

COMMITTEE: EL-002

Safety of Household and Similar Electrical Appliances and Small Power Transformers

DR 25002 CP

**DRAFT**

# **COMBINED POSTAL BALLOT/ AUSTRALIAN / NEW ZEALAND STANDARD FOR COMMENT**

LIABLE TO ALTERATION DO NOT USE AS A STANDARD

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28 July 2025

DR 25002 CP

**AS/NZS 60335.2.15:202x**

**Household and similar electrical appliances –  
Safety**

**Part 2.15: Particular requirements for  
appliances for heating liquids**

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STANDARDS  
Australia

 **STANDARDS  
NEW ZEALAND**  
TE MANA TAUTIKANGA O AOTEAROA

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COMBINED DRAFT FOR COMMENT/POSTAL BALLOT  
STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Committee EL-002, *Safety of household and similar electrical appliances and small power transformers*

**DRAFT**

**Australian/New Zealand standard**

**Household and similar electrical appliances – Safety**

**Part 2.15: Particular requirements for appliances for heating liquids**

Please note that this document is currently being voted on by the committee and the results of the postal ballot will be contingent on public comments received.

Comments on the proposal are invited from persons and organisations concerned with this subject.

Attention is drawn to the fact that this document is a draft only and is liable to alteration in the light of comments received. It is not to be regarded as an Australian/New Zealand standard until it is issued as such by Standards Australia and Standards New Zealand.

**NOTES OF THE SECRETARY:**

THE INTRODUCTION OF ANY NATIONAL VARIATIONS TO BE INCLUDED IN THIS STANDARD WILL OCCUR AFTER PUBLIC COMMENTS HAVE BEEN CONSIDERED AND PRIOR TO THE PUBLICATION OF THE STANDARD.

THIS DOCUMENT MUST BE READ IN CONJUNCTION WITH IEC 60335-2-15, ED. 7.0, COPIES OF WHICH MAY BE VIEWED BY CONTACTING [enquiries@standards.govt.nz](mailto:enquiries@standards.govt.nz).

This joint Australian/New Zealand standard was prepared by Joint Technical Committee EL-002, *Safety of household and similar electrical appliances and small power transformers*. It was approved on behalf of Standards Australia's Standards Development and Accreditation Committee on yyysa and by the New Zealand Standards Approval Board on yyynz.

It was published on yyyanz.

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The following interests are represented on Committee EL-002:

Association of Accredited Certification Bodies

Australian Industry Group

Australian Retailers Association

Building Commission NSW

Business New Zealand

Consumer Electronic Suppliers Association, Australia

Consumers' Federation of Australia

Electrical consultants

Electrical Regulatory Authorities, Australia

Engineers Australia

International Accreditation New Zealand

JAS-ANZ

National Retailers Association (Australia)

New Zealand Electric Fence Energizer Manufacturers' Standards Group

WorkSafe, New Zealand

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### **Keeping standards up-to-date**

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.

For more information about joint standards, visit [www.standards.govt.nz](http://www.standards.govt.nz) or [www.standards.org.au](http://www.standards.org.au). 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 comment to either 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 25002.*

## Australian/New Zealand Standard

### Household and similar electrical appliances – Safety

### Part 2.15: Particular requirements for appliances for heating liquids

Superseding AS/NZS 60335.2.15:2019 on qh mnop 20xx

First published in Australia as AS 3313-1989.

Second edition 1993.

First published in New Zealand as NZS 6315:1989.

Jointly revised and redesignated AS/NZS 3350.2.15:1997.

Second edition 2002.

Jointly revised and redesignated AS/NZS 60335.2.15:2002.

Jointly revised and redesignated AS/NZS 60335.2.15:2013.

Jointly revised and redesignated AS/NZS 60335.2.15:2019.

Jointly revised and redesignated AS/NZS 60335.2.15:202x.

## STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

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**AS/NZS 60335.2.15:202x**  
**HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES –**  
**SAFETY****Part 2.15: Particular requirements for appliances for heating liquids****Preface**

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 60335.2.15:2019 3 years from the date of publication of this standard. During this period, AS/NZS 60335.2.15:2019 and its amendments will remain current. Regulatory authorities that reference this standard in regulation may apply these requirements at a different time. Users of this standard should consult these authorities to confirm their requirements.

The objective of this standard is to provide manufacturers, designers, regulatory authorities, testing laboratories, and similar organisations 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 60335-2-15, Ed. 7.0, prepared by IEC Technical Committee TC 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 2019 edition of AS/NZS 60335.2.15 are as follows (minor changes are not listed):

- (a) Alignment with AS/NZS 60335.1:2022;
- (b) Conversion of some notes to normative text (clause 1 and subclauses 8.1.2, 11.7.104, 15.2, and 15.101);
- (c) Introduction of surface temperature limits (subclauses 3.6.102, 7.1, 7.6, 7.12, 7.14, 7.15, 11.1, and 11.3);
- (d) Addition of instructions for appliances with liquid containers made from polycarbonate material and kettles (subclause 7.12);
- (e) Introduction of test probe 18 and clarification of the application force for test probes in subclause 20.103;
- (f) Improvement of spillage test for coffeemakers with a removable coffee pot and addition of test for appliances with a surface that will support a cup of vessel (subclause 15.2);
- (g) Specified that kettles are to be tested with NaCl instead of the spillage solution (subclause 15.2);
- (h) Addition of spillage tests for built-in appliances (subclauses 15.104 and 15.105);
- (i) Addition of compliance criteria for impact testing on glass containers of kettles, coffeemakers and tea makers (subclause 21.1);
- (j) Addition of requirements for the strength of kettle handles (subclauses 21.101 and 21.102);
- (k) Clarification of requirements for drain holes (subclause 22.6);
- (l) Added requirements for remote operation (subclauses 22.49 and 22.51);
- (m) Clarification of test method evaluation of appliance couplers for cordless appliances (subclause 22.103);
- (n) Clarification of requirements for pressure cookers (subclauses 22.108, 22.108.1, 22.108.2, and 22.109);

- (o) Revision of requirements for the maximum rotation angle of a frothing or hot water nozzle (subclauses 22.115, R.2.2.5, and R.2.2.9);
- (p) Addition of requirements for programmable electronic circuits that limit the number of heating elements and motors able to operate at the same time (subclauses 22.116, R.2.2.5, and R.2.2.9).

This standard is an adoption with national modifications of the seventh edition of IEC 60335-2-15, *Household and similar electrical appliances – Safety – Part 2-15: Particular requirements for appliances for heating liquids*. It has been varied as indicated to take account of Australian and New Zealand conditions.

This part 2 has to be used in conjunction with the latest edition of AS/NZS 60335.1, *Household and similar electrical appliances – Safety – Part 1: General requirements* and its amendments, unless that edition precludes it. In that case, the latest edition that does not preclude it is used. It was established on the basis of AS/NZS 60335.1:2022.

This part 2 supplements or modifies the corresponding clauses of AS/NZS 60335.1 so as to convert it into the Australian/New Zealand standard: Safety requirements for appliances for heating liquids.

When a particular subclause of AS/NZS 60335.1 is not mentioned in this part 2, that subclause applies as far as is reasonable. When this standard states 'addition', 'modification', or 'replacement', the relevant text of AS/NZS 60335.1 is to be adapted accordingly.

NOTE 1 The following numbering system is used:

- subclauses, tables, and figures that are numbered starting from 101 are additional to those in AS/NZS 60335.1;
- unless notes are in a new subclause or involve notes in AS/NZS 60335.1, they are numbered starting from 101, including those in a replaced clause or subclause;
- additional annexes are lettered AA, BB, and so on;
- subclauses, notes, and annexes that are additional to those in the IEC standard are prefixed with the letters AZ.

NOTE 2 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 3 In this document, p is used in the margin to indicate instructions for preparing a consolidated version.

