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Elinstallationer i fartyg – Del 353: Kraftkablar med märkspänning 1 kV och 3 kV

*Electrical installations in ships –
Part 353: Power cables for rated voltages 1 kV and 3 kV*

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

- **IEC 60092-353, Fourth edition, 2016 - Electrical installations in ships - Part 353: Power cables for rated voltages 1 kV and 3 kV**

Nationellt förord

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

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Det finns många fördelar med att ha gemensamma tekniska regler för bl a mätning, säkerhet och provning och för utförande, skötsel och dokumentation av elprodukter och elanläggningar.

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CONTENTS

FOREWORD	4
1 Scope and object.....	6
2 Normative references	6
3 Terms and definitions	7
4 General requirements	7
4.1 Rated voltage	7
4.2 Markings.....	8
4.2.1 Indication of origin and voltage identification	8
4.2.2 Continuity of marking	8
4.2.3 Core identification.....	8
5 Constructional requirements	8
5.1 General description.....	8
5.1.1 Overview	8
5.1.2 Unarmoured cables (excluding 1,8/3 kV)	8
5.1.3 Armoured cables.....	9
5.2 Conductors	10
5.3 Insulation.....	10
5.3.1 Material	10
5.3.2 Application.....	10
5.3.3 Thickness of insulation.....	10
5.4 Cabling (including fillers and binders).....	11
5.5 Inner covering.....	11
5.5.1 General	11
5.5.2 Thickness of inner covering.....	11
5.6 Screen.....	12
5.6.1 Construction	12
5.6.2 Application.....	13
5.7 Inner sheath	13
5.7.1 Material	13
5.7.2 Application.....	13
5.7.3 Thickness of inner sheath	13
5.8 Braid armour.....	13
5.8.1 General	13
5.8.2 Braid wire diameter.....	14
5.8.3 Coverage density	14
5.8.4 Application of the armour	14
5.9 Outer sheath.....	14
5.9.1 Material	14
5.9.2 Application.....	14
5.9.3 Thickness of outer sheath	14
5.9.4 Colour of outer sheath	15
6 Tests – Methods and requirements	15
Annex A (informative) Alternative enhanced insulation thickness for 0,6/1 kV	18
Annex B (informative) Identification of cores of multicore cables.....	19
B.1 Inscription.....	19

B.2	Arrangement of the marks	19
B.3	Spacing and dimensions of the marks	19
B.4	Appearance of inscription.....	20
	Bibliography	21
	Figure B.1 – Arrangement of the marks	19
	Table 1 – Insulation thickness.....	11
	Table 2 – Thickness of extruded inner covering and fictitious diameters	12
	Table 3 – Requirements of drain wire.....	12
	Table 4 – Tests applicable to all cables (<i>1 of 2</i>).....	15
	Table 5 – Additional tests required for halogen-free cables	16
	Table 6 – Additional test required for low smoke cables	17
	Table 7 – Additional test required for fire resistant cables	17
	Table 8 – Additional tests required for specific performances	17
	Table A.1 – Alternative enhanced insulation thickness for 0,6/1 kV.....	18
	Table B.1 – Dimensions of the marks	20

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTRICAL INSTALLATIONS IN SHIPS –

Part 353: Power cables for rated voltages 1 kV and 3 kV

FOREWORD

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International Standard IEC 60092-353 has been prepared by Subcommittee 18A: Electric cables for ships and mobile and fixed offshore units of IEC Technical Committee 18: Electrical installations of ships and of mobile and fixed offshore units.

This fourth edition cancels and replaces the third edition published in 2011. This edition constitutes a technical revision.

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

- a) updated references to IEC 60092-350 for general construction and test methods and IEC 60092-360 for insulating and sheathing materials.

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

FDIS	Report on voting
18A/399/FDIS	18A/400/RVD

Full information on the voting for the approval of this document 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 the parts of the IEC 60092 series, 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.

ELECTRICAL INSTALLATIONS IN SHIPS –

Part 353: Power cables for rated voltages 1 kV and 3 kV

1 Scope and object

This part of IEC 60092 is applicable to shipboard and offshore non radial field power cables with extruded solid insulation, having a voltage rating of 0,6/1 (1,2) kV or 1,8/3 (3,6) kV intended for fixed installations.

Cables designed to maintain circuit integrity during fire are included.

The various types of power cables are given in 5.1. The constructional requirements and test methods are aligned with those indicated in IEC 60092-350, unless otherwise specified in this document.

The object of this document is

- to standardize cables whose safety and reliability is ensured when they are installed in accordance with the requirements of IEC 60092-352 or IEC 61892-4,
- to lay down standard manufacturing requirements and characteristics of such cables directly or indirectly bearing on safety, and
- to specify test methods for checking conformity with those requirements.

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 60050-461, *International Electrotechnical Vocabulary – Part 461: Electric cables*

IEC 60092-350:2014, *Electrical installations in ships – Part 350: General construction and test methods of power, control and instrumentation cables for shipboard and offshore applications*

IEC 60092-360, *Electrical installations in ships – Part 360: Insulating and sheathing materials for shipboard and offshore units, power, control, instrumentation and telecommunication cables*

IEC 60228, *Conductors of insulated cables*

IEC 60331-1, *Tests for electric cables under fire conditions – Circuit integrity – Part 1: Test method for fire with shock at a temperature of at least 830 °C for cables of rated voltage up to and including 0,6/1,0 kV and with an overall diameter exceeding 20 mm*

IEC 60331-2, *Tests for electric cables under fire conditions – Circuit integrity – Part 2: Test method for fire with shock at a temperature of at least 830 °C for cables of rated voltage up to and including 0,6/1,0 kV and with an overall diameter not exceeding 20 mm*

IEC 60331-21, *Tests for electric cables under fire conditions – Circuit integrity – Part 21: Procedures and requirements – Cables of rated voltage up to and including 0,6/1,0 kV*

IEC 60332-1-2, *Tests on electric and optical fibre cables under fire conditions – Part 1-2: Test for vertical flame propagation for a single insulated wire or cable – Procedure for 1 kW pre-mixed flame*

IEC 60332-3-22, *Tests on electric cables and optical fibre cables under fire conditions – Part 3-22: Test for vertical flame spread of vertically-mounted bunched wires or cables – Category A*

IEC 60445, *Basic and safety principles for man-machine interface, marking and identification – Identification of equipment terminals, conductor terminations and conductors*

IEC 60684-2, *Flexible insulating sleeving – Part 2: Methods of test*

IEC 60754-1, *Test on gases evolved during combustion of materials from cables – Part 1: Determination of the halogen acid gas content*

IEC 60754-2, *Test on gases evolved during combustion of materials from cables – Part 2: Determination of acidity (by pH measurement) and conductivity*

IEC 61034-2, *Measurement of smoke density of cables burning under defined conditions – Part 2: Test procedure and requirements*