

AS 3133:2020



STANDARDS  
Australia



# Approval and test specification — Air-break switches



AS 3133:2020

This Australian Standard® was prepared by EL-004, Electrical Accessories. It was approved on behalf of the Council of Standards Australia on 17 November 2020.

This Standard was published on 27 November 2020.

The following are represented on Committee EL-004:

- Australian Chamber of Commerce and Industry
- Australian Industry Group
- Better Regulation Division — NSW Fair Trading
- Consumer Electronics Suppliers Association
- Consumers Federation of Australia
- Electrical Regulatory Authorities Council
- Engineers Australia
- Joint Accreditation System of Australia and New Zealand
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This Standard was issued in draft form for comment as DR AS 3133:2020.

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ISBN 978 1 76113 097 7

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

Originated in Australia as AS C133—1941 and AS C113—1947.  
Seventh edition AS/NZS 3133:2013.  
Revised and redesignated as AS 3133:2020.

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## Preface

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee EL-004, Electrical Accessories, to supersede AS/NZS 3133:2013, *Approval and test specification — Air-break switches*.

AS/NZS 3133:2013 will also remain current for 24 months after the date of publication of this Standard and after this time it will be superseded by AS 3133:2020. Regulatory authorities that reference this Standard in regulation may apply these requirements at a different time. Users of this Standard should consult with these authorities to confirm their requirements.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this Standard is to provide Australian electrical industries with electrical safety requirements and test methods for air-break switches.

This Standard is part 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 which need to be met to secure approval for the sale and use of electrical accessories in Australia. Only safety matters and related conditions are covered.

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 does not apply to—

- (a) cord-line switches as defined in AS/NZS 3127; or
- (b) electronic switches as defined in AS/NZS 60669.2.1.

The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

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# Contents

Preface .....	ii
<b>1 Scope and general .....</b>	<b>1</b>
1.1 Scope .....	1
1.2 Normative references .....	1
<b>2 Terms and definitions .....</b>	<b>1</b>
<b>3 Conformance to Standards .....</b>	<b>5</b>
3.1 General requirements of AS/NZS 3100 .....	5
3.2 Specific requirements of this Standard .....	5
3.3 Requirements of other Standards .....	5
3.3.1 AS 60947.3 utilization categories .....	5
3.3.2 AS/NZS 60669 series .....	5
3.3.3 AS/NZS 61058.1 switches .....	5
<b>4 Enclosure .....</b>	<b>5</b>
<b>5 Insulating materials .....</b>	<b>6</b>
<b>6 Form and action of contacts .....</b>	<b>6</b>
<b>7 Sequence of operation .....</b>	<b>6</b>
<b>8 Actuating mechanism .....</b>	<b>6</b>
<b>9 Earthing facilities .....</b>	<b>6</b>
<b>10 Prohibited arrangements .....</b>	<b>6</b>
<b>11 Lamp load rating .....</b>	<b>7</b>
<b>12 Marking .....</b>	<b>7</b>
12.1 Information required .....	7
12.2 Location .....	8
12.3 Method of marking .....	9
12.4 Switches in equipment .....	9
<b>13 Tests .....</b>	<b>9</b>
13.1 General .....	9
13.1.1 Conformance .....	9
13.1.2 Containing cases .....	9
13.1.3 Switches in equipment .....	9
13.1.4 Auxiliary contacts .....	9
13.1.5 a.c. and d.c. switches .....	10
13.1.6 Earthing .....	11
13.1.7 Switches for special purposes .....	11
13.1.8 Screws .....	11
13.1.9 Test voltage .....	11
13.1.10 Conditioning .....	11
13.2 Mounting of switches for tests .....	11
13.3 Insulation resistance test .....	12
13.3.1 Preparation .....	12
13.3.2 Test .....	12
13.4 High voltage test No. 1 .....	14
13.5 Endurance test .....	15
13.5.1 General .....	15
13.5.2 Test conditions .....	15
13.5.3 Number of operating cycles .....	16
13.5.4 Rate of operation .....	17
13.5.5 Criteria .....	18
13.6 Temperature test .....	18

13.7	High voltage test no. 2.....	18
13.8	Earthing facilities .....	18
13.9	Inspection of switch.....	19
13.10	Determination of ignitability and combustion propagation.....	19
13.11	Resistance to heat test.....	19
13.12	Tests of IP ratings.....	19
	13.12.1 General.....	19
	13.12.2 Tests.....	19
13.13	Motor control test.....	20
	13.13.1 General.....	20
	13.13.2 Test.....	20
	13.13.3 Criteria .....	20
13.14	Endurance test for switches intended for fluorescent lamp loads.....	20
	13.14.1 General.....	20
	13.14.2 Test load details.....	21
	13.14.3 Procedure.....	21
13.15	Test for switches intended for self-ballasted lamp loads.....	22
	13.15.1 General.....	22
	13.15.2 Test load setup.....	22
	13.15.3 Test and criteria .....	23
<b>Appendix A (normative) Additional requirements for isolating switches .....</b>		<b>25</b>
<b>Bibliography .....</b>		<b>29</b>

# Australian Standard®

## Approval and test specification — Air-break switches

### 1 Scope and general

#### 1.1 Scope

This Standard applies to manually operated air-break general purpose functional and isolating 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—

- (a) cord-line switches as defined in AS/NZS 3127; or
- (b) electronic switches as defined in AS/NZS 60669.2.1.

See [Clause 3.3](#) for other relevant Standards covering switches that may affect the application of this Standard.

#### 1.2 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:

AS 1931.1, *High-voltage test techniques, Part 1: General definitions and test requirements*

AS 60529, *Degrees of protection provided by enclosures (IP Code)*

AS 60947.3, *Low-voltage switchgear and controlgear, Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units*

AS/NZS 3100, *Approval and test specification—General requirements for electrical equipment*

AS/NZS 3121, *Approval and test specification—Insulating mouldings*

AS/NZS 60669.1, *Switches for household and similar fixed-electrical installations, Part 1: General requirements (IEC 60669-1:2017 (ED. 4.0)/COR 1:2020 MOD)*

### 2 Terms and definitions

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

#### 2.1

##### **air-break switch**

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

Note 1 to entry: For the purpose of this Standard, “air-break switch” is referred to as “switch”.

#### 2.2

##### **flush switch**

switch for mounting behind or incorporated with a switch plate, the back of the plate being flush with the surface of the wall or enclosure

#### 2.3

##### **intermediate switch**

switch for controlling a circuit where more than two positions of control are required. Such a switch generally occupies an intermediate position between the other switches with which it is used in conjunction