

**Installation and Operating Manual** 

StandBy-Charger 12 V	12 V / 12 V 0 - 3 A	No. 3065
StandBy-Charger 24 V	24 V / 24 V 0 - 2 A	No. 6065



#### Please read this operating and installation manual thoroughly prior to connection and start-up.

The VOTRONIC StandBy-Charger serves for automatic recharging and trickle charge of the starter battery in vehicles with two battery circuits. It will be installed between supply battery or body battery and starter battery. It is only the operation with 2 same nominal battery voltages 12V / 12V or 24V / 24V permitted. Mixed operation 12V and 24V is not allowed.



- It is only the operation with 2 same rated battery voltages 12 V/12 V or 24 V/24 V permissible, mixed Operation 12 V and 24 V is not allowed.
- The device is only suitable for use with lead batteries (acid/GEL/AGM technology), **not** for the combination of Lithium LiFePO4 and lead (starter) batteries.

## Installation:

The StandBy-Charger should be installed as close as possible to the batteries, and it should be protected from humidity.

## **Connection:**

- The device is simply connected to the Plus (+) battery terminals of the Board and vehicle Start battery.
- The connecting cables should have a cross-section of 1.5 mm<sup>2</sup> to 2.5 mm<sup>2</sup> and be protected against overload by short Circuit (cable firing), Fuse 10A.
- The negative (-) battery terminals of the batteries must be connected to each other, i.e. "vehicle mass / ground".
- The StandBy charger is ready for operation.

## **Functioning:**

If the board battery or supply battery is charged by a mains supply charger, solar system or wind-driven or petrol-driven generator, simultaneous charging of the starter battery is max. 3 A (24 V: max. 2 A). Trickle charge is effected automatically and can be recognized by an increased voltage of the starter battery. In case of unloaded batteries, the voltage of the starter battery is only by 0.7 V lower than the voltage of the board battery. Charging control is not required.

## **Operating Instructions:**

#### **Battery lifetime:**

The lifetime of the battery can be extended considerably by means of the StandBy-Charger. In order to achieve that, the following general rules must be observed:

In contrast to other battery types, batteries on lead basis **do not have any** harmful memory effect. Consequently: In case of doubt, partially discharged batteries are to be charged fully by a mains supply charger as soon as possible.

**Store only fully charged batteries** and recharge them periodically, particularly in case of used (older) batteries and higher temperatures. Sulphation of the battery plates due to total discharge is to be prevented by immediate charging by a mains supply charger, particularly in case of low and high ambient temperatures.

Observe the instructions and technical leaflets of the battery manufacturer.

Keep batteries cool; choose an appropriate location for installation.

# **Technical Data:**

Nominal Operating Voltage DC:	12 V or 24 V (lead batteries, AGM, Gel)
Charging Current:	12 V: 0 - 3 A 24 V: 0 - 2 A
Battery Types:	suitable for any type of lead battery with nominal voltage $12$ V or $24$ V
Fitting Position of Unit:	any
Working Temperature Range:	-20/+40 °C
Protection Class:	IP2X
Dimensions / Weight:	90 x 60 x 38 mm / 52 g
Ambient Conditions, Humidity of Air:	max. 95 % RH, no condensation



# Safety Regulations:

Appropriate Application:

The StandBy-Charger has been designed according to the valid safety regulations.

- Appropriate application is restricted to:
- 1. Technically faultless condition.
- 2. Installation in a well-ventilated room, protected from rain, humidity, dust, aggressive battery gas, as well as in an environment being free from condensation water.
- 3. Between two batteries of the same nominal voltage (12V or 24V).

Never use the unit at locations where the risk of gas or dust explosion exists!

- Open-air operation of the unit is not allowed.
- Cables are always to be laid in such a way that damage is excluded. Observe to fasten them tightly.
- Never lay 12 V (24 V) cables and 230 V mains supply cables into the same cable conduit (empty conduit).
- Check live cables or leads periodically for insulation faults, points of break or loosened connections. Occurring defects must be remedied immediately.
- The unit is to be disconnected from any connection prior to execution of electrically welding or work on the electric system.
- If the non-commercial end-user is not able to recognize the characteristic values being valid for a unit or the regulations to be observed, a specialist is always to be consulted.
- The user/buyer is obliged to observe any construction and safety regulations.
- The unit is not equipped with parts, which can be replaced by the user.
- Keep children away from batteries and connections.
- Observe the safety regulations of the battery manufacturer.
- Ventilate the battery room.
- Non-observance may result in injury or material damage.
- The warranty period is 36 months from the purchase date (against presentation of the sales slip or invoice).
- The warranty will be void in case of any inappropriate utilisation of the unit, if it is used beyond the technical specification, in case of improper operation or external intervention. We do not assume any liability for any damage resulting hereof. The liability exclusion is extended to any service being executed by third, which has not been ordered by us in writing. Service is to be effected exclusively by VOTRONIC, Lauterbach.

# UK CA

### Declaration of Conformity:

In accordance with the provisions of the statutory requirements and the relevant directives, Electrical Equipment (Safety) Regulations 2016, Electromagnetic Compatibility Regulations 2016, The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 this product complies with the following standards or normative documents:

BS EN55014-1; BS EN61000-6-1; BS EN61000-4-2; BS EN61000-4-3; BS EN61000-4-4; BS EN62368-1; BS EN50498, BS EN IEC 63000.



### Declaration of Conformity:

In accordance with the provisions of Directives 2014/35/EU, 2014/30/EU, 2009/19/EC, this product complies with the following standards or normative documents: EN55014-1; EN61000-6-1; EN61000-4-2; EN61000-4-3; EN61000-4-4; EN62368-1; EN50498.



The product must not be disposed of in the household waste.



The product is RoHS compliant. It complies with the directive 2015/863/EU for Reduction of Hazardous Substances in electrical and electronic equipment.

Quality Management System DIN EN ISO 9001



#### **Recycling:**

At the end of its useful life, you can send us this device for professional disposal: You can find more information about this on our website at **www.votronic.de/recycling** 

Delivery Scope:

1 StandBy-Charger 1 Installation and Operating Manual

Subject to misprints, errors and technical modification without notice.

All rights reserved. This material may not be published, broadcast, rewritten or redistributed in whole or part without the express written consent of the manufacturer. Copyright © VOTRONIC 06/2023

Made in Germany by VOTRONIC Elektronik-Systeme GmbH, Johann-Friedrich-Diehm-Str. 2, 36341 Lauterbach/GERMANY Phone: +49 (0)6641/91173-0 Fax: +49 (0)6641/91173-10 E-mail: info@votronic.de Internet: www.votronic.de