



Safety instructions

Alternators

1. General safety instructions



- **Read the operating instructions carefully:** The operating instructions must be read carefully and observed before installing or using the product. It contains important information on safe handling and installation. Failure to do so may result in personal injury, damage to property or death. The applicable accident prevention, DIN, VDE and ISO regulations as well as EU directives and the regulations of your country must be observed.



- **Correct installation:** Only have the alternator installed by a trained, qualified specialist. Incorrect installation can endanger your own life and that of all users of the electrical system. You also run the risk of serious damage to property, e.g. due to fire. There is a risk of personal liability for personal injury or damage to property



- **Intended use:** This product must not be used by persons, including children, with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the product.



- **Troubleshooting:** Malfunctions that affect the safety of persons or the product must be rectified immediately by qualified specialist personnel! If this is not possible, e.g. due to a stay abroad, a specialist workshop can also carry out the repair. In this case, please note that the warranty will be invalidated if repairs are carried out incorrectly and *philippi GmbH* will not be liable for any consequential damage caused as a result.



- **WARNING:** Do not tamper with the electrical system or make any changes to the product!



- **DANGER!** Improper handling of alternators can lead to death or serious injury as well as considerable material damage!

- **WARNING!** The safety instructions and dangers in the operating instructions of the boat or vehicle manufacturer must be observed! Each alternator type may have specific requirements!

2. Handling the alternator



- **Check the device before use:** Before each use, check the alternator for visible damage, loose parts or signs of wear. A damaged device should not be used in order to avoid safety risks.



- **Keep cables and plugs in good condition:** Ensure that the power cables and plugs are in perfect condition. Damaged cables can lead to electric shocks or fires.



- **Correct handling:** Always lift and carry the alternator using the handles provided. Avoid pulling the device by the cables, as this can cause damage.



- **Switch off the power supply:** Before starting the installation, make sure that the battery and the power supply of vehicle, boat or machine are completely switched off to avoid the risk of electric shock!



- **Wear protective clothing:** Wear suitable protective clothing, including gloves and safety goggles, to protect yourself from injuries caused by sharp edges or electrical components.



- **Check tools:** Ensure that all tools used are in good condition and suitable for the installation. Avoid using damaged or unsuitable tools.
- **Correct cabling:** Ensure that the cables are connected correctly. Check the polarity and make sure that all connections are tight and secure to avoid short circuits.

3. Safety during operation



- **Select a suitable location:** Place the alternator on a stable, level surface that is free of obstacles. Avoid areas with flammable materials or direct sunlight.
- **Check the fastenings:** Ensure that the alternator is securely and firmly mounted. Check all fastenings and tighten them if necessary.



- **Avoid overheating:** Ensure that the alternator is well ventilated and does not overheat. Cooling openings must not be blocked. Overheating can reduce the service life of the appliance and cause a fire hazard.



- **Carry out a visual inspection:** After installation or maintenance, check all components for visible damage or wear before putting the system with the alternator back into operation.



- **Carry out a test run:** After installation or maintenance, carry out a test run to ensure that the alternator is working properly and that there are no unusual noises or vibrations.

4. First aid and emergency measures



- **In the event of an electric shock:** If someone suffers an electric shock, disconnect the alternator from the mains immediately and call for medical assistance immediately.



- **Recognize fire hazard:** Keep fire extinguishers nearby, especially if the alternator is operated in an environment with flammable materials. Never attempt to extinguish burning appliances with water.

5. Storage and transportation



- **Safe storage:** Store the alternator in a dry, cool place, away from direct sunlight and moisture. This protects the device from damage and extends its service life.



- **Ensure child safety:** Store the alternator out of the reach of children to prevent unintentional accidents. Children should never be near the alternator without supervision.



- **Caution during transportation:** When transporting the alternator, ensure that it is stably and securely packed to prevent damage. If necessary, use a transport box or a suitable bag.