HELLA GUTMANN SOLUTIONS

BPC 50



Operating Instructions

Original Operating Instructions

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1 About this Manual

1.1 Reading the Manual

This user manual contains important information relevant to operator safety.

Please read the user manual completely. Pay special attention to the first pages containing the safety instructions and the conditions of liability. They are provided solely to assure your safety when working with the device.

You are recommended to read the individual work steps in the manual again while working with the device, in order to avoid danger to personnel and equipment or operating errors.

The device may only be operated by personnel qualified in automotive engineering. Information and knowledge included in this training is not explained further in this user manual.

The manufacturer reserves the right to modify this manual and the tool itself without prior notice. We therefore recommend checking for any updates. This manual must accompany the device in case of sale or other transfer.

This user manual must be kept for the entire service life of the device.

1.2 Marking of Text Parts

	**DANGER** Text parts marked in this way indicate an imminent dangerous situation which, if not avoided, will lead to death or severe injuries.
	**WARNING** Text parts marked in this way indicate a potentially dangerous situation which, if not avoided, will lead to dead or severe injuries if it is not avoided.
	**CAUTION** Text parts marked in this way indicate a potentially dangerous situation which, if not avoided, will lead to minor or slight injuries if it is not avoided.
	Warning of hazardous electrical voltage
	Warning of explosive substances.
	**NOTICE** All texts marked with **NOTICE** refer to a hazard in the device or environment. Therefore, the guidance notes and instructions given here must be observed.
	**NOTICE** Texts marked with **NOTE** contain important and useful information. Observance of these texts is recommended.

	**Crossed out waste bin** This marking indicates that the product must not be discarded as domestic waste. The bar underneath the waste bin indicates whether the product was "placed on the market" after August 13, 2005.
	**Alternating voltage** This marking indicates alternating voltage. Alternating voltage means that the polarity of the electrical voltage alternates in regular repetition.
	**Device protection** Keep the device away from fluids such as water, oil or gasoline. The BPC 50 is not waterproof.
	Wear safety gloves.
	Use protective goggles.
	Disconnect the power plug.
	**Refer to manual** This symbol indicates that the user manual must always be read and always be available.

2 User Information

2.1 Safety Precautions

2.1.1 General Safety Precautions



- The BPC 50 is exclusively intended for use on a vehicle. It is a precondition for the use of the BPC 50 that the user has knowledge of automotive engineering and is therefore aware of the sources of danger and risks in the workshop and on the vehicle.
- All notes given in the individual sections of the operating instructions apply. In principle it is required to follow the steps and safety precautions stated below.
- Furthermore, pay attention to all general instructions from labour inspectorates, trade associations and vehicle manufacturers as well as all laws, legal ordinances and instructions which have to be commonly obeyed by a repair shop.

2.1.2 Safety Precautions for the BPC 50



In order to avoid incorrect handling and injury to the user or destruction of the BPC 50 arising from this, observe the following:

- Use the BPC 50 exclusively for charging 12-volt batteries.
- Protect the BPC 50 and the connecting cables from hot parts.
- Protect the BPC 50 and the connecting cables from rotating parts.
- Regularly check connecting cables/accessory parts for damage (destruction of the BPC 50 due to short circuit).
- Only connect the BPC 50 according to operating instructions.
- Protect the BPC 50 from long periods of exposure to solar radiation.
- Keep the BPC 50 away from fluids such as water, oil or gasoline. The BPC 50 is not waterproof.
- Protect the BPC 50 from strong impacts and do not drop it.
- Do not open the BPC 50 on your own. Only technicians authorised by Hella Gutmann are allowed to open the BPC 50. Warranty and guarantee will be rendered void at any case of unauthorised tampering of the BPC 50.
- Service or repair work on the BPC 50 may only be carried out by authorised specialist personnel.
- Immediately contact Hella Gutmann or a Hella Gutmann trading partner in the event of any malfunctions of the BPC 50.
- Only touch the the (–) and (+) terminal clamps on the insulated areas.
- If you do not use the BPC 50 for an extended period of time, disconnect it from the voltage supply and store it in a dry place.

2.1.3 Safety Precautions Regarding the Risk of Injury



When working on the vehicle, there is a risk of injury through inadvertent rolling of the vehicle. Therefore observe the following:

- Make connections to the vehicle only when engine is not running.
- Additionally place gear selector lever of AT vehicles to park position.
- Protect vehicle against rolling away.
- Deactivate the start/stop system on the vehicle to avoid an inadvertent engine start.
- Only use the BPC 50 in well ventilated and dry surroundings.
- Disconnect the BPC 50 from the voltage supply before connecting the terminal clamps (+) and (–) to the battery or disconnecting them from the battery.

2.1.4 Safety Precautions – High Voltage/Line Voltage



Very high voltages occur in electrical systems. Due to voltage flashover on damaged components such as marten damage or touching live components, there is a risk of electric shock. High voltage via the vehicle and line voltage via the building's mains supply can cause severe injury or even death if adequate care is not taken. Therefore observe the following:

- Only use power supply cables with earthing contacts.
- Always use original wiring harnesses.
- Regularly check the power cord for damage.
- Only perform any assembly work, such as the connection of the BPC 50 or the replacement of components, when ignition is switched off.
- Do not touch live components when working with ignition switched on.

2.1.5 Safety Precautions for Initial Start-Up





When working on batteries, there is a risk of injury due to faulty or damaged batteries.

Explosive gases can develop during the battery charge process. Therefore observe the following:

- Do not smoke or generate any sparks or open flames in the vicinity of batteries.
- Remove any items of jewellery and watches.
- In order to prevent sparks or short circuits, avoid the use of metal tools where possible.
- Never place the BPC 50 on the battery during the battery charge process.

2.1.6 Safety Precautions Regarding Chemical Burn



If the battery is damaged, there is a danger of chemical burns due to the escape of battery acid. Therefore observe the following:

- If body parts or clothes come into contact with battery acid, rinse immediately with water and consult a doctor.
- Seek medical attention immediately if you inhale or swallow battery acid.
- If battery acid comes into contact with eyes, rinse eyes with running water for at least 15 minutes and immediately consult a doctor.
- It is essential to wear appropriate personal protective equipment, e.g. goggles and safety gloves. Contact with the battery acid can lead to blindness and other severe injuries.

2.2 Disclaimer

2.2.1 Burden of Proof on the User

Users of the device must provide evidence that they have observed the technical explanations, operating, care and maintenance instructions and the safety precautions without exception.

2.2.2 Documentation

The notes given in the device describe the most common fault reasons. However, there are often further reasons for existing faults, which cannot be listed here, or there are further sources of error, which are unknown yet. Hella Gutmann Solutions GmbH does not accept any liability for failed or unnecessary repair work.

Hella Gutmann Solutions GmbH does not accept any liability for the use of data and information that is found to be incorrect, or was incorrectly displayed, or for errors occurring inadvertently during compilation of the data.

Notwithstanding the above, Hella Gutmann Solutions GmbH does not accept any liability for any losses in relation to loss of profit, goodwill, or any other loss, including financial loss.

Hella Gutmann Solutions GmbH accepts no liability for damages or operational disruptions resulting from failure to observe the "BPC 50" manual and the special safety precautions.

Users of the device must provide evidence that they have observed the technical explanations, operating, care and maintenance instructions and the safety precautions without exception.

3 Device Description

3.1 Intended Use

The BPC 50 is a portable battery charger for charging 12-volt batteries. The charge capacity ranges from 5 Ah to max. 500 Ah.

The various charging voltages and operating modes for different battery types (WET, AGM and LiFePO4 batteries) in various states provide an efficient and secure battery charging solution. The digital display of the BPC 50 indicates the voltage, current and error messages.

Do *not* connect non-rechargeable or frozen batteries to the BPC 50.

3.2 Delivery Contents

Quantity	Designation	
1	BPC 50 with terminal clamps and power cord	
1	Operating Instructions	

3.2.1 Checking Delivery Contents

Please check the delivery contents upon receiving your device so that complaints can be issued immediately regarding any potential damage.

Proceed as follows to check the delivery contents:

1. Check the package delivered to ensure that it is not damaged.

   Should you identify any external transport damage, then open the package in the presence of the delivery service and check the BPC 50 for hidden damage. Any transport damage to the package supplied and damage to the BPC 50 shall be registered in a damage report by the delivery service.

2. Open the package supplied and check for completeness based on the delivery slip.
3. Remove the BPC 50 from the packaging.

	**CAUTION** Danger of short circuit due to loose parts in or on the BPC 50 Risk of destruction of the BPC 50 and/or the vehicle electronics Never put the BPC 50 into operation if you suspect that there are loose parts in or on the BPC 50. Please immediately contact the Hella Gutmann repair service or a Hella Gutmann trading partner.

4. Check the BPC 50 for mechanical damage.

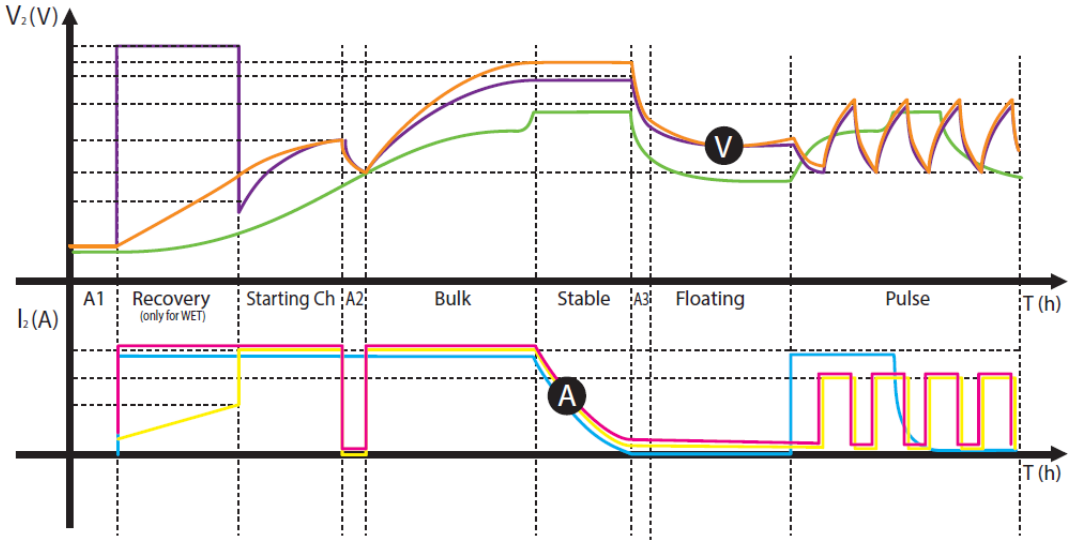
3.3 Description of the BPC 50



	Designation
1	**Power cord** The power cord can be used to supply the BPC 50 with voltage.
2	**Terminal clamp (–)** The black terminal clamp (–) is connected to the negative terminal of the battery.
3	**Control panel** You can switch the BPC 50 on and off using the control panel. You can also select different operating modes for different battery types.
4	**BPC 50 with terminal clamps and power cord**
5	**Terminal clamp (+)** The red terminal clamp (+) is connected to the positive terminal of the battery.
6	**Wall fastening holes** The BPC 50 can be fastened to the wall using the appropriate materials.

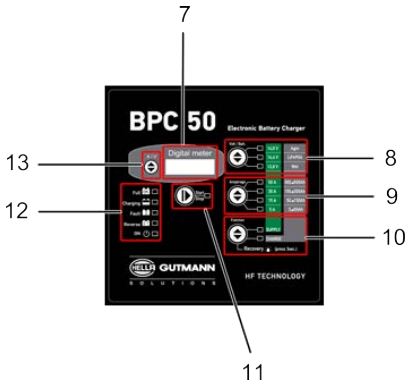
3.4 Charging Curves

The charging curves (charging voltage and charge current) of the different battery types are shown below:



Colour	Description
	• Charge current (A) • Battery type: AGM battery
	• Charging voltage (V) • Battery type: AGM battery
	• Charge current (A) • Battery type: Lithium battery
	• Charging voltage (V) • Battery type: Lithium battery
	• Charge current (A) • Battery type: WET battery
	• Charging voltage (V) • Battery type: WET battery

3.5 Control Panel



	Designation
7	**Digital display** The digital display indicates the voltage, current and error messages.
8	**Volts/batt. arrow keys** **NOTICE** First deactivate the yellow **Start/Stop** indicator lamp (LED) with before selecting the charging voltage/battery type with . Use to choose between 3 different charging voltages and battery types. The yellow indicator lamp (LED) indicates which charging voltage or battery type is selected.

