



## 40 EA

### 4 kW | Water Heater

<b>Power:</b>	1600-4000 W / 5,400-13,600 BTU
<b>Operating Voltage:</b>	12 V
<b>Fuel Consumption:</b>	0,16-0,40 l/h / 5.4-13.5 oz/h
<b>Electricity Consumption:</b>	0,2-0,4 A
<b>EU Energy Efficiency Index:</b>	A+
<b>Colors:</b>	Graphite Gray, Winter White
<b>Room Size:</b>	60-90 m <sup>2</sup> / 645-970 ft <sup>2</sup>
<b>Recommended Use:</b>	Cottages, houseboats, container houses

**Wallas 40 EA is a water heating system for off-grid cottages, which can be used solely for heating domestic water or it can also be used to power up floor and radiator heating.**

Underfloor heating is a great alternative to air heating, because it produces dry heat evenly in the room and who would not enjoy a warm floor under their toes. When the heat transfer fluid passes under the floor, there is no air blowing in the space, which can also be a relief to some, if allergies are a concern. In addition to fossil-based diesel, the Wallas Greenboost burner burns renewable diesel (HVO) cleanly and energy-efficiently resulting in lower NOx and CO2 values.

## 3008 ADVANCED

### THERMOSTATIC | Control Panel

- If 40 EA is used solely as a domestic water tank heater, the only function needed is ON/OFF.
- If a second water pump is installed for floor heating, the control panel allows you to set a target room temperature and the thermostat maintains a smooth ambient temperature in the space.
- The simple display shows all the pertinent information at one glance.