The essential safety requirements in AS/NZS 3820<sup>1</sup> that could be applicable to requirements for appliances for heating liquids are covered by this standard.

Where national variations listed in AS/NZS 60335.1 (adopting IEC 60335-1) affect IEC 60335-2-15, Ed. 7.0, these, along with the variations listed below, form the Australian and New Zealand national variations for purposes of the IECEE scheme for recognition of results of testing to standards for safety of electrical equipment (the CB scheme).

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<sup>1</sup> AS/NZS 3820, *Essential safety requirements for electrical equipment*.

The text of the international standard IEC 60335-2-15, Ed. 7.0 was approved as a joint Australian/New Zealand standard, noting the effect of national variations in AS/NZS 60335.1:2022.

## AUSTRALIAN NATIONAL VARIATIONS

The following national variations to this Part 2 are additional to those listed in the national variations of AS/NZS 60335.1:2022.

### 3 Terms and definitions

- p After 3.113, *insert* the following variation:

#### **AZ.3.101**

##### **all-in-one kitchen appliance**

combined appliance that incorporates both the functions of an electric kitchen machine and an appliance for heating liquids for household and similar purposes but does not include a pressure-cooking function

### 5 General conditions for the tests

- p **5.2** *Add* the following variation to the addition:

*For kettles having a glass water container, 10 additional samples are required for the tests of 21.1.*

- p After 5.101, *insert* the following variation:

**AZ.5.101** *All-in-one kitchen appliances are also subjected to the tests specified in AS/NZS 60335.2.14 for food blenders, liquid blenders, food mixers, and food processors.*

### 7 Marking and instructions

- p **7.1** After the last paragraph *insert* the following variation:

Kettles fitted with earthed, tubular sheathed heating elements that are immersed in water shall be marked with the following:

CAUTION: This kettle should be used with a residual current device (safety switch) to lessen the risk of scalding or other injury from hot water that may be ejected if the heating element ruptures.

Disregard this marking if your home is fitted with a residual current device (safety switch).

- p **7.12** After the last paragraph, *insert* the following variation:

The instructions for kettles shall state the substance of the following:

CAUTION: Do not operate the kettle on an inclined plane. Do not operate the kettle unless the element is fully immersed. Do not move while the kettle is switched on.

The instructions for appliances with enclosures made from polycarbonate material shall state the substance of the following:

CAUTION: To prevent damage to the appliance, do not use alkaline cleaning agents when cleaning. Use a soft cloth and a mild detergent.

- p **7.14** After 7.12, *insert* the following variation:

*Addition:*

In the cautionary marking relating to kettles, the CAPITAL lettering shall have a height of at least 3 mm.

- p 7.15 After the variation for 7.14, insert the following variation:

*Addition:*

The marking relating to kettles shall:

- be on a removable tag attached to the kettle; or
- for kettles fitted with a **supply cord**, it may be permanently marked on the outside of the appliance so that it is visible in normal use; or
- for kettles fitted with an appliance inlet, it may be permanently marked on the appliance inlet or be permanently marked on the outside of the appliance near the appliance inlet so that it is visible in normal use.

## 11 Heating

- p 11.7 After 11.7.106, *insert* the following variation:

**AZ.11.7.101 All-in-one kitchen appliances** are operated until steady conditions are established using the liquid heating function with the most unfavourable load specified in AS/NZS 60335.2.14 for food blenders, liquid blenders, food mixers, and food processors.

- p 11.8 After the addition, *insert* the following variation:

**AZ.11.8.101** During the tests for **all-in-one kitchen appliances**, no mixture shall be expelled from the container and the pressure in the container shall not exceed 4 kPa.

## 21 Mechanical strength

- p 21.1 Add the following variation to the addition:

*The impact energy applied to kettles having a glass water container is increased to 1 J.*

## 22 Construction

- p After 22.115, *insert* the following variations:

**AZ.22.101 All-in-one kitchen appliances** shall be provided with accessories to enable them to operate as an appliance for heating liquids and as a food blender, liquid blender, food mixer, and food processor as specified in AS/NZS 60335.2.14.

