



SLOVENSKI STANDARD
SIST EN 60335-2-29:1997/A11:1998
01-junij-1998

JUfbcgh[cgdcX]b^g_l]b^dcXcVb]l `YY_f] b]l `UdUfUrcj `!`&& "XY.`DcgYVbY
nU hYj Y`nUdc`b]b]_Y`VUhf]^

Safety of household and similar electrical appliances -- Part 2-29: Particular requirements for battery chargers

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

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

<https://standards.iteh.ai/catalog/standards/sist/d672a296-f9c6-41b0-94e6-cc5b8cabe89b/sist-en-60335-2-29-1997-a11-1998>

Ta slovenski standard je istoveten z: EN 60335-2-29:1996/A11:1997

ICS:

13.120	Varnost na domu	Domestic safety
97.180	Razna oprema za dom in trgovino	Miscellaneous domestic and commercial equipment

SIST EN 60335-2-29:1997/A11:1998 **en**

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 60335-2-29:1997/A11:1998

<https://standards.iteh.ai/catalog/standards/sist/d672a296-f9c6-41b0-94e6-cc5b8cabe89b/sist-en-60335-2-29-1997-a11-1998>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60335-2-29/A11

December 1997

ICS 29.200

Descriptors: Household electrical appliances, battery chargers, safety requirements, protection against electric shock, fire protection, protection against mechanical hazard

English version

Safety of household and similar electrical appliances Part 2: Particular requirements for battery chargers

Sécurité des appareils
électrodomestiques et analogues
Partie 2: Règles particulières pour
les chargeurs de batterie

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

This amendment A11 modifies the European Standard EN 60335-2-29:1996; it was approved by CENELEC on 1997-10-01. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

[SIST EN 60335-2-29:1997/A11:1998](https://standards.iteh.ai/catalog/standards/sist/d672a296-f9c6-41b0-94c6-cc5b8cabe89b/sist-en-60335-2-29-1997-a11-1998)

<https://standards.iteh.ai/catalog/standards/sist/d672a296-f9c6-41b0-94c6-cc5b8cabe89b/sist-en-60335-2-29-1997-a11-1998>

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

A proposal to amend EN 60335-2-29:1996, document CLC/TC 61 (SEC) 1049, was circulated under the enquiry procedure in September 1995. This proposal was discussed during the Copenhagen meeting in May 1996, when it was decided to submit a draft for an amendment to EN 60335-2-29 to the formal vote.

This draft was circulated as prAA in May 1997 and was approved by CENELEC as amendment A11 on 1997-10-01.

This amendment has been prepared by the secretariat of CENELEC Technical Committee TC 61.

The following dates are applicable:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 1998-07-01
- date on which national standards conflicting with the amendment have to be withdrawn (dow) 2000-07-01

For products which have complied with the relevant national standard before 2000-07-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2004-07-01.

This amendment supplements or modifies the corresponding clauses of EN 60335-2-29:1996.

There are no special national conditions causing a deviation from this amendment.

There are no national deviations from this amendment.

NOTE - Amendment numbers commencing A1 refer to the endorsement of IEC amendments, while those commencing A11 originate in CENELEC.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 60335-2-29:1997/A11:1998

<https://standards.iteh.ai/catalog/standards/sist/d672a296-f9c6-41b0-94e6-cc5b8cabe89b/sist-en-60335-2-29-1997-a11-1998>



1 Scope

Delete the seventh dashed item from note 2.

Add the following note:

NOTE Z1 Requirements for **battery chargers for use by children** are given in annex ZAA.

Annex A Normative references

Add:

IEC standard	Year	Title	EN/HD	Year
61558-2-7 (mod)	1997	Safety of power transformers, power supply units and similar – Part 2-7: Particular requirements for transformers for toys	EN 61558-2-7	1997

Add the following annex:

Annex ZAA (normative)

Battery chargers for use by children

All clauses of this standard apply, except as specified in this annex.

ZAA.1 Scope

Addition:

This annex deals with the safety of **battery chargers for use by children**, having a d.c. output at **safety extra-low voltage** not exceeding 33 V and a rated output not exceeding 50 VA.

NOTE - Battery chargers covered by this annex are not considered to be toys.

ZAA.2 Definitions

Additional subclause:

ZAA.2.101 **battery charger for use by children**: Battery charger intended to be used by children 8 years old and above, without adult supervision.

NOTE - A **battery charger for use by children** may be supplied together with a toy.

ZAA.4 General conditions for the tests

Additional subclause:

ZAA.4.101 When batteries are used, the generally available rechargeable batteries giving the most unfavourable conditions are used.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 60335-2-29:1997/A11:1998

<https://standards.iteh.ai/catalog/standards/sist/d672a296-80c6-41b0-94e6-cc5b8cabe89b/sist-en-60335-2-29-1997-a11-1998>

Page 4

EN 60335-2-29:1996/A11:1997

ZAA.6 Classification**ZAA.6.1 Addition:**

Battery chargers for outdoor use shall be **class III**. Other battery chargers shall be **class II** or **class III**.

