

REXENER



USER MANUAL

REXENER PR200 WATER HEATER

For heating hot tubs and swimming pools



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- Thank you for purchasing a Rexener water heater. It is a powerful, easy-to-use and economical heater for heating the water in a hot tub or swimming pool.
- The Rexener water heater can be installed as the heating system of either a new or existing hot tub or swimming pool. It can also be installed in systems equipped with a circulation pump and filter.
- We recommend that you read the operating instructions carefully. Once you have read the user manual, ensure that it is stored in such a way that it is available to everyone using the heater.
- Study the safety instructions with particular care before using the heater.
- The conditions in northern countries have been taken into account in the design of the Rexener heater.
- If you take the heater abroad, check the mains voltage in that new country.
- This product comes with a three-year limited warranty.
- Due to active product development, the manufacturer reserves the right to make changes to the technical specifications and functional descriptions in this manual without separate notice.

GREETINGS FROM THE IMPORTER'S REPRESENTATIVE

Thank you for purchasing a high-quality Rexener water heater. It was developed in Finland over many years in close cooperation with the manufacturer Hephzibah Co., Ltd.

During the development, a variety of technical solutions were sought to ensure that the water heater is easy to use and reliable in northern climates as well.

The Rexener water heater utilises a number of circuits to monitor and ensure flawless operation. The highly-efficient and silent diesel burner ensures the safety of the heater, while the digital control panel guarantees ease of use.

The Rexener water heater was designed to be easy to install as the heater of a new hot tub or swimming pool, or to replace the heating solutions of either traditional wood-heated hot tubs or swimming pools.

Biodiesel is the recommended fuel for the Rexener water heater, but the device also works flawlessly with diesel or red diesel. The heater's burner and control system require very little power.

Rex Nordic's swift and proficient maintenance service ensures the reliability of the Rexener water heater.

We hope you enjoy many blissful moments in the warmth provided by the Rexener water heater

Our warmest greetings

Team Rex Nordic



OPERATING PRINCIPLE OF THE REXENER WATER HEATER

- The Rexener water heater's diesel burner is well-protected under heater's metal housing. Varied weather conditions were considered in the design of the diesel burner, controlling electronics and fuel tank.
- The diesel burner fan feeds air into the combustion chamber into which fuel is injected. The fuel is ignited with an ignition device controlled by electronics.
- The heat energy from the diesel is used to warm the water running in the pipes inside the heater. The efficient and finely-tuned combustion arrangement can take nearly full advantage of the energy contained by the diesel. It is mostly harmless carbon dioxide that is discharged from the exhaust pipe.
- The heat energy from the diesel is used to warm the water running in the pipes inside the heater. The efficient and finely-tuned combustion arrangement can take nearly full advantage of the energy contained by the diesel. The Rexener water heater produces practically no carbon monoxide. Only harmless carbon dioxide is discharged from the exhaust pipe.
- Since all of the energy in the diesel can be converted into heating power, the Rexener water heater boasts excellent efficiency, which means low fuel consumption.
- The long exhaust pipe assembly supplied with the heater ensures silence and safety, and the hot diesel burner flame is effectively protected inside the device.
- Due to its high power level, the Rexener water heater requires a circulation pump to ensure that water circulates through the device at a sufficient rate.

Exact water temperature control

You can set the desired water temperature for the Rexener heater between 0 and 45 degrees (°C). The heater will maintain the set temperature automatically. The thermostat can be adjusted so that the burner starts after the temperature has dropped by 2 or 4 degrees.

Powerful diesel burner

The powerful fan and high-pressure diesel injection ensure the reliability of the Rexener water heater's diesel burner in all conditions.

Comprehensive safety systems

The electronically-controlled safety functions of the Rexener water heater ensure the safe usability of the heater in all conditions. The safety functions include two systems that prevent overheating, a flame detector, automatic shutdown and water level monitoring.

Overheat prevention systems

The diesel burner is switched off if the temperature of the water coming to the heater rises to 50°C and is switched off again if the temperature rises to 75°C (2nd safety device)

Water level monitoring system

If the heater contains insufficient water or there are air pockets in the water system, the device will not start. If the water level drops too low, the burner is switched off.

Flame detector and automatic shutdown system

Irregular operation of the diesel burner (poor combustion) activates the flame detector, which deactivates the diesel burner and fuel pump. This ensures the safety of the Rexener water heater in all situations.

Diagnostics function

The diagnostics function connected to the Rexener water heater's control system checks all the heater functions before activation.



SAFETY INSTRUCTIONS

The purpose of these safety instructions is to ensure the safe use of the Rexener water heater. Adherence to these instructions minimises the risk of injury or death and damage to the heating device as well as other items or premises.

Please read the safety instructions with care. "The instructions feature three concepts: "Danger to life," "Warning" and "Note".



DANGER TO LIFE: This marking indicates an immediate risk of death or probable serious injury.



WARNING: This marking indicates the risk of serious injury and/or death.



NOTE: This marking indicates the risk of minor injury or structural damage.

DANGER TO LIFE

- * Never use petrol or similar flammable fuel to power the heater. This may cause the burner, which was designed for diesel, to explode or start a fire due to the explosive combustion.
- * Never use any containers carrying flammable liquids or aerosols near the heater or leave them in its immediate vicinity. They may cause a fire and/or explosion.

