AS 3133:2020

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Approval and test specification — Air-break switches

AS 3133:2020

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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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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.

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will also remain current for 24 months after the date of publication of this Standard and after this time it will be superseded by AS 3133:2020.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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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