

Qoltec[®]



User Manual

AGM GEL STD Battery Charger

Model: 52660, 52661, 52662, 52663, 52664,
52665, 52423, 52424, 52425

Introduction

Thank you for choosing a Qoltec product. Qoltec battery chargers are designed to ensure safe, reliable and convenient charging of batteries that comply with the specifications of the relevant model. Before use, please read this user manual carefully, as it contains important information regarding safe connection, correct operation, maintenance and safety precautions. Using the charger in accordance with the instructions helps to minimise the risk of damage to the battery or device and ensures its correct and long-lasting operation. If you have any questions or require technical support, please contact our customer service department.

About the product

The Qoltec charger is designed to charge AGM, GEL and standard (STD) lead-acid batteries with a voltage of 6V, 12V or 24V (depending on the model). The device automatically adapts to the battery type and voltage, ensuring safe and efficient charging. A smart LED indicator keeps you informed of the charging process in real time – without the need to disconnect the unit or measure the voltage. A red LED indicates that charging is in progress, and once charging is complete, a green LED indicates that the battery is fully ready for use. Automatic safety features protect against overvoltage, overcharging and incorrect connection, whilst the intelligent charging system looks after your battery from start to full charge.

Safety Instructions

Warning: The following warnings are intended to ensure the safe use of the battery charger. Failure to follow the safety instructions may result in electric shock, fire, battery gas explosion, personal injury or damage to the device and the battery.

1. Risk of electric shock
 - 1) Do not touch the charger, cables or terminals with wet hands.
 - 2) Do not use the device in damp or wet environments, or in places exposed to condensation.
 - 3) Do not immerse the charger in water or expose it to rain, spilled liquids or other sources of moisture.
 - 4) Only connect or disconnect the battery after the charger has been disconnected from the mains.

- 5) Do not use the charger if the mains lead, charging cables, terminals or casing are damaged.
2. Risk of battery gas explosion
 - 1) During charging, batteries may release hydrogen — an extremely flammable gas. Do not charge batteries near open flames, sparks, cigarettes or devices that may cause sparks.
 - 2) Charging must be carried out in a well-ventilated room.
 - 3) When connecting and disconnecting the terminals, ensure that no sparks are generated at the battery terminals.
 - 4) Use only batteries that comply with the technology, voltage and capacity specified in the charger's technical specifications.
 - 5) Do not charge batteries that are damaged, cracked, deformed, leaking electrolyte, show visible signs of terminal corrosion or any other signs of damage.
3. Do not cover the charger whilst it is in operation, nor restrict the flow of air around the unit. Ensure there is at least 20 cm of free space around the charger.
4. Do not use the device at ambient temperatures below 0°C or above 40°C, unless the technical specifications for the specific model state otherwise.
5. Protect the charger from direct sunlight, heat sources, dust, moisture and flammable substances.
6. Do not modify the device, cables, connectors or safety features. Unauthorised modifications may pose a risk to the user, damage the equipment and result in the product no longer complying with safety requirements.
7. Before starting to charge, ensure that the polarity of the connection is correct: the red lead to the positive terminal (+), the black lead to the negative terminal (-).
8. For batteries with liquid electrolyte, check the electrolyte level before charging, provided that the battery manufacturer specifies this as part of routine maintenance.
9. If the battery or charger becomes excessively hot, emits an unusual odour or smoke, or shows any other signs of malfunction, stop charging immediately, disconnect the device from the mains supply, and then disconnect the terminals from the battery.

10. Do not leave the charger unattended whilst charging old, deeply discharged, reconditioned batteries or those whose technical condition is in doubt.
11. The charger is intended solely for charging batteries that comply with its technical specifications. Do not use the device as a power supply or for purposes other than those described in the manual.
12. The device is not intended for use by children, people with reduced physical, sensory or cognitive abilities, or by those without the necessary knowledge regarding the safe use of this type of equipment.
13. Keep children and pets away from the charger, the battery and the cables whilst the device is in operation.

Charger user manual

1. Ensure that the battery is of the correct type (AGM, GEL or STD) and voltage (6V, 12V or 24V, depending on the charger model).
2. Check that the charger is suitable for your battery's capacity.
3. Connect the red (+) terminal to the positive terminal of the battery.
4. Connect the black (–) terminal to the negative terminal of the battery.
5. Connect the charger to an AC power source.
6. The charger will automatically detect the battery voltage and start the charging process.
7. The LED indicator will show the charging status:
 - 1) Red: charging in progress
 - 2) Green: charging complete
8. Once charging is complete, disconnect the charger from the mains.
9. Disconnect the clamps from the battery, starting with the black (–) one, followed by the red (+) one.

Note: Connection using crocodile clips (red and black leads) – leads with crocodile clips allow direct connection to the battery terminals. Connect the red lead (+) to the positive terminal of the battery and the black lead (–) to the negative terminal.

Charging in CC-CV mode

The charger operates in CC-CV mode, which is a controlled, two-stage battery charging process — first with a constant current, then with a constant voltage. In the first stage, the charger operates in CC (Constant Current) mode. This

means that the battery is charged at a set current until a specified charging voltage is reached. Once the required voltage is reached, the charger automatically switches to CV (Constant Voltage) mode. At this stage, the voltage is maintained at a constant level, whilst the charging current gradually decreases as the battery's state of charge increases.

Note: The CC-CV process helps to minimise the risk of overcharging, overheating and battery damage, provided the charger is used in accordance with the technical specifications and the battery manufacturer's recommendations.

Technical specifications

Model	52660	52661	52662	52663	52664	52665
Power	6W	24W	19.2W	24W	48W	48W
Input voltage	220–240V					
Battery battery	6V/12V	12V	24V	12V	12V	24V
Current	0.5A	2A	0.8A	2A	4A	2A
Charging mode	CC-CV					
Compatibility	AGM GEL STD					
Charging time	Depending on battery capacity					
Operating temperature	-20°C to +40°C					

Model	52423	52424	52425
Power	12W	12W	6W
Input voltage	220–240V		
Battery battery	6V/12V	12V	6V
Current	1.5A	1A	1A
Charging mode	CC-CV		
Compatibility	AGM GEL STD		

Charging time	Depending on battery capacity
Operating temperature	-20°C to +40°C

Maintenance, disposal and servicing

1. Before cleaning or maintenance, disconnect the charger from the mains and from the battery.
2. Use a dry cloth for cleaning; do not use solvents, detergents or corrosive substances.
3. If you notice a burning smell, smoke, unusual noises or deformation of the casing, immediately disconnect the power supply and stop using the device.
4. Repairs to the device may only be carried out by a qualified service centre.
5. The device must be taken to an appropriate collection point for waste electrical and electronic equipment (WEEE Directive 2012/19/EU). Batteries used with the charger must also be taken to designated collection points.

Warranty

The device is covered by a 24-month manufacturer's warranty. If you experience any problems with the charger, please contact an authorised service centre or point of sale.