

AREBOS

Domestic waterworks 1200 W

AR-HE-HWW1200

User's Manual



Please follow all security measures in this user's manual to ensure a secure use.

Table of contents

1. Introduction and safety instructions	3
1.1 Introduction.....	3
1.2 Explanation of the symbols.....	3
1.3 General safety instructions.....	4
1.4 Specific safety instructions	4
2. Intended use	6
3. Function	6
4. Technical specifications	6
5. Assembly.....	7
5.1 General	7
5.2 Connect suction line	7
5.3 Connect pressure line	8
5.4 Fill the pump.....	8
6. Operation.....	8
7. Troubleshooting	9
8. Cleaning, maintenance and storage	13
8.1 General cleaning work	13
8.2 Clean check valve.....	13
8.3 Eliminate blockages	13
8.4 Increase the pre-charge pressure	13
8.5 Emptying and removing the pump	14
8.6 Store	14
9. Environmentally friendly disposal	15
9.1 Disposal and packaging.....	15
9.2 Disposal of old equipment.....	15
EU Declaration of Conformity	16

Thank you for purchasing our product. Please read the operating instructions carefully before using the product for the first time. If you give the product to a third party, this instruction manual must also be handed over. Keep this manual for future reference. The drawings in this manual may not correspond to the physical objects. Please refer to the physical objects.

1. Introduction and safety instructions

1.1 Introduction

- These operating instructions are intended to familiarise you with the installation, use and maintenance of the appliance. To install the unit safely and correctly, please read the operating instructions **before** you start.
- Check the unit for any damage that may have occurred during transport. Immediately report any damage to the carrier by which the product was delivered.

1.2 Explanation of the symbols



By means of a CE marking, it can be recognized that a product complies with the legal requirements of European legal standards and therefore may be traded within the European Community.



Warning! Read the safety instructions carefully. The Failure to follow the safety precautions can result in serious injury or damage. Keep the operating instructions in a safe place.



Note: Pull out the mains plug!



Attention! Make sure the product is grounded!



Use caution when using this article.



Warning of electrical voltage!



This product **must not** be disposed of with household waste!

1.3 General safety instructions

- Your safety is of the most importance to us. Please make sure that you read this instruction booklet **before** attempting to install and use the appliance. If you are unsure of any of the information contained in this booklet, please contact the Retailer where you purchased your unit.
-  **WARNING:** Read all safety and usage instructions. Failure to follow the safety information and instructions can cause electric shock, fire and/or serious injury. Keep all safety and usage instructions for future reference.
- **DO NOT** use the product until you read the instruction manual.
- Make sure you have read the instruction manual thoroughly and understand the contents before you start the installation.
- The instructions are in the interest of your safety.
- Remove the packaging material.
- Check whether the scope of delivery is complete and check it for transport damage.
- Packaging material is not a child's toy! Children must not play with plastic bags! There is a danger of suffocation!
- Be attentive. Pay attention to what you are doing. Go about your work with common sense.
- Do not use the domestic waterworks if you are not concentrated, tired or under the influence of drugs, alcohol or medication. A moment of carelessness when using the Domestic Water may result in serious injury.
- This appliance is not intended for use by children, persons with reduced physical, mental or psychological capabilities, or persons with no experience or knowledge of such appliances, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children or persons who are not familiar with the operating instructions must not use the appliance.

1.4 Specific safety instructions

- There is a risk of injury due to electric current!
- Freezing, running dry or blocking by impurities must be avoided. This can lead to irreparable damage.
- Do not use the device near flammable liquids or gases. Failure to do so may result in fire or explosion.
- The operator is responsible for compliance with site-specific safety and installation regulations.
- This water pump is designed for use with clean water. Their fields of application include garden irrigation, the water supply of a household, irrigation in the garden or on agricultural land.
- The pump is not suitable for use in swimming pools, ponds, baths and other circumstances where persons may come in contact with water and therefore may not be used for such purposes.
- This water pump must not be operated with flammable or harmful liquids.

