AS 60092.353—2005

Australian Standard™

Electrical installations in ships

Part 353: Single and multicore non-radial field power cables with extruded solid insulation for rated voltages 1 kV and 3 kV

This Australian Standard was prepared by Committee EL-003, Electric Wires and Cables. It was approved on behalf of the Council of Standards Australia on 9 November 2005.
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The following are represented on Committee EL-003:

Australasian Railway Association
Australian Electrical and Electronic Manufacturers Association
Australian Industry Group
Canterbury Manufacturers Association New Zealand
Department of Defence (Australia)
Department of Primary Industries, Mine Safety (NSW)
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PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee EL-003, Electric Wires and Cables. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian, rather than an Australian/New Zealand Standard.

The objective of this Standard is to specify the constructional and test requirements for shipboard power cables having a voltage rating of 0.6/1(1.2) kV and 1.8/3(3.6) kV.

This Standard is identical with, and has been reproduced from IEC 60092-353, Ed. 2 (1995) including Amendment 1: 2001, *Electrical installations in ships—Part 353: Single and multicore non-radial field power cables with extruded solid insulation for rated voltages 1 kV and 3 kV*.

As this Standard is reproduced from an International Standard, the following applies:

(a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.

(b) In the source text 'IEC 60092' should read 'AS 60092'.

(c) A full point should be substituted for a comma when referring to a decimal marker.

The term 'informative' is used to define the application of the annex to which it applies. An informative annex is only for information and guidance.

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1 General

1.1 Scope and object

This part of IEC 60092 is applicable to shipboard power cables with extruded solid insulation, having a voltage rating of 0,6/1 (1,2) kV and 1,8/3 (3,6) kV (see 2.1) intended for fixed installations.

NOTE – Provision is made for fire-resistant (limited circuit integrity) cables to be specified if required.

The various types of power cables are given in 3.1. The construction, requirements and test methods shall comply with those indicated in IEC 60092-350, unless otherwise specified in this standard.

The object of this standard is:

– to standardize cables whose safety and reliability is ensured when they are installed in accordance with the requirements of IEC 60092-352;

– to lay down standard manufacturing requirements and characteristics of such cables directly or indirectly bearing on safety;

– to specify test methods for checking conformity with those requirements.

1.2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 60092. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this part of IEC 60092 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

References to International standards that are struck through in this clause are replaced by references to Australian or Australian/New Zealand Standards that are listed immediately thereafter and identified by shading. Any Australian or Australian/New Zealand Standard that is identical to the International Standard it replaces is identified as such.

~~IEC 60038:1983, *IEC standard voltages*~~

AS 60038, *Standard voltages*

IEC 60092-350:1988, Electrical installations in ships – Part 350: Low-voltage shipboard power cables - General construction and test requirements
Amendment 1 (1994)
Amendment 2 (1999)

~~IEC 60092-351:1983, *Electrical installations in ships – Part 351: Insulating materials for shipboard power cables*~~