AS/NZS 60335.1:2011

Australian/New Zealand Standard

Household and similar electrical appliances – Safety –

Part 1: General requirements

Includes IEC 60335-1 Ed 5.2
This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL/2 - Safety of household and similar electrical appliances and small power transformers. It was approved on behalf of the Council of Standards Australia on 4 April 2011 and by the Council of Standards New Zealand on 21 April 2011. It was published on 29 April 2011.

The following interests are represented on Committee EL/2

A5
Association of Accredited Certification Bodies

A4
Australian Industry Group

National Retailers Association (Australia)

Business New Zealand

Consumer Electronic Suppliers Association, Australia

Consumers’ Federation of Australia

A2
Electrical Regulatory Authorities, Australia

Electrical consultants

Engineers Australia

JAS-ANZ

Testing Interests New Zealand

WorkSafe, New Zealand

New Zealand Electric Fence Energizer Manufacturers’ Standards Group

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Standards are living documents, which reflect progress in science, technology and systems.

To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about joint Australian/New Zealand standards can be found by visiting the standards webshop in Australia at [www.saiglobal.com](http://www.saiglobal.com) or Standards New Zealand’s website at [www.standards.govt.nz](http://www.standards.govt.nz).

For more frequent listings or notification of revisions, amendments, and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national standards organisation.

We also welcome suggestions for improvement in our standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of Standards Australia or the New Zealand Standards Executive at the address shown on the title page.

*This standard was issued in draft form for comment as DR 10912*
STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

AS/NZS 60335.1:2011

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 1: General requirements

Foreword

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-002- Safety of Household and Similar Electrical Appliances and Small Power Transformers to supersede AS/NZS 60335.1:2002 and its amendments three years from the date of publication.

The objective of this Standard is to provide manufacturers, designers, regulatory authorities, testing laboratories and similar organizations with safety requirements designed to give the user protection against hazards that might occur during normal operation and abnormal operation of the appliance and which may be used as the basis for approval for sale or for connection to the electricity supply mains in Australia and New Zealand.

The text of IEC 60335-1 Ed 5, prepared by IEC Technical Committee 61, was submitted to the Standards Australia/Standards New Zealand Combined Procedure (dual public comment and committee vote) for adoption of the IEC standard as a Standards Australia/Standards New Zealand joint standard.

The principal changes in this edition as compared with the 2002 edition of AS/NZS 60335.1 are as follows (minor changes are not listed):

– updated the text of the standard to align with the most recent editions of the dated normative references;
– modified the functional safety requirements using programmable electronic circuits including software validation requirements;
– updated Clause 29 to cover insulation requirements subjected to high frequency voltages as in switch mode power supply circuits;
– updated Subclause 30.2 to further align the pre-selection option with the end-product test option;
– deleted some notes and converted many other notes to normative text;
– clarified requirements for class III appliances and class III constructions.

The text of IEC 60335-1 Ed 5 amendment 1, prepared by IEC Technical Committee 61, was submitted to the Standards Australia/Standards New Zealand Combined Procedure (dual public comment and committee vote) for adoption as amendment 2 to the Standards Australia/Standards New Zealand joint standard AS/NZS 60335.1:2011.

The text of IEC 60335-1 Ed 5 amendment 2 including its corrigendum 1, prepared by IEC Technical Committee 61, was submitted to the Standards Australia/Standards New Zealand Combined Procedure (dual public comment and committee vote) for adoption as an amendment to the Standards Australia/Standards New Zealand joint standard AS/NZS 60335.1:2011.
This Standard incorporates Amendment No.1 (June 2012), Amendment No. 2 (November 2014), Amendment No. 3 (November 2015) and Amendment No. 4 (June 2017). 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. Where an application date other than immediate is applicable to an amendment the date of application (DOA) and the Date of withdrawal (DOW), if relevant is indicated by the marginal bar against the part affected. Unless otherwise indicated, the application date of the changes introduced by Amendment No. 3 is 30 November 2017 and Amendment No. 4 is 30 June 2019.

This Standard incorporates Amendment No.1 (June 2012), Amendment No. 2 (November 2014), Amendment No. 3 (November 2015), Amendment No. 4 (June 2017) and Amendment No. 5 (June 2019). The changes required by the amendments are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected. Where an application date other than immediate is applicable to an amendment the date of application (DOA) and the date of withdrawal (DOW), if relevant is indicated by the marginal bar against the part affected. Unless otherwise indicated, the application date of the changes introduced by Amendment No. 5 is 28 June 2021.

NOTE: Regulatory authorities that reference this Standard in regulation may apply these amendment requirements at a different time. Users of this Standard should consult with these authorities to confirm their requirements.

This Standard is an adoption with national modifications of the fifth edition of IEC 60335-1, Household and similar electrical appliances – Safety – Part 1: General requirements including its
- corrigendum 1 (July 2010);
- amendment 1 (2013) including its corrigendum 1 (January 2014);
- corrigendum 1 (April 2014) to IEC 60335-1 edition 5.1;
- amendment 2 (2016) including its corrigendum 1 (September 2016).

It has been varied as indicated to take account of Australian and New Zealand conditions.

This part is to be used in conjunction with the appropriate Part 2 of AS/NZS 60335. The Parts 2 contain clauses to supplement or modify the corresponding clauses in this part to provide the relevant requirements for each type of appliance.

NOTE 1 The following annexes contain provisions suitably modified from other IEC standards:
- Annex E Needle-flame test IEC 60695-11-5
- Annex F Capacitors IEC 60384-14
- Annex G Safety isolating transformers IEC 61558-1 and IEC 61558-2-6
- Annex H Switches IEC 61058-1
- Annex J Coated printed circuit boards IEC 60664-3
- Annex N Proof tracking test IEC 60112
- Annex R Software evaluation IEC 60730-1

NOTE 2 The following numbering system is used:
- subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;
- unless notes are in a new subclause or involve notes in Part 1, they are numbered starting from 101, including those in a replaced clause or subclause;
- additional annexes are lettered AA, BB, etc.;
- subclauses, notes and annexes that are additional to those in the IEC standard are prefixed with the letters AZ.

NOTE 3 The following print types are used:
- requirements: in roman type;
- test specifications: in italic type;
- notes: in small roman type.

Words in bold in the text are defined in Clause 3.

p NOTE 4 In this document, p is used in the margin to indicate instructions for preparing a consolidated version.