OXYGON

SWIMMING POOL · WATER TREATMENT · HEATING · COOLING



Jazz Series

Full Inverter Pool Heat Pump

Installation, Operation & Maintenance Manual

Model codes: OX-LS13 · OX-LS16 · OX-LS20 · OX-LS24

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www.oxygon.gr

OXYGON — Karamaouna St., N. Rysio, 57001 Thessaloniki, Greece
Tel: +30 2312 208 240 | info@oxygon.gr | www.oxygon.gr

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1. Safety Warnings

Read the following instructions carefully before installing, operating or servicing the heat pump. They contain essential information for the safety of the operator, the pool users and the equipment. Keep this manual for future reference.

ELECTRICAL HAZARD

Do not touch the unit with wet hands or feet. Always disconnect the power supply before opening the casing or carrying out any maintenance. The heat pump must be connected to a correctly rated circuit breaker and a 30 mA residual-current device (RCD). All wiring must be performed by a qualified electrician.

EARTHING REQUIRED

The appliance must be reliably earthed. A missing or defective earth connection can cause fatal electric shock. Never operate the unit without a verified protective earth.

WATER CIRCUIT

The heat pump must be connected to the pool circulation loop with rigid pipes only — the inlet and outlet unions cannot support the weight of flexible hoses. Ensure correct water flow before start-up; insufficient flow triggers protection and can damage the exchanger.

MECHANICAL / FAN

Keep hands and objects away from the fan. Do not stack material near the air inlet or outlet. Only a professional installer may lift, position and fix the unit.

R32 REFRIGERANT

This unit contains R32, a mildly flammable (A2L) refrigerant. Keep open flames and ignition sources away. Refrigerant handling, charging and welding must be carried out only by certified personnel, strictly following the manufacturer's requirements. Vacuum the circuit completely before any welding.

Note: This product complies with EN 60335-2-40 (safety of electrical heat pumps, air-conditioners and dehumidifiers). For warranty terms and contact details, see the final Warranty & Contact section of this manual.

2. Package Contents

On delivery, check that the packaging is intact and that the following items are included. Report any damage or missing part to your Oxygon dealer before installation.

- Jazz Full Inverter heat-pump unit
- Wired LCD controller (factory-fitted on the unit)
- Condensate drainage nozzle + drain hose
- Two water-connection unions (Ø50)
- Anti-vibration mounting feet
- User & installation manual + warranty card

3. Product Description

The Oxygon Jazz is a full-inverter air-source pool heat pump for residential swimming pools. Its twin-rotary DC inverter compressor continuously modulates output to match the pool demand, delivering high seasonal efficiency, quiet operation and stable water temperature. The reversible cycle provides both heating and cooling.



Oxygon Jazz — Full Inverter Pool Heat Pump

Key features

- Twin-rotary DC inverter compressor
- EEV (electronic expansion valve) technology
- Reverse-cycle defrosting with 4-way valve
- High-efficiency twisted titanium heat exchanger
- High-pressure and low-pressure protection
- Soft start and wide-voltage operation
- Stable inverter control system with Wi-Fi (Smart Life app)

Operating range

- Operating air temperature: -10°C to +43°C (ideal 15°C–25°C)
- Heating water set-point: 15°C to 40°C
- Cooling water set-point: 15°C to 35°C

