SLOVENSKI STANDARD
SIST EN IEC 60335-2-29:2022/A1:2022

01-februar-2022

Gospodinjski in podobni električni aparati - Varnost - 2-29. del: Posebne zahteve za polnilnike baterij - Dopolnilo A1

Household and similar electrical appliances - Safety - Part 2-29 - Particular requirements for battery chargers

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke - Teil 2-29: Besondere Anforderungen für Batterieladegeräte

Appareils électrodomestiques et analogues - Sécurité - Partie 2-29: Règles particulières pour les chargeurs de batterie

Ta slovenski standard je istoveten z: **EN IEC 60335-2-29:2021/A1:2021**

ICS:

29.200	Usmerniki. Pretvorniki. Stabilizirano električno napajanje	Rectifiers. Convertors. Stabilized power supply
97.180	Razna oprema za dom in trgovino	Miscellaneous domestic and commercial equipment

SIST EN IEC 60335-2-29:2022/A1:2022 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 60335-2-29:2021/A1

December 2021

ICS 29.200; 97.180

English Version

Household and similar electrical appliances - Safety - Part 2-29 - Particular requirements for battery chargers (IEC 60335-2-29:2016/A1:2019)

Appareils électrodomestiques et analogues - Sécurité - Partie 2-29: Règles particulières pour les chargeurs de batterie
(IEC 60335-2-29:2016/A1:2019)

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke - Teil 2-29: Besondere Anforderungen für Batterieladegeräte
(IEC 60335-2-29:2016/A1:2019)

This amendment A1 modifies the European Standard EN IEC 60335-2-29:2021; it was approved by CENELEC on 2021-11-15. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This amendment exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. EN IEC 60335-2-29:2021/A1:2021 E

European foreword

This document EN IEC 60335-2-29:2021/A1:2021 consists of the text of IEC 60335-2-29:2016/A1:2019 prepared by IEC/TC 61 "Safety of household and similar electrical appliances".

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2022-11-15
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024-11-15

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

This document is read in conjunction with EN IEC 60335-2-29:2021.

This document has been prepared under a Standardization Request given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

For relationship with EU Directive(s) / Regulation(s), see informative Annex ZZA, which is an integral part of EN IEC 60335-2-29:2021.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 60335-2-29:2016/A1:2021 was approved by CENELEC as a European Standard without any modifications.

Annex ZC
(normative)
Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Addition

Publication	Year	Title	EN/HD	Year
IEC 61558-2-4	2009	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	EN 61558-2-4	2009

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

AMENDMENT 1
AMENDEMENT 1

Household and similar electrical appliances – Safety – Part 2-29: Particular requirements for battery chargers

Appareils électrodomestiques et analogues – Sécurité – Partie 2-29: Exigences particulières pour les chargeurs de batterie

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

ICS 29.200; 97.180

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FOREWORD

This amendment has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

The text of this amendment is based on the following documents:

FDIS	Report on voting
61/5760/FDIS	61/5799/RVD

Full information on the voting for the approval of this amendment can be found in the report on voting indicated in the above table.

The committee has decided that the contents of this amendment and the base publication will remain unchanged until the stability date indicated on the IEC website 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 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.

1 Scope

In the second paragraph, replace 120 V by 250 V.

2 Normative references

Add the following new reference:

IEC 61558-2-4:2009, *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*

3 Terms and definitions

Replace the terms and definitions by the following:

3.1 Definitions relating to physical characteristics

3.1.1 *Addition:*

Note 1 to entry: The **rated voltage** is the rated input voltage.

3.1.6 *Addition:*

Note 2 to entry: The **rated current** is the rated input current.

3.1.9 *Replacement:*

normal operation
operation of the appliance under the following conditions:

Battery chargers for charging lead-acid batteries, and other battery chargers having a **rated DC output current** not exceeding 20 A, are connected to the circuit of Figure 101. The variable resistor is adjusted so that the current in the circuit is the **rated DC output current** when the battery charger is supplied at **rated voltage**.

When the charging current is controlled by the state of charge of the battery, the variable resistor and the capacitor are replaced by a discharged battery of the type and having the largest capacity specified in the instructions.

Other battery chargers are connected to a discharged battery of the type and having the largest capacity specified in the instructions.

3.1.101
rated DC output voltage
output voltage assigned to the battery charger by the manufacturer

3.1.102
rated DC output current
output current assigned to the battery charger by the manufacturer

3.2 Definitions relating to means of connection

3.2.2 *Addition:*

Output flexible cords are not considered to be interconnection cords.

3.4.3 *Replacement:*

safety isolating transformer
transformer, the input winding of which is electrically separated from the output winding by an insulation at least equivalent to **double insulation** or **reinforced insulation**, that is intended to supply a battery charging circuit having an output voltage not exceeding 120 V ripple-free direct current

Note 1 to entry: Ripple-free means an r.m.s. ripple voltage not exceeding 10 % of the DC component.

3.5 Definitions relating to types of appliances

3.5.101
DC distribution board
panel having circuits for distributing DC power to socket-outlets or terminals

3.5.102
type 1 battery charger
battery charger the output circuit of which is supplied through a **safety isolating transformer**

3.5.103
type 2 battery charger
battery charger the output circuit of which is supplied through an **isolating transformer**

3.6 Definitions relating to parts of an appliance

3.6.101
isolating transformer
transformer, the input winding of which is electrically separated from the output winding by an insulation at least equivalent to **double insulation** or **reinforced insulation**, that is intended to supply a battery charging circuit having an output voltage not exceeding 250 V ripple-free DC

Note 1 to entry: Ripple-free means an RMS ripple voltage not exceeding 10 % of the DC component.

7 Marking and instructions

7.1 *Replace the sixth dashed item by the following*:

– "Before charging, read the instructions" or symbol ISO 7000-0790 (2004-01); (not required if the battery charger output is less than 20 VA);

– "For indoor use" or symbol IEC 60417-5957 (2004-12) or "Do not expose to rain" or symbol IEC 60417-6062 (2011-05); (not required if the battery charger output is less than 20 VA or the battery charger has a degree of protection against harmful ingress of water of at least IPX4);

7.6 *Add the following symbols to the addition:*

[symbol IEC 60417-5957 (2004-12)] for indoor use only

[symbol IEC 60417-6062 (2011-05)] do not expose to moisture

7.12 *Replace the first paragraph of the addition by the following*:

The instructions shall

– state that during charging, the battery must be placed in a well-ventilated area (for chargers for batteries that release gases into the atmosphere during normal charging);

– state that the battery charger must only be plugged into an earthed socket-outlet (for **portable class I battery chargers** for outdoor use);

– explain the automatic function, stating any limitation (for automatic battery chargers).

The instructions for **type 1 battery chargers** shall also

– specify the types, the number of batteries and the rated capacity of the batteries that can be charged;

– include a warning against recharging non-rechargeable batteries.

The instructions for **type 2 battery chargers** shall also

– specify the batteries intended to be charged, such as by a catalogue number, series identification or the equivalent;