BS EN 62620:2015+A1:2023

BSI Standards Publication

Secondary cells and batteries containing alkaline or other non-acid electrolytes — Secondary lithium cells and batteries for use in industrial applications

National foreword

This British Standard is the UK implementation of EN 62620:2015+A1:2023. It is identical to IEC 62620:2014 incorporating amendment 1:2023. It supersedes BS EN 62620:2015, which is withdrawn.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to IEC text carry the number of the IEC amendment. For example, text altered by IEC amendment 1 is indicated by ⟩A1⟨.

The UK participation in its preparation was entrusted to Technical Committee PEL/21, Secondary cells and batteries.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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Amendments/corrigenda issued since publication

Date	Text affected
31 July 2023	Implementation of IEC amendment 1:2023 with CENELEC endorsement A1:2023

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 62620:2015+A1

June 2023

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English Version

Secondary cells and batteries containing alkaline or other non-acid electrolytes - Secondary lithium cells and batteries for use in industrial applications (IEC 62620:2014)

Accumulateurs alcalins et autres accumulateurs à électrolyte non acide - Éléments et batteries d'accumulateurs au lithium pour utilisation dans les applications industrielles (IEC 62620:2014)

Akkumulatoren und Batterien mit alkalischen oder anderen nichtsäurehaltigen Elektrolyten - Lithium-Akkumulatoren und -batterien für industrielle Anwendungen (IEC 62620:2014)

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 62620:2015 E

EN 62620:2015+A1:2023 (E)

Foreword

The text of document 21A/561/FDIS, future edition 1 of IEC 62620, 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 approved by CENELEC as EN 62620:2015.

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)	2015-09-30
– latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2017-12-30

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

IEC 60051 Series	NOTE	Harmonised in EN 60051 series (not modified).
IEC 61434	NOTE	Harmonised in EN 61434 (not modified).
IEC 61960	NOTE	Harmonised as EN 61960 (not modified).
IEC 62660 Series	NOTE	Harmonised in EN 62660 series (not modified).

European foreword to amendment A1

The text of document 21A/795/CDV, future IEC 62620/AMD1, 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 approved by CENELEC as EN 62620:2015/A1:2023.

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)	2024-03-16
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2026-06-16

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EN 62620:2015+A1:2023 (E)

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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.

Publication	Year	Title	EN/HD	Year
IEC 60050-482	2004	International Electrotechnical Vocabulary (IEV) -- Part 482: Primary and secondary cells and batteries	-	-
ISO/IEC Guide 51	-	Safety aspects - Guidelines for their inclusion in standards	-	-

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

FOREWORD

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International Standard IEC 62620 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 publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of the base publication and its amendment will remain unchanged until the stability date indicated on the IEC web site under 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 USE IN INDUSTRIAL APPLICATIONS

1 Scope

This International Standard specifies marking, tests and requirements for lithium secondary cells and batteries used in industrial applications including stationary applications.

When there exists an IEC standard specifying test conditions and requirements for cells used in special applications and which is in conflict with this standard, the former takes precedence. (e.g. IEC 62660 series on road vehicles).

The following are some examples of applications that utilize the cells and batteries under the scope of this standard.

- Stationary applications: telecom, uninterruptible power supplies (UPS), electrical energy storage system, utility switching, emergency power and similar applications.
- Motive applications: fork-lift truck, golf cart, AGV, railway, and marine, excluding road vehicles.

Since this standard covers batteries for various industrial applications, it includes those requirements, which are common and minimum to the various applications.

This standard applies to cells and batteries. If the battery is divided into smaller units, the smaller unit can be tested as the representative of the battery. The manufacturer clearly declares the tested unit. The manufacturer may add functions, which are present in the final battery, to the tested unit.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60050-482:2004, *International Electrotechnical Vocabulary (IEV) – Part 482: Primary and secondary cells and batteries*

ISO/IEC Guide 51*, Safety aspects – Guidelines for their inclusion in standards*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60050-482 and ISO/IEC Guide 51 as well as the following apply.

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