

User's Manual

Multi-stage Centrifugal Pump

51545-51547, 63906-63907



Illustration similar, may vary depending on model

Please read and follow the operating instructions and safety information prior to initial operation.

Technical changes reserved!

Illustrations, functional steps, and technical data may deviate insignificantly due to continuous further developments.



The information contained in this document may alter at any time without prior notice. No part of this document may be copied or otherwise duplicated without prior written consent. All rights reserved. WilTec Wildanger Technik GmbH cannot be held liable for any possible mistakes in this operating manual, nor in the diagrams and illustrations shown.

Although WilTec Wildanger Technik GmbH has made every possible effort to ensure that this operating manual is complete, accurate, and up-to-date, errors cannot be ruled out entirely.

If you have found an error or wish to suggest an improvement, we look forward to hearing from you. Send us an e-mail to:

service@wiltec.info

or use our contact form:

<https://www.wiltec.de/contacts/>

The most recent version of this manual in several languages can be found in our online shop:

<https://www.wiltec.de/docsearch>

Our postal address is:

WilTec Wildanger Technik GmbH
Königsbenden 12
52249 Eschweiler – Germany

To return your goods for exchange, repair, or other purposes, please use the following address. Attention! To allow for a trouble-free complaint or return, it is important to contact our customer service team before returning your goods.

Retourenabteilung
WilTec Wildanger Technik GmbH
Königsbenden 28
52249 Eschweiler – Germany


E-mail: **service@wiltec.info**
Tel: +49 2403 55592-0
Fax: +49 2403 55592-15






Introduction

Thank you for choosing to purchase this quality product. To minimise the risk of injury, we ask you to always take some basic safety precautions when using this product. Please read this operating manual carefully and make sure that you understand it. Keep these operation instructions in a safe place.

Safety instructions

The symbols  and the sentences including the words “**danger**” or “**warning**” wish to call your attention to the dangers and possible consequences of non-compliance with the safety instructions.

Symbol	Danger: Non-compliance with the safety instructions might ...
	... lead to an electric shock.
	... cause severe damages caused to your health.
	... damage the pump.

General remarks



- Make sure that the product has been installed correctly to work at its best.
- All materials have undergone a meticulous inspection. Installing correctly the pump contributes to the protection of the pump against damages and overcharge. Any non-compliance with the instructions can cause damages to the pump.
- Always use a non-return valve.
- The pump must not be immersed into water. The water is sucked in via a hose.
- Prime the pump and suction line with water before using it; otherwise, it will run the risk of running dry.
- Check if there is a water column (prime the pump with water before use until the water column is present to 100 %).

Assembly

- The pump must be set up on a level and firm surface.
- The end of the suction line should be immersed at least 30 cm at the lowest point of the water.
- The suction line must have a slope in water-sampling direction; that must be done so that the line has no bends that could provoke a water accumulation.
- Never hang up the pump by an electric cable or line.
- Before use, make sure that there is a continuous water column.
- It is advisable that you install a tube with a larger diameter than that of the outlet to reduce the friction loss as much as possible.
- Install a non-return valve to the entry of the pump to prevent that the line is emptied at every stop of the pump.
- Avoid that tube lines are bent or twisted and make sure that the connection to the outlet is correct. In both cases, the flow at the outlet is reduced if the connection be bad.

Checks before start

- Make sure that the existing mains voltage and frequency match the specifications on the name-plate of the device.



- Make sure that the condenser corresponds to the requirement of the pump (one phase).
- Make sure that the suction through the hose works without any problem. If the suction device of the pump should not work properly, the hydraulic elements of the pump could be damaged.
- In case the suction line is bent/curved, a non-return valve with a sieve should be installed to the end of the suction tube/line.
- All connections of the suction line must be installed correctly and tightened completely.
- Do not use anti-vibration hoses, that might impair the flow.
- Before start, check the direction of rotation.
- Never let the pump run dry. The pump and suction line should always be filled with water.

Operating the pump

1. Set up the pump on a level and solid surface.
2. Place the pump at a horizontal position to help the bearing to work properly and to fix the pump the surface.
3. Install the suction line so that it is ready for use. The suction hose should not be narrower than the suction connection.
4. Connect to mains.
5. Fill in the pump with water at the pressure port.
6. During the suction process, the shut-off devices (valves, spray nozzles, etc.) in the pressure line must be completely open so that the air in the suction line can escape freely.
7. Depending on the suction height and air quantity in the suction line, the first suction process can take some time. With longer suction periods of sucking in, new water should be refilled.
8. If the pump is removed after its use, do not forget that it must be refilled with water before you operate the pump again and before restarting and connecting it again.

In case there is a water accumulation or you hear a rattling noise, the pump cannot build up the required pressure to switch off automatically. In such case, it must be assumed that the system has not been purged or that there is a leaking spot in the suction zone. A possible leakage can be detected as follows:

1. Fix one end of the suction hose to a water tap.
2. Now open the water tap and place the other end of the suction hose into another recipient filled with water.
3. Should you detect a spot where water and air bubbles come out, this is the leaking spot. In such case, the device cannot work properly.



