

# REXENER

## WATER BOILER

For heating hot tubs and swimming pools

### User manual

### MODEL PR-200



- ▶ 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.
- ▶ The product has a one-year 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.

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A thank you from the managing director

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 heater is easy to use and reliable in northern climates. "Press a button and enjoy" could be described as the leading theme of the product development process.

The Rexener water heater utilises a number of circuits to monitor and ensure flawless operation. The highly-efficient and silent oil 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 fuel oil. 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.

I hope you will enjoy many blissful moments in the warmth provided by the Rexener heater!

Olli Kuusela  
Managing Director  
Rex Nordic Oy

# **OPERATING PRINCIPLE OF THE REXENER WATER HEATER**

Operating principle of the Rexener water heater

The Rexener water heater's oil burner is well-protected under heater's metal housing. Northern weather conditions were considered in the design of the oil burner, controlling electronics and fuel tank.

The oil 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 oil 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 fuel oil. 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 oil 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 oil 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.

#### 1. Accurate temperature adjustment

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.

#### 2. Powerful oil burner

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

#### 3. 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.

#### 4. Overheat prevention systems

The oil 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)

#### 5. 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.

#### 6. Flame detector and automatic shutdown system

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

#### 7. 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 fuel oil and 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.

## **SAFETY INSTRUCTIONS**

### **Warning – warnings related to the electrical connection**

- The power cord of the device may only be connected to a grounded socket.
- Do not handle the power cord with wet hands. This may cause a short circuit, failure, electrical shock and even fire.

# ADVICE FOR INSTALLING THE DEVICE

## Preparing the installation location and heater installation

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- 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. 38 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 20 cm.

- 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.
- Maintain the distance over 2m between pool and boiler or secure that no water can be splashed on the boiler from the pool.
- 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 150 cm.
- 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 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



## Content of the Rexener water heater delivery

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- Rexener water heater, including installed fuel supply hose and power connections to the circulation pump control and circulation pump heater control.
- Fuel tank with a fuel level gauge in the cap and a quick coupling for the tank's outgoing fuel hose.
- Connections of the Rexener water heater's connections for a 50 mm water hose (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 heating circuit draining valve.
- Fuel hose connector and securing hose clamp.
- Chimney pipe (1 pcs) and cap (1 pcs)

## Installing the Rexener water heater

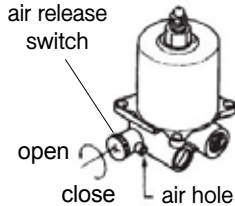
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- **The manufacturer and importer strongly recommend ordering the installation service for the Rexener water heater.**
- Place the Rexener water heater in the position reserved for it. Ensure that the heater is in the appropriate and stable position horizontally and vertically by using the adjustable legs.
- Screw in the pipe connections 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 valve 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.
- Attach the connector of the circulation pump's control cable to the water heater.
- Thread the fuel supply hose through the designated hole at the bottom of the housing.
  
- Attach the fuel supply hose connector to the end of the hose. Tighten the hose clamp.
- Install the fuel tank on the base you have reserved for it.
- Connect the fuel hose connector to the fuel tank connector.
- Fill the fuel tank. The manufacturer and importer recommend using biodiesel. Light fuel oil and regular diesel are also suitable fuels.
- 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.

