gorenje

TGR SUPER SLIM

Dear buyer, thank you for purchasing our product.
Prior to the installation and first use of the electric water heater, please read these instructions carefully.

THIS APPLIANCE IS NOT INTENDED FOR USE BY PERSONS (INCLUDING CHILDREN) WITH REDUCED PHYSICAL, SENSORY OR MENTAL CAPABILITIES, OR LACK OF EXPERIENCE AND KNOWLEDGE, UNLESS THEY HAVE BEEN GIVEN SUPERVISION OR INSTRUCTIONS CONCERNING THE USE OF THE APPLIANCE BY A PERSON RESPONSIBLE FOR THEIR SAFETY.
CHILDREN SHOULD BE SUPERVISED TO ENSURE THAT THEY DO NOT PLAY WITH THE APPLIANCE.

This water heater has been manufactured in compliance with the relevant standards and tested by the relevant authorities as indicated by the Safety Certif cate and the Electromagnetic Compatibility Certif cate. The technical characteristics of the product are listed on the label aff xed between the inlet and outlet pipes. The installation must be carried out by qualif ed staff. All repairs and maintenance work within the water heater, e.g. lime removal or inspection/replacement of the protective anticorrosion anode, must be carried out by an authorised maintenance service provider.

INSTALLATION

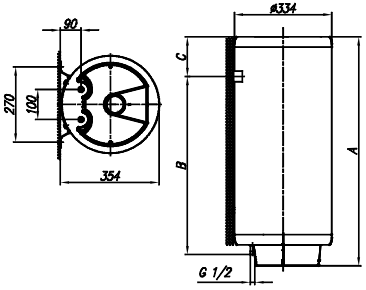
The water heater shall be installed as close as possible to the outlets. When installing the water heater in a room with bathtub or shower, take into account requirements def ned in IEC Standard 60364-7-701 (VDE 0100, Part 701). It has to be f tted to the wall using appropriate rag bolts with minimum diameter of 8 mm. The wall with feeble charging ability must be on the spot where the water heater shall be hanged suitably reinforced. The water heater may be f xed upon the wall only vertically.

TECHNICAL PROPERTIES OF THE APPLIANCE

Type		TGR 30 S	TGR 50 S	TGR 65 S	TGR 80 S
Volume	[l]	30	50	65	80
Rated pressure	[MPa (bar)]	0,6 (6) / 0,9 (9)			
Weight / Filled with water	[kg]	20/50	24/74	27/92	32/112
Anti-corrosion protection of tank		Enameled / Mg Anode			
Connected power	[W]	2000			
Voltage	[V~]	230			
Heating time to 75 °C [1)]	[h]	1 05	1 55	2 30	3 05
Quantity of mixed water at 40 °C	[l]	55	89	124	154
Energy consumption [2)]	[kWh/24h]	1,00	1,45	1,75	1,85

1) Time for heating the whole content of heater if the initial temperature of cold water from water supply is 15 °C.
2) Energy consumption to maintain the temperature of water in the water heater at 65 °C if the surrounding temperature is 20 °C, measured according to EN 60379.

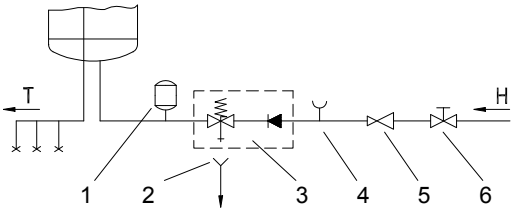
	A	B	C
TGR 30 S	615	410	180
TGR 50 S	915	710	180
TGR 65 S	1135	930	180
TGR 80 S	1310	930	355



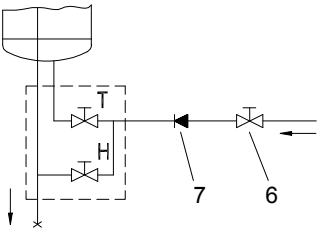
Connection and installation dimensions of the water heater [mm]

