

1980

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*Amend 1.  
Cover.*

# Australian Standard 3300—1978

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## APPROVAL AND TEST SPECIFICATION FOR GENERAL REQUIREMENTS FOR HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES

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**STANDARDS ASSOCIATION OF AUSTRALIA**

*Incorporated by Royal Charter*

**THE FOLLOWING SCIENTIFIC, INDUSTRIAL AND GOVERNMENTAL ORGANIZATIONS and departments were officially represented on the committee entrusted with the preparation of this standard:**

**Australian Chamber of Commerce**

**Australian Electrical and Electronics Manufacturers Association**

**Confederation of Australian Industries**

**Electrical Apparatus Approvals Authorities**

**Electrical Contractors Associations of Australia**

**Electrical Testing Laboratories**

**Electricity Supply Association of Australia**

**Electronics Importers Association**

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**This standard, prepared by Committee EL/2, Electrical Approvals Standards, was approved on behalf of the Council of the Standards Association of Australia on 29 May 1978, and was published on 1 September 1978.**

**To keep abreast of progress in industry, Australian standards are regularly reviewed. Suggestions for improvements to published standards, addressed to the head office of the Association, are welcomed.**

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***This standard was issued in draft form for public review as DR 76082.***

Amendment No 1  
July 1979

STANDARDS ASSOCIATION OF AUSTRALIA  
Incorporated by Royal Charter

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AMENDMENT No 1  
to  
AS 3300—1978

SAA APPROVAL AND TEST SPECIFICATION  
FOR  
GENERAL REQUIREMENTS FOR HOUSEHOLD AND SIMILAR  
ELECTRICAL APPLIANCES

The 1978 edition of AS 3300 is amended as follows; the amendments should be inserted in the appropriate place.

*SUMMARY:* The following sections of the standard are covered by this amendment; Clause 30.2 and Fig. 12.

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**Clause 30.2.**

*Delete* the last five paragraphs and note from this clause.

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JULY  
1979

**This amendment forms part of the specification on publication.**

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**Fig. 12.**

*Delete* this figure.

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Published on 1 August 1979.

STANDARDS ASSOCIATION OF AUSTRALIA  
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SAA Approval and Test Specification  
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GENERAL REQUIREMENTS FOR HOUSEHOLD AND SIMILAR  
ELECTRICAL APPLIANCES

The 1980 edition of AS 3300 is amended as follows; the amendment should be inserted in the appropriate place.

*SUMMARY:* The following sections of the standards are covered by this amendment: Table 7 and Clause 19.8.

Published on 1 May 1981.

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**Page 28. Table 7.**

- (i) *Delete* asterisk and associated footnote.
- (ii) *Add* the following new columns to Table 7.

5	6
Class F	Class H
240	260
190	210
240	260
215	235
190	210

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**This amendment forms part of the specification on publication.**

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**Page 28. Clause 19.8.**

*Delete* 'and' after item (b).

*Add* the following to the third paragraph:

- (d) for Class F material . . . . . 180°C; and
- (e) for Class H material . . . . . 200°C

**This amendment forms part of the specification on publication.**

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1981

**AUSTRALIAN STANDARD**

**APPROVAL AND TEST SPECIFICATION**

**FOR**

**GENERAL REQUIREMENTS  
FOR HOUSEHOLD AND SIMILAR  
ELECTRICAL APPLIANCES**

**AS 3300 — 1978**

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## P R E F A C E

This standard was prepared by the Association's Committee on Electrical Approvals Standards. It is the basic or parent specification of a new series of Australian specifications that will ultimately replace those existing approval and test specifications dealing with household and similar electrical appliances; the new specifications will be issued progressively and will need to be read in conjunction with this standard. (See Introduction to Part 2 of the SAA Wiring Rules herein.) The new series is based on a similar series of specifications issued by the International Electrotechnical Commission (IEC).

It is intended that a number of other basic specifications will be prepared to cover items of electrical equipment other than appliances, such as accessories, wiring equipment, control devices, protective devices, electronic equipment, isolating transformers, etc. These basic specifications, together with the particular specifications related to them, will eventually supersede the existing AS C100, Approval and Test Specification for Definitions and General Requirements for Electrical Materials and Equipment, and the series of particular specifications in the AS C101 to AS C199 and AS 3101 to AS 3199 groups which currently are related to AS C100. It is expected that AS C100 will be in use for a considerable period of time whilst it is referred to by any existing particular specification or is otherwise required.

The existing basic specification AS C100 includes general requirements applicable to all appliances and the related particular specifications contain additional requirements for each appliance or group of appliances. In the new series, the basic specification AS 3300 contains a wide range of requirements, all of which may not necessarily be applicable to a particular appliance. A particular specification in the new series converts AS 3300 into the specification for the type of appliance being considered; it does this by indicating, clause by clause, whether or not the requirements and test methods are applicable in whole or in part or whether they should be replaced, modified or supplemented.

Whereas AS C100 may be satisfactorily used as a specification for an appliance for which there is no particular specification related to AS C100, it is not practicable to use AS 3300 in a similar manner. It may however be used as a guide by

taking into account particular specifications related to AS 3300 for similar equipment.

Where a particular specification related to AS 3300 is published for an appliance covered by an existing particular specification related to AS C100, the existing specification will not be withdrawn for a period of approximately two years following publication of the new specification. Until such time as a new series specification is issued, the existing particular specification related to AS C100 will apply; however, during the 2-year period before withdrawal of an existing particular specification when two specifications are concurrent for the same appliance, it is anticipated that regulatory authorities will approve appliances to either specification.