- This water pump must not be exposed to impurities such as sand, stones, sticky substances, etc. in the pumping liquid for a long time. Since the pumping liquids may contain corrosive chemical substances, it is of particular importance to prevent their action on the material of the pump body.
- Sand and stones in the pumping water can cause the pump to wear out quickly and reduce its effective performance. Therefore, the installation of a filter is necessary.
- If too much pump water flooded the area to be irrigated due to your own fault, you must take a number of protective measures (such as the installation of a water disposal device, an alarm device, a reserve pump, a water tank, etc.). In any case, the manufacturer is not responsible for any damage or loss caused thereby.
- This pump is not suitable for the transport of drinking water!
- Only use extension cords intended for outdoor use. Always unroll cable drums completely.
- Protect cables from heat, oil and sharp edges.
- Only use the device and extension cable in a technically perfect condition! Damaged devices must not be operated.
- Never carry the pump by the cable.
- The power supply must be in accordance with the specifications given on the product. If necessary, ask your energy supply company for the necessary connection conditions. If the pump and power cord do not meet the conditions, do not connect the pump!
- Never remove the plug or shorten the cable. Keep the connections (plug and socket) dry.
- Unauthorized modifications or changes to the device are prohibited.
- When the garden pump is in operation, the water outlet (such as the tap or sprinkler system) must be open to allow air to escape from the hose. If the water outlet is closed, the pump may be damaged by overheating after more than 5 minutes of operation.
- Prior to use, always visually inspect to see if the pump, especially the power cord and plug, is damaged.
- Never touch the power plug with wet hands.
- It is absolutely forbidden to reach into the opening of the pump with your hands when the device is connected to the mains.
- A direct connection to the public drinking water network for drinking water supply is not permitted.

2. Intended use

- The domestic waterworks is intended for private use in the house and garden and only suitable for pumping clear and rain water.
- It is suitable for:
 - the irrigation of the garden and land area
 - the water supply in the house
 - increasing the pressure of the water supply (When increasing the pressure of the water supply, the local regulations must be observed. You will receive information from your sanitary specialist)
- The pump is not suitable for continuous use, e.g. in industry, in mining or for a water treatment system.
- This water pump has no splash guard and may only be installed in a dry environment. The water pump must not be set up or operated in rain, in dirty or damp surroundings or in freezing temperatures.
- The domestic waterworks is not suitable for the promotion of:
 - sand-containing water, salt water and waste water with textile and paper components,
 - aggressive, corrosive, explosive or gassing chemicals or liquids,
 - water and food or drink,
 - liquids above 95° F (35° C).

3. Function

- The pumps have a maintenance-free motor with thermal overload protection. They are equipped with a stainless-steel water flow system and a female-threaded suction and pressure port to pump water to a higher energy level.
- The domestic waterworks has a membrane pressure kettle, which is under pressure (pre-charge pressure). This allows the removal of small amounts of water without the pump starting.
- The pressure switch switches on the pump when the water pressure drops in the kettle. When the kettle is filled, the pump shuts off again.

4. Technical specifications

Modell	AR-HE-HWW1200
Performance	1200 W
Voltage	230 V; 50 Hz
Max. Capacity	3800 L/h
Material	Polypropylene; Stainless steel
Max. Suction lift	23 ft (7 m)
Max. conveyor height	157.5 ft (48 m)
Max. working pressure	4.8 bar
Cable length	4 ft (1.2 m)
Volume pressure tank	19 L
Pressure connection (inside thread)	1" (25 mm)
Suction lift (inside thread)	1" (25 mm)
Inlet temperature	95°F (35°C)
Protection class	I
Safety class	IPX4
Weight	27.5 lbs (12,5 kg)

5. Assembly

5.1 General

- Prepare a level and stable location.
- Place the device horizontally, against falling over and protected against flooding.
- The domestic waterworks must be protected against rain and direct water jet.
- The device must be installed in dry, well-ventilated conditions and at a temperature below 104°F (40°C).
- The domestic waterworks can also be screwed to a solid foundation. For reducing vibrations, it is recommended to use antivibration material - e.g. a rubber layer - between the pump and the support surface.
- During installation of the water pump, the power supply must be disconnected.
- Protect the device, cables and connections from moisture.
- For safety reasons, the water pump must be checked (before commissioning) to see if the mains cable or the power plug is damaged. It is strictly forbidden to put a damaged pump into operation.
- The electrician responsible for the installation must make sure that the electrical connections, including the grounding contact, comply with the standard.
- Only connect the device to a socket with residual current device (RCCB) with a rated current of not more than 30 mA and a fuse of at least 10 amps.
- The pump must be earthed. If it is necessary to extend the original cable, a cable with the same cross section must be used.
- If the pump is mounted directly in a distribution network, it must be noted that the pre-pressure is added to the pump pressure.

