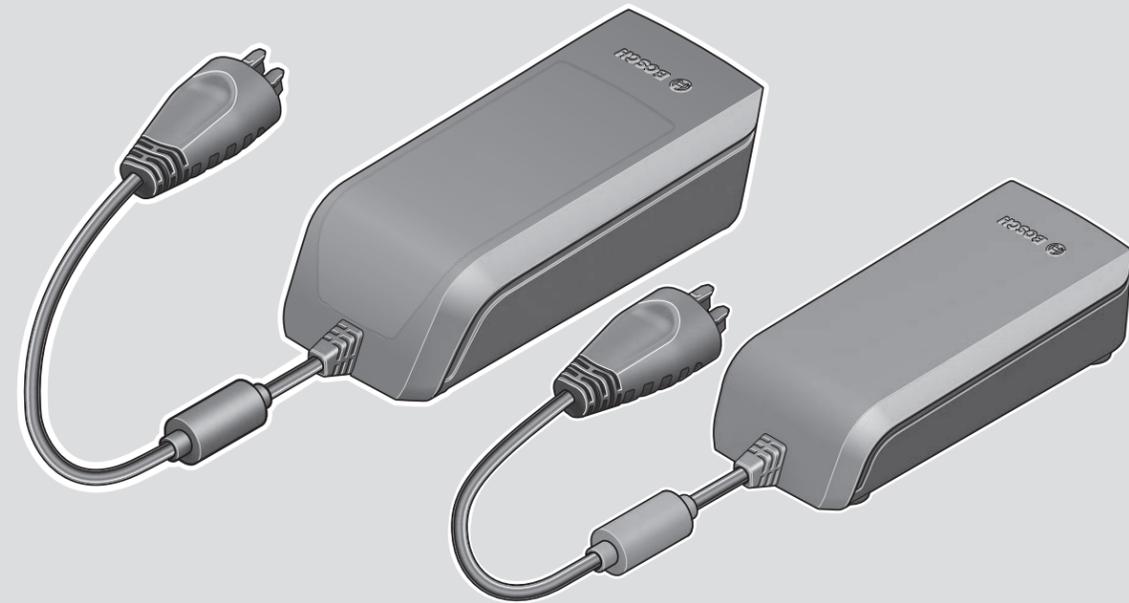


Cette notice contient d'importantes informations sur la sécurité, les performances et l'entretien. Lisez-les et comprenez-les ainsi que les informations fournies par le fabricant de votre vélo avant d'utiliser le produit, et conservez-les pour référence ultérieure.

## Owner's Manual – The Bosch Drive System Charger

BCS 210 | BCS230



**Robert Bosch GmbH**  
72757 Reutlingen  
Germany

[www.bosch-ebike.com](http://www.bosch-ebike.com)

0 275 U07 XCX (2020.04) T / 43



Este manual contiene información importante de seguridad, rendimiento y mantenimiento. Léalo y asegúrese de entenderlo junto con la información que le ha facilitado el fabricante de su bicicleta antes de usar el producto; guárdelo a modo de referencia.

**en** Original operating instructions  
**fr** Notice d'utilisation d'origine  
**es** Instrucciones de servicio originales

**This manual contains important safety, performance and service information. Read and understand it along with the information provided to you by your bicycle manufacturer before using the product, and keep it for reference.**



# Table of Contents

Introduction.....	2
About Warnings.....	2
General Warnings .....	2
Using your Manual .....	2
On-product warning labels .....	4
Operating the Charger .....	5
Safety Instructions.....	5
Product Description and Specifications .....	7
Operation .....	9
Maintenance/cleaning .....	11
Troubleshooting .....	12
Battery Recycling Program.....	13

# Introduction

## About Warnings

This manual contains many **DANGER**, **WARNING**, and **CAUTION** indicators concerning the consequences of failure to use, assemble, maintain, store, inspect and dispose of a Bosch-equipped eBike in a safe manner.

- The combination of the safety alert symbol and the word **DANGER** indicates a hazardous situation that, if not avoided, will result in death or serious injury.
- The combination of the safety alert symbol and the word **WARNING** indicates a hazardous situation that, if not avoided, could result in death or serious injury.
- The combination of the safety alert symbol and the word **CAUTION** indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

## General Warnings



**Read all safety warnings and all instructions.** Failure to follow the warnings and instructions may result in death or serious injury.

**Save all safety warnings and instructions for future reference.**

The term **battery pack** used in these operating instructions refers to all original Bosch eBike battery packs.

### **▲ WARNING**

- ▶ **This manual contains important safety, performance and service information.** Read it before you take the first ride on your new bicycle, and keep it for reference. The manual can also be found online at [www.bosch-ebike.com](http://www.bosch-ebike.com).
- ▶ **This manual is intended to be read together with the separate user manual provided with your bicycle.** Be sure to read all provided documents including labels on the product before your first ride.

- ▶ **Read ALL accompanying manuals before riding the bike for the first time.** Your Bosch Drive System comes with additional manuals and documents provided by the manufacturer of the bicycle and other components. Failure to read and understand safety information can result in death or serious injury.

- ▶ **Take responsibility for your own SAFETY.** If you have any questions or do not understand something, consult with your dealer or the bicycle or component manufacturer.

- ▶ **Some eBike accessories may present a choking hazard to small children.** Keep these accessories away from children.

### **▲ CAUTION**

- ▶ **The Bosch Drive System adds weight to your bicycle which you may not be used to lift.** Avoid injury, use proper lifting techniques.

## Using your Manual

In addition to the functions outlined here, changes to software relating to troubleshooting and functional modifications may be introduced at any time.

### Graphics

The bicycle shown in this manual may differ slightly from your bicycle, but will be similar enough to help you understand our instructions.

RIGHT-HAND and LEFT-HAND sides are determined by facing in the direction the bicycle will travel when going forward. When you see a broken line (-----), the item referred to is hidden from view.

# On-product warning labels

**A**

**eBike Battery Charger 36-4/100-230**  
**0 275 007 906**  
**Standard Charger BCS210**  
 Input: 110V-230V ~ 50-60Hz 2.2A  
 Output: 36V = 4A  
 Made in  
 Robert Bosch GmbH  
 72757 Reutlingen  
 Germany

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**⚠ WARNING** For safe operation see manual. Risk of electric shock. Indoor use only. Charge only batteries of the Bosch eBike Systems. Other batteries may burst causing personal damage. Do not replace the plug assembly as risk of fire or electric shock may result.

**⚠ ADVERTENCIA** Para un funcionamiento con seguridad, ver el manual Peligro de sacudida eléctrica. Utilice solamente en lugares secos. Cargar únicamente baterías de sistemas eBike de Bosch. Otras baterías podrían reventar, causando lesiones personales y daños. No reemplace el ensamblaje del enchufe, ya que el resultado puede ser riesgo de incendio o sacudidas eléctricas.

**⚠ AVERTISSEMENT** Pour un fonctionnement sûr, reportez-vous au manuel. Risque de choc électrique. Utiliser en lieu sec uniquement. A utiliser uniquement avec les batteries des systèmes d'assistance électrique eBike de Bosch. D'autres batteries risqueraient d'éclater et de causer des blessures corporelles et des dommages. Ne pas remplacer la connectique car un risque d'incendie ou de choc électrique pourrait en résulter.

**B**

**eBike Battery Charger 36-2/100-240**  
**0 275 007 915 Compact Charger**  
**BCS230**  
 Input: 100-240V ~ 50/60Hz 1.6A  
 Output: 36V = 2A  
 Made in China  
 Robert Bosch GmbH  
 72757 Reutlingen  
 Germany

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**⚠ WARNING** For safe operation see manual. Risk of electric shock. Indoor use only. Charge only batteries of the Bosch eBike Systems. Other batteries may burst causing personal damage. Do not replace the plug assembly as risk of fire or electric shock may result.

**⚠ ADVERTENCIA** Para un funcionamiento con seguridad, ver el manual Peligro de sacudida eléctrica. Utilice solamente en lugares secos. Cargar únicamente baterías de sistemas eBike de Bosch. Otras baterías podrían reventar, causando lesiones personales y daños. No reemplace el ensamblaje del enchufe, ya que el resultado puede ser riesgo de incendio o sacudidas eléctricas.

