User Manual
OXYGEN CONCENTRATOR

Apply to JLO-590 Si

Revision: V2.1
Date: 8th December, 2023

CE
2862

Read the instructions carefully before using the device

CAUTION: EU law restricts this device to sale by or on the order of a physician.
The unit should only be used as prescribed.

LIMITED WARRANTY

Shenzhen Homed Medical Device Co., Ltd (“Homed Medical Device”) is pleased to provide this warranty which is only for the benefit of the original purchaser of new equipment from Homed Medical Device or an authorized distributor. This warranty gives you specific legal rights and you may also have other legal rights which vary from state to state.

Homed Medical Device warrants this product to be free from defects in material and workmanship for a period of three years from the date of purchase. If within such warranty period the product proves to be defective, the product will be repaired or replaced at the option of Homed Medical Device. This warranty provides for the replacement of defective parts and labor performed at Homed Medical Device Authorized Service Centers. This warranty does not include normal wear and tear, shipping charges, or routine maintenance items. Homed Medical Device’s sole obligation, and your exclusive remedy, under this warranty are limited to such repair and/or replacement.

For warranty service, please contact Homed Medical Device Technical Support at the toll-free number below. Do not return products or defective parts to Homed Medical Device without first contacting us for our prior consent.

THE DURATION OF ANY IMPLIED WARRANTY WHATSOEVER, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED TO THE DURATION OF THE EXPRESS WARRANTY PROVIDED HEREIN. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THIS LIMITATION MAY NOT APPLY TO YOU.

Shenzhen Homed Medical Device Co., Ltd
3rd Floor, Block1, Longquan Industrial Zone, Huarong Road, Dalang Street, Longhua New District, Shenzhen 518109, People’s Republic of China
http://en.homedgroup.com
Technical Support: 86-0755-29821671

Authorized representative: Shanghai International Holding Corp. GmbH (Europe)
Eiffestrasse 80, 20537 Hamburg, Germany
Phone: +49-40-2513175

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INTENDED USE

The JLO-590Si Oxygen Concentrator manufactured by Shenzhen Homed Medical Device Co., Ltd. is intended for continuous or intermittent use as a source of up to 5 liters per minute of supplemental oxygen therapy in the hospitals, healthcare units and home healthcare environment. It should not be used in life supporting or life sustaining applications. Oxygen Concentrator uses the PSA principle, produces oxygen which concentration is within 90%-96% (V/V) from air for medical purpose.

Intended use: Oxygen concentrator is intended to provide supplemental oxygen to adult patients with chronic pulmonary diseases such as chronic bronchitis, emphysema, asthma, or lung cancer, those in the terminal stage of cancer, or any patient requiring supplemental oxygen. The oxygen concentrator is used in hospitals, healthcare units and home healthcare environment, it is available by prescription only and is not intended to support or sustain life.

Service life: 5 years.
Operator: healthcare personnel and patient.

INTRODUCTION

Oxygen makes up about 21% of the air we breathe and everyone needs a certain amount of oxygen to function properly. Your physician prescribes supplemental oxygen therapy for you because your body is not getting enough oxygen from room air alone. Concentrators work by separating oxygen from room air and delivering a metered flow of high-purity (~90%) oxygen to meet your needs. It is important that you do not increase or decrease the flow setting unless you are directed to do so by your physician or provider.

Working Principle

Oxygen concentrator can concentrate the oxygen in the air through the adsorbent of zeolite molecular sieve in normal temperature and air pressure, it uses the pressure swing adsorption (PSA) technology to separate the oxygen (21%) and nitrogen (78%) from the air by air-adsorption and air-desorption, then purifies the oxygen and transmits it to patients.

Clinical Benefit

The device provides high concentration oxygen to patient who needs oxygen therapy, to improve the patient's blood oxygen saturation and the patient's disease conditions.
The patients with diseases may include chronic pulmonary diseases such as chronic bronchitis, emphysema, asthma, or lung cancer, those in the terminal stage of cancer, or any patient requiring supplemental oxygen.

