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Electrical installations in ships -- Small vessels

船舶电气设备 小船

(English Translation)

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules.

This standard uses the translation method identical with IEC 60092-507:2008 "Electrical equipment 507 Ship boat." Correspondence between the consistency of the standards of international documents and normative references of the following documents.

--- GB/T 4208-2008 housing protection (IP Code) (IEC 60529:2001, IDT)

--- GB/T 10250 Electromagnetic compatibility ship electrical and electronic equipment (GB/T 10250-2007, IEC 60533:1999, IDT) Disconnection for exchange. --- GB/T 10963.1 electrical accessories for household and similar applications over-current protection circuit breakers - Part 1 Device (GB/T 10963.1-2005, idt, IEC 60898-1:2002)

--- GB/T 11918 industrial plugs, sockets and couplers - Part 1. General requirements (GB/T 11918-2001, idt, IEC 60309-1:1999)

--- GB/T 11919 industrial plugs, sockets and couplers - Part 2. With pin and sleeve size

interchangeable electrical accessories Requirements (GB/T 11919-2001, idt, IEC 60309-2:1999)

--- GB/T 17729 Small craft - Electrical apparatus protected from ignition of surrounding flammable gases (GB/T 17729-1999, idt, ISO 8846:1990)

--- GB/T 18380.11 ~ 18380.13 burning test and optical fiber cables under fire conditions - Part 1. single insulated electric Cable vertical flame spread test (GB/T 18380.11 ~ 18380.13-2008, IEC 60332-1-1 ~ IEC 60332-1-3.

2004, IDT)

Electrical wires bunched vertically mounted. --- GB/T 18380.32 and optical fiber cables under fire conditions Part 22 Combustion Tests Cable vertical flame spread test (GB/T 18380.32-2008, IEC 60332-3-22:2000, IDT)

--- GB/T 18821 boat liquefied petroleum gas (LPG) system (GB/T 18821-2002, ISO 10239:2000, IDT)

--- GB/T 19917-2005 dinghy boat master manual (GB/T 19917-2005, ISO 10240:2002, IDT)

--- GB/T 20637 Electrical installations in ships shipboard power cables - General construction and test requirements (GB/T 20637-2006, IEC 60092-350:2001, IDT)

--- GB/T 20703 Marine Electrical apparatus for heating and cooking appliances (GB/T 20703-2006, IEC 60092-307. 1980, IDT)

--- GB/T 20847.1 boat fire - Part 1. hull length of not more than 15m boat (GB/T 20847.1-2007, ISO 9094-1:2003, IDT)

--- GB/T 21065 Marine Electrical installations and completion test (GB/T 21065-2007, IEC 60092-401. 1980, IDT)

--- GB/T 22189-2008 Marine Electrical Equipment album tankers (IEC 60092-502:1999, IDT)

--- GB/T 22191 Marine Electrical equipment lighting equipment and accessories (GB/T 22191-2008, IEC 60092-306. 1980, IDT)

--- GB/T 22193 Marine Electrical Equipment Equipment - Semiconductor convertors (GB/T 22193-2008, IEC 60092-304:1995, IDT)

--- GB/T 22194 Marine Electrical equipment and lighting equipment of power transformers (GB/T 22194-2008, IEC 60092-303. 1980, IDT)

--- GB/T 22195 Marine Electrical Equipment Equipment voltage switchgear and controlgear assemblies (GB/T 22195-2008, IEC 60092-302:1997, IDT) Please note that some of the content of this document may involve patents. Release mechanism of the present document does not assume responsibility for the identification of these patents.

The standard proposed by China State Shipbuilding Corporation.

This standard by the National Standardization Technical Committee Marine Boats (SAC/TC12) centralized.

This standard was drafted. China Shipbuilding Technology and Economy Research Institute, Dalian big ship navigation National Engineering Research Center limited liability any company.

1 Scope

This standard specifies the design, construction, installation and testing requirements boat electrical system.

This standard applies to inland and sea captain is not greater than 50m or gross register tons not to exceed 500GRT boat.

This standard does not apply only to the battery to start the engine and power boat navigation lights, the battery is inboard or outboard drive Hair Motivation alternator charging.

Note 1: For the single-phase AC system voltage exceeds 250V, 500V three-phase AC voltage exceeds the system voltage exceeds 50V DC system and for 500GRT greater than or greater than the captain of the boat 50m, see IEC 60092 series of other criteria.

Note 2: Please note boat navigation lights rules governing special requirements.

Note 3: Please note that in some countries to comply with EU directives relating to EMC (89/336/EEC), Low Voltage (73/23/EEC) and general product safety (92/59 /EEC) requirements. In addition, the EU Directive 97/70 applies to a length of 24m and over fishing, the EU Directive 98/18/EC apply to passenger ships.

Please also note indicating that the file relating to recreational boats 94/25/EC and 2003/44/EF. For high-speed craft, note HSC Code (HSC rule).

This standard applies to the following alone or in combination of DC and AC electrical systems.

a) does not exceed the rated voltage of 50V DC system;

Note: For example, many boats are the main electrical system. A boat can be equipped with an AC system as the main electrical system, it can also be equipped with a DC system EC, with a battery pack to power the navigation and communication equipment.

b) rated voltage not exceeding 250V single-phase AC system;

Note: This system may be the main supply system when the boat or shore power connection is only when a charging system. AC ultra low voltage, and other safety circuits it may include part of the single-phase AC system circuit. Boats can also be equipped with a) above the DC system

requirements.

c) rated voltage not exceeding 1000V three-phase AC system.

NOTE: Three-phase system may be the main power supply boat electrical equipment. Boats can also be equipped with single-phase AC and DC subsystem.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 6994-2006 marine electrical equipment definitions and general provisions (IEC 60092-101:1994, IDT) IEC 60079 (all parts) containing explosive gas atmosphere electrical equipment (Explosive atmospheres) IEC 60092-201:1994 Electrical installations in ships - Part 201. System design - General (Electrical installations in ships-Part 201. System design-General) IEC 60092-202:1994 Electrical installations in ships - Part 202. System design protection (Electrical installations in ships-Part 202. System design-Protection) IEC 60092-301. 1980 Electrical installations in ships Part 301. Equipment - Generators and motors (Electrical installations in ships-Part 301. equipment-Generators and motors) IEC 60092-302 ship electrical equipment and control equipment Low-voltage switchgear combination means (Electrical installations in ships-Part 302. Low-voltage switchgear and control gear assemblies) IEC 60092-303 Marine Electrical equipment and lighting equipment Power Transformers (Electrical installations in ships-Part 303. Equipment-Transformers for power and lighting)