gorenje

GBFU 50-150E/V6

Dear buyer, we thank you for purchase of our product.

Prior to installation and first use of the electric water heater, please carefully read these instructions.
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 INSTRUCTION CONCERNING USE OF THE APPLIANCE BY PERSON RESPONSIBLE FOR THEIR SAFETY.

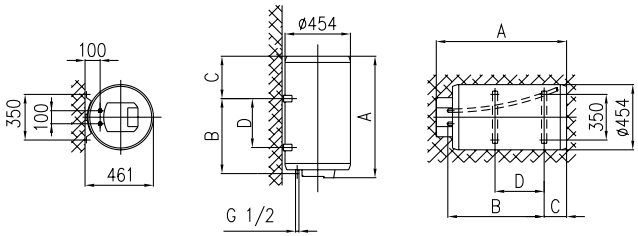
CHILDREN SHOULD BE SUPERVISED TO ENSURE THAT THEY DO NOT PLAY WITH THE APPLIANCE.

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

BUILDING-IN

The water heater shall be built-in as close as possible to the outlets. When installing the water heater in a room with bathtub or shower, take into account requirements defined in IEC Standard 60364-7-701 (VDE 0100, Part 701). It has to be fitted 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. Due to universal construction of the water heater it can be fixed vertically on the wall or horizontally on the wall (output pipes must be on the left).

	GBFU 50 E/V6	GBFU 80 E/V6	GBFU 100 E/V6	GBFU 120 E/V6	GBFU 150 E/V6
A	596	816	961	1116	1331
B	365	565	715	865	1065
C	185	205	200	205	220
D	145	345	495	645	845



Connection and installation dimensions of the water heater [mm]

TECHNICAL PROPERTIES OF THE APPLIANCE

Type	GBF 50	GBF 80	GBF 100	GBF 120	GBF 150
Model	GBFU 50 E/ V6	GBFU 80 E/ V6	GBFU 100 E/V6	GBFU 120 E/V6	GBFU E150 E/V6
Volume [l]	50	80	100	120	150
Rated pressure [MPa]	0,6				
Weight / Filled with water [kg]	24/74	30/110	34/134	38/158	44/194
Anti-corrosion of tank	Enamelled / Mg anode				
Connected power [W]	2000				
Number and power of heating elements [W]	2 x 1000				
Voltage [V~]	230				
Protection class	I				
Degree of protection	IP 25				
Heating time to 75 °C [1] [h]	1^{55}	3^{05}	3^{55}	4^{35}	5^{45}
Quantity of mixed at 40°C [l]	96/80	151/130	199/174	238/210	296/260
Energy consumption [2] [kWh/24h]	1,32/1,45	1,85/2,10	2,20/2,45	2,60/2,90	3,20/3,60

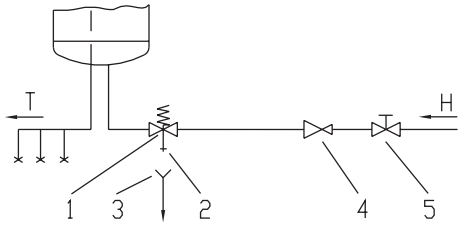
1) Time for heating of the whole volume of heater with electric immersion heater by entering temperature of cold water from water supply 15°C.
2) Energy consumption to maintain stable temperature of water in the water heater 65°C at surrounding temperature 20°C, measured according to EN 60379.

CONNECTION TO THE WATER SUPPLY

The water heater connections for the in-flowing and out-flowing water are colour-coded. The connection for the supply of cold water is coloured blue, while the hot water outlet is coloured red.
The water heater may 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 purchased 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 an instantaneous 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 return 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. 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 the 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 located in the 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 return 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 relief valve, periodical inspections of the relief valve must be carried out by the user. To check the valve, you should open the outlet of the return 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.

Legend:
1 - Safety valve
2 - Test valve
3 - Funnel with outlet connection
4 - Pressure reduction valve
5 - Closing valve
H - Cold water
T - Hot water



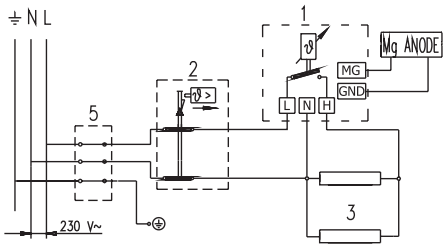
Between the water heater and return safety valve no closing valve may be built-in because with it the function of return safety valve would be impeded.

The water heater may be connected to the water network in the house without reduction valve if the pressure in the network is lower than 0.5 MPa (5 bar). If the pressure exceeds 0.5 MPa (5 bar), a reduction valve must be installed. Prior to the electric connection the water heater must obligatorily be filled with water. By first filling the tap for the hot water upon 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 - Electronic thermostat
2 – Bipolar thermal fuse
3 – Heating element 1000W
5 – Connection terminal

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!

MAINTENANCE

The external parts of the water heater may 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 authorized 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 product 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.

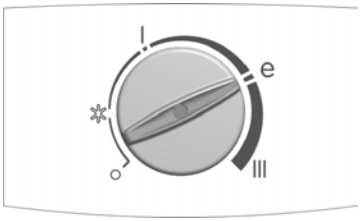
Never try to repair any possible faults of the water heater by yourself, but inform about it the nearest authorized service provider.

OPERATION AND MAINTENANCE

After connecting to water and power supply, the heater is ready for use.
By turning rotating knob on the control panel, water temperature can be set between 10ºC and 75ºC.
We recommend setting to economic mode of operation – control knob to position . This is cost effective mode of operation, water temperature is maintained at 55ºC, lime deposits and heat loses are minimal compared to higher temperature settings.

OPERATION CONTROL

On the control panel is rotating knob used for switching on the heater and for temperature setting. Also there is a signal lamp for indicating the operating mode.



Control panel

The rotating knob on the control panel may be set to various positions:

Knob position	Setting
O	Appliance switched off
❄	Protection against freezing, temperature regulation set to 10ºC
I	Setting and regulation of temperature to 35ºC
e	Optimum setting, temperature regulation set to 55ºC
III	Maximum setting, temperature regulation set to 75ºC

The signal lamp indicates the status of the heating element and anti-corrosion Magnesium anode (Mg anode). The anti-corrosion protection may fail due to worn out of Mg anode or bad connection to Mg anode.

Signal lamp status	Indication
Green	Heating element switched on, Mg anode active
Orange	Heating element switched on, Mg anode not active
Red	Heating element switched off, Mg anode not active
Lamp off	Heating element switched off, Mg anode active
Red - flashing	Heating element not operating, sensor disconnected

Warning! *When the water heater is out of use for longer period of time, the signal lamp may indicate that the Mg anode is worn out in spite of the fact that the Mg anode is still active. In this case open the hot water tap (fresh water flow into water heater). If the signal lamp switches off, the water heater operation is not impaired. If not, call the nearest authorized service provider.*

Temperature indication:
Bimetal thermometer is installed on the water heater housing. When the water in the water heater is heated, the thermometer pointer rotates clockwise.

Freezing protection:
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.
Discharging water from the water heater:
Water is discharged from heater via the inlet pipe. To 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 same position as for checking the operation. Before discharge, make sure the heater is disconnected from the power supply, 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

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