	Designation
9	**Amperage arrow keys**  **NOTICE** Before you can select the charge current or capacity of the connected battery via , the yellow **Start/Stop** indicator lamp (LED) must be deactivated via . Use  to select the charging current of the BPC 50 and the capacity of the connected battery. The yellow indicator lamp (LED) indicates which current level or battery capacity is selected.
10	**Function arrow keys**  **NOTICE** First deactivate the yellow **Start/Stop** indicator lamp (LED) with  before selecting the operating mode with . Select the operating mode of the BPC 50 with . When selecting the **SUPPLY** operating mode (power adapter mode), 4 different **current levels** can be selected. When selecting the **CHARGE** operating mode (battery charging mode), 4 different **battery capacities** can be selected. The yellow indicator lamp (LED) indicates the operating mode in which the BPC 50 is working.
	You can restore/recover sulfated batteries by selecting the operating mode **Recovery** (restoration mode).
11	**Start/stop button** Use  to start or stop the battery charge in the selected operating mode. If the BPC 50 is operating in the selected operating mode, then the yellow indicator lamp (LED) will light up.

	Designation
12	**Indicator lamps (LED) for the battery state** There are 4 different battery states: • **Full**: The battery is charged and in trickle charging mode (green LED). • **Charging**: The battery is charging (yellow LED). • **Fault**: The battery is damaged/defective (red LED). • **Reverse**: Polarity inversion Reversing the polarity of single cells in a battery leads to permanent battery damage (red LED). The indicator lamps (LEDs) indicate the state of the battery.
	Indicator lamps (LED) for the battery state The blue **ON** indicator lamp (LED) indicates the operating status of the BPC 50. If the BPC 50 is switched on, then the blue indicator lamp (LED) will light up.
13	**A/V button** Use  to switch between the voltage indicator and the current indicator on the digital display.

4 Initial Start-Up of the BPC 50

4.1 Switching on the BPC 50

To switch on the BPC 50:

- Insert the power plug of the BPC 50 into the power outlet.

  The blue **ON** indicator lamp (LED) turns on. The BPC 50 is switched on.

4.2 Switching off the BPC 50

To switch off the BPC 50:

- Disconnect the BPC 50 from the voltage supply.

  The blue indicator lamp (LED) **ON** is off. The BPC 50 is switched off.

5 Working with the BPC 50

5.1 Operating Modes of the BPC 50

The following operating modes are available when working with the BPC 50:

- Function
  - Charge
  - Supply
  - Recovery
- Amperage
- Volts/Batt.

The individual operating modes are described below.

5.1.1 Function

Charge

The **CHARGE** battery charging mode incorporates 7 charging characteristics:

Charging characte-ristics	Proceeding	Description
1	Analysis 1*A1*	• The BPC 50 switches to standby mode if voltage is below 6.5 V. • The BPC 50 starts with the next charging phase (2) if voltage is exceeding 6.5 V.
2	Precharging*Starting Ch*	The BPC 50 starts charging with constant current until the battery reaches a voltage of 13 V.
3	Analysis 2*A2*	**NOTICE** • The following text is shown on the digital display: *TEST*. • The BPC 50 searches for a short-circuited element. • The BPC 50 disconnects the current output for 5 min. • The digital display shows the text *ER02*, if voltage drops below 11.7 V. Switch to the **Recovery** restoration mode. To do this, refer to section**Recovery (Page 16)**. • The next charging characteristic (4) starts if voltage remains higher than 11.7 V.
4	Intensive charging*Bulk*	The battery is charged up to the set limit value.
5	Constant voltage*Stable*	The BPC 50 keeps the battery at the set voltage constantly (end of the battery charge process).

Charging characte-ristics	Proceeding	Description
6	Buffer*Floating*	• The voltage drops to the retention level and the charging process is completed. • The green indicator lamp (LED) comes on (**Full**).
7	Pulse charging*Pulse*	• The BPC 50 switches to the charge conservation process (for longer periods of time). • During impulse charging, individually timed current pulses ensure the optimal battery charge. • The battery is *not* overcharged.

Supply

The **SUPPLY** power adaptor mode does not include charging phases and stabilizes the battery at its rated voltage.

In the **SUPPLY** mode, the BPC 50 supplies the battery with power. This prevents the battery from discharging. The battery discharges e.g. when working on the vehicle.

This mode is intended to protect the battery.

Recovery



ATTENTION

High voltages in the **Recovery** restoration mode

Danger of destruction of automotive electronics.

Never put the BPC 50 into operation if the battery is connected to the vehicle.

Always remove the battery connections of the vehicle from the battery itself before activating the restoration mode.

The **Recovery** mode incorporates 6 charging characteristics and makes it possible to refresh/recover sulphated batteries which have not been used for a long time.

Proceed as follows to activate the **Recovery** mode:

1. Disconnect the battery from the vehicle.

2. Under **Function**, keep **>** pressed for 3 seconds.

   The yellow **CHARGE** indicator lamp (LED) lights up.

   If the refresh mode has been activated, the following text is displayed: *rEC*.

   The BPC 50 performs a special charging process in which higher-than-average voltages are applied in order to restore the battery.

   The 6 charging phases are as follows:

Charging characte-ristics	Proceeding	Description
1	Analysis 1*A1*	• The BPC 50 switches to standby mode if voltage is below 3 V. • The BPC 50 starts with the next charging phase (2) if voltage is exceeding 3 V.
2	Precharging*Starting Ch*	The BPC 50 starts charging with constant current until the battery reaches a voltage of 13 V.
3	Intensive charging*Bulk*	The battery is charged up to the set limit value.
4	Constant voltage*Stable*	The BPC 50 keeps the battery at the set voltage constantly (end of the battery charge process).
5	Buffer*Floating*	• The voltage drops to the retention level and the charging process is completed. • The green indicator lamp (LED) comes on (**Full**).
6	Pulse charging*Pulse*	• The BPC 50 switches to the charge conservation process (for longer periods of time). • During impulse charging, individually timed current pulses ensure the optimal battery charge. • The battery is *not* overcharged.

5.1.2 Amperage

Use to select the charging current of the BPC 50 and the capacity of the connected battery.

When selecting the **SUPPLY** operating mode (power adapter mode), 4 different **current levels** can be selected:

Current level	Description
5 A	The BPC 50 is constantly delivering up to max. 5 A.
15 A	The BPC 50 is constantly delivering up to max. 15 A.
30 A	The BPC 50 is constantly delivering up to max. 30 A.
50 A	The BPC 50 is constantly delivering up to max. 50 A.

When selecting the **CHARGE** operating mode (battery charging mode), 4 different **battery capacities** can be selected:

Battery capacity	Description
5–50 Ah	The BPC 50 charges batteries with a capacity of 5–50 Ah.
50–150 Ah	The BPC 50 charges batteries with a capacity of 50–150 Ah.
150–300 Ah	The BPC 50 charges batteries with a capacity of 150–300 Ah.
300–500 Ah	The BPC 50 charges batteries with a capacity of 300–500 Ah.

The yellow indicator lamp (LED) indicates which current level or battery capacity is selected.

5.1.3 Volts/Batt.

☞	**NOTICE** The charging voltage to be set depends on the type of battery and the battery's end-of-charge voltage.

Battery type	End-of-charge voltage
WET battery	14.4 V
LiFePO4 battery	14.4 V
AGM battery	14.8 V

Use  to choose between 3 different charging voltages and battery types.

When selecting the **SUPPLY** operating mode (power adapter mode), the following **charging voltages** can be selected:

Charging voltage	Description
13.8 V	The charging voltage of the BPC 50 is set to 13.8 V.
14.4 V	The charging voltage of the BPC 50 is set to 14.4 V.
14.8 V	The charging voltage of the BPC 50 is set to 14.8 V.

