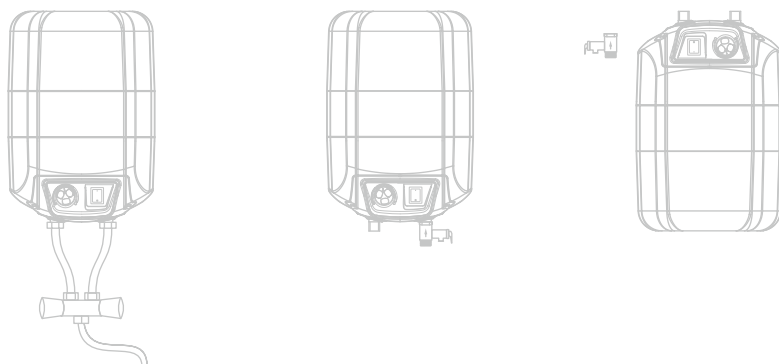
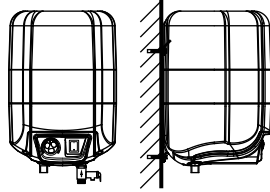


HOUSEHOLD ELECTRIC WATER HEATERS

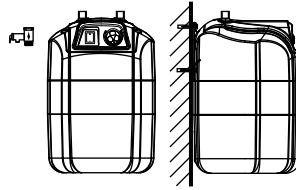
TECHNICAL DESCRIPTION, MANUAL FOR INSTALLATION, OPERATION AND
MAINTENANCE, WARRANTY AND WARRANTY CONDITIONS



1

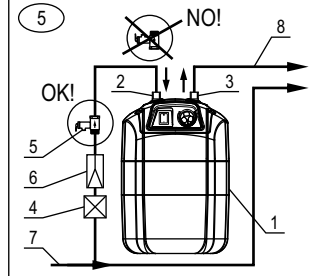
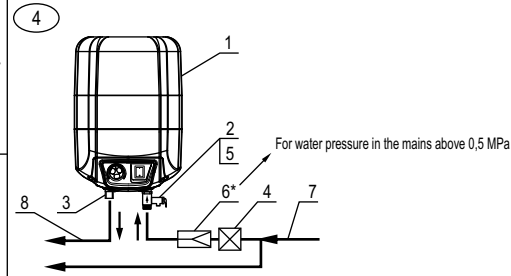
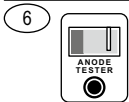
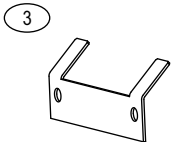


2



Installation	For installation above sink			For installation under sink		
Fig.	1			2		
Operation principle	Under pressure (closed)			Under pressure (closed)		
Model number	72324NMP	72325NMP	72326NMP	72324PMP	72325PMP	72326PMP
Capacity group	7	10	15	7	10	15
Voltage [V]	230 V~					
Power [kW]	1.5	2		1.5	2	
Rated pressure [MPa]	0.7			0.7		
Test pressure [MPa]	1.0			1.0		
Overall dimensions	A [mm]	285	285	285	285	285
	B [mm]	288	288	288	288	288
	H [mm]	340	430	520	340	430

The parameters in the table above are approximate



- 1 Water heater
- 2 Water inlet
- 3 Water outlet
- 4 Stop cock
- 5 Combined valve
- 6* Reducing valve
- 7 Cold water
- 8 Hot water

WARNING! Before installation and operation with the appliance, read carefully the present manual!

KEY REQUIREMENTS FOR SAFETY

Before starting the installation of your appliance and its operation it is compulsory to read carefully the text of the instructions booklet. It is designed to familiarize you with the unit, with the rules for its proper and safe use and the minimum activities necessary to maintain and service it. Furthermore, you will need to provide this

guide for use by qualified persons who will install and repair the unit in case of failure. Installation and commissioning of the unit is not a warranty obligation of the seller and/or manufacturer.

Keep this guide in a suitable place for future reference. Compliance with the rules helps for safety use of the appliance and is one of the warranty terms and conditions.

ATTENTION! Installation of the water heater and connection to the water main system should be performed only by qualified persons in accordance with the instructions in present manual and local regulations in force. Installation of safety and other components provided by the manufacturer is **COMPULSORY!**

ATTENTION! Connection of the water heater to the water main system should be performed only by qualified persons in accordance with the instructions in present manual and local regulations in force. The appliance should be properly connected to the current-carrying wires and the protection grid! Do not connect the appliance to the electrical installation before filling its water tank up with water! Failure to comply shall make the appliance dangerous and in such state its use is strictly forbidden!


WARNING! When using the appliance there is a risk of hot water scalding!

WARNING! Do not touch the appliance and its control panel with wet hands or if you are barefoot or standing on a wet spot!

WARNING! This appliance may be used by children of age over 3 years old and persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, where they are under supervision or instructed about the safe use of the appliance and understand the dangers. Children must not be allowed to play with the unit! It is absolutely forbidden that children undertake cleaning or servicing of this appliance! Children aged from 3 to 8 years are only allowed to operate the tap connected to the water heater.

ENVIRONMENTAL PROTECTION

This appliance is marked according the REGULATION concerning waste electric and electronic equipment (WEEE). By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product.

The symbol  on the product, or on the accompanying

documents indicates that this appliance may not be treated as household waste. Instead it should be handed over to the applicable collection point for the recycling of electrical and electronic equipment. Disposal must be carried out in accordance with local environmental regulations for waste disposal. For more detailed information about treatment, recovery and recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

TECHNICAL DESCRIPTION

The water heater is intended for use only for domestic purposes in the household and is used to heat water from common water supply network, which composition and features comply with the specified values in water quality legislation, such as its chlorides composition should be less than 250 mg/l and its electric conductivity should be more than 100 µS/cm, while its pH within the limits of 6,5-8 for the water heaters with enameled water tanks, and electric conductivity less than 200 µS/cm for the water heaters with chrome-nickel steel water tanks.

Water heaters are working with contained therein under pressure water. Water heaters are equipped with combined return valve, which prevents runtime water pressure to exceed exposure limits.

Water heaters are manufactured with corrosion protection of the water container - steel with durable enamel coating and an additional cathodic protection of anodes with special alloy. In production are as well modifications with the anode status indicator - anode tester ("A").

The thermal insulation of the water container is of foamed polyurethane.

Under pressure water heaters for mounting over the sink are shown in Fig. 1, and those to be mounted under the sink - in Fig. 2.

The parameters of basic water heaters with enameled water tank are recorded in the table.

INSTALLATION OF THE WATER HEATER ON THE WALL OF THE PREMISES

The water heater can be installed only in normal fire safeguarded premises and where temperature cannot fall under 0°C. For water heaters under pressure the availability of a siphon on the installation for waste waters or another system of the same purpose is needed, as during normal usage water may leak from the safety valve aperture. At the same time the siphon will facilitate the water tank maintenance, prevention and servicing operations when water needs to be drained out of the water tank.

When choosing a place of installation the dimensions of the device, its security from dripping water, method of attachment and connection to water and electricity installations are taken into account.

WARNING! The water heater is equipped with a power cord with plug and can NOT be installed in a room for bathing!

In the water heater packaging is placed a suspension plate (Fig. 3) and 3 pcs. screws and dowels for concrete. With two of the dowels and screws fasten the hanging plate securely to the wall of the room. The location of the plate is selected so as to provide sufficient space for the device and the fittings thereof, and its water and electrical connections. The wall must be of sound and dense material (such as concrete). It is unacceptable for hanging the unit on decorative walls or made of hollow material. Once the plate suspension is mounted, then the tank is hung on it. For this purpose on the device rear side there are provided holes. After the suspension of the appliance using the third set dowel and screw fix the unit rigidly to the wall through the opening of the ear of its hull, located to the side of the cover with the management bodies - see Figures 1-2.

WARNING! Failure to comply with these requirements may result in damage to the device, other devices and the room in which the appliance is installed. In these cases, such damages are not covered by the warranty obligations of the manufacturer and the seller.