*Compliance is checked by inspection.*

**AZ.22.102 All-in-one kitchen appliances** shall incorporate a lid interlock that prevents accidental removal of the lid and ejection of its container contents.

*Compliance is checked by the tests of AZ.22.102.1 and AZ.22.102.2.*

**AZ.22.102.1** The container is filled with water to the maximum level specified in the instructions and the appliance fitted with any mixing, cutting, or stirring attachment provided with the appliance.

*The lid is placed in any position that allows the lid interlock to function.*

*The appliance is then supplied at **rated voltage** and set to operate so that the water in the container heats to its maximum temperature. It is then operated at its maximum speed setting for approximately 5 s. or any cycle that does this. No water shall be ejected from the appliance.*

*An attempt is then made to open the lid with a force of 100 N and the lid shall not open.*



*The appliance is then set to any function or setting that will disengage the lid interlock and an attempt is immediately made to open the lid with a force of 100 N. The force for opening of the lid is applied until the lid opens, taking care to ensure that the force is applied in a manner that does not prevent a lid-interlocking mechanism from operating to release the lid before it is safe to do so.*

*No water shall be ejected from the appliance during the opening of the lid.*

**AZ.22.102.2** *The container is filled with water to the maximum level specified in the instructions and the appliance fitted with any mixing, cutting, or stirring attachment provided with the appliance.*

*The lid is placed in any position that allows the lid interlock to function.*

*The appliance is then supplied at **rated voltage** and set to operate so that the water in the container heats to its maximum temperature. It is then operated at its maximum speed setting for approximately 5 s. or any cycle that does this.*

*Then the mixing, cutting, or stirring attachment provided is stalled and the unit is then restarted with the stall removed.*

*Then the unit is run, and the supply is interrupted, and the unit is then restarted.*

*No water shall be ejected from the appliance.*

## NEW ZEALAND NATIONAL VARIATIONS

The following national variations to this Part 2 are additional to those listed in the national variations of AS/NZS 60335.1:2022.

### 3 Terms and definitions

- p After 3.113, *insert* the following variation:

#### **AZ.3.101**

##### **all-in-one kitchen appliance**

combined appliance that incorporates both the functions of an electric kitchen machine and an appliance for heating liquids for household and similar purposes but does not include a pressure-cooking function

### 5 General conditions for the tests

- p **5.2** *Add* the following variation to the addition:

*For kettles having a glass water container, 10 additional samples are required for the tests of 21.1.*

- p After 5.101, *insert* the following variation:

**AZ.5.101** ***All-in-one kitchen appliances** are also subjected to the tests specified in AS/NZS 60335.2.14 for food blenders, liquid blenders, food mixers, and food processors.*

### 7 Marking and instructions

- p **7.1** After the last paragraph, *insert* the following variation:

Kettles fitted with earthed, tubular sheathed heating elements that are immersed in water shall be marked with the following:

CAUTION: This kettle should be used with a residual current device (safety switch) to lessen the risk of scalding or other injury from hot water that may be ejected if the heating element ruptures.

Disregard this marking if your home is fitted with a residual current device (safety switch).

- p **7.12** After the last paragraph, *insert* the following variation:

The instructions for kettles shall state the substance of the following:

CAUTION: Do not operate the kettle on an inclined plane. Do not operate the kettle unless the element is fully immersed. Do not move while the kettle is switched on.

The instructions for appliances with enclosures made from polycarbonate material shall state the substance of the following:

CAUTION: To prevent damage to the appliance, do not use alkaline cleaning agents when cleaning. Use a soft cloth and a mild detergent.

- p **7.14** After 7.12, *insert* the following variation:

*Addition:*

In the cautionary marking relating to kettles, the CAPITAL lettering shall have a height of at least 3 mm.

- p **7.15** After the variation for 7.14, insert the following variation:

*Addition:*

The marking relating to kettles shall:

- be on a removable tag attached to the kettle; or
- for kettles fitted with a supply cord, it may be permanently marked on the outside of the appliance so that it is visible in normal use; or
- for kettles fitted with an appliance inlet, it may be permanently marked on the appliance inlet or be permanently marked on the outside of the appliance near the appliance inlet so that it is visible in normal use.

## **11 Heating**

- p **11.7** After 11.7.106, *insert* the following variation:

**AZ.11.7.101** *All-in-one kitchen appliances are operated until steady conditions are established using the liquid heating function with the most unfavourable load specified in AS/NZS 60335.2.14 for food blenders, liquid blenders, food mixers, and food processors.*

- p **11.8** After the addition, *insert* the following variation:

**AZ.11.8.101** *During the tests for all-in-one kitchen appliances, no mixture shall be expelled from the container and the pressure in the container shall not exceed 4 kPa.*

## **21 Mechanical strength**

- p **21.1** Add the following variation to the addition:

*The impact energy applied to kettles having a glass water container is increased to 1 J.*

## **22 Construction**

- p After 22.115, *insert* the following variations:

**AZ.22.101 All-in-one kitchen appliances** shall be provided with accessories to enable them to operate as an appliance for heating liquids and as a food blender, liquid blender, food mixer, and food processor as specified in AS/NZS 60335.2.14.

*Compliance is checked by inspection.*

**AZ.22.102 All-in-one kitchen appliances** shall incorporate a lid interlock that prevents accidental removal of the lid and ejection of its container contents.

*Compliance is checked by the tests of AZ.22.102.1 and AZ.22.102.2.*

**AZ.22.102.1** *The container is filled with water to the maximum level specified in the instructions and the appliance fitted with any mixing, cutting, or stirring attachment provided with the appliance.*

*The lid is placed in any position that allows the lid interlock to function.*

*The appliance is then supplied at **rated voltage** and set to operate so that the water in the container heats to its maximum temperature. It is then operated at its maximum speed setting for approximately 5 s. or any cycle that does this. No water shall be ejected from the appliance.*

*An attempt is then made to open the lid with a force of 100 N and the lid shall not open.*

*The appliance is then set to any function or setting that will disengage the lid interlock and an attempt is immediately made to open the lid with a force of 100 N. The force for opening of the lid is applied until the lid opens, taking care to ensure that the force is applied in a manner that does not prevent a lid-interlocking mechanism from operating to release the lid before it is safe to do so.*

*No water shall be ejected from the appliance during the opening of the lid.*

**AZ.22.102.2** *The container is filled with water to the maximum level specified in the instructions and the appliance fitted with any mixing, cutting, or stirring attachment provided with the appliance.*

*The lid is placed in any position that allows the lid interlock to function.*

*The appliance is then supplied at **rated voltage** and set to operate so that the water in the container heats to its maximum temperature. It is then operated at its maximum speed setting for approximately 5 s. or any cycle that does this.*

*Then the mixing, cutting, or stirring attachment provided is stalled and the unit is then restarted with the stall removed.*

*Then the unit is run, and the supply is interrupted, and the unit is then restarted.*

*No water shall be ejected from the appliance.*

## Annex ANZ

(Normative)

### Normative references to international publications with their corresponding joint Australia/New Zealand publications

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by national variations, the relevant joint Australia/New Zealand publication applies if the national variations are needed to ensure the safety of the appliance for Australia/New Zealand conditions. These international publications are indicated by (MOD). If an international publication is not so indicated, then either it or the listed Australia/New Zealand publication may be used. Where there is no equivalent international publication listed, then the Australian/New Zealand publication applies.

Publication	Year	Title	AS/NZS	Year
IEC 60584-1		<i>Thermocouples – Part 1: EMF specifications and tolerances</i>		
IEC 60335-2-14 (MOD)	2024	<i>Household and similar electrical appliances – Safety – Part 2-14: Particular requirements for kitchen machines</i>	60335.2.14	2025