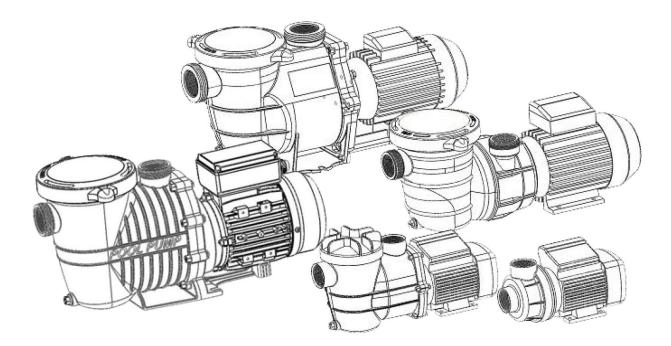
Original User Manual – AREBOS Swimming Pool Pump



# **Swimming Pool Pump**

### AR-HE-SP600S / AR-HE-SP800S



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

CE

Thank you for trusting in AREBOS.

S MILLING CONTRACT

# **Table of Contents**

<b>1.Introduction and safety instructions</b>	<b>3</b>
2.Installation	7
3. Maintenance	9
4. Technical Data	10
5. Trouble Shooting	10
6. Part List	12
7. Environmentally friendly disposal	14
EU Declaration of Conformity	15

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

#### Introduction

• This instruction handbook is intended to familiarise you with the installation, use and maintenance of the product. To install the unit safely and correctly, please read the operating instructions **before** you start.

#### **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.



This product has been tested and certified by TÜV Rheinland. The symbol "GS" stands for tested safety. Products marked with this symbol comply with the requirements of the German Product Safety Act (ProdSG).



**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!



Warning against automatic start!



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

#### **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.
- To operate the device safely, users must read and understand the instructions carefully before first use.
- Users must follow all safety instructions. Otherwise, you and others may be injured.
- You must retain all application and safety instructions for further reference. If you are sharing this device with another person, please give it to them.
- Serious injuries with fatal consequences are possible if these hazard warnings are not observed.
- Please use the device according to the safety and technical requirements stated in the manual.
- Any application other than that specified in the manual will be considered as an unauthorized application. As a result, the resulting problems are vendor-independent.
- After opening the package, make sure that the product is complete.
- Check the device for transport damage. Immediately report damage to the carrier with which the pump was delivered.
- If the pump is damaged or the scope of delivery is not complete, please do not use the delivery and return it to your dealer.
- For damages caused by non-compliance, there is no warranty or guarantee.
- As a user of this device:
  - You may be liable for damages to third parties caused by the use of the device.
  - You are responsible for compliance with local safety and installation regulations.

• Only use original parts. These replaceable spare parts are designed and manufactured specifically for the device. If other spare parts are used, the warranty will be void and there is a **risk of injury**.

#### Danger of electric shock

- Make sure that the sockets and their connections are protected against flooding and moisture. The installation site must have a drain for collecting water or be elevated, so that flooding is excluded.
- The pump may only be connected to power grids with the appropriate current consumption. Properly, this is connected to a 230V 50Hz power outlet. Compare also the information on the type plate.
- The pump may only be connected to sockets that have protective contacts. These must also be installed, grounded and tested by qualified electricians.
- Attention: The pump should only be connected if the socket is protected by a RCCB (Residual Current operated Circuit-Breaker) at a rated residual current of not more than 30 mA. If you have any questions, please ask an electrician.
- If the pump is faulty, disconnect the plug from the socket. If the pump is still connected to the mains, electric shocks may occur. There is an acute risk of personal injury and further damage to the device.
- Do not expose the pump or other electrical parts directly to squirting water. Danger of a fatal electric shock!
- Never touch the plug with wet hands! To disconnect the pump, pull directly on the plug but not on the power cord.
- A possibly required extension cable must have a sufficient conductor cross-section. The cable drum must be unrolled completely.
- Do not kink, squeeze, pull on or drive over the power and extension cables to prevent cable breakage. Protect them from sharp edges.
- Lay the extension cables so that they do not get into the liquid to be pumped.
- The power cable of the pump must not be used to lift, move or fix the pump.
- Before each use, check the pump, power cord and power outlet for defects. If the power cord is damaged, unplug it immediately. Please do not use the device if the power line is damaged.

For your protection, please read these important instructions first.