CONNECTION OF THE WATER HEATER TO THE WATER SUPPLY NETWORK

Connecting water heaters under pressure

With an arrow towards the pipe and blue color is marked the cold water pipe and with an arrow from the pipe and red color insert - the hot water pipe.

WARNING! IT IS MANDATORY in the cold water to the unit to be mounted the supplied combined return valve and to keep the arrow on the valve body indicating the direction of flow through water flow.

IT IS PROHIBITED to mount any valve between the combined valve and the water heater! It is absolutely forbidden to block the side hole of the combined valve!

The connection of the water heater under pressure above sink is carried out in accordance with Fig. 4.

The connection of the water heater under pressure under sink is carried out in accordance with Fig. 5.

IT IS FORBIDDEN to install the combined valve in the space above the unit!

Where the plumbing pipes are copper or of another metal, other than that of the water tank, or where brass fasteners are used, it is obligatory to install on the water tank inlet and outlet non-metallic couplings (dielectric fittings).

Filling the water tank of the unit under pressure is carried out in the following sequence: open the shut-off valve in the cold water pipe; open the shut-off valve of the hot water mixing battery; wait until the water flow is strong and solid; close the tap and hot water; lift the lever of the combined valve and wait 30-60 seconds of the lateral opening of the valve to flow thick and strong jet of water; then relax the valve lever.

WARNING! If no water is coming out of the opening of the combined valve or the flow is weak (during normal water pressure), this should be considered as a malfunction indicating that impurities from the plumbing or caused by sewage connections have blocked the safety valve of the combined valve. **IT IS FORBIDDEN** to proceed with appliance electric connection before eliminating the reason for malfunction.

If necessary you may make a system for draining dripping water from the combined valve side hole. The drain pipe must have constant downward slope and located in anti-freezing environment with extremities in the atmosphere.

WARNING! Failure to comply with the requirements for connection to the water supply system may cause partial filling up of the water tank and malfunction of the heating element, or when the combined valve is not installed at all or has been improperly installed this may even cause destruction of the water tank. Such consequences are not within the scope of manufacturer or seller warranty liabilities and shall be at the expense of the party, which has not observed the present manual instructions.

Draining the water from the water tank

(performed when possible temperature drop below 0°C in the room where the water heater is, as well as before eventual repairs)

Water heater under pressure for mounting over sink

Stop the cold water flow to the tank by closing the cold water tap - pos. 4 of Fig. 4. Remove the power cord plug of the heater outlet. Open the hot water tap of the closes mixer in order to free the pressure within the unit. Disconnect the unit hot water pipe from the water mains in the premise. Release the combined valve lever.

Wait unit from the side edge of the combined valve stops running of water. Attention! The escaping water may be hot - beware of burns!

Water heater under pressure for mounting under sink

Stop the cold water flow to the tank by closing the cold water tap - pos. 4 of Fig. 5. Remove the power cord plug of the heater outlet. Open the hot water tap of the closes mixer in order to free the pressure within the unit. Release the connections of the water mains in the room from the unit pipes for cold and hot water. Unhook the tank fastening screw and suspension plate and place it lying on the rear over a sink or a vessel that can accommodate the water flowing out of the tank. Wait until draining. Attention! The escaping water may be hot - beware of burns!

WARNING! When draining the water out of the water tank all necessary precautions must be taken to prevent damages from flowing out water.

WARNING! IT IS ABSOLUTELY PROHIBITED TO SWITCH ON POWER SUPPLY TO THE SYSTEM WHEN THE WATER TANK IS PARTIALLY FILLED OR EMPTY OF ITS WATER CONTENT! Do not forget to fill the tank with water before putting it back into operation.

The water heater connection to the water supply system must be performed only by qualified persons.

CONNECTION OF THE WATER HEATER TO THE ELECTRIC SUPPLY NETWORK

WARNING! Do not proceed to connect the water heater to the power supply network unless you have made sure that its water tank is full with water! Check!

The water heater is competed with a protection degree for electrocution - Class I.

