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High-temperature secondary batteries - Part 3: Sodium-based batteries - Performance requirements and tests

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 09/20

Obsahuje: EN IEC 62984-3:2020, IEC 62984-3:2020

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EN IEC 62984-3

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May 2020

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English Version

High-temperature secondary batteries - Part 3: Sodium-based batteries - Performance requirements and tests (IEC 62984-3:2020)

Batteries d'accumulateurs à haute température - Partie 3:
Batteries au sodium - Exigences et essais relatifs aux
qualités de fonctionnement
(IEC 62984-3:2020)

Hochtemperatur-Sekundärbatterien - Teil 3: Natrium-
basierte Batterien - Leistungsanforderungen und Prüfungen
(IEC 62984-3:2020)

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European Committee for Electrotechnical Standardization
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Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 62984-3:2020 (E)**European foreword**

The text of document 21/1040/FDIS, future edition 1 of IEC 62984-3, prepared by IEC/TC 21 "Secondary cells and batteries" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62984-3:2020.

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) 2021-02-21
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-05-21

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

| | | |
|--------------------|------|---------------------------------|
| IEC 60952 (series) | NOTE | Harmonized as EN 60952 (series) |
| IEC 61982 (series) | NOTE | Harmonized as EN 61982 (series) |
| IEC 62485-2 | NOTE | Harmonized as EN IEC 62485-2 |

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where 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.

| <u>Publication</u> | <u>Year</u> | <u>Title</u> | <u>EN/HD</u> | <u>Year</u> |
|--------------------|-------------|---|----------------|-------------|
| IEC 62902 | - | Secondary cells and batteries - Marking symbols for identification of their chemistry | EN IEC 62902 | - |
| IEC 62984-1 | 2020 | High-temperature secondary batteries - Part 1: General requirements | EN IEC 62984-1 | 2020 |
| IEC 62984-2 | 2020 | High-temperature secondary batteries - Part 2: Safety requirements and tests | EN IEC 62984-2 | 2020 |



IEC 62984-3

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INTERNATIONAL STANDARD

NORME INTERNATIONALE



**High-temperature secondary batteries –
Part 3: Sodium-based batteries – Performance requirements and tests**

**Batteries d'accumulateurs à haute température –
Partie 3: Batteries au sodium – Exigences et essais relatifs aux qualités de
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Edition 1.0 2020-04

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**High-temperature secondary batteries –
Part 3: Sodium-based batteries – Performance requirements and tests**

**Batteries d'accumulateurs à haute température –
Partie 3: Batteries au sodium – Exigences et essais relatifs aux qualités de
fonctionnement**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

HIGH-TEMPERATURE SECONDARY BATTERIES –**Part 3: Sodium-based batteries –
Performance requirements and tests**

FOREWORD

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International Standard IEC 62984-3 has been prepared by IEC technical committee 21: Secondary cells and batteries.

The text of this International Standard is based on the following documents:

| FDIS | Report on voting |
|--------------|------------------|
| 21/1040/FDIS | 21/1048/RVD |

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

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

This document is to be read in conjunction with IEC 62984-1:2020.

A list of all parts in the IEC 62984 series, published under the general title *High-temperature secondary batteries*, can be found on the IEC website.

The committee has decided that the contents of this document 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 document. At this date, the document will be

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HIGH-TEMPERATURE SECONDARY BATTERIES –

Part 3: Sodium-based batteries – Performance requirements and tests

1 Scope

This part of IEC 62984 specifies performance requirements and test procedures for high-temperature batteries based on sodium for mobile and/or stationary use and whose rated voltage does not exceed 1 500 V.

Sodium based batteries include sodium-sulphur batteries and sodium-nickel chloride batteries; both are high-temperature batteries and use a solid, sodium conducting electrolyte. Additional information on sodium-based batteries technology, their chemistries and construction are given in Annex B.

This document does not cover aircraft batteries, covered by IEC 60952 (all parts), and batteries for the propulsion of electric road vehicles, covered by IEC 61982 (all parts).

NOTE High-temperature batteries are electrochemical systems whose cells' internal minimum operating temperature is above 100 °C.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 62902, *Secondary cells and batteries – Marking symbols for identification of their chemistry*

IEC 62984-1:2020, *High-temperature secondary batteries – Part 1: General requirements*

IEC 62984-2:2020, *High-temperature secondary batteries – Part 2: Safety requirements and tests*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN