

Australian Standard 3133—1980

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APPROVAL AND TEST SPECIFICATION FOR AIR BREAK SWITCHES (LOW AND MEDIUM VOLTAGE TYPES WITH CURRENT RATINGS NOT EXCEEDING 300 A)

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- Australian Chamber of Commerce**
- Australian Electrical and Electronics Manufacturers Association**
- Confederation of Australian Industry**
- Department of Housing and Construction**
- Electrical Apparatus Approvals Authorities**
- Electrical Contractors Association of Australia**
- Electrical Testing Laboratories**
- Electricity Supply Association of Australia**
- Electronic Importers Association**

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STANDARDS ASSOCIATION OF AUSTRALIA

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Amendment No 1

to

AS 3133—1980

Approval and Test Specification for

AIR BREAK SWITCHES

(Low and Medium Voltage Types With Current Rating Not Exceeding 300 A)

REVISED TEXT

The 1980 edition of AS 3133 is amended as follows; the amendment should be inserted in the appropriate place.

SUMMARY: The following sections of the standard are covered by this amendment: Clause 5.1 and Clause 12.13 (new). In addition a number of references to AS C100 have been changed to AS 3100.

Published on 11 October 1982.

Preface.

Page 5. (Line under title.)

Clauses 3.1, 9, 10, 11.1, 12.4, 12.6.2(b), 12.8.2, 12.8.3 and 12.10.

Delete 'AS C100' and insert 'AS 3100'.

This amendment forms part of the specification on publication.

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Page 7. Clause 5.1.

Delete existing first paragraph and substitute:

5.1 General. All insulating material, except ceramic, shall comply with the requirements of Clause 12.13, and any insulating material used as functional insulation shall have adequate mechanical and electrical strength.

This amendment forms part of the specification on 1 November 1983.

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Page 16. New Clause 13.

Add new Clause 12.13 as follows:

12.13 Determination of Ignitability and Combustion Propagation. This test shall be carried out in accordance with the provisions of Clause 6.1 of AS 3100 with values in Clause 6.1.1 for (a) and (b) as follows:

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(a) 750°C for 30 s.

(b) 650°C for 30 s.

This amendment forms part of the specification on 1 November 1983.

PREFACE

This revised specification, prepared by Committee EL/2, Electrical Approvals Standards, was approved on behalf of the Council of the Standards Association of Australia on 25 August 1980, and was published on 1 November 1980.

It is one of a series of approval and test specifications issued by the Association under Part 2 of the SAA Wiring Rules. These specifications are accompanied by a general specification, AS ~~3100~~³¹⁰⁰, containing definitions and general requirements for electrical materials and equipment. The purpose of these specifications is to outline conditions which must be met to secure approval for the sale and use of electrical equipment in Australia. Only safety matters and related conditions are covered.

This edition is technically identical with the 1977 edition except that it incorporates Amendment No 1 to that edition (renumbered as Clause 3.4), which was issued in July 1979, and includes a change to Clause 12.8.3, 2nd paragraph, in which the test cables are now as specified in Clause 8.12 (ii) of AS ~~3100~~³¹⁰⁰.

This specification supersedes AS 3133—1977 from date of publication.

The Association desires to call attention to the fact that this specification does not purport to include all the necessary provisions of a contract.

This specification requires reference to Australian standard approval and test specifications—

AS 3121 Insulating Mouldings

AS ~~3100~~³¹⁰⁰ Definitions and General Requirements for Electrical Materials and Equipment

and to Australian standard—

AS 1775 Air-break Switches, Isolators and Fuse-combination Units (up to and including 1000 V a.c. and 1200 V d.c.)

Amend 1

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard APPROVAL AND TEST SPECIFICATION FOR AIR BREAK SWITCHES

This specification shall be read in conjunction with AS ~~€100~~. (See also Clause 3, below.)

3100 (Cond 1)

1 SCOPE. This specification applies to air break switches operated manually, mechanically, hydraulically or by other means, having current ratings not exceeding 300 A, and intended for use in electrical circuits and appliances operating at low or medium voltage.

It does not apply to the following:

- (a) Switches within the scope of other approval and test specifications or switches which are specifically excluded from compliance with AS 3133 in another approval and test specification.
- (b) Motor starters and speed controllers other than direct-on-line starting switches of the manually operated type.
- (c) Switches not intended to make or break a circuit on load, such as isolating switches and certain types of reversing switch.

2 DEFINITIONS. For the purposes of this specification the following definitions apply:

2.1 Air break switch—a mechanical device for making and breaking in air a circuit carrying a load current.

2.2 Ceiling switch—a switch for mounting on a ceiling or suitable overhead surface and operated by pulling a cord or the like attached to the switch.

2.3 Flush switch—a 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.

2.4 Intermediate switch—a switch for controlling a circuit where more than two positions of control are required, and which generally occupies an intermediate position between the two 2-way switches used in conjunction therewith.

2.5 Isolating switch—a switch for making and breaking a circuit, when it is not on load.

2.6 Number of ways (of a switch)—the number of paths provided on each pole.

2.7 (An) Operation—a make and break on one set of contacts in the switch in the manner intended under normal conditions of use.