Oase
LIVING WATER

AquaMax *Eco Classic 9000 C / 12000 C / 18000 C*

EN **Operating instructions**

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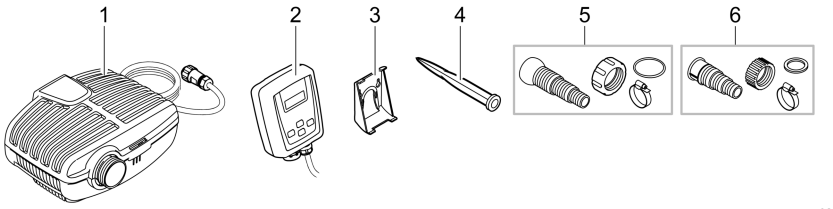

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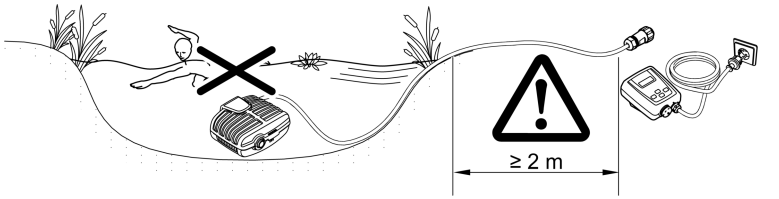

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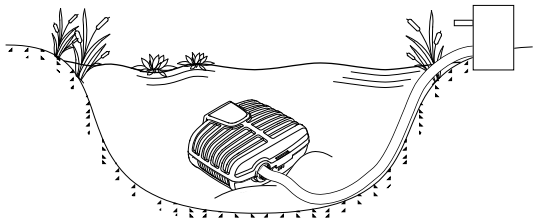

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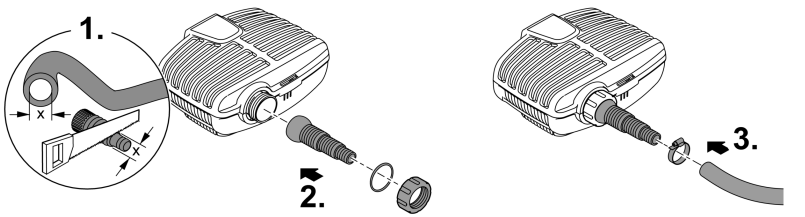

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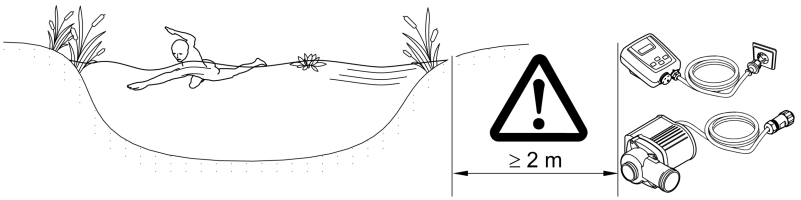