When selecting the **CHARGE** operating mode (battery charging mode), the following **battery types** can be selected:

☞	**NOTICE** Information about the installed battery type is in the vehicle's operating manual or in the technical data of the installed battery. If you are unsure about the integrated battery type, please contact a specialist retailer or workshop.

Battery charging mode	Battery type
WET	**Lead-acid batteries** • WET batteries • GEL batteries • *Start/stop* EFB batteries • *Start/stop* AFB batteries
LiFePO4	**Lithium batteries** • LiFePO4 batteries
AGM	**Sealed lead-acid batteries (lead fleece batteries)** • *Start/stop* AGM batteries • Spiral-cell AGM batteries • VRLA batteries • MF batteries

5.2 Precondition for Battery Charging

To charge the battery, observe the following:

- The BPC 50 is disconnected from the voltage supply.
- The BPC 50 is only connected to the battery when the ignition is switched off.

5.3 Charging the Battery



CAUTION

Detachment of the power plug and terminal clamps

Risk of injury or material damages

Proceed as follows before startup:

1. Protect vehicle against rolling away.
2. Apply the parking brake.
3. No gear is engaged.



NOTICE

Risk of short circuit due to high voltages of the BPC 50

Danger of destruction of automotive electronics.

In the **Recovery** mode, remove the vehicle's battery connections from the battery before taking the BPC 50 into operation.

To connect the BPC 50 to a battery and charge the battery:

1. Connect the red terminal clamp (+) to the positive terminal (+) on the battery.
2. Connect the black terminal clamp (–) to the negative terminal (–) of the battery or to the vehicle's ground point.
3. Insert the power plug of the BPC 50 into the power outlet.

4. Select the desired operating mode.

   For this regard the sections **Control Panel (Page 11)** and **Operating Modes of the BPC 50 (Page 15)**.

5. Start the charging process in the selected operating mode with .

   If the yellow indicator lamps (LEDs) light up in **Start/Stop** and **Charging**, then the battery is being charged.

   If the green indicator lamp (LED) lights up in **FULL**, then the battery is charged. The BPC 50 switches to conservation mode (the efficiency is constantly monitored and the battery is maintained at an optimum trickle charge).

6. Press .
7. Remove the terminal clamps (–) and (+) from the battery as instructed in Chapter **Disconnecting the BPC 50 from the Battery (Page 20)**.

5.4 Resuming Battery Charging After Interruption

If the BPC 50 battery charging is interrupted, then the BPC 50 starts with the most recently saved settings when switched on again.

When selecting the **SUPPLY** operating mode (power adaptor mode), the battery charge resumes automatically once the power supply is restored.

When selecting the **CHARGE** operating mode (battery charging mode) the error message *E01* is shown on the digital display when recovering the power supply.

1. Resume battery charge in **CHARGE** battery charging mode with .
2. Refer to section **Troubleshooting (Page 22)** if the error message appears again.

5.5 Disconnecting the BPC 50 from the Battery

☞	**NOTICE** The BPC 50 can only be disconnected from the battery when the BPC 50 is disconnected from the voltage supply.

To disconnect the BPC 50 from the battery:

1. Use  to switch off the BPC 50.

   The yellow indicator lamp (LED) in **Start/Stop** is off. Battery charge is finished.

2. Disconnect the BPC 50 from the voltage supply.

   The blue indicator lamp (LED) **ON** is off. The BPC 50 is switched off.

3. Remove the black terminal clamp (–) from the negative terminal (–).
4. Remove the red terminal clamp (+) from the positive terminal (+).

5.5.1 Canceling the Battery Charge Process

To cancel or stop the battery charge process:

1. Stop or interrupt the battery charge with .

   The yellow indicator lamp (LED) in **Start/Stop** is off. The battery charge is stopped.

	**NOTICE** You are advised to disconnect the BPC 50 from the voltage supply and remove the (–) and (+) terminal clamps from the battery.

2. If the battery charge is interrupted by e.g. a blackout, then refer to the section **Resuming Battery Charging After Interruption (Page 20)**.

6 General Information

6.1 Troubleshooting

The following list will help you to solve minor problems yourself. For this, select the appropriate error message and perform the points listed under **Solution** until the problem is solved.

Error info	Cause	Solution
Er01	• The terminal clamps are connected correctly to the battery. • The power cord is defective.	• Connect the terminal clamps correctly to the battery. • Ensure voltage supply.
	Short circuit in the battery	• The battery may be defective. • Connect a battery tester. • If necessary, replace the battery with a new one.
Er02	• The battery is defective or a recovery is not possible. • No current consumption is possible after 20 h of **Recovery**.	If necessary, replace the battery with a new one.
Er03	• The BPC 50 is overheated. • BPC 50 overloading.	• If necessary, remove any objects obstructing the ventilation slot of the BPC 50. • Place the BPC 50 in a cool location. • Wait until the BPC 50 switches back on automatically.
Er04	Voltage error	• Set the correct battery voltage of the BPC 50. • Resume battery charging.
	Short circuit of one or more elements of the battery.	• The battery may be defective. • Connect a battery tester. • If necessary, replace the battery with a new one.
Er05	The battery voltage is too high compared to the set charging voltage (it might be that an attempt is being made to charge a 24-volt battery).	• Use the BPC 50 exclusively for 12-volt batteries. • Resume battery charging.
Er06	• The battery's charge capacity is too high. • The end of the battery charge was not reached.	Use a battery charger with a higher charge capacity.

Error info	Cause	Solution
• *Er07* • The red indicator lamp (LED) **Reverse** lights up.	The terminal clamps are not connected to the battery correctly.	• Connect the terminal clamps correctly. • Resume battery charging.
Er08	• The charge current is too high. • The charge current is above the max. limit value.	Reduce the charging rate at the battery.

6.2 Care and Maintenance

- Like every device, the BPC 50 must be handled with care.
- Regularly clean the BPC 50 with non-aggressive cleaning agents.
- Use commercial household cleaning detergents and a moistened, soft cleaning cloth.
- Replace damaged cables/accessories immediately.
- Always use original spare parts.

6.3 Disposal

☞	**NOTICE** The guideline listed here is exclusively valid within the European Union.

In compliance with Directive 2012/19/EU of the European Parliament and Council of 4 July 2012 relating to Waste Electrical and Electronic Equipment (WEEE), and the German national statute governing the distribution, return and environmental disposal of electrical and electronic equipment (Electrical and Electronic Equipment Act – ElektroG) of 16 March 2005, we are obliged to take back this device, distributed by us after 13/08/2005, at the end of its service life free of charge and to dispose of it in accordance with the above-mentioned directives. In compliance with Directive 2012/19/EU of the European Parliament and Council of 4 July 2012 relating to Waste Electrical and Electronic Equipment (WEEE), and the German national statute governing the distribution, return and environmental disposal of electrical and electronic equipment (Electrical and Electronic Equipment Act – ElektroG) of 16 March 2005, we are obliged to take back this device, distributed by us after 13/08/2005, at the end of its service life free of charge and to dispose of it in accordance with the above-mentioned directives.

Since, in the case of the present device, this relates to exclusively commercially used equipment (B2B), it must not be handed over to a public disposal facility.

The device can be disposed of at the following address (specifying the date of purchase and the device numbers):

Hella Gutmann-Solutions GmbH
Am Krebsbach 2
79241 Ihringen
GERMANY
WEEE reg. no.: DE25419042
Phone: +49 7668 9900-0
Fax: +49 7668 9900-3999
E-mail: info@hella-gutmann.com

6.4 Technical Data of the BPC 50

General Data

Power	110–240 V
Frequency	50/60 Hz
Output voltage	12 V
Max. charging voltage	14.4 V WET/ 14.4 V LiFePO4 / 14.8 V AGM / 15.5 V REC
Power input	750 W
Rated current	5–50 A
Battery types (selectable)	WET, AGM battery, LiFePO4
Battery types (suitable)	WET, GEL, AGM battery, LiFePO4
Charge capacity	5–500 Ah
IP degree of protection	IP 20
Dimensions (device)	375 x 330 x 100 mm (H x W x D)
Dimensions (transport)	460 x 270 x 250 mm (H x W x D)
Weight	5.2 kg

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1 STUECK/PIECE(S)

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