

Australian/New Zealand Standard™

Low-voltage fuses

**Part 2.1: Supplementary requirements
for fuses for use by authorized persons
(fuses mainly for industrial
application)—Sections I to V: Examples
of types of standardized fuses**



Standards Australia



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NEW ZEALAND
Pūrongo Aotearoa

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Australian/New Zealand Standard™

Low-voltage fuses

Part 2.1: Supplementary requirements for fuses for use by authorized persons (fuses mainly for industrial application)—Sections I to V: Examples of types of standardized fuses

Originated as part of AS 2005.2—1977.

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AS 2005.21.1—1990, AS 2005.21.2—1990 and AS 2005.29—2001 jointly revised,
amalgamated and redesignated as AS/NZS 60269.2.1:2001.

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-007, Power Switchgear to supersede AS 2005.21.1—1990, AS 2005.21.2—1990 and AS 2005.29—1990.

The objective of this Standard is to provide additional requirements to those of AS/NZS 60269.1:2000 and AS/NZS 60269.2.0:2000 for specific examples of standardized fuses for use by authorized persons.

This Standard is Part 2.1 of a series which, when complete, will consist of the following:

AS/NZS

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 (mainly for industrial application)
60269.2.1	Part 2.1: Supplementary requirements for fuses for use by authorized persons (mainly for industrial application)—Sections I to V: Examples of types of standardized fuses (this Standard)
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 fuses

The requirements of this Standard do not apply to fuses manufactured to AS 3135—1997.

This Standard is identical with and reproduced from IEC 60269-2-1:1998, *Low-voltage fuses—Part 2-1: Supplementary requirements for fuses for use by authorized persons (fuses mainly for industrial application)*—Sections I to V: *Examples of types of standardized fuses* and its Amendment 1:1999. The requirements for fuses for use by authorized persons have been updated from those stated in AS 2005.21.1—1990, AS 2005.21.2—1990 and AS 2005.29—1990 and combined in a single Standard to bring them into line with those of IEC 60269.2-1:1998.

This Standard differs from the Standards it supersedes in the following areas:

- Requirements for fuses with fuse-links with blade contacts, previously specified in AS 2005.21.1, are now specified in Section I of this Standard.
- AS 2005 series of Standards did not specify requirements for fuses less than 16 A rated current.
- Requirements for fuses with fuse-links for bolted connections, previously specified in AS 2005.21.2, are now specified in Section II of this Standard.
- Requirements for fuses with fuse-links having cylindrical contact caps, not previously specified in the AS 2005 series, have been specified in Section III of this Standard.
- Requirements for fuses with fuse-links with offset blade contacts, previously specified in AS 2005.29, and referred to as fuses with compact dimensions, are now specified in Section IV of this Standard.
- Requirements for size F3 fuse-links, not previously specified in AS 2005.29, have been specified in Section IV of this Standard.

- (g) Degree of protection against electric shock IP2X is to be maintained in all states for fuses covered by Section IV of this Standard. This was not a requirement of AS 2005.29.
- (h) Requirements for fuses with Fuse-links having 'gD' and 'gN' characteristics, not previously specified in the AS 2005 series, have been specified in Section V of this Standard.

A reference to an International Standard identified in the normative references clause by strikethrough (~~example~~) is replaced by a reference to the Australian or Australian/New Zealand Standard(s) listed immediately thereafter and identified by shading (**example**). Where the struck-through referenced document and the referenced Australian or Australian/New Zealand Standard are identical, this is indicated in parenthesis after the title of the latter.

In view of the fact that this Standard should be read together with AS/NZS 60269.1, *Low-voltage fuses, Part 1: General Requirements*, the numbering of its clauses and sub-clauses is made to correspond to the latter. Regarding the tables, their numbering also corresponds to that of AS/NZS 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:

- (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 'this International Standard' should read 'this Australian/New Zealand Standard'.
- (c) A full point should be substituted for a comma when referring to a decimal marker.

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

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STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard**Low-voltage fuses****Part 2.1: Supplementary requirements for fuses for use by authorized persons (fuses mainly for industrial application)—Sections I to V: Examples of types of standardized fuses**

EXPLANATORY NOTE

In view of the fact that this standard should be read together with IEC 60269-1 and 60269-2, the numbering of its clauses and subclauses are made to correspond to these publications. Regarding the tables, their numbering also corresponds to that of IEC 60269-1; however, when additional tables appear they are referred to by capital letters, for example, table A, table B, etc.

1.1 General

Fuses for use by authorized persons according to the following sections shall also comply with all subclauses of:

References to International Standards that are struck through in this Clause are replaced by references to equivalent 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 appropriately identified.

~~IEC 60269-1: Low-voltage fuses — Part 1: General requirements~~

AS/NZS 60269.1, *Low-voltage fuses, Part 1: General requirements* (identical to IEC 60269-1)

~~IEC 60269-2: Low-voltage fuses — Part 2: Supplementary requirements for fuses for use by authorized persons (fuses mainly for industrial applications)~~

AS/NZS 60269.2.0, *Low-voltage fuses, Part 2.0: Supplementary requirements for fuses for use by authorized persons (fuses mainly for industrial application)* (identical to IEC 60269-2 and including IEC Amendment 1:1995 and Corrigendum:1996.)

This standard is divided into five sections, each dealing with a specific example of standardized fuse for use by authorized persons:

Section I: Fuses with fuse-links with blade contacts.

Section II: Fuses with fuse-links for bolted connections.

Section III: Fuses with fuse-links having cylindrical contact caps.

Section IV: Fuses with fuse-links with offset blade contacts.

Section V: Fuses with fuse-links having 'gD' and 'gN' characteristics.

NOTE – The following fuse systems are standardized systems in respect to their safety aspects. The National Committees may select from the examples of standardized fuses one or more systems for their own standards.