5.2 Connect suction line

- Select the length of the suction line so that the domestic waterworks cannot run dry. The suction line must always be at least 11.8 in (30 cm) below the water surface. The maximum suction height must not exceed 23 ft (7 m).
- Connect the suction line. Pay attention to a tight connection without damaging the thread.
- Be sure to use a suction fitting with a suction filter, suction basket and non-return valve to prevent damage to the pump due to contamination.
- A check valve must be installed in the suction line so that the water does not drain when the pump is switched off.
- For slightly sand-containing water, a pre-filter must be installed between the suction line and the pump inlet. Ask a specialist.
- The suction line may be a fixed pipe or a flexible hose line. It must have a minimum cross section of 0.984 in (25 mm).
- The suction line should be as short as possible, because with increasing line length the flow rate decreases.
- Lay the suction line rising from the water outlet to the pump.
- Make sure that the suction line is not over the height of the pump and that it has no bends to prevent the formation of air pockets. The suction line must be tight to prevent air intake.
- When installing the suction and discharge lines, make sure that no mechanical pressure or tension is exerted on the device. Fix it if necessary and ask a specialist.
- Screw the suction line to the suction nozzle (internal thread). Make sure that the thread is not overtightened and damaged. Use appropriate sealants (e.g., O-rings, gaskets, sealing strip, etc.).
- Check the connection for leaks. Leaky connections will cause malfunctions and can cause property damage.

- Lay suction line always rising. If the suction height is more than 23 ft (7 m), a suitable suction hose must be installed.

5.3 Connect pressure line

- The pressure line conveys the liquid to be conveyed from the pump to the extraction point.
- Screw the pressure line to the discharge nozzle (water outlet) (internal thread). Make sure that the thread is not overtightened and damaged. Use appropriate sealants (e.g., O-rings, gaskets, sealing strip, etc.). Check the connection for leaks. Leaky connections will cause malfunction and can cause property damage.
- Make sure that the pressure line is not loaded with its weight on the pump body. Attach these as needed.
- In case of permanent installation (e.g. domestic water supply) it is recommended to connect the device to the pipe network with elastic hose lines to reduce noise and vibrations.
- The pressure pipes or hoses connected to the pressure side should be as short as possible, as straight as possible, not bent, and not half rolled up. The diameter should be as large as possible.

5.4 Fill the pump

- Use a suction line with a check valve, which prevents emptying of the suction line when filling or stopping the pump.
- Remove the locking screw on the filler neck.
- Fill the pump via the filler neck with water until it overflows.
- Screw the locking screw onto the filler neck.

6. Operation

- The pumps are not self-priming pumps. Therefore, the intake hose must first be equipped as described below:
 1. Check valve with filter; This ensures that after switching off the pump, the hose and the pump do not run dry. This part of the hose keeps the pumped water back.
 2. hose connection with coupling nut; this hose end is connected to the front of the pump.
 3. Both accessories must be securely fastened to the hose with hose clamps.
- Before connecting the hose to the pump, it is best to fill it with water. Then you can connect the three-way tap or another 1 in (25 mm) connection to the outlet of the pump.
- Afterwards you have to fill the pump housing with water through the opening of the integrated filter and close it again.
- When commissioning for the first time, make sure that the pump housing is completely vented – i.e. filled with water. If this venting is omitted, the pump does not suck in the pumped liquid. It is highly recommended, but not urgently necessary, in addition to deaerate the intake pipe or to fill it with water.
- If both the pump housing and the hose are filled with water, you can turn on the pump with the ON/OFF switch. The pump immediately starts pumping water.
 - Tilt the ON/OFF switch to position "I" to switch on the pump.
 - Tilt the ON/OFF switch to position "O" to switch off the pump.
- When the pump is turned off again, the water remains in the pump housing and in the hose. The next time the pump is turned on, it pumps water immediately. If the check valve has not been fitted or if the valve and hose are not properly connected (hose clamp!), the pump may run dry again and must be refilled to function properly.
- The pump must not work when the inflow is closed.

- Before every restart, fill the pump with pumped liquid until it overflows. Switching on without water filling destroys the pump.