**⚠ AVERTISSEMENT** Pour un fonctionnement sûr, reportez-vous au manuel. Risque de choc électrique. Utiliser en lieu sec uniquement. A utiliser uniquement avec les batteries des systèmes d'assistance électrique eBike de Bosch. D'autres batteries risqueraient d'éclater et de causer des blessures corporelles et des dommages. Ne pas remplacer la connectique car un risque d'incendie ou de choc électrique pourrait en résulter.

**Li-Ion USE ONLY with BOSCH Li-Ion batteries**

**A** Wide range charger

**B** Compact charger

A short version of important safety warnings in English, French and Spanish with the following content can be found on the bottom side of the charger (marked with number **(4)** in the representation on the graphics page):

- For safe operation, see manual.
- Risk of electric shock
- Indoor use only
- Charge only batteries for the Bosch eBike Systems. Other batteries may burst causing personal damage.
- Do not replace the plug assembly as risk of fire or electric shock may result.

# Operating the Charger

## Safety Instructions

### IMPORTANT SAFETY INSTRUCTIONS SAVE THESE INSTRUCTIONS –

This manual contains important safety and operating instructions for this battery charger.

- ▶ Before using battery charger, read all instructions and cautionary markings on battery charger, battery, and product using battery.

#### CAUTION

- ▶ **To reduce risk of injury, charge only batteries of the Bosch eBike Systems.** Other types of batteries may burst causing personal injury and damage.



**Save all safety warnings and instructions for future reference.**

The term **battery pack** used in these operating instructions refers to all original Bosch eBike battery packs.

#### DANGER

- ▶ **Only charge eBike-approved Bosch lithium-ion battery packs. The battery pack voltage must match the battery pack charging voltage of the charger.** Otherwise, there is risk of fire and explosion.



**Do not expose the charger to rain or wet conditions.** If water enters a charger, there is a risk of electric shock.

#### WARNING

- ▶ **Use only the original Bosch battery charger supplied with your eBike or one approved for your eBike by the manufacturer and purchased from a trusted source.** Bypassing the battery charger or the use of a non-approved or counterfeit battery charger can lead to death or serious injury.
- ▶ **Keep the battery charger clean.** Contamination can lead to the risk of an electric shock. Clean only with the use of a damp cloth (mild soap/water).

- ▶ **Always check the charger, cable and plug before use. Stop using the charger if you discover any damage. Do not open the charger.** Damaged chargers, cables and plugs increase the risk of electric shock.
- ▶ **Do not operate the charger on an easily ignited surface (e.g. paper, textiles, etc.) or in a flammable environment.** There is a risk of fire due to the charger heating up during operation.
- ▶ **Take care if you touch the charger while it is charging. Wear protective gloves.** The charger can get very hot, especially when the ambient temperature is high.
- ▶ **The battery may give off fumes if it becomes damaged or is used incorrectly. Ensure the area is well ventilated and seek medical attention should you experience any adverse effects.** These fumes may irritate the respiratory tract.
- ▶ **The eBike battery must not be left unattended while charging.**
- ▶ **Batteries must not be subjected to mechanical shock.** There is a risk of the battery being damaged.
- ▶ **Keep the battery charger away from children.** This will ensure that children do not play with the charger.
- ▶ **Persons who are not capable of safely operating the charger because of their physical, sensory or mental limitations, or because of their lack of experience or knowledge, may only use this charger under supervision or after having been instructed by a responsible person.** Otherwise, there is a risk of operating errors and injuries.
- ▶ **Read and observe the safety warnings and instructions in all operating instructions of the eBike system and your eBike.**

**NOTICE:** This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter:

1. This device must not cause harmful interference, and
2. this device must accept any interference that is received, including interference that may cause undesired operation.