CONNECTION TO THE WATER SUPPLY

The water heater connections for the inlet and outlet of water are colour-coded. The inlet of cold water is marked with blue colour, while the hot water outlet is marked with red colour.
The water heater can be connected to the water supply in two ways. The closed-circuit pressure system enables several points of use, while the open-circuit gravity system enables a single point of use only. The mixer taps must also be installed in accordance with the selected installation mode.
The open-circuit gravity system requires the installation of a non-return valve in order to prevent the water from draining out of the tank in the event of the water supply running dry or being shut down. This installation mode requires the use of a cross-flow mixer tap. As the heating of water expands its volume, this causes the tap to drip. The dripping cannot be stopped by tightening it further; on the contrary, the tightening can only damage the tap.
The closed-circuit pressure system requires the use of pressure mixer taps. For safety reasons the supply pipe must be fitted with a safety valve or alternatively, a valve of the safety class that prevents the pressure in the tank from exceeding the nominal pressure by more than 0.1 MPa (1 bar). The outlet opening on the relief valve must be equipped with an outlet for atmospheric pressure.
The heating of water in the heater causes the pressure in the tank to increase to the level set by the safety valve. As the water cannot return to the water supply system, this can result in dripping from the outlet of the safety valve. The drip can be piped to the drain by installing a catching unit just below the safety valve. The drain installed below the safety valve outlet must be piped down vertically and placed in an environment that is free from the onset of freezing conditions.
In case the existing plumbing does not enable you to pipe the dripping water from the safety valve into the drain, you can avoid the dripping by installing a 3-litre expansion tank on the inlet water pipe of the boiler.
In order to provide correct operation of the safety valve, periodical inspections of the relief valve must be carried out by the user to eliminate any limescale and check if the safety valve is blocked. To check the valve, open the outlet of the safety valve by turning the handle or unscrewing the nut of the valve (depending on the type of the valve). The valve is operating properly if the water comes out of the nozzle when the outlet is open.



Closed (pressure) system



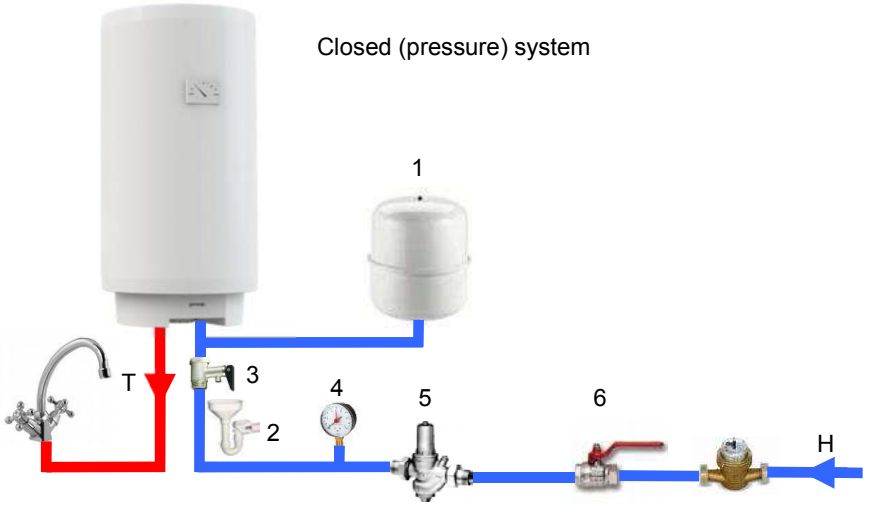
Open (non-pressure) system

Legend:

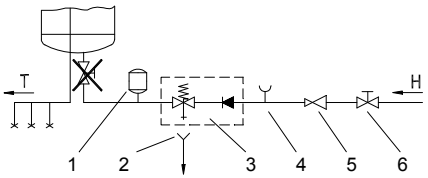
1 - Expansion tank
2 - Funnel with outlet connection
3 - Safety valve
4 - Checking f tting
5 - Pressure reduction valve
6 - Closing valve
7 - Non-return valve

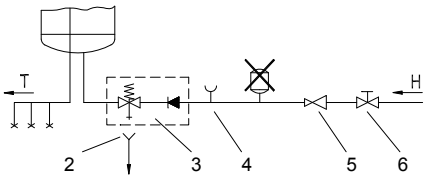
H - Cold water
T - Hot water

Closed (pressure) system



Between the water heater and safety valve, no closing valve may be built in because it could impede the function of the safety valve.





