

REMKO TANK SYSTEMS

*Storage tank for hot/cold water
KPS 300*

Operation · Technology



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**Read these operating instructions carefully
before commissioning / using the device!**

**These instructions are an integral part of the unit and must
always be kept in the vicinity of the installation location or
on the unit itself.**



*Subject to modifications; no liability accepted for errors or
misprints!*



Made by REMKO

REMKO KPS 300

Safety notes

Carefully read the operating manual before placing the unit in service for the first time. It contains useful tips  and notes  such as hazard warnings to prevent injury and material damage. Failure to follow the directions in this manual can result in endangerment to persons, the environment and the equipment itself and will void any claims for liability.

- Keep this manual in the vicinity of the units.
- The units and components should be set up and installed only by qualified personnel.
- The set-up, connection, and operation of the unit and its components must take place in accordance with the operating conditions stipulated in this manual and comply with all applicable local regulations.
- Modification of units and components supplied by REMKO is not permitted and can cause malfunctions.
- Units and components may not be operated in areas where there is an increased risk of damage. Observe the minimum clearances.
- The electrical supply is to be adapted to the requirements of the units.
- The operational safety of units and components is only assured if they are fully assembled and used as intended. Safety devices may not be modified or bypassed.
- Do not operate units or components with obvious defects or signs of damage.
- The units and components must be kept an adequate distance from flammable, explosive, combustible, abrasive and dirty areas or atmospheres.
- Installation, repair and maintenance work may be carried out only by authorised specialists. Visual inspections and cleaning can be performed by the operator as long as power is disconnected from the equipment.
- To preclude any danger from the unit, take appropriate hazard-prevention measures when performing installation, repair or maintenance work or cleaning the units.

Environmental protection and recycling

Disposing of packaging

All products are packed for transport in environmentally friendly materials. You can make a valuable contribution to reducing waste and sustaining raw materials by only disposing of packaging at approved collection points.



Disposal of components

The manufacturing process for the units is subject to continuous quality control. Only high-grade materials are processed, the majority of which are recyclable. You can also contribute to environmental protection by only disposing of components in accordance with local regulations and in an environmentally safe manner, e.g. through authorised disposal and recycling specialists or at collection points.

Warranty

The warranty conditions are listed in the "General terms and conditions". Please contact your contractual partner in the first instance.

Intended use

The storage tanks are employed for the storage of hot water in all types of warm water central heating systems (solid fuel/oil-fired boilers, heat pumps, solar energy systems, gas/electric instantaneous water heaters) within enclosed spaces and for the storage of cold water for cooling processes or heat recovery purposes.

Any different or additional use shall be classed as non-intended use.

The manufacturer/supplier assumes no liability for damages arising from such use. The user bears the sole risk in such cases.

Intended use also includes working in accordance with the operating manual and installation instructions and complying with the maintenance requirements.

Operation

Manual operation is not necessary.

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Description

The storage tanks are employed for the storage of hot water in all types of warm water central heating systems (solid fuel/oil-fired boilers, heat pumps, solar energy systems, gas/electric instantaneous water heaters) within enclosed spaces and for the storage of cold water for cooling processes or heat recovery purposes.

The tank volume can be adapted to your particular needs by connecting several storage tanks to form batteries. The storage tanks may be used universally, either as parallel storage (hydraulic switch) or series storage.

The insulation of the storage tank is comprised of 50 mm directly applied, CFC-free, fine-pore PU foam. The external cladding applied at the factory is comprised of a powder-coated steel sheet cladding in the colour: silvery-grey; the insulation of the KPS 300 is water vapour diffusion-tight.

All storage tanks are manufactured from quality steel in accordance with DIN EN 10025/10111. An electric booster heater (immersion heater) can be fitted into each storage tank in a 6/4" socket. For retrofitting a fin-tube heat exchanger, a D180 (f=180mm) blank flange cover is included. The storage tanks have 4 connection ports 5/4" AG. A sensor channel enables variable positioning of a temperature sensor.

Decommissioning

Temporary shutdown

1. Disconnect the electrical connection at all poles.
2. Drain the tank in areas where it is at risk from frost and before the onset of winter.
3. Then also drain all cold water pipes or hot water carrying lines leading to the heating elements and to the heater/cooler as well as all water-carrying fittings and lines (including heating circuit = register) back as far as the frost-proof section of the domestic water system (domestic water connection).

Permanent decommissioning

Ensure that equipment and components are disposed of in accordance with local regulations, e.g. through authorised disposal and recycling specialists or at collection points. REMKO GmbH & Co. KG or your contractual partner will be pleased to provide a list of certified firms near you.



ATTENTION

When emptying the tank, hot water may escape!



ATTENTION

When placing the tank back into service, ensure that it is filled with water and that water which is free of bubbles is escaping from the valves!

Care and maintenance

Care

- Only clean the units with a damp cloth (adding, for instance, a liquid household cleaner. Do not use any harsh, scouring or solvent-based cleaners.)

Maintenance

- We recommend concluding a maintenance contract with a specialist firm, which includes annual maintenance services.



NOTE

This ensures the operational reliability of your equipment!

- Regularly check the function of the safety valve.

The expansion water amount at maximum heat (approx. 80°C) represents approx. 3.5% of the tank capacity. When the safety valve test knob is lifted or turned to the "Test" position, the water must flow unhindered out of the safety valve body into the drainage funnel.



ATTENTION

This can cause the cold water supply and parts of the storage tank connection fitting to become hot!

If the tank is not heated or when warm water is removed, no water should be dripping from the safety valve. If this does occur, either the pressure in the water pipe is greater than the permitted value, or the safety valve is defective. If the pressure in the water pipe is higher than permitted, a pressure relief valve must be used.

Installation instructions for qualified personnel

General instructions prior to installation

- Ensure that the area in which the unit is to be operated is free of frost and easily accessible for required maintenance, repairs and even for the possible replacement of the unit (e.g. avoid overly narrow thoroughfares and doorways).
- When installing the storage tank in unusual locations, such as in lofts, residential units with floors that are sensitive to water, storerooms, etc. take account of the possibility of leaking water, and ensure that a facility is in place to catch the water, including appropriate drainage methods.
- The unit may only be positioned and operated on level surfaces.

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- The unit may only be positioned and operated on level surfaces.
- When planning the unit's installation surface and selecting the installation location, note the total weight of the storage tank, including the weight of the water (the nominal capacity), in order to ensure that the statics of the load-bearing surface are not exceeded.
- Ensure proper clearance from firing systems.
- Make sure that units with enclosures, which are installed in small, tight spaces or in suspended ceilings have the connection block (water and electric connections and heater installation) still freely accessible and that there is no buildup of heat.
- Leave at least 500mm of space free for the removal of the cleaning/heating flange.



ATTENTION

The storage tank is not suitable for preparing drinking water!

Central heating connection

Before being placed into service, the heat distribution must be rinsed out in order to remove any soiling (e.g. scale) from the heating circuit.

Installation

- Check the contents of the packaging for completeness and check the unit for visible transport damage. Immediately notify your contractual partner of any deficiencies.
- The unit must be assembled on site.
- For all connection ports, ensure that the thread is fully engaged.

Installation

General Information

- Do not continually top up the water level in the storage tank. This will prevent corrosion damage to the tank.
- If aggressive water is an issue, please note that special models of the tank can be tested (address all queries to your contractual partner)

- In hard water areas, connect a standard descaling device upstream of the tank.



NOTE

Installation may only be performed by authorised specialists. Preparation of the hot water must be in compliance with the applicable standards.