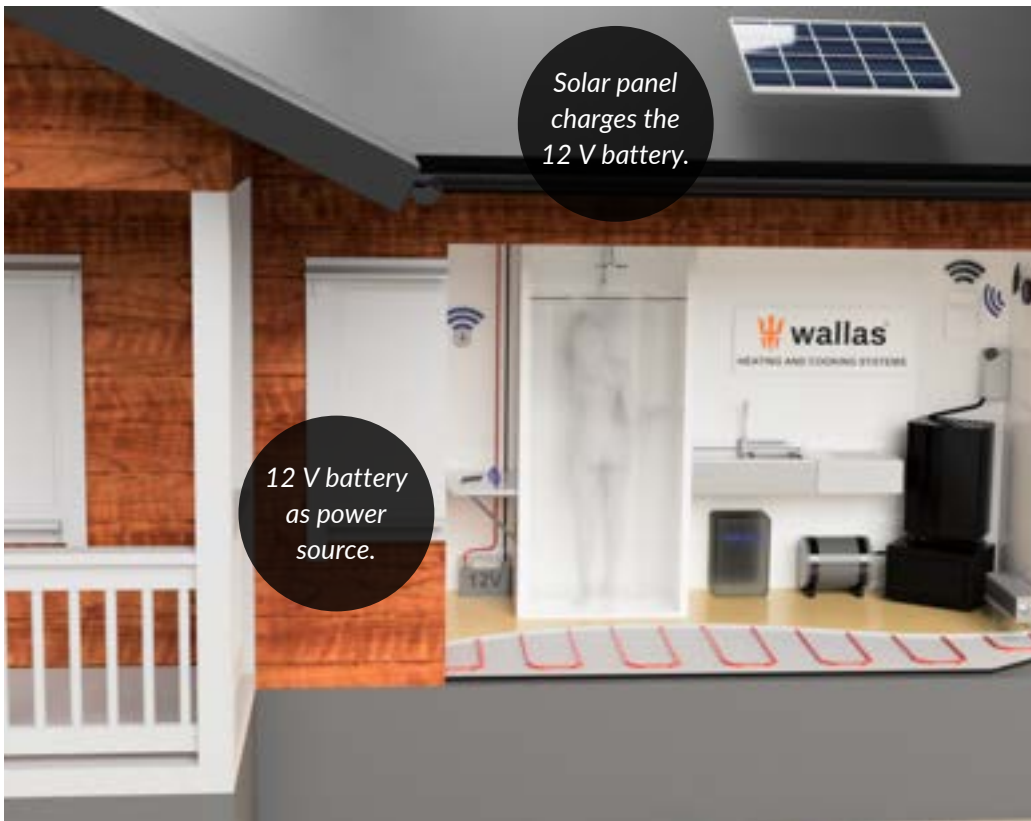




  
**WALLAS REMOTE APP**  
EASY ALTERNATIVE  
HEATER CONTROL

**ULTRA-LOW EMISSIONS  
HEATER FOR OFF-GRID  
COTTAGES AND HOUSEBOATS**

**HEATER CAN BE TURNED ON  
REMOTELY TO SAVE TIME AND  
TO ENSURE EVERYONE'S  
COMFORT LEVEL**



*Solar panel  
charges the  
12 V battery.*

*12 V battery  
as power  
source.*

*Water pump pushes  
the heat transfer fluid  
from the lowest pipe  
connection into the  
unit, hot water boiler  
and the heating pipes  
underneath the  
flooring.*

*Heat transfer fluid  
must be either*

- Glycol + water mixture or
- Dowcal 200 (propylene glycol-based heat transfer fluid) + water mixture

## FEATURES

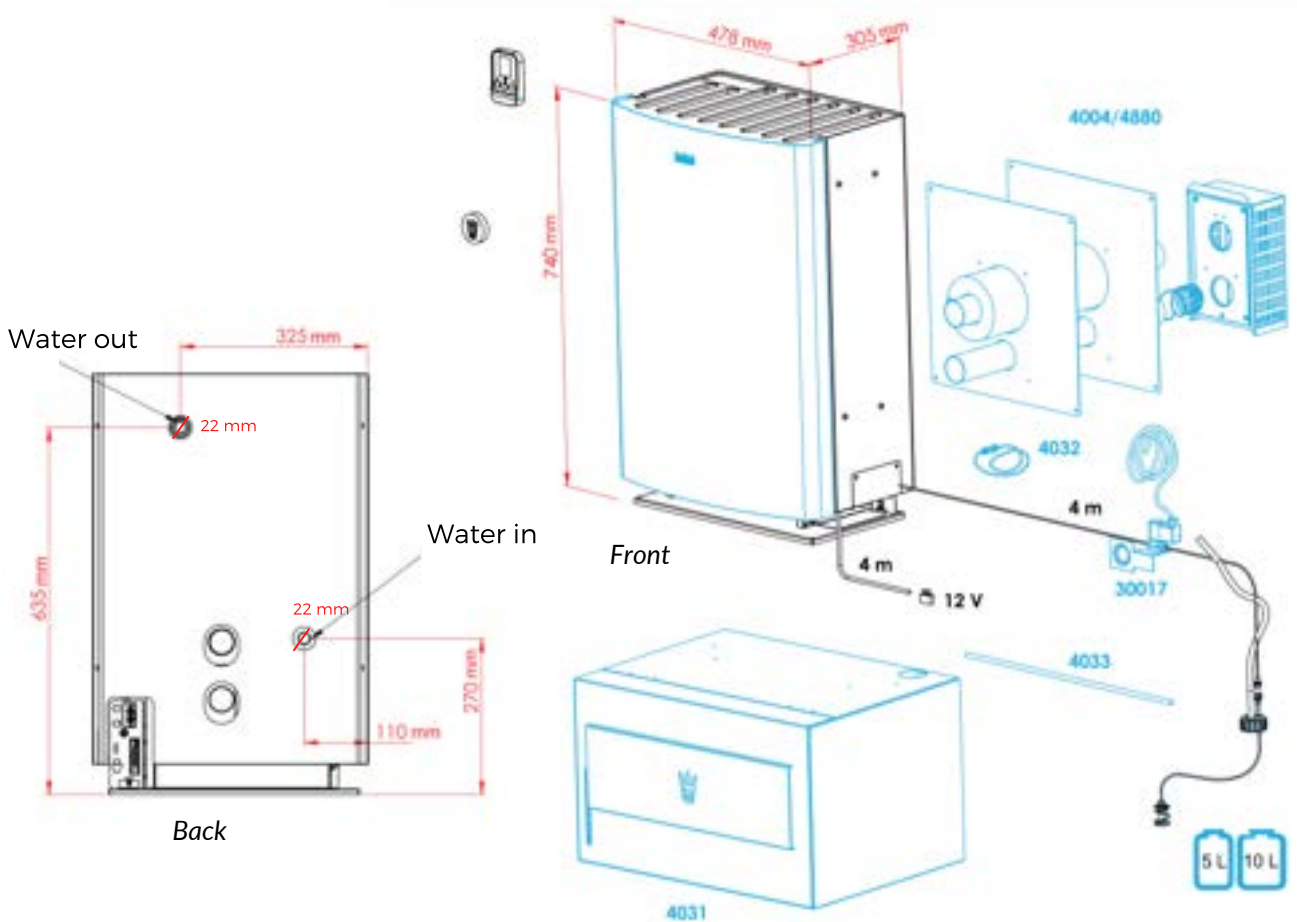
- 40 EA can be used with a water heater, underfloor heating or a radiator system.
- Fully enclosed laminar burning process warms up the cottage and dries the indoor air with no exposed flame.
- Exhaust gas is safely expelled outside keeping the indoor air clean and odorless.
- Extremely low fuel and electricity consumption.
- Brushless blower motors have a very long life-cycle, supporting reliably long service intervals.
- Low temperature on unit case improves everyone's safety.
- Remote accessibility enables system updates and diagnostics.



