

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Primary batteries –
Part 2: Physical and electrical specifications**

**Piles électriques –
Partie 2: Spécifications physiques et électriques**



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INTERNATIONAL
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

PRIMARY BATTERIES –**Part 2: Physical and electrical specifications**

FOREWORD

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International Standard IEC 60086-2 has been prepared by IEC technical committee 35: Primary cells and batteries.

This twelfth edition cancels and replaces the eleventh edition (2006) and constitutes a technical revision.

Significant changes from the previous edition are the deletion of eight battery types from this standard, the addition of an air hole placement diagram and deletion of the resistive hearing aid tests for the P-system (zinc air) hearing aid batteries, standardization of a new form of alkaline (L-system) 9 volt battery (6LP3146), addition of a common designation reference as Annex D and general adjustment of application tests and their minimum average duration values to reflect changes in battery usage.

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

CDV	Report on voting
35/1271/CDV	35/1275/RVC

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 in the IEC 60086 series, under the general title *Primary batteries*, can be found 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- withdrawn;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.

INTRODUCTION

The technical content of this part of IEC 60086 provides physical dimensions, discharge test conditions and discharge performance requirements. IEC 60086-2 complements the general information and requirements of IEC 60086-1.

This part was prepared to benefit primary battery users, device designers and battery manufacturers by furnishing the specifics of form, fit and function for individual standardized primary cells and batteries. Over the years, this part has been changed to improve its contents and may again be revised in due course in the light of comments made by national committees and experts on the basis of practical experience and changing technology.

This current revision is the result of a reformatting initiative, as well as some content changes, aimed at making this part more user-friendly, less ambiguous, and, from a cross reference basis, fully harmonized with other parts of IEC 60086.

NOTE Safety information is available in IEC 60086-4, IEC 60086-5 and IEC 62281.

PRIMARY BATTERIES –

Part 2: Physical and electrical specifications

1 Scope

This part of IEC 60086 is applicable to primary batteries based on standardized electro-chemical systems.

It specifies

- the physical dimensions,
- the discharge test conditions and discharge performance requirements.

2 Normative references

The following referenced documents are indispensable for the application 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 60086-1:2011, *Primary batteries – Part 1: General*

ISO 1101, *Geometrical product specifications (GPS) – Geometrical tolerancing – Tolerances of form, orientation, location and run-out*

3 Terms, definitions, symbols and abbreviations

For the purposes of this document, the terms, definitions, symbols and abbreviations given in IEC 60086-1 and the following apply.

3.1 Terms and definitions

3.1.1

application test

simulation of the actual use of a battery in a specific application

3.1.2

closed-circuit voltage

CCV (abbreviation)

voltage across the terminals of a battery when it is on discharge

[IEC 60050- 482:2004, 482-03-28, modified]

3.1.3

end-point voltage

EV (abbreviation)

specified voltage of a battery at which the battery discharge is terminated

[IEC 60050-482:2004, 482-03-30, modified]