



Kundendienst:

## HEAT PUMP WP2 - AE

Type: WP2      Model: WP2 - AE



CE

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## INSTRUCTIONS FOR INSTALLATION AND USE

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Includes Declaration of Warranty

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## **2. Introduction**

We appreciate the trust you have given us by purchasing our heat pump. We believe that the product will serve its purpose, thus providing satisfaction both to you and to us. Please read the instructions thoroughly before first operation of the device. Get to know all the details of the heat pump, the purpose of use, its functions and operations. The instructions were prepared in a manner that will inform you on all necessary activities for the use of this product.

If you intend to give this product to a third person, make sure you enclose the Instructions for use.

Read the Instructions carefully and make sure you completely understand the sections and paragraphs marked with this sign:



This sign is used in the text to point out that the related part of the Instructions is especially important. In addition, this sign is also used with other markings, symbols and warning signs, as to remind you to pay attention.

## **3. Customer service**

Servicing and fault correction during the warranty period performed:



When ordering replacement parts for the device, please provide the following information:

- the product,
- the product type,
- the serial number,
- year of manufacture.

All data necessary for ordering replacement parts can be found on a plate or a sticker attached to the device.

## **4. Purpose of use**



The heat pump is used for heating the tap water in dwellings and other buildings where daily consumption of hot water does not exceed 700 litres. Besides heating water, the heat pump is also used to air condition the room in which it is installed. The heat pump therefore assures substantial savings in energy used for heating the tap water and it also air conditions the selected rooms (e.g. a cellar, a storage room, etc.).



Any modifications or replacement of parts other than original shall cease the manufacturer's guarantee for safe and functional operation of the product. The manufacturer shall not be liable for or assume any responsibility in case of incorrect use or use for purpose other than intended, and the customer shall be solely responsible for any such damage resulting from incorrect use or use for purpose other than intended.

## **5. Specifications**

Produkt:	<b>HEAT PUMP FOR TAP WATER HEATING</b>
Type:	<b>WP2</b>
Model:	<b>WP2 - AE</b>
Max. power consumtion:	560 W / 1910W*
Max. heat output:	1850 W / 3200W*
Max. power output:	680 W (60°C)
Heater*:	1350 W
Voltage:	230 V ~ 50 Hz
Fusing:	16A, (230V/50Hz)
COP (EN255/3):	3,3
Refrigerant:	R134a
Max. outlet temperature:	55°C / Additional heating to ~ 60 °C
Air flow rate:	500 m <sup>3</sup> (8 – 35°C)
Protection class:	IPX1
Ambient temperature:	5 – 37°C
Noise level:	50 dB(A)

## 6. Description of the heat pump and operation

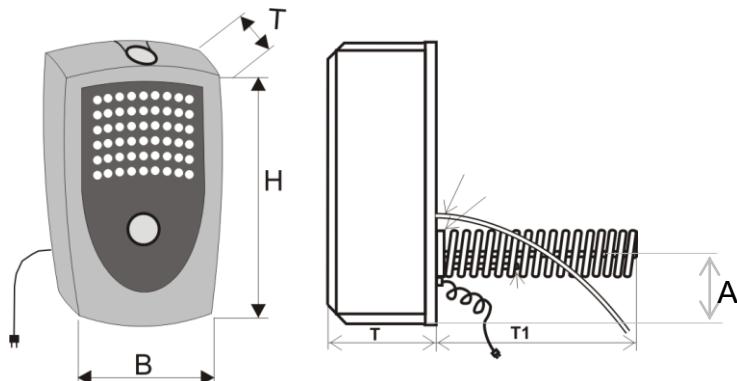
Heating of tap water with the heat pump is an environmentally friendly and cost saving way of producing hot water for residential buildings.

The slot in heat pump WP2 – AE is specifically designed for tap water heating by using the heat stored in the ambient air. The heat pump uses the heat stored in the ambient air by cooling it and is therefore preferably installed in the cellar or storage room.

The heat pump can also be installed on an existing, already functioning Austria-Email-hot water tank (with  $\Phi$  180mm/8hole flange).

The aggregate of the heat pump is comprised of: compressor, evaporator, condenser, fan, filter, copper, electronic regulation and electrical wiring.

The aggregate of the heat pump is where the thermodynamic process for the hot water heating happens.



Dimensions:

Model	Min. Volume	Dimensions (HxWxT/T1xA)	Total weight
WP2-AE	140	880x470x330/490x250	35 kg

### 6.1 Refrigerant circuit (Functional principle of the heat pump)

The refrigerant circuit is a closed system in which the R134a refrigerant circulates, used as a heat transfer media. In the fin exchanger, the heat is removed from the intake air at low evaporation temperature and transferred to the refrigerant. The vaporous refrigerant is sucked in by a compressor, compressed to a higher pressure/temperature level and transported to the condenser, where the heat absorbed in the evaporator and a part of the absorbed compressor energy is transferred to the water. Subsequently, the high condensing pressure is decompressed down to the evaporating pressure using a flow control valve (expansion valve) and in the evaporator, the refrigerant can again absorb heat from the intake air.