WARNING

- * Only use 230 volt 50 Hz mains electricity. Incorrect voltage may cause a fire or electrical shock.
- * The power cord of the device may only be connected to a grounded socket.
- * Do not use this heater for any purpose other than heating a hot tub or swimming pool.
- * Do not handle the heater's power cord, electrical devices or control panel with wet hands. The moisture may cause a short circuit, failure, electrical shock and even fire.
- * Do not clean the interior of the heater with a wet cloth. The moisture may cause a short circuit, failure, electrical shock and even fire.
- * Do not place your hands or any objects inside a running heater. The current in the electrical cables between the control panel and heater burner may cause an electrical shock.
- * Ensure that the heater remains upright during operation. Do not bang or push the heater or cause it to fall over. Damage to the heater may cause an electrical shock or fire.
- * Hot condensation water and steam may cause burns.
- * Do not make any structural changes to the heater or attempt to repair the burner, water heating circuit or control panel.
- * Never place electrical equipment or heavy objects on the heater.
- * Do not cover the heater with any obstructions such as clothing, fabric or plastic bags. This may cause a fire.
- * Do not wash the heater with a water hose or pressure washer. Water entering the heater's protective housing may cause a short circuit, electrical shock and/or fire.
- * Do not use petrol, thinner or other technical solvents to clean the heater. They may cause a short circuit, electrical and/or fire.



- * Install the heater on a non-flammable surface.
- * Protect the heater from water spatter.
- * Always ensure the condition of the power cord. Do not bend the cord, and ensure that it is not crushed under or between anything. A damaged power cord or plug may cause a short circuit, electrical shock and even fire.
- * If the Rexener water heater's power cord is damaged, it must be immediately replaced with a new one at a maintenance shop authorised by the manufacturer or importer, or in some other authorised provider of electrical repair services.
- * Do not extend the power cord by connecting additional lengths of cord to it or its connector plugs. Poorly-made connections may cause a short circuit, electrical shock and/or fire.
- * If the plug gets dirty, clean it carefully before connecting it to the socket. A dirty plug may cause a failure and, as the dirt is heated, smoke, a short circuit and even fire may result.
- * Before cleaning and maintaining the device, disconnect the power plug from the socket and allow the device to cool down sufficiently. Neglecting these instructions may lead to burns or an electrical shock.
- * During thunder, deactivate the device and disconnect the power plug from the electrical grid.

CONTENT OF THE REXENER WATER HEATER

- Rexener Water Heater
- Fuel tank
- Rexener water heater's water circuit connections for water hose (1.5 mm external thread, 2 pcs).
- Plugs for the Rexener water heater's water circuit (2 pcs).
- Sealing tape for the threads of the water circuit connection (1 roll).
- Water heater drainage valve.
- Chimney pipe (1 pcs) and cap (1 pcs)
- Instruction manual
- Key for heater door

INSTALLING THE REXENER WATER HEATER

- The Rexener water heater must be installed in a visible location that can be easily monitored.
- Do not install the heater in a location where it is subjected to significant heat or continuous moisture.
- Ensure sufficient room around the heater for maintenance and operation.
- The manufacturer's recommendation is 60 cm from fixed structures.
- Clear the immediate vicinity of the heater of flammable materials or structures, wood piles, wooden walls or roofs, piles of leaves or twigs, etc.
- In operating conditions, the Rexener water heater weighs approx. 43 kg. Prepare a sufficiently solid and strong foundation for the heater with concrete tiles, for example. Remember to counteract the effects of frost heave. Remove loose soil from under the tiles and replace it with gravel up to a depth of about 20cm.
- Do not position the heater on an unstable, inclined or wobbly foundation. The device tilting and / or falling over may cause malfunctions and lead to a fire.
- Install the heater on a non-flammable surface or otherwise ensure that the surface is fireproof.
- Install the heater on a non-flammable surface.
- The heater's legs are adjustable. Use them to ensure that the heater is level.



- Before cleaning and maintaining the device, disconnect the power plug from the socket and allow the device to cool down sufficiently. Neglecting these instructions may lead to burns or an electrical shock.
- Prepare a separate and safe platform for the fuel tank. Ensure that fuel can be added easily.
- The fuel tank can be installed either at a higher or equal level with the heater. The distance between the fuel tank and heater should be no more than 5-7 m.
- If possible, secure a separate fixed electrical connection and plug for the heater. In the event that you need to use an extension cord, it should be continuous from the socket to the heater.
- Use a residual-current device in the electrical connection or extension cord.
- Obtain sufficiently long hoses, at least 38-50 mm in diameter and with a minimum heat resistance of 50°C, as well as suitable hose clamps (6 pcs) for heater installation. You can also order them for delivery with the heater.
- Measure the diameter of the water connections of the tub or pool to be heated. Obtain the requisite reducers for installing the water hoses.
- Ensure the discharge of condensate and steam so that they do not cause injuries or damage the heater's surroundings. For this purpose, there is a condensate drain valve in the bottom of the heater, to which it is possible to attach a drain hose. Direct the hose from under the heater to either of its sides.