While this standard closely follows the IEC Publication 335-1 (2nd Edition including Amendment No 1), Safety of Household and Similar Electrical Appliances—General Requirements, some of the requirements of that publication have been modified to take account of local conditions. Where this standard deviates technically from the IEC document by way of additional or different requirements, the deviation is indicated by a rule in the margin against the clause, or part thereof, affected.

In this standard the requirements proper appear in 'normal' type and the test requirements appear in *italic* type. Explanatory matters are contained in notes to the clauses, in a smaller size of the 'normal' type.

This standard requires reference to the existing standards that constitute Part 2 of the SAA Wiring Rules (see list following 'Introduction to Part 2') and to the following Australian and British standards:

- AS 1279 Refined Copper
- AS 1566 Copper and Copper Alloy Plate, Rolled Bar, Sheet, Strip and Foil for General Engineering Purposes
- AS 1931 High Voltage Testing Techniques
- AS 1939 Classification of Degrees of Protection Provided by Enclosures for Electrical Equipment
- BS 5267 A.C. Motor Capacitors

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## STANDARDS ASSOCIATION OF AUSTRALIA

**Australian Standard**  
**APPROVAL AND TEST SPECIFICATION FOR**  
**GENERAL REQUIREMENTS FOR HOUSEHOLD AND**  
**SIMILAR ELECTRICAL APPLIANCES**

**1. SCOPE**

**1.1 SCOPE AND APPLICATION.** This specification applies to electric heating appliances and electric motor-operated or magnetically-driven appliances for household and similar purposes.

**NOTES:**

1. Appliances not intended for normal household use but which nevertheless may be a source of danger to the public, such as appliances intended to be used by laymen in shops, in light industry and on farms, are within the scope of this specification. Examples of such appliances are appliances for hair-dressers, soldering irons, glue pots, sterilizers, infra-red radiation appliances, feed boilers, water pumps and lawn mowers.
2. Except in so far as this specification deals with electric toys, it does not take into account the special hazards which exist in nurseries and other places where there are young children or aged or infirm persons without supervision; in such cases, additional requirements may be necessary.
3. This specification does not apply to—
  - (a) electronic sound and vision equipment (see AS 3159);
  - (b) electromedical equipment;
  - (c) wires and cables; and
  - (d) accessories.

**1.2 INTERFERENCE SUPPRESSION.** This specification is concerned with safety and takes into account the influence on safety of components necessary to achieve a required degree of radio and television interference suppression.

**2. DEFINITIONS**

**2.1 VOLTAGES AND CURRENT.** Where the terms voltage and current are used, they imply r.m.s. values, unless otherwise specified.

**2.2 SPECIFIC DEFINITIONS.**

**2.2.1 Rated voltage** denotes the voltage (for three-phase supply, the voltage between phases) assigned to the appliance by the maker.

**2.2.2 Rated voltage range** denotes the voltage range assigned to the appliance by the maker, expressed by its lower and upper limits.

**2.2.3 Working voltage** denotes the maximum voltage to which the part under consideration can be subjected when the appliance is operating at its rated voltage and under normal conditions of use.

**NOTES:**

1. Normal conditions of use include changes of voltage within the appliance imposed by likely occurrences such as the operation of a circuit-breaker or the failure of a lamp.
2. When deducing the working voltage, the effect of possible transient voltages on the supply mains is ignored.

**2.2.4 Rated input** denotes the input under conditions of adequate heat discharge or under normal load and at normal operating temperature, assigned to the appliance by the maker.

**2.2.5 Rated current** denotes the current assigned to the appliance by the maker.

**NOTE:** If no current is assigned to the appliance, the rated current for the purpose of this specification is determined by calculation from the rated input and the rated voltage and or by measuring the current when the appliance is operating at rated voltage under normal load and at normal operating temperature.

**2.2.6 Rated frequency** denotes the frequency assigned to the appliance by the maker.

**2.2.7 Rated frequency range** denotes the frequency range assigned to the appliance by the maker, expressed by its lower and upper limits.

**2.2.8 Rated capacity** for appliances with a liquid container denotes the quantity of liquid for which the appliance is designed.

**2.2.9 Detachable flexible cable or cord** denotes a flexible cable or cord, for supply or other purposes, intended to be connected to the appliance by means of a suitable appliance coupler.

**2.2.10 Power supply cord** denotes a flexible cable or cord, for supply purposes, fixed to, or assembled with, the appliance according to one of the following methods:

- (a) **Type X attachment** which denotes a method of attachment such that the flexible cable or cord can easily be replaced, without the aid of special purpose tools, by a flexible cable or cord not requiring any special preparation.
- (b) **Type M attachment** which denotes a method of attachment such that the flexible cable or cord can easily be replaced, without the aid of special purpose tools, by a special cable or cord with, for example, a moulded-on cord guard or crimped terminations.
- (c) **Type Y attachment** which denotes a method of attachment such that the flexible cable or cord can only be replaced with the aid of special purpose tools normally available only to the manufacturer or his agents.

**NOTE:** Type Y attachments may be used either with common flexible cables or cords or with special cables or cords.

- (d) **Type Z attachment** which denotes a method of attachment such that the flexible cable or cord cannot be replaced without breaking or destroying a part of the appliance.