Electric booster heater

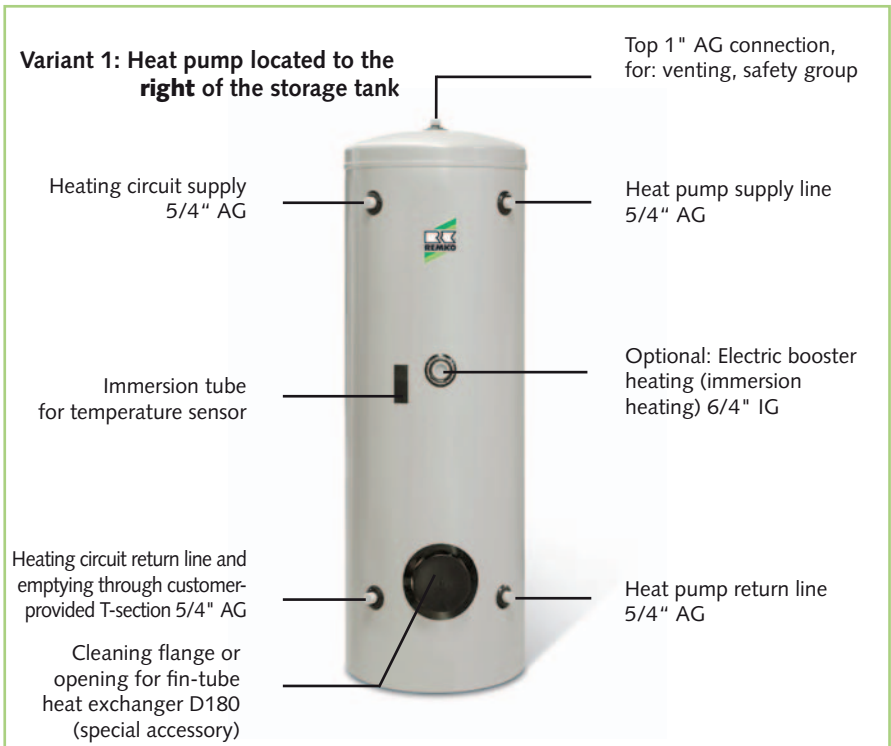
- Use the 6/4" socket to install an electric booster heater (immersion heater)
- Please note that the electric booster heater must not be used as a permanent heating system.



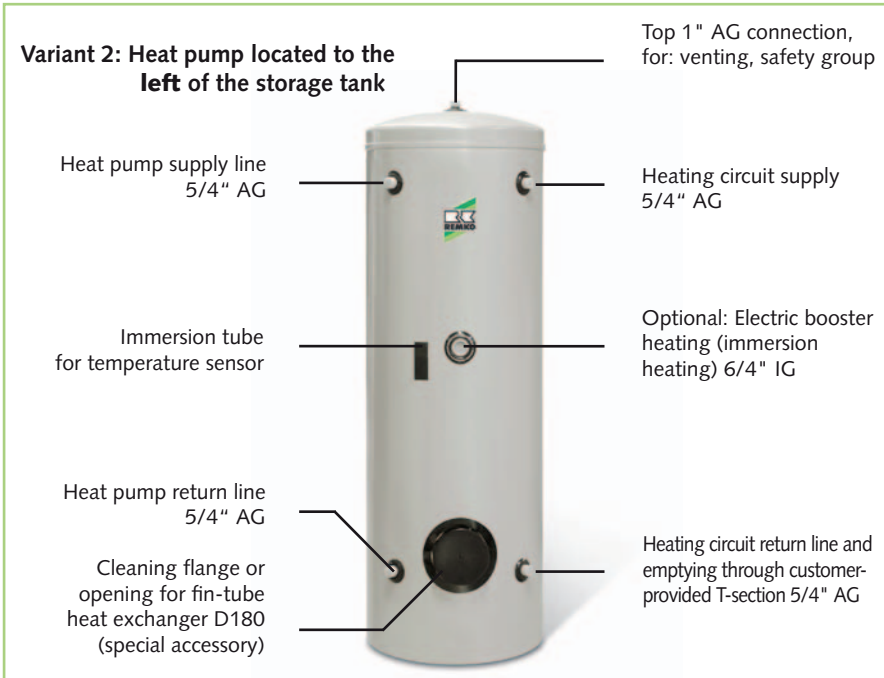
NOTE

Installation may only be performed by authorised specialists.