Attention! The pump is equipped with an overheat control, but it has no safety device that switches off the pump automatically when it runs dry.

Electric connections



The one-phase motor has been installed with a thermo-protection. With a three-phase pump, this protection should be realised by the user.



Technical specifications

Item number	51545	51546	51547	63906	63907	
Power supply	220–240 V / 50 Hz					
Power consumption (W)	550	900	2200	1100	1650	
Length of cable (m)	1	1	1	1,2	1,2	
Sound level (dB (A))	72	72	78	75	75	
Pressure range (bar)	3.5	5.5	10.5	5,2	6,5	
Rotation speed (rpm)	2900	2900	2850	2850	2850	
Max. flow rate (l/h)	6000	7200	9000	8700	10.200	
Max. suction height (m)	9	9	9	8	8	
Lifting height (m)	35	55	105	52	65	
Max. temper- ature (°C)	of pumped medium	60	60	60	60	60
	of environ- ment	40	40	40	40	40

Maintenance



Our pumps do not require any special maintenance; however, we ask you to follow the following advice:



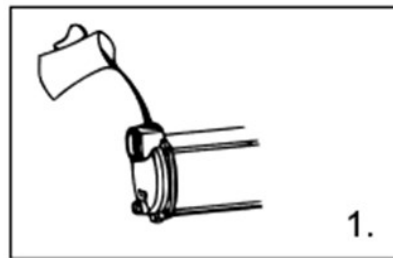
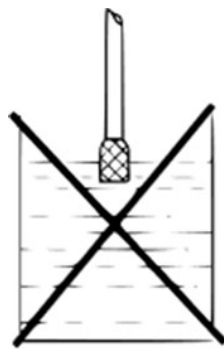
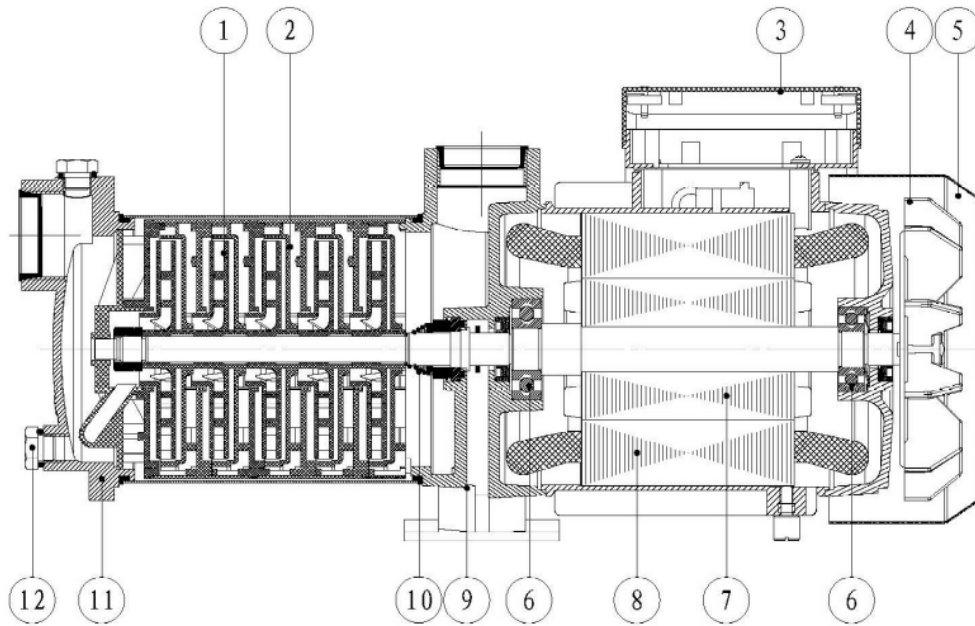
Attention!

Before every maintenance, the pump must be switched off; to do so, disconnect the pump from the power supply.

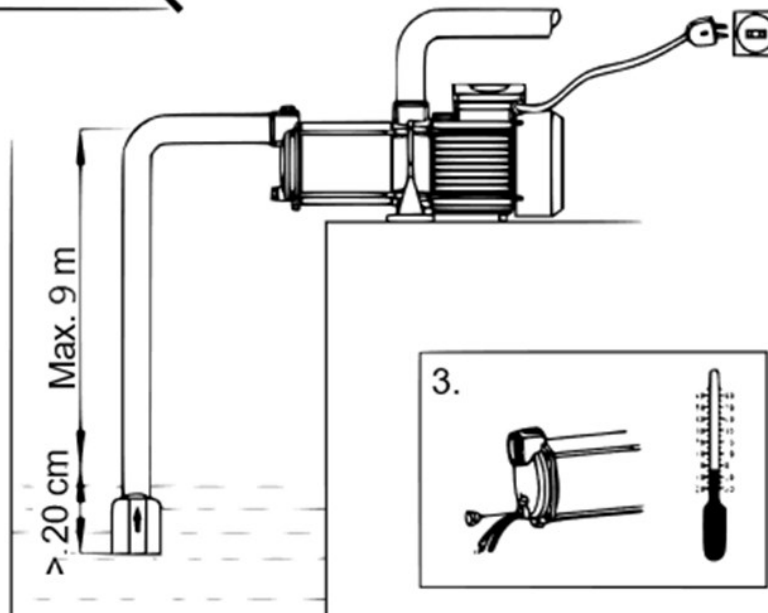
- Before a longer period of non-operation or winter storage, the pump must be rinsed thoroughly with water, emptied completely, and stored at a dry location.
- In case of frost danger, the pump must be completely emptied.
- After long non-operation periods, check if a proper turning of the rotor takes place by shortly switching the device on and off.

