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Safety requirements for secondary batteries and battery installations - Part 1: General safety information

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. 12/18

Obsahuje: EN IEC 62485-1:2018, IEC 62485-1:2015

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NORME EUROPÉENNE

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Supersedes EN 50272-1:2010

English Version

**Safety requirements for secondary batteries and battery installations - Part 1: General safety information
(IEC 62485-1:2015)**

Exigences de sécurité pour les batteries d'accumulateurs et les installations de batteries - Partie 1: Informations générales de sécurité
(IEC 62485-1:2015)

Sicherheitsanforderungen an Sekundär-Batterien und Batterieanlagen - Teil 1: Allgemeine Sicherheitsinformationen
(IEC 62485-1:2015)

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EN IEC 62485-1:2018 (E)**European foreword**

This document (EN IEC 62485-1:2018) consists of the text of IEC 62485-1:2015 prepared by IEC/TC 21 "Secondary cells and batteries".

The following dates are fixed:

- latest date by which this document has to be implemented (dop) 2019-04-09
at national level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2021-04-09

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

IEC 60254-1	NOTE Harmonized as EN 60254-1.
IEC 60254-2	NOTE Harmonized as EN 60254-2.
IEC 60622	NOTE Harmonized as EN 60622.
IEC 60623	NOTE Harmonized as EN 60623.
IEC 60896-21	NOTE Harmonized as EN 60896-21.
IEC 60896-22	NOTE Harmonized as EN 60896-22.
IEC 60952-1	NOTE Harmonized as EN 60952-1.
IEC 60952-2	NOTE Harmonized as EN 60952-2.
IEC 60952-3	NOTE Harmonized as EN 60952-3.
IEC 61056-1	NOTE Harmonized as EN 61056-1.
IEC 61056-2	NOTE Harmonized as EN 61056-2.
IEC 61427 series	NOTE Harmonized as EN 61427 series.
IEC 61951-1	NOTE Harmonized as EN 61951-1.
IEC 61951-2	NOTE Harmonized as EN 61951-2.
IEC 61959	NOTE Harmonized as EN 61959.
IEC 61960	NOTE Harmonized as EN 61960.
IEC 61982	NOTE Harmonized as EN 61982.
IEC 62133	NOTE Harmonized as EN 62133.
IEC 62259	NOTE Harmonized as EN 62259.
IEC 62877-1	NOTE Harmonized as EN 62877-1.
IEC 62877-2	NOTE Harmonized as EN 62877-2.

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 60050-482	2004	International Electrotechnical Vocabulary (IEV) -- Part 482: Primary and secondary cells and batteries	-	-
IEC 60364-4-41	-	Low-voltage electrical installations -- Part 4-41: Protection for safety - Protection against electric shock	HD 60364-4-41	-
IEC 60993	-	Electrolyte for vented nickel-cadmium cells	EN 60993	-
IEC 61429	1995	Marking of secondary cells and batteries with the international recycling symbol ISO 7000-1135 and indications regarding directives 93/86/EEC and 91/157/EEC	EN 61429	1996
-	-		+ A11	1998
-	-		+ corrigendum Oct.	1998
IEC 62485-2	-	Safety requirements for secondary batteries and battery installations -- Part 2: Stationary batteries	EN 62485-2	-
IEC 62485-3	-	Safety requirements for secondary batteries and battery installations -- Part 3: Traction batteries	EN 62485-3	-
IEC 62485-4	-	Safety requirements for secondary batteries and battery installations -- Part 4: Valve-regulated lead-acid batteries for use in portable appliances	EN 62485-4	-
ISO 7000	-	Graphical symbols for use on equipment - Registered symbols	-	-



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INTERNATIONAL STANDARD

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**Safety requirements for secondary batteries and battery installations –
Part 1: General safety information**

**Exigences de sécurité pour les batteries d'accumulateurs et les installations de
batteries –
Partie 1: Informations générales de sécurité**

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INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Safety requirements for secondary batteries and battery installations –
Part 1: General safety information**

**Exigences de sécurité pour les batteries d'accumulateurs et les installations de
batteries –
Partie 1: Informations générales de sécurité**

