AS/NZS 60335.2.15:2019

Australian/New Zealand Standard™

Household and similar electrical appliances—Safety

Part 2.15: Particular requirements for appliances for heating liquids (IEC 60335-2-15 Ed 6.2, MOD)

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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 the Council of Standards Australia on 26 November 2019 and by the New Zealand Standards Approval Board on 6 November 2019.
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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 Standards may also be withdrawn.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.

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This Standard was issued in draft form for comment as DR 19903.

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Household and similar electrical appliances—Safety

Part 2.15: Particular requirements for appliances for heating liquids (IEC 60335-2-15 Ed 6.2, MOD)

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STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

AS/NZS 60335.2.15:2019

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2.15: Particular requirements for appliances for heating liquids

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 60335.2.15:2013 two years from the date of publication. During this period AS/NZS 60335.2.15:2013 will also remain current. 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

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 60335-2-15 Ed 6.2, 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 2013 edition of AS/NZS 60335.2.15 and its amendments are as follows (minor changes are not listed).

– added modified requirements for feeding-bottle heaters (3.104, 7.12, 22.110);
– clarified the abnormal operation test for kettles (19.101);
– clarified the use of self-resetting thermal cutouts (24.101);

This standard is an adoption with national modifications of the sixth edition of IEC 60335-2-15*, Household and similar electrical appliances – Safety – Part 2-15: Particular requirements for appliances for heating liquids* including its amendment 1 (2016) and amendment 2 (2018). 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. It was established on the basis of AS/NZS 60335.1:2011.

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 Part 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 Part 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 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.;

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– 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[1] that could be applicable to requirements for appliances for heating liquids are covered by this standard.

The national variations to the IEC 60335-2-15 Ed 6.2 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).

The text of the International Standard IEC 60335-2-15 Ed 6.2 was approved as a joint Australia/New Zealand Standard with the agreed national variations as given below.

AUSTRALIAN NATIONAL VARIATIONS

The following national variations to this Part 2 are additional to those listed in the national variations of AS/NZS 60335.1:2011.

2 Normative references

p *Replace* the text with the following variation:

This clause of Part 1 is applicable except as follows.

Addition:

AS/NZS 60335.2.14, *Household and similar electrical appliances – Safety – Part 2.14: Particular requirements for kitchen machines*

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 ten additional samples are required for the tests of 22.101.

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.*

[1] AS/NZS 3820 *Essential safety requirements for electrical equipment*

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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:

AZ11.7.101 ***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*.*

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

The glass of the water container shall not break.

22 Construction

p **22.108** *Replace* the subclause by the following variation:

22.108 VOID

p **22.109** *Replace* the second paragraph of the test specification by the following variation.

The pressure cooker is operated under the conditions of Clause 11 with the lid and any seal, or combination of the two, fitted in the most unfavourable position that allows the pressure cooker to operate.

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

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No water shall be ejected from the appliance.

AZ.22.103 To avoid a pressure build up in the container after the appliance is de-energised at the end of the cooking cycle, due to residual heat of the contents, pressure cookers shall be constructed so that

– the lid cannot be removed while the pressure within the container is excessive;

– there is no build-up of pressure within the container unless the lid is locked.

They shall incorporate a means to release the pressure to a value such that the lid can be removed without risk.

Compliance is checked by inspection and the tests of AZ.22.103.1 and AZ.22.103.2.

AZ.22.103.1 *The pressure cooker is operated as specified in Clause 11 until the **pressure regulator** operates for the first time.*

The pressure cooker is then disconnected from the supply and a force of 150 N is immediately applied to the most unfavourable point where the lid or its handle can be gripped. It shall not be possible to remove the lid.

The internal pressure is then gradually reduced, the force of 150 N being applied taking care to ensure that the force is applied in a manner that does not prevent a lid locking mechanism from operating to release the lid before a safe internal pressure is obtained. The internal pressure is allowed to decrease until the internal pressure does not exceed 4 kPa when the test is stopped.

There shall be no hazardous displacement of the lid or of the pressure cooker contents when the lid is released.

AZ.22.103.2 *The pressure cooker is tested by placing the lid on the appliance in the most unfavourable position without allowing the lid safety locking mechanism to lock. Attempts are made to pressurise the container hydraulically. The internal pressure of the container shall not exceed 4kPa.*

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NEW ZEALAND NATIONAL VARIATIONS

The following national variations to this Part 2 are additional to those listed in the national variations of AS/NZS 60335.1:2011.

