SVENSK STANDARD SS-IEC 60092-202

Fastställd	Utgåva	Sida	Ansvarig kommitté
2017-11-23	1	1 (1+18)	SEK TK 18

Elinstallationer i fartyg – Del 202: Systemuppbyggnad – Elektriskt skydd

Electrical installations in ships – Part 202: System design – Protection

Denna svenska standard innehåller den engelska texten i nedan angiven IEC-publikation, utarbetad inom International Electrotechnical Commission, IEC:

– **IEC 60092-202, Fifth edition, 2016 - Electrical installations in ships - Part 202: System design - Protection**

Nationellt förord

Tidigare fastställd svensk standard SS-IEC 92, utgåva 4, 1995, gäller ej fr o m 2017-11-23.

ICS 47.020.60

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CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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ELECTRICAL INSTALLATIONS IN SHIPS –

Part 202: System design – Protection

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 60092-202 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 1:1996. This edition constitutes a technical revision.

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

This document: Clause/subclause No. and heading	Previous document: Corresponding clause/subclause No., remark
1 Scope	1, No change
2 Normative references	2, Updated
3 Definitions	3, Several definitions changed and added
4 General requirements	4, Text changed
4.1 General	New clause/subclause
4.2 Basic protection	New clause/subclause
4.3 Studies and calculations	New clause/subclause
5 Electrical load study	New clause/subclause
6 Short-circuit current calculations	5, Heading change
-	5.1, Text changed and moved to new Clause 6
-	5.2, Text deleted, for DC-Systems reference to IEC 61660-1 added
7 Protection discrimination study	New clause/subclause
7.1 General	New clause/subclause
7.2 Current selectivity	New clause/subclause
7.3 Time-current selectivity	New clause/subclause
8 Characteristics and choice of protective devices with reference to short-circuit rating	6, Text completely revised and extended
8.1 General	6.1
8.2 Protective devices	New clause/subclause
8.3 Rated short-circuit breaking capacity	6.2
8.4 Rated short-circuit making capacity	6.3
8.5 Co-ordinated choice of protective devices with regard to discrimination requirements	6.4, Heading changed, new text
9 Choice of protective devices with reference to overload	7
9.1 Mechanical switching devices	7.1
9.2 Fuses for overload protection	7.2
10 Choice of protective devices with regard to their application	8
10.1 General	8.1
10.2 Generator protection	8.2
10.3 Protection of essential services	8.3
10.4 Protection of transformers	8.4
10.5 Circuit protection	8.5
10.6 Motor protection	8.6
10.7 Accumulator (storage) battery protection	8.9
10.8 Protection of meters, pilot lamps and control circuits	8.10
10.9 Protection of static or solid-state devices	8.11
11 Reverse power and reverse current protection for AC generators	9
11 Reverse power and reverse current protection for AC generators	9.1
-	9.2
12 Undervoltage protection	10
12.1 AC and DC generators	10.1

This document: Clause/subclause No. and heading	Previous document: Corresponding clause/subclause No., remark
12.2 AC and DC motors	10.2
13 Overvoltage protection	11
13.1 General	New clause/subclause
13.2 Transformers	11.1
13.3 AC machines	11.2
14 Protection against under- and over-frequency	New clause/subclause

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

FDIS	Report on voting
18/1538/FDIS	18/1542/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 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 publication will remain unchanged until the stability date indicated on the IEC website 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.

INTRODUCTION

The IEC 60092 series includes 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 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, ship builders and appropriate organizations.

ELECTRICAL INSTALLATIONS IN SHIPS –

Part 202: System design – Protection

1 Scope

This part of IEC 60092 is applicable to the main features of the electrical protective system to be applied to 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 60909 (all parts), *Short-circuit currents in three-phase a.c. systems*

IEC 60909-0, *Short-circuit currents in three-phase a.c. systems – Part 0: Calculation of currents*

IEC TR 60909-1, *Short-circuit currents in three-phase a.c. systems – Part 1: Factors for the calculation of short-circuit currents according to IEC 60909-0*

IEC 60947-2:2006, *Low-voltage switchgear and controlgear – Part 2: Circuit-breakers*
IEC 60947-2:2006/AMD1:2009
IEC 60947-2:2006/AMD2:2013

IEC 61140, *Protection against electric shock – Common aspects for installation and equipment*

IEC 61363-1, *Electrical installations of ships and mobile and fixed offshore units – Part 1: Procedures for calculating short-circuit currents in three-phase a.c.*

IEC 61660-1, *Short-circuit currents in d.c. auxiliary installations in power plants and substations – Part 1: Calculation of short-circuit currents*

IEC 62271-100, *High-voltage switchgear and controlgear – Part 100: Alternating-current circuit-breakers*