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High-temperature secondary batteries - Part 1: General requirements

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

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

Obsahuje: EN IEC 62984-1:2020, IEC 62984-1:2020

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**High-temperature secondary batteries - Part 1: General requirements  
(IEC 62984-1:2020)**

Batteries d'accumulateurs à haute température - Partie 1:  
Exigences générales  
(IEC 62984-1:2020)

Hochtemperatur-Sekundärbatterien - Teil 1: Allgemeine Anforderungen  
(IEC 62984-1:2020)

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**EN IEC 62984-1:2020 (E)****European foreword**

The text of document 21/1031/FDIS, future edition 1 of IEC 62984-1, prepared by IEC/TC 21 "Secondary cells and batteries" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62984-1:2020.

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) 2021-01-15
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-04-15

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

IEC 60721-3-2:2018	NOTE	Harmonized as EN IEC 60721-3-2:2018 (not modified)
IEC 60952 (series)	NOTE	Harmonized as EN 60952 (series)
IEC 61427-2:2015	NOTE	Harmonized as EN 61427-2:2015 (not modified)
IEC 61982 (series)	NOTE	Harmonized as EN 61982 (series)
IEC 62485-2	NOTE	Harmonized as EN IEC 62485-2
CISPR 11	NOTE	Harmonized as EN 55011

**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](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-2-1	2007	Environmental testing - Part 2-1: Tests - Test A: Cold	EN 60068-2-1	2007
IEC 60068-2-2	2007	Environmental testing - Part 2-2: Tests - Test B: Dry heat	EN 60068-2-2	2007
IEC 60068-2-30	2005	Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle)	EN 60068-2-30	2005
IEC 60068-2-52	2017	Environmental testing - Part 2-52: Tests - Test Kb: Salt mist, cyclic (sodium chloride solution)	EN IEC 60068-2-52	2018
IEC 60068-2-64	2008	Environmental testing - Part 2-64: Tests - Test Fh: Vibration, broadband random and guidance	EN 60068-2-64	2008
IEC 60068-2-75	2014	Environmental testing - Part 2-75: Tests - Test Eh: Hammer tests	EN 60068-2-75	2014
IEC 60068-2-78	-	Environmental testing - Part 2-78: Tests - Test Cab: Damp heat, steady state	EN 60068-2-78	-
IEC 60529	-	Degrees of protection provided by enclosures (IP Code)	-	-
IEC 61000-4-2	-	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	EN 61000-4-2	-
IEC 61000-4-3	-	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	-	-

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IEC 61000-4-4	- Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test	EN 61000-4-4	-
IEC 61000-4-5	- Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test	EN 61000-4-5	-
IEC 61000-4-6	- Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields	EN 61000-4-6	-
IEC 61000-4-11	- Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests for equipment with input current up to 16 A per phase	EN IEC 61000-4-11	-
IEC 61000-4-29	- Electromagnetic compatibility (EMC) - Part 4-29: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations on d.c. input power port immunity tests	EN 61000-4-29	-
IEC 61000-4-34	- Electromagnetic compatibility (EMC) - Part 4-34: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests for equipment with input current more than 16 A per phase	EN 61000-4-34	-
IEC 61000-6-3	- Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments	EN 61000-6-3	-
IEC 61000-6-4	- Electromagnetic compatibility (EMC) - Part 6-4: Generic standards - Emission standard for industrial environments	EN IEC 61000-6-4	-
IEC 61373	- Railway applications - Rolling stock equipment - Shock and vibration tests	EN 61373	-
IEC 62236-3-2	- Railway applications - Electromagnetic compatibility - Part 3-2: Rolling stock - Apparatus	-	-
IEC 62262	- Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)	EN 62262	-
CISPR 25	- Vehicles, boats and internal combustion engines - Radio disturbance characteristics - Limits and methods of measurement for the protection of on-board receivers	-	-



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# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



**High-temperature secondary batteries –  
Part 1: General requirements**

**Batteries d'accumulateurs à haute température –  
Partie 1: Exigences générales**





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IEC 62984-1

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# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



**High-temperature secondary batteries –  
Part 1: General requirements**

**Batteries d'accumulateurs à haute température –  
Partie 1: Exigences générales**

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ELECTROTECHNICAL  
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## CONTENTS