2 Normative references

p *Replace* the text with the following variation:

This clause of Part 1 is applicable except as follows.

Addition:

AS/NZS 60335.2.14, *Household and similar electrical appliances – Safety – Part 2.14: Particular requirements for kitchen machines*

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 ten 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 exposed, 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.

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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.

The glass of the water container shall not break.

22 Construction

p **22.108** *Replace* the subclause by the following variation:

22.108 VOID

p **22.109** *Replace* the second paragraph of the test specification by the following variation.

The pressure cooker is operated under the conditions of Clause 11 with the lid and any seal, or combination of the two, fitted in the most unfavourable position that allows the pressure cooker to operate.

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.

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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.

AZ.22.103 To avoid a pressure build up in the container after the appliance is de-energised at the end of the cooking cycle, due to residual heat of the contents, pressure cookers shall be constructed so that

- the lid cannot be removed while the pressure within the container is excessive;
- there is no build-up of pressure within the container unless the lid is locked.

They shall incorporate a means to release the pressure to a value such that the lid can be removed without risk.

Compliance is checked by inspection and the tests of AZ.22.103.1 and AZ.22.103.2.

AZ.22.103.1 *The pressure cooker is operated as specified in Clause 11 until the **pressure regulator** operates for the first time.*

The pressure cooker is then disconnected from the supply and a force of 150 N is immediately applied to the most unfavourable point where the lid or its handle can be gripped. It shall not be possible to remove the lid.

The internal pressure is then gradually reduced, the force of 150 N being applied taking care to ensure that the force is applied in a manner that does not prevent a lid locking mechanism

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from operating to release the lid before a safe internal pressure is obtained. The internal pressure is allowed to decrease until the internal pressure does not exceed 4 kPa when the test is stopped.

There shall be no hazardous displacement of the lid or of the pressure cooker contents when the lid is released.

AZ.22.103.2 *The pressure cooker is tested by placing the lid on the appliance in the most unfavourable position without allowing the lid safety locking mechanism to lock. Attempts are made to pressurise the container hydraulically. The internal pressure of the container shall not exceed 4kPa.*

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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 publications 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.

Publication	Year	Title	AS/NZS	Year
IEC 60335-2-14		*Household and similar electrical appliances – Safety – Part 2-14: Particular requirements for kitchen machines*	60335.2.14	

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-15: Particular requirements for appliances for heating liquids

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
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9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

DISCLAIMER
This Consolidated version is not an official IEC Standard and has been prepared for user convenience. Only the current versions of the standard and its amendment(s) are to be considered the official documents.

This Consolidated version of IEC 60335-2-15 bears the edition number 6.2. It consists of the sixth edition (2012-11) [documents 61/4451/FDIS and 61/4504/RVD], its amendment 1 (2016-04) [documents 61/5109/FDIS and 61/5131/RVD] and its amendment 2 (2018-11) [documents 61/5709/FDIS and 61/5725/RVD]. The technical content is identical to the base edition and its amendments.

This Final version does not show where the technical content is modified by amendments 1 and 2. A separate Redline version with all changes highlighted is available in this publication.

This part of International Standard IEC 60335 has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

The principal changes in this edition as compared with the fifth edition of IEC 60335-2-15 are as follows (minor changes are not listed):

- added requirements for soy milk makers;
- added requirements for dynamic pressure cookers;
- expanded requirements for cordless kettles to cover cordless appliances throughout document;
- reorganized 7.12 so that instructions related to generic types of appliances covered by this part are listed first;
- converted notes to normative (5.2, 7.12, 19.101, 22.7, 22.106, 24.1.5, 24.4, 25.101) text;
- deleted Note in 19.102.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

This part 2 is to be used in conjunction with the latest edition of IEC 60335-1 and its amendments. It was established on the basis of the fifth edition (2010) of that standard.

NOTE 1 When “Part 1” is mentioned in this standard, it refers to IEC 60335-1.

This part 2 supplements or modifies the corresponding clauses in IEC 60335-1, so as to convert that publication into the IEC standard: Safety requirements for appliances for heating liquids.