# BLEEDING THE FUEL SUPPLY SYSTEM

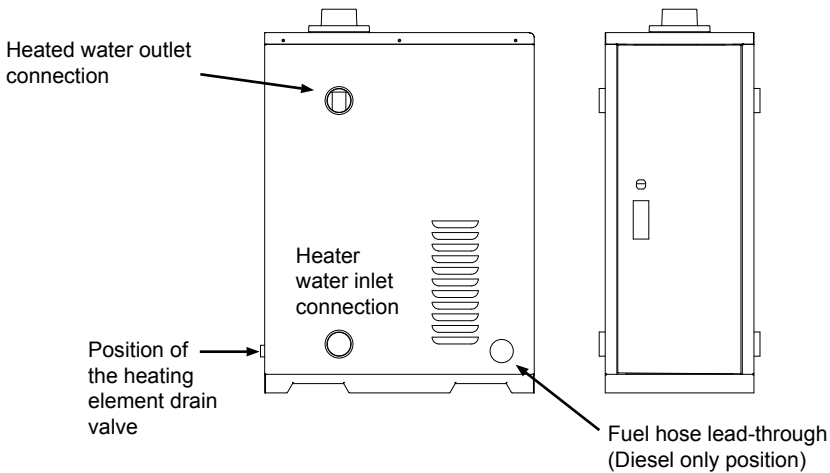
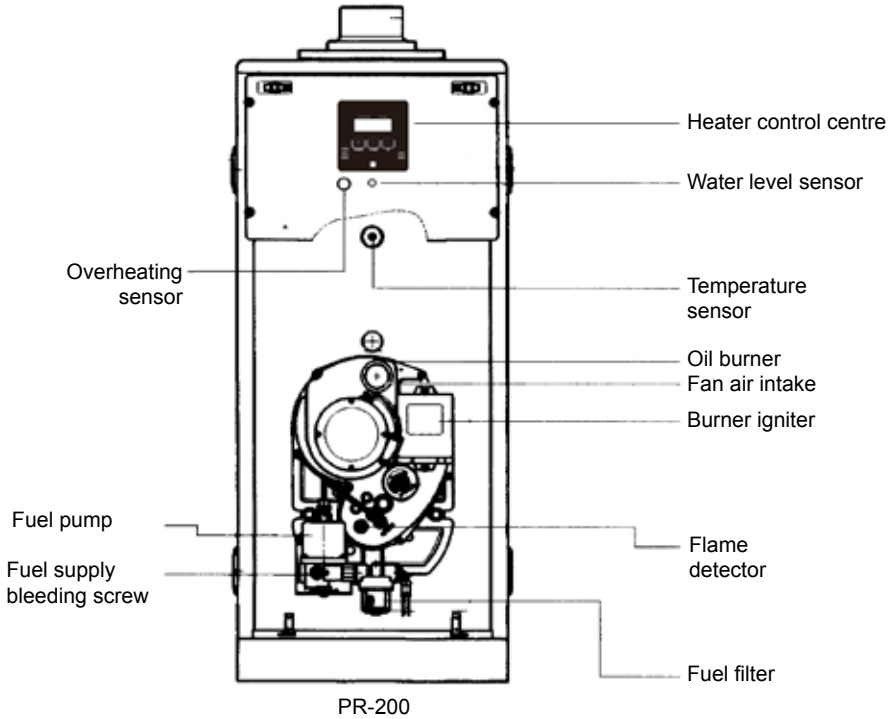
**The fuel supply system must be bled in conjunction with the initial start-up or when the fuel runs out.**

- Place a suitable small collection container under the fuel pump.
- 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.



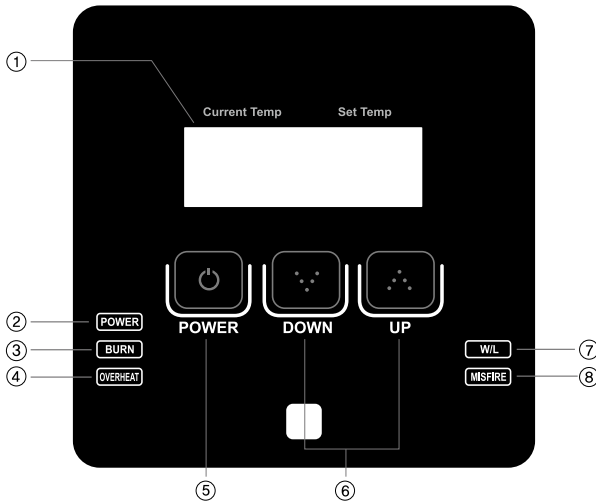
# HEATER STRUCTURE

## Structural figures



## Operating switches and display

### Controller



#### 1. LIQUID CRYSTAL DISPLAY

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

- the temperature reading on the left side of the display indicates the temperature of the water to be heated
- the temperature reading 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. OIL BURNER INDICATOR LIGHT

This light is on when the oil 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 heater 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.