Connecting the water heater to the power supply 230 V ~ is carried out rotating the knob for the unit temperature anti-clockwise until it stops and the Illuminated key switches in OFF position (pressed the end marked "0"), has joined the plug on power his cord to the upright and properly connected with protective contact terminals type F or E (Schuko, French type). The wires from the electrical circuit of the contact should be with section 2,5 mm² each, and fuse in the phase line is 10A. The socket must be positioned so that it is easily accessible after installation of the water heater to the wall and connecting it to the water installation. The electric installation to which the heater will be connected must be built in accordance with the requirements of the applicable statutes and local regulations in force.

Once the appliance is connected to the power supply grid check its functionality.

WARNING! Failure to comply with the requirements concerning connection to the mains shall impede the appliance safety, in which it is prohibited to use. Such consequences are not within the scope of manufacturer or seller warranty liabilities and shall be at the expense of the party, which has not observed the present manual instructions.

Only qualified persons are entitled to connect the water heater to the mains and to check its functionality.

USAGE OF THE APPLIANCE

Your water heater is switched on in operating mode by pressing the glowing key on its end marked "I" and rotating the knob for the temperature clockwise. You may switch off the appliance by

pressing the end of the button of the glowing key marked "0". Complete shutdown is done by subtracting the plug on the power cord from the outlet.

Lighting of the key when in switched on position indicates that the water heater is operating and water is heating, while when the light is off it indicates that the water has reached adjusted temperature and the heater is switched off.

Using the knob the temperature to which it will heat the water may be adjusted. The chart around the thermostat knob has a distinct sector marked ECO. When the cursor of the knob is in the sector, the water is warmed to an optimum temperature at which the heat losses of the device are reduced and the reduced use of electric energy. At the same time, the warm water is sufficient for normal households. When a need for a large amount of mixed water is required the thermostat knob is rotated in the direction of travel counterclockwise to its maximum position, to reach the higher temperature of the water in the tank. We recommend to keep the knob in the sector ECO, when the heater is left on for long periods without use of hot water and only to store heated water.

The appliance built-in thermostat unit has antifreeze function. When the thermostat knob is to the extreme left, at the scale beginning, the heater shall switch on at ambient temperature around 8-10°C and shall switch off at about 12-15°C. Thus in case of air temperature fall in the room, the water in the tank will be protected from freezing. ATTENTION! This feature shall not prevent the water in the room plumbing from freezing!

Within the combined valve of the water heaters under pressure is built a special controller which during water heater normal operation allows the expanded during heating water not to leak through the valve side hole, but to pass into cold water plumbing. The quantity of this water is negligible and usually is with low temperature. During normal operation of the water heater, as well as in present of additional return valve, it is possible that through the valve side opening leak some water drops. This should not be perceived as defect and the side hole of combined valve should not be blocked because it shall cause destruction of the tank. The built-in controller in the valve prevents, in case of cutting water supply, the water in the water tank to return to cold water pipeline.

During the water warming in the water heaters with free outflow the water expanded by temperature leaks from the fitting outlet. This is not a defect! Do not try to stop the drip, as tightening the mixer knobs - you can damage them!

WARNING! Do never switch the appliance if there is a chance that the water in the water tank is frozen! This shall damage both heater and the tank.

When the appliance is used in areas with soft water rich in limestone it is possible to hear some noises during water heating. The noise is due to the limestone stitching on the heater and contained within the tank. The quantity of limestone contained depends of the type of water and its heating temperature. When the latter is higher than 60°C the quantity of separate limestone increases. Accumulated limestone impedes the heater efficiency and may even cause its failure, while increasing the time for water heating.

When using the appliance it is possible to hear some weak noise due to the water flow through the pipelines and the appliance, as well as to the natural process of expanding and heating.

When the heater is regularly used to heat water to a lower temperature, it is recommended to turn the thermostat knob at least once monthly to its maximum position, then to heat the water to maximum degrees and keep it such at least for 24 hours in order to prevent bacteria formation.

