IEC 62984-3

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

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

IEC 62984-3:2020-04

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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

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- withdrawn,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

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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*

3 Terms, definitions, symbols and abbreviated terms

For the purposes of this document, the terms and definitions given in IEC 62984-1 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

3.1 Battery construction

Refer to IEC 62984-1:2020, 3.1.