



NSAI
Standards

Irish Standard
I.S. EN IEC 60086-3:2021

Primary batteries - Part 3: Watch batteries

I.S. EN IEC 60086-3:2021

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

I.S. EN IEC 60086-3:2021 is the adopted Irish version of the European Document EN IEC 60086-3:2021, Primary batteries - Part 3: Watch batteries

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In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN IEC 60086-3

June 2021

ICS 29.220.10; 39.040.10

Supersedes EN 60086-3:2016 and all of its amendments
and corrigenda (if any)

English Version

**Primary batteries - Part 3: Watch batteries
(IEC 60086-3:2021)**

Piles électriques - Partie 3: Piles pour montres
(IEC 60086-3:2021)

Primärbatterien - Teil 3: Uhrenbatterien
(IEC 60086-3:2021)

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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.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 60086-3:2021 (E)

European foreword

The text of document 35/1467/FDIS, future edition 5 of IEC 60086-3, prepared by IEC/TC 35 "Primary cells and batteries" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60086-3:2021.

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) 2022-03-01
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024-06-01

This document supersedes EN 60086-3:2016 and all of its amendments and corrigenda (if any).

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

Endorsement notice

The text of the International Standard IEC 60086-3:2021 was approved by CENELEC as a European Standard without any modification.

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 60086-1	-	Primary batteries - Part 1: General	EN IEC 60086-1	-
IEC 60086-2	-	Primary batteries - Part 2: Physical and electrical specifications	EN IEC 60086-2	-
IEC 60086-4	-	Primary batteries - Part 4: Safety of lithium batteries	EN IEC 60086-4	-
IEC 60086-5	-	Primary batteries - Part 5: Safety of batteries with aqueous electrolyte	EN 60086-5	-

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IEC 60086-3

Edition 5.0 2021-04

INTERNATIONAL STANDARD

**Primary batteries –
Part 3: Watch batteries**



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IEC 60086-3

Edition 5.0 2021-04

INTERNATIONAL STANDARD

Primary batteries – Part 3: Watch batteries

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 29.220.10; 39.040.10

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

PRIMARY BATTERIES –

Part 3: Watch batteries

FOREWORD

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International Standard IEC 60086-3 has been prepared by IEC technical committee 35: Primary cells and batteries, and ISO technical committee 114: Horology.

This fifth edition cancels and replaces the fourth edition published in 2016. This edition constitutes a technical revision.

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

- a) reformatted Table 1 and Table 2. The reformatted tables are now divided by system. Dimensional tolerances were changed when appropriate. Cell sizes were removed or added based on the size prevalence in the market place;
- b) in Table 3 the minimum values of I_1 were reformatted;
- c) the minimum OCV for the S system in Table 5 was changed to 1,55 V.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
35/1467/FDIS	35/1470/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

A list of all parts in the IEC 60086 series, published under the general title *Primary batteries*, can be found on the IEC website.

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

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

INTRODUCTION

This part of IEC 60086 provides specific requirements and information for primary watch batteries. This part of IEC 60086 was prepared through joint work between the IEC and ISO to benefit primary battery users, watch designers and battery manufacturers by ensuring the best compatibility between batteries and watches.

This part of IEC 60086 will remain under continual scrutiny to ensure that the publication is kept up to date with the advances in both battery and watch technologies.

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

PRIMARY BATTERIES –

Part 3: Watch batteries

1 Scope

This part of IEC 60086 specifies dimensions, designation, methods of tests and requirements for primary batteries for watches. In several cases, a menu of test methods is given. When presenting battery electrical characteristics and/or performance data, the manufacturer specifies which test method was used.

2 Normative references

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.

IEC 60086-1, *Primary batteries – Part 1: General*

IEC 60086-2, *Primary batteries – Part 2: Physical and electrical specifications*

IEC 60086-4, *Primary batteries – Part 4: Safety of lithium batteries*

IEC 60086-5, *Primary batteries – Part 5: Safety of batteries with aqueous electrolyte*

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

capacitive reactance

part of the internal resistance that leads to a voltage drop during the first seconds under load

3.2

capacity

electric charge (quantity of electricity) which a cell or battery can deliver under specified discharge conditions

Note 1 to entry: The SI unit for electric charge is the coulomb (1 C = 1 As) but, in practice, capacity is usually expressed in ampere hours (Ah).

3.3

fresh battery

undischarged battery 60 days maximum after date of manufacture

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