

EU Declaration of Conformity

According to Article 6 of Regulation (EU) 2023/1542

Document No.: 2024081501

We, the company, herewith

Manufacturer Name: Anhui Leoch Power Supply Corp.

Manufacturer Address: No.1, Yingchun Road, Suixi Economic Development Zone,
Huaibei City, Anhui Province

Authorized Representative
Name: NA

Authorized Representative
Address: NA

Declares under our sole responsibility that follow products:

Product Name: Battery assembly

Product Category: Lead-acid battery (SLI)

Product or Series Number: 6-QF-32

Trade Mark: FLESEA/LEOCH

Is in conformity with the relevant Union harmonisation legislation:

Article 6 to Regulation (EU) 2023/1542

With applied relevant harmonised standards or the common specifications:

- Restrictions set out in Annex XVII to Regulation (EC) No 1907/2006
- Restrictions set out in Article 4(2), point (a), of Directive 2000/53/EC
- Restrictions set out in Annex I to Regulation (EU) 2023/1542

Authorized person signed for and on behalf of:

Name: Guohuisong

Function: Office Director

Address: Economic Development Zone, Suixi, Huaibei City, Anhui
Province, P.R. China

2024-8-16
Place and date of issue

Signature

Technical documentation

1. General description of the battery pack and its intended use (2.a).

AGM L1 lead-acid battery is a device that can output and store electrical energy. It is a battery whose electrodes are mainly made of lead and its oxides, and the electrolyte is sulfuric acid solution. The battery is composed of 6 single cells, each with a nominal voltage of about 2 V, which are connected in series to form a 12V lead-acid battery. There are 6 safety valves and 2 exhaust holes on the battery cover, which are used to discharge the gas generated inside the battery. There are two positive and negative terminals on the battery, which can be connected to the clamp on the vehicle to power the entire vehicle.

1.2 This product can be used as below.

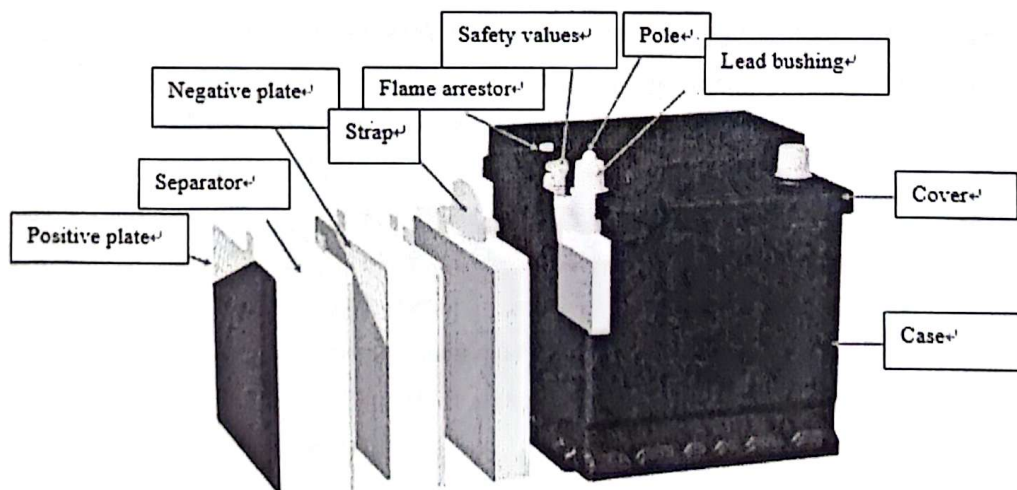
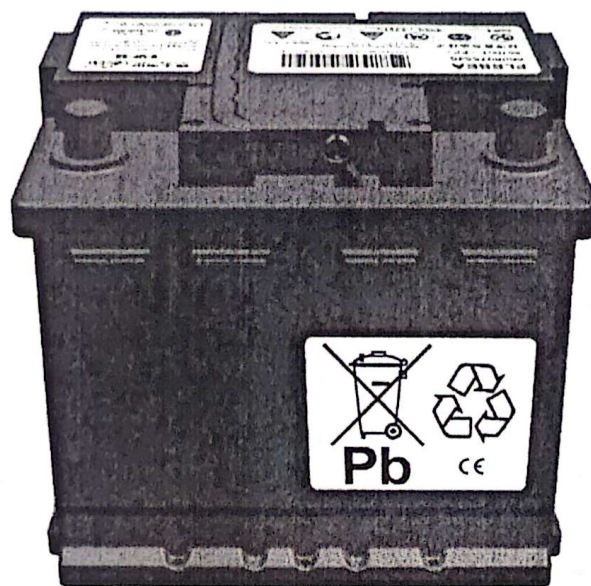
- ① When an electric vehicle is started, the battery supplies power to the starting system and power distribution system;
- ② When an electric vehicle reaches the OK position (high-voltage power is used for driving), the DC-DC voltage is higher than the battery voltage, and the DC-DC charges the battery. At this time, the DC-DC should have enough current output to power basic electrical equipment, and the battery will store the remaining power of the DC-DC;
- ③ When the DC-DC is overloaded, or the DC-DC power cannot meet the power demand of the vehicle, the voltage of the DC-DC is lower than the voltage of the battery, and the battery assists the DC-DC to supply power to the electrical equipment;
- ④ The battery can also absorb instantaneous overvoltage in the circuit, maintain the stability of the voltage of the automotive electrical system, and protect electronic components.
- ⑤ The battery provides electrical energy for shut down vehicles or static loads.

1.3 Main construction features

- ① Positive plate: It is composed of porous PbO_2 , a positive active material, and a conductive skeleton positive grid.
- ② Negative plate: It is composed of porous Pb, a negative active material, and a conductive skeleton negative grid.
- ③ Electrolyte: It is an aqueous solution of sulfuric acid. Sulfuric acid participates in both positive and negative electrode reactions and ionic conduction processes.
- ④ Separator: Use ultra-fine glass fiber partition (AGM partition). The separator material is non-conductive and can isolate the positive and negative plates and store electrolyte. There are a large number of micropores in the AGM separator, and the ions in the electrolyte can easily pass through the micropores of the separator.
- ⑤ Welding alloy: Use lead-tin alloy to connect the plates with same polarity to form a plate group. It is a lead alloy material that is acid-resistant and corrosion-resistant, has good welding performance, high strength and is conductive.

- ⑥ Battery case and battery cover (including battery case, battery cover, battery lid): Made of high-strength polypropylene plastic, it has good insulation, strength, corrosion resistance, and high and low temperature resistance.
- ⑦ Handle: used to transport batteries.
- ⑧ Flame arrestor and safety valve: The Flame arrestor is made of acid-resistant microporous materials, which can discharge the gas in the battery, but can prevent external flames from being introduced into the battery; the safety valve is a one-way valve with a certain opening and closing valve pressure. Only when a certain valve opening pressure is reached will it be exhausted.
- ⑨ Terminal: It is a standard connector connected to the vehicle for charging and discharging.

2. Conceptual design and manufacturing drawings (2.b).



- 3. Explanations necessary for the understanding of the drawings referred to in point (b) and the operation of the battery pack (2.c).**

3.1 Explanations

①Positive plate: As the positive of the battery, select the appropriate plate size according to the external dimensions of the battery. According to the capacity requirements, design the required amount of active material. According to the CCA requirements, calculate the required positive plates and distribute them evenly in 6 single cells. An expanded alloy grid is used, and the required amount of active material is coated on the grid to make the required positive plate.

②Negative plate: As the negative of the battery, select the appropriate plate size according to the external dimensions of the battery. According to the capacity requirements, design the required amount of active material. According to the CCA requirements, calculate the required negative plates and distribute them evenly in 6 in a single cells. Use an expanded alloy grid to coat the required amount of active material on the grid to make the required negative plate.

③Electrolyte: It functions as a medium for electrochemical reactions. The ions of the electrolyte participate in the charge and discharge reactions of the battery. The electrolyte is generally prepared from sulfuric acid and distilled water in a certain proportion. This battery is a flooded design, and the electrolyte inside the battery is flowing.