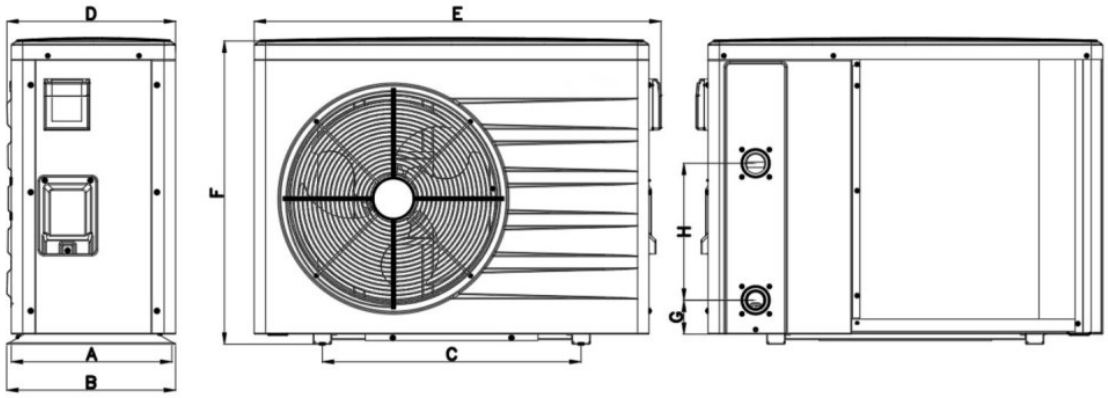
4. Technical Specifications

Full technical data for the four Jazz models. An arrow (←) indicates a value common to all models.

Specification	OX-LS13	OX-LS16	OX-LS20	OX-LS24
Advised pool volume (m³)	35–65	40–75	50–90	60–110
Heating capacity – Air 24°C / Water 26°C (kW)	2.6–13.0	3.2–16.0	4.1–20.0	4.8–24.0
Power input, heating (kW)	0.60–2.30	0.70–3.20	0.80–3.50	0.90–4.00
COP – Air 24°C / Water 26°C	6.4–13.1	6.4–13.5	6.4–13.6	6.4–14.0
Heating capacity – Air 15°C / Water 26°C (kW)	1.8–9.1	2.8–14.0	2.95–15.5	3.20–17.8
COP – Air 15°C / Water 26°C	4.0–7.4	4.2–7.7	4.1–7.8	4.1–7.6
Cooling capacity (kW)	1.8–7.20	2.3–9.40	2.9–11.50	3.9–15.90
Power supply	220-240V / 50 Hz / 1-phase	←	←	←
Rated running current (A)	12.0	16.5	18.6	21.0
Refrigerant	R32	←	←	←
Compressor	Twin-rotary DC inverter	←	←	←
Heat exchanger / condenser	Titanium coil	←	←	←
Number of fans	1	1	1	1
Noise level at 1 m – dB(A)	≤42.5–52	≤42.5–52	≤44.3–57	≤44.9–58.7
Water connection	Ø50	Ø50	Ø50	Ø50
Recommended water flow (m³/h)	4–6	6–8	7–10	10–12
Operating ambient temp.	-10°C to +43°C	←	←	←
Net dimensions L/W/H (mm)	891/370/665	981/370/665	981/440/765	981/440/765
Package dimensions L/W/H (mm)	936/385/695	1026/385/695	1026/455/800	1026/455/800
Net / gross weight (kg)	55 / 67	59 / 70	68 / 78	72 / 84
Function	Heating & cooling with reverse defrost	←	←	←

Note: Performance figures are rated values and may vary with ambient conditions. Data is subject to change without notice — refer to the unit nameplate for the definitive rating.

5. Dimensions



Reference dimensions (front / side / rear views)

Overall dimensions in millimetres, per model (letters refer to the drawing above):

Ref (mm)	OX-LS13	OX-LS16	OX-LS20	OX-LS24
A	352	352	422	422
B	370	370	440	440
C	567	657	594	594
D	370	370	440	440
E	891	981	981	981
F	665	665	765	765
G	75	75	75	75
H	300	350	420	420