ADVICE FOR INSTALLING THE DEVICE

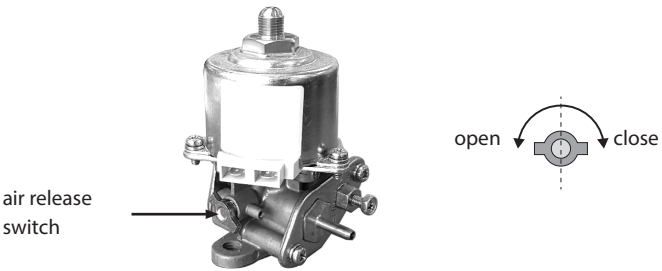
- The manufacturer and importer strongly recommend ordering the installation service for the heater.
- Place the Rexener water heater in the position reserved for it. Ensure that the heater is in the appropriate and stable position horizontally and vertically by using the adjustable legs.
- Screw in the water lines suitable for the heater's water connections. Wind sealing tape around the threaded section of the pipe connections in the direction of the thread.
- Plug the water connections on the other side of the heater. Wind sealing tape around the threaded section of the plugs in the direction of the thread.
- Install the heating element drain tap included in the delivery in the lower section of the water heating element. Use sealing tape.
- Ensure the suitability of the hose connections of the water basin. Install any reducers that may be needed.
- Position the circulation pump in a suitable location between the water basin to be heated and the Rexener heater. Install the circulation pump in connection to the lower water hose.
- Shorten the water hoses to the appropriate length and install them. Remember to install the hose clamps but do not tighten them.
- Dimension the upper water lower and install it.
- Screw the water hose clamps closed.
- Thread the fuel supply hose through the designated hole at the bottom of the housing.
- Draw the fuel lines from the fuel tank to the heater.
- Install the fuel tank on the base you have reserved for it.
- Fill the fuel tank. Use biodiesel, red diesel or regular diesel.
- Connect the Rexener water heater's power plug to the power socket.
- You can now begin to run water into the tub or pool to be heated.
- Install the chimney and the chimney cover in place. Secure the chimney to the heater with the indicated screws.

BLEEDING THE FUEL SUPPLY SYSTEM

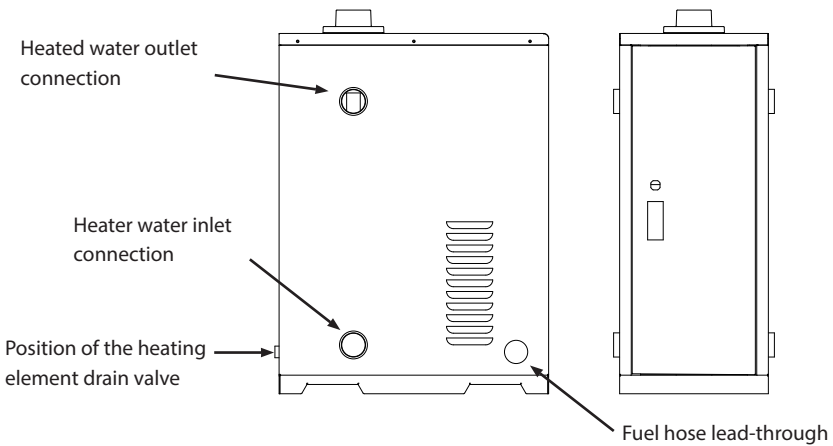
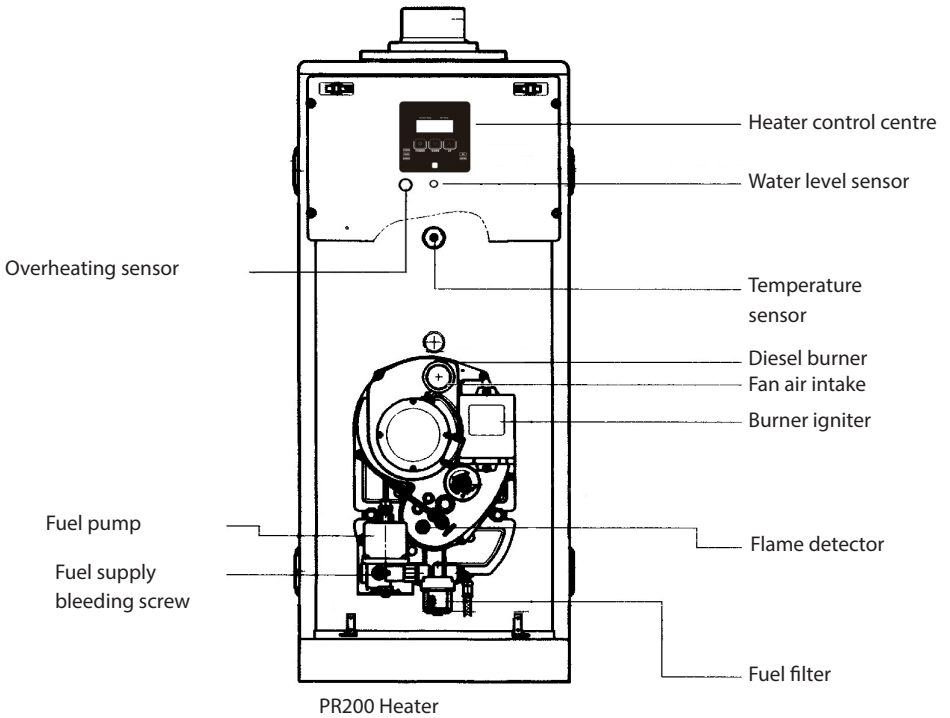


The fuel supply system must be bled in conjunction with the initial start-up or when the fuel runs out, when necessary. First try to turn on the heater 2-3 times. If the heater does not start, bleed the fuel supply system according to the instructions below.

