumed completely		N/A
	- Material extinguishes within 30s		N/A
	- No burning of layer or wrapping tissue		N/A
S.2	Flammability test for fire enclosure and fire barrier integrity		N/A
	Samples, material.....		—
	Wall thickness (mm)		—
	Conditioning (C)		—
	Test flame according to IEC 60695-11-5 with conditions as set out		N/A
	Test specimen does not show any additional hole		N/A
S.3	Flammability test for the bottom of a fire enclosure		N/A
	Samples, material.....		—
	Wall thickness (mm)		—

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Clause	Requirement + Test	Result - Remark	Verdict
	Cheesecloth did not ignite		N/A
S.4	Flammability classification of materials		N/A
S.5	Flammability test for fire enclosures materials of equipment with a steady-state power - exceeding 4 000 W		N/A
	Samples, material.....		—
	Wall thickness (mm)		—
	Conditioning (test condition), (C)		—
	Test flame according to IEC 60695-11-20 with conditions as set out		N/A
	After every test specimen was not consumed completely		N/A
	After fifth flame application, flame extinguished within 1 min		N/A
T	**MECHANICAL STRENGTH TESTS**		P
T.1	General requirements		P
T.2	Steady force test, 10 N		P
T.3	Steady force test, 30 N		N/A
T.4	Steady force test, 100 N		P
T.5	Steady force test, 250 N		N/A
T.6	Enclosure impact test		N/A
	Fall test		N/A
	Swing test		N/A
T.7	Drop test		N/A
T.8	Stress relief test.....		P
T.9	Impact Test (glass)		N/A
T.9.1	General requirements		N/A
T.9.2	Impact test and compliance		N/A
	Impact energy (J)		—
	Height (m)		—
T.10	Glass fragmentation test	No glass.	N/A
T.11	Test for telescoping or rod antennas		N/A
	Torque value (Nm)		—
V	**DETERMINATION OF ACCESSIBLE PARTS (FINGERS, PROBES AND WEDGES)**		P

UL 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
V.1	Accessible parts of equipment		P
V.2	Accessible part criterion		P

4.1.2	TABLE: List of critical components				P
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity1
Enclosure	Various	Various	V-0	--	VDE
Supplementary information:					

5.4.1.4, 6.3.2, 9.0, B.2.6	TABLE: Thermal requirements		P
	Supply voltage (V) .....:	12V	—
	Ambient T_{min} (°C) .....:	See below	—
	Ambient T_{max} (°C) .....:		—
Maximum measured temperature T of part/at::		T (°C)	Allowed T_{max} (°C)
Enclosure		37.2	75
Ambient		24.6	--
Supplementary information:			

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

5.4.1.10.3	TABLE: Ball pressure test of thermoplastics		P
Allowed impression diameter (mm)		≤ 2 mm	--
Object/Part No./Material	Manufacturer/trademark	Test temperature (°C)	Impression diameter (mm)
Plastic enclosure	See table 4.1.2	75	1.0
PCB	See table 4.1.2	125	1.0
Supplementary information:			

5.4.2.2, 5.4.2.4 and 5.4.3	TABLE: Minimum Clearances/ Creepage distance						P
Clearance (cl) and creepage distance (cr) at/of/between:	Up (V)	U r.m.s. (V)	Frequenc y (kHz)[1]	Required cl (mm)	cl (mm) [2]	Required [3] cr (mm)	cr (mm)
Between L and N	--	--	--	1.5	3.0	2.5	3.0
Between live parts and contact housing	--	--	--	4.0	5.2	5.0	5.2

Supplementary information: Note 1: Only for frequency above 30 kHz Note 2: See table 5.4.2.8 if this is based on electric strength test (5.4.2.8) Note 3: Provide Material Group Note 4: BI: basic insulation; SI: supplementary insulation; DI: double insulation; RI: reinforced insulation.

5.4.2.8	**TABLE: Clearances based on electric strength test**		P
Test voltage applied between:	Required cl (mm)	Test voltage (kV) peak/ r.m.s. / d.c.	Breakdown Yes / No
Between the poles of the power supply and the metal foil to the housing	--	1000Vrms 1min	No
Supplementary information:			

5.4.4.2, 5.4.4.5c), 5.5.2.7	**TABLE Distance through insulation measurements**				N/A
Distance through insulation di at/of:	Up (V)	Test voltage (V)	Required di (mm)	di (mm)	
--	--	--	0.4	*	
Supplementary information:					

5.6.6.4	**TABLE: Resistance of protective conductors and terminations**			**N/A**
Accessible part	Test current (A)	Duration (min)	Voltage drop (V)	Resistance (Ω)
--	--	--	--	--
Supplementary information:				

5.7.4.1	**TABLE: Unearthed conductive parts accessible for ordinary person**	**N/A**
Supply voltage (V): ..... :	--	—
Earthed neutral conductor [Voltage differences less than 1% or more]: ..... :	--	—
Specify method used for measurement as described in IEC60990, sub-clause 4.3:..... :	--	—