7. Troubleshooting

Problem	Possible cause	Solution
<p>The electric motor is running, but the pump does not suck in water or too little at low pressure.</p>	<ul style="list-style-type: none"> - The pump body is not filled with water after starting the pump. - The suction hose is not tight enough or is leaking. - The filter sieve of the check valve of the suction inlet is blocked. - The air cannot escape from the compressed air hose because the water outlet is closed. - The waiting period does not comply with the regulations. - Too large suction height (over 23 ft (7 m)). - The check valve does not suck in water. - Suction line clogged by impurities. - Pump clogged with impurities. - Suction line too long. - Diameter of the suction line too small. - Suction line not immersed deep enough in the medium. 	<ul style="list-style-type: none"> - Fill the pump with water. - Check the recommended and used parts and components of the pump, e.g. the connection of the suction hose, the connection of the pressure hose, the clamping ring, the suction hose itself, etc. and the sealing strip made of teflon or hemp rope. The pump can only work with absolutely tightly sealed connections. - Clean the check valve of the suction inlet and the filter sieve. - Open the water outlet (e.g. the water faucet, sprinkler nozzle, etc.) when the pump starts working. - Fill the entire suction hose with water or check it again at least 7 minutes after starting the pump. - Select the suction height smaller. - Check the water level of the reservoir. If possible, extend the suction hose. - Clean the pump. Check the filter in the suction line and replace if necessary. - Clean the pump. Check the filter in the suction line and replace if necessary. - Change the installation of the pump. - Replace the suction line. - Make sure that the suction line is always sufficiently immersed in the fluid to be pumped.

<p>Inadequate water discharge.</p>	<ul style="list-style-type: none"> - The filter sieve of the check valve is blocked. - The intake water level is too low. - Impurities reduce the effective performance of the pump. 	<ul style="list-style-type: none"> - Clean the filter sieve. - Dip the check valve deeper into the water. - Clean the housing of the pump, the suction hose and the outlet pressure hose with pressurized water.
<p>The pump does not reach the desired pressure.</p>	<ul style="list-style-type: none"> - Shut down pressure set too low. - Ingress of air into the intake pipe. 	<ul style="list-style-type: none"> - Contact customer service. - Check and make sure that: <ul style="list-style-type: none"> a) the suction line and all connections are tight. b) the inlet of the intake pipe including check valve is immersed in the pumped liquid. c) the check valve with suction filter closes tightly and is not blocked. d) there are no siphons, kinks, opposite slopes or restrictions along the suction lines.
<p>The pump does not turn off.</p>	<ul style="list-style-type: none"> - Shut down pressure set too high. - Ingress of air into the intake pipe. 	<ul style="list-style-type: none"> - Contact customer service. - Check and make sure that: <ul style="list-style-type: none"> a) the suction line and all connections are tight. b) the inlet of the intake pipe including check valve is immersed in the pumped liquid. c) the check valve with suction filter closes tightly and is not blocked. d) there are no siphons, kinks, opposite slopes or restrictions along the suction lines.
<p>The heat protection switch cannot switch off the pump.</p>	<ul style="list-style-type: none"> - Overload of the electric motor due to friction due to impurities entering the engine. 	<ul style="list-style-type: none"> - Clean the housing of the pump with pressurized water.
<p>The pump switch is always ON or OFF.</p>	<ul style="list-style-type: none"> -No check valve is installed on the suction hose. 	<ul style="list-style-type: none"> - Make sure that there is a check valve on the suction hose.
<p>Frequent switching on and off of the pump switch (when used for household water supply)</p>	<ul style="list-style-type: none"> -Breakage of the rubber lining in the pressure tank -No compressed air in the tank. 	<ul style="list-style-type: none"> -Replace the rubber casing or the tank. - Use a suitable valve and connect it to a compressed air supply; fill the tank with air.
<p>The pump turns on and off too</p>	<ul style="list-style-type: none"> - Membrane of the pressure kettle damaged. 	<ul style="list-style-type: none"> - Have membrane or entire pressure kettle replaced by

8. Cleaning, maintenance and storage

- Under normal conditions, the water pump is maintenance-free.
- Before carrying out any work on the device, remove the mains plug from the socket.
- If the power cord is damaged, it must be replaced by a qualified electrician. Short-circuit damage is not covered by the warranty.
- Check the pre-charge pressure in the boiler every 2-3 months or when the pump starts after a small water intake.

8.1 General cleaning work

- Clean and maintain your device regularly. This ensures its performance and long life.
- From time to time, clean the chambers by rinsing them with clean water to prevent them becoming blocked by dirt.
- After pumping raw water or rainwater or other fluids, flush the pump with clean water. When using a suction filter (recommended!), clean it regularly.
- Clean the controls with a dry cloth.
- Never spray the device with water or immerse it in water.
- Never use solvents such as gasoline, alcohol, ammonia water, etc. These solvents can damage the plastic parts.

