



Safire cera22 ceramic cooker

PACKAGE CONTENT:

- ✓ Ceramic hob cera22, mounting accessories
- ✓ Fuel line (3 m), fuel pump
- ✓ Power cable (4 m)
- ✓ Sirius control panel (approx. 1 m cable)



INSTALLATION

PLACEMENT

- When installing the hob, take into account the ventilation of the space under the hob, so that when the hob is switched on, air circulation occurs due to pressure differences (air enters from the lower part and exits from the upper part).
- When required, the exhaust air can be routed directly through the table top level by using a ventilation grille.
- Possible removal for maintenance work. Some maintenance work (glow plug, supply needle and flame sensor) and fastening work can be done via the "service valve" on the front of the stove housing.
- Choose the mounting location of the control panel to maximize visibility and usability, preferably mount the control panel on a vertical surface.
- The hob gives off heat to the environment, take this into account, for example when placing a refrigerator near the hob.

INSTALLATION

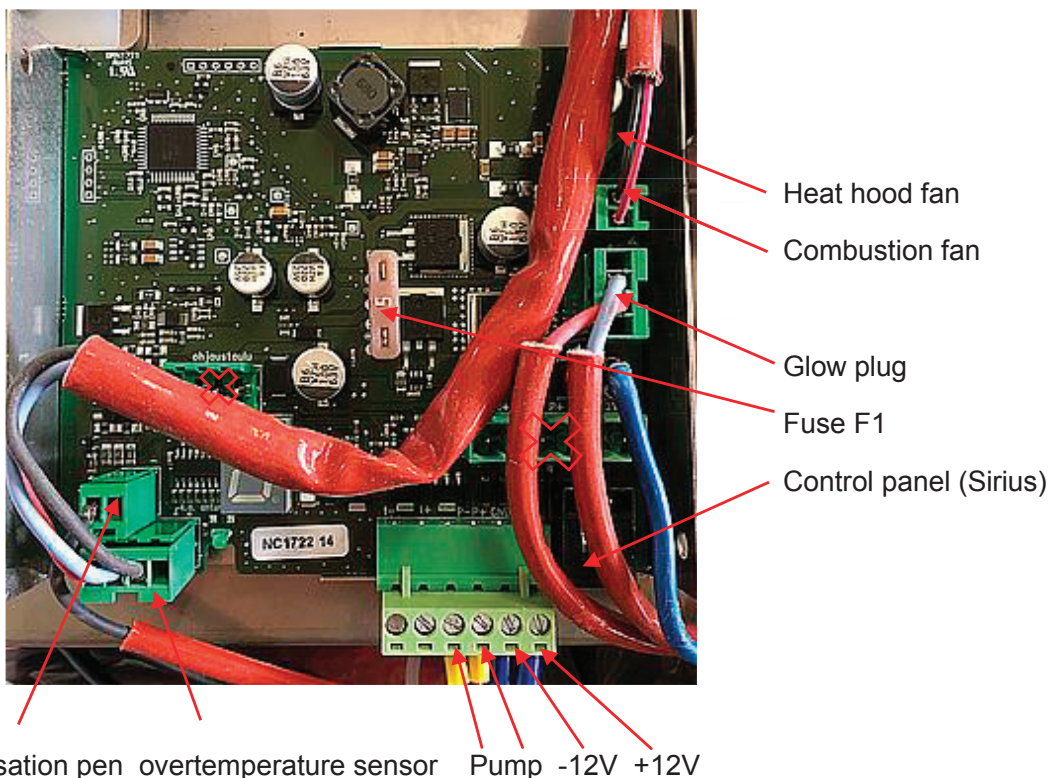
- Cut a mounting hole according to the drawing. (Figure 1)
- Ensure air circulation in the space under the hob by making two air holes of approximately 100 cm² (= 10 x 10 cm), one at the bottom, one at the top of the built-in space.
- Before fixing the hob, it is useful to place the flue gas exhaust hose and secure it with the hose clamp.
- Mark the center of the chimney at the desired location, taking into account, however, the space required on the inside for the upward-facing "gooseneck", which has the function of preventing water from passing through to the flue gas discharge hose.
- Drill a 30mm hole in the hull of the boat and then, using the exhaust as the model, drill the 4.5mm holes for the mounting screws. Apply waterproof sealant on both sides of the insulation to ensure watertightness. Use insulating sleeving to insulate the exhaust hose.
- When using a condensate drain line (4052) you prevent watering or rusting of the exhaust hose. Route the exhaust hose as shown in figure 2.
- Secure the outlet with the hose clamps. On a metal boat, use nylon screws to isolate galvanic contact between the battery and the hull of the boat. (The hob is in contact with the negative terminal of the battery and can cause malfunctions and interfere with electrical corrosion protection).
- Lower the hob into the hole. It is useful if you can support the hob while lowering it via a maintenance flap.
- Fix the hob in the correct position and fix it using the corner supports. Always allow sufficient extra length for the exhaust hose and fuel line to remove during maintenance work.

