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## **Laddningsbara batterier – Märkning med den internationella återvinningsymbolen ISO 7000-1135**

*Marking of secondary cells and batteries with the international recycling symbol ISO 7000-1135*

Som svensk standard gäller europastandarden EN 61429:1996. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61429:1996.

### **Nationellt förord**

Europastandarden EN 61429:1996\*)

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 61429, First edition, 1995 - Marking of secondary cells and batteries with the international recycling symbol ISO 7000-1135**

utarbetad inom International Electrotechnical Commission, IEC.

\*) EN 61429:1996 ikraftsattes 1997-04-11 som SS-EN 61429 utan återgivning av IEC-standarden.  
Corrigendum October 1998 till EN 61429:1996 ingår i standarden

## *Standarder underlättar utvecklingen och höjer elsäkerheten*

Det finns många fördelar med att ha gemensamma tekniska regler för bl a mätning, säkerhet och provning och för utförande, skötsel och dokumentation av elprodukter och elanläggningar.

Genom att utforma sådana standarder blir säkerhetsfordringar tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

## *SEK är Sveriges röst i standardiseringsarbetet inom elområdet*

SEK Svensk Elstandard svarar för standardiseringen inom elområdet i Sverige och samordnar svensk medverkan i internationell och europeisk standardisering. SEK är en ideell organisation med frivilligt deltagande från svenska myndigheter, företag och organisationer som vill medverka till och påverka utformningen av tekniska regler inom elektrotekniken.

SEK samordnar svenska intressenters medverkan i SEKs tekniska kommittéer och stödjer svenska experters medverkan i internationella och europeiska projekt.

## *Stora delar av arbetet sker internationellt*

Utformningen av standarder sker i allt väsentligt i internationellt och europeiskt samarbete. SEK är svensk nationalkommitté av International Electrotechnical Commission (IEC) och Comité Européen de Normalisation Electrotechnique (CENELEC).

Standardiseringsarbetet inom SEK är organiserat i referensgrupper bestående av ett antal tekniska kommittéer som speglar hur arbetet inom IEC och CENELEC är organiserat.

Arbetet i de tekniska kommittéerna är öppet för alla svenska organisationer, företag, institutioner, myndigheter och statliga verk. Den årliga avgiften för deltagandet och intäkter från försäljning finansierar SEKs standardiseringsverksamhet och medlemsavgift till IEC och CENELEC.

## *Var med och påverka!*

Den som deltar i SEKs tekniska kommittéarbete har möjlighet att påverka framtida standarder och får tidig tillgång till information och dokumentation om utvecklingen inom sitt teknikområde. Arbetet och kontakterna med kollegor, kunder och konkurrenter kan gynnsamt påverka enskilda företags affärsutveckling och bidrar till deltagarnas egen kompetensutveckling.

Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

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**EUROPEAN STANDARD**

**EN 61429**

**NORME EUROPÉENNE**

**EUROPÄISCHE NORM**

**November 1996**

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ICS 01.080.20; 29.220.20; 29.220.30

Descriptors: Lead-acid batteries, alkaline batteries, marking, symbols, waste recycling

English version

**Marking of secondary cells and batteries with the international  
recycling symbol ISO 7000-1135  
(IEC 1429:1995)**

Marquage des accumulateurs avec le  
symbole international de recyclage  
ISO 7000-1135  
(CEI 1429:1995)

Kennzeichnung von Akkumulatoren und  
Batterien mit dem internationalen  
Recycling-Bildzeichen ISO 7000-1135  
(IEC 1429:1995)

This European Standard was approved by CENELEC on 1996-10-01. 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, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, 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**

### **Foreword**

The text of document 21/381/FDIS, future edition 1 of IEC 1429, prepared by IEC TC 21, Secondary cells and batteries, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61429 on 1996-10-01.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 1997-06-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 1997-06-01

Annexes designated "normative" are part of the body of the standard.

In this standard, annex ZA is normative.

Annex ZA has been added by CENELEC.

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### **Endorsement notice**

The text of the International Standard IEC 1429:1995 was approved by CENELEC as a European Standard without any modification.

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**Annex ZA (normative)**

**Normative references to international publications  
with their corresponding European publications**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE: When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 416	1988	General principles for the creation of graphical symbols for use on equipment	HD 571 S1	1990
ISO 7000	1989	Graphical symbols for use on equipment Index and synopsis	-	-

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**MARKING OF SECONDARY CELLS AND BATTERIES WITH THE  
INTERNATIONAL RECYCLING SYMBOL ISO 7000-1135**

## 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 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. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 1429 has been prepared by IEC technical committee 21: Secondary cells and batteries.

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

FDIS	Report on voting
21/381/FDIS	21/394/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.

## INTRODUCTION

In many countries, there are legal requirements that certain spent secondary batteries should be kept separate from normal waste disposal. The return to recycling facilities requires appropriate channels.

The identification of such batteries by a standardized symbol should improve the protection of the environment.

## MARKING OF SECONDARY CELLS AND BATTERIES WITH THE INTERNATIONAL RECYCLING SYMBOL ISO 7000-1135

### 1 Scope

This International Standard defines the conditions of utilization of the recycling symbol of the International Organization for Standardization (ISO) associated with the chemical symbols indicating the electrochemical system of the battery. This standard applies to lead-acid batteries (Pb) and nickel-cadmium batteries (Ni-Cd).

NOTE – The term "battery" as used throughout this standard covers batteries constituted of several single cells as well as single cells distributed and used separately.

In all cases cells have to be marked individually with the exception of those constituting a battery or a subassembly that cannot be dismantled. For example, traction batteries and stationary batteries should be marked on or near the type plate only.

The object of this standard is to present recommendations concerning the size of the symbol and its location on the surface of the cells and batteries or on the packages of button cells.

### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 7000: 1989, *Graphical symbols for use on equipment – Index and synopsis*

IEC 416: 1988, *General principles for the creation of graphical symbols for use on equipment*