## **6.2 Water heater (Boiler)**

The slot in heat pump WP2-AE is designed for water heaters with a standard flange (Φ180 mm/8 hole). It is to be installed on the side of the water heater.

## **6.3 Additional electrical heater**

Additional electric heater EG with power 1.3 kW is used for:

- **quick heating of the tap water** - simultaneous operation of the heat pump and the electric heater.
- **protecting the evaporator** - if the ambient temperature is too low to allow the operation of the heat pump, the additional heater is automatically switched on when the pump operates in summer mode of operation.
- **alternative heating** - e.g. in case of malfunction of the aggregate.

## **6.4 Safety elements of the heat pump**

### **Temperature feeler – protection against freezing**

The heat pump incorporates a temperature feeler which is used to detect the temperature of the air flowing through the pump. In case the air temperature is below 7°C, the feeler switches off the operation of the pump for 30 minutes. With heat pumps operating with an electric heater and summer mode of operation, the pump automatically switches on heating as soon as the air temperature drops below 7°C. When this air temperature is reached in winter mode of operation, the circulating pump of the connected oil fired boiler is switched on.

### **Operating and safety thermostat of electric heater (only WPA 302 E-LF)**

The electric heater incorporates an operating and safety thermostat limited to 65°C.

**Caution!** When the electric heater operates, the water is always heated to approx. 65°C, since only the upper part of the hot water tank is heated. In such case, the regulator does not display the actual water temperature, since the feeler is installed in the bottom part of the hot water tank where the water temperature is lower.

### **Temperature control in the hot water tank**

The OPTITRONIC regulator is installed in the heat pump to provide control and heating of water to desired temperature.

Taking into account the selected water temperature, the regulator switches on and off the operation of the compressor and the fan. Under specific conditions, the regulator also switches on and off the electric heater or the circulating pump of the oil fired boiler. The maximum adjustable water temperature is 55°C. After pressing the 'HT' key, the water temperature rises to 60°C (overheating).

### **High pressure protection of the refrigerating system**

In order to prevent high pressure in the refrigerating system and subsequently damage to the compressor, a high pressure safety switch is installed to emergency switch off the operation of the heat pump in case of high pressure. When the pressure in the refrigerating system drops, the heat pump is automatically switched back on.

The display shows the notification E7.

## **6.5 Operating conditions**

The ambient temperature during normal use is +8 to +35°C. The air should be clean, relative humidity should not exceed 50% at +40°C. Higher relative moisture values are allowed only with lower ambient temperature.

If a device is used at an altitude of more than 1000 m, its heating and air conditioning capacity is reduced due to air pressure.

## **6.6 Connection of the hot water tank**

Connect the heat pump to the water supply network in compliance with the regulations related to connection of tap water heaters.

# **7. Filling the water in the system**

After connecting the heat pump to water supply network, fill the system with water. When bubble-free water starts running from the tap, the system is filled with water and deaeration is complete.



**Do not let the pump operate with empty hot water tank – danger of damaging the compressor.**

## **7.1 Condensate outlet**

Due to the humidity of the air, condensate is formed in the heat pump. Depending on the season and hot water demand, 1 to 5 litres of condensate per day is accumulated. This condensate water can be used for steam ironing or for watering the plants.

To drain off the condensate, a drain hose is attached to the device at the back right side. If there is no possibility for free draining of the condensate in the room where the device is installed, a collecting vessel with the volume of at least 10 litres must be installed and emptied regularly.

## **7.2 Connection to electricity supply network**

After the heat pump is connected to water supply network and appropriately deaerated, it is now prepared to be connected to the electricity supply network.