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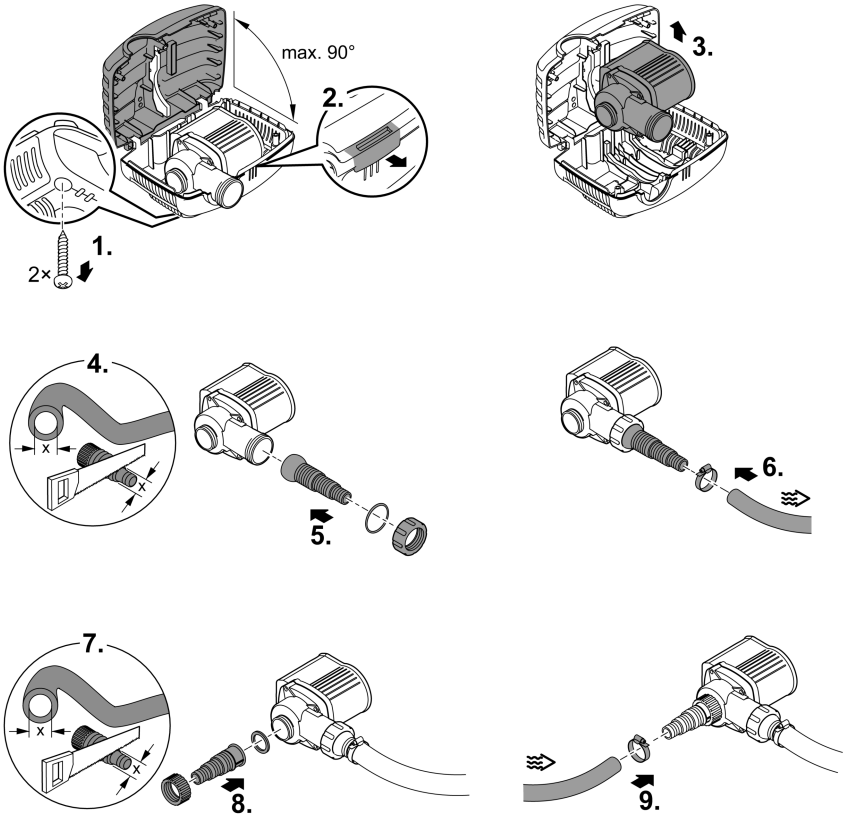

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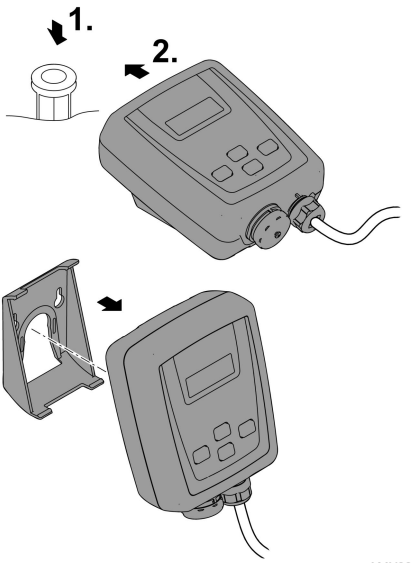

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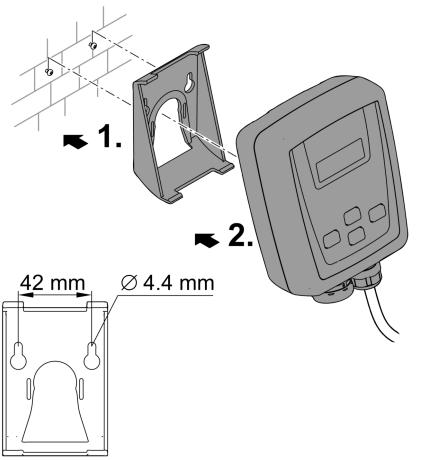

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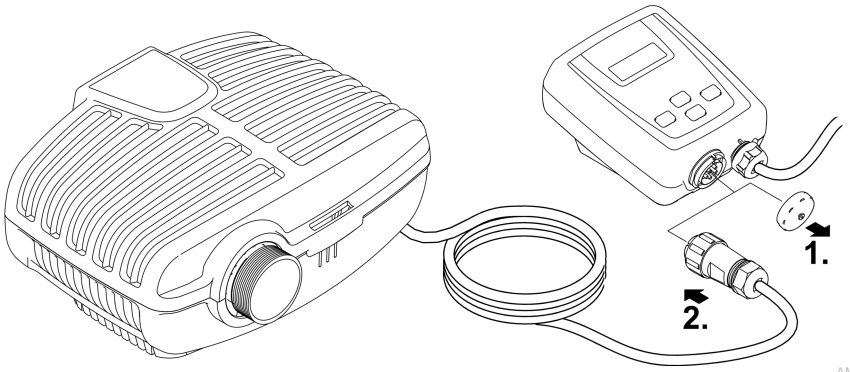