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- The fuel is supplied through the fuel line from a separate tank (connection 1016) or a diesel tank with adapter (1016/2) or with a "tank connection kit" (2265), which is connected to the pump. If the fuel in the tank or in the suction pipe can possibly reach higher than the hob, the connection must be equipped with a possibility to shut off.
- Fuel hose and tank must be attached carefully and protected against heat and mechanical stress.
- The outlet of the flue gas discharge hose must be located at the rear or rear of the boat and be at least 0.5 meters away from the fuel filler connection and sea level.
- There should be no materials above the hob that could pose a fire hazard, even in an overheating situation.
- Electric cables and fuel hoses from the hob must have sufficient spare length so that disconnection and maintenance work can be carried out.

ELECTRIC CONNECTIONS

- The hob works with 12V DC. If there is a 12V battery in the boat, use it as per preference. When using a 24V system, you must use a sufficiently effective DC/DC 24/12 transformer, for example the Mastervolt DC/DC 24/12 12A.
- A battery connected to a large power bow thruster is a risk factor for electrical failure.
- Make sure that the outside of the heater is in galvanic contact with the battery terminal.
- The minimum cross section of the power cables in 2.5 mm² is equal to the length of the cables in meters. If it is necessary to use longer cables, you should also replace the original cables (2.5mm²) with thicker ones. Cut the cables at a maximum of 1m from the hob and connect them to a thicker cable 6 mm² with insulated butt connector (color yellow) for wire 4.0-6.0 mm².
- The color of the cables: red +, yellow -.
- The + cable from the battery must be protected with a slow 15A fuse (the circuit board has fuse F1 as reverse polarity protection, slow 5A ATO fuse)





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Hobs with heat fan cover

- The thermostat sensor is connected to the coupling X10
- The electronics automatically detect when the thermostat sensor is connected. After that, when the fan cover is in the lowest position, the position control of the control panel changes to heat control.
- The electric cables of the pump are connected to the coupling X10 (in case of hobs with heat fan cover also the thermostat).
- When the thermostat sensor is connected, the heating must **NOT** be connected to the battery voltage.

Pay attention! Connect all cables in such a way that any water that may run past them cannot reach the electronics board of the hob.

SIRIUS CONTROL PANEL

- The control panel must be placed in a dry, splash-proof location so that it can be clearly seen and used, and there is no risk of accidental start.
- The body of the control panel is first fixed with double-sided tape, eg to the wall of the cabinet, the wire is fed through the wall, finally the stainless steel cover plate is provided with double-sided tape.
- The control panel cable is connected to the electronic circuit board.

APPLICATION AND COMMISSIONING

PREFACE

Before commissioning, ensure that...

- Tank and fuel hose are properly installed
- Heating is securely fastened
- The passages for combustion air, flue gases and air flows are clear
- There are no foreign objects or substances in or around the heater and the exhaust that could cause a fire hazard or odors.

FUEL

- Recommended fuels are diesel (winter quality) and light petroleum in very cold conditions. At the end of the season, it is advisable to leave winter diesel or a light bulb in the fuel line to avoid start-up problems during starting. Bad fuel is the most common cause of hob and stove problems.
- Attention: The recommended fuel storage times are not long, at most half a year!
- Only isopropanol (2%) can be used as an additive to remove potential water and to clean the fuel line

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START AND INDICATORS

- Press the on/off button for about 1 second to activate the device, the green status LED will turn on when the power is on.
- The Flame LED flashes green at start-up and lights up continuously when the flame is detected.
- The decimal point of the numeric display flashes at the rate of the current pulses going to the pump.
- The power (1-10) of the hob is controlled by the arrow keys and displayed as number display. The setting is displayed by pressing the arrow button once.
- With the heating hood in heating mode, the MODE key is used to select power or temperature setting, the thermostat controls the current when the temperature is selected.

