

# Installation and Servicing Instructions

## PRIMARY WATER STORAGE 120 LITRES



6 720 614 912-00, TRS

UK/IE

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**WORCESTER**  
Bosch Group

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# 1 Safety precautions and explanation of symbols

## 1.1 Safety precautions

### Fitting & Retrofitting

- **Risk of fire!**  
Exercise due care when soldering and welding as this can lead to fire.
- This storage tank must only be fitted or refitted by a competent installer.

### Operation

- In order to ensure trouble-free operation, read these instructions carefully..
- **Risk of scalding!**  
During operation of this storage tank temperatures over 60°C can occur.

### Servicing

- Only original spare parts must be used with this appliance.

## 1.2 Explanation of symbols

### Warning symbols



Safety instructions in this document are framed and identified by a warning triangle which is printed on a grey background.



Electrical hazards are identified by a lightning symbol surrounded by a warning triangle.

Signal words indicate the seriousness of the hazard in terms of the consequences of not following the safety instructions.

- **NOTICE** indicates possible damage to property or equipment, but where there is no risk of personal injury.
- **CAUTION** indicates possible personal injury.
- **WARNING** indicates possible severe personal injury.
- **DANGER** indicates possible risk of life.

### Important information



Notes contain important information in cases where there is no risk of personal injury or material losses and are identified by the symbol shown on the left. They are bordered by horizontal lines above and below the text.

### Additional symbols

Symbol	Meaning
●	a step in an action sequence
→	a reference to a related part in the document or to other related documents
–	a list entry
–	a list entry (second level)

Tab. 1

## 2 Product information

### 2.1 Use

The storage tank is designed to act as a buffer for the heating system and is ideally suited to heat pump applications.



**Warning:**

- Do not use the storage tank in conjunction with permeable pipework.

### 2.2 Intended use

The storage tank must only be filled with heating water and must only be used in sealed heating systems which are designed for use with heat pumps. Any other use is an infringement of use for intended purpose. Any damage that may result is excluded from liability.

**Not for use as a method of potable hot water (Domestic Hot Water) storage.**

#### Scope of delivery

The packaged storage tank includes:

Drain valve (factory fitted).



The sensor pocket is for the installation of the heat pump temperature sensor.

- Sensor pocket (for flow temperature sensor) and air vent.
- Sensor pocket (for return temperature sensor GT1)
- bolts.
- Plastic cover cap.

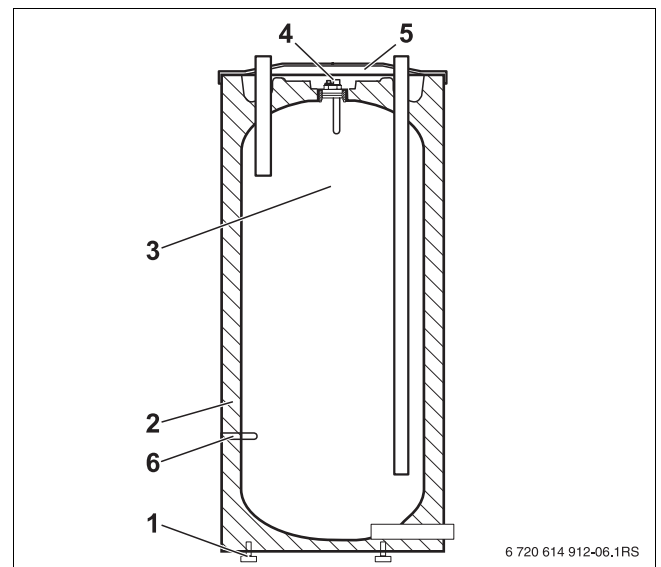


Fig. 1 Primary water storage tank

- 1** bolts (x3)
- 2** insulation
- 3** storage tank
- 4** sensor pocket (for flow temperature sensor) and air vent
- 5** cover cap
- 6** sensor pocket (for return temperature sensor GT1)