**The power supply cord may only be connected to a Schuko socket (16A, 230 V/50 Hz).**

## 7.3 Elektrischer Schaltplan

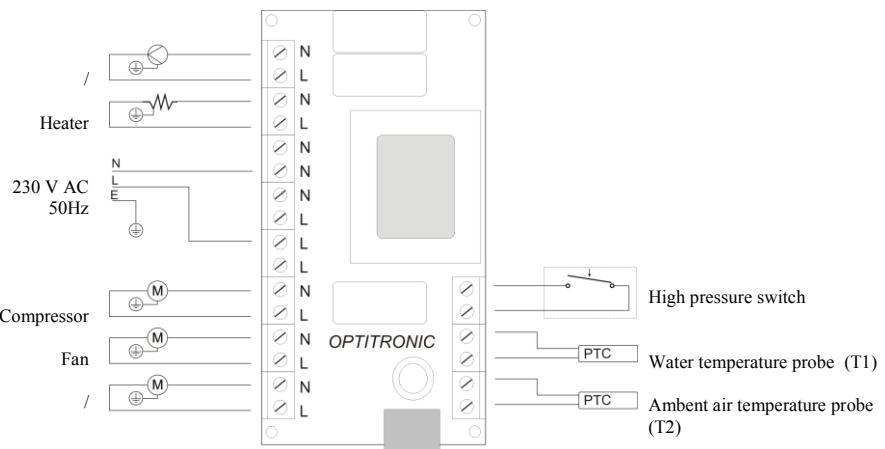


Figure 1: Wiring diagram.

## 7.4 Grounding cable instalation

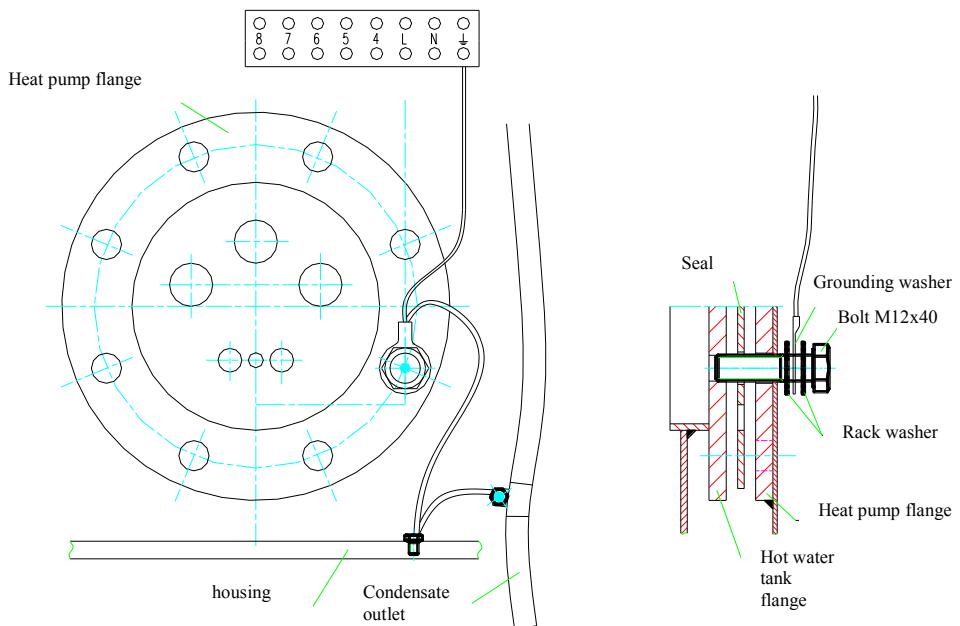


Figure 2: Grounding cable instalation

Die Erdung des Boilers muss über einen Erdungsgewindegewindebolzen erfolgen.

The necessary parts are preinstalled and loosely attached. The grounding cable is to be connected with a AMP-plug. The AMP-plug has to be connected according to drawing in figure 2.

**The grounding of the water heaters must be done according to the drawing in figure 2.**



1. Ground the water heater according to figure 2.
2. Protective conductor test.
3. Perform a conductor test with an ohm-meter. The resistance between the grounding cable and the heat pump housing should be between 600 and 700  $\Omega$ . That ensures a thorough installation of the grounding assembly. In case that the resistance is not in the range specified above, the grounding assembly has to be checked.

## **7.5 Heat pump start-up**

- Up-to-date and efficient visual transmission of information on operation of the system, via display and control lamps
- Quick keys for water temperature adjustment (+, -)
- Quick key for switching between operating modes (P)
- Quick key (HT) for single superheating of water to **60°C** (legionella control)
- Option for quick water heating (heat pump + additional heat source)
- Automatic switching to backup heating source in case of undercooling of the ambient (oil fired boiler or electric heater)
- Automatic legionella control programme - automatic superheating of water above 60°C every 14 days
- Autodiagnostics
- Identification and display of operating faults

