

Australian/New Zealand Standard™

**Approval and test specification—
Air-break switches**



AS/NZS 3133:2008

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-004, Electrical Accessories. It was approved on behalf of the Council of Standards Australia on 22 August 2008 and on behalf of the Council of Standards New Zealand on 21 August 2008.

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The following are represented on Committee EL-004:

Australasian Railway Association
Australian Chamber of Commerce and Industry
Australian Industry Group
Australian Information Industry Association
Canterbury Manufacturers Association New Zealand
Consumer Electronics Suppliers Association
Consumers' Federation of Australia
Electrical Compliance Testing Association
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Australian/New Zealand Standard™

Approval and test specification— Air-break switches

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-004, Electrical Accessories, to supersede AS/NZS 3133:2003, *Approval and test specification—Air break switches*, from the date of publication.

This Standard incorporates Amendment No. 1 (April 2009) and Amendment No. 2 (February 2012). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

The objective of this Standard is to provide Australian and New Zealand electrical industries (including manufacturers, test laboratories, installers and regulators) with electrical safety requirements and test methods for air-break switches. This Standard does not apply to cord-line switches within the scope of AS/NZS 3127, *Approval and test specification—Cord-line switches*.

This Standard is one of a series of approval and test specifications to be read in conjunction with AS/NZS 3100, *Approval and test specification—General requirements for electrical equipment*. The purpose of this series is to outline the conditions that must be met to secure approval for the sale and use of electrical accessories in Australia and New Zealand. Only safety matters and related conditions are covered.

A2 | The essential safety requirements in AS/NZS 3820, *Essential safety requirements for electrical equipment*, that could be applicable to switches are covered by this Standard, taken in conjunction with any other relevant requirements affecting safety.

This Standard was revised to introduce editorial changes and the following technical changes:

- (a) Requirements for switches for motors.
- (b) Reference to AS/NZS 61058.1 for switches for appliances.
- (c) Fluorescent lamp loading requirements and marking.
- (d) Instructions and marking for field-installed insulation.
- (e) Mounting of switches during testing.
- (f) Insulation resistance test.
- (g) High voltage test no. 1.
- (h) IP rating test.
- (i) The endurance test for fluorescent lamp loads.

This Standard does not include all the necessary provisions of a contract.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

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Australian/New Zealand Standard**Approval and test specification—Air-break switches****1 SCOPE AND REFERENCED DOCUMENTS****1.1 Scope**

This Standard applies to air-break switches having current ratings not exceeding 125 A for use in electrical circuits and equipment operating at low voltage but not exceeding 500 V and intended for household or similar use and for use in indoor and outdoor electrical installations.

This Standard does not apply to cord-line switches as defined in AS/NZS 3127.

NOTES:

- 1 Appendix A lists variations between this edition of AS/NZS 3133 and the 2003 edition (including Amendment 1).
- 2 See Clause 3.3 for other relevant Standards covering switches that may affect the application of this Standard.

1.2 Referenced documents

The following documents are referred to in this Standard:

AS

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|--------|--|
| 1931 | High-voltage test techniques |
| 1931.1 | Part 1: General definitions and test requirements |
| 60529 | Degrees of protection provided by enclosures (IP Code) |

AS/NZS

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|---------|--|
| 3100 | Approval and test specification—General requirements for electrical equipment |
| 3121 | Approval and test specification—Insulating mouldings |
| 3127 | Approval and test specification—Cord-line switches |
| 3947 | Low-voltage switchgear and controlgear |
| 3947.3 | Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units |
| 60335 | Household and similar electrical appliances—Safety |
| 60335.1 | Part 1: General requirements (IEC 60335-1: Ed. 4.2, MOD) |
| 61058 | Switches for appliances |
| 61058.1 | Part 1: General requirements (IEC 61058-1: Ed. 3.1 (2000), MOD) |

IEC

- | | |
|-------|---|
| 60669 | Switches for household and similar fixed-electrical installations (all parts) |
|-------|---|

2 DEFINITIONS

For the purpose of this Standard, the definitions below apply:

2.1 Air-break switch

A mechanical device for making and breaking in air a circuit carrying a load current.

For the purpose of this Standard, an air-break switch is referred to as a switch.