BATTERY INFORMATION

Regulation (EU) 2023/1542
Labelling & Marking Information
In accordance with Article 13 and Annex VI

PUBLICLY ACCESSIBLE INFORMATION

1.1 General Information

Manufacturer identification Annex VI Part A (1)	CSB Energy Technology Co., Ltd. < GLOBAL HQ > 11F, No. 150, Sec. 4, Chengde Rd., Shilin Dist., Taipei City 111052, Taiwan Tel +886-2-2880-5600 | service@csb-battery.com.tw | csb-battery.com
Authorized EU representative	CSB Energy Technology (EMEA) B.V. Keurmeesterstraat 28-30 2984 BA Ridderkerk The Netherlands Tel : +31(0) 180418140 | service@csb-battery.eu
Battery category and identification Annex VI Part A (2)	Industrial Battery – VRLA-AGM Battery
Battery model Annex VI Part A (2)	HR1227W (with applicable suffix, e.g., F2, FR, or F2FR)
Place of manufacture Annex VI Part A (3)	CSB Energy Technology (Vietnam) Co., Ltd. < VIETNAM FACTORY > 4 Street, Nhon Trach 3IP, Second Phase, Phuoc An Commune, Dong Nai City, Vietnam 815960
Date of manufacture Annex VI Part A (4)	Refer to the date code on the battery's yellow caution label.
Weight Annex VI Part A (5)	1.97kg
Capacity Annex VI Part A (6)	27W / Cell / 1.67V / 15MIN
Chemistry Annex VI Part A (7)	Lead-acid VRLA-AGM (Pure Lead)
Hazardous substances present Annex VI Part A (8); Annex XIII 1(b)	Tetrabromobisphenol-A (TBBPA) CAS No.: 79-94-7 *(Applicable only to batteries with UL94 V-0 grade ABS containers.)*
Usable extinguishing agent Annex VI Part A (9)	Carbon Dioxide Powder
Critical raw materials above 0.1 % w/w Annex VI Part A (10); Annex XIII 1(b)	-

1.2 Marking, Conformity and Waste Management

Marking requirements Annex XIII 1(q); Art. 13(3) – (4)	
EU declaration of conformity Annex XIII 1(r); Art. 18	Refer to Page 2 for further details.
Waste battery prevention and management Annex XIII 1(s); Art. 74(1)(a)–(f)	Refer to Page 3 for further details.

August 18th, 2024

EU DECLARATION OF CONFORMITY

1. **Battery model (product, category, etc.):**
   - Industrial Battery – VRLA-AGM Battery
   - CSB HR series
2. **Name and address of the manufacturer:**
   - CSB Energy Technology Co., Ltd. < GLOBAL HQ >
     11F, No. 150, Sec. 4, Chengde Rd., Shilin Dist., Taipei City 111052, Taiwan
   - CSB Energy Technology (Vietnam) Co., Ltd. < VIETNAM FACTORY >
     4 Street, Nhon Trach 3IP, Second Phase, Phuoc An Commune, Dong Nai City, Vietnam 815960
3. **Name and address of authorized EU representative:**
   - CSB Energy Technology (EMEA) B.V. EUROPE HQ
     Keurmeesterstraat 28-30 2984 BA Ridderkerk The Netherlands.
4. **This declaration of conformity is issued under the sole responsibility of the manufacturer.**
5. **Object of the declaration:**
   - HR1218W, HR1221W, HR1224W, HR1227W, HR1232W, HR1234W, HR1251W, HR1290W, HR12120W

   The above models may have optional suffix “F1”, “F2”, “F2F1”, “B1”, “P1”, denoting terminal types.
   Battery models with suffix “FR” are constructed with cases and covers made of UL94-V0 flame rating.
6. **The object of the declaration described in point 5 is in conformity with the relevant Union harmonization legislation:**
   - Regulation (EU) 2023/1542 of the European Parliament and of the Council of 12 July 2023 concerning batteries and waste batteries, amending Directive 2008/98/EC and Regulation (EU) 2019/1020 and repealing Directive 2006/66/EC.
7. **References to the relevant harmonized standards or the common specifications used or references to the other technical specifications in relation to which conformity is declared:**
   - IEC 60896-21: 2004 | IEC 60896-22:2004
   - IEC61056-1:2012 | IEC 61056-2:2012
8. **Additional information**
   - This declaration is based on the results of a conformity assessment procedure Module A according to Regulation (EU) 2023/1542 of July 12, 2023, Annex VIII, Part A.

Signed for and on behalf of:	CSB Energy Technology Co., Ltd.
Date of issue:	18-August-2024
Name of Manager / Function:	Andy Tasi, Quality Assurance Manager.

Andy Tsai
2024 / 8 / 18

Signature of Manager

BATTERY INFORMATION

Regulation (EU) 2023/1542
Information on the Prevention and Management of Waste Batteries
Valve-Regulated Lead-Acid (VRLA) Batteries

Scope definition

"Single cell, not a battery pack/system" refers to Point 2 of Annex XIII of the EU Battery Regulation (restricted-access information, including disassembly information, spare part numbers, module configuration, etc.). Certain data fields within this restricted-access section may be marked as "Not Applicable (N/A)", provided that an appropriate justification is included.

(a) Good practices for end-users to extend battery life and enable re-use

Regulatory requirement: The role of end-users in contributing to waste prevention, including good practices and recommendations on the use of batteries aimed at extending their use phase, and the possibilities of re-use, preparing for re-use and remanufacturing.

To maintain battery performance and extend the service life of CSB VRLA batteries, the following practices are recommended:

- Charging and discharging: Recharge batteries promptly after discharge and maintain charging voltage and current according to CSB specifications. Avoid repeated deep discharge, overcharging, and undercharging.
- Temperature control: Maintain suitable operating temperatures. CSB recommends charging at 5–35°C. Prolonged operation above 40°C may cause thermal runaway.
- Storage and supplementary charging: Store batteries in a clean, dry environment at 25°C or below. Supplementary charging is recommended every six months below 25°C and every three months at 25–30°C. Avoid storage above 30°C.
- Inspection and maintenance: Regularly inspect battery condition, voltage, charging current, and temperature. Follow CSB's recommended maintenance intervals to support reliable performance.
- Safe handling and end-of-life management: Maintain battery structural integrity and avoid internal disassembly. Batteries showing significant deterioration should be evaluated and replaced as appropriate. End-of-life batteries must be collected and recycled in accordance with applicable local regulations.

Note: Follow the CSB VRLA Battery User Manual and the applicable model-specific datasheet for detailed operating, charging, and maintenance requirements

(b) Role and obligations of end-users in separate collection under Article 64

Regulatory requirement: The role of end-users, in accordance with their obligations under Article 64, in contributing to the separate collection of waste batteries to allow their treatment.

End-user Obligations (Article 64(1) and (2))

- Waste batteries must be collected separately from household and other waste streams and must not be disposed of as mixed municipal waste or littered.

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Tel: +886-2-2880-5600 Mail: service@csb-battery.com.tw

- End-users shall deliver waste batteries to designated collection points established under Articles 59–61 or through collection arrangements provided by producers or producer responsibility organizations.

Free-of-Charge Take-Back of Industrial Batteries (Article 61)

- CSB or its appointed producer responsibility organization shall take back waste industrial batteries free of charge, without requiring the purchase of new batteries.
- Available collection channels may include distributors of batteries of the same category, designated producer collection points, and collection facilities operated in cooperation with public waste management authorities. Refer to Section (c) for collection information.
- Where on-site removal is necessary, the applicable removal and collection arrangements shall comply with Article 61. Private non-commercial end-users shall not bear the associated removal and collection costs where required by that Article.

Separate collection supports safe waste management, prevents environmental pollution, and enables the recovery and recycling of valuable materials, including lead and plastics.

(c) Separate collection, collection points, preparing for re-use and treatment

Regulatory requirement: Information on separate collection, collection points, preparing for re-use and treatment of waste batteries.

Recycling and treatment: Waste lead-acid batteries should be collected and recycled through authorized treatment facilities. These batteries contain recyclable materials, including lead and plastics, as well as sulfuric acid electrolyte that requires appropriate treatment.