### 

This equipment must be installed and serviced by a qualified technician. Improper installation can create electrical hazards which could result in property damage, serious injury or death. Improper installation will void the warranty.

#### **General safety rules**

1. This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

- 2. If the supply cord is damaged, it must be replaced by the manufacture or its service agent or a similarly qualified person in order to avoid a hazard
- 3. The pump must be supplied through a residual current device (RCD) having a rated residual operating current not exceeding 30mA
- 4. The products mentioned in this manual are specially designed for the pre-filtering and recirculation of water in swimming pools and spas.
- 5. They are designed to work with clean water at a temperature not exceeding **40°C**
- 6. The installation should be carried out in accordance to the safety instructions of swimming pools, **especially Standard HD 384.7.702**, and the specific instructions for each facility.
- 7. The compulsory rules on accident prevention should be carefully followed.
- 8. Any modification of the pump requires the **prior consent of the manufacturer**. Original replacement parts and accessories authorized by the manufacturer ensure a high level of safety. The manufacturer of the pump assumes no liability for the damage and injuries **caused by un-authorized replacement parts and accessories**.
- 9. During operation, some parts of the pump are subject to dangerous electric voltage. Work may only be performed on each pump or on the equipment connected to it after **disconnecting them from the main power and after disconnecting the starting device**.
- 10. The user should make sure that assembly and maintenance tasks are carried out by **qualified authorized persons** and that these persons have first carefully read the instructions for service and installation.
- 11. The operating safety of the pump is only guaranteed if the installation and service instructions are correctly followed.
- 12. The limit values stated in the technical table **should not be exceeded under any condition**.
- 13. In the event of defective operation or fault, contact the technical support department of the manufacturer or its nearest authorized agents.
- 14. If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person to avoid a hazard.
- 15. The pump must not be used when people are in the water.
- 16. The pump must be supplied through a residual current device (RCD) having a rated residual operating current not exceeding 30mA.
- 17. Children should be under close supervision to prevent them from playing with the pump.
- 18. 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.
- 19. Children should be supervised to ensure that they do not play with the appliance.
- 20. The pump must be protected from running dry.

#### LOCATION

- The pump must be installed and placed to an enough distance away from the pool or water source, to avoid the water from the pool or water source, to avoid the water pouring or flowing onto the pump.
- The pump must also be in a position that enables easy access for periodic servicing. Care must also be taken to position the pump in an area that is **free from flooding in a well ventilated and dry area.**

## 2. Installation

Adopt the latest technology when designing and manufacturing our pumps, a few simple precautions during installation will ensure years of trouble free operation.

- 1. The pump suction line should not be smaller than 1 1/2" (40mm imperial) or 50mm true metric.
- 2. The suction line is to have as few bends or elbows as possible. There must not be an air traps on the suction line.
- 3. Installation shall arrange on a solid, flat foundation with the pump bolted securely to it.
- 4. The pump electrical cable must be wired for the proper voltage and current in accordance with the wiring instructions.
- 5. All wiring (electrical) work must be carried out **by licensed electricians** and must be installed in accordance to the local codes.
- 6. The motor must be grounded.
- 7. The weight of the plumbings and fittings is to be independently supported and not carried by the pump.
- 8. The maximum total head (Hmax) of the pump (in metres) shown on the pump label should be noted by the installer.
- 9. The permissible temperature is > 0°C and < 40°C. The pump should never be operated outside of these temperatures, or damage may occur.

#### IMPORTANT ELECTRICAL NOTICE

The electrical installation is to be done by a licensed electrician.

Each pump requires a circuit breaker to separate the pump from the electrical supply. The open contact distance of the circuit breaker is to be **no less than 3mm**.

The pump is to be supplied by an isolating transformer or supplied through a residual current device (RCD) with a rated residual current not exceeding 30mA.

Check the pumps name plate for the following: Voltage, Amp draw and Cycle.

The power cord, including the ground wire shall have a quality of **245 IEC66 (HO7RN-F)** for models **greater** than **1kW** power input.

For models **less** than **1kW** input the quality shall be **245 IEC57 (H05RN-F)**. All installations must be comply with local codes, based on **IEC 364-7-702** requirements.