**NOTICE:** Changes or modifications made to this equipment not expressly approved by the Robert Bosch GmbH may void the FCC authorization to operate this equipment.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio fre-

quency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Responsible party:

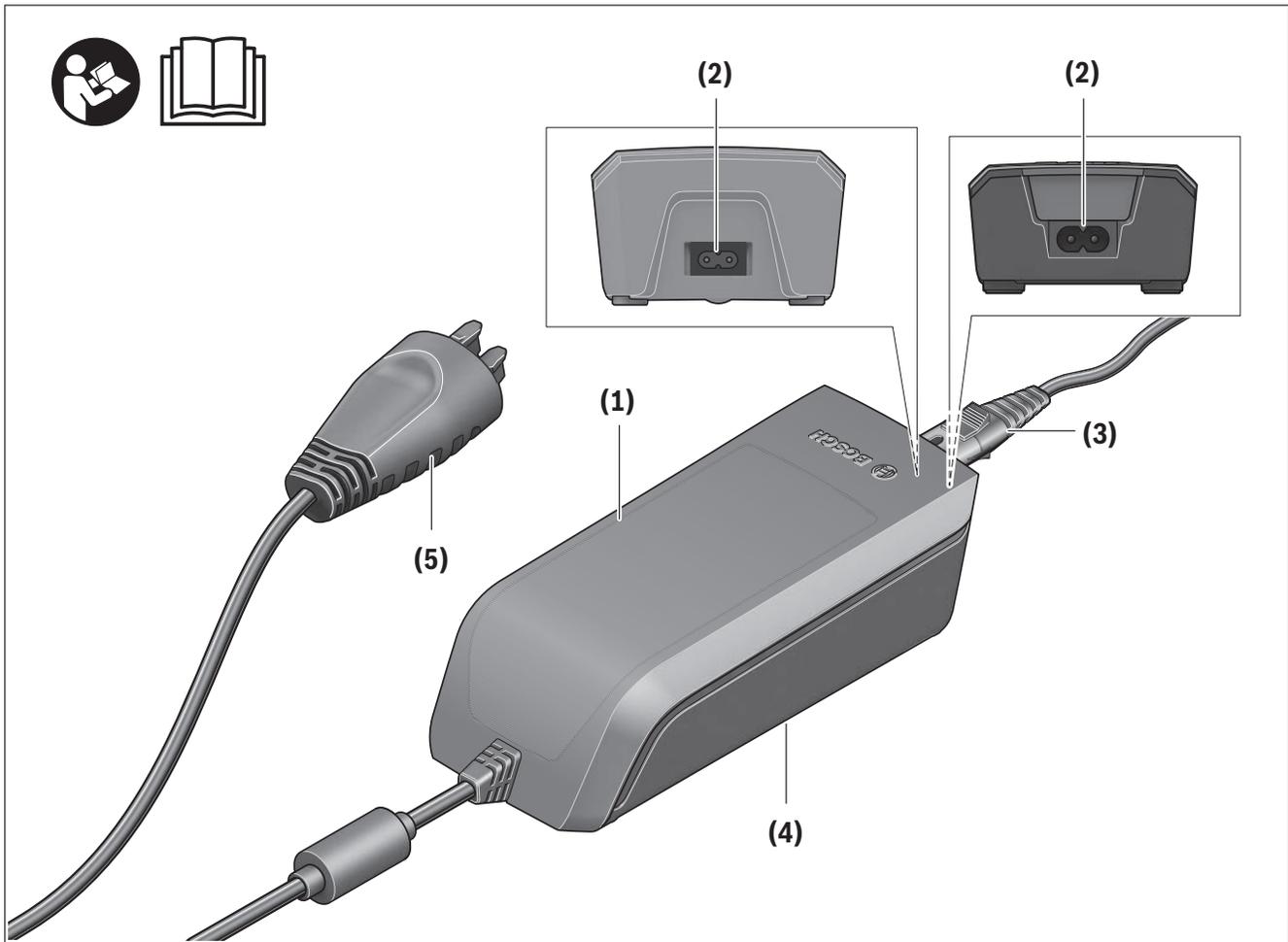
Bosch eBike Systems Americas

Robert Bosch LLC

27211 Burbank, Foothill Ranch, CA 92610, USA,

[www.bosch-ebike.com/us/](http://www.bosch-ebike.com/us/)

## Product Description and Specifications



### Product Features

- (1) Charger
- (2) Device socket
- (3) Device connector
- (4) Charger safety instructions
- (5) Charging connector

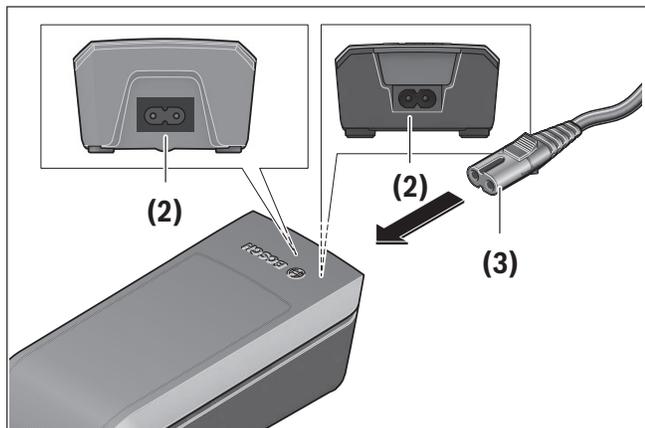
**Technical data**

Charger		Wide Range Charger (36-4/100-230)	Compact Charger (36-2/100-240)
Product code		BCS210	BCS230
Rated voltage	V~	90-264	90-264
Frequency	Hz	47-63	47-63
Battery charging voltage	V=	36	36
Charging current (max.)	A	4	2
Charging time			
– PowerPack 400, approx.	hrs	3.5	6.5
– PowerPack 500, approx.	hrs	4.5	7.5
Operating temperature	°F	+32 to +104	+32 to +104
Storage temperature	°F	+50 to +104	+50 to +104
Weight, approx.	lb	1.8	1.3
Protection rating		IP 40	IP 40
<b>Power cable</b>			
Article number			1 270 020 343
Rated voltage – cables		V~	300
Rated voltage – connectors/plug-in connectors		V~	125
Rated current – connectors/plug-in connectors		A	10
Material – cables			PVC
Safety standard – cables			UL 62
Safety standard – connectors/plug-in connectors			UL 817
Length, approx.		m	1.8

## Operation

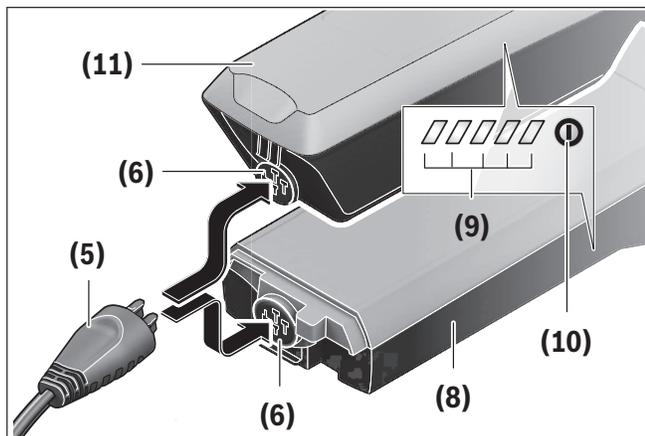
### Start-up

#### Connecting the charger to the mains



► **Note the household voltage!** The voltage of the power supply must correspond to the specifications given on the battery charger nameplate. Plug the device connector **(3)** of the power cable into the device socket **(2)** on the charger. Connect the power cable (country-specific) to the mains. Use only the supplied input connection: standard AC power cord **(3)** in the diagram) when connecting to the household electrical supply.

#### Charging the battery when removed



- (5)** Charging connector
- (6)** Socket for charging connector

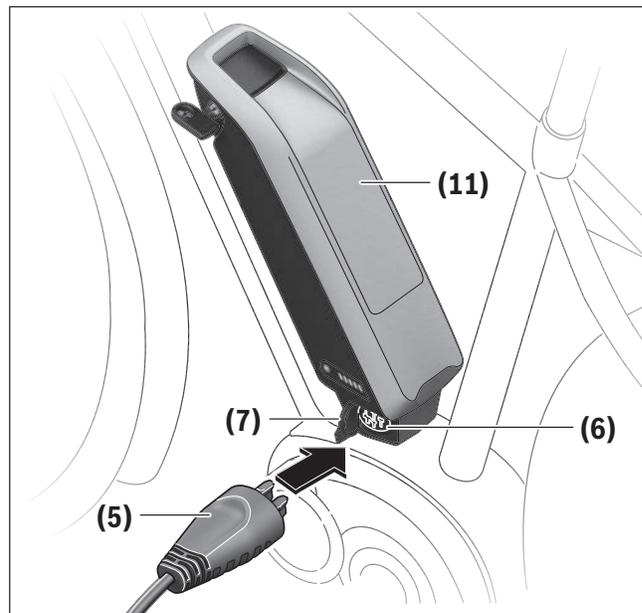
- (8)** Rack-mounted battery
- (9)** Operation/state of charge indicator
- (10)** On/off button for battery
- (11)** Standard battery

Switch the battery off and remove it from its holder on the eBike. When doing so, read and observe the operating instructions of the battery.

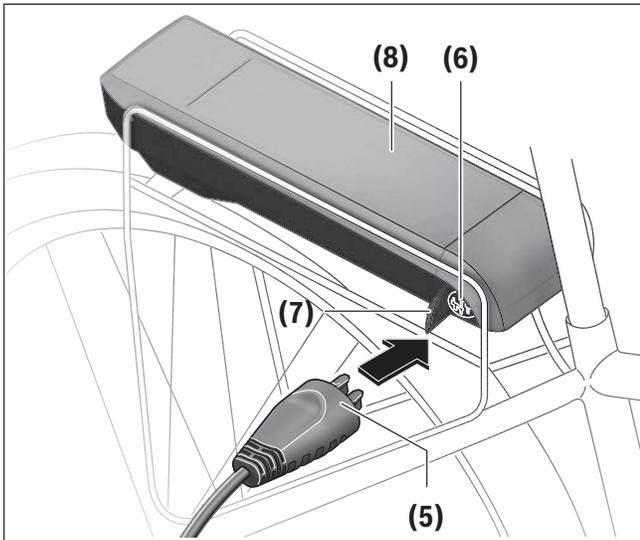
► **Ensure the battery is placed on clean surfaces only.** Avoid getting dirt, e.g. sand or soil, in the charging socket and contacts in particular.

Plug the charging connector **(5)** of the charger into the socket **(6)** on the battery.

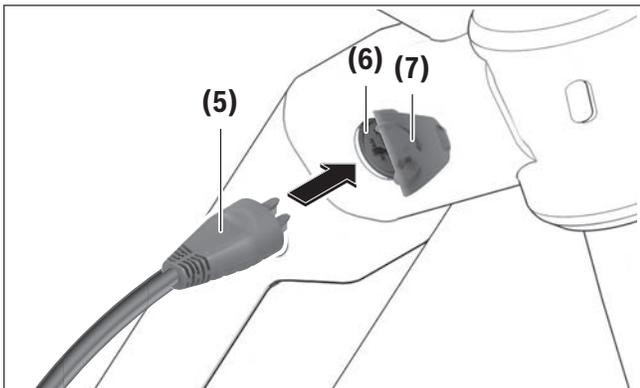
#### Charging the battery when inserted in the bicycle



- (5)** Charging connector
- (6)** Socket for charging connector
- (7)** Charging socket cover
- (11)** Standard battery



- (5) Charging connector
- (6) Socket for charging connector
- (7) Charging socket cover
- (8) Rack-mounted battery



- (5) Charging connector
- (6) Socket for charging connector
- (7) Charging socket cover

Switch the battery off. Clean the cover of the charging socket (7). Avoid getting dirt, e.g. sand or soil, in the charging socket and contacts in particular. Lift the cover of the charging socket (7) and plug the charging connector (5) into the charging socket (6).

► **There is a risk of fire due to the charger heating up during charging. Ensure the battery on the bike is completely dry and placed on a fireproof**

**surface before charging.** If this is not possible, remove the battery from the holder and charge it in a more suitable location. When doing so, read and observe the operating instructions of the battery.

