



INDIRECT HEATED D.H.W. STORAGE TANKS
ATTACK Z100 PLUS



INSTRUCTIONS FOR USE



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1 PRODUCT ACCESSORIES:



WARNING: The safety valve G 3/4" is enclosed in the product. Ensure completeness of accessories in your own interest.

2 USE OF

The stationary container is used to prepare DHW in conjunction with another source of heating water, most often with a gas boiler. Its nominal output guarantees a sufficient amount of DHW even for large residential units, operations, restaurants and similar facilities.

With increased DHW collection, the tank keeps the water running continuously and works similarly to the flow heater.

3 ADVANTAGES OF USING THE STATIONARY TANK:

- Easy to install and connect to the heating water source
- Very fast hot water heating
- The enameled steel container ensures hygienic quality requirements for DHW
- Built-in magnesium anode increases resistance to corrosion
- High-quality polyurethane insulation ensures minimal heat loss
- Smoothly adjustable DHW temperature up to 80 °C
- Connect multiple outlets
- Lighting for heater operation
- Accurate DHW temperature control
- Possibility to connect DHW circulation

4 TECHNICAL DATA

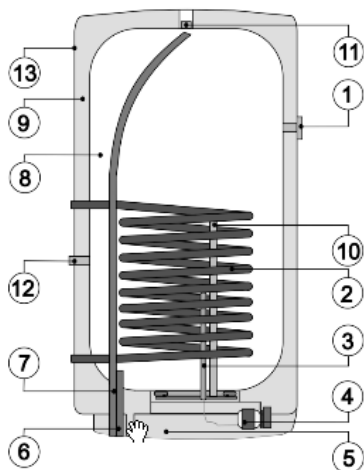
Parameter	Unit	Z100 Plus
Volume	l	87
Weight	kg	53
Exchanger area	m ²	1,08
Maximum DHW overpressure	MPa	0,6
Maximum tank pressure	MPa	1
DHW connection	Js	3/4"
Connection of heating water	Js	3/4"
Setting range	°C	Do 90
Recommended DHW temperature	°C	60
Electrical coverage	–	IP 42
Connection voltage	V/Hz	~230/50
Rated thermal output at a water temperature of 80 °C and a flow rate of 720 l / h	W	24000
Heating time from 10 °C to 60 °C	min	13
Static loss	W	42

5 POSITION AND TYPE OF ENVIRONMENT:

The container is placed on the ground next to or close to the heating water source.

All connecting wiring is best insulated. The product is recommended to be used indoors with an air temperature of +2 °C to +45 °C and a relative humidity of max. 80%.

6 TECHNICAL DESCRIPTION

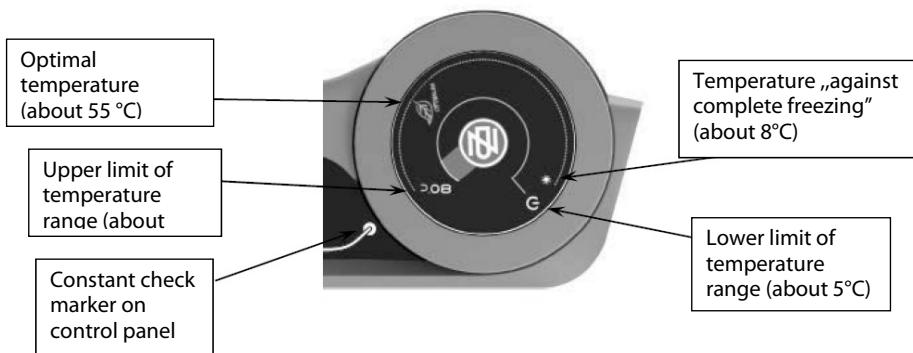
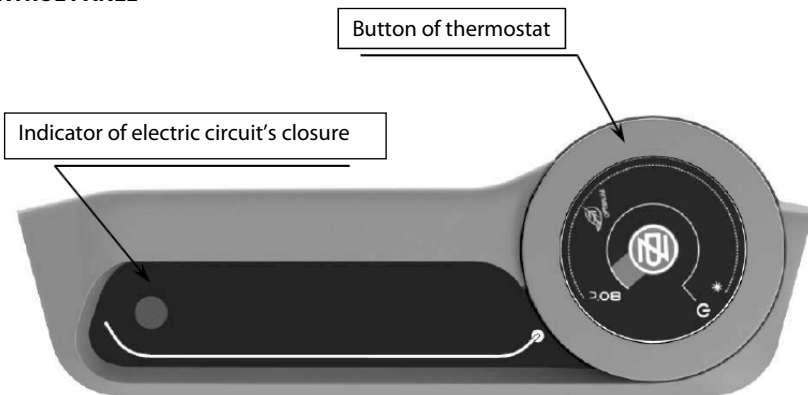