#### • RESPECT THE MINIMUM GAUGE GIVEN IN THE CHART OF THE TECHNICAL MANUAL.

#### Original User Manual – AREBOS Swimming Pool Pump

#### **ELECTRICAL CONNECTION**

Check that the information on the nameplate corresponds to the power supply. Employ a competent electrician to ensure wiring installation is made in accordance with any local electrical codes. Every motor requires either a **fused disconnect switch or a circuit breaker**. **A SINGLE PHASE MOTOR** has a built in thermal overload switch.

#### PRIMING

The pump will prime and re-prime providing the filter tank water and there is sufficient supply from the suction point. (It is for pump AR-HE-SP800S)

If you lose water from the filter tank it will be necessary to re-fill it before starting.

- 1. Remove the translucent lid and fill the filter tank with water.
- 2. Replace the lid ensuring **the o-ring is correctly** located and start the pump.

After you have done this allow a **few minutes (maximum) running** for the pump to start delivering water.

### 

High suction lift or long suction lines will require additional time to prime and can severely affect the performance of the pump. If the pump will not prime, repeat step 1 and 2 above. **The pumps are required AR-HE-SP600S worked or installed below the water level.** Mechanical seals if running dry can be damaged rapidly and may need to be replaced.

ENSURE that there is always adequate water in the filter tank before you start up.If you are unable to prime the pump please see the trouble-shooting guide.ENSURE that all suction and discharge valves are open before you start the pump, otherwise will result in damage to the pump.

#### Pump Start Up

Do not operate pump until it has been primed as water acts to cool and lubricate the seal. For pumps without strainer bodies and locater above water, close suction line valve and fill pump with water in order to prime. For pumps with strainer bodies and located above water, prime by removing strainer cover and filling strainer body with water. Pumps located below water level will selfprime if all piping is also below water level. After pump has been primed, energize motor and open all suction and discharge line valves. It may take some time for pump to remove air from suction lines. If no flow is observed in five minutes, stop the motor and re-prime. If the pump fails to operate, check for air leaks. Refer to Trouble Shooting section.

After about ten minutes of operation, check the return fittings for air bubbles. A continuous flow of air indicates leaks in suction line. Locate and correct any leaks immediately.

#### CONTROLLING THE OUTPUT

Keep the gate valve in the suction line fully open during operation. Should it be necessary to control the output, use a valve in the return line.

Caution: Do not retighten strainer Ring-Lok during operation.

Caution: Do not operate pump with closed suction or discharge valves.

### 3. Maintenance

The strainer basket in the filter tank should be inspected and cleaned at regular intervals.

- 1. Remove lid and lift out basket.
- 2. Remove debris and hose off with clean water if necessary.
- 3. Inspect the lid gasket, lubricate with SILICON based grease only if needed. If it is damaged, pls replace.
- 4. Replace the strainer.
- 5. Re-prime the filter tank.
- 6. Correctly locate the O-ring.
- 7. Replace the lid (hand tighten) only.
- 8. Switch on pump.

In Climates where the pump may be **exposed to frost or freezing**, care must be taken to ensure the pump is protected from damage.

It is **recommended** that if the pump is not used during winter period it should be **drained completely** and store pump in a dry location. Do not replace the drain plug. Store it in a safe place when not use. An example would be store plug in the filter tank basket.

When you re activate the pump ensure all seals and O-rings are in operational condition, re-grease, if necessary, replace if unsure of condition.

Check that the motor shaft moves freely before re-activation.

### 

- When connecting electric cables to the motor of the pump, be careful to correctly arrange them inside the connection box, verify that no bits of cable are left inside the box on closing it. See that the ground wire is correctly connected. When connecting the motor, follow the wiring diagram supplied with the pump.
- 2. Be especially careful that no water enters the motor or electrical parts under voltage.
- 3. In the event that the planned use is not as specified, adaptations and supplementary technical rules may be necessary.
- 4. Before starting the pump, verify the calibration of the electrical protection devices of the motor and that the protections against electrical and mechanical contacts are correctly positioned and attached.
- 5. It is advisable to follow the steps listed below before handling the pump in any way.
  - a. Turn off the voltage to the pump.
  - b. Lock starting devices.
  - c. Verify that there is no voltage in the circuits, including ancillary devices and auxiliary circuits.
  - d. Wait until motor stops completely.

The above list should be considered indicative and not binding for the purpose of safety; specific safety rules may exist in particular regulations.

