

© Copyright SEK. Reproduction in any form without permission is prohibited.

Ventilreglerade mindre blybatterier för allmän användning – Del 2: Mått, poler och märkning

*General purpose lead-acid batteries (valve-regulated types) –
Part 2: Dimensions, terminals and marking*

Som svensk standard gäller europastandarden EN 61056-2:2012. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61056-2:2012.

Nationellt förord

Europastandarden EN 61056-2:2012

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 61056-2, Third edition, 2012^{*)} - General purpose lead-acid batteries (valve-regulated types) - Part 2: Dimensions, terminals and marking**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 61056-2, utgåva 2, 2003, gäller ej fr o m 2015-03-28.

^{*)} Corrigendum, October 2012 till IEC 61056-2:2012 är inarbetat i standarden.

Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler för bl a säkerhet, prestanda, dokumentation, utförande och skötsel av elprodukter, elanläggningar och metoder. Genom att utforma sådana standarder blir säkerhetskraven tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

SEK är Sveriges röst i standardiseringsarbetet inom elområdet

SEK Svensk Elstandard svarar för standardiseringen inom elområdet i Sverige och samordnar svensk medverkan i internationell och europeisk standardisering. SEK är en ideell organisation med frivilligt deltagande från svenska myndigheter, företag och organisationer som vill medverka till och påverka utformningen av tekniska regler inom elektrotekniken.

SEK samordnar svenska intressenters medverkan i SEKs tekniska kommittéer och stödjer svenska experters medverkan i internationella och europeiska projekt.

Stora delar av arbetet sker internationellt

Utformningen av standarder sker i allt väsentligt i internationellt och europeiskt samarbete. SEK är svensk nationalkommitté av International Electrotechnical Commission (IEC) och Comité Européen de Normalisation Electrotechnique (CENELEC).

Standardiseringsarbetet inom SEK är organiserat i referensgrupper bestående av ett antal tekniska kommittéer som speglar hur arbetet inom IEC och CENELEC är organiserat.

Arbetet i de tekniska kommittéerna är öppet för alla svenska organisationer, företag, institutioner, myndigheter och statliga verk. Den årliga avgiften för deltagandet och intäkter från försäljning finansierar SEKs standardiseringsverksamhet och medlemsavgift till IEC och CENELEC.

Var med och påverka!

Den som deltar i SEKs tekniska kommittéarbete har möjlighet att påverka framtida standarder och får tidig tillgång till information och dokumentation om utvecklingen inom sitt teknikområde. Arbetet och kontakterna med kollegor, kunder och konkurrenter kan gynnsamt påverka enskilda företags affärsutveckling och bidrar till deltagarnas egen kompetensutveckling.

Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

SEK Svensk Elstandard

Box 1284
164 29 Kista
Tel 08-444 14 00
www.elstandard.se

English version

**General purpose lead-acid batteries (valve-regulated types) -
Part 2: Dimensions, terminals and marking
(IEC 61056-2:2012 + corrigendum Oct. 2012)**

Batteries d'accumulateurs au plomb-acide pour usage général (types à soupapes) - Partie 2: Dimensions, bornes et marquage (CEI 61056-2:2012 + corrigendum Oct. 2012)

Bleibatterien für allgemeine Anwendungen (verschlossen) - Teil 2: Maße, Anschlüsse und Kennzeichnung (IEC 61056-2:2012 + corrigendum Oct. 2012)

This European Standard was approved by CENELEC on 2012-03-28. 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 21/766/FDIS, future edition 3 of IEC 61056-2, prepared by IEC/TC 21 "Secondary cells and batteries" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61056-2:2012.

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) 2013-06-14
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2015-03-28

This document supersedes EN 61056-2:2003.

The main changes consist in adding new battery designations and an update of the requirements like the one concerning the marking.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

The text of the International Standard IEC 61056-2:2012 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 60051-1:1997	NOTE	Harmonized as EN 60051-1:1998 (not modified).
IEC 60095 series	NOTE	Harmonized in EN 60095 series.
IEC 60254 series	NOTE	Harmonized in EN 60254 series.
IEC 60896 series	NOTE	Harmonized in EN 60896 series.
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 When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60445	-	Basic and safety principles for man-machine interface, marking and identification - Identification of equipment terminals, conductor terminations and conductors	EN 60445	-
IEC 61056-1	2012	General purpose lead-acid batteries (valve-regulated types) - Part 1: General requirements, functional characteristics - Methods of test	EN 61056-1	2012

CONTENTS

1	Scope	5
2	Normative references	5
3	Terms and definitions	5
4	Dimensions	6
5	Terminals	6
6	Marking	6
6.1	Marking of polarity	6
6.2	Marking items	6
7	Classification of battery-shapes	6
8	Classification of terminal types	9
	Bibliography	12
	Figure 1 – P-type batteries.....	8
	Figure 2 – C-type cells.....	9
	Figure 3 – F-contacts (flat contacts).....	9
	Figure 4 – B-contacts (bolt and nut system)	10
	Figure 5 – Lead-type terminal	10
	Figure 6 – Screw contacts	11
	Figure 7 – K-contact (button-contact).....	11
	Table 1 – Prismatic design (P-type)	7
	Table 2 – Cylindrical shape (C-type)	8

GENERAL PURPOSE LEAD-ACID BATTERIES (VALVE-REGULATED TYPES) –

Part 2: Dimensions, terminals and marking

1 Scope

This part of IEC 61056 specifies the dimensions, terminals and marking for all general purpose lead-acid cells and batteries of the valve regulated type :

- for either cyclic or float charge application;
- in portable equipment, for instance, incorporated in tools, toys, or in static emergency, or uninterruptible power supply and general power supplies.

The cells of this kind of lead-acid battery may either have flat-plate electrodes in prismatic containers or have spirally wound pairs of electrodes in cylindrical containers. The sulphuric acid in these cells is immobilized between the electrodes either by absorption in a microporous structure or in a gelled form.

This standard defines the dimensions of the batteries in length, height and width, as well as the shapes of the terminals.

The lead-acid cells and batteries which are described in this standard should be tested according to the requirements of IEC 61056-1.

This part of IEC 61056 does not apply for example to lead-acid cells and batteries used for

- vehicle engine starting applications (IEC 60095 series),
- traction applications (IEC 60254 series) or
- stationary applications (IEC 60896 series).

Conformance to this standard requires that dimensions, terminals and marking correspond to these requirements.

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 60445, *Basic and safety principles for man-machine interface, marking and identification – Identification of equipment terminals, conductor terminations and conductors*

IEC 61056-1:2012, *General purpose lead-acid batteries (valve-regulated types) – Part 1: General requirements, functional characteristics – Methods of test*