

Australian/New Zealand Standard™

**Household and similar electrical
appliances—Safety**

**Part 2.29: Particular requirements for
battery chargers
(IEC 60335-2-29 Ed 5.1, MOD)**



AS/NZS 60335.2.29:2020

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 11 May 2017 and by the New Zealand Standards Approval Board on 10 May 2017.

This Standard was published on 30 June 2017.

The following are represented on Committee EL-002:

Association of Accredited Certification Bodies
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Business New Zealand
Consumer Electronic Suppliers Association, Australia
Consumers' Federation of Australia
Electrical Regulatory Authorities, Australia
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This Standard was issued in draft form for comment as DR 16922.

Australian/New Zealand Standard™

Household and similar electrical appliances—Safety

Part 2.29: Particular requirements for battery chargers (IEC 60335-2-29 Ed 5.1, MOD)

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STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

AS/NZS 60335.2.29:2017

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES –
SAFETY –

Part 2.29: Particular requirements for battery chargers

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 60335.2.29:2004 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 60335-2-29 Ed 5, 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 2004 edition of AS/NZS 60335.2.29 and its Amendment 1 (October 2004) and Amendment 2 (October 2010) are as follows (minor changes are not listed):

- Revised the drop test to refer to IEC 60068-2-31 (21.101);
- Requirements for supply cords on battery chargers used at low temperatures (25.7);
- Requirements for battery chargers having an output voltage exceeding SELV have been added (1, 3.2.2, 3.4.3, 10.101, 24.4, 25.5, 25.7, 25.8, 25.15, 26.5);
- A classification for battery chargers used outdoors has been added (6.2, 29.2);
- Some notes in Clause 1, Subclauses 7.1 and 22.102, Figure 101 and Annex AA 11.8 have been converted to normative text.

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This Standard is an adoption with national modifications of the fifth edition of IEC 60335-2-29, *Household and similar electrical appliances – Safety – Part 2-29: Particular requirements for battery chargers*. It has been varied as indicated to take account of Australian and New Zealand conditions.

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The text of IEC 60335-2-29 edition 5 amendment 1, 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 as an amendment to the Standards Australia/Standards New Zealand joint standard AS/NZS 60335.2.29:2017.

This standard incorporates Amendment No. 1 (June 2020). The changes introduced by the amendments are indicated in the text by a marginal bar and amendment number against the part 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. 1 is 26 June 2022.

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

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This standard is an adoption with national modifications of the fifth edition of IEC 60335-2-29, *Household and similar electrical appliances – Safety – Part 2-29: Particular requirements for appliances for battery chargers* including its amendment 1 (2019). 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 battery chargers.

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.;
- 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 3820¹ that could be applicable to requirements for battery chargers are covered by this standard.

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The national variations to IEC 60335-2-29 Ed 5 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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The national variations to IEC 60335-2-29 Ed 5.1 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).

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

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The text of the International Standard IEC 60335-2-29 Ed 5 was approved as a joint Australia/New Zealand Standard with the agreed national variations as given below.

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The text of the International Standard IEC 60335-2-29 Ed 5.1 was approved as a joint Australia/New Zealand Standard with the agreed national variations as given below.

AUSTRALIAN NATIONAL VARIATIONS

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

7 Marking and instructions

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26/6/22

p 7.1 *Insert* after the seventh dash item of the first paragraph, the following variation:

- the types of battery that are intended to be charged in the battery charger.

p 7.14 *Insert* the following variation:

7.14 Addition:

The marking concerning the types of battery that are intended to be charged in the battery charger shall be visible when the battery charger is being used, as in normal use. The lettering shall have a height of not less than 3 mm.

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p 7.1 *Insert* after the seventh dash item of the first paragraph, the following variation:

- the types of battery that are intended to be charged by the battery charger.

p 7.14 *Insert* the following variation:

7.14 Addition:

The marking concerning the types of battery that are intended to be charged by the battery charger shall be visible when the battery charger is being used, as in normal use. The lettering shall have a height of not less than 3 mm.

NEW ZEALAND NATIONAL VARIATIONS

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

7 Marking and instructions

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26/6/22

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DOA
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The marking concerning the types of battery that are intended to be charged by the battery charger shall be visible when the battery charger is being used, as in normal use. The lettering shall have a height of not less than 3 mm.

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>AS/NZS</u>	<u>Year</u>
IEC 60068-2-6		<i>Environmental testing – Part 2-6: Tests – Test Fc: Vibration (sinusoidal)</i>		
IEC 61558-2-4	2009	<i>Safety of transformers, reactors, power supply units and similar products for supply voltages up to 1 100 V – Part 2-4: Particular requirements and tests for isolating transformers and power supply units incorporating isolating transformers</i>	61558.2.4 AMD1	2009 2012
IEC 61558-2-7	2007	<i>Safety of power transformers, power supplies, reactors and similar products – Part 2-7: Particular requirements and tests for transformers and power supplies for toys</i>	61558.2.7	2008

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-29: Particular requirements for battery chargers

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.
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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 60335-2-29 bears the edition number 5.1. It consists of the fifth edition (2016-06) [documents 61/5142/FDIS and 61/5173/RVD] and its amendment 1 (2019-03) [documents 61/5760/FDIS and 61/5799/RVD]. The technical content is identical to the base edition and its amendment.

This Final version does not show where the technical content is modified by amendment 1. 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.

This fifth edition constitutes a technical revision.

The principal changes in this edition as compared with the fourth edition of IEC 60335-2-29 are as follows (minor changes are not listed):

- Revised the drop test to refer to IEC 60068-2-31 (21.101);
- Requirements for supply cords on battery chargers used at low temperatures (25.7);
- Requirements for battery chargers having an output voltage exceeding SELV have been added (1, 3.2.2, 3.4.3, 10.101, 24.4, 25.5, 25.7, 25.8, 25.15, 26.5);
- A classification for battery chargers used outdoors has been added (6.2, 29.2);
- Some notes in Clause 1, Subclauses 7.1 and 22.102, Figure 101 and Annex AA 11.8 have been converted to normative text.

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 battery chargers.

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- *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 amendment 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.