SLOVENSKI STANDARD
SIST EN 61960:2011

01-oktober-2011

Sekundarni celice in baterije z alkalnimi ali drugimi nekislinskimi elektroliti - Sekundarni litijevi členi in baterije za prenosne naprave

Secondary cells and batteries containing alkaline or other non-acid electrolytes - Secondary lithium cells and batteries for portable applications

Akkumulatoren und Batterien mit alkalischem oder anderen nichtsäurehaltigen Elektrolyten - Lithium-Akkumulatoren und -batterien für tragbare Geräte

Accumulateurs alcalins et autres accumulateurs à électrolyte non acide - Eléments et batteries d'accumulateurs au lithium pour applications portables

Ta slovenski standard je istoveten z: **EN 61960:2011**

ICS:

29.220.30	Alkalni sekundarni členi in baterije	Alkaline secondary cells and batteries

SIST EN 61960:2011 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61960

August 2011

ICS 29.220.99

Supersedes EN 61960:2004

English version

Secondary cells and batteries containing alkaline or other non-acid electrolytes - Secondary lithium cells and batteries for portable applications

(IEC 61960:2011)

Accumulateurs alcalins et autres accumulateurs à électrolyte non acide - Eléments et batteries d'accumulateurs au lithium pour applications portables
(CEI 61960:2011)

Akkumulatoren und Batterien mit alkalischen oder anderen nichtsäurehaltigen Elektrolyten - Lithium-Akkumulatoren und -batterien für tragbare Geräte
(IEC 61960:2011)

This European Standard was approved by CENELEC on 2011-07-21. 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.

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CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Ref. No. EN 61960:2011 E

Foreword

The text of document 21A/486/FDIS, future edition 2 of IEC 61960, prepared by SC 21A, Secondary cells and batteries containing alkaline or other non-acid electrolytes, of IEC TC 21, Secondary cells and batteries, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61960 on 2011-07-21.

This European Standard supersedes EN 61960:2004.

EN 61960:2011 includes the following significant technical changes with respect to EN 61960:2004:

— 7.6 Endurance in cycles: addition of an accelerated test procedure.

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

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)	2012-04-21
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2014-07-21

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61960:2011 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60051 series	NOTE	Harmonized in EN 60051 series.
IEC 61434	NOTE	Harmonized as EN 61434.
IEC 61959	NOTE	Harmonized as EN 61959.
IEC 62133	NOTE	Harmonized as EN 62133.
IEC 62281	NOTE	Harmonized as EN 62281.

Annex ZA
(normative)

Normative references to international publications with their corresponding European 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 common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC 60050-482	-	International Electrotechnical Vocabulary - Part 482: Primary and secondary cells and batteries	-	-
IEC 61000-4-2	-	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	EN 61000-4-2	-

IEC 61960

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Secondary cells and batteries containing alkaline or other non-acid electrolytes – Secondary lithium cells and batteries for portable applications

Accumulateurs alcalins et autres accumulateurs à électrolyte non acide – Éléments et batteries d'accumulateurs au lithium pour applications portables

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CONTENTS

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SECONDARY CELLS AND BATTERIES CONTAINING ALKALINE OR OTHER NON-ACID ELECTROLYTES – SECONDARY LITHIUM CELLS AND BATTERIES FOR PORTABLE APPLICATIONS

FOREWORD

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International Standard IEC 61960 has been prepared by subcommittee 21A: Secondary cells and batteries containing alkaline or other non-acid electrolytes, of IEC technical committee 21: Secondary cells and batteries.

This second edition cancels and replaces the first edition published in 2003. It is a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- 7.6 Endurance in cycles: addition of an accelerated test procedure.

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

FDIS	Report on voting
21A/486/FDIS	21A/490/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 publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication 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.

SECONDARY CELLS AND BATTERIES CONTAINING ALKALINE OR OTHER NON-ACID ELECTROLYTES – SECONDARY LITHIUM CELLS AND BATTERIES FOR PORTABLE APPLICATIONS

1 Scope

This International Standard specifies performance tests, designations, markings, dimensions and other requirements for secondary lithium single cells and batteries for portable applications.

The objective of this standard is to provide the purchasers and users of secondary lithium cells and batteries with a set of criteria with which they can judge the performance of secondary lithium cells and batteries offered by various manufacturers.

This standard defines a minimum required level of performance and a standardized methodology by which testing is performed and the results of this testing reported to the user. Hence, users will be able to establish the viability of commercially available cells and batteries via the declared specification and thus be able to select the cell or battery best suited for their intended application.

This standard covers secondary lithium cells and batteries with a range of chemistries. Each electrochemical couple has a characteristic voltage range over which it releases its electrical capacity, a characteristic nominal voltage and a characteristic end-of-discharge voltage during discharge. Users of secondary lithium cells and batteries are requested to consult the manufacturer for advice.

2 Normative references

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.

IEC 60050-482, *International Electrotechnical Vocabulary (IEV) – Part 482: Primary and secondary cells and batteries*

IEC 61000-4-2, *Electromagnetic compatibility (EMC) – Part 4-2: Testing and measurement techniques – Electrostatic discharge immunity test*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in the IEC 60050-482, as well as the following apply.

3.1
charge recovery
capacity that a cell or battery can deliver after the charge following the charge retention test according to 3.2