FOREWORD .....	4
1 Scope .....	6
2 Normative references .....	6
3 Terms, definitions, symbols and abbreviated terms .....	7
3.1 Battery construction .....	7
3.2 Battery functionality .....	10
3.3 Symbols and abbreviated terms .....	12
4 Environmental (service) conditions .....	13
4.1 General .....	13
4.2 Normal service conditions for stationary installations .....	13
4.2.1 General .....	13
4.2.2 Additional normal environmental conditions for indoor installations .....	14
4.2.3 Additional normal environmental conditions for outdoor installations .....	14
4.3 Special service conditions for stationary installations .....	14
4.3.1 General .....	14
4.3.2 Additional special service conditions for indoor installations .....	14
4.3.3 Additional special service conditions for outdoor installations .....	14
4.4 Normal service conditions for mobile installations (except propulsion) .....	14
4.5 Special service conditions for mobile installations (except propulsion) .....	14
5 Design and requirements .....	15
5.1 Battery architecture .....	15
5.1.1 Module .....	15
5.1.2 Battery .....	15
5.1.3 Assembly of batteries .....	16
5.1.4 Thermal management subsystem .....	17
5.2 Mechanical requirements .....	17
5.2.1 General .....	17
5.2.2 Battery enclosure .....	17
5.2.3 Vibration .....	18
5.2.4 Mechanical impact .....	18
5.3 Environmental requirements .....	18
5.4 EMC requirements .....	18
6 Tests .....	19
6.1 General .....	19
6.1.1 Classification of tests .....	19
6.1.2 Test object selection .....	19
6.1.3 DUT initial conditions before tests .....	20
6.1.4 Measuring equipment .....	20
6.2 List of tests .....	20
6.3 Type tests .....	21
6.3.1 Mechanical tests .....	21
6.3.2 Environmental tests .....	23
6.3.3 EMC tests .....	24
6.4 Routine tests .....	33
6.5 Special tests .....	33
7 Markings .....	33

7.1	General.....	33
7.2	Data plate marking.....	33
8	Rules for transportation, installation and maintenance .....	33
8.1	Transportation .....	33
8.2	Installation .....	33
8.3	Maintenance .....	33
9	Documentation .....	33
9.1	Instruction manual .....	33
9.2	Test report.....	34
	Bibliography.....	35
	Figure 1 – Components of a battery .....	16
	Figure 2 – Components of an assembly of batteries.....	16
	Figure 3 – Thermal management subsystem .....	17
	Table 1 – List of symbols and abbreviated terms.....	13
	Table 2 – Electromagnetic environments.....	19
	Table 3 – Type tests .....	21
	Table 4 – Damp heat test – Steady state .....	23
	Table 5 – EMC tests severity level .....	25
	Table 6 – Assessment criteria description for immunity tests.....	26
	Table 7 – EFT/Burst test parameters .....	28
	Table 8 – Surge test levels .....	29

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International Standard IEC 62984-1 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
21/1031/FDIS	21/1041/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.

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 website 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 1: General requirements

#### 1 Scope

This part of IEC 62984 specifies general aspects, definitions and tests for high-temperature secondary batteries for mobile and/or stationary use and whose nominal voltage does not exceed 1 500 V.

This document does not cover aircraft batteries, which are covered by IEC 60952 (all parts), or 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 60068-2-1:2007, *Environmental testing – Part 2-1: Tests – Test A: Cold*

IEC 60068-2-2:2007, *Environmental testing – Part 2-2: Tests – Test B: Dry heat*

IEC 60068-2-30:2005, *Environmental testing – Part 2-30: Tests – Test Db: Damp heat, cyclic (12 h + 12 h cycle)*

IEC 60068-2-52:2017, *Environmental testing – Part 2-52: Tests – Test Kb: Salt mist, cyclic (sodium chloride solution)*

IEC 60068-2-64:2008, *Environmental testing – Part 2-64: Tests – Test Fh: Vibration, broadband random and guidance*

IEC 60068-2-75:2014, *Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests*

IEC 60068-2-78, *Environmental testing – Part 2-78: Tests – Test Cab: Damp heat, steady state*

IEC 60529, *Degrees of protection provided by enclosures (IP Code)*

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

IEC 61000-4-3, *Electromagnetic compatibility (EMC) – Part 4-3: Testing and measurement techniques – Radiated, radio-frequency, electromagnetic field immunity test*

IEC 61000-4-4, *Electromagnetic compatibility (EMC) – Part 4-4: Testing and measurement techniques – Electrical fast transient/burst immunity test*

IEC 61000-4-5, *Electromagnetic compatibility (EMC) – Part 4-5: Testing and measurement techniques – Surge immunity test*

IEC 61000-4-6, *Electromagnetic compatibility (EMC) – Part 4-6: Testing and measurement techniques – Immunity to conducted disturbances, induced by radio-frequency fields*

IEC 61000-4-11, *Electromagnetic compatibility (EMC) – Part 4-11: Testing and measurement techniques – Voltage dips, short interruptions and voltage variations immunity tests*

IEC 61000-4-29, *Electromagnetic compatibility (EMC) – Part 4-29: Testing and measurement techniques – Voltage dips, short interruptions and voltage variations on d.c. input power port immunity tests*

IEC 61000-4-34, *Electromagnetic compatibility (EMC) – Part 4-34: Testing and measurement techniques – Voltage dips, short interruptions and voltage variations immunity tests for equipment with mains current more than 16 A per phase*

IEC 61000-6-3, *Electromagnetic compatibility (EMC) – Part 6-3: Generic standards – Emission standard for residential, commercial and light-industrial environments*

IEC 61000-6-4, *Electromagnetic compatibility (EMC) – Part 6-4: Generic standards – Emission standard for industrial environments*

IEC 61373, *Railway applications – Rolling stock equipment – Shock and vibration tests*

IEC 62236-3-2, *Railway applications – Electromagnetic compatibility – Part 3-2: Rolling stock – Apparatus*

IEC 62262, *Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)*

CISPR 25, *Vehicles, boats and internal combustion engines – Radio disturbance characteristics – Limits and methods of measurement for the protection of on-board receivers*

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