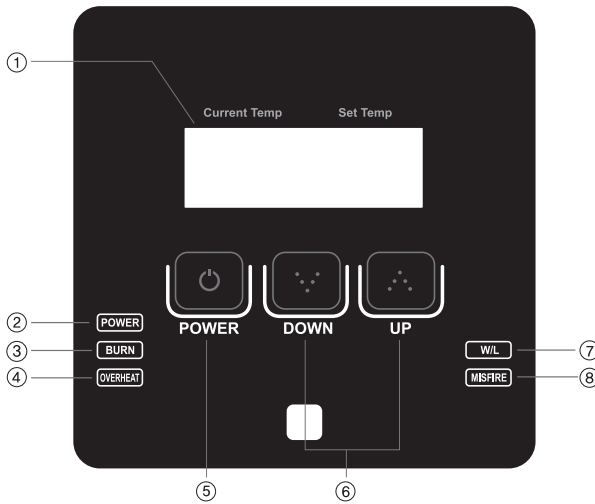
- Open the wing screw at the bottom of the fuel pump by 2–3 rotations.
- Connect the power cord to the power socket and press the Reset switch on the plug to connect power to the heater.
- Press the heater's activation switch (Power).
- The fuel pump is activated, discharging fuel and air bubbles from the bleed opening. Close the bleeding screw.
- If the fuel hose contains a lot of air, you may need to repeat the above steps two or three times.
- If the burner shuts down due to a lack of fuel or there is another cause to suspect that air has entered the fuel supply circuit, you must repeat the bleeding in accordance with these instructions.
- Should you wish to avoid bleeding in the future, do not let the fuel tank drain fully at any point.



HEATER STRUCTURE



CONTROL PANEL



1. LIQUID CRYSTAL DISPLAY

The display can be used to check temperature adjustments, error codes, etc.

- The temperature on the left side of the display indicates the temperature of the water to be heated
- The temperature on the right side of the display indicates the target temperature set for the water

2. ACTIVITY INDICATOR LIGHT

This light is on when the water heater is running.

3. DIESEL BURNER INDICATOR LIGHT

This light is on when the diesel burner is in operation.

4. OVERHEAT WARNING LIGHT

This warning light is lit when the temperature of the water being heated exceeds 50°C or the overheating sensor in the heater detects a temperature higher than 75°C. The burner is switched off at the same time.

5. POWER BUTTON

Switches the device power on and off.

6. TEMPERATURE CONTROL BUTTONS

These buttons are used to set the desired water temperature. They can also be used to adjust the thermostat's accuracy to 2 or 4 degrees.

7. LOW WATER WARNING LIGHT (W/L = Water Low)

The warning light is lit when the water level of the heating system drops too low or if there are air bubbles in the device.

8. BURNER MALFUNCTION WARNING LIGHT (MISFIRE)

This indicator light is lit if the burner has failed or shut down during operation



INSTALLING INSTRUCTIONS

1. Check the fuel and water levels.
2. Connect the power cord to the power socket and press the Reset switch on the plug to connect power to the heater.
3. Press the "Power" button. Once the heater has been activated, the "Burn" indicator (3) is lit.
4. Use the temperature control buttons (6) to set the desired temperature.
5. The diesel burner is deactivated once the desired temperature is reached. It is restarted once the water temperature drops 2 or 4 degrees below the set target temperature.
 - Turn off the heater using the POWER button.
 - Hold the DOWN and UP buttons simultaneously for 5 seconds.
 - Di F2 or F4 will flash on the screen.
 - Choose the amount of degrees the water temperature is allowed to drop before the heater restarts with the DOWN and UP buttons.
 - Finally, press the POWER button to lock your selection.
6. Deactivate the water heater by pressing the "Power" button again.

WARNING! The heater must always be prevented from water splashing into the heater. Please take this into account during installation and use!

NOTE! The heater operating voltage is 230 V~, 50 Hz. It is the responsibility of the user to connect the device to a power grid that supplies the appropriate voltage.

NOTE! Do not turn off the heater by pulling the power plug out of the socket.

NOTE! Always deactivate the heater before refuelling it.

RECOMMENDATION : Use only high-grade biodiesel, diesel or red diesel in the heater. Always ensure the cleanliness of the containers used for refuelling the heater. Container impurities and the use of fuels other than diesel may cause malfunctions or excessive soot formation.

RECOMMENDATION : When handling fuel, observe all relevant safety instructions.



CIRCULATION PUMP

If a circulation pump has been acquired for the Rexener water heater, it is always on when the heater burner is active. When the heater is switched off, the circulation pump shuts down. The water heater requires a circulation pump to function.

Recommended circulation pump properties

Operating voltage	230 V~, 50 Hz
Flow speed	6100 L/h 6 m.c.H2O
Highest flow rate	9,6 m.c.H2O
Lowest flow rate	2 m.c.H2O

OVERHEAT PREVENTION SYSTEM

The overheat prevention system has two phases. The overheat warning light is lit when the temperature of the water being heated rises to 50 °C or the overheating sensor in the heater detects a temperature higher than 75°C. The heater burner is switched off at the same time.

Once the water temperature has exceeded 50°C, the overheat prevention system deactivates the burner and turns on the warning light. As the temperature drops, the system will reset automatically, enabling heater operation.

If the heater water exceeds 75°C, the overheat prevention system deactivates the burner and activates the warning light. In this case, it must be determined whether the overheating was caused by a failure in the heater or water circulation (e.g. pipe blockage).

DAILY INSPECTION POINTS

1. Check fuel level and the fuel hose connections to detect leaks. Repair any faults immediately.
2. Check the connections of the exhaust piping and their tightness. Remove soot and other dirt with a soft cloth.
3. Check the water circuit hoses for leaks. Repair any faults immediately.
4. When you start the heater, monitor burner operation and smoke formation. If a noticeable amount of black smoke is discharged from the exhaust pipe, the diesel burner is not operating correctly. Please contact the importer to determine the problem.