TURN OFF

- Turn off the appliance by pressing the on/off button, then the pump will stop and the heater will go into cooling state and then turn off. Before the end of the cooling time (approx. 8 min), the hob cannot be disconnected from the power supply, e.g. with the battery main switch.
- If the ignition is turned off after cooling down (error code A), the error mode is cleared by the MODE button. When the hob is no longer in use, switch off the main switch

ERRORS

- If the green status light does not light up when starting, it is obvious that the heater is not receiving electricity.
- If THE FLAME LED does not light up at the end of the start-up process (approx. 6.5 min), the device enters the cooling state and turns off. For example, an empty fuel system or bad fuel could be the reason, if no differences are detected in a visual inspection, start a new start-up attempt. After two failed attempts, the cause of the problem must be investigated to prevent fuel from flowing from the burner into the 'wool'.
- If the green light comes on while the engine is running and the malfunction indicator lights up, it is often caused by an empty fuel tank, a fuel intake problem or a power supply problem. Check the situation.
- To cancel the error, press and hold the MODE button for about 1 second.

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No. 1 (overheating error)

The cause of overheating is usually insufficient ventilation in the place where the stove is installed.

No. 2 (ionization) on the electronics board means that the flame ionization detector is covered with soot or defective. Due to the fault, there is a short circuit with the housing of the heater. The sensor can be cleaned, see page 7.

No. 3 (flame detection) the heating has gone out due to a lack of a burner flame, usually because the fuel has run out or due to a blockage in the fuel system.

No. 4 (glow fault) a fault with the glow plug; the plug connection is open, the spark plug is defective or the wire connection is incorrect.

No. 5 (combustion fan) fault in the combustion fan or its cables

No. 6 (heating fan) fault in the main fan or its cables

No. 7 (undervoltage). Check the battery voltage that it is at least 12 V. The voltage may drop slightly during start-up, the voltage drop is caused by the glow plug and may be up to 0.5V lower. If the voltage drops below the limit less than 10.8 V or 10.2 V during start, the cooling phase is activated and the hob switches off.

No. 8 (pump) the circuit of the pump is interrupted

No. 9 (airflow) fault in the airflow heat sensor or its cables

Means that the heater did not turn off normally the last time it was turned off. A rapid voltage drop has occurred or the main switch has been turned off before the 2nd cooling phase has finished.

The 'dot' of the control panel flashes in the frequency of the pump. If it does not flash and the pump makes no sound and there is no other error, then there is a pump fault (error code 8). The fault can be in the wiring, the coil or the electronics board. If the tip flashes but the pump does not make any sound, the fault is in the pump, for example due to the piston sticking or paraffin fuel. Another possible cause is soot blockage of the fuel line tip.

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CHANGES AND MAINTENANCE

Check regularly:

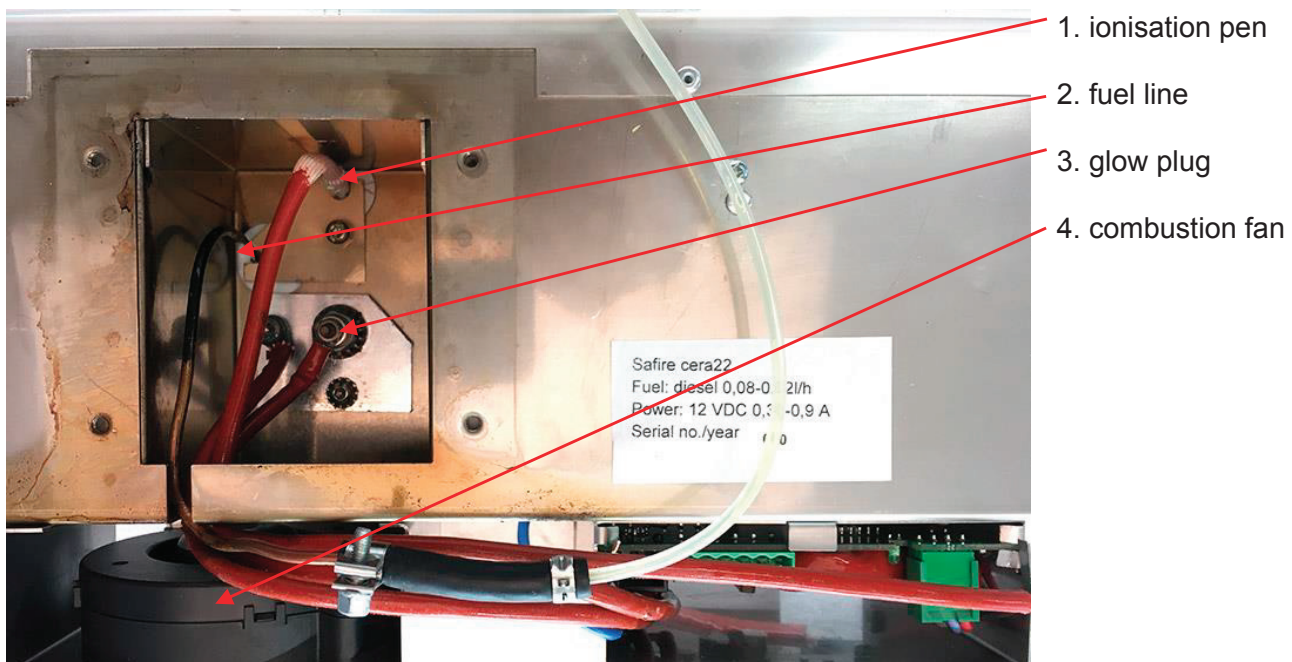
1. The stove receives sufficient power and the connections are good and clean.
2. Exhaust gases can escape unhindered.
3. That there are no leaks in the fuel line.
4. Fuel filter and tank.
5. Keep the device and the environment clean (dust-free).

If there is reason to suspect that the device's power has decreased, check:

1. The fuel should move about 20mm/pulse in the nylon fuel line.
2. At full power the fuel consumption is about 210 - 230 ml/h.
3. The fuel supply needle is clogged, pierce with 1.5 mm drill or with a gas flame from heating.
4. In the fuel line, for example, the fuel is paraffined. Isopropanol helps to dissolve the blockage, which can be sprayed through the hoses or pump with a syringe.
5. Air leak in fuel line, check connections