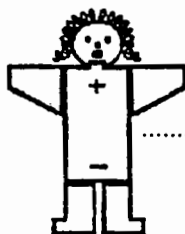
ZAA.6.2 Addition:

Enclosures shall also provide the appropriate degree of protection against ingress of solid foreign objects. Battery chargers for indoor use shall be at least IP3X. Battery chargers for outdoor use shall be at least IP37.

ZAA.7 Marking and instructions**ZAA.7.1 Addition:**

Battery chargers shall be marked with:

- the symbol for **battery chargers for use by children**;
- the relevant IP number;
- "for indoor use only" or "for outdoor use", as applicable.

ZAA.7.6 Addition:

..... symbol for **battery chargers for use by children**

The symbol shall have a height of at least 5 mm.

ZAA.7.12 Replace the addition by:

The instructions for use shall include the substance of the following:

Caution! Only allow children at least 8 years old to use the battery charger. Explain that the battery charger is not a toy and must not be played with. Give sufficient instruction so that the child is able to use the battery charger in a safe way.

Instruct the child not to try and recharge non-rechargeable batteries because of the danger of eruption.

The battery charger is to be regularly examined for damage, especially to the cord, plug and the enclosure. If the battery charger is damaged, it must not be used until it has been repaired.

The instructions for **class III battery chargers** shall state that they must be supplied from a transformer for toys.

ZAA.8 Protection against access to live parts**ZAA.8.1.1 Addition:**

*It shall not be possible to gain access to **live parts** or to metal parts separated from **live parts** by **basic insulation** only, even after the removal of covers which can only be removed with the aid of a **tool**.*

In addition to the test finger of figure 1, the small test finger of figure ZAA.1 is applied in the same way.

ZAA.10 Power input and current**ZAA.10.101 Addition:**

Any peak of the output voltage shall not exceed 46 V.

ZAA.11 Heating**ZA.11.8 Addition:**

The temperature rise of parts which can be touched by the small test finger of figure ZAA.1 shall not exceed the following values:

- if of metal 25 K;
- if of other material 35 K.

NOTE - The temperature rise limit for metal applies to the surface of the batteries.

ZAA.17 Overload protection of transformers and associated circuits**Addition:**

The temperature rise of parts which can be touched by the small test finger of figure ZAA.1 shall not exceed the following values:

- if of metal 25 K;
- if of other material 35 K.

ZAA.19 Abnormal operation
(standards.iteh.ai)**ZAA.19.13 Addition:**

The temperature rise of parts which can be touched with the small test finger of figure ZAA.1 shall not exceed the following values:

- if of metal 25 K;
- if of other material 35 K.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 60335-2-29:1997/A11:1998

<https://standards.iteh.ai/catalog/standards/sist/d072a290-19c0-4100-94c0-cc5b8cabe89b/sist-en-60335-2-29-1997-a11-1998>

cc5b8cabe89b/sist-en-60335-2-29-1997-a11-1998

ZAA.21 Mechanical strength

Addition:

Compliance is also checked by the test of ZAA.21.101.

Additional subclause:

ZAA.21.101 The battery charger is allowed to fall against the corner of a right-angle steel bar which is mounted on a solid wall of concrete or similar material, as shown in figure ZAA.2. The bar has dimensions of 40 mm x 40 mm x 5 mm with the corner rounded to a radius of 5 mm. It is mounted with the edges in contact with the wall.

*The battery charger is suspended by its **supply cord** or **interconnection cord** so that it rests against the corner of the bar, the point of suspension being 1 m above the bar. It is then pulled away from the corner of the plane perpendicular to the wall until it has risen to a height of 400 mm.*

The battery charger is allowed to fall against the bar. For rectangular shaped battery chargers, the four sides and four edges are subjected to an impact. For other battery chargers, the enclosure is subjected to eight impacts equally spaced over the periphery.

The battery charger is then dropped from a height of 400 mm onto a steel plate, at least 5 mm thick, placed on a concrete base.

*The battery charger shall not be damaged to such an extent that compliance with this standard is impaired. In particular, **live parts** shall not be accessible.*

ZAA.22 Construction

ZAA.22.26 Addition:

Transformers incorporated in battery chargers shall comply with subclauses 7.2, 15, 20.5.1 and 20.101 of IEC 61558-2-7.

Additional subclauses:

ZAA.22.101 Battery chargers shall have only one **rated voltage**. They shall not incorporate means for manually adjusting the output voltage.

Compliance is checked by inspection.

ZAA.22.102 Battery chargers shall be constructed so that reverse charging is prevented regardless of the state of charge of the battery. This applies even if the battery is inserted with the wrong polarity.

Compliance is checked by inspection and by measurement.

ZAA.25 Supply connection and external flexible cords

ZAA.25.1 Modification:

Battery chargers shall not be provided with an appliance inlet.

ZAA.25.5 Modification:

Battery chargers shall have **type Y attachment** or **type Z attachment**.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

<https://standards.iteh.ai/catalog/standards/sist/d672a296-f9c6-41b0-94e6-cc5b8cabe89b/sist-en-60335-2-29-1997-a11-1998>