

Installation instructions and user manual

including EU Declaration of Conformity

English

Saftkiste 100
Saftkiste 200
Saftkiste 300



 **SAFTKISTE**

Introduction

Introduction

You have purchased a quality product developed and manufactured in Germany. Should you have any reason for complaint, please contact the retailer from whom you purchased your Saftkiste.

Intended use

The Saftkiste is a lithium iron phosphate battery for use in recreational vehicles that are located within the EU and Switzerland. It is designed to replace or extend the standard living area battery(ies) in vehicle electrical systems with 12 or 24 volt nominal voltage.

Scope of delivery

- 1x Saftkiste
- 1x battery terminal adapter set
- 2x battery terminal screw incl. washer
- 1x installation instructions and user manual with CE Declaration of Conformity

First steps

1. Install the Saftkiste mobile app on your smartphone or tablet.
To do so, please visit
 - the Google Play Store for Android devices.
 - the Apple App Store for Apple devices.
2. Open the Saftkiste mobile app and follow the instructions.

Note: The operating instructions of the Saftkiste mobile app are not part of this manual. For instructions, please refer to the Saftkiste mobile app.

Installation

Installation

Safety note: installation may only be carried out by a qualified electrician. Incorrect installation in the vehicle can result in serious hazards.

To avoid short circuits during installation, please

- only remove the battery terminal covers after installing the Saftkiste and immediately before connecting the power cables, and
- set the integrated main switch to "Off" via the Saftkiste mobile app to prevent accidental short circuits during installation.

Note: For technical reasons, a small residual voltage can still be measured even when the main switch is switched off - this is harmless and cannot cause a short circuit.

The Saftkiste must be permanently attached to the vehicle in an accident-proof manner. The four M4 internal threads on the underside must be used as fastening points. You can obtain suitable holders for your Saftkiste from your dealer.

To minimize contact resistance, we recommend only using the enclosed battery terminal adapters if they are absolutely necessary. In many cases, the existing cabling can be attached directly to the battery terminals of the Saftkiste using the M8 hexagon head screws supplied. Tightening torque: 16 Nm.

Cascading

Cascading

By connecting several batteries together, the total capacity can be multiplied and/or the nominal voltage can be increased to a maximum of 24 V:

Parallel connection



→ doubles the total capacity

Serial connection



→ increases the nominal voltage to 24 V

Parallel- and serial connection



→ doubles the total capacity

→ increases the nominal voltage to 24 V

The cabling should have the same cross-section and correspond to the respective image above.

Settings

Exemplary settings of chargers in the 12V grid

In many cases, you can continue using shore-power chargers, charge boosters, solar charge controllers and electric blocks ("EBL") that you have already installed. Please configure the devices as follows:

Note: Different designations are used, depending on the manufacturer and type of charger. Not all chargers require all of the following settings.

If available, please select the settings in the "Preferred" column of the table below; only if these settings are not available on the device, select the settings in the "Alternative" column. Don't worry! This does not shorten the lifespan of your battery.

The following settings are usually available:

Designation(s)	Preferred	Alternative
Battery typ	LFP Lithium LiFePO4	Gel Lead gel
Charging characteristic	Constant voltage IU CCCV	IUoU
Charging voltage		14,4 V
Voltage U1	14,2 V	14,6 V
Main charging voltage		14,7 V 14,8 V

Settings

The following setting options are also available in rare instances:

Designation(s)	Value
Voltage U2 Recharging voltage	13,6 V
Voltage U3 Float voltage	13,5 V or 13,6 V
Maximum charging current Max. Output	135 A for Saftkiste 100 200 A for Saftkiste 200 and 300
Constant voltage time Absorption time	2 h
Desulphation Recondition	Off
Low temperature cut-off	Off If not possible: 0°C
Tail current	0 A
Peukert exponent	1.05
Charging efficiency	100 %

Don't worry about incorrect settings - the integrated DualBMS® protects the battery against deep discharge, excessively high charging voltages, charging currents or incompatible charging curves and reliably switches off if necessary.

To ensure reliable full charging via the alternator, a charging booster is required for vehicles first registered around 2018. Depending on the vehicle body manufacturer and model year, a charging booster may already be available. Older vehicles may not require a charging booster - your dealer will be happy to offer further advise.

EU-Declaration of Conformity



Date of issue: 03.04.2022
Manufacturer: Batterieschmiede GmbH
Address: In der Neuen Welt 8, 87700 Memmingen

Product description: Lithium-iron-phosphate battery

Models: Saftkiste 100, Art.No. BSL100xxxxx, where x is a placeholder
Saftkiste 200, Art.No. BSL200xxxxx, where x is a placeholder
Saftkiste 300, Art.No. BSL300xxxxx, where x is a placeholder

This declaration of conformity is issued under the responsibility of the manufacturer. The object of the declaration described above complies with the requirements of the following directives of the European Union:

2014/30/EU with the following harmonized standards:

- EN 61000-6-1:2007
 - EN 61000-6-3:2007/A1:2011/AC:2012
- 2014/35/EU with the following harmonized standards:
- EN 62368-1:2014/AC:2015

2014/53/EU with the following harmonized standards:

- EN 300 328 V2.2.2
- EN 301 489-1 V2.2.3
- EN 301 489-17 V3.2.4
- EN 301 511
- EN 301 908-1
- EN 301 908-13
- EN 303 413

The models listed are in accordance with Regulation No. 10 of the United Nations Economic Commission for Europe of the United Nations Economic Commission for Europe (UN/ECE) of REGULATION (EC) No 661/2009 OF THE EUROPEAN PARLIAMENT AND OF THE OF July 13, 2009 on type-approval of motor vehicles, their trailers and systems, components and of systems, components and separate technical units intended for such vehicles with regard to their general safety as electrical sub-assemblies and in accordance with paragraph 3.2.9. All requirements and limit values, in particular those of paragraphs 6.5, 6.6, 6.8 and 6.9, are fulfilled.

Issued by: Pascal Walter
Batterieschmiede GmbH
Memmingen, Germany,
08. Feb. 2024



Activation number of your
Saftkiste:



Do you have any suggestions for improving this manual?
Please send an e-mail to info@batterieschmiede.de

Do you have any questions about installation or settings?
Please always contact your dealer first.

Batterieschmiede GmbH
In der Neuen Welt 8, 87700 Memmingen