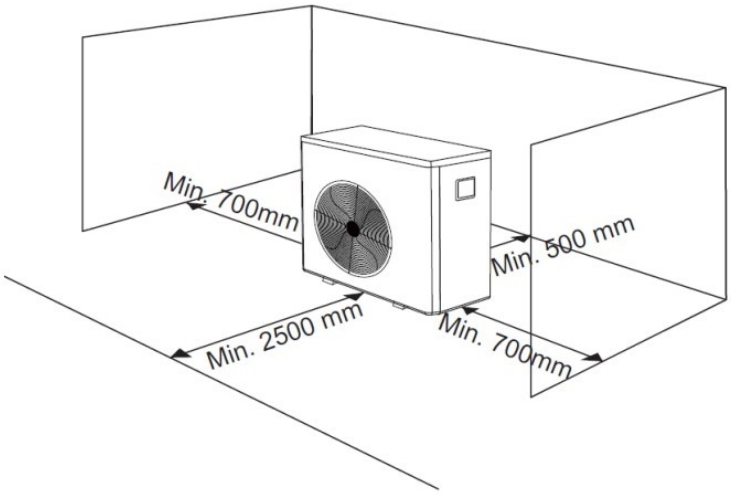
6. Installation

PROFESSIONAL INSTALLATION

Only qualified personnel may install the heat pump. Incorrect installation can damage the unit and endanger users.

Location & clearances

Install the unit outdoors in a well-ventilated position. Keep the minimum clearances shown below so that air can circulate freely; no barrier within 50 cm behind the unit. Poor ventilation reduces efficiency and may stop the unit.



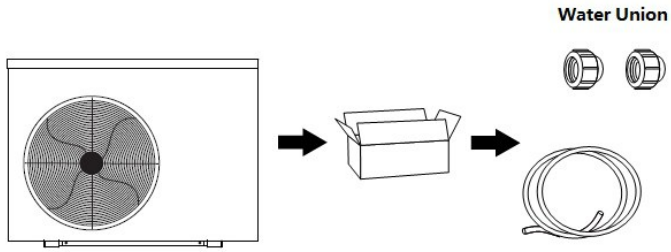
Minimum installation clearances

Mounting

- Fix the frame with M10 bolts to a solid, level concrete base or to strong, rust-proofed brackets.
- Fit the supplied anti-vibration feet to reduce noise transmission.
- Do not stack objects that block the air inlet or outlet.

Condensate drainage

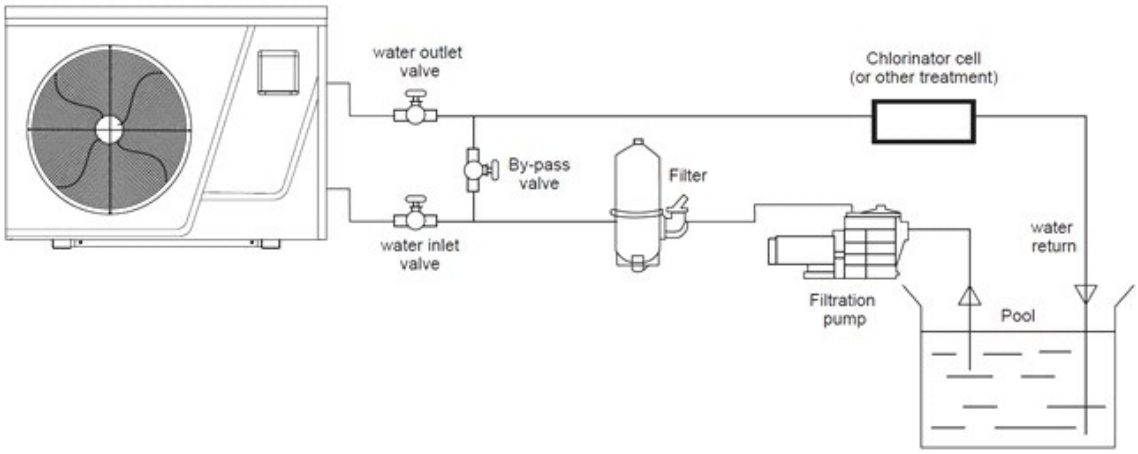
During operation, condensation is discharged from the bottom of the unit. Fit the supplied drainage nozzle into the base hole, clip it firmly and connect a hose to lead the condensate away.



Condensate drainage kit assembly

7. Hydraulic Connection

Connect the heat pump into the pool circulation loop after the filter and before any chlorinator / dosing equipment, as shown. Use rigid Ø50 pipework and the supplied unions.



Typical hydraulic connection with by-pass

By-pass valves

Install a three-valve by-pass (inlet, outlet and by-pass) so that water flow through the heat pump can be adjusted and the unit can be isolated for servicing without stopping the pool circulation.