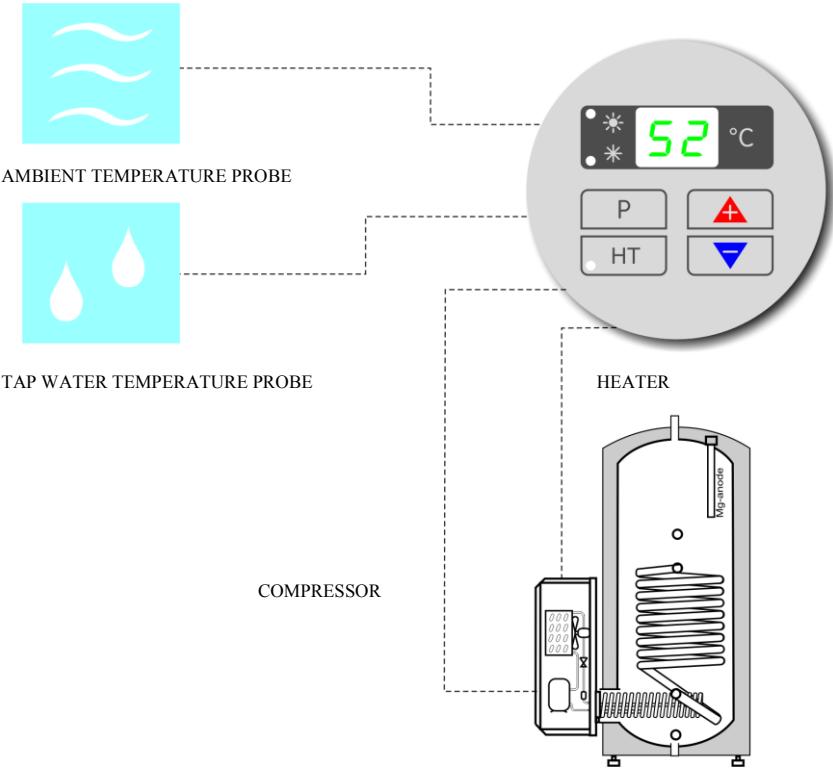
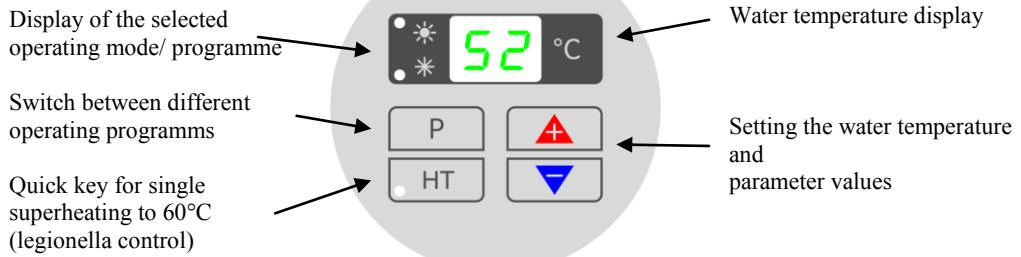


Figure 3: Function diagram.

### 7.5.1 Operating procedure

Within 2 seconds after the heat pump is connected to water supply and electricity source according to these instructions, the display shows the type of the regulator and default settings for operation, for example 'P1', as well as all parameters and their values. Within 30 seconds after connection to electricity supply, the system is activated and water heating in the hot water tank starts. The heat pump switches on. When the preset switch-off temperature of 52°C is reached, the heat pump switches off automatically. As soon as water temperature drops by 5°C, i.e. to 47°C, the heat pump starts operating again. The user may, at his own discretion, adjust the switch-off temperature, but not higher than 55°C (thermostat lock). Heating the water to 60°C is limited by factory setting and cannot be adjusted. The ambient temperature, at which switching over to backup heating source is made, is factory set at 7°C. This temperature setting may be adjusted by the user (instructions in the following chapters).

## 7.5.2 Short instructions for operation



**The display on the control panel in the main menu displays the current water temperature.**

### DESCRIPTION OF FUNCTION (flashing display):

Flashing display	Selected programme	Description
☀ off	P0	The heat pump is switched off; only the hot water temperature display is active.
* off		
☀ on	P1	The heat pump heats the water only with the compressor to the set temperature. The heat pump heats the water. At a too low air temperature, the compressor is switched off for security reasons. Caution: In the event of a faulty air sensor, an error message is displayed, but the water is further heated.
* off		
☀ off	P3	The water is heated to the set temperature by an electric heater. Note: Air temperature has no effect on the function.
* blinks		
☀ on	P5	The heat pump heats the water to the set temperature with the compressor (automatic operation mode). The heat pump heats the water depending on the air temperature. If the temperature drops below the switching level, the heat pump switches automatically to heating with the electric heater.
* blinks		
Particularities		In the event of switching to a backup heating source.

 blinks		If the air temperature is too low or if it drops below the switching level, selecting the P4 programme means heating the water with the oil fired boiler and selecting the P5 means heating with the electric heater. In such event, the compressor is switched off for safety reasons.
* blinks or on	P5	

**NOTICE: AFTER PRESSING THE 'P' KEY, THE SELECTED PROGRAMME IS DISPLAYED** (the selected programme can also be controlled by using the flashing display - see the table above). **PRESS THE 'P' KEY AGAIN WITHIN 8 SECONDS TO CHOOSE FROM THE AVAILABLE PROGRAMMES.**

**NOTE: WITH EVERY SELECTED PROGRAMME, YOU ALSO SELECT THE HEAT GENERATOR WHICH TAKES OVER THE WATER HEATING OPERATION.**

**1. Setting the water temperature:** When pressing the + or – key, the currently selected temperature is displayed. If you continue pressing the + or – key (within 8 seconds), the temperature setting will change. After 5 seconds and after the indicator stop flashing, the new selection is stored.

**2. Switching between different operating modes:** Switching between operating modes is made by 'P' key. The selected operating mode is indicated by the illumination of the operating mode indicator and the inscription displayed after the first pressing of the 'P' key (see table above). With every subsequent pressing of the 'P' key within 8 seconds, you can switch between the available operating modes.

TIP: In case that temperature in the room is higher than 7°C, it is the most cost effective to heat the water exclusively with the heat pump. (P1, P4, P5)

**3. Single thermal disinfection:** Single overheating of water to 60°C is switched on with the 'HT' key (the indicator lamp on the key is on). After overheating is completed, the indicator lamp on the key switches off. The overheating may be cancelled during the process by pressing the 'HT' key. Overheating of water is recommended once in every two weeks. Water heating is carried out with the heat source defined and adjusted by the selected operation mode. For example, in the 'P1' programme, heating is carried out with the compressor and in the 'P2' programme with the oil fired boiler.

Notice: If the heating process does not occur within 12 hours, the function turns off and switches to normal water heating.

**4. Quick water heating:** In programme 'P5', the function of quick (simultaneous) water heating is available where both heat sources are operated: the heat pump and the electric heater in the 'P5' programme. This function is switched on by pressing the 'HT' key for 20 seconds. The indicator lamp on the 'HT' key blinks until the preset temperature is reached. The function may be cancelled during the process by pressing the 'HT' key.

### 7.5.3 Operating programmes

**1. Water heating only with the compressor (the 'P1' programme must be selected):** The device heats the water with the compressor until the set temperature is reached and as long as the air temperature remains above the minimum operating temperature (5° C). When the ambient temperature drops below the set temperature, the compressor switches off for safety reasons. Once the air temperature rises above the minimum operating temperature again (or after 30 minutes), the regulator turns on the compressor and water heating starts again. In the 'P1' programme, water heating is carried out with the compressor. Water heating starts again as soon as the water temperature drops by 5° C.

**2. Water heating only with the electric heater (the 'P3' programme, only WPA 302 E-LF):** The electric heater is switched on until the set water temperature is reached. The displayed temperature is not correct if the electric heater is installed on top of the heat pump because the sensor is located below the electric heater. The electric heater turns on and off on the basis of its own working and safety thermostat (the set temperature is 65° C).

**3. Water heating with the compressor and the automatic switching to the backup heating source in case of undercooling of the air (the 'P5' programme only):** The heat pump operates completely automatically with the priority of the compressor operation until the set temperature is reached and as long as the air temperature is above the switching-off level (L1). When the air temperature drops below the switching-off level, the device automatically switches to heating with the backup heating source (to the electric heater in the 'P5' programme). When the backup heat source is active, it is indicated by blinking of the sign ☀ on the display. As soon as the air warms up again and the temperature rises above the switch-off level (or at least after 30 minutes), the regulator switches to heating with the compressor.

### 7.5.4 Parameter display

To enter the parameter display menu, press the + and – keys simultaneously then use these keys to scroll between the functions in the menu.

After selecting the parameter, wait for 8 seconds and the selected value of the related parameter is shown for 10 seconds. After 10 seconds, the main menu is displayed again, showing the current temperature of water in the hot water tank.

Parameter	Description	Scale	Factory setting
L0	Display of ambient temperature	-9 - 95	
L1	Air temperature at which compressor is switched off (in °C). Only P4 and P5	5 - 30°C	7
L2	Time interval for water overheating (in days @	1 - 99 days	14

## **1. Setting the time interval of the automatic thermal disinfection / Safety heating (60° C):**

To enter the parameter display menu, press the keys + and – simultaneously. Use these keys to scroll between the functions in the menu (see the chapter '*Parameter display*'). Select the parameter L2 and after a few seconds, the preset heating interval appears (set to 14 days). While the set value is displayed, it can be changed by pressing the keys + or - (from 1 to 99 days). 5 seconds after the desired setting is selected, the blinking stops and the setting is saved. Overheating of water is recommended once in every two weeks. Do not use the overheating function too often, since the consumption of energy for overheating is higher by 1/3 compared to normal operation of the heat pump.

## **2. Setting the temperature for switching to the backup heating source (only automatic programme 'P5'): To enter the parameter display menu, press the keys + and – simultaneously. Use these keys to scroll between the functions in the menu. Select the parameter L1 and after a few seconds, the preset switch-off temperature appears (factory set to 7°C). While the set temperature is displayed, it can be changed by pressing the keys + or - (from 5 to 25°C). 5 seconds after the desired setting is selected, the blinking stops and the setting is saved.**

**It is not recommended to set the temperature below 7°C, due to possibility of ice formation on the evaporator.**

## **8. Heat pump instalation site**

The heat pump may be installed in almost any room, except the dwelling rooms. The room can be of any size, but large enough for installation and normal operation of the pump (approx. 20m<sup>3</sup>).

**The minimum ceiling height should be 2,100 mm.**

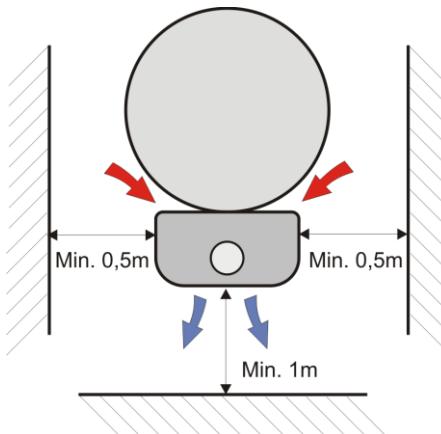
The design of the heat pump allows it to draw ventilation air from the selected room or ambient. This air emits the heat in the heat pump and is then returned to the selected room or ambient, depending on needs, desires and demands.

Depending on the version of the channel system, the heat pump allows the following ventilation modes:



The air must be sucked and discharged without hinderance. In no case should you cover any of the perforations on the heat pump housing. One must also garantie that the heat pump has enough space for normal operation (see figure below).

The energy needed for tap water heating comes for the most part from the ambient air that is being sucked by the device. The higher the ambient temperature, the higher the efficiency of the heat pump.



## 9. Safety warnings

Only skilled personnel with knowledge of safety instruction and instructions for use and maintenance should manipulate with this product.

Do not move, clean or repair the product during operation.

Before installation and any other intervention inside the heat pump, make sure you read the instructions for safe use and maintenance.

The electrical installation of the device must be carried out by a qualified person (an authorised electrician), in a voltage free status of the device.

No objects should be placed on or immediately around the heat pump.

Provide sufficient space around the heat pump in order to allow quick and simple access in case of switching off and maintenance interventions.



**BEFORE ANY SERVICING INTERVENTION, PULL THE PLUG FROM THE WALL SOCKET.**



Place the heat pump on such location, where the **supply cord plug is accessible any time**. Place the pump on solid, horizontal, non-slip floor. Make sure there is enough space (at least 2 m<sup>2</sup>) around the pump to allow handling and manipulation. During installation, use and maintenance, the heat pump should be sufficiently illuminated (min. 150 lux). Make sure the pump does not present risk to anybody. Children and persons unacquainted with the operation of the pump should not have access to the heat pump during its operation.

## 10. Instructions for safe maintenance

The heat pump will operate without any servicing or maintenance interventions provided you take into account instructions for safe use and maintenance.

**We recommend you check the following:**

- Check the operation of the safety valve on the cold water tap –unscrew the cap on the tap until the water starts dripping.
- Check of the evaporator fins – dust deposit on the fins will reduce the efficiency of the heat pump.
- In case of dust deposit of the fins, **disconnect the heat pump from power supply**, loosen the screws, remove the top plastic cover and clean the fins with vacuum cleaner or purge with air. Be careful not to damage the fins or other component parts of the heat pump.

**Before calling the servicing operator:**

- Make sure the power supply is in order.
- Check for eventual clogging of the air outlet from evaporator through the grid – this may cause ice formation on the evaporator.

Check the ambient temperature in the room where the heat pump is installed, and make sure it is within the limits defined in the instructions.



**Installation and connection must be carried out in compliance with the national regulations.**

## **11. Transport and storage**

Before transport, protect the heat pump with protective foil and cardboard packaging to avoid eventual damages (scratches, bumps).

Move or transport the heat pump only when disconnected from power supply.



The total dimensions of the pump vary for different types.

The ambient temperature for transport and storage shall be between 10 and 45°C, but in exceptional cases and for a shorter period (up to 24 hours), it may reach up to max. 55°C.

**NEVER PLACE THE HEAT PUMP IN A HORIZONTAL POSITION.**



## **12. Dismantling and disposal**

The device as a whole has, according to its technical concept, an operational life of several years. Individual component parts have different life cycles and they should be replaced with new ones after they are malfunctioned, damaged or worn. Replace them exclusively with original replacement parts.

When the pump is obsolete and out of use, make sure to dispose it off on a special industrial waste collecting centre, taking into account the waste classification list. Any polluting component parts shall be disposed to special collection centres.

## 13. Safety warnings

This product is manufactured in compliance with the standards which allow the manufacturer to mark it with CE sign. In order to assure functionality of the product, the following warning signs had been used to mark potential hazards.

The warning signs have the following meaning:

Be sure to read the instructions.	Danger! Electricity!	Do not place in horizontal position. Transport and operation in vertical position.

Besides symbols and warning signs, the device also has an attached plate or sticker containing its specifications.

## 14. Resolving technical deficiencies

Warning		
A1	The pump switches off due to the too low ambient temperature.	Ventilate the room and let it warm up to adequate temperature (open the door, window) Adjust the switch-over temperature to lower setting (from 5 to 25°C) In case of connecting to the oil fired boiler, switch to the 'P2' or 'P3' operation mode (the 'P' key), heating will be automatically carried out with oil fired boiler or heater.
A3	The pump switches off, because the ambient temperature exceeded the upper limit 37°C	Ventilate the room and let it cool down to adequate temperature, and the pump will automatically continue with operation. If the temperature continues to be above this limit, relocate the heat pump to another room.
Error	Cause	Solution
E7	The pressure in the system is too high.	Check if there is sufficient water in the tank. Delete the warning with key +. In case of repeated malfunction, call the authorised servicing centre.
Alternating E8 and _	Temperature feeler for water is not connected.	Check if the feeler is connected or call the authorised servicing centre.
Alternating E8 and _	Temperature feeler for water is malfunctioned.	First, reset the heat pump. Check the feeler connection and cable. In case of repeated malfunction, call the authorised servicing centre.
Alternating E9 and _	Temperature feeler for air is not connected.	Check if the feeler is connected or call the authorised servicing centre.
Alternating E9 and _	Temperature feeler for air is malfunctioned.	First, reset the heat pump. Check the feeler connection and cable. In case of repeated malfunction, call the authorised servicing centre.
Description	Cause	Solution
Water is not heated to the preset	Heating cycle not closed.	Close the oil fired boiler heating cycle (close the valve).

temperature.	Circulation consuming too much heat.	Switch off the pump and close the circulation valve.
	Gas leakage in the system.	Call the authorised servicing centre.
	Damaged evaporator due to careless cleaning.	Call the authorised servicing centre.
The pump operates continuously – no switching off.	Not enough gas in the system.	Call the authorised servicing centre.
	Circulation consuming too much heat.	Switch off the pump and close the circulation valve.
	Uncontrolled escape of heat from the hot water tank (too large consumption of hot water).	Check all possible points for heat escape from the hot water tank.
Too much noise during operation of the pump Ice formation on the evaporator	The fan is in contact with the pump housing or protective net.	Call the authorised servicing centre. Check the air intake and outlet.
	Damaged compressor (damaged fixing springs)	
	Air flow rate is not sufficient.	
Ice formation on the evaporator	Air flow rate is not sufficient.	Check the air intake and outlet.
	Fan malfunctioned	Call the authorised servicing centre.
	Too low temperature in the room from which air is drawn	Set switch-over temperature to a higher setting.

## **15. Guarantee, warranty and product liability**

Warranty is made according to the legal provisions of the Republic of Austria and the EU.

1. The prerequisite for honouring of warranty terms on the part of the manufacturer (hereinafter referred to as Manufacturer) is presentation of a paid invoice for the purchase of the appliance in question, whereby the identity of the appliance including model and fabrication number must be indicated on the invoice and presented by the claim applicant. The General Terms and Conditions, Terms and Conditions of Sale and Delivery of the manufacturer shall apply exclusively.

2. The assembly, installation, wiring and start-up of the appliance in question must, to the extent that this is prescribed legally or in the installation and operation guide, have been performed by an authorized electrical technician or installer who has followed all the required regulations. The hot water tank (excluding outer jacket or plastic cover) must be protected from exposure to direct sunlight to prevent discoloration of the polyurethane foam and possible cracking of plastic parts.

3. The area in which the appliance is operated must be kept from freezing. The unit must be installed in a location where it can be easily accessed for maintenance, repair and possible replacement. The costs for any necessary changes to the structural conditions (e.g. doors and passages too narrow) are not governed by the guarantee and warranty declaration and therefore shall be rejected on the side of manufacturer. When erecting, installing and operating the water heater in unusual locations (e.g. attics, interior rooms with water-sensitive floors, closets, etc.), provision must be made for possible water leakage and means provided for catching the water with a corresponding drain to avoid secondary damage in the context of product liability.

4. Warranty claims will not be honoured for:

Improper transport, normal wear, intentional or negligent damage, use of force of any kind, mechanical damage or damages caused by freezing or by even one-time exceeding of the operating pressure indicated on the specification label, use of an unapproved plumbing fitting or non-functional hot water tank fitting as well as inappropriate and non-functional previously used fittings. The breakage of glass and plastic parts, possible colour differences, damages caused by improper use, in particular as a result of a failure to observe the information stated in the assembly and operating instructions (Operating and Installation Instructions), damages due to external influences, connection to the wrong voltage, corrosion damage as a consequence of aggressive waters – water not suitable for use as drinking water – in accordance with the national regulations (e.g. the Austrian Drinking Water Regulation TWV – Federal Law Gazette II no. 304/2001), deviations between the actual drinking water temperature at the tank fitting and the specified hot water temperature of up to 10°K (hysteresis of the controller and possible cooling-off due to pipelines), natural formation of boiler scale, lack of water, fire, flood, lightning, overvoltage, power failure or other types of force majeure. Use of non-original and company-external components such as e.g. heating elements, reactive anode, thermostat, thermometer, ribbed tube heat exchanger, etc. Washing-in of foreign objects or electrochemical influences (e.g. mixed installation), non-observance of the layout documents, failure to perform timely and documented replacement of the built-in sacrificial anode, lack of or improper cleaning and operation, as well as such deviations from the norm which reduce the value or functionality of the appliance even slightly. All regulations in accordance with ÖNORM B 2531 or DIN 1988 (EN 806) or the corresponding national regulations and laws must also be followed.

5. A justified claim must be reported to the closest customer service location of the manufacturer. The latter reserves the right to replace or repair a defective part or to decide whether a defective appliance shall be replaced with a working one of equal value. The manufacturer furthermore expressly reserves the right to require that the purchaser return the appliance in question.

6. Repairs made under warranty are to be performed only by persons authorized by the manufacturer. Replaced parts become the property of the manufacturer. If any repairs to the water heater become necessary as part of necessary service work, these are charged at the cost of repair and prorated material cost.

7. Any work performed without our express order, even this is done by an authorized installer, will void the warranty. Assumption of the costs for repairs performed by third parties presumes that the manufacturer was requested to eliminate the defect and did not or did not in timely fashion meet his obligation for replacement or repair.

8. The warranty period will not be renewed or extended as a result of a guarantee and warranty claim, service or maintenance work.

9. Transport damage will only be inspected and if appropriate recognized if it has been reported in writing to the manufacturer no later than the weekday following delivery.

10. Claims exceeding the terms of the warranty, in particular those for damage and consequential damages, are precluded insofar as these are legally permissible. Pro rata work times for repairs as well as the costs for restoring the equipment to its original condition must be paid in full by the purchaser. The guarantee provided extends according to this guarantee declaration only to the repair or replacement of the appliance. The provisions of the Terms of Sales and Delivery of the manufacturer remain, insofar as they are not altered by these guarantee conditions, fully in effect.

11. There is a charge for services provided outside of the context of these guarantee conditions.

12. In order for a warranty claim to be honoured by the manufacturer, the appliance must be paid for in full to the manufacturer and the claimant must have met all his obligations to his vendor in full.

13. The enamelled internal boiler for water heaters is warranted additionally for a period of 5 years following the delivery date as long as the warranty terms described under 1 to 11 above have been satisfied. If the warranty terms have not been met, the legal warranty requirements of the respective country from which the appliance was shipped shall prevail.

14. Claim satisfaction according to prevailing Austrian Product Liability Law:

Claims for compensation under the title of product liability are only justified if all prescribed measures and necessities for fault-free and approved operation of the appliance have been met.

This includes among other things the prescribed and documented anode replacement, connection to proper operating voltage, prevention of damage due to improper use, etc. From these conditions it can be concluded that if all requirements are met (norms, installation and operation guide, general guidelines, etc.), the device or product fault resulting in the secondary damages would not have occurred.

Furthermore it is mandatory that for processing of the claim the necessary documentation such as the part number and manufacturing number of the water heater, the seller's invoice and that of the executing license holder as well as a description of the malfunction for a laboratory study of the appliance in question (absolutely required, since a specialist will study the appliance and analyze the cause of failure) be provided.

To prevent misidentification of the water heater during transport, it must be marked with a highly visible and legible marking (preferably including address and signature of the end customer). Corresponding pictorial documentation indicating the extent of the damage, the installation (cold water line, hot water outlet, heating outgoing and return, safety fixtures, expansion tank if present) as well as the defect location on the water heater is also required. Furthermore the manufacturer reserves the express right to require that the purchaser provide all the documents and equipment and equipment parts necessary for clarification. The prerequisite for performing services under the title of product liability is that it is the claimant's obligation to prove that the damage was caused by the manufacturer's product. Damage compensation according to the Austrian Product Liability Law is subject to a 500 Euro deductible. Non-observance of the operating and installation guide and/or the relevant norms is considered negligent and will result in a liability disclaimer within the scope of compensation for damages.