N O R M A I T A L I A N A C E I

Norma Italiana *Data Pubblicazione*

CEI EN 62485-3 **2016-05**

La seguente Norma è identica a: EN 62485-3:2014-10.

Titolo

Prescrizioni di sicurezza per batterie di accumulatori e loro installazioni
Parte 3: Batterie di trazione

Title

Safety requirements for secondary batteries and battery installations

Part 3: Traction batteries

Sommario

La presente Norma sostituisce completamente la Norma CEI EN 50272-3:2003-04 che rimane applicabile fino al 14-08-2017.
Questa Norma viene pubblicata dal CEI nella sola lingua inglese in quanto particolarmente mirata a settori specialistici.
La presente Norma recepisce il testo originale inglese della Pubblicazione IEC.

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COLLEGAMENTI/RELAZIONI TRA DOCUMENTI

Nazionali	(SOC) CEI EN 50272-3:2003-04 (CEI 21-42); fasc. 6880, che rimane applicabile fino al 14-08-2017;
Europei	(IDT) EN 62485-3:2014-10;
Internazionali	(IDT) IEC 62485-3:2014-07;
Legislativi	
Legenda	*(SOC) - La Norma in oggetto sostituisce completamente le Norme indicate dopo il riferimento (SOC)* *(IDT) - La Norma in oggetto è identica alle Norme indicate dopo il riferimento (IDT)*

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 62485-3

October 2014

ICS 29.220.20; 29.220.30; 43.040.10

Supersedes EN 50272-3:2002

English Version

Safety requirements for secondary batteries and battery installations - Part 3: Traction batteries (IEC 62485-3:2014)

Exigences de sécurité pour les batteries d'accumulateurs et les installations de batteries - Partie 3: Batteries de traction (CEI 62485-3:2014)

Sicherheitsanforderungen an Batterien und Batterieanlagen - Teil 3: Antriebsbatterien für Elektrofahrzeuge (IEC 62485-3:2014)

This European Standard was approved by CENELEC on 2014-08-14. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 62485-3:2014 E

Foreword

The text of document 21/834/FDIS, future edition 2 of IEC 62485-3, prepared by IEC/TC 21 "Secondary cells and batteries" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62485-3:2014.

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)	2015-05-14
–	latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2017-08-14

This document supersedes EN 50272-3:2002.

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Endorsement notice

The text of the International Standard IEC 62485-3:2014 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated :

IEC 61429	NOTE	Harmonized as EN 61429.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 When 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.

Publication	Year	Title	EN/HD	Year
IEC 60204-1	-	Safety of machinery - Electrical equipment of machines - Part 1: General requirements	EN 60204-1	-
IEC 60364-4-41 (mod) -	2005 -	Low-voltage electrical installations - Part 4-41: Protection for safety - Protection against electric shock	HD 60364-4-41 + corrigendum Jul.	2007 2007
IEC 60900	-	Live working - Hand tools for use up to 1 000 V a.c. and 1 500 V d.c.	EN 60900	-
IEC 61140	-	Protection against electric shock - Common aspects for installation and equipment	EN 61140	-
ISO 3864	series	Graphical symbols - Safety colours and safety signs	-	-

IEC 62485-3

Edition 2.0 2014-07

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Safety requirements for secondary batteries and battery installations – Part 3: Traction batteries

Exigences de sécurité pour les batteries d'accumulateurs et les installations de batteries – Partie 3: Batteries de traction

IEC 62485-3:2014-07(en-fr)

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IEC 62485-3

Edition 2.0 2014-07

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Safety requirements for secondary batteries and battery installations – Part 3: Traction batteries

Exigences de sécurité pour les batteries d'accumulateurs et les installations de batteries – Partie 3: Batteries de traction

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CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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SAFETY REQUIREMENTS FOR SECONDARY BATTERIES AND BATTERY INSTALLATIONS –

Part 3: Traction batteries

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 62485-3 has been prepared by IEC technical committee 21: Secondary cells and batteries.

This second edition cancels and replaces the first edition published in 2010. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) a comprehensive revision of Clause 6, presenting a unified and changed formula for the calculation of the required ventilation air flow during battery charging;
b) addition of requirements for properties of floor material and battery changing equipment in Clause 9.

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

FDIS	Report on voting
21/834/FDIS	21/843/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 web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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

SAFETY REQUIREMENTS FOR SECONDARY BATTERIES AND BATTERY INSTALLATIONS –

Part 3: Traction batteries

1 Scope

This part of the IEC 62485 applies to secondary batteries and battery installations used for electric vehicles, e.g. in electric industrial trucks (including lift trucks, tow trucks, cleaning machines, automatic guided vehicles), in battery powered locomotives, in electric vehicles (e.g. goods vehicles, golf carts, bicycles, wheelchairs), and does not cover the design of such vehicles.

This International Standard covers lead dioxide-lead (lead-acid), nickel oxide-cadmium, nickel-oxide-metal hydride and other alkaline secondary batteries. Safety aspects of secondary lithium batteries in such applications will be covered in their own appropriate standards.

The nominal voltages are limited to 1 000 V a.c. and 1 500 V d.c. respectively and the principal measures for protection against hazards generally from electricity, gas emission and electrolyte are described.

It provides requirements on safety aspects associated with the installation, use, inspection, maintenance and disposal of batteries.