SLOVENSKI STANDARD
SIST EN 60335-2-29:2004

01-december-2004

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

Gospodinjski in podobni elektriļ ni aparati - Varnost - 2-29. del: Posebne zahteve za polnilnike baterij (IEC 60335-2-29:2002 + A1:2004)

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

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

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

Ta slovenski standard je istoveten z: **EN 60335-2-29:2004**

ICS:

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

SIST EN 60335-2-29:2004 **en**

2003-01.Slovenski inštitut za standardizacijo. Razmnoževanje celote ali delov tega standarda ni dovoljeno.

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60335-2-29

September 2004

ICS 29.200;97.180

Supersedes EN 60335-2-29:1996 + A11:1997

English version

Household and similar electrical appliances – Safety
Part 2-29: Particular requirements for battery chargers
(IEC 60335-2-29:2002 + A1:2004)

Appareils électrodomestiques et analogues – Sécurité
Partie 2-29: Règles particulières pour les chargeurs de batterie
(CEI 60335-2-29:2002 + A1:2004)

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke
Teil 2-29: Besondere Anforderungen für Batterieladegeräte
(IEC 60335-2-29:2002 + A1:2004)

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This European Standard was approved by CENELEC on 2004-07-06. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard 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 European Standard 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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

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Ref. No. EN 60335-2-29:2004 E

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Foreword

The text of document 61/2169/FDIS, future fourth edition of IEC 60335-2-29, and the text of document 61/2536/FDIS, future amendment to the International Standard, prepared by the IEC Technical Committee 61, were submitted to the IEC-CENELEC parallel vote.

The texts of IEC 60335-2-29:2002 and A1:2004 were approved by CENELEC as a new edition of EN 60335-2-29 on 2004-07-06.

This European Standard replaces EN 60335-2-29:1996 + corrigendum November 2001 + A11:1997.

The following dates are applicable:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2004-12-01
- date on which national standards conflicting with the EN have to be withdrawn (dow) 2007-06-01

This part 2 has to be used in conjunction with EN 60335-1, Household and similar electrical appliances – Safety – Part 1: General requirements. It was established on the basis of the 2002 edition of that standard. Amendments and revisions of Part 1 have also to be taken into account and the dates when such changes become applicable will be stated in the relevant amendment or revision of Part 1.

This part 2 supplements or modifies the corresponding clauses of EN 60335-1, so as to convert it into the European Standard: Safety requirements for electric battery chargers.

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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.

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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 letter Z.

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

Special national conditions causing a deviation from this European Standard are listed in annex ZA and are in addition to those in EN 60335-1.

There are no national deviations from this European Standard, other than those listed in Annex ZB to EN 60335-1.

p NOTE In this document, p is used in the margin to indicate instructions for preparing the printed version.

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Introduction

p Add:

An investigation by CENELEC TC 61 has shown that all risks from products within the scope of this standard are fully covered by the Low Voltage Directive, 73/23/EEC. For products having mechanical moving parts, a risk assessment in accordance with the Machinery Directive, 98/37/EC, has shown that the risks are mainly of electrical origin and consequently this directive is not applicable. However, the relevant essential safety requirements of the Machinery Directive are covered by this standard together with the principal objectives of the Low Voltage Directive.

Endorsement notice

The text of the International Standard IEC 60335-2-29:2002 + A1:2004 was approved by CENELEC as a European Standard without any modification.

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p Add:

Annex ZA
(informative)

Special national conditions

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Addition:

Clause	Special national condition
25.7	**Finland** Polyvinylchloride sheathed cords are not allowed for battery chargers for charging automobile batteries in outdoor use or in locations where the temperature is equal to the outdoor temperature.

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Annex ZC
(normative)

Normative references to international publications with their corresponding European publications

Publication	Year	Title	EN/HD	Year
IEC 60068-2-6	–[1)]	Environmental testing - Part 2: Tests - Test Fc: Vibration (sinusoidal)	EN 60068-2-6	1995 [2)]
IEC 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

[1)] undated reference

[2)] valid edition at date of issue

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NORME INTERNATIONALE
INTERNATIONAL STANDARD

CEI
IEC
60335-2-29

Quatrième édition
Fourth edition
2002-09

Appareils électrodomestiques et analogues – Sécurité –

Partie 2-29: Règles particulières pour les chargeurs de batterie

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Part 2-29: Particular requirements for battery chargers

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International Electrotechnical Commission
Международная Электротехническая Комиссия

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For price, see current catalogue

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-29: Particular requirements for battery chargers

FOREWORD

1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The 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 the 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 National Committees.
3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

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

This fourth edition cancels and replaces the third edition published in 1994. It constitutes a technical revision.

This bilingual version (2003-03) replaces the English version.

The text of this part of IEC 60335 is based on the following documents:

FDIS	Report on voting
61/2169/FDIS	61/2250/RVD

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

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 fourth edition (2001) of that standard.

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

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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 electric 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 in Part 1 is to be adapted accordingly.

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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 this publication will remain unchanged until 2003. At this date, the publication will be

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

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The following differences exist in the countries indicated below.

– 3.1.9: The artificial load may not be used (USA).

– 10.101: The d.c. output voltage is not to exceed 30 V (USA).

– 11.2: The appliance is not placed in a test corner (USA).

– 21.101: The drop test is carried out differently on battery chargers with a mass less than 18 kg (USA).

– 21.102: The test is different (USA).

– 22.26: Basic insulation is allowed between live parts and SELV circuits (USA).

– 25.7: Special rubber insulated and sheathed cords are required for some types of battery chargers. (Finland).

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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.

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.

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.

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.

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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.

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