APPLICATION FOR LOW VOLTAGE DIRECTIVE

On Behalf of

Shandong Xiaoya Group Household Appliances Co., Ltd.

Ozone Air Sterillizer

Model: XY-850S, XY-835S

Prepared For : **Shandong Xiaoya Group Household Appliances Co., Ltd.**
No.44 Gongye bei Road, Licheng District, Jinan City, China

Prepared By : **Beide (Shenzhen) Product Service Limited**

6F, Bldg E, Hourui 3rd Ind Zone, Xixiang, Bao'an Dist, Shenzhen, China

Date of Test	**:**	**Mar. 03-11, 2020**
Date of Report	**:**	**Mar. 11, 2020**
Report Number	**:**	**B-S200327994**

LVD Report EN 60204 Safety of machinery- electrical equipment of machines- Part 1: General requirement	
Testing laboratory ……..:	Beide (Shenzhen) Product Service Limited
Address ……..:	6F, Bldg E, Hourui 3rd Ind Zone, Xixiang, Bao'an Dist, Shenzhen, China
Report body ……..……:	Beide (Shenzhen) Product Service Limited
Address……..…….....	6F, Bldg E, Hourui 3rd Ind Zone, Xixiang, Bao'an Dist, Shenzhen, China
Applicant ……:	Shandong Xiaoya Group Household Appliances Co., Ltd.
Address ……..:	No.44 Gongye bei Road, Licheng District, Jinan City, China
Client No……..:	05319987
Standard ……:	EN 60204-1:2018
Result ……..:	Compliance with EN 60204-1:2018
Procedure deviation ……..:	N.A.
Non-standard ……:	N.A.
Type of verdict object ……:	Ozone Air Sterillizer
Rating……:	220-240V~, 50Hz, 88W
Trademark ……..:	N.A.
Model/type reference ……:	XY-850S
Manufacturer ……..:	Shandong Xiaoya Group Household Appliances Co., Ltd.
Address ……..:	No.44 Gongye bei Road, Licheng District, Jinan City, China

Possible case verdicts :	
Case does not apply to the verdict object …….. :	N (.A.)
Verdict object does meet the requirement ……:	P(ass)
Verdict object does not meet the requirement … :	F(ail)

Name and address of the testing laboratory: **Beide (Shenzhen) Product Service Limited**
6F, Bldg E, Hourui 3rd Ind Zone, Xixiang,
Bao'an Dist, Shenzhen, China

Reported by : Signature / Anna Deng — Date: Mar. 11, 2020

Checked by : Signature / Austin Zhong — Date: Mar. 11, 2020

Approved by : Signature / Martin Wang — Date: Mar. 12, 2020

BEIDE (SHENZHEN) PRODUCT SERVICE LIMITED
Beide Compliance Laboratory
CERTIFICATION

General remarks:	
"(see remark #)" refers to a remark appended to the report. "(see appended table)" refers to a table appended to the report. Throughout this report a comma is used as the decimal separator. The test results presented in this report relate only to the object tested. This report shall not be reproduced except in full without the written approval of the testing laboratory.	Attached with: APPENDIX A: Photo-documentation

Artwork of Marking Label

Ozone Air Sterillizer

Model No: XY-850S
Rating: 220-240V~, 50Hz, 88W
Shandong Xiaoya Group Household Appliances Co., Ltd.
No.44 Gongye bei Road, Licheng District, Jinan City, China
MADE IN CHINA 2020/02

EN 60204-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
4.	General requirements		P
4.1	General		P
4.2	Selection of equipment	Comply with relevant IEC 60439 series.	P
4.2.1	General		P
4.2.2	Switchgear		P
4.3	Electrical supply		P
4.3.1	General		P
4.3.2	AC supplies		P
4.3.3	DC supplies		N
4.3.4	Special supply systems		N
4.4	Physical environment and operating conditions		P
4.4.1	General		P
4.4.2	Electromagnetic compatibility (EMC)		P
4.4.3	Ambient air temperature		P
	The minimum requirement for all electrical equipment is correct operation between air temperatures of +5 °C and +40 °C.		P
4.4.4	Humidity		P
	The electrical equipment shall be capable of operating correctly when the relative humidity does not exceed 50 % at a maximum temperature of +40 °C. Higher relative humidities are permitted at lower temperatures (for example 90 % at 20 °C).		P
4.4.5	Altitude		P
	Electrical equipment shall be capable of operating correctly at altitudes up to 1 000 m above mean sea level.		P
4.4.6	Contaminants		P
4.4.7	Ionizing and non-ionizing radiation		N
4.4.8	Vibration, shock, and bump		P
4.5	Transportation and storage	Not exceed 50°C	P

EN 60204-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
4.6	Provisions for handing		N
5.	Incoming supply conductor terminations and devices for disconnecting and switching off		P
5.1	Incoming supply conductor terminations	Such terminations used	P
5.2	Terminal for connection to the external protective conductor		P
5.3	Supply disconnecting (isolating) device		P
5.3.1	General		-
5.3.2	Type		P
5.3.3	Requirements		P
5.3.4	Operating means of the supply disconnecting device		P
	The operating means (for example, a handle) of the supply disconnecting device shall be external to the enclosure of the electrical equipment.		P
5.3.5	Excepted circuits	No such circuits	N
5.4	Devices for removal of power for prevention of unexpected start-up		N
5.5	Devices for isolating electrical equipment		P
5.6	Protection against unauthorized, inadvertent and/or mistaken connection		P
6.	Protection against electric shock		P
6.1	General	Direct contact and indirect contact	P
6.2	Basic protection		P
6.2.1	General		P
6.2.2	Protection by enclosures		P
	Opening an enclosure shall be possible only under one of the following conditions:		P
	a) The use of a key or tool is necessary for access		P

EN 60204-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
	b) The disconnection of live parts inside the enclosure before the enclosure may be opened		P
	c) Opening without the use of a key or a tool and without disconnection of live parts shall be possible only when all live parts are protected against direct contact to at least IP2X or IPXXB		N
6.2.3	Protection by insulation of live parts	Insulation can withstanding the mechanical, chemical, electrical, and thermal stresses.	P
6.2.4	Protection against residual voltages		P
6.2.5	Protection by barriers		N
6.2.6	Protection by placing out of reach or protection by obstacles	Not protected by such devices.	N
6.3	Fault protection		P
6.3.1	General		-
6.3.2	Prevention of the occurrence of a touch voltage	Electrical separation	P
6.3.2.1	General		-
6.3.2.2	Protection by use of class II equipment or by equivalent insulation		N
6.3.2.3	Protection by electrical separation		P
6.3.3	Protection by automatic disconnection of supply		N
6.4	Protection by the use of PELV		N
6.4.1	General requirement		N
6.4.2	Sources for PELV		N
7.	Protection of equipment		P
7.1	General	See below	P
7.2	Overcurrent protection		P
7.2.1	General		P
7.2.2	Supply conductors		P
7.2.3	Power circuits		P

EN 60204-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
7.2.4	Control circuits		P
7.2.5	Socket outlets and their associated conductors		N
7.2.6	Lighting circuits		N
7.2.7	Transformers		P
7.2.8	Location of overcurrent protective devices		P
7.2.9	Overcurrent protective devices		P
7.2.10	Rating and setting of overcurrent protective devices		P
7.3	Protection of motors against overheating		P
7.3.1	General		N
7.3.2	overload protection		N
7.3.3	Over-temperature protection		N
7. 4	Protection against abnormal temperature		N
7.5	Protection against the effects of supply interruption 。r voltage reduction and subsequent restoration		P
7.6	Motor overspeed protection		P
7.7	Additional Earth fault/residual current protection		P
7.8	Phase sequence protection		P
7.9	Protection against overvoltages due to lightning and to switching surges		P
7.10	Short-circuit current rating		N
8.	Equipotential bonding		P
8.1	General	See below	-
8.2	Protective bonding circuit		P
8.2.1	General		-
8.2.2	Protective conductors		P
8.2.3	Continuity of the protective bonding circuit		P
8.2.4	Protective conductor connecting points		P
8.2.5	Mobile machines		P

