



IEC 60092-201

Edition 5.0 2019-09

# INTERNATIONAL STANDARD

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**Electrical installations in ships –  
Part 201: System design – General**





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IEC Central Office  
3, rue de Varembe  
CH-1211 Geneva 20  
Switzerland

Tel.: +41 22 919 02 11  
[info@iec.ch](mailto:info@iec.ch)  
[www.iec.ch](http://www.iec.ch)

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**Electrical installations in ships –  
Part 201: System design – General**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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International Standard IEC 60092-201 has been prepared by IEC technical committee 18: Electrical installations of ships and of mobile and fixed offshore units.

This fifth edition cancels and replaces the fourth edition, published in 1994. It constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) a new subclause regarding studies and calculations has been added;
- b) a new subclause regarding documentation has been added;
- c) the clause regarding distribution systems has been rewritten;
- d) a clause regarding system earthing has been added;
- e) the clause regarding sources of electrical power has been rewritten;
- f) the clause regarding distribution system requirements has been rewritten;

- g) the clause regarding cables has been deleted and transferred to IEC 60092-401;
- h) a new subclause regarding electric and electrohydraulic steering gear has been added.

NOTE IEC 60092-204, *Electrical installations in ships – Part 204: System design – Electric and electrohydraulic steering gear*, has been withdrawn.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
18/1673/FDIS	18/1674/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of the IEC 60092 series, published under the general title *Electrical installations in ships*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

## INTRODUCTION

IEC 60092 (all parts) forms a series of international standards for electrical installations in sea-going ships, incorporating good practice and co-ordinating as far as possible existing rules.

These standards form a code of practical interpretation and amplification of the requirements of the International Convention on Safety of Life at Sea, a guide for future regulations which may be prepared and a statement of practice for use by shipowners, shipbuilders and appropriate organizations.

# ELECTRICAL INSTALLATIONS IN SHIPS –

## Part 201: System design – General

### 1 Scope

This document is applicable to the main features of system design of electrical installations for use in ships.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60092-101, *Electrical installations in ships – Part 101: Definitions and general requirements*

IEC 60092-202, *Electrical installations in ships – Part 202: System design – Protection*

IEC 60092-401, *Electrical installations in ships – Part 401: Installation and test of completed installation*

IEC 60364-1, *Low-voltage electrical installations – Part 1: Fundamental principles, assessment of general characteristics, definitions*

IEC/IEEE 80005 (all parts), *Utility connections in port*

IMO, *International Convention for the Safety of Life at Sea (SOLAS):1974, consolidated edition 2009*

### 3 Terms and definitions

For the purpose of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

#### 3.1 General

##### 3.1.1

##### **dead ship**

condition where the entire machinery installation, including the power supply, is out of operation and where auxiliary services such as compressed air, starting current from batteries etc., for bringing the main propulsion into operation and for the restoration of the main power supply, are not available