The heater can be connected to the domestic water supply network without a pressure-reducing valve if the pressure in the network is lower than the nominal pressure. If the pressure in the network exceeds the nominal pressure, a pressure-reducing valve must be installed.

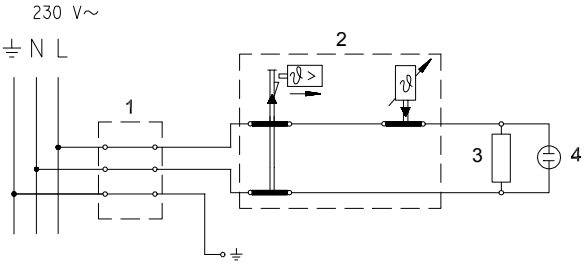
Before connecting it to the power supply, the water heater must be filled with water. When filling the heater for the first time, the tap for the hot water on the mixing tap must be opened. When the heater is filled with water, the water starts to run through the outlet pipe of the mixing tap.

CONNECTION OF THE WATER HEATER TO THE ELECTRIC NETWORK

Before connecting to power supply network, install a power supply cord in the water heater, with a min. diameter of 1,5 mm^2 (H05VV-F 3G 1,5 mm^2). For it the protection plate must be removed from the water heater. The connection of water heater to the electric network must be performed according to standards for electric installation. Install a disconnect switch (separating all poles from the power supply network) between the water heater and the permanent power connection, in compliance with the national regulations.

Legend:
1 - Connection terminal
2 - Thermostat and bipolar thermal cut-out
3 - Electric heater
4 - Pilot lamp

L - Live conductor
N - Neutral conductor
⏚ - Earthing conductor



Electric installation

CAUTION: Prior to each reach in the inner of the water heater it must absolutely be disconnected from the electric network!

USE AND MAINTENANCE

The water heater is ready for use once it has been connected to water and power. By turning the thermostat knob, water temperature can be set between 25 °C and 75 °C. We recommend that the knob be set to the position "eco" ensuring the most economic operation of the water heater. This way, the water temperature is maintained at 55 °C while the operation also results in less lime sediment as well as in less heat losses than is the case at higher temperatures. During the operation of an electric heater can hear noise in the wather heater. The light indicator shows the operation of the heating element. On the casing of the water heater a bimetal thermometer is mounted, pointing clockwise (to the right) whenever there is hot water in the water heater. When the water heater is not in use for longer periods of time, it should be protected from freezing by setting the temperature to "*". Do not disconnect the power. Thus the temperature of water is maintained at about 10 °C. Should you choose to disconnect the power, the water heater should be thoroughly drained before the onset of freezing conditions. Water is discharged from heater via the inlet pipe. For this purpose, a special fitting (T-fitting) must be mounted between the relief valve and the heater inlet pipe, or a discharge tap. The heater can be discharged directly through the relief valve, by rotating the handle or the rotating valve cap to the same position as for checking the operation. **Before discharge, make sure the heater is disconnected from the power supply, and open the hot water on the connected mixer tap.** After discharging through the inlet pipe, there is still some water left in the water

heater. The remaining water will be discharged after removing the heating flange, through the heating flange opening.
The external parts of the water heater can be cleaned with a mild detergent solution. Do not use solvents and abrasives.
Regular preventive maintenance inspections ensure faultless performance and long life of your heater. The first of these inspections should be carried out by the authorised maintenance service provider about two years from installation in order to inspect the wear of the protective anticorrosion anode and remove the lime coating and sediment as required. The lime coating and sediment on the walls of the tank and on the heating element is a result of quality, quantity and temperature of water flowing through the water heater. The maintenance service provider shall also issue a condition report and recommend the approximate date of the next inspection.

Never try to repair any possible faults of the water heater by yourself, but inform about it the nearest authorised service workshop.

08/2012
381805