DESCRIPTION OF SYMBOLS

Symbol	Explanation
	Manufacturer
	Authorised representative in the European Community
	Lot Number
	Serial Number
	Date of Manufacture
	Waste Electrical and Electronic Equipment (WEEE)
	The CE conformity marking
	Refer to instruction manual/ booklet
	Class II electrical equipment
	Type BF applied part
	Medical device

Protection against harmful ingress of water:
-IP22

Degree of safety in the presence of flammable anesthetics or oxygen.
-No AP/APG (Not suitable for use in the presence of flammable anesthetic or oxygen)

IMPORTANT SAFETY INFORMATION

This manual uses the following convention to highlight information relating to hazards and precautions associated with your oxygen concentrator.

DANGER Hazards that will cause serious injury or death.

WARNING Hazards that may cause serious injury.

CAUTION Hazards that may affect your product or property.

DANGER – FIRE HAZARD, NO SMOKING

This device supplies high concentrations of oxygen which promotes rapid burning. Do not allow smoking, open flames, or other ignition sources within 5 feet of this device or

its accessories (tubing, cannulas, etc.). Oil, grease, or other petroleum products should NEVER be used on or around the unit.

Do not use extension cords with this unit.

Warnings and Cautions

a) Warnings:

* In the event of an alarm, you observe the device is not working properly, consult your provider or your physician immediately.

* If you feel discomfort or are experiencing a medical emergency while undergoing oxygen therapy, seek medical assistance immediately to avoid harm.

* This unit is not to be used for life support. The geriatric, pediatric, or any other patient who is unable to communicate discomfort, may require additional monitoring while using this machine. Patients with hearing and/or sight impairment(s) may need assistance with monitoring alarms.

* An oxygen concentrator, its parts and accessories are specified for use at specific flows.

* Incompatible parts or accessories can result in degraded performance.

* The responsible organization is accountable for ensuring the compatibility of the Oxygen Concentrator and all of the parts or accessories used to connect to the patient before use.

* Open flames during oxygen therapy are dangerous and is likely to result in fire or death.

* No lubricants other than those recommended by the manufacturer are to be used.

* Use no oil, grease, or petroleum-based products on or near this device.

* Do not modify this equipment without authorization of the manufacturer.

* Do not use if the power cord is damaged.

* Your level of oxygen flow is a prescription dose based on your individual needs. Do not increase or decrease the oxygen flow without consulting your physician.

* Oxygen therapy may be hazardous for certain individuals. Do not use this device unless it has been prescribed for you by a physician.

* Care should be taken to prevent the unit from getting wet or allowing water to enter the unit.

* Do not allow either the air intake or the air outlets to become blocked, check the air inlet and outlet carefully before use, and locate them in a well-ventilated space.

* Do not operate, store or transport the device beyond its regulated environmental conditions, or the device may be damaged or not functioned properly.

* Federal (USA) law restricts this device to sale by order of a physician.

* Oxygen tube is disposable, do not reuse it, or else cross-infection may be occurred.

* The effect that the oxygen delivery settings of the oxygen concentrator should be

periodically reassessed for the effectiveness of the therapy.

* Use only water-based lotions or salves that are oxygen-compatible before and during oxygen therapy. Never use petroleum-based or oil-based lotions or salves to avoid the risk of fire and burns.

* Do not lubricate fittings, connections, tubing, or other accessories of the oxygen concentrator to avoid the risk of fire and burns.

* Use only spare parts recommended by the manufacturer to ensure proper function and to avoid the risk of fire and burns.

* Use of this device at an altitude above 2000 meters or outside a temperature of 5-40℃ or a relative humidity above 80%R.H. is expected to adversely affect the flowrate and the percentage of oxygen and consequently the quality of the therapy.

* Oxygen makes it easier for a fire to start and spread. Do not leave the nasal cannula or mask on bed coverings or chair cushions, if the oxygen concentrator is turned on, but not in use; the oxygen will make the materials more flammable. Turn the oxygen concentrator off when not in use to prevent oxygen enrichment.

* Smoking during oxygen therapy is dangerous and is likely to result in facial burns or death. Do not allow smoking or open flames within the same room as the oxygen concentrator or any oxygen-carrying accessories. If you smoke, you must always turn the oxygen concentrator off, remove the cannula and leave the room where either the cannula or mask or the oxygen concentrator is located. If unable to leave the room, you must wait 10 minutes after you have turned the oxygen concentrator off.

* Open flames during oxygen therapy are dangerous and are likely to result in fire or death. Do not allow open flames within 2 m of the oxygen concentrator or any oxygen-carrying accessories.

* Any serious incident that has occurred in relation to the Oxygen Concentrator should be reported to Homed and the Authority having jurisdiction in your locale.

b) Cautions

* It is very important to select the prescribed level of oxygen flow. Do not increase or decrease the flow until you first consult your physician.

* The device may be used during sleep under the recommendation of a qualified clinician.

* Operate the device while it is placed on a steady and horizontal flat.

* Disconnect the power cord from the electrical outlet before you clean or service the unit.

* Unplug the power cord from the AC wall outlet before cleaning.

* Do not remove the cover or attempt to disassemble this device by unauthorized person, contact your equipment provider if service is required.

* If the foreign object falls into the devices, please stop it immediately, unplug the power supply, and contact the professional for inspection.

* If replacement is required, please use the same model as the humidifier and accessories that came with it, otherwise the performance of the Oxygen Concentrator

may be damaged.

* After each shutdown, it needs 10 minutes of intermittent to restart the device.

* Please dispose in legal way in compliance with local law or contact the relative staff for environmental protection.

* After powering on the device, it needs 30 minutes for the device to reach a stated performance.

* The device should be located so as to avoid pollutions or fumes.

* Please use Oxygen tube or Oxygen mask which has CE certification. Homed provide the accessories of oxygen tube, but not provide oxygen mask.

* Proper placement and positioning of the oxygen tube or oxygen mask is critical to the effectiveness of the therapy.

IMPORTANT FEATURES

1. Power Switch
2. Control panel
3. Flow Control Knob
4. Flow Meter
5. Oxygen outlet
6. Oxygen outlet
7. Humidifier
8. Power port

Serial Number	Name	Quantity
1	Oxygen unit	1
2	Manual	1
3	Product qualification certificate	1
4	Quality assurance card	1
5	Inlet filter cotton	2
6	Humidifier and joint	1
7	Connecting pipe	1
8	Nasal oxygen tube	1
9	Earphone type nasal oxygen tube	1

CONCENTRATOR SET-UP

1. Position your unit within reach of an electric outlet in a location that allows at least 6 inches from walls, curtains, or other objects that may block the flow of air to your unit. Avoid locations where fumes are present or confined spaces with poor air circulation. **DANGER - Keep concentrator and oxygen tubing at least 5 feet away from objects that are hot, sparking, or contain open flames.**

2. Check to make sure the foam air filters on either side of your concentrator are free from excessive dust or debris. Proper cleaning instructions can be found in the Cleaning & Routine Maintenance section of this manual.

3. Fill the humidifier with clean water, check to make sure it is filled correctly and all connections are secure. When the concentrator is operating, a steady stream of bubbles will be present in the humidifier if all connections are leak-tight.

4. Nasal Oxygen Cannula

Direction For Use:

Attach the oxygen supply tubing to the gas source and set the oxygen to the prescribed flow.

Check for gas flow throughout the device.

Insert the nasal tips into the nostrils with the two plastic tubes over the ears and under the chin.

Gently adjust the plastic slide until the cannula is secure.

Nasal tips may be trimmed with scissors to fit smaller patient.

Cautions:

For single use, discard after use.

Do not use if the package is open or damaged.

Do not store at extreme temperature and humidity. Store in cool and dry place.

Ensure that all connections are secure and air circulates freely through the tubing.

5. Ensure that the power cord and plug are not damaged and then insert the plug directly into a wall outlet.

CAUTION - Do not use extension cords or power adapters.

