

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

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

**Piles électriques –  
Partie 3: Piles pour montres**



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**Primary batteries –  
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INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## CONTENTS

FOREWORD.....	4
INTRODUCTION.....	6
1 Scope.....	7
2 Normative references.....	7
3 Terms and definitions .....	7
4 Physical requirements.....	8
4.1 Battery dimensions, symbols and size codes .....	8
4.2 Terminals.....	9
4.3 Projection of the negative terminal ( $h_5$ ).....	10
4.4 Shape of negative terminal.....	10
4.5 Mechanical resistance to pressure.....	11
4.6 Deformation .....	11
4.7 Leakage.....	11
4.8 Marking.....	12
4.8.1 General .....	12
4.8.2 Disposal .....	12
5 Electrical requirements .....	12
5.1 Electrochemical system, nominal voltage, end-point voltage and open-circuit voltage.....	12
5.2 Closed circuit voltage $U_{CC}$ (CCV), internal resistance and impedance.....	13
5.3 Capacity .....	13
5.4 Capacity retention .....	13
6 Sampling and quality assurance.....	13
7 Test methods.....	13
7.1 Shape and dimensions .....	13
7.1.1 Shape requirement.....	13
7.2 Electrical characteristic .....	14
7.2.1 Environmental conditions .....	14
7.2.2 Equivalent circuit – effective internal resistance – DC method.....	14
7.2.3 Equipment.....	15
7.2.4 Measurement of open-circuit voltage $U_{OC}$ (OCV) and closed circuit voltage $U_{CC}$ (CCV) .....	15
7.2.5 Calculation of the internal resistance $R_i$ .....	16
7.2.6 Measurement of the capacity.....	16
7.2.7 Calculation of the internal resistance $R_i$ during discharge in case of method A (optional).....	18
7.3 Test methods for determining the resistance to leakage .....	20
7.3.1 Preconditioning and initial visual examination .....	20
7.3.2 High temperature and humidity test .....	20
7.3.3 Test by temperature cycles .....	20
8 Visual examination and acceptance conditions .....	21
8.1 Preconditioning .....	21
8.2 Magnification .....	21
8.3 Lighting.....	21
8.4 Leakage levels and classification.....	21
8.5 Acceptance conditions.....	23

Annex A (normative) Designation .....	24
Bibliography .....	25
Figure 1 – Dimensional drawing .....	8
Figure 2 – Shape of negative terminal .....	11
Figure 3 – Shape requirement .....	14
Figure 4 – Schematic voltage transient .....	14
Figure 5 – Curve: $U = f(t)$ .....	15
Figure 6 – Circuitry principle .....	16
Figure 7 – Circuitry principle for method A .....	17
Figure 8 – Circuitry principle for method B .....	18
Figure 9 – Test by temperature cycles .....	20
Table 1 – Dimensions and size codes .....	9
Table 2 – Dimensions and size codes .....	10
Table 3 – Minimum values of $I_1$ .....	11
Table 4 – Applied force $F$ by battery dimensions .....	11
Table 5 – Standardised electrochemical systems .....	12
Table 6 – Test method for $U_{CC}$ (CCV) measurement .....	16
Table 7 – Test method A for $U_{CC}$ (CCV) measurement .....	17
Table 8 – Discharge resistance (values) .....	19
Table 9 – Storage conditions for the recommended test .....	20
Table 10 – Storage conditions for optional test .....	20
Table 11 – Leakage levels and classification (p. 1 of 2) .....	22

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**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 fourth edition cancels and replaces the third edition published in 2011. This edition constitutes a technical revision.

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

- a) A harmonization of the cell sizes and service output tests with IEC 60086-2;
- b) Clarifications of Clauses 6: Sampling and Quality Assurance, 7: Test methods, and 8: Visual examination and acceptance condition;
- c) Harmonization of temperature and humidity conditions with IEC 60086-1.

This publication is published as a double logo standard.

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

FDIS	Report on voting
35/1359/FDIS	35/1362/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 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 publication will remain unchanged until the stability date indicated on the IEC website 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

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.

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## 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, 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 60086-1:2015, *Primary batteries – Part 1: General*

IEC 60086-2:2015, *Primary batteries – Part 2: Physical and electrical specifications*

IEC 60086-4:2014, *Primary batteries – Part 4: Safety of lithium batteries*

IEC 60086-5:-1, *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 as well as the following terms and definitions apply.

##### 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 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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<sup>1</sup> To be published.