EN 60204-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
8.2.6	Additional requirements for electrical equipment having earth leakage currents higher than 10mA		P
8.3	Measures to restrict the effects of high leakage current		N
8.4	Functional bonding		N
9.	Control circuits and control functions		P
9.1	Control circuits		P
9.1.1	Control circuit supply		P
9.1.2	Control circuit voltages		P
9.1.3	Protection		P
9.2	Control functions		P
9.2.1	General		P
9.2.2	Categories of stop functions		P
9.2.3	Operation		P
9.2.3.1	General		P
9.2.3.2	Start		P
9.2.3.3	Stop		P
9.2.3.4	Emergency operations (emergency stop, emergency switching off)		P
9.2.3.4.1	General		P
9.2.3.4.2	Emergency stop		N
9.2.3.4.3	Emergency switching off		N
9.2.3.5	Operating modes		P
9.2.3.6	Monitoring of command actions		N
9.2.3.7	Hold-to-run controls		N
9.2.3.8	Two-hand control		N
9.2.3.9	Enabling device		N
9.2.3.10	Combined start and stop controls		N

EN 60204-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
9.2.4	Cableless control system(CCS)		N
9.2.4.1	General		N
9.2.4.2	Monitoring the ability of a cableless control system to control a machine		N
9.2.4.3	Control limitation		N
9.2.4.4	Use of multiple cableless operator control stations		N
9.2.4.5	Portable cableless operator control stations		N
9.2.4.6	Deliberate disabling of cableless operator control stations		N
9.2.4.7	Emergency stop devices on portable cableless operator control stations		N
9.2.4.8	Emergency stop reset		N
9.3	Protective interlocks		N
9.3.1	Reclosing or resetting of an interlocking safeguard		N
9.3.2	Exceeding operating limits		N
9.3.3	Operation of auxiliary functions		N
9.3.4	Interlocks between different operations and for contrary motions		N
9.3.5	Reverse current braking		N
9.3.6	Suspension of safety functions and/or protective measures		N
9.4	Control functions in the event of failure		P
9.4.1	General requirements		P
9.4.2	Measures to minimize risk in the event of failure		P
9.4.2.1	General		P
9.4.2.2	Use of proven circuit techniques and components		P
9.4.2.3	Provisions of partial or complete redundancy		P
9.4.2.4	Provision of diversity		P
9.4.2.5	Provision for functional tests		P
9.4.3	Protection against malfunction of control circuits		N

EN 60204-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
9.4.3.1	Insulation faults		N
9.4.3.2	Voltage interruptions		N
9.4.3.3	Loss of circuit continuity		N
10.	Operator interface and machine-mounted control devices		P
10.1	General		-
10.1.1	General requirements		P
10.1.2	Location and mounting	Readily accessible for service and maintenance	P
10.1.3	Protection		P
10.1.4	Position sensors		P
10.1.5	Portable and pendant control stations		P
10.2	Actuators	See Operator interface	P
10.2.1	Colours		P
10.2.2	Markings	See Operator interface	P
10.3	Indicator lights and displays		P
10.3.1	General		P
10.3.2	Colours		P
10.3.3	Flashing lights and displays		N
10.4	Illuminated push-buttons		P
10.5	Rotary control devices		P
10.6	Start devices		P
10.7	Emergency stop devices		N
10.7.1	Location of emergency stop devices		N
10.7.2	Types of emergency stop devices		N
10.7.3	Operation of the supply disconnecting device to effect emergency stop		N
10.8	Emergency switching off devices		N
10.8.1	Location of emergency switching off devices		N