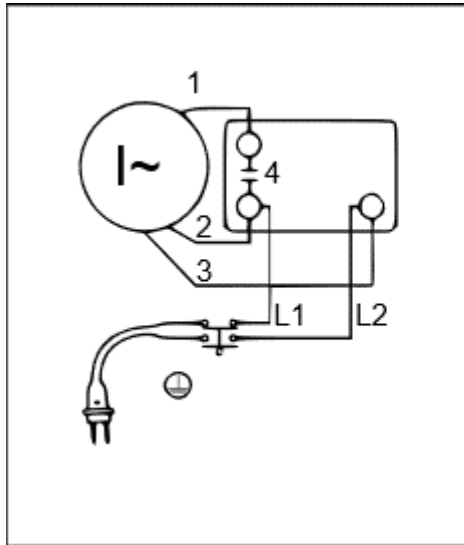
Technical drawing and parts list

Nº	Name	Nº	Name	Nº	Name
1	Driving wheel	5	Fan cover	9	Pump holder
2	Outlet	6	Bracket	10	Mechanic seal
3	Terminal box	7	Rotor system	11	Inlet housing
4	Fan	8	Wrapped stator	12	Pressure plug

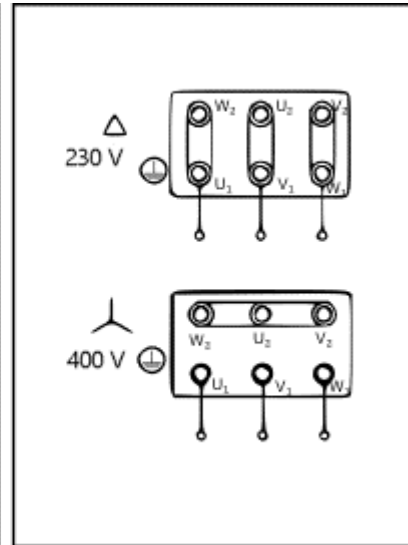


2.





1-phase supply



3-phase supply

No	Name
1	Brown
2	Yellow
3	Red
4	Capacitor

Troubleshooting

If the pump stops or breaks off water suction, check the following:

- Is there water in the water source?
- Is the non-return valve completely submerged into water?
- Is the suction unit obstructed by dirt or leaking?
- Has the suction depth been exceeded?

Engine does not run

Cause	Solution
Lack of voltage	Check voltage.
Pump impeller blocked – thermo-controller has switched pump off	Dismantle and clean pump.

Pump does not suck in

Cause	Solution
Suction valve not in the pumped medium	Install suction valve inside the water.
Pump room without water	Fill in pump medium in suction nozzle.
Air in suction line	Check if suction line is well sealed.
Suction valve leaking	Clean suction valve.
Suction strainer (suction valve) blocked	Clean suction basket.
Max. suction lift exceeded	Check suction lift.



Insufficient flow rate

Cause	Solution
Suction lift too high	Check suction lift.
Suction strainer dirty	Clean suction basket.
Water level drops rapidly	Lower suction valve.
Pump capacity reduced because of harmful substances	Clean pump and replace worn parts.

Thermo-switch switches off pump

Cause	Solution
Engine overloaded – excessive friction due to foreign particles	Dismantle and clean pump, prevent sucking-in of foreign matter (Filter).

Regulations for waste disposal

The Waste Electrical and Electronic Equipment Directive (WEEE Directive, 2012/19/EU) of the EU was implemented in the German law related to electrical and electronic equipment and appliances.

All WilTec electric devices that fall under the WEEE directive are labelled with the symbol of a crossed-out wheeled rubbish bin. This symbol indicates that this electric device must not be disposed of with the domestic waste.

WilTec Technik GmbH is registered with the German registration authority EAR (Stiftung Elektro-Altgeräte Register) under the WEEE-registration number DE45283704.

Disposal of used electrical and electronic devices (intended for use in the countries of the European Union and other European countries with a separate waste collection system for these devices).

The symbol on the packaging or the product itself indicates that this product must not be treated as normal domestic waste but must be disposed of at a recycling collection station for electrical and electronic waste.

By disposing of this product correctly, you contribute to the protection of the environment and the health of your fellow people. Inappropriate disposal threatens the environment and health.



Material recycling helps to reduce the consumption of raw materials.

Additional information about the recycling of this product can be provided by your local commune, the municipal waste disposal facilities, or the store where you purchased the product.

Address:
WilTec Wildanger Technik GmbH
Königsbenden 12 / 28
52249 Eschweiler Germany

Important Note:

Reproduction and any commercial use (of parts) of this operating manual, requires a written permission of WilTec Wildanger Technik GmbH.