CLEANING AND MAINTENANCE

Maintenance should be done by guaranteed person regularly.

Cleaning the rexener water heater

Regularly wipe the surface and exhaust pipe of the water heater with a dry and clean cloth. Mild cleaning



agents may also be used where necessary.

DO NOT WASH the heater with a water jet or pressure washer. Water entering the heater internals may cause malfunctions or electrical shocks.

Cleaning the flame detector

- If the flame detector's sensor is covered in soot or other dirt, the heater power is reduced and its operation can be prevented entirely. In order to prevent operating failures, the flame detector must be checked regularly and cleaned as necessary
- Detach the flame detector from the burner by pulling it outwards. The flame detector is installed in the lower section of the burner.
- Clean the flame detector sensor with a soft and clean cloth.
- Reinstall the flame detector carefully. The protrusion (A) in the body of the detector must settle firmly in place.
- If the flame detector is extremely sooty, the heater may also require sweeping.

Sweeping

The Rexener PR200 heater requires occasional sweeping. Sweeping may only be performed by an importer-authorized provider of maintenance services.

Sweeping is required if the heater produces smoke during operation.

ANNUAL MAINTENANCE

We recommend maintaining the water heater annually. Annual maintenance includes the replacement of the diesel filter, funnel and seal, as well as general cleaning and inspection.

Replacement parts required for annual maintenance are included in a separately sold maintenance package. Ensure you use the correct maintenance set.

Annual maintenance is also available as a paid, comprehensive service.

Annual maintenance is required to retain the heater's three-year warranty.



OPERATING FAILURES



If the safety systems of the device detect a fault, the message “Err” appears on the display and one of the warning lights is lit at the same time.

The heater burner has shut down “misfire”

The burner is probably not receiving fuel. In addition to this, the poor combustion may have caused soot or deposits to accumulate on the flame detector or nozzle. Fuel may be of poor quality..

1. Check the fuel quality and level, and refuel as necessary.
2. Try to start the heater.
3. Check the fuel filter and funnel, and replace them as necessary.
4. If the fuel tank contains impurities that block the filter, drain the tank and flush it with clean fuel until the impurities are discharged. If necessary, contact the importer to have the tank cleaned.
5. If the fuel tank contains water, drain it and fill it with suitable fuel. If water does not drain, buy a new tank.
6. Check the condition of the flame detector. Inspection and cleaning instructions. Start the heater.
7. If the heater does not start, contact the importer.

Advice and instructions for problem situations

- If the heater safety systems deactivate the heaters, determine the cause(s) of the shutdown and immediately remedy any faults detected and reported by the safety system and diagnostics.
- Try turning the device off and on again.
- If necessary, contact the importer.
- Once the fault diagnostics display is deactivated, the warning sounds will also stop.

Fault codes

- ER1 -> Check the flame detector for soot or damage.
- ER2 -> Fault caused by the water temperature sensor.
- ER3 -> Insufficient water level or air pockets in the water tank.

Heater repairs

- In the event that the basic maintenance parts of the Rexener water heater require replacing, please contact the importer.
- Perform periodic maintenance on the heater at least once a year. Periodic maintenance may be performed by an importer-authorized maintenance service, or you may perform the maintenance yourself with a service kit that is available to purchase from the importer.
- Heater repairs must be conducted by the importer.

Incorrect repairs may cause even more severe damage to the heater.



DIAGNOSING AND REPAIRING



If the heater is not functioning, check the following:

Is the power connected?

Is there sufficient fuel?

FAULT DESCRIPTION	POSSIBLE CAUSE	REPAIR MEASURE	
DEVICE WILL NOT START	The device does not receive power, none of the signal lights are on.	The plug is not connected to the socket.	Connect the power cord plug to the socket.
		The power grid does not supply current.	Check the operation of the power grid and the on-site fuses.
			Replace the fuse.
	The "Power" signal light is on but the heater is not running	The water temperature is higher than the set temperature.	Increase the set temperature or wait for the water to cool down.
	The "MISFIRE" or "ERR, ER1, ER2 or ER3" light is on	Fuel has run out.	Refuel the heater and, if necessary, bleed the fuel supply system
		The fuel has hardened.	Change to fuel that is more resistant to low temperatures.
		The fuel filter is blocked.	Replace the fuel filter.
		There is air in the fuel pump.	Bleed the fuel supply system (see instructions on page10.)
	The "OVERHEAT" or "ERR" warning light is on	The overheat prevention function has been activated.	Allow the water to cool. Clean any water circuit blockages and reset the overheat sensor (instructions on page14.)
		The temperature sensor has failed.The circulation pump has failed.	Contact the importer to repair the sensor or pump.
		The burner has failed.	Contact the importer.
	The burner's fan is activated but the burner is not ignited.	The burner's igniter has failed.	Contact the importer to repair the igniter. Check the electrical wiring and connections.