*Wireless sensor  
monitors the indoor  
room temperature  
with improved  
accuracy in order to  
maintain a smooth  
target temperature.*

# 40 EA

4 kW | Water Heater

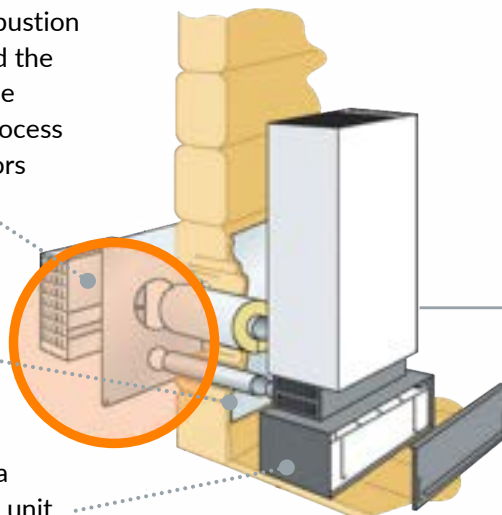


Weight 25 kg

The flue gas head of the heater leads the combustion air into the heater and the exhaust gases out. The closed combustion process does not leak any odors indoors.

Inlet air is drawn in from outside with a fan.

Fuel can be stored in a socket case under the unit or underneath the cottage.



Heater can be installed with Wall Installation (in the picture) or Chimney Installation



Solar panel recharges the 12 V battery.

Alternatively, the unit can be used in 110/230 V network with a 12 V converter.