WATER FLOW

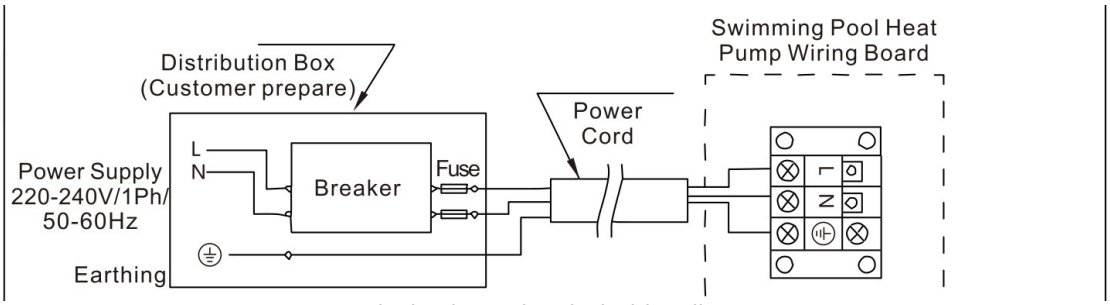
Keep the water flow within the recommended range for the model (4–6 / 6–8 / 7–10 / 10–12 m³/h for LS13 / LS16 / LS20 / LS24). Low flow triggers the flow switch (error E17) and prevents heating.

8. Electrical Connection

QUALIFIED ELECTRICIAN ONLY

All electrical work must follow the wiring diagram and local regulations. Fit a 30 mA leakage protector. Route power and signal cables separately so they do not interfere.

Power supply: 220-240V / 1-Ph / 50–60 Hz. Connect through a dedicated breaker and fuse to the heat-pump wiring board as shown.



Single-phase electrical wiring diagram

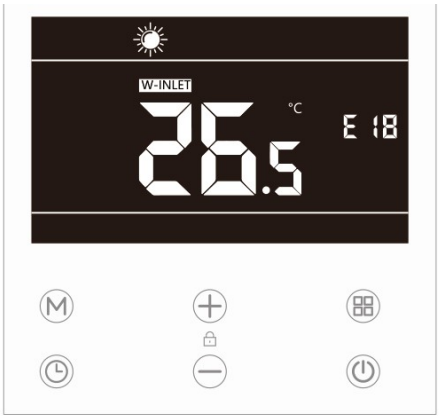
Protective devices & cable sizing

Select the breaker, fuse and cable according to the model. Values apply to a power cord ≤ 10 m; for longer runs increase the wire cross-section. The signal cable may be extended up to 50 m.

Model	OX-LS13	OX-LS16	OX-LS20	OX-LS24
Breaker rated current (A)	15	20.5	23.5	25
Residual current device (mA)	30	30	30	30
Fuse (A)	15	20.5	23.5	25
Power cord (mm²)	3×1.5	3×2.5	3×4.0	3×4.0
Signal cable (mm²)	4×0.5	4×0.5	4×0.5	4×0.5

9. Wired Controller — Display & Keys

The unit is operated from the wired LCD controller. The display shows the water-inlet temperature, the active mode and any fault code. The six keys are described below.



Wired LCD controller and keypad

Keys

Key	Function
Power	Turn the controller on/off or quit the current function.
Mode	Select the desired function or confirm the current operation. Short-press to switch cooling/heating.
Clock	Enter the timing / clock function setting.
M	Switch modes when the controller is on; with Mode, enter manual defrosting.
+	Increase the temperature or setting value.
−	Decrease the temperature or setting value.

10. Wired Controller — Operation

On / off & set temperature

Short-press Power to switch the controller on; the last mode flashes for 3 seconds (the command reaches the main board after a 5-second delay). With the water temperature shown, press + or − to enter the set-point of the current mode; adjust the flashing value, then press Power to save and exit.

Mode selection

When the unit is on, short-press Mode to switch between cooling and heating. The available modes are set by the main board and cannot be changed while the unit is off.