- 1 Indikátor teploty
- 2 Špirálový výmenník tepla
- 3 Jímka prevádzkového termostatu
- 4 Prevádzkový termostat s vonkajším ovládaním
- 5 Kryt elektroinštalácie
- 6 Napúšťací rúrka studenej vody
- 7 Vypúšťací rúrka teplej vody
- 8 Oceľová smaltovaná nádoba
- 9 Polyuretánová bezfreonová izolácia 42 mm
- 10 Horčíková anóda
- 11 Ďalší výstup teplej vody
- 12 Cirkulácia
- 13 Plášť ohrievača

- 1 Temperature indicator
- 2 Spiral heat exchanger
- 3 Protecting tube of operating thermostat
- 4 Operating thermostat with external control
- 5 Wiring cover
- 6 Fill tube of cold water
- 7 Discharge tube of hot water
- 8 Enameled steel tank
- 9 Polyurethane CFC-free isolation 42 mm
- 10 Magnesium anode
- 11 Another outlet of hot water
- 12 Circulation
- 13 Coat of the heater

The reservoir tank is welded from steel sheet, surface-treated with a paint that resists warm water. As an additional corrosion protection, a magnesium anode is mounted in the flange of the container, which adjusts the electrical potential of the vessel interior and reduces the risk of its rusting. The vessel is welded spiral exchanger made of enameled steel pipe, hot and cold water outlets, circular opening. At the top of the container there is a flange with housing for thermostat sensors, thermometer and anode holder. Isolation of the container forms a 40 mm layer of polyurethane foam, the flange is protected by polystyrene. The sheath of the heater is a steel sheet painted with white powder paint, the coupling parts are surface-treated. The whole heater is mounted on three adjustable screws, with the possibility of equalizing floor unevenness +10 mm. The control wiring is located in a plastic cover in the upper part of the heater. The tank is tested at a pressure of 0.9 MPa, with exchanger pressure of 1.5 MPa.

CONTROL PANEL



7 PRINCIPLE OF ACTIVITY

The heat exchanger is connected to a heating water source (eg a gas hot water boiler) and the DHW is controlled by the thermostat. By appropriate connection with the three-way distributor valve and the pump, the DHW automatically heats and prefers heating. To achieve the required DHW temperature set on the heater thermostat, the heating water temperature must be min. 0 5 ° C higher (recommended higher by 15 ° C). The heater works on the pressure principle. There is constant water pressure in the vessel from the water system, which allows DHW to be taken at any distance from the heater. It is recommended to use a circulatory system for long periods of time.

8 CONNECTING THE DHW HEATING SCHEME

Cold water is connected to an entry marked with a blue circle or "DHW INPUT". The safety valve is mounted in accordance with the enclosed instructions. The dripping water is drained into the drain pipe or a small expansion vessel is fitted between the container and the relief valve to compensate for the increase in the volume of water during heating. The hot water is connected to the outlet indicated by the red ring or the "OUTPUT".

If the DHW distribution is equipped with a circulating circuit, it is connected to the terminal marked "CIRCULATION".

The tank has a drain output. If the pressure in the supply line is higher than 0.63 MPa, the reducer valve must be inserted in front of the safety valve.

Each separately sealed container must be fitted with a cap and a non-return valve in the cold water inlet.

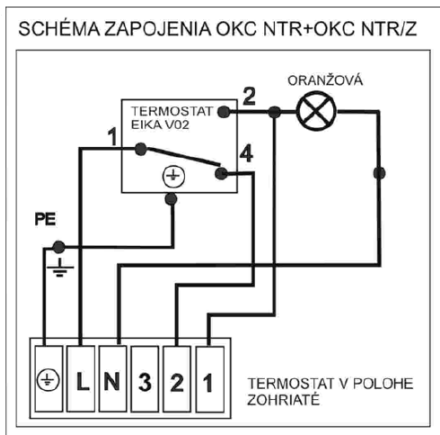


CAUTION: There must be no stop valves between the cylinder and the safety valve!

9 CONNECTING TANK INTO THE HEATER CIRCUIT

The container is placed on the ground near or close to the heating source. Using three adjustable screws, it aligns to a stable position. The heating circuit is connected to the indicated inlet and outlet of the tank exchanger and the vent valve is installed in the highest position. To protect the pumps, the 3-way valve, the non-return valves and the exchanger from the exchanger, it is necessary to install a filter in the circuit. It is recommended to flush the heating circuit before installation. All power supplies must be insulated sufficiently. If the system will operate with DHW preheating using a three-way valve, always follow the installation instructions of the three-way valve manufacturer.

10 ELECTRICAL CONNECTION OF THE HEATER:



Scheme of connection OKC NTR+OKC NTR/Z Thermostatic V02 Orange Thermostat in position "heated"

The tank can be connected to any hot-water boiler up to 50 kW, which is controlled by a space thermostat with 230 V / 50 Hz. The electric heater is powered directly from the boiler by a 230 V / 50 Hz control voltage. A flexible cable CYSY 4Cx0.75 can be used for the connection. The connection terminals are marked on the heater terminal box.

- at voltage 2 on the heated heater
- at voltage 1 for unheated heater



NOTE: When installing in bathrooms, showers and washbasins, it is necessary to proceed according to STN 332135-1: 1991

The control panel has a capillary thermometer for controlling water temperature, a capillary thermostat control for setting the desired water temperature, and two signal lights: green "Tray heats up", orange "Tray heated".

11 PROCEDURE OF FILLING THE TANK WITH WATER

1. Open the shut-off valve at the inlet to the tank.
2. Open the hot water valve on the mixing tank.
3. When the water starts to run through the mixer, the overflow is over and the battery closes.
4. Check tightness of joints.

Water from the heater is considered as utility water.

12 HANDLER OPERATION WITH CONSUMER

Set the DHW temperature setpoint on the tank thermostat. To ensure fast heating, min. a difference of 15 ° C in the boiler thermostat temperature setting and the boiler thermostat (eg 60 ° C heater thermostat and 75 ° C boiler thermostat). Control of DHW temperature is ensured by the tank thermometer. During the summer period, the boiler must be switched to summer operation.

13 MAINTENANCE

Maintaining the tank consists in checking and replacing the anode rod. The magnesium anode modifies the electrical potential inside the container to a value that prevents corrosion of the container vessel. The anode life is theoretically calculated for two years of operation, but varies according to the hardness and chemical composition of the water at the point of use of the container. After two years of operation, it is recommended to carry out a check and an anode bar replacement. Depending on the degree of wear of the anode, another check is determined. It is advisable not to underestimate the importance of this additional protection of the heater vessel.

Procedure for anode bar replacement:

- Drain approximately 1/3 of the volume of water from the tank
Procedure: close the valve on the water inlet to the tank
- Open the hot water valve on the mixing tank
- Open the tank drain valve
- Switch off the control voltage in the charger
- Remove the wiring cover
- Remove the flange cover by unscrewing 8 M10 nuts
- Thanks to the tool to unscrew the anode that is screwed onto the M10 nut
- Re-assemble the assembled parts, the M10 nuts to be crossed
- Fill the tank with water



Replace the anode with a service professional!

14 PRESSURE AND THERMAL WATER TANKS

Type	Flow of heating water (l/h)	Pressure loss (mbar)	kW/24 h
Z100Plus	720	33	0,9



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