Assignment of the connection ports



REMKO KPS 300



Commissioning



NOTE

Commissioning should only be performed and documented by specially trained personnel.

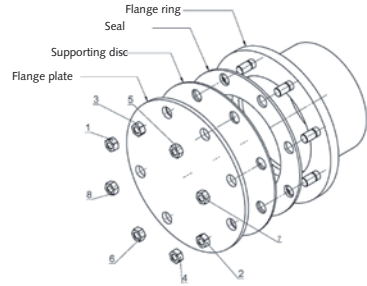
1. Check all connections, even those which were sealed at the factory (flange), for leak-tightness.
2. Then check all pipes for any leaks and, if necessary, fix them.
3. Test the safety module and valves for function.
4. During the heating process, all expansion water generated in the tank must be captured by an appropriate expansion vessel.

Flange installation port

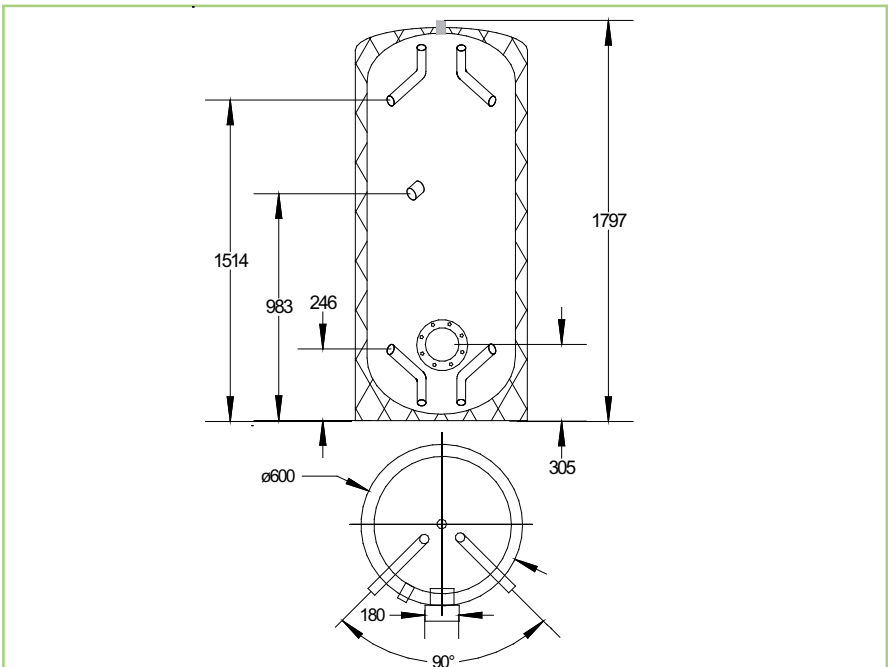
Depending on the design of your system, fin-tube heat exchangers may be attached to the boiler flanges.

- First tighten the nuts by hand.
- Then tighten the nuts, in the sequence specified below, to a torque of 20 Nm to max. 25 Nm.

Fitting the flange installation port



Unit dimensions and technical data



Unit type	Nominal capacity [l]	Operating temperature min/max [°C]	Operating pressure [bar]	Tilt height [mm]	Weight [kg]	Energy consumption in standby (emission value) according to DIN 44532 [kWh/d]
KPS 300	300	0/95	3	1835	125	2,2

We reserve the right to modify the dimensions and constructional design as part of the ongoing technical development process.

REMKO INTERNATIONAL

*... and also right in your neighbourhood!
Benefit from our experience and advice*



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