Key lock

After 60 seconds without operation the keys lock and the screen dims. Press + and − together for 3 seconds to lock or unlock; a lock icon shows the locked state.

View & set parameters

Short-press Power to view operating parameters, scrolling with + / −. To change a parameter, press Mode for 3 seconds; the parameter number flashes — scroll with + / −, confirm with Mode. The page exits after 1 minute.

Timing & clock

Press Clock to set the time. Press Clock + ‘+’ for 3 seconds to set Timer 1 ON then OFF; press Power + ‘−’ to set Timer 2. To cancel a timer, press Power for 3 seconds in the timing screen.

Manual defrosting

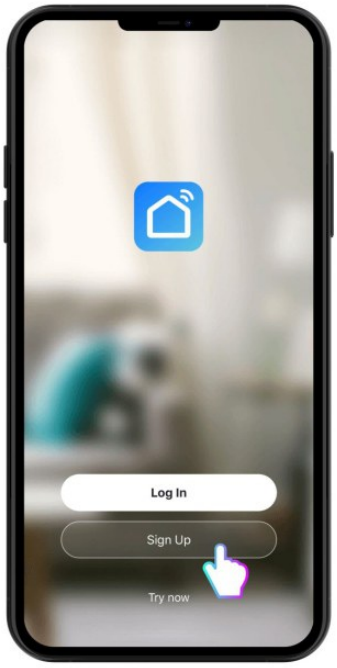
With the water temperature shown, press Mode + M together for 3 seconds after power-on to request manual defrosting; the main board decides whether to defrost according to the conditions.

11. Wi-Fi Functionality

The Jazz heat pump can be monitored and controlled remotely through the free “Smart Life” app for Android and iOS. A 2.4 GHz Wi-Fi network is required.



Download Smart Life



Register / log in

Pairing

- Download “Smart Life” from Google Play or the App Store and create an account.
- Connect your phone to the 2.4 GHz Wi-Fi network the unit will use.
- In the app tap “+”, add the heat pump and follow the on-screen pairing steps.
- Once paired, set temperature, mode and timers, and receive fault notifications remotely.

Note: The Wi-Fi module supports 2.4 GHz networks only. Keep the unit within good signal range of the router.

12. Start-Up & Testing

Before first start-up

- Confirm the pool pump runs and water circulates through the heat pump.
- Confirm the power supply matches the rating and the earth is connected.
- Open the inlet/outlet valves and set the by-pass for correct flow.

Test run

Switch on and select heating (or cooling). The compressor starts after a short delay (up to 3 minutes) for protection. Check that the water-inlet/outlet temperature difference is reasonable and that no fault code appears.

Refrigerant leakage check

As the unit uses R32, check the refrigerant circuit for leaks with an approved detector during commissioning and servicing. In case of a suspected leak, stop the unit, ventilate the area, keep ignition sources away and call a certified technician. Do not use open flame to detect leaks.

13. Maintenance & Servicing

ISOLATE BEFORE SERVICING

Cut off the power supply before any cleaning or maintenance.

Routine care

- Keep the air inlet and finned coil clear of leaves and debris; clean the coil gently with water.
- Check the water connections and the condensate drain periodically.
- Verify that the RCD and breaker operate correctly.

Winterising

- At the end of the season, switch off and isolate the unit.
- Drain the water from the heat exchanger to prevent frost damage.
- Cover the unit loosely, keeping the air paths ventilated.

R32 servicing

Repairs to the refrigerant circuit, recharging and welding must be carried out only by certified personnel following the manufacturer's requirements. Vacuum the circuit completely before welding. Refer to the technical service manual for detailed procedures.

14. Troubleshooting & Error Codes

Common faults

Symptom	Possible cause	Solution
Heat pump does not run	No power	Wait until the power recovers
	Power switch off	Switch on the power
	Fuse burned	Check and change the fuse
	Breaker off	Check and turn on the breaker
Fan runs but insufficient heating	Evaporator blocked	Remove the obstacles
	Air outlet blocked	Remove the obstacles
	3-minute start delay	Wait patiently
Display normal but no heating	Set temperature too low	Set a proper heating temperature
	3-minute start delay	Wait patiently

If the solutions above do not work, contact your installer with the model number and details. Do not attempt to repair the unit yourself.