PREPARATIONBEFOREOPERATIONOFOXYGENGENERATOR

1. The oxygen generator and the oxygen pipe exit keep at least 1 meter distance to prevent the fire caused by the heat.

2. Please check whether the air filter is clean before using the machine.

3. Install the approved fittings at the oxygen outlet.

4. If you do not use a humidifier, please make sure that the nasal oxygen tube is connected to the oxygen outlet.

5. If you use a humidifier, please ensure that the humidifier and oxygen generator installation method: the top of the humidifier bottle interface access oxygen outlet, humidification bottle placed in the concave position.

6. Connect the oxygen pipe to the exit of the humidifier bottle.

7. If your doctor requires the use of nasal oxygen tubes, catheters or masks, or other accessories, should be connected to the humidifier bottle.

8. Take the power cord out of the belt completely, make sure the power switch is in the closed state, and then plug the plug into the wall mounted power outlet.

Improper use of power cords and plugs may cause burns, fires, or other electrical shocks.

Do not use other types of power cords and power adapters and power cords damaged machines.

OPERATING INSTRUCTIONS

1. When using the Oxygen Concentrator for the first time, cut the cable tie at the bottom of the machine.

2. Turn the switch to the “on” position. When the machine starts to run, the power indicator will light up, the automatic alarm will respond, and the machine will start to work normally within 10s.

3. Adjust the knob of the flowmeter until the ball in flowmeter is adjusted to the flow value you specify as follows:

Adjust the flowmeter after the oxygen concentrator starts to work normally.

Check the flowmeter to ensure that the float is at the specified flow position (5L/min is recommended). Adjusted the flowmeter knob to adjust the oxygen flow. Counterclockwise rotation, flow increases; Clockwise rotation reduces the flow rate and eventually shuts down the flow meter. Do not close the flowmeter when inhaling oxygen.

It takes about 30 minutes from the start of oxygen production to the standard oxygen concentrator (about 5L/min). When the oxygen concentration does not reach the standard of 82%, the hypoxia alarm light will light up. If oxygen levels are consistently below the standard, please stop taking oxygen and call your company's customer service hotline for advice.

4. The oxygen concentrator will be initially used a 5 minutes warm-up period, after which the machine will return to normal operation.

5. Press the "Start/Stop" button to stop oxygen production;

When oxygen inhalation enters the timing mode, if the timing time is not reached, press the "Start/Stop" button to stop sample preparation and return to the standby mode of oxygen maker.

6. Remove the power cord from the power socket;

7. Remove the power line cord from the oxygen concentrator power port.

CLEANING & DISINFECTION & ROUTINE MAINTENANCE

1. Clean and disinfect the Humidifier

Humidifiers need to be cleaned before each use. Follow the instructions issued by the humidifier manufacturer and follow these steps:

(1) Clean the surface of humidifier by running tap water;

(2) Wipe the surface by a dust-free cloth dampened with 75% ethyl alcohol;

(3) Immerse the connecting pipe and humidifier in 75% ethyl alcohol, pay attention to fill the humidifier and connecting cavity, after 5-6 minutes, rinse the connecting pipe and the inner wall with clean water;

(4) Dry the sample with a soft, clean cloth and air dry.

2. Clean the outshell, display/key panel, switch

Clean the outshell, display/key, and switch by a dust-free cloth with clean water for 2-3 times, then wipe the surface by a cloth dampened with 75% ethyl alcohol for 2-3 times, then dry them on the air.

3. Air intake filter cotton handling

The air intake filter cotton is located on the back of the Oxygen Concentrator. It is cleaned once a week to ensure the normal operation of the machine. The specific steps are as follows:

(1) Turn off the power supply of the equipment and remove the intake filter cotton from the back of the Oxygen Concentration.

(2) Rinse with clean water and dry with a clean cloth. Place in a ventilated place to dry. Ensure that the air filter cotton is completely dry before re-installation.

! Matters need attention:

(1) The Oxygen Concentrator should be turned off and disconnected before any cleaning steps.

(2) The outlet of the humidifier must be fastened tightly, otherwise it may lead to coagulative fog phenomenon in the oxygen tube.

(3) Do not use any oil solvent or cleaner to clean the shell.

MINOR TROUBLESHOOTING GUIDE

Problem	Probable Cause	Solution
Unit does not operate. Continuous audible alarm sounds indicating power failure.	The power cord is disconnected. No power at outlet. Concentrator circuit breaker has tripped.	Connect power cord to wall outlet. Check power source, fuses, breakers, switches, etc. Remove filter door on left side of the concentrator and momentarily press the circuit breaker reset button. Contact your provider.
Low Oxygen light (yellow) is illuminated	Air flow to the concentrator is blocked. The outlet flow is set greater than 5 liter/min.	Check condition of air filters and clean if necessary. Remove any items that may be blocking air flow to the concentrator. Adjust Flow Control Knob to prescribed setting. Contact your provider.
Equipment Alarm	Low concentration	See above.

light (red) is illuminated	Low outlet flow	Adjust Flow Control Knob to prescribed setting. Check oxygen tubing and accessories for blockage. Contact your provider.
Any other problems		Turn off your unit, switch to your reserve oxygen supply (if provided), and contact your provider.

SPECIFICATIONS –OXYGEN CONCENTRATOR

Oxygen Outlet Flow	1 - 5 LPM
Maximum Outlet Flow	5 LPM
Low Flow Alarm	Less than 0.5 LPM
Outlet Pressure	0.04-0.06MPa
Accuracy of oxygen concentration	93% +/- 3%
Accuracy of oxygen flowrate	+/- 10%
Electrical Rating	220 – 240VAC, 50 Hz, 2.4 Amps
Operating Voltage Range	220 – 240VAC, 50 Hz
Input power rate	380VA
Water content	≤0.07g/m^3
Carbon dioxide content	≤0.01% (v/v)
Operation Environment Conditions	Temperature: 10ºC-40ºC; Humidity: ≤ 83% Relative Humidity (non-condensing) Atmosphere pressure: 86kPa-106kPa
Warm-up time	30 minutes
Dimensions	W13.4” (34cm) *L11.6” (29.5cm) *H20.7” (52.5cm)
Weight	Product: 22.4 kg Shipping: 23.2 kg
Sound Level	≤60dB(A)
OCI Thresholds	Low Oxygen concentration (yellow): 84% +/- 2% Equipment Alarm (red): 73% +/- 2%
Storage Environmental Conditions	Temperature: -20ºC-55ºC; Humidity: 10%-93% Relative Humidity (non-condensing) Atmosphere pressure: 70kPa-106kPa
Equipment Class and Type	Class II (Double Insulation) Type BF (Applied Part)

WARRANTY and VALIDITY

Validity of maintenance: 5 years.

1. Maintenance of Oxygen tube and other accessories

Clean and regularly replace oxygen tubes or other accessories according to oxygen tube supplier's requirements.

2. Air intake filter cotton

It is recommended to check the intake filter cotton every 300 hours after the oxygen concentrator runs. If all the intake filter cotton is black, replace it in time. You can purchase the filter cotton from the distributor.

3. Biofilter

The bacterial filter inside the oxygen machine host can filter 90% of the bacteria. After every 20000 hours of operation. It is recommended that you contact the service provider for maintenance and replacement.

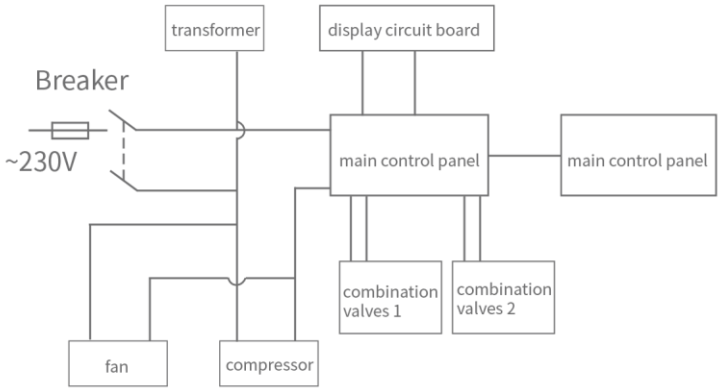
4. Routine maintenance

In order to ensure that you are better off using the oxygen generator, it is recommended that you contact your service provider for maintenance whenever the machine has been running for 5000 hours.