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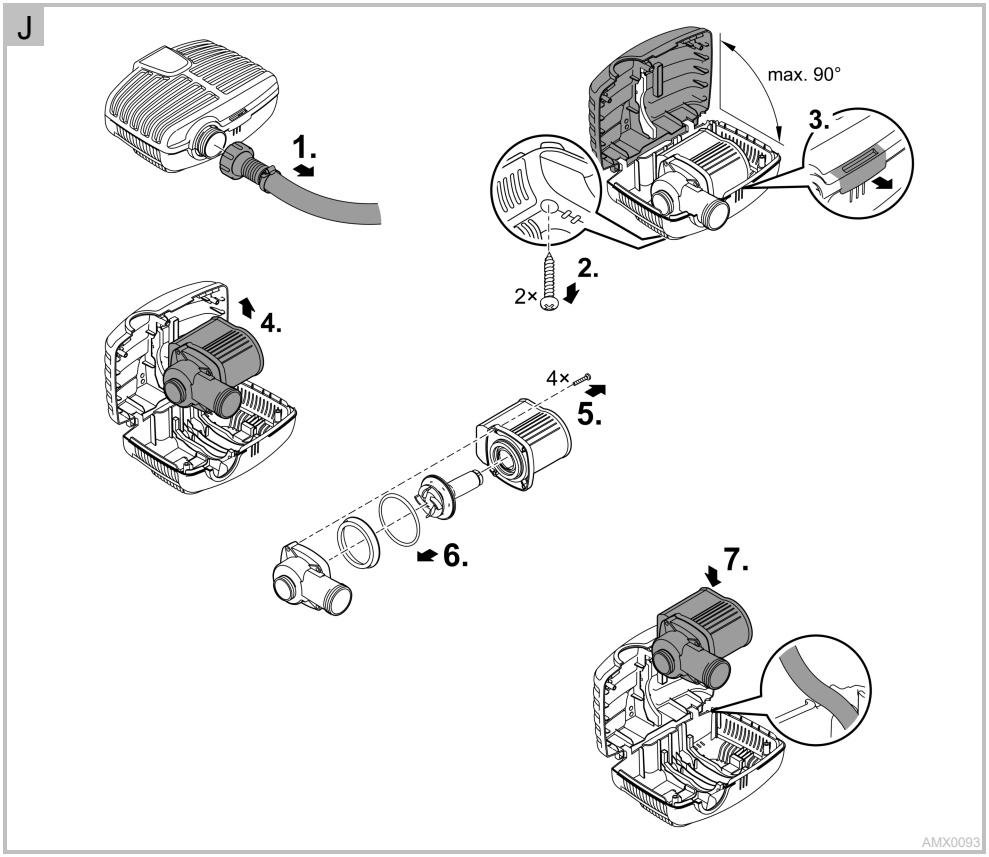

⚠WARNING

- This unit can be used by children aged 8 and above and by persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they are supervised or have been instructed on how to use the unit in a safe way and they understand the hazards involved.
- Do not allow children to play with the unit.
- Only allow children to carry out cleaning and user maintenance under supervision.
- Ensure that the unit is fused for a rated fault current of max. 30 mA by means of a fault current protection device.
- Only connect the unit if the electrical data of the unit and the power supply correspond. The unit data is to be found on the unit type plate, on the packaging or in this manual.
- Possible death or severe injury from electrocution! Before reaching into the water, disconnect all electrical units in the water from the mains.
- Only operate the unit if no persons are in the water.
- Do not use the unit if electrical cables or housings are damaged.
- A damaged connection cable cannot be replaced. Dispose of the unit.

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1 Information about these operating instructions

You made a good choice with the purchase of this product **AquaMax Eco Classic 9000 C / 12000 C / 18000 C**.
Prior to commissioning the unit, please read the instructions of use carefully and fully familiarise yourself with the unit. Ensure that all work on and with this unit is only carried out in accordance with these instructions.
Adhere to the safety information for the correct and safe use of the unit.
Keep these instructions in a safe place! Please also hand over the instructions when passing the unit on to a new owner.

1.1 Warnings used in these instructions

The warning information is categorised by signal words, which indicate the extent of the hazard.

WARNING
Indicates a possibly dangerous situation, which could lead to death or severe injuries, if not avoided.

NOTE
Indicates a possibly dangerous situation, which could lead to damage to property or the environment, if not avoided.

