

Australian Standard™

Low-voltage fuses

**Part 4.1: Supplementary requirements
for fuse-links for the protection of
semiconductor devices—Sections I to
III—Examples of types of standardized
fuse-links**

This Australian Standard was prepared by Committee EL-007, Power Switchgear. It was approved on behalf of the Council of Standards Australia on 20 December 2004.
This Standard was published on 1 February 2005.

The following are represented on Committee EL-007:

Australian British Chamber of Commerce
Australian Electrical and Electronic Manufacturers Association
Energy Networks Association
Engineers Australia
Testing interests (Australia)

Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about Standards can be found by visiting the Standards Web Shop at www.standards.com.au and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Global Standard*, has a full listing of revisions and amendments published each month.

Australian Standards™ and other products and services developed by Standards Australia are published and distributed under contract by SAI Global, which operates the Standards Web Shop.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.org.au, or write to the Chief Executive, Standards Australia, GPO Box 5420, Sydney, NSW 2001.

This Standard was issued in draft form for comment as DR 04503.

Australian Standard™

Low-voltage fuses

Part 4.1: Supplementary requirements for fuse-links for the protection of semiconductor devices—Sections I to III—Examples of types of standardized fuse-links

First published as AS 60269.4.1—2005.

COPYRIGHT

© Standards Australia

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

Published by Standards Australia GPO Box 5420, Sydney, NSW 2001, Australia

ISBN 0 7337 6458 4

PREFACE

This Standard was prepared by the Standards Australia Committee EL-007, Power Switchgear.

The objective of this Standard is to provide supplementary requirements and tests to AS 60269.1 and AS 60269.4.0 for specific examples of standardized fuse-links for the protection of semiconductor devices.

This Standard is Part 4.1 of a series which, when complete, will consist of the following:

AS

60269	Low-voltage fuses
60269.1	Part 1: General requirements
60269.2.0	Part 2.0: Supplementary requirements for fuses for use by authorized persons (fuses mainly for industrial application)
60269.2.1	Part 2.1: Supplementary requirements for fuses for use by authorized persons (fuses mainly for industrial application)—Sections I to VI: Examples of types of standardized fuses
60269.3.0	Part 3.0: Supplementary requirements for fuses for use by unskilled persons (fuses mainly for household and similar applications)
60269.3.1	Part 3.1: Supplementary requirements for fuses for use by unskilled persons (fuses mainly for household and similar applications)—Sections I to IV: Examples of types of standardized fuses
60269.4.0	Part 4.0: Supplementary requirements for fuse-links for the protection of semiconductor devices
60269.4.1	Part 4.1: Supplementary requirements for fuse-links for the protection of semiconductor devices—Sections I to III: Examples of types of standardized fuse-links(this Standard)

This Standard is identical with, and has been reproduced from, IEC 60269-4-1, Ed.1.0(2002), *Low-voltage fuses—Part 4-1: Supplementary requirements for fuse-links for the protection of semiconductor devices—Sections I to III: Examples of types of standardized fuse-links*.

In view of the fact that this standard should be read together with AS 60269.1 and AS 60269.4, the numbering of its clauses and subclauses are made to correspond to these publications. Regarding the tables, their numbering also corresponds to that of AS 60269.1; however, when additional tables appear they are referred to by capital letters, for example, Table A, Table B, etc.

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

- Its number does not appear on each page of text and its identity is shown only on the cover and title page.
- In the source text ‘this international standard’ should read ‘this Australian Standard’.
- All point should be substituted for a comma when referring to a decimal marker.

The terms ‘normative’ and ‘informative’ are used to define the application of the annex to which they apply. A normative annex is an integral part of a standard, whereas an informative annex is only for information and guidance.

CONTENTS

	<i>Page</i>
1 General.....	1
SECTION 1A - FUSE LINKS WITH BOLTED CONNECTIONS, TYPE A	
1.1 Scope	3
7 Standard conditions for construction	3
7.1 Mechanical design	3
7.1.7 Construction of a fuse-link.....	3
Figure 1 (IA) – Single body fuse-links.....	3
Figure 2 (IA) – Double body fuse-links	4
Figure 3 (IA) – Twin body fuse-links	5
Figure 4 (IA) – Trip indicator fuse-links	5
SECTION IB - FUSE-LINKS WITH BOLTED CONNECTIONS, TYPE B	
1.1 Scope	6
7.1 Mechanical design	6
7.1.7 Construction of a fuse-link.....	6
Figure 1 (IB) – Body sizes 000 and 00.....	7
Figure 2 (IB) – Body sizes 0, 1, 2 and 3	8
SECTION IC - FUSE-LINKS WITH BOLTED CONNECTIONS, TYPE C	
1.1 Scope	9
7.1 Mechanical design	9
Figure 1 (IC) – Bolted fuse-links, type C.....	10
SECTION IIA - FUSE LINKS WITH FLUSH END CONNECTIONS TYPE A	
1.1 Scope	11
7.1 Mechanical design	11
7.1.7 Construction of a fuse-link.....	11
Figure 1 (IIA) – Flush end fuse-links type A.....	12
SECTION IIB - FUSE-LINK WITH FLUSH END CONNECTIONS, TYPE B	
1.1 Scope	13
7.1 Mechanical design	13
Figure 1 (IIB) – Flush end fuse-links, type B.....	13
SECTION IIIA - FUSE-LINKS HAVING CYLINDRICAL CONTACT CAPS, TYPE A	
1.1 Scope	14
7.1 Mechanical design	14
Figure 1 (IIIA) – Fuse-links with cylindrical contact caps, type A.....	14

Currently in preview, click buy full vers.

STANDARDS AUSTRALIA

Australian Standard

Low-voltage fuses

**Part 4.1: Supplementary requirements for fuse-links for the protection of semiconductor devices—Sections I to III—
Examples of types of standardized fuse-links**

1 General

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

Fuse-links for the protection of semiconductor devices according to the following sections shall comply with all subclauses of

- ~~IEC 60269-1: Low-voltage fuses—Part 1: General requirements;~~
- AS 60269.1, *Low-voltage fuses, Part 1: General requirements* (identical to IEC 60269-1) and
- ~~IEC 60269-4: Low-voltage fuses—Part 4: Supplementary requirements for fuse-links for the protection of semiconductor devices~~
- AS 60269.4.0, *Low-voltage fuses, Part 4: Supplementary requirements for fuse-links for the protection of semiconductor devices* (identical to IEC 60269-4)

and shall comply with the requirements laid down in the relevant sections.

This standard is divided into three sections, each dealing with specific examples of standardized dimensions.

Section I: Fuse-links having bolted connections

Type A

Type B

Type C

Section II: Fuse-links with flush end connections

Type A

Type b

Section III: Fuse-links with cylindrical contact caps

Type A

This standard covers dimensional systems but does not standardize characteristics.

Fuse-links for the protection of semiconductor devices may also have the same dimensions as fuse-links to:

IEC 60269-2-1: Section I

IEC 60269-2-1: Section III

IEC 60269-3-1: Section I