#### 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

# OPERATING INSTRUCTIONS

## Using the rexener water heater

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 oil 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.
6. Deactivate the water heater by pressing the "Power" button again.

**WARNING!** The heater must always be protected against water spatter. Please take this into account during installation and use!

**NOTE!** The heater's 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.

**NOTE!** If the Rexener water heater is used in winter, it must always be connected to power.

**RECOMMENDATION :** Use only high-grade biodiesel or light fuel oil in the heater. Always ensure the cleanliness of the containers used for refuelling the heater. Container impurities and the use of fuels other than light fuel oil or 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	230V~, 50Hz
Flow speed	6100 L/h 6 m.c.H <sub>2</sub> O
Highest flow rate	9.6 m.c.H <sub>2</sub> O
Lowest flow rate	2 m.c.H <sub>2</sub> O

## Resetting the 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 oil burner is not operating correctly. Please contact a Rexener maintenance service 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.

## Replacing the fuel filter

A dirty fuel filter may prevent fuel flow, which may cause heater malfunctions. Regular replacement of the fuel filter efficiently prevents all operating failures.

For heaters in heavy use, the filter should be replaced every six months. In normal use, annual replacement is sufficient.

1. Deactivate the heater and disconnect the power cord from the socket. If the fuel supply hose features a valve, close it.
2. Place a suitable collection container under the fuel filter.
3. Screw the filter cover open and remove it.
4. Detach the fuel filter and place it in a suitable leak-proof container.
5. Install the new fuel filter.
6. Install the fuel filter cover.
7. Connect the power cord, (open the fuel valve) and press the start switch.
8. Bleed the fuel supply system.

## Sweeping

The Rexener PR-200 heater requires occasional sweeping, which may only be performed by an authorised provider of maintenance services.

Heater sweeping is required at least in the following situations:

- The heater produces smoke during operation.
- The "Misfire" message appears on the display frequently and the heater shuts down producing smoke.

You can order the sweeping service by email [service@rexnordic.com](mailto:service@rexnordic.com)

# DIAGNOSING AND REPAIRING OPERATING FAILURES

If the heater is not functioning, check the following:



- Is the power connected?
- Is there sufficient fuel?
- Is the flame detector clean?

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.
		Burnt fuse	Replace the fuse.
	The "Power" signal light is on but the heater is not running.	The water temperature is higher than the set target temperature.	Increase the target temperature or wait for the water to cool down.
	The "MISFIRE" warning light is on.	Fuel has run out.	Refuel the heater and bleed the fuel supply system.
		The fuel has hardened.	Warm up the fuel. Add 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" 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 maintenance service to repair the sensor or pump.
The burner has failed.		Contact the maintenance service to repair the burner.	
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. Instructions on page10.
		The burner has failed.	Contact an authorised maintenance service.



FAULT DESCRIPTION		POSSIBLE CAUSE	REPAIR MEASURE
THE HEATER SHUTS DOWN SHORTLY AFTER ACTIVATION.	The burner's fan is activated but the burner is not ignited.	The burner's igniter has failed. Contact failure	Contact the maintenance service to repair the igniter. Check the electrical wiring and connections.
		Incorrect fuel type	Drain the fuel tank and fill it with high-grade diesel or fuel oil.
		The fuel contains water or other impurities.	
		The flame detector is in the incorrect position.	Install the flame detector precisely in the correct position.
		The flame detector is dirty.	Clean the flame detector.
		There is air in the fuel supply system.	Bleed the fuel supply system. Instructions on page 10.
THE BURNER PRODUCES SMOKE AND ACCUMULATES SOOT		Incorrect fuel type	Drain the fuel tank and fill it with high-grade diesel or fuel oil.
		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 an authorised maintenance service to repair the burner.
		The combustion chamber is sooty.	Contact an authorised maintenance service 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 target temperature is too low.	Adjust the target 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.