TIP
Useful tip.

1.2 Cross-references used in these instructions

▢ A reference to a figure, e.g. figure A.

→ Reference to another section.

2 Safety information

2.1 Correct electrical installation

- Electrical installations must meet the national regulations and may only be carried out by a qualified electrician.
- A person is regarded as a qualified electrician if, due to his/her vocational education, knowledge and experience, he or she is capable of and authorised to judge and carry out the work commissioned to him/her. This also includes the recognition of possible hazards and the adherence to the pertinent regional and national standards, rules and regulations.
- For your own safety, please consult a qualified electrician.
- Route cables such that they are protected from damage and do not present a tripping hazard.
- Extension cables and power distributors (e.g. outlet strips) must be suitable for outdoor use (splash-proof).
- Protect the plug connection from moisture.
- Only connect the unit to a correctly fitted socket.

2.2 Safe operation

- The impeller unit in the pump contains a magnet with a strong magnetic field that may affect the operation of pacemakers or implantable cardioverter defibrillators (ICDs). Always keep magnets at least 0.2 m away from implanted devices.
- Never carry or pull the unit by the electrical cable.
- Never carry out technical changes to the unit.
- Only carry out work on the unit that is described in this manual. If problems cannot be overcome, please contact an authorised customer service point or, if in doubt, the manufacturer.
- Only use original spare parts and accessories for the unit.

3 Product Description

3.1 Overview

▢ A	Description
1	Filter pump
2	Controller for regulating the speed of the filter pump • Control via the OASE App "Easy Switch"
3	Retaining frame for mounting controller to the wall
4	Ground stake for mounting controller at ground level
5	Stepped hose adapter with ball joint, seal, coupling nut and hose clip
6	Stepped hose adapter with coupling nut and hose clip

3.2 Intended use

Only use the product described in this manual as follows:
- For pumping normal pond water for filter systems, waterfall systems and water course systems.
- Operate in accordance with instructions. (→ Technical data)
- Use for private purposes only.

The following restrictions apply to the unit:
- Do not use in swimming ponds.
- Never use the unit with fluids other than water.
- Never run the unit without water.
- Do not use in conjunction with chemicals, foodstuff, easily flammable or explosive substances.
- Do not connect to the domestic water supply.

4 Installation and connection

The unit can be placed submerged or dry.

▢ B

WARNING
Death or serious injuries from hazardous electrical voltage due to operation of this unit in a swimming pond.
- Never operate this unit in a swimming pond.

4.1 Submerged installation of the pump

▢ C
- Only install the unit below water level.

Place the unit horizontally on the ground ensuring its stable position.

How to proceed:
▢ D
1. Shorten the stepped hose adapter to the diameter of the hose used if necessary.
   – This reduces pressure losses.
2. Screw the stepped hose adapter including union nut and sealing ring to the outlet.
   – Align the stepped hose adapter prior to tightening the union nut.
3. Slip the hose clip over the hose, fit the hose onto the hose connector and secure with the hose clip.

4.2 Install the unit at a dry place

☐ E

- Swimming pond or pool that may be accessed by people.
  – Install the unit at least 2 m away from the water.
- Do not expose the pump to direct sunlight.

How to proceed:

☐ F

1. Remove screws.
   – The screws are used as transport protection and not required for operation.
2. Actuate the engagement hook and fold up the strainer top casing.
3. Remove pump.
4. Shorten the stepped hose adapter to the diameter of the hose used if necessary.
   – This reduces pressure losses.
5. Screw the stepped hose adapter including sealing ring onto the inlet.
6. Slip the hose clip over the hose, fit the hose onto the hose connector and secure with the hose clip.
   – Align the stepped hose adapter prior to tightening the union nut.
7. Shorten the stepped hose adapter to the diameter of the hose used if necessary.
   – This reduces pressure losses.
8. Screw the stepped hose adapter including union nut and sealing ring to the outlet.
   – Align the stepped hose adapter prior to tightening the union nut.
9. Slip the hose clip over the hose, fit the hose onto the hose connector and secure with the hose clip.