CORROSION PROTECTION, PREVENTION, MAINTENANCE

Enameled water heater tanks

In each water heater with an enameled tank is installed additional corrosion protection. It consists of an anode protector (anode) of special alloy operating only when the water tank is full. The anode is a consumable (i.e. a device with normal wear during the appliance operation) and its average operational life is up to 3 (three) years. This period depends much of the type of operating the appliance and the characteristics of the heated water. After this period, a manufacturer authorized specialist or dealer service company must check the conditions of the anode. Where necessary it should be replaced with new one. Compliance with the inspection deadline and timely replacement of the anode is important for the effective protection of the tank from corrosion.

Water heater with enamel tank and anode tester

The availability of this information device (Fig.6) it is essential for the operation of the heater. It consists of an arrow-indicating system with a scale and switch (button). The scale has two sections - red and green. In tank normal operating condition the tester pointer is in the red section - the tester is not switched on and the anode is working properly. Checking the anode efficiency is carried out when the water is fully heated (the thermostat is in position OFF, i.e. the key is not lit) by pressing for few seconds the button on the tester. The arrow shall depart in the direction of the scale green sector. The magnitude of the variation is strongly affected by the parameters of the water and its temperature, as the boundary between the two sectors correspond to the water average values. The anode efficiency criterion is its arrow deflection. When at the time of pressing the tester button, the arrow does not divert or is hold at the beginning of the red section, you should contact the specialists at your nearest manufacturer or vendor authorized service company. They will review the corrosion protection and repair it if necessary. The timely replacement of the anode protector is a prerequisite for extending the life of the enameled water tank.

SERVICE, PREVENTION, MAINTENANCE

In order to secure reliable operation of the water tank in areas with highly calcareous water it is recommended to clean the limestone accumulated within. This operation should take place at least once every two years, while in areas with higher limestone content even more frequently. The depositions on the enamel coating should not be removed otherwise than wiped with dry cotton cloth and without using hard tools. Regular limestone removal and cleaning is particularly important for appliance reliable operation. It is recommended that during this maintenance operation you carry out a review of the enameled tank anode condition. These services are not subject to warranty coverage and must be performed only by qualified person.

WARNING! To ensure safe and trouble-free operation of pressurized water heater must be checked if it is not reduced permeability of its combined valve. This is done by lifting the lever, and wait for 30-60 seconds from the side opening the valve to flow thick and strong jet of water. This operation must be carried out after connecting the heater to the plumbing and when filling of the tank with water in the process of using the heater not less than once every two weeks, as well as eventually after stop and start of water supply. When at full tank by opening the valve does not leak or water flow is weak, there is a failure and probably the valve is clogged by impurities in the sewage.

Using water heater combined with a defective valve is strictly prohibited. Switch off immediately the appliance from the power supply and contact the nearest authorized by manufacturer service company. Otherwise, it will cause damage to the water tank, and could cause tangible and intangible damages in the room where the water heater is located.

The water heater outer shell and plastic parts can be cleaned using only a slightly damp soft cotton cloth and never with invasive and/or abrasive substances and preparations. Before cleaning the appliance, it MUST be disconnected from the power supply by unplugging the plug on the power cord. IT IS FORBIDDEN to clean the appliance with steam generator. Particular attention should be paid to prevent wetting of the appliance light switch on its control panel. The plug of the cord can be plugged into the socket only after complete removal of moisture.

The rules for checking the anode protection and anode replacement (please refer to previous section), as well as removal of the accumulated limestone, must be strictly observed both during and after the appliance warranty period.

During the appliance usage and maintenance do not damage the metal plate with its technical data and serial number. Should you take it off, keep it with the warranty form because it is the document serving to identify the water heater.

FAILURES

When the heater does not heat the water, check if the power cord plug is plugged, if the lighting key is switched off and if the thermostat knob is not turned to the lowest position.

If the power supply is in order, the lighting key is switched on and the thermostat knob is turned to its highest position, but the water in the appliance is still not warming (it is possible that the lighting key or the signal lamp are lighted or not), using the external disconnecting device unplug the heater plug from the power cord and contact the nearest authorized service company.