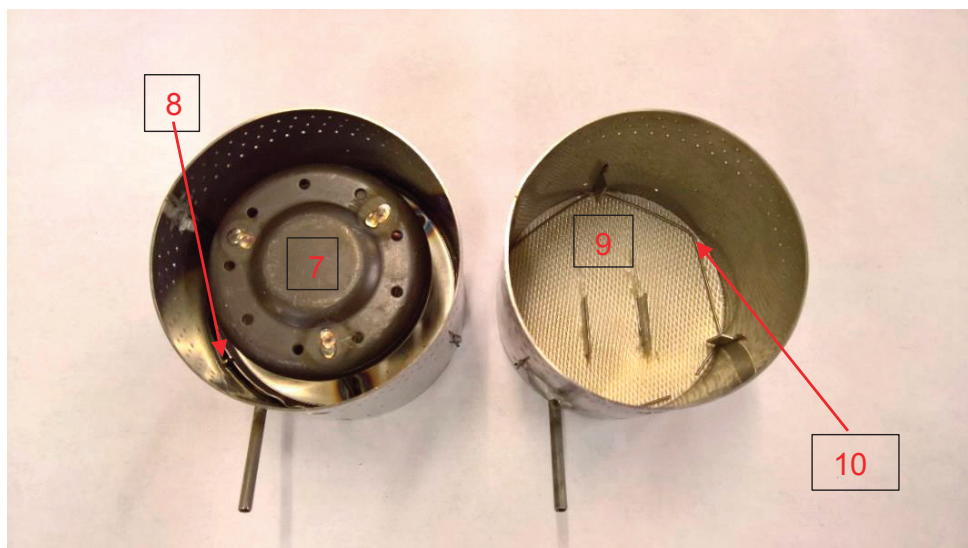
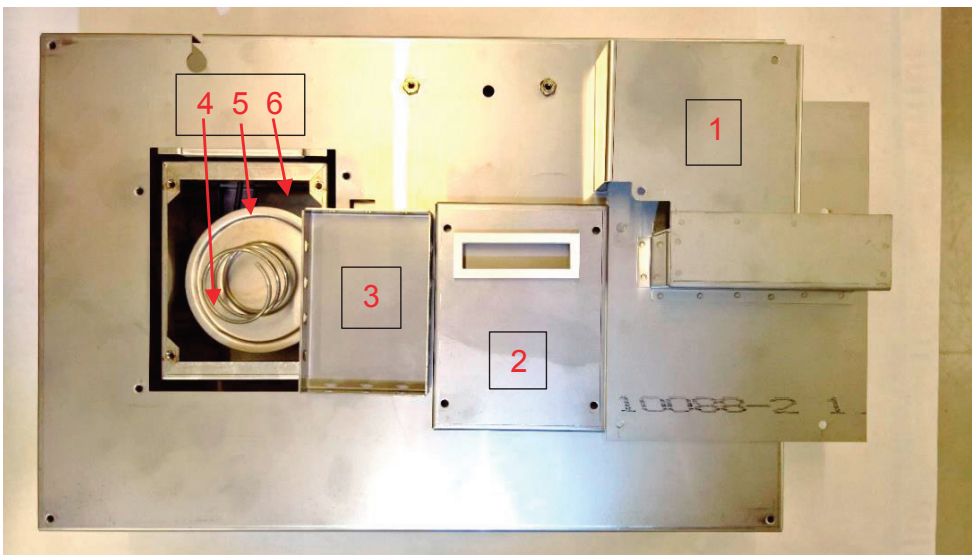
MAINTENANCE

Service the fuel supply needle, glow plug and ionisation sensor (flame detector) through the service hatch from the front of the appliance. For other maintenance on the device, it must be removed from the installation site.

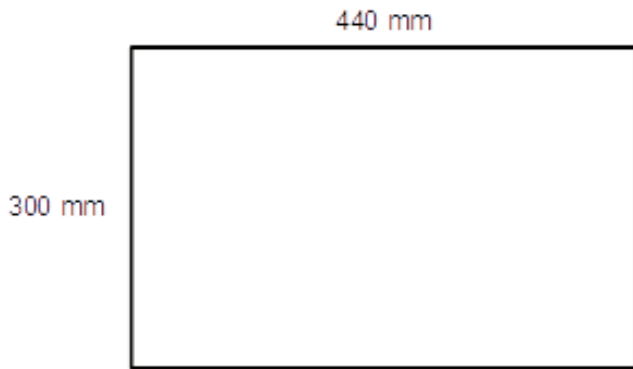


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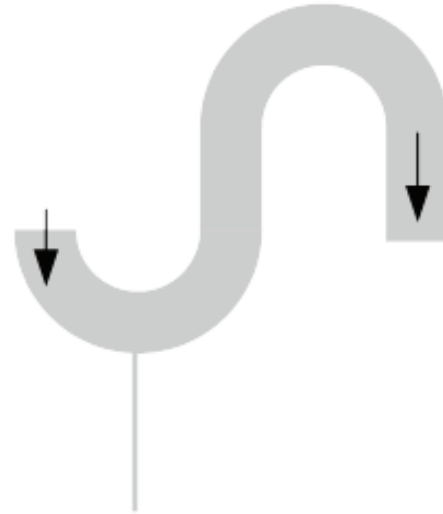
1. Open the service hatch to remove the disconnected fuel pipe, glow plug and ionisation sensor.
2. Remove the fan cover 1 from the bottom of the appliance and the burner housing cover 2.
3. Lift up the airflow regulator 3, the support spring 4, the radial plate 5 and the burner 6 (if necessary, tap the hammer and wooden stick)
4. Open the burner cover 7 through the lock 8 with a 4 mm screwdriver. Insert the screwdriver tip next to the lock between the cylinder and the edge of the burner ring, the flexibility of the cylinder allows the lower ring to come out of the lock, turn the screwdriver head while lifting the burner cover, so that the lower end of the burner cover rises, avoid damage to the burner ring.
5. Clean the brazier by scraping it mechanically, eg with a wire brush and a screwdriver. If necessary, drill through the fuel pipe guide tube with a 3.0 mm drill. Clean the fuel feed needle (or once a season) by heating and/or releasing it with a 1.5mm drill, check the position of the fuel tip (approximately 52mm to the edge of the burner tray).
6. If necessary, replace a new burner mat 9 held in place with the circlip 10
7. Clean the ionisation sensor and check the length of the sensor (from the base to the tip of the probe approximately 41 mm, see Fig. 3).
8. Assemble in reverse order, make sure burner is in correct position. Use the glow plug as a fixation point when installing the burner, also check the position of the fuel line guide tube. Install the ionization sensor with care not to damage it and with the tip pointing up towards the glass.