12 V battery as a power source.



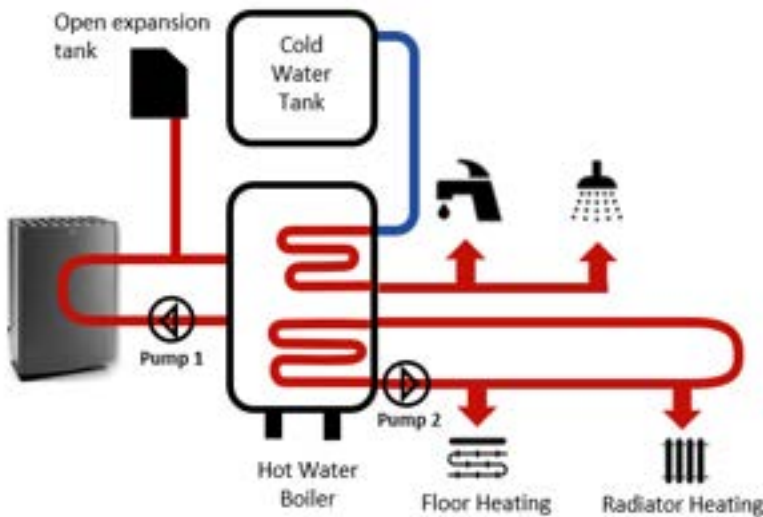
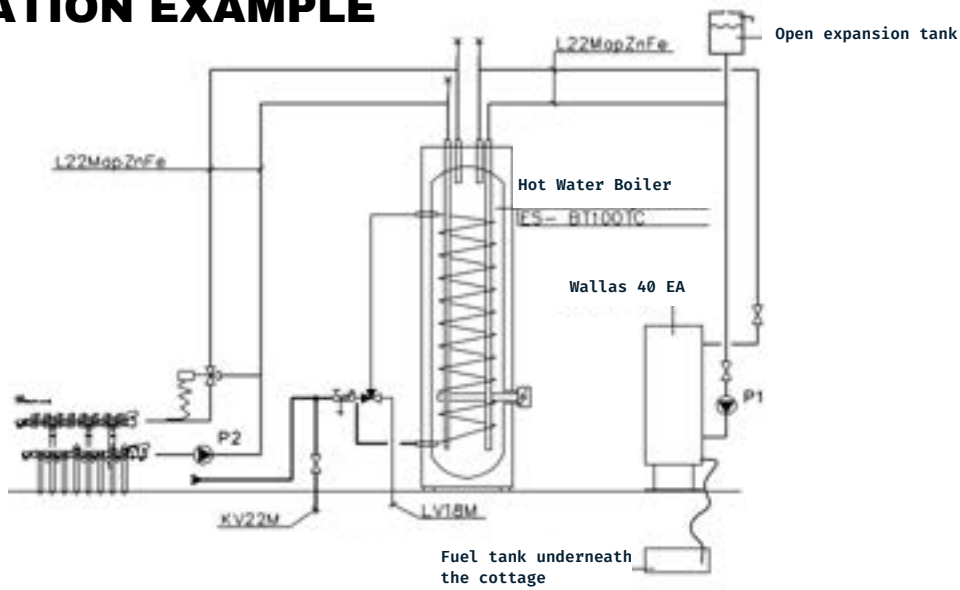
Accessories in black come with the standard package. Accessories in blue are additional/optional. The calculated values are measured in a reference measurement wall, which is constructed to represent a typical cottage installation. The figures allow for 10 % reserve - yours may vary.

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## INSTALLATION EXAMPLE



### PUMPS OPERATE AUTOMATICALLY

Pumps are thermostatically controlled to maintain a target temperature. When the target room temperature is set higher than the current room temperature, the pump is running continuously until the target temperature is reached. To maintain the temperature, the pump runs with intervals of 10 seconds ON and 5-90 seconds OFF.

The pump will maintain the water heater at 70 °C / 158 F°. If the water temperature rises above 82 °C / 180 F°, the burner switches off automatically for safety reasons. The burner re-starts, when the water temperature drops to 55 °C / 130 F°. The unit attempts to maintain a target temperature of 70 °C / 158 F°.

### NOTE ON INSTALLATION

- Water pumps form pressure, which circulates the fluid inside the unit and in heating pipes. It is very important to not let the unit reach excessive pressure.
- An open expansion tank must be used at all times.
- Also, a 1.5 Bar overpressure valve should be installed in the system.
- To avoid all damage from flooding, there must be proper drainage in the space where unit and water boiler are installed.
- Also, the expansion tank overflow pipe should lead to the floor drain.
- Drainage must be checked before use.