When a particular subclause of Part 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 in Part 1 is to be adapted accordingly.

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.

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. When a definition concerns an adjective, the adjective and the associated noun are also in bold.

The committee has decided that the contents of the base publication and its amendments will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

NOTE 4 The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations may need a transitional period following publication of a new, amended or revised IEC publication in which to make products in accordance with the new requirements and to equip themselves for conducting new or revised tests.

It is the recommendation of the committee that the content of this publication be adopted for implementation nationally not earlier than 12 months or later than 36 months from the date of publication.

A list of all parts of the IEC 60335 series, under the general title: *Household and similar electrical appliances – Safety*, can be found on the IEC website.

The following differences exist in the countries indicated below.

– 19.101: The test is not applicable (Japan).
– 25.8: A supply cord having a cross-sectional area of 0,75 mm² is not allowed for appliances having a rated current exceeding 6 A (Japan).
– 25.8: Longer supply cords are allowed (Japan).

INTRODUCTION

It has been assumed in the drafting of this International Standard that the execution of its provisions is entrusted to appropriately qualified and experienced persons.

This standard recognizes the internationally accepted level of protection against hazards such as electrical, mechanical, thermal, fire and radiation of appliances when operated as in normal use taking into account the manufacturer's instructions. It also covers abnormal situations that can be expected in practice and takes into account the way in which electromagnetic phenomena can affect the safe operation of appliances.

This standard takes into account the requirements of IEC 60364 as far as possible so that there is compatibility with the wiring rules when the appliance is connected to the supply mains. However, national wiring rules may differ.

If an appliance within the scope of this standard also incorporates functions that are covered by another part 2 of IEC 60335, the relevant part 2 is applied to each function separately, as far as is reasonable. If applicable, the influence of one function on the other is taken into account.

When a part 2 standard does not include additional requirements to cover hazards dealt with in Part 1, Part 1 applies.

NOTE 1 This means that the technical committees responsible for the part 2 standards have determined that it is not necessary to specify particular requirements for the appliance in question over and above the general requirements.

This standard is a product family standard dealing with the safety of appliances and takes precedence over horizontal and generic standards covering the same subject.

NOTE 2 Horizontal and generic standards covering a hazard are not applicable since they have been taken into consideration when developing the general and particular requirements for the IEC 60335 series of standards. For example, in the case of temperature requirements for surfaces on many appliances, generic standards, such as ISO 13732-1 for hot surfaces, are not applicable in addition to Part 1 or part 2 standards.

An appliance that complies with the text of this standard will not necessarily be considered to comply with the safety principles of the standard if, when examined and tested, it is found to have other features that impair the level of safety covered by these requirements.

An appliance employing materials or having forms of construction differing from those detailed in the requirements of this standard may be examined and tested according to the intent of the requirements and, if found to be substantially equivalent, may be considered to comply with the standard.

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-15: Particular requirements for appliances for heating liquids

1 Scope

This clause of Part 1 is replaced by the following.

This International Standard deals with the safety of electrical appliances for heating liquids for household and similar purposes, their **rated voltage** being not more than 250 V.

NOTE 101 Some appliances can be used for heating food.

NOTE 102 Examples of appliances that are within the scope of this standard are

– coffee-makers;
– cooking pans;
– egg boilers;
– **feeding-bottle heaters**;
– kettles and other appliances for boiling water, having a **rated capacity** not exceeding 10 l;
– milk heaters;
– pressure cookers having a **rated cooking pressure** not exceeding 140 kPa and a **rated capacity** not exceeding 10 l;
– **rice cookers**;
– slow cookers;
– **steam cookers**;
– **soy milk makers**;
– tea maker;
– wash boilers;
– yoghurt makers.

Appliances can have more than one function.

Appliances intended for normal household and similar use and that may also be used by laymen in shops, in light industry and on farms, are within the scope of this standard.

NOTE 103 Examples of such appliances are

– glue pots with a water jacket;
– livestock feed boilers;
– sterilizers.

If the appliance is intended to be used professionally to process food for commercial consumption, the appliance is not considered to be for household and similar use only.

As far as is practicable, this standard deals with the common hazards presented by appliances that are encountered by all persons in and around the home. However, in general, it does not take into account

– persons (including children) whose
  - physical, sensory or mental capabilities; or
  - lack of experience and knowledge