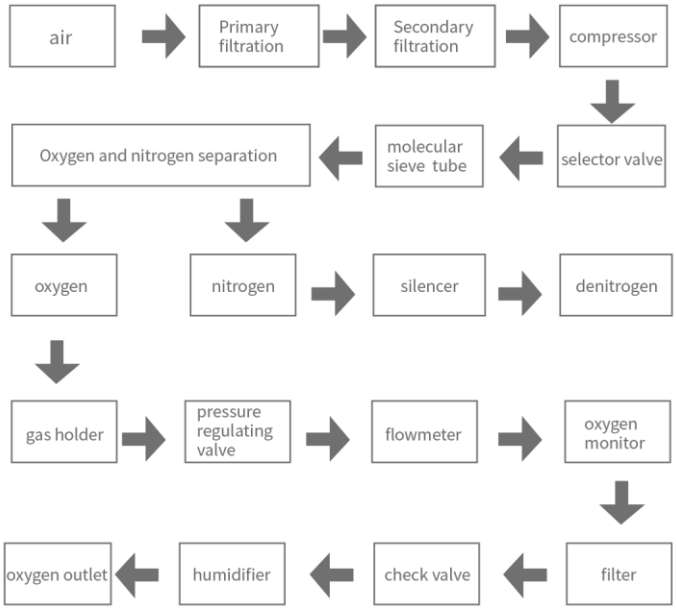
! Matters need attention:

(1) Filter cotton must be fully dried before use. To prevent damage to the machine, do not attempt to operate the without air intake or when the filter is not thoroughly dry.

(2) When the Oxygen Concentration in the air is abnormal, the machine concentration will have a slight error, which is a normal phenomenon.



Schematic diagram of electrical principle



Schematic diagram of gas path operation

ESSENTIAL PERFORMANCE

a) Oxygen concentration notice

Status	Audible Alarm	Light	Indicates
Alarm	/	Green	Oxygen concentration up to 90%

Alarm	/	Yellow	Oxygen concentration below 82%
Alarm	Alarm sound	Red	Oxygen concentration below 73%.

b) Description of alarm situations

Status	Audible Alarm	Light	Indicates	Alarm status priority
Supply voltage drop alarm	Alarm sound	Red light flashing	This alarm is generated when the power supply voltage is lower than 10% of the rated voltage	High
Power failure alarm	Alarm sound	Red light flashing	When the oxygen machine is working, the power supply is interrupted, and the oxygen machine sends out the alarm of power failure.	High
Low oxygen concentration alarm	No	Yellow light flashing	Oxygen concentration below 82%.	Low
Low oxygen concentration fault alarm	Alarm sound	Red light flashing	Oxygen concentration below 73%.	High
Obstruction of gas pathways alarm	Alarm sound	Red light flashing	When the gas path is blocked the system gives an alarm.	High

EMC INFORMATION

Important Notice

* Oxygen Concentrator (OC) meets the requirement of electromagnetic compatibility in IEC60601-1-2.
* The user needs to install and use according to electromagnetism compatibility information which is attached with it.
* Portable and mobile RF communication devices may influence OC performance, so OC should be kept away from them during using.
* Guidance and manufacturer's declaration stated in the appendix.

⚠ **Warning:**

* Oxygen Concentrator should not be used adjacent to or stacked with other equipment and that if adjacent or stacked use is necessary, the Oxygen Concentrator should be observed to verify normal operation in the configuration in which it will be used.

Table 1

Guidance and manufacturer's declaration –electromagnetic emissions
This equipment is intended for use in the electromagnetic environment specified below. The user of this equipment should assure that is used in such an environment.