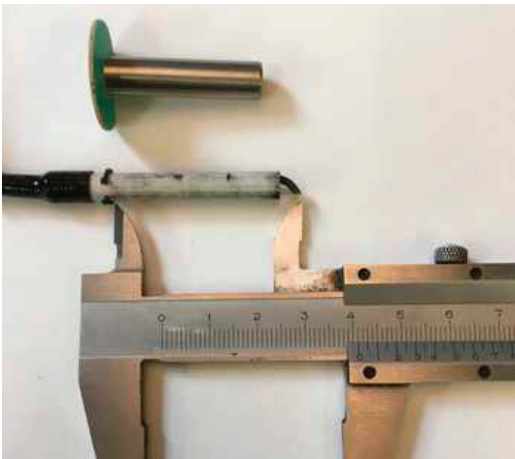
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picture 1



picture 2



picture 3

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We recommend that you only use pots and pans with a flat bottom, so that the hob is not scratched or damaged. If you use the cold plate as a work surface, always clean it carefully afterwards. Even small hard food residues can cause scratches if you put a cooking pot on it. However, minor scratches in the hob will not affect the heating properties of the cooker.

Cooking utensils

Use cookware that is suitable for ceramic hobs. The bottom of an ideal cooking pot is slightly concave when cold. Due to the heat expansion, the bottom on the stove then becomes flat, so that the heat energy is optimally transferred to the cooking pot. The ideal bottom thickness for a cooking pot is 2-3 mm for enamelled steel cooking pots and 4-6 mm for steel kettles with a sandwich bottom.

Do not place clothing, textiles or similar materials on the ceramic plate while it is still hot.

The exhaust pipe radiates heat. Do not touch the hot surface of the pipe while the burner is on.

MAINTENANCE AND CLEANING

To keep the hob clean and ready to use, you should clean it regularly, preferably after each use. First remove the food residues with a spatula. Spray a few drops of a ceramic hob cleaner on the cooled plate and wipe the plate with a paper towel. Rinse the plate with water and then dry it with a clean cloth. Do not use an abrasive sponge or abrasive. Also avoid using strong chemical cleaners (eg oven spray or stain remover). If necessary, remove melted aluminum foil, plastic, sugar or sugar mixtures immediately from the hot plate to avoid damaging the surface. Before cooking dishes with a lot of sugar, coat the plate with a protective agent to prevent damage to the surface if the pot boils over.

If you wash your boat/vehicle with a pressure washer, make sure no water gets into the cooker exhaust pipe.

SERVICE INTERVAL

The cooker must be serviced every two years by an authorized service company. In case of intensive use, the fuel filter should be replaced once a year. The stove is fired with diesel fuel. Follow the engine manufacturer's instructions when selecting the fuel type. If necessary, you can add a suitable antifreeze agent in the correct mixing ratio to the fuel. In this way the water is bound in the fuel.

Specifications Safire Cera Diesel Cooker

Power supply 12V

Power consumption: 0.4-0.9A

Power 1 - 2.2 kW / 3070 - 7500 BTU/hr

Fuel: diesel

Consumption 0.1-0.21 l/h

Dimensions l x w x h mm: 463 x 317 x 175

Installation dimensions l x w mm: 440 x 300

Weight: 9 kg