Safe handling and transport: Protect battery terminals against short circuits and use suitable packaging to prevent damage during transportation. Avoid excessive vibration and impact, and transport batteries in an upright position as recommended by CSB.

Waste management: Waste batteries must be collected and recycled in accordance with applicable local regulations through authorised collection and treatment channels.

Transport classification: CSB VRLA batteries are identified as “Battery, Electric Storage, Wet, Non-spillable” and meet the applicable vibration and pressure differential test requirements specified in DOT 49 CFR 173.159(f) and IATA/ICAO Special Provision A67.

Collection enquiries: For information on battery take-back and recycling arrangements, contact your distributor or CSB at service@csb-battery.com.tw or +886-2-2880-5600.

BATTERY INFORMATION

Regulation (EU) 2023/1542
Information on the Prevention and Management of Waste Batteries
Valve-Regulated Lead-Acid (VRLA) Batteries

(d) Necessary safety instructions for handling waste batteries

Regulatory requirement: Necessary safety instructions for handling waste batteries.

When handling waste CSB valve-regulated lead-acid (VRLA) batteries, observe the following safety precautions:

- Electrolyte safety: The battery contains sulfuric acid electrolyte, which is corrosive. In case of skin contact, rinse immediately and thoroughly with water. In case of eye contact, flush thoroughly with water for 10 minutes and seek immediate medical attention.
- Battery integrity: Handle batteries carefully to prevent impact, deformation, or damage to the container. Do not disassemble or damage the battery, as this may cause electrolyte leakage and other safety hazards.
- Ventilation and fire prevention: Ensure adequate ventilation to prevent hydrogen gas accumulation. Keep batteries away from open flames, sparks, and excessive heat. CSB recommends maintaining hydrogen accumulation below 1% of the battery area or cabinet volume.
- Electrical safety: Protect battery terminals against short circuits. Use insulated tools, observe correct polarity, and avoid contact between terminals and conductive materials.
- Safe storage and handling: Store batteries in a clean, dry, well-ventilated area away from children. Use appropriate personal protective equipment, including protective eyewear and rubber gloves, when handling batteries.
- Fire and disposal safety: Do not burn batteries or dispose of them with general waste. Waste batteries must be collected and recycled through appropriate channels in accordance with applicable local regulations.

Note: For detailed safety instructions, refer to the CSB VRLA Battery User Manual (June 2025) and the applicable CSB Safety Data Sheet (SDS).

(e) Meaning of labels and symbols

Regulatory requirement: The meaning of the labels and symbols required under Article 13, whether affixed to the battery, printed on its packaging or included in the accompanying documents.

Explanation of Battery Label Symbols

- Crossed-out wheeled bin: Indicates that waste batteries must be collected separately and must not be disposed of with household waste.
- Pb (Lead): Identifies batteries containing lead above the applicable regulatory threshold and indicates the need for proper collection and recycling.
- CE marking: Indicates conformity with the applicable requirements of EU legislation.

- Capacity and electrical ratings: Identify key battery specifications, including rated capacity and nominal voltage.

- Model, batch or serial number: Provides product identification and traceability information.

QR code: Provides access to applicable battery information required under Regulation (EU) 2023/1542, including relevant product, conformity and waste battery management information.

Impact of substances in batteries on the environment and human health

Regulatory requirement: The impact of substances present in batteries, in particular hazardous substances, on the environment and on human health or safety, including the impact of inappropriate discarding such as littering or discarding as unsorted municipal waste..

CSB valve-regulated lead-acid (VRLA) batteries contain substances that may affect human health and the environment if improperly handled or disposed of.

Lead and lead compounds: Lead and its compounds may pose risks to human health and the environment. Improper disposal may result in contamination of soil and water.

Sulfuric acid electrolyte: The battery contains corrosive sulfuric acid electrolyte, which may cause chemical burns and environmental contamination if released.

Plastic components: Battery cases contain plastic materials that can be recovered and recycled through appropriate treatment processes.

Environmental protection and recycling: Waste batteries must be collected separately from household waste and delivered to authorised collection and recycling facilities. Proper recycling helps prevent the release of hazardous substances and supports the recovery of valuable materials, including lead and plastics.