### 2.3 Dimensions and connections

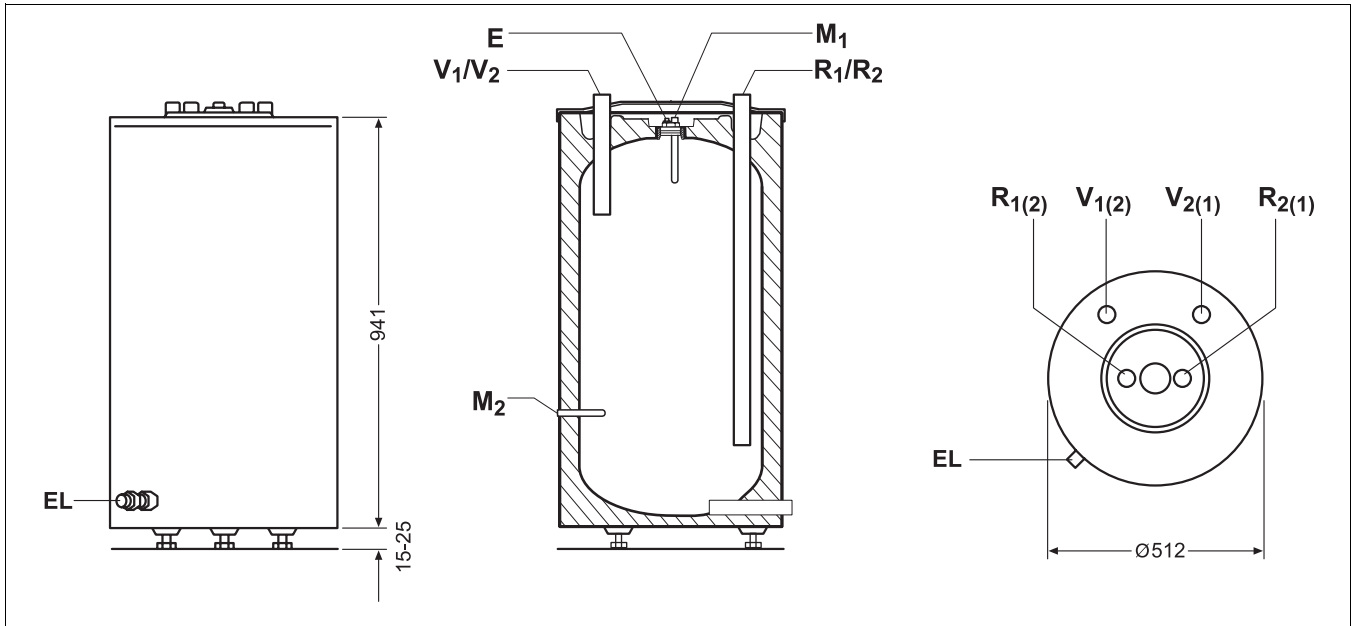


Fig. 2 Dimensions and connections (dimensions in mm)

- V<sub>1</sub>** flow (heat pump)
- V<sub>2</sub>** flow (heating)
- R<sub>1</sub>** return (heat pump)
- R<sub>2</sub>** return (heating)
- M<sub>1</sub>** measuring point for flow temperature sensor
- M<sub>2</sub>** measuring point for return temperature sensor (GT1) -  
from heat pump
- EL** drain valve
- E** air vent

### 2.4 Technical data

Storage tank		P120 W	
storage volume (heating water)	l	120	
flow V <sub>1</sub> , V <sub>2</sub>	DN	R ¾	
return R <sub>1</sub> , R <sub>2</sub>	DN	R ¾	
measuring point M <sub>1</sub> , M <sub>2</sub>	Ø	mm	10
air vent		Rp 3/8	
maximum heating water temperature	°C	90	
maximum heating water working pressure	bar	3	
<b>Additional data:</b>			
weight (empty)	kg	60	
weight (full)	kg	180	

Tab. 2

## 3 Installation

### 3.1 Regulations

This appliance must be installed and serviced only by a competent person in accordance with the current:

IEE Regulations, Building Regulations,  
Building Standards (Scotland) (Consolidation),  
Building Regulations (Northern Ireland),  
local water by-laws,  
Health and Safety Document 63S (the Electricity at  
Work Regulations 1989,  
IS813 (Eire)

and other local requirements

Where no specific instruction is given, reference  
should be made to the relevant codes of Practice.

BS7074:1 : Code of practice for domestic and hot  
water supply

EN:12828 : Central heating for domestic premises

### 3.2 Disposal

- Dispose of the storage tank packaging in an environmentally sound method.
- Dispose of the storage tank in an environmentally sound method at an appropriate disposal facility.

## 4 Transport

### 4.1 Means of transport



**Danger:** Risk of injury from carrying heavy weights!

- Do not try to lift or carry the storage tank alone.



**Caution:** Damage from inappropriate protection during transport!

- For transport, use appropriate means, e. g. a sack truck or pump truck with a tension belt.

- Protect the storage tank against tilting and transport to its installation location standing upright and in its packaging.
- Do not remove the storage tank packaging before it is in the installation location.