FAULT DESCRIPTION		POSSIBLE CAUSE	REPAIR MEASURE
NOISY BURNER		The fuel filter is clogged.	Clean or replace the filter. Instructions on page15.
	The fuel pump is noisy during operation.	There is air in the fuel system.	Bleed the fuel supply system.
		The burner has failed.	Contact the importer.
THE HEATER SHUTS DOWN SHORTLY AFTER ACTIVATION.		Incorrect fuel type	Drain the fuel tank and fill it with high-grade diesel.
	"ERR" / "Misfire"	The fuel contains water or other impurities.	
	"ERR" / "Misfire"	The flame detector is in the incorrect position.	Install the flame detector precisely in the correct position.
	"ERR" / "Misfire"	The flame detector is dirty.	Clean the flame detector.
	"ERR" / "Misfire"	There is air in the fuel supply system.	Bleed the fuel supply system. Instructions on page10.
THE BURNER PRODUCES SMOKE AND ACCUMULATES SOOT		Incorrect fuel type	Drain the fuel tank and fill it with high-grade diesel.
		The fuel contains water or other impurities.	
	The burner is not receiving enough air.	The intake channel is blocked or damaged.	Check the intake channel. Contact an authorised maintenance service.
	The exhaust pipe is blocked.	The exhaust gases may be flowing in the wrong direction.	Clean the exhaust pipe carefully or replace it.
		The burner has failed	Contact the importer to repair the burner.
		The combustion chamber is sooty.	Contact the importer to have the heater swept.
THE WATER FAILS TO HEAT UP OR CIRCULATE.	The heater functions but the water does not heat up.	The set temperature is too low.	Adjust the set temperature to the desired level.
		There is air in the water pipes.	Ensure a sufficient water level and the operation of the circulation pump.
		The circulation pump has failed.	
	The circulation pump is noisy.	There is air in the water pipes.	Ensure a sufficient water level and the operation of the circulation pump.
		The circulation pump has failed.	Contact an authorised maintenance service to have the circulation pump repaired.



PRODUCT SPECIFICATIONS

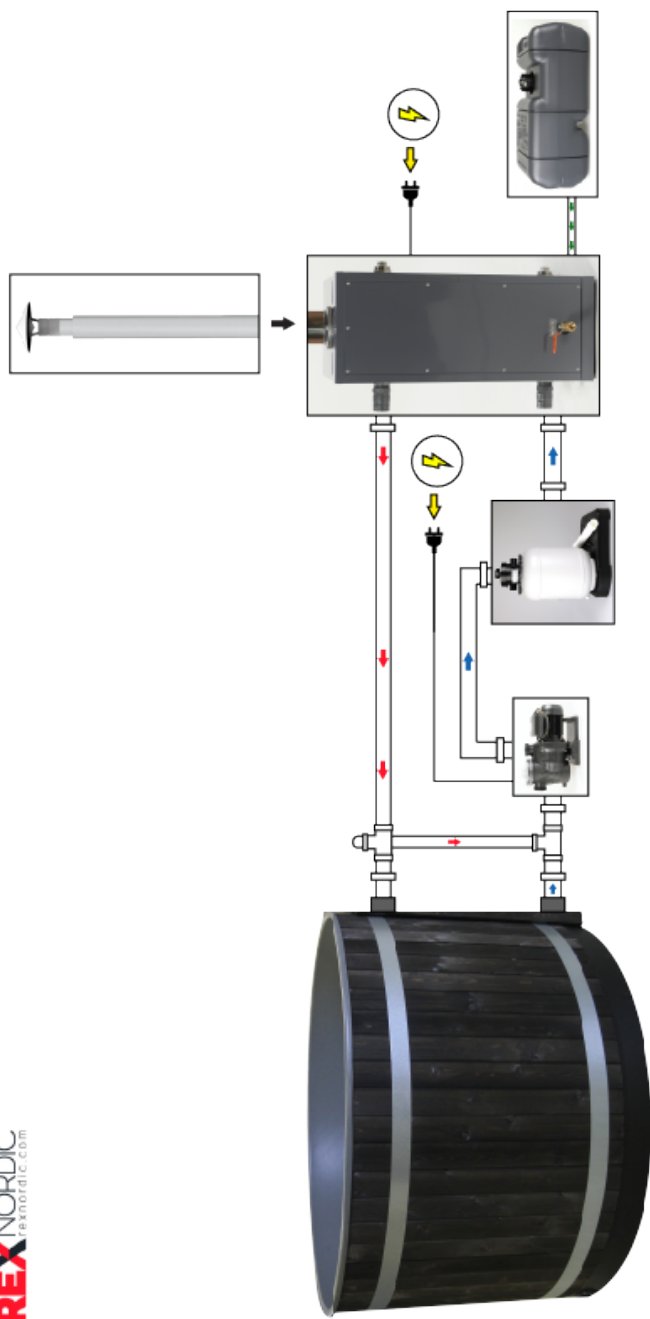
Product name	REXENER PR200
Model name	PR-200
Heating output	18.5 kW
Heating efficiency	96 %
Fuel consumption	1.94 L/h
Fuel	diesel, biodiesel, red diesel
Burner type	Diesel spray
Usage	Heating pools and hot tubs
Water tank capacity	17.1 Litre
Maximum operating pressure	1.7 bar (167 kPa)
Power	230 V~, 50 Hz
Rated Power Consumption	80 W
IP Grade	IP 33
Dimension (W x D x H)	320 x 580 x 839 mm
Weight	43 kg
Thread size of water out	Inner diameter (45 mm), Outer diameter (52 mm), 40 A
Thread size of water in	Inner diameter (45 mm), Outer diameter (52 mm), 40 A
Exhaust pipe diameter(Ø)	Ø 75 mm
Safety device	Flame detecting, Low water level detecting, Water temperature, Over heating protection
Heating efficiency rated is measured at supply temperature of 40 °C and return temperature of 25 °C.	