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CONTENTS

FOREWORD.....	4
1 Scope.....	6
2 Normative references	6
3 Terms and definitions	7
4 General information	8
4.1 General.....	8
4.2 Charge.....	9
4.2.1 General	9
4.2.2 Charging techniques and charging procedures	9
4.2.3 Charger characteristics.....	10
4.2.4 Mode of operation.....	10
4.3 Discharge	11
4.4 Superimposed AC current / ripple current.....	12
5 Protection against electric shock	12
6 Disconnection and separation.....	12
7 Commissioning and putting batteries into operation	12
7.1 Delivery conditions of batteries	12
7.2 Electrolyte and topping up water (for vented / flooded type cells only).....	12
7.3 Commissioning	12
8 Limit values and correction factors	13
8.1 General.....	13
8.2 Rated capacity and depth of discharge	13
8.3 Charge current, charge voltage	13
8.3.1 General	13
8.3.2 Charge voltage	13
8.4 External short circuit.....	14
8.5 Battery temperature	14
8.5.1 Temperature limits.....	14
8.5.2 Temperature correction of the charging voltage	15
9 Provisions against explosion hazards	16
10 Provision against electrolyte hazards.....	16
11 Marking, labeling and instructions.....	17
12 Transport and storage	17
13 Disposal and environmental aspects.....	17
Bibliography.....	18
Figure 1 – Battery/cycle operation mode of a battery (charge/discharge)	10
Figure 2 – Response (switch) mode operation	11
Figure 3 – Parallel operation mode (including standby and buffer operation mode)	11
Figure 4 – Freezing point curve of sulphuric acid	15
Figure 5 – Freezing point curve of potassium hydroxide solution.....	15
Table 1 – Electrochemical couples (secondary cells)	8

Table 2 – Preferred fields of application of secondary battery design	9
Table 3 – Permitted variation of single cell voltage during charging with constant voltage at battery temperature 20 °C.....	14
Table 4 – Operating temperatures.....	14
Table 5 – Typical temperature correction factor λ_U of the single cell charging voltage	16

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**SAFETY REQUIREMENTS FOR SECONDARY
BATTERIES AND BATTERY INSTALLATIONS –****Part 1: General safety information**

FOREWORD

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International Standard IEC 62485-1 has been prepared by IEC technical committee 21: Secondary cells and batteries.

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

FDIS	Report on voting
21/851/FDIS	21/856/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.

A list of all parts of the IEC 62485 series can be found, under the general title *Safety requirements for secondary batteries and battery installations*, on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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SAFETY REQUIREMENTS FOR SECONDARY BATTERIES AND BATTERY INSTALLATIONS –

Part 1: General safety information

1 Scope

This Part of IEC 62485 specifies the basic requirements for secondary batteries and battery installations.

The requirements regarding safety, reliability, life expectancy, mechanical strength, cycle stability, internal resistance, and battery temperature, are determined by various applications, and this, in turn, determines the selection of the battery design and technology.

In general, the requirements and definitions are specified for lead-acid and nickel-cadmium batteries. For other battery systems with aqueous electrolyte, the requirements may be applied accordingly.

The standard covers safety aspects taking into account hazards associated with:

- electricity (installation, charging, discharging, etc.);
- electrolyte;
- inflammable gas mixtures;
- storage and transportation.

With respect to electrical safety, reference is made to IEC 60364-4-41.

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 – Part 482: Primary and secondary cells and batteries*

IEC 60364-4-41, *Low-voltage electrical installations – Part 4-41: Protection for safety – Protection against electric shock*

IEC 60993, *Electrolyte for vented nickel-cadmium cells*

IEC 61429:1995, *Marking of secondary cells and batteries with the international recycling symbol ISO 7000-1135*

IEC 62485-2, *Safety requirements for secondary batteries and battery installations – Part 2: Stationary batteries*

IEC 62485-3, *Safety requirements for secondary batteries and battery installations – Part 3: Traction batteries*

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– 7 –

IEC 62485-4, *Safety requirements for secondary batteries and battery installations – Part 4: Valve-regulated lead-acid batteries for use in portable appliances*

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