4.3 Mounting the controller on the ground stake

How to proceed:

☐ G

1. Fully insert the ground stake into the ground.
2. Slide the device onto the ground stake.
3. Check its stability.

4.4 Mounting the controller to the wall

How to proceed:

☐ H

1. Affix the retaining frame using suitable screws.
2. Fit the device into the retaining frame.
   – Ensure that the device is properly engaged in the retaining frame.

4.5 Connecting the controller

How to proceed:

☐ I

1. Remove the protection cap from the unit.
2. Attach the connector and secure with the coupling nut.
   – The connector and coupling must be clean and dry.

5 Commissioning/start-up

NOTE

The unit will be destroyed if it is operated with a dimmer. It contains sensitive electrical components.

- Do not connect the unit to a dimmable power supply.

Switching on

The pump must be connected to the controller before the controller is switched on.

- First connect the controller to the mains supply, then switch on the pump at the controller.

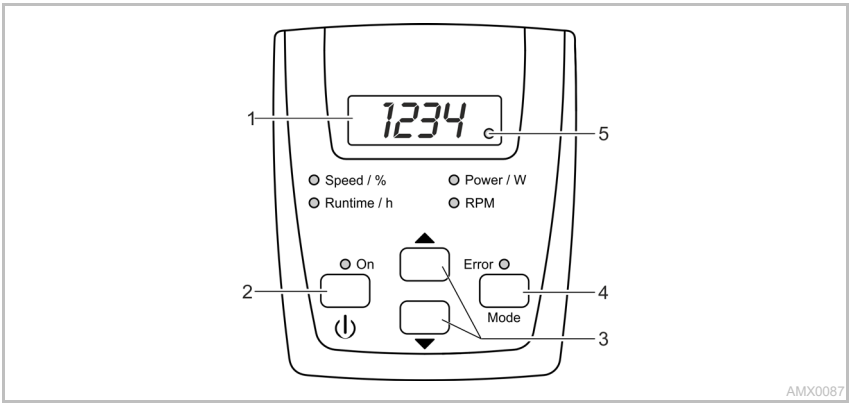
Switching off

- Switch the pump off at the controller.
  – Disconnect the controller from the mains before performing any work on the unit.

When started up, the pump automatically performs a pre-programmed self-test (**Environmental Function Control (EFC)**). The pump detects if it is running dry / blocked or submerged. The pump switches off automatically after approx. 90 seconds if it runs dry/is blocked. In the event of a malfunction, disconnect the power supply and “flood the pump” or remove the obstacle. Afterwards, the unit can be restarted.

6 Operation

6.1 Controller overview



Description		Function
1	Four-digit LED display	For displaying values • Standard display is "Power / W" mode.
2	“On/Off” button	For switching the pump on or off
3	Arrow keys	For increasing or decreasing rotation speed/power output
4	“Mode” button	• For selecting the next mode • For switching the wireless connection on/off
5	LED wireless connection	• The LED lights up when the wireless connection is switched on. • The LED blinks when connected to the OASE App.
○	Speed / % Runtime / h Power / W RPM	The respective LED lights up for the mode that is selected. • The current mode appears in the display.
○	ON	The LED lights up when the pump is switched on.
○	Error	The LED lights up when an error occurs. • The error code appears in the display. (→ Error messages)

6.2 Operating functions

Switching the pump on/off

Proceed as follows		Information
	Press the button briefly to turn the pump on or off.	–

Increasing or decreasing rotation speed

Proceed as follows		Information
	Press the desired button several times or push continually in order to change the rotation speed in percent.	• Adjustable range: 1 % … 100 % • Increment: 1 % • Adjustment is only possible in "Speed / %" or "Power / W" modes. • The adjusted value is immediately adopted. • By pressing a button the controller automatically switches to "Speed / %" mode. After 15 s without operation the controller automatically switches to "Power / W"mode.