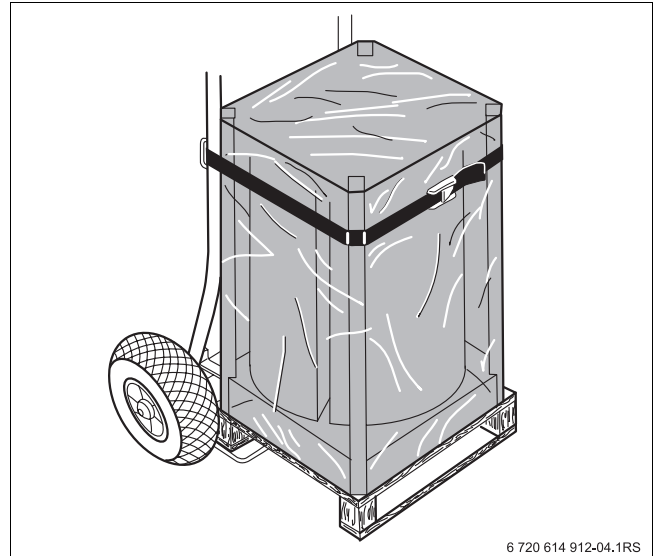


Fig. 3 Transport of the hot water storage tank by suitable means

### 4.2 Installation location



**Caution:** Protect from freezing!

- Place storage tank in a frost-proof room.
- Ensure the tank is frost protected.



**Caution:** Damage from corrosion!

- Use the storage tank in sealed systems only.

- Observe minimum clearances.
- Place storage tank on an even and load-bearing ground.
- In damp rooms: put storage tank on a platform.
- Recommend minimum clearance of 25mm around the tank.
- Ensure you have adequate access to the drain valve.

## 5 Fitting

### 5.1 Fitting the bolts

- Place the polystyrene packaging [1] on the floor.
- Lay the storage tank [2] on the polystyrene with care.
- Fit the M10 x 30mm bolts [3] accordingly into the bottom of the storage tank.
- Adjust the bolts to level the tank.

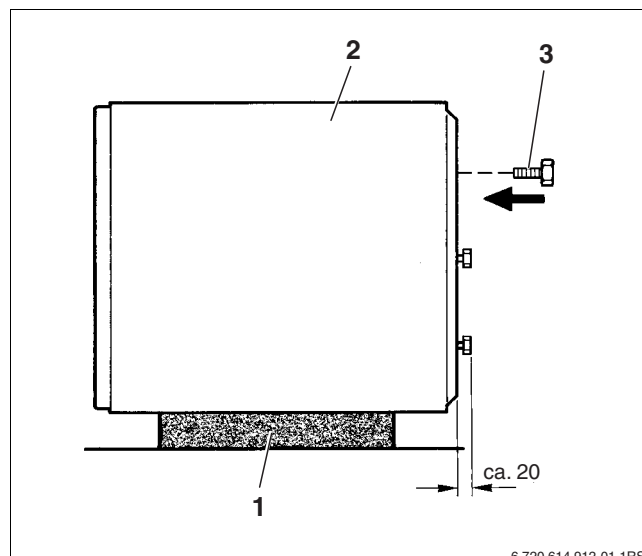


Fig. 4 Fitting the foot screws

- 1 polystyrene packaging, top
- 2 storage tank
- 3 bolts (x3)

### 5.2 Fitting the temperature sensor

- Using the guide wire on the guide plate [ slide the clamp spring and the temperature sensor together into the sensor pocket.



Ensure that the sensor area has contact with the sensor pocket area for its full length.

Sensor positions:

- **M1** = Measuring point for flow temperature sensor top
- **M2** = Measuring point for return temperature sensor (GT1) bottom (→ Fig. 2, page 5)



For information on this refer to the documentation of your heat pump or of the control unit.

- Lay the sensor lead through the top opening to the control unit with care.
- Carefully route the sensor cable to the heat pump

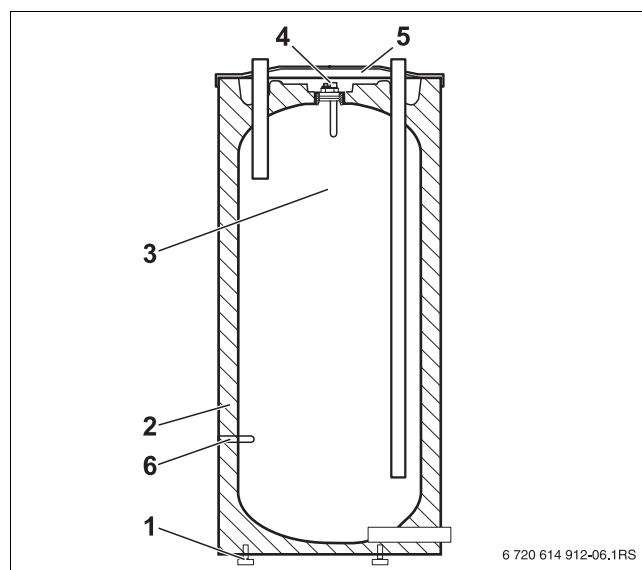


Fig. 5 Primary water storage tank

- 1 bolts (x3)
- 2 insulation
- 3 storage tank
- 4 sensor pocket (for flow temperature sensor and air vent)
- 5 cover cap
- 6 sensor pocket (for return temperature sensor GT1) - M2



### 5.3 Connection of the storage tank to the heat pump and heating system



**Danger:** Risk of fire from soldering and welding!

- Take suitable safety measures when soldering and welding.

- When sizing the heating system expansion vessel, take the storage tank volume into consideration.



**Caution:** Risk of damage to non heat-resistant installation materials (e. g. plastic piping)!

- Use installation material which is heat resistant to  $\geq 80\text{ }^{\circ}\text{C}$ .

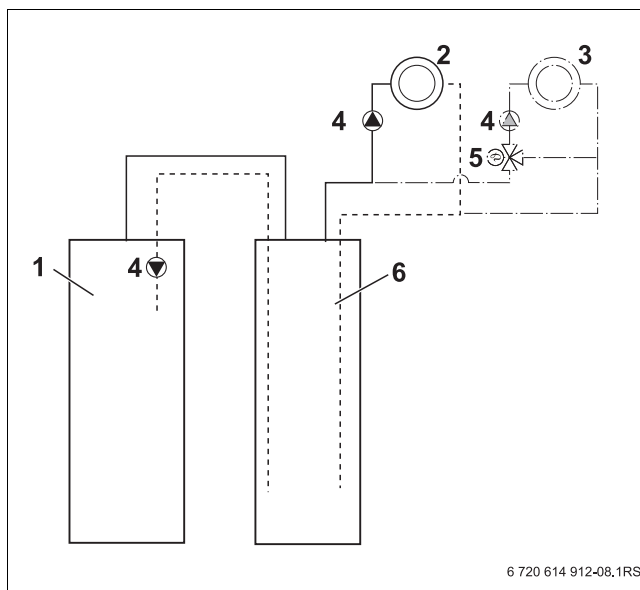


Fig. 6 functional schematic: connection of the storage tank to the heat pump

- 1 heat pump
- 2 heating system
- 3 additional heating system (in case of expansion)
- 4 pump  
(An additional external circulation pump, for each heating system, may be needed. This will be fitted to the flow outlet from the tank to the heating system as shown above)
- 5 3-way-valve
- 6 storage tank

- Ensure pipework is adequately supported
- Ensure that the correct connections are made to the storage tank.
- When filling the storage tank, manually release the air via the air vent (→ Fig. 2, [E], page 5) on the top side of the storage tank.
- Check all connections for tightness.

## 6 Initial operation

### 6.1 Customer handover

The installer explains to the customer (user) the mode of operation and the handling of the heating appliance and the storage tank.

- Make the user aware of the mode of operation.
- Hand all enclosed documents over to the user.

### 6.2 Start of operation

Start of operation has to be done by the installer of the heating system or by a technical expert.

- Start the operation of the heat pump in accordance to the manufacturers information, installation or instruction manuals.

## 7 Decommissioning the system

### 7.1 Decommission the system when there is a risk of frost

- Decommission the heating system in accordance with the heat pump (or other accessories) instruction manual.

### 7.2 Environmental protection

Environmental protection is a key company commitment for the Bosch Group.

Quality of performance, efficiency and environmental protection are our long term objectives. Legal and corporate guidelines are strictly adhered to.

To protect the environment we utilize the most efficient processes, technology and materials

#### Packaging

We are dedicated in adhering to country specific disposal standards as they relate to packaging to ensure optimum recycling. All packaging materials are environmentally friendly and can be recycled..

#### Obsolete equipment

Obsolete products contain raw materials that can be recycled.

The components are easily separated and are clearly marked. In this manner the individual components are easily sorted and added into the recycling and disposal systems.

## 8 Servicing

### 8.1 Service and commissioning

Apart from occasional visual inspection, storage tanks do not require any particular servicing or cleaning.

- Use original spare parts only!

#### Emptying



**Warning:** Risk of scalding!

Hot water can lead to major scalding

- Allow the storage tank time to cool down after decommissioning.
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- If required, empty the storage tank via the drain valve at the bottom of the tank, see fig. 2, page 5.

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## Notes

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## Notes



## CONTACT INFORMATION

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## Dedicated to heating comfort

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