

Electric Motor with Starting Capacitor





Illustration similar, may vary depending on model

Read and follow the operating instructions and safety information before using for the first time.

Technical changes reserved! Due to further developments, illustrations, functioning steps, and technical data can differ insignificantly.

Updating the documentation

If you have suggestions for improvement or have found any irregularities, please contact us.





The information contained in this document may alter at any time without previous notice. It is prohibited to copy or spread any parts of this document in any way without prior written allowance. All rights reserved.

The WilTec Wildanger Technik GmbH cannot be held accountable for any possible mistakes in this operating manual, nor in the diagrams and figures shown.

Even though, the WilTec Wildanger Technik GmbH has undergone biggest possible efforts to ensure that the operating manual is complete, faultless, and up to date, mistakes cannot be entirely avoided. If you should find a mistake or wish to make a suggestion for improvement, we look forward to hearing from you.

Send 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 various languages can be found in our online shop via:

https://www.wiltec.de/docsearch

Our postal address is:

WilTec Wildanger Technik GmbH Königsbenden 12 52249 Eschweiler Germany

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

Returns Department WilTec Wildanger Technik GmbH Königsbenden 28 52249 Eschweiler

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





Introduction

Thank you for purchasing this quality product. To minimise the risk of injury we urge that our clients take some basic safety precautions when using this device. Please read the operation instructions carefully and make sure you have understood its content. Keep these operation instructions safe.

Transport and storage

- When transporting the motor, always ensure that it is placed in an upright position and on a level surface. If the motor must be moved with a crane, ensure to move it carefully and slowly to avoid jerky motions. Keep the motor away from rain and make sure that moisture does not enter it.
- Motors should preferably be stored in their normal working position and in a dry and clean environment. It should further be ensured that the motor is exposed to as little vibration as possible. If the motor has been exposed to moisture for an extended period, its insulation resistance must be checked using a megohmmeter (maximum 500 V).

Before operation

- 1. Check the **insulation resistance**: Before the motor is put into operation, use a megohmmeter to ensure that the insulation resistance between the thread and earthing is above 1 M Ω with a test voltage of 500 V.
- 2. Connect the **voltage line** in accordance with the information stated on the nameplate of the motor. When using a two-voltage motor, make sure that the voltage of the motor and the voltage specified on the nameplate of the device match.
- 3. The specifications and capacity of the **control switch** used should meet the requirements indicated on the motor nameplate (e.g., current fuse capacity).
- 4. The **space surrounding the motor** should be free of corrosive gases. Make sure to prevent water drops, iron chips, and cotton fibres from getting inside the engine, and ensure that there is a sufficient clearance around the motor to facilitate ventilation and heat dissipation.
- 5. Check the **earthed connection:** The motor frame should be earthed to ensure safety.
- 6. **Rotating condition** of the motor: Before installing the motor, slowly turn the shaft extension by hand to ensure that the rotor does not rub or bump against other parts and can instead rotate quickly without any form of obstruction. After the motor has been installed, check that the drive belt and coupling have been fitted correctly and with sufficient flexibility.
- 7. Check the **cable connections** before starting the motor. The motor may only be started if all cables have been properly connected in accordance with the connection diagram. To change the direction of the connection, refer to the connection diagram.
- 8. The start of operation must occur in accordance with the valid **norms** as well as the current **state-of-the-art of technology.**

Safety instructions

- For your safety, the motor must be connected to a suitable power supply line protected by an overload circuit breaker and a differential-type automatic circuit breaker suitable for earthing.
- Always disconnect the power supply before performing maintenance on the motor.
- Always disconnect the power supply before disassembling the guards covering and protecting the moving parts.
- Make sure to properly reassemble the guards before restarting the motor.
- Wear appropriate clothing when operating the machine. Avoid wearing loose clothing as well as jewellery and keep long hair tied up to avoid getting caught in moving parts.
- Electrical maintenance must be performed by a qualified electrician.