Displaying current status values

Proceed as follows		Information
MODE	Press the button briefly to select the next mode.	"Runtime / h" mode • Displays the total operating hours of the pump • Displays up to 9999 operating hours: 0 to 9999 – Displayed increments: 1 hour • Displays from 10000 to 99900 operating hours: 100H to 999H – Displayed increments: 100 hours – Example: 022H = 22 × 100 = 2200 operating hours "Power / W" mode • Displays the current power consumption of the pump in watts – Tolerance: ±5 % of the max. power consumption. (→ Technical data) "RPM" mode • Displays the current speed of the pump in revolutions per minute "Speed / %" mode • Displays the current speed in percentage – Display range: 1 to 100 After 15 s without operation the controller automatically switches to "Power / W"mode.

Switching the wireless connection on/off

Proceed as follows		Information
MODE	Press and hold the button for longer than 10 s.	• If bOF appears in the display, the wireless connection is switched off. • If bOn appears in the display, the wireless connection is switched on. – The LED in the display lights up when the wireless connection is switched on. – The LED in the display blinks when connected to the OASE App. – (→ Controller overview) • When the unit is delivered, the wireless connection is switched on. After 15 s without operation the controller automatically switches to "Power / W"mode.

Connecting the controller to the smart phone/tablet

The maximum distance for interference-free communication between the controller and smartphone/tablet depends on the transmission power of the smartphone/tablet. Brick walls, walls made of reinforced concrete, large metal objects or bushes and trees can dampen radio waves and decrease the distance.

Proceed as follows		Information
1.	Download and install the OASE App "Easy Switch" to the smartphone/tablet.	The OASE App is available on iOS (App Store) and Android (Play Store).
2.	If you have not already done so, switch on the wireless connection at the controller.	(→ Switching the wireless connection on/off)
3.	Activate the Bluetooth feature on the smartphone/tablet.	–
4.	Start the App "Easy Switch" .	After a brief search, a list of available products will appear.
5.	Select your pump from the list.	An authentication code will be displayed on the controller for two minutes.
6.	Enter the authentication code in the smartphone/tablet.	Upon successful connection, the display will change to the operating instruction page for the pump. • Now, the pump can be controlled via the smartphone/tablet. • The LED in the controller display blinks. (→ Controller overview)

7 Remedy of faults

7.1 Troubleshooting overview

Malfunction	Cause	Remedy
Pump does not start	No mains voltage	• Check the mains voltage. • Check supply lines.
	Faulty connection between pump and controller	Check connection, and if needed reconnect
	Pump not switched on	Switch the pump on at the controller
Pump does not transport fluid	Filter housing clogged	Clean strainer casings
	Excessively soiled water	Clean the pump. The pump automatically switches on again once the motor has cooled down.
	Pump is set too low	Increase the rotation speed of the pump at the controller
	The impeller unit is blocked	Disconnect the power supply and remove obstacle. Then switch the pump on again.
Insufficient delivered quantity	Filter housing clogged	Clean strainer casings
	Excessive loss in the supply lines	• Select larger hose diameter • Adjust stepped hose adapter to hose diameter • Reduce hose length to minimum necessary • Avoid unnecessary connection elements
	Pump is set too low	Increase the rotation speed of the pump at the controller
Pump switches off after operating briefly	Excessively soiled water	Clean the pump. The pump automatically switches on again once the motor has cooled down.
	The impeller unit is blocked	Disconnect the power supply and remove obstacle. Then switch the pump on again.
	Pump has run dry.	Flood the pump. Fully submerge the pump for operation in the pond.

7.2 Error messages

The error message automatically disappears after the error has been corrected.

Error message	Cause	Remedy
Er1	No pump connected or connection to pump is faulty	• Check that cable is connected correctly to pump • Connect the pump to the controller
Er2	Communication error between controller and pump	• Check that cable is connected correctly to pump. • Connect the pump to the controller
Er3	Excess temperature	• Check that impeller unit moves freely – If the impeller unit is sluggish, the pump is requiring too much power • The ambient temperature is too high
Er4	Overcurrent	Check that impeller unit moves freely • If the impeller unit is sluggish, the pump is re-quiring too much power
Er5	Pump blocked	Check pump and remove obstacle
Er6	Pump has run dry	• Submerge pump in water • For dry installation ensure adequate water supply
Er7	Overvoltage	Connect the pump to the correct mains voltage • The unit is not suitable for use with the existing mains voltage range
Er8	Undervoltage	• Keep extension cable to the pump as short as possible. – The voltage to the pump is too low due to the voltage drop in long cables. • Use extension cable to the pump with greater conductor cross-section – The voltage to the pump is too low due to the voltage drop in cables with too small of a conductor cross-section.