#### **REGULARLY VERIFY**

- 1. The correct attachments of the mechanical parts and of the support screws of the pump.
- 2. The correct position, attachment and condition of the supply cables and of the insulating parts.
- 3. The temperature of the motor. In the event of any excessive high, stop immediately and have it repaired.

4. The vibration of the pump. In the case of any excessive high, stop immediately and have it repaired.

### 

Owing to the complexity of the cases covered, the instructions for installation, use and maintenance contained in this manual do not attempt to examine all possible and imaginable cases of service and maintenance. If supplementary instructions are required or if special problems arise, do not hesitate to contact the distributor or to address directly the manufacturer of the pump.

# 4. Technical Data

ТҮРЕ	Input power	H. Max	Q. Max/min	V	HZ	IP	REMARK
AR-HE-SP600S	600W	8M	265L	220~240	50	IPX5	Single- speed
AR-HE-SP800S	800W	12M	250L	220 240	50	11 7.5	Single- speed

### **5. Trouble Shooting**

SYMPTOMS	PROBABLE CAUSE	WHAT TO DO
Pump will not		Make sure water level is correct through suction
prime	Suction air leak	points. Ensure
		baskets and strainers are free of debris. Tighten all
		fittings/unions on
		the suction side of the pump, remove and replace
		mechanical seal.
	No water in the pump	Make sure the filter tank if full
	Closed valves or	Open all valves in system, clean skimmer and pump
	blocked lines	basket, check
		pump impeller of blockage
Motor will not		Check that all electrical switches are on. Ensure the
run	No power to motor	circuit breakers
		are properly set. Check if timer is set properly. Check
		motor wiring at
		terminals
	Pump jammed	With power switched off turn pump shaft (should
		spn freely).

#### Original User Manual – AREBOS Swimming Pool Pump

Low flow	Dirty filter	Backwash or clean cartridge.
	Dirty skimmer and pump strainer	Clean skimmer and pump strainer.
	Suction air leak	See 1
	Closed valve or blocked line	See 1
Motor runs hot		Supply to be correct by electrician. Motors running hot to touch is normal. Thermal
	Low or incorrect voltage	overload protector will function to turn them off if there is an overload or excessive high temperature problem.
	Installed in direct sunlight	Shield from weather
	Poor ventilation	Do not tightly cover or enclose motor
Noise pump	Bad bearing	Have electrician replace
operation	Air leak in suction	See 1
	Suction blockage	Locate and clean blockage
	Disturbance in impeller	Contact supplier
	Cavitations	Improve suction, reduce suction lift, reduce number of fittings, increase pipe size, increase discharge pressure and reduce flow by throttling discharge valve.
Motor overload cuts out	Motor not connected properly	Have electrician check wiring.
	Low incoming voltage	Voltage at motors should be no more than 6% above or below nameplate voltage. Have electrician check voltage, ensure pump is not running on an extension cord, Report low supply to authorities.
	Over load due to binding in pump or wrong size impeller	Contact supplier
Leaking	Leak between pump housing and pump cover	Change a new O-ring between pump housing and pump cover
	Leak between pump and motor	Change a new pair of mechanical seal

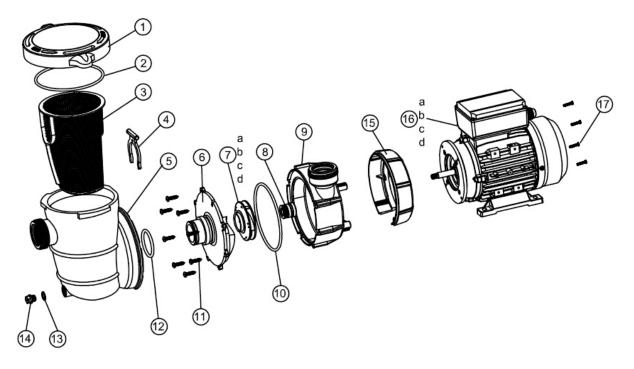
### 

If the pump is within the stated warranty period and you experience faults always contact your supplier.

Failure to do this may void warranty. Refer to warranty documentation supplied with pump. All electrical work is to be carried out by a Qualified Electrician; under no circumstances should you attempt repairs on the electrical components of pumps unless you are qualified to do so.

