

# The Brose e-bike drive

## Instructions for use



# Drive unit

## Safety directions

- Please follow all safety directions and instructions found in both these Instructions for Use and in all other sets of instructions supplied with the e-bike.
  - Not following these safety directions and instructions can lead to electric shocks, fires and/or severe injuries.
- Keep these Instructions for Use safe for future reference.
- Never open the drive unit. It is maintenance-free and may only be repaired by qualified experts using only original spare parts.
  - This ensures the safety of the drive unit. All warranty claims are invalidated if the drive unit has been opened without authorization.
- All components forming part of the e-bike system and parts fitted to the drive unit (e.g. chain ring, mounting of chain ring, pedals) may be replaced only by components approved by the manufacturer of the e-bike.
  - This protects the drive unit from damage (e.g. due to overloading).
  - There is a risk of injury if the e-bike system is activated by mistake.
- The push-assist may only be used when the e-bike is pushed.
  - There is a risk of injury if the wheels of the e-bike are not in contact with the ground when the push-assist is used.
- Do not make any alterations at all to your e-bike system. On no account attempt to improve the performance of your e-bike system.
  - If you do so, you will shorten the service life of its components and run the risk of damaging both the e-bike system and the e-bike itself. Furthermore, the warranty and any warranty claims will be invalidated if there has been any type of manipulation of the e-bike system. Incorrect handling of the e-bike system also endangers both your own health and that of other road users. By making your own alterations to the e-bike system, you run the risk of high personal liability costs or even criminal prosecution in the event of accidents due to manipulation.
- Please follow all national regulations relating to the licensing and use of e-bikes.
- Caution: There is a risk of burns if the motor casing is touched.

## Use for the intended purpose

The drive unit is intended solely for powering your e-bike and may not be used for any other purposes.

## Operation

For information on operating the Brose e-bike drive, please refer to the instructions for use of the operator control module.

## Cycling instructions and tips

### When does the e-bike drive operate?

The Brose e-bike system permits electric motor assistance of the cyclist in a Pedal Electric Cycle (PEDELEC). This assistance depends on the force applied to the pedals by the cyclist. Assistance by the e-bike drive is therefore only provided when the cyclist is pedaling. This applies regardless of the assist level.

The e-bike drive switches off automatically at speeds of more than 25/45 km/h. If the speed drops below 25/45 km/h, the assist switches back on automatically.

An exception to this is the push-assist function, in which the e-bike can be pushed more comfortably at low speed without pedaling. When the push-assist is used, the pedals can also turn.

You can also use the e-bike at any time like a normal bike without assistance.

### Familiarization

Take the time to get used to your e-bike before venturing into normal traffic conditions. Test the various assist levels until you feel confident in handling the system. Before setting off on long trips, gain experience of how different parameters and ambient conditions affect the range of your e-bike.

### Motor setups

The Brose e-bike system supports various motor setups. The following tells you more about the characteristics of the different settings. Detailed information about motor set-up for your e-bike is available from the bicycle manufacturer and your bicycle dealer.

## Effects on range

The range is affected by many factors, such as:

- Assist level
  - The higher the selected assist level in otherwise identical conditions, the shorter the range.
- Gear changing style
- Type of tire
- Tire pressure
- Age, standard of care and charge level of battery pack
- Route type (slopes) and conditions (road surface)
- Weather conditions (e.g. head wind, ambient temperature etc.)
- Weight of e-bike
- Payload.

## Maintenance & cleaning

Avoid contact of the drive unit with aggressive cleaning and maintenance products, especially penetrating lubricant and brake cleaner.

The drive unit must not be dipped in water or cleaned using a high-pressure cleaner.

For servicing or repairs to the e-bike, please contact an authorized bicycle dealer.

## Inspection

**For the drive unit, an inspection by a service center certified by Brose is mandatory after a distance covered of 15,000 km.**

**Information on the service center responsible for you is available from your cycle dealer.**

## Disposal

The drive unit, display and control unit, battery pack, speed sensor, accessories and packaging should be recycled in environment-friendly processes. Do not dispose of e-bikes and their components as normal waste!

### For EU countries only:



In line with the European Union directive 2012/19/EU, electrical appliances which are no longer serviceable must be collected separately and recycled in environment-friendly processes, and in line with directive 2006/66/EC the same applies for defective or used-up batteries.

## Specifications

Brose drive unit 25km/h (20mph)	
Brose material number	C16162 / C91143 / C97272
Dimensions	213 x 150 x 128 mm
Weight	3.400 g
Nominal voltage	36 V $\text{---}$
Ingress protection rating	IP56
Torque max.	90 Nm
Rated continuous power	250 W
Pushing aid (Scoop)	up to 6km/h (4mph)

Brose drive unit 45km/h (28mph)	
Brose material number	C79232 / C97292
Dimensions	213 x 150 x 128 mm
Weight	3.400 g
Nominal voltage	36 V $\text{---}$
Ingress protection rating	IP56
Torque max.	90 Nm
Rated continuous power	250 W
Starting aid	up to 20km/h (13mph)
Pushing aid (Scoop)	Pushing aid (Scoop)

Lights for drive version C16162 / C91143 / C79232 / C97292	
Rated voltage	6 V $\text{---}$
Maximum rated output*	
- Front light	6,6 W
- Rear light	0,6 W

Lights for drive version C97272	
Rated voltage	6 V $\text{---}$
Maximum rated output*	
- Front light	14,0 W
- Rear light	0,6 W

\* Please verify the drive version of your e-bike by checking the type number on the drive train.

Your notes



Brose Antriebstechnik GmbH & Co.  
Kommanditgesellschaft, Berlin  
Sickingenstraße 29-38  
10553 Berlin  
Germany

Phone: +49 30 343498 100  
Fax: +49 30 343498 122  
[ebike.berlin@brose.com](mailto:ebike.berlin@brose.com)  
[brose-ebike.com](http://brose-ebike.com)  
[facebook.com/broseebike](https://facebook.com/broseebike)