Emissions test	Compliance	Electromagnetic environment - guidance
RF emissions CISPR 11	Group 1	The Oxygen Concentrator uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class B	The Oxygen Concentrator is suitable for use in all establishments other than domestic and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Complies	
Voltage fluctuations/flicker emissions IEC 61000-3-3	Complies	

Table 2

Guidance and manufacturer's declaration – electromagnetic immunity			
This equipment is intended for use in the electromagnetic environment specified below. The user of this equipment should assure that is used in such an environment.			
Immunity test	**IEC 60601 test level**	**Compliance level**	**Electromagnetic environment – guidance**
Electrostatic discharge (ESD) IEC 61000-4-2	±8 kV contact ±15 kV air	±8kV Contact ±15 kV Air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30 %.
Electrical fast transient/burst IEC 61000-4-4	±2 kV for power supply lines ±1 kV for input/output lines	±2 kV for Power supply lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1 kV differential mode ±2 kV common mode	±1kV differential mode ±2kV common mode	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	0% UT; 0.5 cycle at 0, 45, 90, 135, 180, 225, 270 and 315 degrees, 0% UT; 1 cycle 0 degree 70% UT (30% dip in UT) for 25 cycle single phase at 0 degree 0% UT; 250 cycles	0% UT; 0.5 cycle at 0, 45, 90, 135, 180, 225, 270 and 315 degrees, 0% UT; 1 cycle 0 degree 70% UT (30% dip in UT) for 25 cycle single phase at 0 degree 0% UT; 250 cycles	Mains power quality should be that of a typical commercial or hospital environment. If the user of the Oxygen Concentrator requires continued operation during power mains interruptions, it is recommended that the OC be powered from an uninterruptible power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	30 A/m 50Hz/60Hz	30 A/m 50Hz/60Hz	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
NOTE*U*T is the a.c. mains voltage prior to application of the test level.			

Table 3

Guidance and manufacturer's declaration – electromagnetic immunity			
This equipment is intended for use in the electromagnetic environment specified below. The customer or the user of should assure that it is used in such an environment.			
Immunity test	**IEC 60601 test level**	**Compliance level**	**Electromagnetic environment - guidance**
Conducted RF IEC 61000-4-6	3 VRMS 150kHz to 80MHz 6Vrms in ISM bands between 150kHz to 80MHz 80%AM at 1kHz	3V	Portable and mobile RF communications equipment should be used no closer to any part of the Oxygen Concentrator, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. **Recommended separation distance** $d = 1.2\sqrt{P}$ $d = 1.2\sqrt{P}$ 80MHz to 800MHz $d = 2.3\sqrt{P}$ 800MHz to 2.7GHz where *P* is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and *d* is the recommended separation distance in meters (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, [a]should be less than the compliance level in each frequency range. [b] Interference may occur in the vicinity of equipment marked with the following symbol: 
Radiated RF IEC 61000-4-3	10 V/m 80MHz to 2.7GHz 80%AM at 1kHz	10 V/m	
NOTE 1 At 80MHz and 800MHz, the higher frequency range applies. NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.			
[a] Field strength from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the Oxygen Concentrator is used exceeds the applicable RF compliance level above, the Oxygen Concentrator should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the Oxygen Concentrator. [b] Over the frequency range 150kHz to 80MHz, field strengths should be less than 3V/m.			

Table 4

Recommended separation distances between portable and mobile RF communications equipment and the Oxygen Concentrator
The Oxygen Concentrator is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the Oxygen Concentrator can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the Oxygen Concentrator as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of transmitter W	Separation distance according to frequency of transmitter m		
	150kHz to 80MHz $d = 1.2\sqrt{P}$	**80MHz to 800MHz** $d = 1.2\sqrt{P}$	**800MHz to 2.5GHz** $d = 2.3\sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

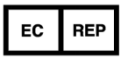
For transmitters rated at a maximum output power not listed above, the recommended separation distance *d* in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where *P* is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1 At 80MHz and 800MHz, the separation distance for the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

Caution: Instructions for a correct disposal of the product.
Disposal requirement: Comply with WEEE directive, it must be disposed of in accordance with the locally applicable regulations, not with domestic waste.

Shenzhen Homed Medical Device Co., Ltd.
Address: 3rd Floor, Block 1, Longquan Industrial Zone, Huarong Road, Dalang Street, Longhua New District, Shenzhen 518109, People's Republic of China
TeL: 0755-29821671/29821673/29821675



Shanghai International Holding Corp. GmbH (Europe)
Address: Eiffestrasse 80, 20537 Hamburg, Germany
Tel: +49-40-2513175