

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

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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English Version

**Safety requirements for secondary batteries and battery
installations - Part 4: Valve-regulated lead-acid batteries for use
in portable appliances
(IEC 62485-4:2015)**

Exigences de sécurité pour les batteries d'accumulateurs et
les installations de batteries - Partie 4: Batteries au plomb à
soupapes pour appareils portables
(IEC 62485-4:2015)

Sicherheitsanforderungen an Sekundär-Batterien und
Batterieanlagen - Teil 4: Verschlussene Bleibatterien zur
Anwendung in tragbaren Geräten
(IEC 62485-4:2015)

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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European foreword

This document (EN IEC 62485-4:2018) consists of the text of IEC 62485-4:2015 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- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2021-04-09

This document supersedes EN 50272-4:2007.

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Endorsement notice

The text of the International Standard IEC 62485-4:2015 was approved by CENELEC as a European Standard without any modification.

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

IEC 60086-1	NOTE Harmonized as EN 60086-1.
IEC 60086-2	NOTE Harmonized as EN 60086-2.
IEC 60086-3	NOTE Harmonized as EN 60086-3.
IEC 60086-4	NOTE Harmonized as EN 60086-4.
IEC 60086-5	NOTE Harmonized as EN 60086-5.
IEC 61056-1	NOTE Harmonized as EN 61056-1.
IEC 61056-2	NOTE Harmonized as EN 61056-2.
IEC 62133	NOTE Harmonized as EN 62133.
IEC 62425-2	NOTE Harmonized as EN 62425-2.

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 60417-DB	-	Graphical symbols for use on equipment	-	-
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	
ISO 7000	-	Graphical symbols for use on equipment - Registered symbols	-	-

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INTRODUCTION

This standard provides information about the safety and health protection of persons when using valve-regulated lead-acid batteries, which are used as a DC power supply systems in portable appliances. Therefore the standard applies to commercially available valve-regulated lead-acid batteries and battery systems.

IEC 62133 has preference for secondary cells and batteries containing alkaline or other non-acid electrolytes.

In some portable appliances or toys the use of both primary and secondary cells or batteries is possible. Where there is interchangeability of these cells or batteries, the standards for primary batteries in the IEC 60086 series, Parts 1 to 5, have preference.