# PROBLEM SITUATIONS



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.

## 1. THE HEATER BURNER HAS SHUT DOWN AND THE “MISFIRE” LIGHT IS ON.

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.

1. Check the fuel level and refuel as necessary.
2. Try to start the heater.
3. Check the fuel filter and replace it as necessary. Instructions on page15.
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 Rexener maintenance service to have the tank cleaned.
5. If the fuel tank contains water, drain it and fill it with suitable fuel.
6. Check the condition of the flame detector. Inspection and cleaning instructions on page14. Start the heater.
7. If the heater does not start, contact an authorised Rexener maintenance service.

### Advice and instructions for operating the heater

- If the heater’s 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.
- If necessary, contact an authorised Rexener maintenance service. Then, restart the device.
- Once the fault diagnostics display is deactivated, the warning sounds will also stop.

### FAULT CODES

ER1 -> Check the flame detector for soot.

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 need replacement, please contact the importer or an authorised retailer.
- All heater repairs must be conducted by an authorised Rexener maintenance service. Contact the importer or an authorised retailer to determine the locations of the maintenance shops.
- Repairs without the necessary expertise (authorisation) may cause even more severe damage to the heater. Please find out the locations of the Rexener maintenance services by contacting the importer or an authorised retailer.

# PRODUCT SPECIFICATION

Product name	REXENER Water Boiler
Model name	PR-200
Heating output	18.5 kW
Heating efficiency	96 %
Fuel consumption	1.94L/h
Fuel	Diesel
Burner type	Gun type oil
Usage	Pool Heating Boiler
Water tank capacity	17.1 Liter
Maximum operating pressure	1.7 bar (167kPa)
Power	230V~, 50Hz
Rated Power Consumption	80W
IP Grade	IP 33
Dimension (W x D x H)	320x580x839 mm
Weight	38kg
Pipe size of water out	Inner diameter (45mm), Outer diameter (52mm), 40A
Pipe size of water in	Inner diameter (45mm), Outer diameter (52mm), 40A
Exhaust pipe diameter(Ø)	Ø 75mm
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 INFORMATION

EN 303-1 7.2		result
the required draught in mbar		0.04 mbar
gas side resistance and combustion chamber pressure for boilers 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		20K - 60 mbar 10K - 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	at full load	75 W
	at part load	40 W
	in standby mode	6 W
gas volume of the boiler in m'		0.023 m'
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 m'
direct flame operation or flame reversal		Direct flame
boiler type: ON/OFF, modulating, multi stage		ON/OFF

# REXENER WARRANTY

The more the REXENER heater is used, the more reliable its operation is.

REXENER heaters go through uncompromising quality control during production. Every product is inspected and test run, and some are subjected to highly demanding functional tests.

To resolve any unexpected faults or malfunctions, please contact your retailer or importer. If the fault or malfunction is caused by a defect in the product or one of its components, the product will be replaced for no charge during the warranty period, provided that the following conditions are met:

1. The warranty period is 12 months from the device's date of purchase.
2. If the fault or failure is due to the improper use of the device or damage caused by an external factor, all the repair costs will be charged to the customer.
3. Warranty maintenance or repairs require the original purchase receipt to verify the date of purchase.
4. Furthermore, to be eligible for warranty maintenance or repairs, the device must have been purchased from the importer or an official retailer authorised by it.
5. The customer is responsible for all costs of shipping the device for warranty maintenance or repairs. Keep the original product packaging for possible transport. The retailer/importer will cover the costs of shipping the device for warranty maintenance or repairs if the device is found eligible for processing under warranty.
6. Store the purchase receipt in a safe place. Presenting the warranty certificate when contacting the authorised retailer/maintenance service will expedite the proceedings.



# REXENER

[www.rexener.com](http://www.rexener.com)

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