Engine maintenance

- The purchaser is not entitled to disassemble the product. The product may only be disassembled by qualified professionals or service centres.
- **Daily cleaning:** The motor should be always kept clean. Never use water or cotton wool to clean the motor.
- **Load current control:** During motor operation, make sure that the load current remains below the rated value.
- **Operating noises:** Operation noises, squeaks, or other random noises must not occur during the operation of the motor. In case of such noises occurring, immediately stop the motor and do not restart it before the adjustments necessary to solve the issue have been made.
- The **centrifugal switch** is installed in the front end of the motor. If a noise resounds from the centrifugal switch after the switching-on of the motor, the motor operates correctly. If the capacitor, however, does not make any noise and instead vibrates, turn both the centrifugal switch and the capacitor off.
- It is not allowed to operate the capacitor over longer periods of time or under load as an increase in temperature will damage the thread of the motor.
- - The capacitor must be operated under the rated voltage. It is possible to operate it at 1.05 times the rated voltage. When operating at 1.1 times the rated voltage, the operating time must not exceed 4 hours.

General note

To guarantee a safe operation of the motor, you should maintain it on a regular basis (e.g., once a year).

Connection diagram



Note: The direction of the point is displayed to show the rotational direction from the shaft end.





Changing the rotation direction of item 62000-62003

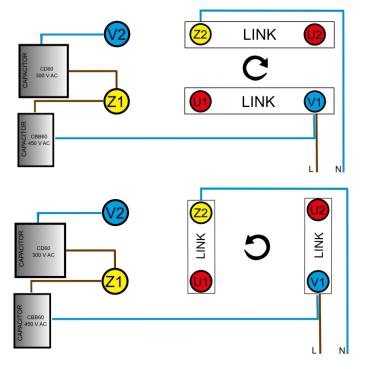
To change the direction of rotation of the motor shaft, you will need to change the links inside the switch box of the motor.



For there are different configurations of the cables, you will need to check, before changing the direction of rotation, if the configuration of colours in the motor is as follows:

V2	blue	Z2	yellow	U2	red
Z1	yellow	U1	red	V1	blue

Change them if the configuration should differ.



The terminals are labelled on the plastic parts. To change the direction of rotation, turn the link afterwards as illustrated (see Fig. 2).





Technical specifications

ltem number	Power		Voltage	Max. rotation	Torque (Nm)		Efficiency	Maight (kg)
	(kW)	(hp)	(V)	speed (rpm)	Starting	Max.	factor	Weight (kg)
62000	1.5	2	230	2850				13.1
62001	2.2	3			1.8		0.95	15.3
62002	1.5	2						14.2
62003	2.2	3						16.6
62004	1.5	2	400	2830	2.2	2.3	0.84	15.8
62005	2.2	3					0.85	18.7
62006	3	4		2840			0.87	24.5
62007	1.5	2		2830				24.5
62008	2.2	3					0.85	19.6
62009	3	4		2840			0.87	26





EU guidelines regarding the disposal of scrap electric appliances (WEEE, 2012/19/EU) were implemented in the law related to electrical and electronic equipment and appliances.

All WilTec electric devices that fall under the WEEE regulations are labelled with the crossed-out wheeled waste bin logo. This logo indicates that this electric equipment must not be disposed with the domestic waste.

The company WilTec Technik GmbH has been registered in the German registry EAR under the WEEE-registration number DE45283704.

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

The logo on the article or on its packaging points out that this article must not be treated as normal household waste but must be disposed to a recycling collection point for electronic and electrical waste equipment. By contributing to the correct disposal of this article you protect the environment and the health of your fellow men. Environment and health are threatened by inappropriate disposal.



Material recycling helps reduce the consumption of raw materials.

Additional information on recycling this article can be provided by your local community, municipal waste disposal facilities, or the store where you purchased the article.

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

Important notice:

The reprint or reproduction, even of excerpts, and any commercial use, even in part, of this instruction manual require the written permission of WilTec Wildanger Technik GmbH.