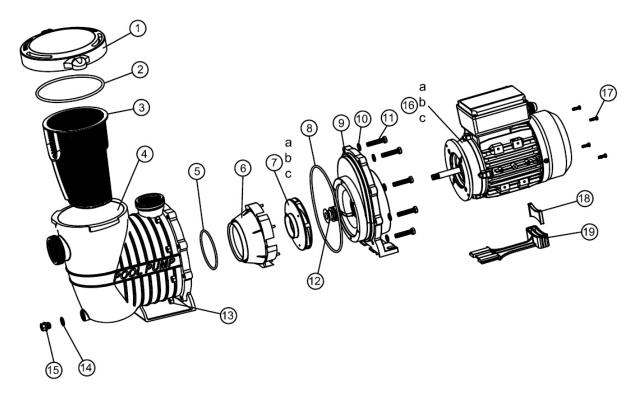


Parts Listing: AR-HE-SP600S



Ref. No.	Part No.	Description	Qty
1	647252772000	Cover	1
2	65431042080	O-ring	1
3	647252704001	Basket	1
4	647252705080	Clip	1
5	647252703080	Strainer housing	1
6	647252702080	Pump cover	1
7	647252771	Impeller	1
8	65028003000	Seal assembly	1
9	647252701080	Pump housing	1
10	65431040080	O-ring	1
11	65212016000	Screw ST5.5X25	8
12	65431029080	O-RING	1
13	65432002080	Gasket	1
14	648860105080	Drain plug	1
15	647252708080	Motor mounting plate	
16	65023002000	0.75HP motor	
17	65226020000	Screw P+8#-32*5/8 UNC	4

Parts Listing: AR-HE-SP800S



Ref. No.	Part No.	Description	Qty
1	647252772000	Cover	1
2	65431042080	O-ring	1
3	647252704001	Basket	1
4	647254201080	Pump housing	1
5	65431032080	O-ring	1
6	647254203080	Diffuser	1
7	647254271	Impeller	1
8	65431075080	O-ring	1
9	647254202080	Pump cover	1
10	65244005000	Gasket M8	8
11	65221009000	Screw M8X40	8
12	65028003000	Seal assembly	1
13	65231004106	Nut M8	8
14	65432002080	Gasket	1
15	648860105080	Drain plug	1
16	65023002000	0.75HP motor	1
17	65226020000	Screw P+8#-32*5/8 UNC	4
18	647254205080	Supporting	
19	647254204080	Mounting foot	

13

# 7. Environmentally friendly disposal

Warning! from the risk of suffocation! Packaging material is dangerous for children. Never let children play with packaging material.

#### **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.

#### **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 <u>www.arebos.de</u>.

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 Fax: +49 (0) 931 4523 2799 / E-Mail: <u>info@arebos.de</u>

Office address: Canbolat Vertriebs GmbH • Gneisenaustraße 10-11 • 97074 Würzburg

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

VAT identification number: DE 263752326 Court of the Commercial Register is Würzburg, HRB 10082 WEEE Reg.-No. DE 61617071

### **EU Declaration of Conformity**

#### We, the

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

hereby declare that the equipment described below, by virtue of its design and construction and in the versions placed on the market by us, complies with the relevant essential health and safety requirements of the EU directives.

Product name: AREBOS Swimming Pool Pump Model name: 4252023111072 / 4252023111089 Article number: AR-HE-SP600S / AR-HE-SP800S

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:

AR-HE-SP600S	AR-HE-SP800S
2006/42/ EC Machinery Directive	2014/35/ EU Low Voltage Directive

EU Standard:

AR-HE-SP600S	AR-HE-SP800S
EN 60335-1:2012+A11+A13+A1+A14+A2	EN 60335-1:2012+A11
EN 60335-2-41:2003+A1+A2	EN 60335-2-41:2003+A1+A2
EN 62233:2008	EN 62233:2008
EN ISO 12100:2010	
EK1 527-12 Rev.2	AfPS GS 2014:01 Par.3.1

Date/Signature Manufacturer/Place:

Würzburg, November 17, 2022

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

Representative of these instructions for use/technical data: Dipl.-Inform. (Univ.) Korhan Canbolat, Managing Director

Office address: Canbolat Vertriebs GmbH Gneisenaustraße 10-11 D-97074 Würzburg

Return address can be found in the imprint: https://www.arebos.de/impressum/ VAT identification number: DE 263752326 Court of the Commercial Register is Würzburg, HRB 10082 WEEE Reg.-No. DE 61617071