### Charging with Two Battery Packs Inserted

If two battery packs are mounted on one eBike, both battery packs can be charged using the unsealed connection. To begin with, both batteries are charged one after the other until they reach approx. 80–90 % capacity, then they are both charged at the same time until full (the LEDs on both batteries flash).

When the bike is in operation, power is drawn from both batteries on an alternating basis.

If you take the battery packs out of the holders, you can charge each battery pack individually.

### Charging process

The charging process begins as soon as the charger is connected to the battery or charging socket on the bike and to the mains.

**Note:** The charging process is only possible when the temperature of the eBike battery is within the permitted charging temperature range.

**Note:** The drive unit is deactivated during the charging process.

The battery can be charged with or without the on-board computer. When charging without the on-board computer, the charging progress can be observed via the battery charge indicator.

When the on-board computer is connected, a charging notification appears on the display.

The state of charge is displayed by the battery charge indicator (9) on the battery and by the bars on the on-board computer.

The LEDs on the battery charge indicator (9) will flash during the charging process. Each solid illuminated LED represents approximately 20 % of the charging capacity. The flashing LED indicates the next 20 % currently charging.

Once the eBike battery is fully charged, the LEDs extinguish immediately and the on-board computer is

switched off. The charging process is terminated. The state of charge can be displayed for three seconds by pressing the on/off button **(10)** on the eBike battery. Disconnect the charger from the mains and the battery from the charger.

When the battery is disconnected from the charger, the battery is automatically switched off.

**Note:** If you have charged the battery on the bike, carefully close the charging socket **(6)** with the cover **(7)** after charging, so that no dirt or water can get in. If the charger is not disconnected from the battery after charging, the charger will switch itself back on after a few hours, check the state of charge of the battery and begin the charging process again if necessary.

## Maintenance/cleaning

### WARNING

- ▶ **Do not open any of the components. Service should only be carried out at an authorized Bosch eBike dealer.** Failure to follow above warning can cause death or serious injury. Refer to your bicycle manual or component manual for all non-Bosch drive system components.
- ▶ **Do not charge or use your eBike in any area with a potentially explosive atmosphere, such as at a fueling area, or in areas where the air contains chemicals or particles (such as grain, dust, or metal powders).** Obey all signs and instructions.
- ▶ **Do not submerge your eBike components in water, or wash with pressurized hose.** Your Bosch drive unit is designed to be water tight to rain water or non-pressure hose washing.
- ▶ **Do not paint any components of the Bosch drive system as they may cause premature failure of the component.**

### After-sales service and advice on using products

If you have any questions about the eBike system and its components, contact an authorized bicycle dealer. For contact details of authorized bike dealerships, please visit [www.bosch-ebike.com](http://www.bosch-ebike.com).

Please contact an authorized bicycle dealer if the battery is no longer working.

# Troubleshooting

Cause	Corrective measures
 <p>Battery defective</p>	<p><b>Two LEDs flash on the battery.</b></p> <p>Contact an authorized bike dealership.</p>
 <p>Battery too warm or too cold</p>	<p><b>Three LEDs flash on the battery.</b></p> <p>Disconnect the battery from the charger until the charging temperature range has been reached.</p> <p>Do not reconnect the battery to the charger until it has reached the correct charging temperature.</p>
 <p>The charger is not charging.</p>	<p><b>No LEDs flashing (one or more LEDs will remain permanently lit depending on the state of charge of the eBike battery).</b></p> <p>Contact an authorized bike dealership.</p>
<p><b>Charging not possible (no indicator on battery)</b></p>	
<p>Connector not attached properly</p>	<p>Check all connections.</p>
<p>Battery contacts dirty</p>	<p>Carefully clean the battery contacts.</p>
<p>Socket outlet, cable or charger defective</p>	<p>Check the mains voltage, have the charger checked over by a bike dealership.</p>
<p>Battery defective</p>	<p>Contact an authorized bike dealership.</p>

## Battery Recycling Program



The drive unit, on-board computer incl. operating unit, battery, speed sensor, accessories and packaging should be disposed of in an environmentally correct manner.

Do not dispose of eBikes and their components with household waste.



You may recycle your Bosch battery pack by calling 1.800.822.8837.