8.2 Clean check valve

- Removing and installing filter.
- Unscrew check valve and clean under running water.
- Renew gasket if necessary.
- Install check valve.

8.3 Eliminate blockages

- If you pump contaminated fluids without an aspiration filter (pre-filter) - despite explicit reference not to do so - the device may become clogged.
- Remove the suction hose at the pump inlet.
- Connect the pressure hose to the water pipe.
- Rinse the pump and, if necessary, clean the suction filter.
- Check by briefly switching on, if the pump turns free.
- If you cannot eliminate the blockage, the pump parts must be disassembled and cleaned. Be sure to have this work done by an authorized specialist.

8.4 Increase the pre-charge pressure

- If the air pre-charge pressure in the boiler is too low, the pump will restart much faster and damage to the equipment may occur. Therefore, check the pre-charge pressure regularly. The pre-charge pressure cannot be read off on the pressure gauge!
- Unplug the power plug.
- Open the pressure line (taps, nozzles, etc.) and allow the water to drain completely.
- Unscrew the plastic cap on the boiler, behind it is the air valve
- Place an air pump with pressure gauge on the air valve.
- Check the pre-charge pressure.
- If necessary, pump air into the boiler.
- Screw the plastic cap onto the boiler, connect the device and fill it.
- Additional measures, in particular the opening of the pump, must be carried out by a qualified electrician. In case of repair, always contact a service workshop.

8.5 Emptying and removing the pump

- Store the pump dry and frost-proof. If there is a risk of frost and long periods of non-use (e.g. wintering), the pump must be completely drained.
- Unplug the power plug.
- Open the pressure line (faucets, nozzles, etc.) and drain the water.
- Unscrew the screw on the water drain nozzle and drain the contents of the pump.
- Rinse the pump with clean water.
- Briefly open the screwcap of the metal hose on the boiler and allow the remaining water to drain off.
- Remove suction and discharge lines from the unit.
- For recommissioning the pump, see chapter Assembly and Operation.

8.6 Store

- Disconnect the mains plug of the pump.
- Unscrew the cap and the check valve with a suitable tool.
- Tilt the pump in the direction of the water outlet so that the device is completely emptied.
- Clean the domestic waterworks before storing it.
- Store the device in a clean, dry, frost-free place away from direct sunlight.
- Store the device inaccessible to children.

9. Environmentally friendly disposal

9.1 Disposal and packaging

- The packaging of your unit consists of materials that are necessary to guarantee effective protection during transport. These materials are fully recyclable and therefore reduce the environmental impact. Dispose of the packaging in a bin for recyclable materials.

9.2 Disposal of old equipment

- Old appliances must be disposed of in accordance with the guidelines and regulations of the local waste disposal authority. Check with your local administration for the address of the nearest recycling centre and deliver your appliance there.



The symbol of the crossed-out dustbin on a Waste electrical or electronic equipment indicates that it must not be disposed of with household waste at the end of its life. Collection points for waste electrical and electronic equipment are available free of charge in your area. You can obtain the addresses from your city or local government. You can find out about other return options created by us on our website www.arebos.de.



The separate collection of Waste electrical or electronic equipment is intended to enable the reuse, recycling or other forms of recovery of Waste electrical or electronic equipment and to avoid the negative consequences of disposal on the environment and human health.

Our customer service number: Tel. +44 (0) 208 068 5604

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EU Declaration of Conformity

We,

Canbolat Vertriebs GmbH, Gneisenaustraße 10-11, 97074 Würzburg, Germany,

Hereby declare that the product named below, seen its design and construction as well as according to our sales, has been complied with the relevant and basic health and safety EU-requirements.

Name of the product	Domestic waterworks 1200 W
Model number	AR-HE-HWW1200
Article number	4260551587757

Should the appliance be modified without our consent, this declaration of conformity will lose its validity.

Directives

This device complies with the following EU/EC directives:

2014/30/ EU EMC Directive

2014/35/ EU Low Voltage Directive

2011/65/ EU RoHS Directive

2014/68/ EU Pressure Equipment

Date/Manufacturer Signature/Location:

Würzburg, 09.11.2021



Signature:

Dipl.-Inform. (Univ.) Korhan Canbolat, Managing Director

Representative of these instructions for use/technical data:

Dipl.-Inform. (Univ.) Korhan Canbolat, Managing Director

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Return address can be found in the imprint: <https://www.arebos.de/impressum/>

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Court of the Commercial Register is Würzburg, HRB 10082

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