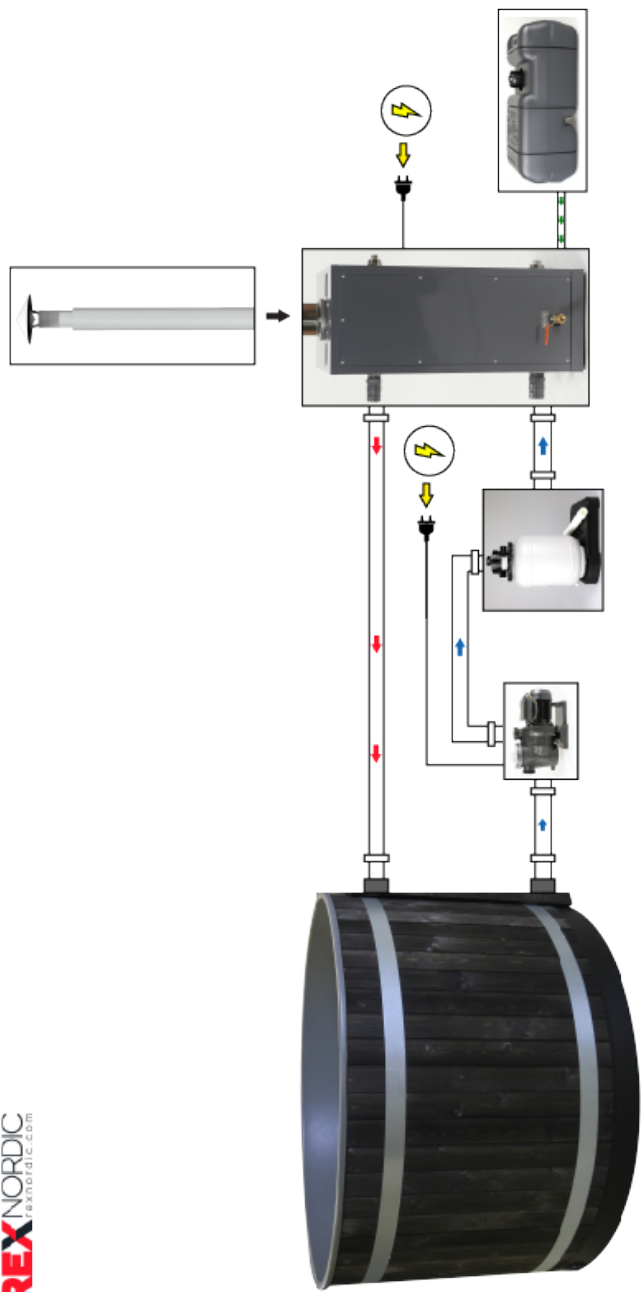


TECHNICAL SPECIFICATIONS

EN 303-1 7.2	result	
the required draught in mbar	0.04 mbar	
gas side resistance and combustion chamber pressure for heaters operating with positive pressure in mbar	0.14 mbar	
exit flue gas temperature in °C	140 °C	
exit flue gas mass flow in kg/s	0.0088 kg/s	
emissions of nitrogen oxides NOx in mg/kWh	119 mg/kWh	
exit flue connection diameter in mm	75 mm	
water resistance in mbar	20 K - 60 mbar 10 K - 80 mbar	
maximum heat input in kW	19.6 kW	
nominal heat output in kW	18.5 kW	
30 % nominal heat output in kW	5.6 kW	
useful efficiency at rated heat output and high temperature regime in %	96 %	
useful efficiency at 30 % of rated heat output and high temperature regime in %	98 %	
standby heat loss in kW	0.089 kW	
auxiliary electricity consumption	Initial burn	75 W
	While operating	40 W
	in standby mode	6 W
gas volume of the heater	0.023	
range of temperature control in °C	(0 ~ 45) °C	
fuel type	Diesel	
combustion chamber type	Forced Exhaust	
the combustion chamber dimensions and the combustion chamber volume	0.015	
direct flame operation or flame reversal	Direct flame	
heater type: ON/OFF, modulating, multi stage	ON/OFF	







REXENER PR200 WATER HEATER WARRANTY

Warranty provided by
Rex Nordic Oy (2646942-1)
Mustanlähdeentie 24A,
07230 Askola, FINLAND

1. General description

Rex Nordic provides a warranty to consumers who have purchased a product imported by an importer either directly or from a reseller. The consumer's rights during the warranty period are determined based on the regulations valid in the country where the warranty or warranty service claim has been presented. This warranty is a voluntary manufacturer's warranty providing consumers with additional rights in addition to their rights under national consumer legislation and shall, therefore, not impact these legal rights. The warranty shall remain valid provided that the device is operated and serviced in accordance with the instruction manual.

Time-restricted or temporary offers are country-specific, and the related warranty claims shall not be presented in any country other than the country or countries in which the offer is valid.

2. Warranty coverage

The importer shall provide the products it has imported with a warranty for material and manufacturing defects in accordance with these warranty terms. The provider of the warranty shall be responsible for ensuring that the usability and quality of the device remain normal throughout the warranty period. Otherwise, the device has a defect.

A defect refers to an expertly assessed deviation from the normal quality of the importer's products or the related guidance values provided by the manufacturer, taking into account the age of the device and the time it has been in use. For example, manufacturing and structural defects and other defects and deficiencies impairing usability of the device during the warranty period shall be considered defects covered by the warranty.

