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

GB/T 17846-2024

Replacing GB/T 17846-2009

Small craft - Electrically operated bilge pumps

小艇 电动舱底泵

(English Translation)

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document replaces GB/T 17846-2009 "Direct current electric bilge pumps for small boats". Compared with GB/T 17846-2009, except for the structural adjustment in addition to the integration and editorial changes, the main technical changes are as follows.

- a) The scope of application of this document has been changed (see Chapter 1, Chapter 1 of the 2009 edition);
- b) The terms anti-ignition device and non-submersible pump have been deleted (see 3.2 and 3.4 of the 2009 edition);
- c) Added the terms boat, small boat and critical bilge water level (see 3.5 and 3.6);
- d) The range of nominal voltage has been changed (see 3.2, 3.3 of the 2009 edition);
- e) Deleted the example of the operating voltage range of bilge pumps (see 4.1 of the 2009 edition);
- f) Added applicable scenarios for anti-ignition requirements (see 4.2);
- g) The requirement of the installation instructions to install a debris filter at the pump suction port has been deleted (see 4.8, 4.7 of the 2009 edition);
- h) The requirements for bilge pump line type and conductors have been deleted (see 5.1 and 5.2 of the 2009 edition);
- i) Changed the IP rating requirements for electrical connections (see 5.1, 5.3 of the 2009 edition);
- j) The applicable parts of the grounding requirements have been changed (see 5.2, 5.4 of the 2009 edition);
- k) A measure is added to prevent the bilge pump from being in a continuous stalled state

(see 5.3);

l) Added requirements for leakage current protection of AC bilge pumps (see 5.4);

m) Added User Manual (see Chapter 7).

This document is equivalent to ISO 8849:2020 "Electric bilge pumps for small boats".

1 Scope

This document specifies the requirements for electric bilge pumps for the removal of bilge water, suitable for direct current (DC) bilge pumps with a nominal voltage not exceeding 50 V.

Bilge pumps, and single-phase alternating current (AC) bilge pumps with a nominal voltage not exceeding 250 V.

This document does not apply to bilge pumps for damage control.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document.

GB/T 4208-2017 Degrees of protection provided by enclosures (IP code) (ISO 60529:2013, IDT) GB/T 17726-1999 Protection of small boat electrical installations against ignition of surrounding flammable gases (ISO 8846:1990, IDT) ISO 13297:2020 Small craft electrical systems - Alternating current and direct current equipment

3 Terms and definitions

The following terms and definitions apply to this document.

automatic pump A pump equipped with a sensing device to start and stop at a predetermined liquid level.

Nominal voltage the DC voltages commonly used on boats, such as 6V, 12V and 24V, and the AC voltages, such as 110/120V or 230/240V.

Submersible pump

Pumps designed to operate completely immersed in water.

Design voltage 113% of nominal voltage.

Boat

dinghy smalcraft

A pleasure yacht with a hull length (LH) not exceeding 24m, or other watercraft (boat) using similar equipment.

Note: The method for measuring hull length is specified in ISO 8666.

[Source. ISO 8666:2020, 3.15, modified]