EN 60204-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
10.8.2	Types of emergency switching off devices		N
10.8.3	Local operation of the supply disconnecting device to effect emergency switching off		N
10.9	Enabling control device		P
11	Controlgear: location, mounting, and enclosures		P
11.1	General requirements	Refer to instruction	P
11.2	Location and mounting		P
11.2.1	Accessibility and maintenance		P
11.2.2	Physical separation or grouping		P
11.2.3	Heating effects		P
11.3	Degrees of protection		P
11.4	Enclosures, doors and openings		P
11.5	Access to controlgear electrical equipment		P
12	conductors and cables		P
12.1	General requirements		P
12.2	Conductors		P
12.3	Insulation		P
12.4	Current-carrying capacity in normal service		P
12.5	conductor and cable voltage drop		P
12.6	Flexible cables		P
12.6.1	General		P
12.6.2	Mechanical rating		P
12.6.3	Current-carrying capacity of cables wound on drums		P
12.7	conductor wires, conductor bars and slip-ring assemblies		P
12.7.1	Basic protection		P
12.7.2	Protective conductors		P

EN 60204-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
12.7.3	Protective conductor current collectors		P
12.7.4	Removable current collectors with a disconnector function		P
12.7.5	Clearances in air		P
12.7.6	Creepage distances		P
12.7.7	conductor system sectioning		P
12.7.8	construction and installation of conductor wire, conductor bar systems and slip-ring assemblies		P
13.	Wiring practices		P
13.1	Connections and routing		P
13.1.1	General requirements		P
	All connections shall be secured against accidental loosening	No loosening	P
	Soldered connections shall only be permitted where terminals are provided that are suitable for soldering		P
	Terminal blocks shall be mounted and wired so that the internal and external wiring does not cross cover the terminals		P
13.1.2	Conductor and cable runs		P
	Conductors and cables shall be run from terminal to terminal without splices or joints		P
	The terminations of cables shall be adequately supported to prevent mechanical stresses at the terminations of the conductors		P
13.1.3	Conductors of different circuits		P
	Conductors of different circuits may be laid side by side, may occupy the same duct, or may be in the same multiconductor cable provided that the arrangement does not impair the proper functioning of the respective circuit		P
13.1.4	AC circuits - Electromagnetic effects (prevention of eddy currents)		P
13.1.5	Connection between pick-up and pick-up converter of an inductive power supply system		P

EN 60204-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
13.2	Identification of conductors		P
13.2.1	General requirements		P
	Each conductor shall be identification at each termination in the accordance with the technical documentation		P
13.2.2	Identification of the protective conductorl /protective bonding conductor		P
13.2.3	Identification of the neutral conductor		P
13.2.4	Identification by colour		P
13.3	Wiring inside enclosures		P
	Conductors inside enclosures shall be supported where necessary to keep them in place		P
	Conductors and cables that do not run in ducts shall be adequately supported		P
	Power cables and cables of measuring circuit may be directly connected to the terminals of the devices for which the connections were intended		P
13.4	Wiring outside enclosures		P
13.4.1	General requirements		P
13.4.2	External ducts		P
	Flexible conduit or flexible multiconductor cable shall be used where it is necessary to employ flexible connections to pendant push-button stations		P
13.4.3	Connection to moving elements of the machine		P
	Flexible conduit shall not be used for connections subject to rapid or frequent movements except when specifically designed for the purpose		P
13.4.4	Interconnection of devices on machine		P
13.4.5	Plug/socket combinations		P
13.4.6	Dismantling for shipment		P
13.4.7	Additional conductors		P
	Consideration should be given to providing additional conductors for maintenance or repair		P

EN 60204-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
13.5	Ducts, connection boxes and other boxes		P
13.5.1	General requirements		P
	Ducts shall provide a degree of protection suitable for application		P
	Ducts and cable trays shall be rigidly support and positioned at a sufficient distance from moving parts and in such a manner so as to minimize the possibility of damage or wear		P
13.5.2	Rigid metal conduit and fittings	No Such conduit and fittings applied	N
	Conduits shall be securely held in place and supported at each end		N
13.5.3	Flexible metal conduit and fittings	No such conduit and fittings	N
	Fittings shall be compatible with the conduit and appropriate for the application		N
13.5.4	Flexible non-metallic conduit and fittings		P
	The conduit shall be suitable for use in the expected physical environment	Such non-metallic conduit and fittings used	P
	Fittings shall be compatible with the conduit and appropriate for the application		P
13.5.5	Cable trunking systems		N
	Cable trunking systems external to enclosures shall be rigidly supported and clear of all moving or contaminating portions of the machine		N
	Where the cable trunking system is furnished in sections, the joints between sections shall fit tightly but need not be gasketed		N
	The only openings permitted shall be those required for wiring or for drainage		N
13.5.6	Machine compartments and cable trunking systems		P
13.5.7	Connection boxes and other boxes		P
13.5.8	Motor connection boxes		P
14.	Electric motors and associated equipment		P
14.1	General requirements		P

EN 60204-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
14.2	Motor enclosures		P
14.3	Motor dimensions		P
14.4	Motor mounting and compartments		P
	Each motor and its associated couplings, belts and pulleys, or chains, shall be so mounted that they are adequately protected and are easily accessible for inspection, maintenance, adjustment and alignment, lubrication, and replacement		P
14.5	Criteria for motor selection		P
14.6	Protective devices for mechanical brakes		P
15.	Accessories and lighting		N
15.1	Socket-outlets for accessories		N
15.2	Local lighting of the machine and of the equipment		N
15.2.1	General		N
15.2.2	Supply		N
15.2.3	Protection		N
15.2.4	Fittings		N
16.	Marking, warning signs and reference designations		P
16.1	General		P
	Warning signs, nameplates, markings, and identification plates shall be of sufficient durability	See artwork of marking label and manufacturer's manual	P
16.2	Warning signs		P
16.3	Functional identification	See instruction	P
16.4	Marking of enclosures of electrical equipment	See marking label	P
16.5	Reference designations		P
17.	Technical documentation		P
17.1	General		P
17.2	Information related to the electrical equipment	(See instruction)	P

EN 60204-1			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
18.	Verification		P
18.1	General		P
18.2	Verification of conditions for protection by automatic disconnection of supply		P
18.3	Insulation resistance tests	500V d.c. between the power circuit conductors and the protective bonding circuit and the insulation resistance more than 2 MΩ.	P
18.4	Voltage tests	1000V for 1 s, no disruptive discharge occurred.	P
18.5	Protection against residual voltages	1s after disconnection from main supply, the voltage between input terminals :9.8V<60V	P
18.6	Functional tests		P
18.7	Retesting		P

TABLE	TABLE: list of critical components			P
Object/ part No.	Manufacturer/ trademark	Type	Technical data	Mark(s) of conformity
Internal wire	GREAT SHENG INDUSTRIAL CO LTD	1015	105℃; 600V; 12A/18AWG	UL

Beide
Compliance Laboratory

APPENDIX A

Photo-documentation

Photo 1

View:

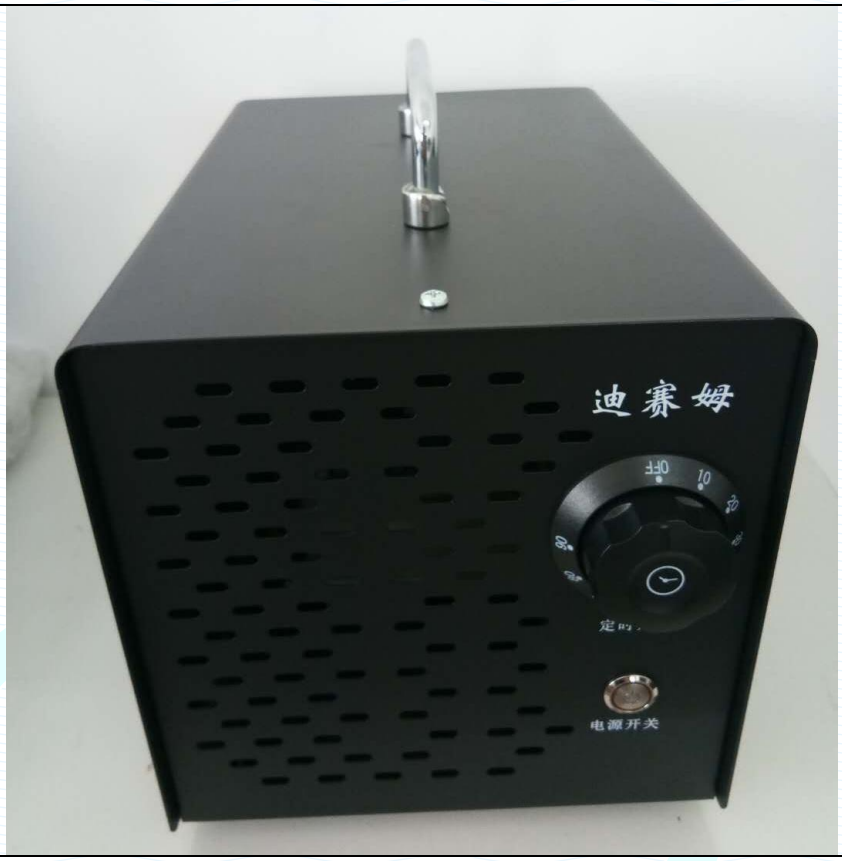

Photo 2

View:

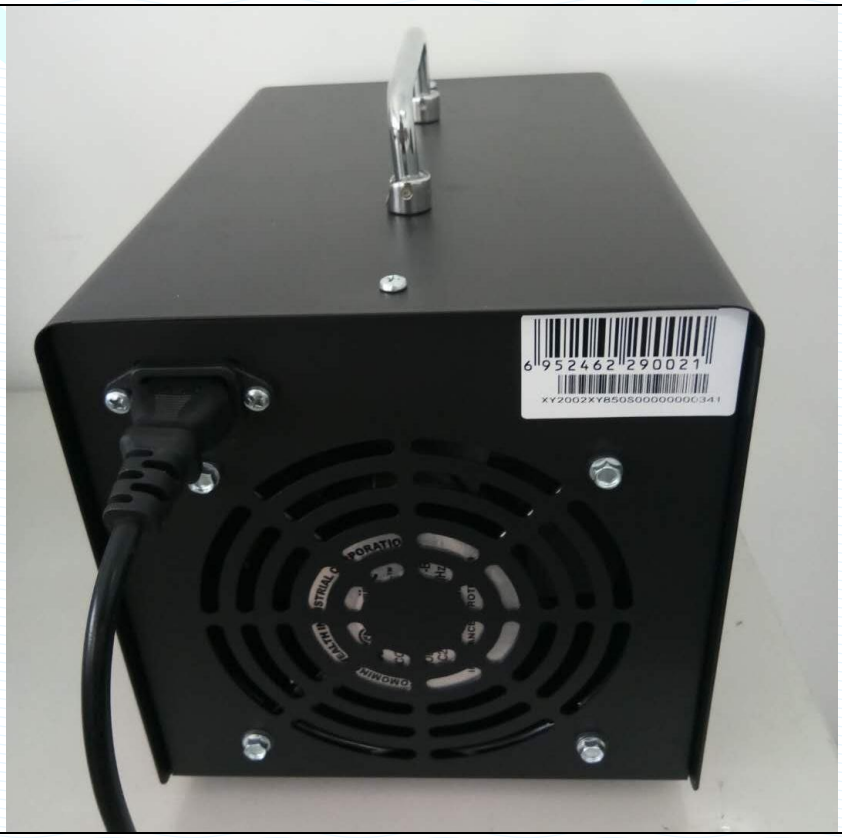

Photo 3

View: