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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 22192-2008

**Electrical installations in ships -- Equipment -- Accumulator
(storage) batteries**

船舶电气设备 设备 蓄电池

(English Translation)

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Table of Contents

Foreword
1 Scope
2 Types of batteries
3 Construction and assembly
4 Crates and pallets
5 Nameplate
6 Charging Equipment

Foreword

This standard is identical with IEC 60092-305. 1980 "Electrical installations in ships - Part 305. equipment" (in English) to and the amendment of 1989.

This standard is equivalent translation IEC 60092-203. 1980.

For ease of use, this standard made the following editorial changes.

--- "This International Standard" be replaced by "this standard";

"," --- With a decimal point instead of a comma as the decimal point, "";

--- Delete international standards preface, introduction;

--- Of expression in accordance with the provisions of GB/T 1.1-2000 made changes.

The standard proposed by China State Shipbuilding Corporation.

This standard by the National Standardization Technical Committee boat ocean.

This standard was drafted. Technical and Economic Research Institute of China Shipbuilding Industry.

1 Scope

This standard applies to fixed marine battery installed.

This standard does not apply to portable batteries.

2 Types of batteries

Lead-acid batteries are usually based on nickel base type, taking into account the suitability of a particular application, it can be other types verified.

3 Construction and assembly

All plates should be rigid structure, and should be designed so that the active material shedding is minimal.

The structure of the cells should be able to prevent the electrolyte due to the inclined 40 ° from the normal position caused by spills.

Filling plug shall be so constructed as to prevent the electrolyte due to the rolling and pitching motion caused by ships, and other spill.

4 Crates and pallets

The cells to be assembled from a suitable material having a rigid structure and is equipped to handle it in the handling of pallets or crates.

A crate or quantity loaded in the tray of the battery depends on the weight and space available for installation. The total mass of each crate or tray should not More than 100kg.

This chapter does not apply to the whole can not be assembled in crates or pallets battery pack.

5 Nameplate

Each crate or tray should be configured with a tightly adherent durable nameplate on the nameplate should be the manufacturer's name and address and type no, Ann particular discharge rate when - when quotas (best represented by the appropriate alternative for special applications 5h, 10h or 20h time rating) and electricity the specific gravity of the liquid solution (in the case of lead-acid batteries, fully charged battery system for the proportion of the time).

6 Charging Equipment

6.1

For the condition when the battery float charging or connected to a load, the battery charging process should not exceed the maximum voltage of any connected devices Safe voltage. In parallel with batteries to run one or more generators, one or several semiconductor converter voltage characteristics should be suitable for Use alone. In the connected equipment can not operate at the maximum charging voltage applications, configure the voltage regulator or other voltage control equipment.

6.2

When the battery via a series resistor connected to the line were floating, all the devices connected to it shall be able to withstand the electrical ground Pressure, or should be

disconnected. Recommendation voltage exceeds 55V system should set the appropriate warning signs on the card states. "In the ON connected to the battery Before any circuit, disconnect the charging device. " 6.3 ships with the voltage DC power supply emergency lighting batteries are the same, in order to be charged, the battery can be emergency lighting Ping is divided into two parts, each part to set up a charging resistor.

Another approach is to provide a boost charge voltage generator. With the above two approaches in any way, automatic transfer switch GB/T 22192-2008/IEC 60092-305. 1980