IEC 60092-101

Edition 5.0 2018-10

INTERNATIONAL STANDARD

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Electrical installations in ships –
Part 101: Definitions and general requirements

IEC 60092-101:2018-10(en)

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Electrical installations in ships – Part 101: Definitions and general requirements

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ICS 01.040.47; 47.020.60

ISBN 978-2-8322-6079-1

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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ELECTRICAL INSTALLATIONS IN SHIPS –

Part 101: Definitions and general requirements

FOREWORD

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International Standard IEC 60092-101 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 and Amendment 1:1995. This edition constitutes a technical revision.

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

a) the applicability of the standard has been changed to 1 000 V AC and 1 500 V DC:
b) the table for design temperature has been simplified;
c) the clause regarding power supply system characteristics has been rewritten;
d) information regarding pollution degree has been added in the clause regarding clearance and creepage distances;
e) a clause regarding environmental impact has been added;

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f) the clause regarding classification test for materials has been deleted;

g) the annex regarding flame-retardant test for cables has been deleted;

h) the annex regarding test on bunched wires or cables under fire conditions has been deleted.

The text of this standard is based on the following documents:

FDIS	Report on voting
18/1617/FDIS	18/1631/RVD

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

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

A list of all parts in 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 publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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- withdrawn,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

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

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INTRODUCTION

The IEC 60092 series includes international standards for electrical installations in sea-going ships, incorporating good practice and coordinating, as far as possible, existing rules. These standards form a code of practical interpretation and amplification of the requirements of the International Convention for the Safety of Life at Sea, a guide for future regulations which may be prepared and a statement of practice for use by ship-owners, shipbuilders and appropriate organizations.

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ELECTRICAL INSTALLATIONS IN SHIPS –

Part 101: Definitions and general requirements

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1 Scope

This part of IEC 60092 is applicable to electrical installations for use in ships.

The definitions and general requirements given in this part are applicable, unless otherwise indicated, to other parts of the IEC 60092 series.

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 60034-30-1, *Rotating electrical machines – Part 30-1: Efficiency classes of line operated AC motors (IE code)*

IEC 60079 (all parts), *Explosive atmosphere*

IEC 60092-201, *Electrical installations in ships – Part 201: System design – General*

IEC 60092-305, *Electrical installations in ships – Part 305: Equipment – Accumulator (storage) batteries*

IEC 60092-504:2016, *Electrical installations in ships – Part 504: Automation, control and instrumentation*

IEC 60529, *Degrees of protection provided by enclosures (IP Code)*

IEC 60533, *Electrical and electronic installations in ships – Electromagnetic compatibility (EMC) – Ships with a metallic hull*

IEC 60664-1, *Insulation coordination for equipment within low-voltage systems – Part 1: Principles, requirements and tests*

IEC 60695-11-5, *Fire hazard testing – Part 11-5: Test flames – Needle-flame test method – Apparatus, confirmatory test arrangement and guidance*

IEC 61439-1:2011, *Low-voltage switchgear and controlgear assemblies – Part 1: General rules*

3 Terms and definitions

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

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