8 Maintenance and cleaning

TIP

Recommendation regarding cleaning:

- Clean the unit as required but at least twice a year.
- When cleaning the pump, pay particular attention to the cleaning of the impeller unit and pump housing.

- In the event of the filter housing capacity reducing, clean the unit under running water using a brush.
- Do not not use cleaning agents or chemical solutions.
- Recommended cleaning agent for removing stubborn limescale deposits:
  – Pump cleaning agent PumpClean from OASE.
  – Vinegar- and chlorine-free household cleaning agent.
- After cleaning, thoroughly rinse all parts in clean water.

8.1 Cleaning the pump

How to proceed:

☐ J

1. Screw off the stepped hose adapter.
2. Remove screws.
   – The screws are used as transport protection and not required for operation.
3. Actuate the engagement hook and fold up the strainer top casing.
4. Remove pump.
5. Remove screws.
6. Remove the pump housing including its holding ring, sealing and impeller unit.
   – Clean all components under running water using a soft brush, replace damage parts.
7. Reassemble the unit in the reverse order.
   – Place the pump cable into the cable opening of the bottom strainer casing such that the cable will not be crushed when closing the filter housing.

9 Wear parts

- Impeller unit

10 Spare parts

The use of original parts from OASE ensures continued safe and reliable operation of the unit. Please visit our website for spare parts drawings and spare parts.

www.oase.com/spareparts

11 Storage/overwintering

The unit is not frost-proof and has to be removed and put into storage if minus temperatures are expected.

How to correctly store the unit:

- Thoroughly clean the unit, check it for damage and replace any damaged parts.
- Store the pump submerged and in a frost-free environment.
- Protect open plug connections from moisture and dirt.

12 Repair

A damaged unit cannot be repaired and must be put out of operation. Dispose of the unit in accordance with the regulations.

13 Disposal

NOTE

Do not dispose of this unit with domestic waste.

- Render the unit unusable beforehand by cutting the cables and dispose of the unit via the return system provided for this purpose.

14 Technical data

14.1 Unit data

Description			AquaMax Eco Classic		
			9000°C	12000°C	18000°C
Connection voltage		V AC	220 … 240	220 … 240	220 … 240
Mains frequency		Hz	50/60	50/60	50/60
Power consumption		W	23 … 90	26 … 120	33 … 175
Pump protection type			IP 68	IP 68	IP 68
Controller protection type			IP 44	IP 44	IP 44
Connection	Discharge port		G1½	G2	G2
	Inlet port		G1½	G1½	G1½
	Hose	mm	25/32/38	25/32/38	25/32/38
Max. pump capacity		l/h	8800	12000	17600
Max. pump head		m	4.5	4.7	5.3
Filter supply surface area		cm²	810	810	810
Max. particle size, coarse dirt particles		mm	8	8	8
Max. immersion depth		m	4	4	4
Length of mains cable to controller		m	2	2	2
Length of mains cable to pump		m	10	10	10
Dimensions	Length	mm	280	280	280
	Width	mm	230	230	230
	Height	mm	140	140	140
Weight		kg	4.4	5.0	5.35

14.2 Water values

Type	Fresh water/Pond water
pH value	6.8 … 8.5
Hardness	8 … 15 DH
Free chlorine	<0.3 mg/l
Chloride content	<250 mg/l
Overall dry residue	<50 mg/l
Temperature	+4 … +35°C

15 Symbols on the unit

	Dust tight. Watertight to a depth of 4 m.
	Dust protected. Protected against water splashed from all directions. Do not immerse.
	Remove the unit at temperatures below zero (centigrade).
	Possible danger for persons with pacemakers.
	Protect from direct sunlight.
	Do not dispose of with household waste.
	Read the instructions for use.

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