STOP IMMEDIATELY IF…

Stop the machine and cut off the power at once, then call your dealer, if: the switch action is inaccurate, or the fuse blows / the RCD trips repeatedly.

Protection & failure codes

When a fault occurs, the code flashes in the display area. The main codes are listed below (single-phase units; some codes apply only to specific configurations).

Code	Description	Action
EE	Sensor failure	Stop for protection
E01	Controller communication protection	Stop for protection
E02	Driver communication protection	Stop for protection
E03	AC current protection	Stop for protection
E04	AC voltage protection	Stop for protection
E05	DC voltage protection	Stop for protection
E06	Phase current protection	Stop for protection
E07	IPM over-temperature protection	Stop for protection
E08	DC current protection	Stop for protection
E09	Excessive exhaust protection	Stop for protection
E10	Outdoor ambient temperature limit	Stop for protection
E11	High pressure protection	Stop for protection
E12	Low pressure protection	Stop for protection
E14	Cooling water outlet overcooling protection	Stop for protection
E15	Cooling coil temperature too high	Stop for protection
E16	Heating water outlet temperature too high	Stop for protection
E17	Water flow failure	Stop; restarts after 1 min, locks after 3 times
E18	High-voltage switch failure	Stop for protection
E19	Low-voltage switch failure	Stop for protection
E22	Inlet/outlet water temp. difference protection	Stop for protection
E23	Heating ambient temperature too low	Stop for protection
E24	Cooling ambient temperature too low	Stop for protection
E25	Internal cooling coil temperature too low	Stop for protection
E26	DC fan motor failure (no speed feedback)	Stop for protection
E29	EEPROM reading error	Restore default; normal operation
E37	IPM protection (permanent)	Stop for protection
E38	Driver protection	Stop for protection

Note: Codes E13, E20–E21, E27–E28, E30–E36 and E39–E48 are reserved or apply to other configurations and are not normally shown on single-phase Jazz units.

15. Spare Parts & Accessories

Genuine spare parts and accessories are available through the Oxygon service network. When ordering, always quote the model code (OX-LS13 / OX-LS16 / OX-LS20 / OX-LS24) and the serial number from the nameplate.

- Wired LCD controller
- Condensate drainage nozzle & hose
- Water-connection unions (Ø50)
- Anti-vibration mounting feet
- Titanium heat exchanger (service part)

Note: Refrigerant-circuit components must be replaced only by certified technicians. Do not substitute non-original parts.

16. Warranty & Contact

Warranty

The Oxygon Jazz heat pump is warranted against manufacturing defects under the terms of the accompanying warranty card, from the date of purchase. The warranty does not cover damage from incorrect installation, insufficient water flow, freezing, chemical imbalance, unauthorised repair or use outside the specified operating range. Installation and servicing must be carried out by qualified personnel.

For service, keep your proof of purchase and quote the model code and serial number.

Contact Information

Company	OXYGON — Karavasilis Stergios & Sia EE
Headquarters	Karamaouna St., N. Rysio, 57001 Thessaloniki, Greece
Phone	+30 2310 810 000
Service	+30 2312 208 240
Mobile	+30 6945 157 589
email	info@oxygon.gr
website	www.oxygon.gr
Romania subsidiary	OXYGON SRL — Str. Constelatiei 1 Bis, Voluntari, Bucharest, Romania — +40 753 380 848 — info@oxygon.ro

ISO Certifications

ISO 9001:2015 Quality Management *EUROCERT*	**ISO 14001:2015** Environmental Management *BQV*	**ISO 45001:2018** Health & Safety *BQV*
ISO 22301:2019 Business Continuity *EUROCERT*	**ISO 46001:2019** Water Efficiency *BQV*	

Recycling of materials must be carried out in accordance with applicable regulations.