5.7.4.1a)	**TABLE: Unearthed conductive parts accessible (for ordinary person)**	**N/A**
Unearthed accessible part	Prospective touch voltage (V)	Touch current (mA)
--	--	--
--	--	--
After fault of the applicable basic safeguard		
--	--	--
After fault of the applicable supplementary safeguard		

--	--	--
--	--	--

Supplementary Information:

For fault conditions, identify the safeguard that was faulted e.g., -Accessible Part/basic insulation.|

5.7.4.1b)	TABLE: Unearthed conductive parts accessible (>ES2 voltage limits)	N/A

Unearthed accessible part, at which the prospective touch voltage exceeds the ES2 limits	Fault Condition No in IEC 60990 clause 6.2.2.1 through 6.2.2.8, except for 6.2.2.7	Touch current (mA)
	1	--
	2	--
	3	--
	4	--
	5	--
	6	--
	8	--

Supplementary Information:

If touch current measurements are not needed, indicate -N/A| in the space provided.

IEC60990, sub-clause 6.2.2.7, Fault 7 not applicable.

If the touch current did not exceed ES2 limits, indicate, -PASS.|

5.7.4.2	TABLE: Unearthed conductive parts accessible to instructed persons	N/A
Supply voltage (V): ..... :	--	—
Earthed neutral conductor [Voltage differences less than 1% or more]: ..... :	--	—
Specify method used for measurement as described in IEC60990, sub-clause 4.3 ..... :	--	—

5.7.4.2 a)	TABLE: Unearthed conductive parts accessible to instructed persons	N/A

Unearthed accessible part	Prospective touch voltage (V)	Touch current (mA)
--	--	--
--	--	--
--	--	--
--		

5.6.6.2	TABLE: Resistance of protective conductors and terminations			N/A
Accessible part	Test current (A)	Duration (min)	Voltage drop (V)	Resistance (Ω)
--	--	--	--	--
Supplementary information:				

5.4.7.2 b)	TABLE: Unearthed conductive parts accessible (>ES2 voltage limits)	N/A
Unearthed accessible part, at which the prospective touch voltage exceeds the ES2 limits	Fault Condition No in IEC 60990 clause 6.2.2.1 through 6.2.2.8, except for 6.2.2.7	Touch current (mA)
	1	--
	2	--
	3	--
	4	--
	5	--
	6	--
	8	--
Supplementary Information: If touch current measurements are not needed, indicate -N/A- in the space provided. IEC60990, sub-clause 6.2.2.7, Fault 7 not applicable. If the touch current did not exceed ES2 limits, indicate, -PASS.-		

5.7.5	TABLE: Earthed accessible conductive part	N/A
Supply voltage ..... :	--	—
Earthed neutral conductor [Voltage differences less than 1% or more]..... :	--	—
Specify method used for measurement as described in IEC60990, sub-clause 4.3 ..... :	--	—
Earthed accessible conductive part	Test conditions specified in 6.1 of IEC 60990 or Fault Condition No in IEC 60990 clause 6.2.2.1 through 6.2.2.8, except for 6.2.2.7	Touch current (mA)
	1	--
	2	--
	3	--
	4	--
	5	--
	6	--
	8	--
Supplementary Information: IEC60990, sub-clause 6.2.2.7, Fault 7 not applicable. (*) IEC60990, sub-clause 6.2.2.2 is not applicable if switch or disconnect device (e.g., appliance coupler) provided.		

8.5	**TABLE: Fan Blade Classification**	N/A

Variable	Value	
Mass, m	kg	
Fan blade radius, r	mm	
Rotational speed, N	rpm	
K factor (figure 47), K		
Classification formula	*N* *K* 115,000 2,400	*N* *K* 122,000 3,600
Classification calculation		
Classification: MS .....:		
Supplementary information:		

8.5.5.2.1	**TABLE: Rotating Solid Media**	N/A

Variable	Value	
Media thickness (mm).....:		
Total media mass, M (kg) .....:		
Constant, S.....:	0,250 (no deflector)	0,125 (deflector)
Velocity, v (m/s) .....:		
Media outer radius, R_o (m) .....:		
Force {F =S x (mv^2)/R_o } (N).....:		
Smallest dia of media, X (mm) .....:		
Test Result .....:		
Supplementary information:		

8.5.5.2.2	**TABLE: High Pressure Lamp**	N/A

Description	Values	Energy Source Classification
Lamp type.....:		—
Manufacturer .....:		—
Cat no. .....:		—
Pressure (cold) (MPa) .....:		MS_
Pressure (operating) (MPa) .....:		MS_
Operating time (minutes) .....:		—
Explosion method.....:		—

Max particle length escaping enclosure (mm)..:		MS_
Max particle length beyond 1 m (mm) .....:		MS_
Overall result .....:		
Supplementary information:		

B.2.5	TABLE: Input test						N/A
U (V)	I (A)	I rated (A)	P (W)	P rated (W)	Fuse No	I fuse (A)	Condition/status
--	--	--	--	--	--	--	--
Supplementary information: Equipment may be have rated current or rated power or both. Both should be measured							

Sample Pictures：

Photo 1 General appearance of the EUT

Sample Pictures：

Sample Pictures：

End of Report