

Australian/New Zealand Standard™

**Household and similar electrical  
appliances—Safety**

**Part 2.60: Particular requirements for  
whirlpool baths and whirlpool spas  
(IEC 60335-2-60 Ed 4, MOD)**



## **AS/NZS 60335.2.60:2018**

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 24 October 2018 and by the New Zealand Standards Approval Board on 6 November 2018.

This Standard was published on 30 November 2018.

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*This Standard was issued in draft form for comment as DR 18921.*

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## Household and similar electrical appliances—Safety

### Part 2.60: Particular requirements for whirlpool baths and whirlpool spas (IEC 60335-2-60 Ed 4, MOD)

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## STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

## AS/NZS 60335.2.60:2018

**HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES –  
SAFETY –****Part 2.60: Particular requirements for whirlpool baths and whirlpool spas****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 60335.2.60:2006 three years from the date of publication. During this period AS/NZS 60335.2.60:2006 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 60335-2-60 Ed 4, 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 2006 edition of AS/NZS 60335.2.60 are as follows (minor changes are not listed):

- requirements for transportable whirlpool spas have been added (3.103, 5.101, 6.1, 7.12.1, 22.106, 25.1, 25.5, 25.7);
- some notes have been deleted or converted to normative text (22.101, 22.102, 22.103, 22.105);
- the text has been aligned with the 2011 edition of Part 1.

This Standard is an adoption with national modifications of the fourth edition of IEC 60335-2-60, *Household and similar electrical appliances – Safety – Part 2-60: Particular requirements for whirlpool baths and whirlpool spas*. 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 whirlpool baths and whirlpool spas.

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;

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- 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 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 whirlpool baths and whirlpool spas are covered by this standard.

The national variations to IEC 60335-2-60 Ed 4 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 60335-2-60 Ed 4 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.

## 5 General conditions for the tests

- p **5.7** *Replace* the text of the Addition by the following variation

*If the tests for **whirlpool baths** are influenced by the temperature of the water, it is maintained at 40 °C or at the maximum value allowed by the control, whichever is greater*

## 7 Marking and instructions

- p **7.12** *Insert* the following variation

The instructions for **whirlpool spas** shall contain the substance of the following

In order to avoid the possibility of hyperthermia (heat stress) occurring it is recommended that the average temperature of spa-pool water should not exceed 40°C.

## 11 Heating

- p **11.8** *Replace* the text of the Addition by the following variation

*If the appliance incorporates a heating element, the water temperature at the inlet of the bath or spa shall not exceed 45 °C.*

## 15 Moisture resistance

- p **15.1.2** *Delete* the Addition: to Part 1.

## 19 Abnormal operation

- p **19.2** *Insert* the following variation

*Pressure switches and flow switches that operate during the test of clause 11 are rendered inoperative.*

NOTE 301 If the appliance incorporates more than one pressure switch or flow switch, they are rendered inoperative in turn.

NOTE 302 Thermal sensing elements, relays and contactors that operate during the test of Clause 11 are not allowed to operate.

- p **19.3** *Insert* the following variation

*Addition:*

NOTE 301 Thermal sensing elements, relays and contactors that operate during the test of Clause 11 are not allowed to operate.

## 24 Components

- p **24.101** *Replace* the requirement by the following variation

*Thermal cut-outs incorporated in appliances for compliance with 19.4 shall not be self-resetting and shall have at least a Type 1E trip-free mechanism according to IEC 60730-1.*

## NEW ZEALAND NATIONAL VARIATIONS

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

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*Addition:*

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*Thermal cut-outs incorporated in appliances for compliance with 19.4 shall not be self-resetting and shall have at least a Type 1E trip-free mechanism according to IEC 60730-1.*

**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.

| <b><u>Publication</u></b> | <b><u>Year</u></b> | <b><u>Title</u></b>                                                                                                                                   | <b><u>AS/NZS</u></b> | <b><u>Year</u></b> |
|---------------------------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------------------|
| IEC 60364-7-701           |                    | <i>Low-voltage electrical installations –<br/>Requirements for special installations or<br/>locations – Locations containing a bath or<br/>shower</i> | 3000                 |                    |

## NOTES