However, the warranty provider shall not be responsible for the defect if it puts forward a reasonable case that the deviation in the normal quality or usability of the device is due to a reason related to the purchaser. The reason may be, for example, handling the device contrary to the maintenance instructions or other wrongful use of the device or neglecting the maintenance to be carried out according to a maintenance programme and prepared by the manufacturer or a deficient implementation thereof. The warranty limitations have been described in more detail in Section 6. The warranty only covers Rex Nordic Oy products imported by Rex Nordic Oy and sold by an official dealer thereof.

Only dealers authorised by Rex Nordic Oy are allowed to market and advertise the 3-year warranty.

3. Start and duration of the warranty

The warranty period begins on the day of purchase of the product. A receipt or similar certificate of the purchase of the product must be retained and presented in warranty-related matters to confirm the



warranty.

The importer grants a 12-month warranty for products starting from the date of purchase of the device. In case of specifically mentioned and marketed products, the warranty may be extended at rexnordic.com by activating a 2-year additional warranty within 4 weeks of the date of purchase.

Following the registration of the additional warranty, the maximum warranty period of the product shall be 3 years in total. More information about the warranty periods of different products is available at rexnordic.com.

4. Work included in the warranty scope

If the device is sent to warranty servicing within the extended warranty period, the receipt and warranty certificate (or a reliable clarification of the date of purchase) for the extended warranty must be sent with it. Based on the warranty, repair of the defect covered by the warranty shall be performed free of charge during the warranty period during normal working hours as indicated by Rex Nordic Oy.

Possible costs connected to transporting the device to warranty servicing or warranty repair are at the customer's expense. Keep the original packaging to facilitate any transport. The costs connected to returning the product to the customer after warranty servicing or warranty repair, if the device was approved for warranty servicing/repair are at the expense of the dealer/importer. If a defect in or repair of the product is not covered by the warranty, the customer must pay for all service costs, including any postal fees.

If the product or part thereof is replaced as part of the rights under this warranty term, the replacing part shall become the customer's property and the replaced old part shall become the importer's property.

5. Warranty of a repaired product

The warranty of a device repaired or replaced under the warranty shall continue until the end of the original warranty period.

Warranty terms and conditions

6. Warranty limitations

The warranty shall not cover:

- a. Repair of a defect caused by natural wear and tear or inappropriate use; deficient or faulty service performed by a party other than the importer or conditions of use deviating from the dimensioning basis; or selection by the purchaser of a device unfit or wrongly dimensioned for use or for a certain application. Instructions on annual maintenance are provided in the instruction manual delivered with the product and available online at rexnordic.com
- b. Use of the product in facilities incompatible with the instruction manual and/or problems caused by conditions. Always check the required technical specifications in the product manual
- c. Insufficient ventilation (products requiring sufficient ventilation to function)
- d. Compensation for direct or indirect damage caused by the defective device
- e. Repair of a defect if a third party has performed modifications or repairs to the device
- f. Repair or replacement of parts subject to wear with no specifically granted warranties

If it emerges during a warranty repair that the defect or possible defect has been caused by one of the aforementioned factors, the importer shall have the right to invoice the customer for any work and material costs induced by the work. The importer shall report such a situation once the matter has



emerged, in which case the customer shall have the option of not repairing the defect not covered by the warranty terms. In the situation described above, the product's return charges shall fall under the customer's responsibility. The product can also be recovered from the Importer's maintenance service where the product has been sent at no extra charge.

A reasonable time in which to report a defect shall be no later than 60 days following the detection of the defect or the day when it should have been detected. However, in the event of a defect, the customer must always act in a way that ensures that the damage will not be heightened due to the customer's actions or negligence. When reporting a defect, the purchaser must present a warranty certificate or another reliable clarification on where and when the device was purchased.

When estimating a reasonable repair time, the degree of defect shall be taken into account in consideration of the safety and reliability of the device, the difficulty of locating the defect, the scope of repair and the availability of spare parts.

With regard to software, the manufacturer's licence and terms of use shall be observed.

7. Presenting a warranty claim

You can submit a warranty claim at rexnordic.com or by phone or e-mail to Rex Nordic's customer service during service hours. The up-to-date customer service contact information is available at rexnordic.com. Alternatively, if you purchased the product from an official Rex Nordic Oy reseller, you can contact the reseller.

8. Warranty service and options

The most suitable warranty service option can be determined through contact with the importer. With the below options, Rex Nordic shall determine one or more options to be used:

- a. An authorised servicing staff member arrives on site to perform the warranty service measures
- b. The customer sends the product to warranty service by post. Rex Nordic shall pay the postal fees both ways if the warranty terms are met
- c. The customer delivers the product to an authorised reseller, and the reseller delivers the product to Rex Nordic.
- d. The customer delivers the product directly to a service location indicated by Rex Nordic. The customer shall be responsible for the costs incurred by them.
- e. Rex Nordic shall deliver an easily replaceable part by post for the customer to replace by themselves. We shall not bear any direct or indirect responsibility for any labour-related costs. If you need guidance or more information, please contact the Rex Nordic maintenance department. The up-to-date contact information is available at rexnordic.com.

9. Disclaimer

This warranty shall be interpreted according to the laws of the country in which the product imported by Rex Nordic Oy has been sold. To the extent allowed by local legislation, Rex Nordic shall not bear responsibility for any operational defects, harm, loss or other indirect damage to the product caused by misuse of the product, inability to use it or breach of the direct or indirect warranty.



MAINTENANCE LOGBOOK

Heater model:

Serial number:

Date:

Maintenance done by:

Maintenance done:

Date:

Maintenance done by:

Maintenance done:

Date:

Maintenance done by:

Maintenance done:

Date:

Maintenance done by:

Maintenance done:



Date:

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REXENER

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