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**NATIONAL STANDARD OF THE
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GB/T 13603-2023

Replacing GB/T 13603-2012

Marine battery installation

船舶蓄电池装置

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Foreword

This document complies with the provisions of GB/T 1:1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents" Drafting: This document replaces GB/T 13603-2012 "Ship Battery Devices": Compared with GB/T 13603-2012, except for structural adjustment and compilation In addition to editorial changes, the main technical changes are as follows:

- a) The application requirements for marine lithium iron phosphate batteries as general-purpose batteries are added to adapt to the development status of marine batteries (see 5:1:2:4, 5:1:2:5 and 5:1:2:7);
- b) Added the capacity calculation method for marine batteries to meet actual needs (see 5:1:2:2:3);
- c) Added layout and ventilation requirements for lithium iron phosphate battery ships to meet their characteristic requirements (see 5:1:3:6);
- d) Different requirements for starting batteries and general batteries have been added to adapt to different application scenarios of batteries (see 5:2, 5:3, 6:2 and 6:3):
- e) Added test methods, inspection rules, packaging, marking, transportation and storage, etc: to coordinate the normative requirements of product standards and with Combined with actual needs (see Chapter 6, Chapter 7, Chapter 8): Please note that some contents of this document may involve patents, and the issuing organization of this document does not assume the responsibility for identifying patents: This document is proposed and coordinated by the National Standardization Technical Committee for Ship Electrical and Electronic Equipment (SAC/TC531): This document was drafted by: China State Shipbuilding Corporation Ltd: 708th Research Institute, China State Shipbuilding Corporation Ltd: 712th Research Institute Institute, Hefei Guoxuan Hi-Tech Power Energy

Co., Ltd., Shanghai Wuyang Ship Technology Co., Ltd., Fenxi Heavy Industry Wuxi Saisiyi Electric Technology Co., Ltd. company: The main drafters of this document: Du Rui, Liu Fei, Liu Bo, Li Shiming, Hu Jianjun, Shao Shiyi, Wang Yuhang, Chen Junjie, Li Yu, and Wang Dong: The previous versions of this document and the documents it replaces are as follows:

---First published as GB/T 13603-1992 in:1992, first revised in:2012;

---This is the second revision: Ship battery device

1 Scope

GB/T 13603-2023 is the Chinese national standard on marine battery installation, in the field of shipbuilding and marine structures. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 28 December 2023 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 April 2024. Classification: ICS 47.020.60, CCS U61. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This document specifies the technical requirements and inspection rules, packaging, transportation and storage of ship's auxiliary battery devices (hereinafter referred to as battery devices): storage and markings, and describes the test method: This document applies to battery devices that are fixedly installed on ships other than main power, including lead-acid batteries and lithium iron phosphate batteries: battery:

2 Normative reference documents

The contents of the following documents constitute essential provisions of this document through normative references in the text: Among them, the dated quotations For undated referenced documents, only the version corresponding to that date applies to this document; for undated referenced documents, the latest version (including all amendments) applies to this document:

GB/T 6994-2006 Definition and general provisions for ship electrical equipment

GB/T 7357-2010 Design and protection of ship electrical equipment systems

GB 38031-2020 Safety requirements for power batteries for electric vehicles CB/T 3821

Lead-acid batteries for ship communications and lighting CB/T 4319 Lead-acid batteries for ship starting China Classification Society Battery Power Specifications for Ship Applications (2023)

3 Terms and definitions

The following terms and definitions as defined in GB 38031-2020, CB/T 3821 and CB/T 4319 apply to this document:

3:1 universal battery pack universal battery Battery packs used for ship emergency lighting, communications, and alarm power supplies:

3:2 starter battery pack starter battery Battery pack used for starting main engines and auxiliary engines of ships:

3:3 initial capacity initial capacity When a newly shipped battery pack is fully charged at room temperature, it will be discharged with a discharge current of 1 hour to the discharge termination condition specified by the manufacturer: The capacity released when loading:

3:4 rated capacity The battery capacity value measured under specified conditions and indicated by the manufacturer:

3:5 battery room(box) battery room(box) A cabin (box) dedicated to storing batteries: