

# ELECTRICAL INSTANTENIOUS WATER HEATERS

Eldom

CE

## TECHNICAL SPECIFICATION INSTALLATION AND OPERATION MANUAL

ATTENTION! Read carefully current manual before installation and use of water heater!

### TECHNICAL SPECIFICATION, INSTALLATION AND OPERATION MANUAL OF ELECTRICAL HOUSEHOLD INSTANTENIOUS WATER HEATERS ELDOM β LINE

### **APPLICATION**

The instantaneous water heaters of ELDOM  $\beta$  line are high efficient household water heating appliances heating water for sanitary needs at the moment when it is passing throughout the water tank. They are in three general modifications: for basin installation (Figure 1); for bathroom installation equipped with a shower (Figure 2); for universal installation i.e. to be installed above a basin and are equipped with a shower (Figure 3). As the construction, elements and in built parts of different modifications are being improved all the time, is it possible your appliance to differ from the ones showed on Figures 1, 2 and 3.

### TECHNICAL PARAMETERS

Type Parameters	72285B Eldom β3	72485 Eldom β4	72486 Eldom β7	72486B Eldom β7	72486C Eldom β7	
Place of installation	Sink			Bathroom with shower	Sink with shower	
Rated voltage [V]	230 V~					
Rated power [W]	3150	3500		6500 (3500+3000)		
Type of the appliance	Open-outlet (free flow)					
Rated pressure [MPa]	0					
Rated pressure of main water supply [MPa]	0.2-0.8					
Temperature increase of heated water by 12 °C inlet water	39 °C Water flow at 1 l/min	45.1 °C Water flow at 1 l/min		5 °C by water flow at 1.5 l/min 1 °C by water flow at 2 l/min		
Outside dimensions [mm]	298 x 195 x 134					
Weight [kg]	1.8	1.8	2	2.7	2.9	

N.B. The values showed in the table are approximately

### INSTALALTION TO THE ROOM WALL

The water tank should be mounted only to the room wall with a normal room fire safety and at room temperature not less than 0°C. There are three openings on the back side of the appliance and the fixing elements should go trough them in order to assure strong fixing to the wall. The openings could be reached after unscrew of the four screws, on the left and right appliance's sides and after careful remove of front appliance's cover. There is a pattern in the appliance's packaging what makes easier determination of opening's wall places and the fixing screws.

<u>ATTENTION!</u> When dismounting the front appliance cover a rotation of the hand wheel for water flow and temperature regulation is possible. We would recommend you to remember (sign) the hand's wheel position before removing the cover. This will avoid breach of construction parts caused by possible over tightening.

<u>ATTENTION!</u> When dismounting the front appliance's cover be sure that electrical wires stay together. In case they break after all, please call a specialist from the authorized by the manufacturer service bases in order to recover the wire's connections according to the appliance's electrical diagram. Otherwise you may damage the appliance's safety.

The installation place (the distance to the basin or room's floor) should comply to the

Fig. 1
Water heater Eldom β for kitchen application

Faucet

Flexible pipe

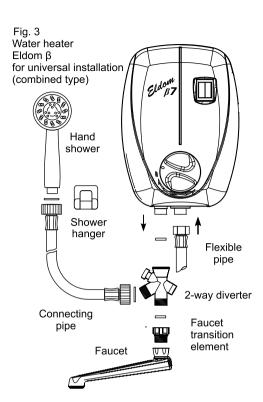
Fig. 2
Water heater
Eldom β
for bathroom
installation

Hand
shower

Shower
hanger

Flexible
pipe

Connecting pipe



elements (flexible pipes, distributor and other connection elements).

Water heaters Eldom  $\beta 3$  (type 72285B), Eldom  $\beta 4$  (type 72485), Eldom  $\beta 7$  for sink (type 72486) and Eldom  $\beta 7$  for sink and with a shower (type 72486C) should be installed at an appropriate distance above the sink.

The water heater for a bathroom with a shower Eldom  $\beta 7$  should be mounted in a way where the upper side of its box should be higher than the water openings of the hung already on its place hand shower (at least 2 m from the bathroom's floor).

The hand shower hanger should be fixed at a place where the direct splashing of the water heater with water is avoided at any case. In case

the hand shower is fixed above a bath tub and when the shower is not hung and the connection pipe is free laying, the water openings on the shower head should not dip into filled with water bath tub.

After fixing of water heater to the wall the front cover should be mounted again and fixed with the screws.

ATTENTION! Ignoring the above assembly instructions may deteriorate the safety of

appliance or even the appliance could be damaged.

### CONNECTING TO WATER MAIN

The water pressure in the water main should be above 2 bars (0,2 Mpa) and lower than 8 bars (0,8 Mpa). In case the pressure is under the minimum, the functionality of the appliance could get worse, it is also possible not to function at all.

The appliance's inlet is marked in blue and has 1/2" thread. For easy connection and maintains we would recommend flexible tube with a steel stitch and appropriate length. Use only brand new flex tubes suitable for respective water main pressure. It is not allowed assembly of used ones.

The appliance's outlet is marked in red. Connect it OBLIGATORY only to supplied together with appliance winch, distributor or a flex tube.

When tighten the thread connections use only supplied seals and pay attention not to tight too strong in order to avoid appliance's damage.

ATTENTION! It is forbidden the assembly of a hand shower different from the supplied by the manufacturer as this may damage the safety and functionality of the appliance.

ATTENTION! It is forbidden to use elements connected to the outlet pipe such as outlet flex tubes, distributor, winch etc. what are not supplied or approved by the manufacturer.

ATTENTION! The instantaneous water heaters Eldom  $\beta$  line are open outlet to the environment appliances and it is definitely forbidden to connect stop elements on the outlet pipe! Not observing this requirement will destroy the appliance!

The water tank should be filled in with water by rotation of hand wheel for water flow and temperature regulation counter – clockwise until stops (from STOP position towards the blue arrow). Wait for until from the winch or the shower head openings comes strong and dense water stream. Rotate careful the hand wheel of appliance on STOP position avoiding over tightening. As this is a opened outlet appliance (the water tank is connected all the time to the environment through the outlet pipe) is it possible after rotation of hand wheel on STOP position from the winch (shower head openings) to leak additionally some water until total drain of entire outlet water heater's system. This is not a fault and the amount of water is minimal.

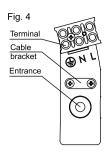
ATTENTION! Not filling the water tank with water will damage the heating element.

ATTENTION! Consequences from not observing of requirements of this section are not a subject of warranty terms of the manufacturer and dealer and are at the expenses of wrong side according to this manual requirements.

### CONNECTING TO THE POWER SUPPLY NETWORK

The instantaneous water heaters Eldom  $\beta$  line are manufactured with a protection degree against current damages – Class I.

Eldom  $\beta 3$ , Eldom  $\beta 4$  and Eldom  $\beta 7$  water heaters should be connected to the electrical circuit using a three wires cord, directly connected to the column terminal of appliance. The phase wire should be connected to the column marked with L, the neutral one – to N and the protection wire should be connected to the column marked with the sign for protection connection. The cross section of feeding cable's wires for Eldom  $\beta 3$  and Eldom  $\beta 4$  should be at least 2.5 mm² each as the protection element in the phase outline should be at least 16A. The cross section of feeding cable's wires for Eldom  $\beta 7$  should be at least 4 mm² each as the protection element in the phase circle should be at least 35A.



ATTENTION! It is OBLIGATORY to install in the electric circuit intended for Eldom  $\beta 7$  water heaters such a device that ensures complete disconnection of all the poles in case of over voltage class III. The wires of the electric circuit between the device and the water heater should not be disconnected by another breaker or safety device. If the water heater is equipped with a shower, that device must be mounted outside the room where the appliance is installed.

ATTENTION! Not observing of requirements for connection to the electric installation may damage the appliance safety and in this case it

is forbidden to use the appliance. Consequences from not observing of requirements of this section are not a subject of warranty terms of the manufacturer and dealer and are at the expenses of wrong side according to this manual requirements.

The check of electric installation and connecting the water heater to the power supply network should be performed by qualified persons only.

### USING THE WATER HEATER

Before putting the water heater into operation make sure that it is filled with water! CHECK! Perform the following check – by switched off heating elements (the ends of switch rockers marked with 0 are pressed) turn the hand wheel towards the blue arrow. In case no leak of water from the winch (the shower head openings) it means that is possible same to be obstructed. Do not use the appliance in that case, it is forbidden and see Maintenance and Prevention Section.

ATTENTION! Do not switch on the appliance if there is any possibility the water inside the water tank to be frozen! This will lead to heating element and water tank damage.

ATTENTION! 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 a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

By the water heater for a basin installation equipped with a shower the switching of water flow between the winch and the shower is possible trough the hand wheel (the button) of the distributor. The switching from shower to the winch is possible trough back movement of the distributor's hand wheel (the button). ATTENTION! The distributor has no middle position on its hand wheel where the water stream to be stopped. Switch careful the distributor's hand wheel (the button) without over effort in order to save the distributor, the water heating element and rest elements.

When the water heater is filled already with water and proper connected to the electric installation the putting into function mode of the appliance is possible trough rotation of hand wheel for water flow and temperature regulation counter – clockwise from STOP position.

When the switch is switched off ( the end of the rocker O marked is pressed) from the winch ( shower head ) a cold water will leak.

When the switch is switched on (the end of rocker I and/or II marked is pressed) while rotation of hand wheel and after reaching of certain outlet water flow, the signal lamp of the rocker starts to light and the heating element switches on. The water temperature gets stabile after 15 – 30 sec.

When the switch is switched on, by rotation of hand wheel clockwise or counter – clockwise the optimal for the case water temperature could be chosen.

It is normal as a result to reach higher water temperatures close to red arrow of the hand

wheel scale next to STOP.

By Eldom  $\beta$ 7 water heaters the water temperature can be regulated trough switching on of one or both heating elements (I and II signs).

There is a thermal cut off built into the water heater against unlimited water temperature increase. When water temperature reaches the limit, the thermal cut off cuts off the heating elements and after temperature normalization it switches them on once again.

For all water heaters is possible by a drastic decrease of coming throughout the appliance water, the inbuilt hydraulic breaker to switch off the heating elements. When the water flow stream gets stronger, the heating elements will switch on.

ATTENTION! When using the appliance it is FORBIDDEN to block the winch or to bend the connection shower pipe in a way where the incoming water flow decreases. Do not dip the hand shower in water containers (for example bath tubes) because doing so the water pressure inside the water tank rises and this could force the inbuilt safety valve to come into operation.

ATTENTION! Do not use the appliance by any doubt that water inside it is frozen.

When finish using of appliance, turn on the hand wheel into STOP position, wait for until the water from the winch ( the shower) stops to leak and over switch the rocker/rockers of the switch on O position.

ATTENTION! Do not over tight the rotation part in order to avoid breakage and they to be able to turn on again.

### PREVENTIVE AND REGULAR MAINTENANCE

After certain period of appliance's use it is possible a lockage of hand shower head openings and in this case is necessary same to be cleaned up at regular basis.

There is a special inbuilt valve what protects the construction from possible over pressure inside the water tank. If this happen, the valve's membrane is tearing off and from its outlet pipe water becomes to leak. The opening of valve's pipe is behind the appliance hot water tube.

ATTENTION! IT IS FORBIDDEN to block the safety valve's pipe opening!

By leakage of water from safety valve's pipe opening YOU MUST immediately:

- stop using of appliance trough rotation of water flow hand wheel until passing throughout the appliance water stops to leak;
  - over switch the switch rockers in turned off position ( sign "0");
- switch off the appliance from the electric circuit. For Eldom  $\beta 3$  and Eldom  $\beta 4$  pull out the plug of feeding cable from the contact and for Eldom $\beta 7$  switch off the additional breaker;
  - contact the nearest authorized by the dealer service basis.

In order to save the appliance qualities in areas where water in the main supply is limy we would recommend periodically to clean the deposited on the heating elements limestone. This operation could be performed only by a specialist from the authorized by the manufacturer service bases because the appliance will be taken into pieces. This service is not an object of the manufacturer's warranty obligations.

When minus temperatures are possible in the premises where the water heater is mounted, the water from its water tank should be drained. This is possible by disconnecting of inlet pipe (marked in blue) from the main supply only after the central water feeding is stopped. For Eldom  $\beta 7$  the flex tube should be disconnected from the outlet pipe (marked in red), the hand wheel for water flow and temperature regulation should be turned on towards the arrow direction until full stop and until full drain of water inside the appliance's water tank.

ATTENTION! By draining out the water from the water tank of the appliance, all necessary

measures should be foreseen and taken in order to avoid damages caused by drained from the appliance water.

In case there is no water coming trough the inlet appliance's pipe you should contact the nearest authorized service base for removing of parts what have blocked the system ( most probable – a limestone ).

### IMPORTANT RULES

- 1. The water heater is designed to be used only for sanitary needs in the households and serves to heat the water coming from the main supply.
- 2. The water heater should be mounted and used observing the requirements of present manual, only in premises where minus temperatures are not allowed and with normal fire safety.
- 3. 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 a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
- 4. When connecting the water heater to the power supply network, proper connection to the neutral and safety circuit of the power installation is required. Not observing this requirement will damage the appliance's safety and in this case the usage of appliance is forbidden.
- 5. The water heater already mounted and connected to the water and power supply networks should be put into operation after testing its functionality. The person performing the functionality test should fill in the respective sections in the guarantee card and the guarantee check and to sign it. The functionality test is not a guarantee obligation of the manufacturer. This will make you feel secure about the right execution of requirements of this manual how to mount the appliance.
- 6. Capable persons as per the meaning of the present manual are the persons of the enclosed "List of service depots ..." and other possible representatives of companies having the same subject of activity and in contract relations with household water heaters dealers.
- 7. Drain out the water what is inside the appliance's water tank when minus temperatures are possible within the rooms where the appliance is mounted!
- 8. Do not use the appliance if you have some doubts that water in the water heater to have frozen!
- 9. If the feeding cord and the plug of Eldomβ3 and Eldomβ4 are damaged, please contact the nearest authorized service base as same should be exchanged by the dealers, its service representative or by a person with similar qualification I order to avoid any danger.
- 10. Present appliance have been dully signed according to the Regulation for the requirements of put on the market electric and electronic equipment and treating and transportation of electric and electronic equipment waste. If you take care to deposit this appliance in a right way and only after product's life, you will help to prevent possible negative consequences for the environment and human health what otherwise could happen if wrong deposited.

The sign on the appliance or within the documents, here applied, shows that this appliance should not be treated as a household waste. Instead, it should be given to a special place for recycling of electric and electronic equipment. When depositing, please observe local norms for treating the waste. For wider information about the treatment, recovering and recycling of this appliance, please contact you local authorities, your recycling company or the store, where you have purchased the appliance.

### **GUARANTEE CONDITIONS**

The water heaters guarantee period is determinate by the importer for every country (market).

The water heaters guarantee shall be acknowledged only when:

- •The water heater has been installed in compliance with the requirements of the present manual.
- •The water heater shall be used as intended only.

The guarantee includes a free of charge repair of all factory defects that may occur during the guarantee period. The repair shall be performed by the service offices authorized by the seller.

The warranty is not valid for defects resulting from:

- Improper transportation
- Improper storage
- •Improper use
- •Contents and parameters of the water exceeding the standard European norms of the quality of drinking water and particularly content of chlorides up to 250 mg/l and electrical conductivity of the water up to 2000  $\mu S/cm$
- •Higher voltage used than the indicated in the Installation and Operation Manual
- •Deformation of the water tank as a result of freezing of the water
- •Natural elements, calamities and other force majeure circumstances
- •Non-observance of the instructions in the Installation and Operation Manual
- In cases of unauthorized fixing of eventual defects

In the above mentioned cases the defects are eliminated against payment.

OBSERVING THE REQUIREMENTS OF THE PRESENT MANUAL IS A PREREQUISITE FOR SAFE OPERATION OF THE PRODUCT YOU HAVE PURCHASED.

ANY MODIFICATIONS OR RECONSTRUCTIONS OF THE WATER HEATER STRUCTURE BY THE BUYER ARE FORBIDDEN. IN CASE MODIFICATIONS OR RECONSTRUCTIONS HAVE BEEN ASCERTAINED, THE WARRANTY OBLIGATIONS OF THE MANUFACTURER ARE CANCELLED.

IF NECESSARY, REFER TO THE COMPANY SERVICE DEPOTS.

THE MANUFACTURER RESERVES HIS RIGHT OF CONSTRUCTION CHANGES WHICH DO NOT DETERIORATE THE SAFETY AND FUNCTIONAL QUALITIES OF THE PRODUCTS.

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