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

GB/T 29484.509-2019

**Electrical installations in ships -- Part 509: Operation of
electrical installations**

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Foreword

This standard is one of the national standards for the series of "ship electrical equipment". The series includes.

---GB/T 22189-2008 Ship electrical equipment album tanker;

---GB/T 22190-2008 Ship electrical equipment album electric propulsion system;

---GB/T 28560-2012 Ship electrical equipment boat;

---GB/T 28561-2012 Ship electrical equipment album control and measuring instrument;

---GB/T 29484-2013 Marine electrical equipment Part 503. Album voltage from 1kV to not more than 15kV

AC power supply system;

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

This standard uses the translation method equivalent to IEC 60092-509.2011 "Marine Electrical Equipment Part 509. Electrical Installations".

The documents of our country that have a consistent correspondence with the international documents referenced in this standard are as follows.

--- GB/T 18209.2-2010 Mechanical and electrical safety instructions, marking and operation - Part 2. Marking requirements (IEC 61310-2.

2007, IDT)

This standard is proposed and managed by the National Marine Electrical and Electronic Equipment Standardization Technical Committee (SAC/TC531).

This standard was drafted. China Shipbuilding Industry Comprehensive Technology and Economic Research Institute.

1 Scope

This standard applies to the operation and operation of power generation, substation and distribution systems and electrical equipment for ship AC and DC.

This standard specifies the safe operation requirements for electrical equipment and its work and operations in the vicinity. These requirements apply to the operation and operation of the equipment.

And maintenance. This standard applies to all electrical and non-electrical work, such as electrical equipment and hull structural operation requirements near the cable.

This standard does not apply to the general personnel who use equipment and devices. If the equipment and equipment are designed and installed to provide general personnel,

Meet the relevant requirements of the IEC 60092 series of standards.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article.

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 6994-2006 Marine electrical equipment definition and general provisions (IEC 60092-101.2002, IDT)

IEC 61310-2 Mechanical and electrical safety instructions, marking and operation - Part 2. Marking requirements (Safetyofmachinery-In-

Dication, markingandactuation-Part 2.Requirementsformarking)

3 Terms and definitions

The following terms and definitions as defined in GB/T 6994-2006 apply to this document.

3.1 General requirements

3.1.1

Electrical equipment electricalinstalation

Electrical devices include all electrical equipment that provides for the generation, transmission, conversion, distribution, and use of electrical energy. It also includes batteries, capacitors and

All other power sources that store electrical energy.

[IEC 60050-651.1999, definition 651-01-04, modified]

3.1.2

Live parts livepart

During operation, wires or conductive parts, including neutral conductors, may be loaded with voltage. But by convention does not include both protective grounding

Protective earthing neutral (PEN) conductors for functional and neutral conductor functions, or protection of the function of both protective earth conductors and midpoint conductors

Grounded intermediate (PEM) conductor, and a protective ground (PEL) conductor that combines the functions of a protective earth conductor and conductor.

[IEC 60050-651.1999, definition 651-01-03]

[IEC 60050-195.1998, definition 195-01-12, 195-01-13, 195-01-14, modified]

Note. This concept does not imply a risk of electric shock.

3.1.3

Operation operation

All operations performed on electrical equipment, including electrical and non-electrical work activities such as conversion, control, monitoring, and maintenance.

[IEC 60050-151.2001, definition 151-11-28, modified]