In case when from the mixer at completely open tap for hot water there is no leakage or water flow is weaker than normally, check that the inlet mixer nozzle of the instruments with free flow is not clogged, or if the filter at the mixer outlet is not clogged, or whether the shut-off valve before the heater is not fully or partially closed (4 of Fig. 4-5), or if water supply is not stopped. If all listed above causes are not the cause of failure, unplug the plug on the power cord or using the external disconnecting device unplug the heater and contact the nearest authorized service company.

Failure of the mixer of a water heater leak free and requires replacement with a new one, it must be of the same type or of a type approved by the manufacturer of the tank. It is imperative to contact a competent specialist in this field, as we recommend it to be representative of the manufacturer or its authorized service company. The installation of improper and / or unapproved mixer is a danger! It is forbidden to use the device with such a mixer!

In case of failure of the power cord and plug of contact the nearest authorized by the manufacturer service company as the cord with plug must be replaced by the manufacturer, its service agent, or a person with similar qualifications in order to avoid danger.

WARRANTY, WARRANTY PERIOD AND WARRANTY CONDITIONS

The warranty, warranty conditions, warranty period, warranty validity for purchased appliance and service related manufacturer or vendor liabilities during the appliance warranty period are listed in the appliance warranty form. When buying the appliance the warranty form must be filled and signed both by seller and buyer. Keep the warranty form in a secure place.

In all instances shall be in force the applicable laws, regulations and other legislation dealing with the rights and obligations of consumer, seller and manufacturer, and their relationships related to purchased water heater, its installation, use, servicing and maintenance.

Warranty term is determined by seller and is in force only for the geographical territory of the country.

Warranty is valid only if the appliance:

- Is installed according to the requirements for installation and operation.
- Is used only as per designed purpose and in accordance with the installation and operation manual.

Warranty consists of free of charge repair of all factory defects, which may arise during the warranty term. Repair is performed by service specialists, authorized by seller.

Warranty is not valid for damages, caused by:

- Improper transportation
- Improper storage
- Improper usage
- Parameters of water, different from the admissible norms for quality of drinking water, and particularly if: the composition of chlorides is more than 250 mg/l; the electrical conductivity is less than 100 $\mu\text{S/cm}$ and pH is outside of 6,5-8 for water heaters with enameled water tanks; the electrical conductivity is more than 200 $\mu\text{S/cm}$ for water heaters with water tanks made of chrome-nickel steel.
- Supply voltage, different than the unit's rated voltage.
- Damages due to freezing of water.
- Elemental perils, disasters and other force majeure circumstances.
- Non observance of the installation and operation manual.
- In cases, when a non authorized person has tried to repair any kind of a defect.

In the above cases the defect will be repaired against relative payment.

Warranty shall not apply to normal wear parts and components of the device, parts that are removed during normal use, lighting and signal lamps and the like, re-painting colour of external surfaces, change of shape, size and location of parts and components that are exposed to impact and conditions that are not considered normal use.

Lost profits, tangible and intangible damages caused by temporary inability to use the device during its prevention and repair shall not be covered by the warranty.

COMPLIANCE WITH THE REQUIREMENTS OF THIS INSTRUCTION MANUAL IS A PREREQUISITE FOR SAFE OPERATION OF YOUR PURCHASED PRODUCT AND IS ONE OF THE WARRANTY TERMS AND CONDITIONS.

IT IS ABSOLUTELY PROHIBITED TO THE USER OR ANY AUTHORIZED BY HIM PERSON TO UNDERTAKE ANY CHANGES IN THE PRODUCT DESIGN AND

STRUCTURE. ANY FINDING OF SUCH ACTIONS OR ATTEMPTS SHALL AUTOMATICALLY RENDER VOID ALL WARRANTY LIABILITIES OF SELLER OR PRODUCER.

IN CASE OF NECESSITY FOR SERVICE SEEK ONLY MANUFACTURER AUTHORIZED SERVICE COMPANIES LISTED IN THE ANNEXED FORM.

THE MANUFACTURER PRESERVED HIS RIGHT TO STRUCTURAL CHANGES WITHOUT NOTICE WHERE SUCH SHALL NOT AFFECT PRODUCT SAFETY.