④AGM separator: The function of the AGM separator is to prevent the positive and negative plates from being in direct contact and causing a short circuit, and to absorb the electrolyte. Therefore, AGM separators is required to be porous, acid and high temperature resistant, will not oxidize and deform, and has good insulation.

⑤Cast welding alloy: After the plates required for each cell of the battery are assembled, the positive plates or negative plates are connected together through cast welding as a path for current conduction.

⑤Battery case and battery cover (including battery case, battery cover, battery lid, battery handle): It is used to hold the plates and electrolyte. Made of polypropylene plastic. The battery tank has an integral structure. The 12V battery is divided into 6 independent cells (batteries). Each cell is covered with a cover, and the cover and the tank are sealed by heat sealing. The handle is used to carry the battery.

⑥Safety valve: The safety valve is a one-way valve with a certain opening and closing valve pressure. When the air pressure inside the battery reaches the valve opening pressure, it is exhausted outward. When the pressure is lower than the closing valve pressure, the safety valve is closed.

⑦Flame arrestor: The battery will produce gas during use. The gas is a mixture of hydrogen and oxygen gas to prevent external sparks from igniting the hydrogen and oxygen gas inside the battery. Install a flame arrestor at the exhaust hole, it can not only discharge gas from the battery, but also prevent external flames from entering the battery.

⑧Terminal: Its function is to lead out the positive and negative electrodes inside the battery for connection with the external circuit. The positive and negative terminals of lead-acid batteries adopt internationally accepted terminal types.

3.2 Operation

①The battery is marked with "+" and "-" symbols. "+" represents the positive terminal of the battery and "-" represents the negative terminal of the battery. When installing the battery in the car and wiring

it, first, connect the positive terminal of the battery to the positive terminal of the car, and then connect the negative terminal of the battery to the negative ferrule. When disassembling, first remove the negative electrode ferrule from the negative electrode of the battery, and then remove the positive electrode ferrule from the positive electrode of the battery. During installation and disassembly, be careful not to short-circuit the two poles of the battery and do not come into contact with open flames. Loosen / tighten the bolts when installing the ferrule, to adjust the fastening ferrule. The wiring harness ferrules and battery terminals should be installed firmly without looseness.

②The battery voltage needs to be checked before the vehicle is delivered to the user. If the voltage is lower than 12.6V, it must be charged offline before being delivered to the user. Batteries that are stored for more than 3 months need to be recharged once. Batteries that are depleted due to various reasons during use should be charged in time to prevent performance degradation caused by sulfation of the battery plates.

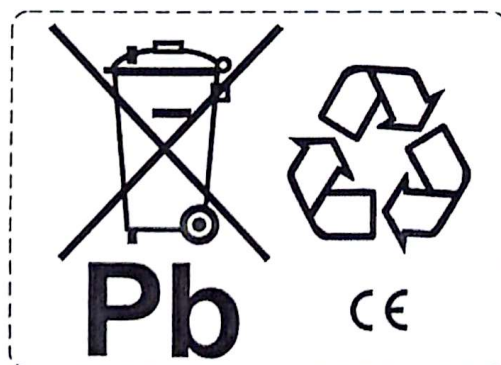
③Always check the exhaust holes on both sides of the battery cover to make sure they are not blocked by dust, ice water, etc. to prevent the casing from bulging and deforming.

④When the battery is not used for a long time, the battery should be fully charged before storage, otherwise the service life of the battery will be affected.

⑤ When using a charger to charge the battery, turn off the power of the charger first, and then remove the connection cable between the charger and the battery.

⑥During the loading and unloading process, the product should be handled with care. Be careful not to throw, roll, or press hard.

4. Specimen of the label required in accordance with Article 13 (2.d)



5. List of the harmonised standards (2.e).

Restrictions set out in Annex XVII to Regulation (EC) No 1907/2006

Restrictions set out in Article 4(2), point (a), of Directive 2000/53/EC

Restrictions set out in Annex I to Regulation (EU) 2023/1542

Labelling and marking set out in Article 13(4), 13(5)

6. Description of the solutions adopted to meet the applicable requirements (2.f)

NA

7. Results of design calculations and the examinations carried out (2.g).

See attachment 1 for chemical report.

8. Test reports (2.h).

See attachment 2 for test report.