IEC 60086-3

Edition 4.0 2016-05

REDLINE VERSION

colour inside

Primary batteries –
Part 3: Watch batteries

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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PRIMARY BATTERIES –

Part 3: Watch batteries

FOREWORD

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This Redline version provides you with a quick and easy way to compare all the changes between this standard and its previous edition. A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text.

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.

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

FDIS	Report on voting
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- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

IMPORTANT – The "colour inside" logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this publication using a colour printer.

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 ~~TC 35~~ and ISO ~~TC 114~~ 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 ~~can be found~~ 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, 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~~-1~~:2015, *Primary batteries – Part 1: General*

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

IEC 60086-4:~~2007~~ 2014, *Primary batteries – Part 4: Safety of lithium batteries*

IEC 60086-5:-[3], *Primary batteries – Part 5: Safety of batteries with aqueous electrolyte*

~~IEC 60410, *Sampling plans and procedures for inspection by attributes*~~

~~ISO 2859 (all parts), *Sampling procedures for inspection by attributes*~~

~~ISO 3951(all parts as applicable), *Sampling procedures for inspection by variables*~~

~~1 To be published in 2011.~~

~~2 To be published in 2011.~~

3 To be published ~~in 2011~~.

IEC 60086-3

Edition 4.0 2016-05

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Primary batteries –
Part 3: Watch batteries

Piles électriques –
Partie 3: Piles pour montres

IEC 60086-3:2016-05(en-fr)

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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*

[1] To be published.

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COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

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PILES ÉLECTRIQUES –

Partie 3: Piles pour montres

AVANT-PROPOS

1) La Commission Electrotechnique Internationale (IEC) est une organisation mondiale de normalisation composée de l'ensemble des comités électrotechniques nationaux (Comités nationaux de l'IEC). L'IEC a pour objet de favoriser la coopération internationale pour toutes les questions de normalisation dans les domaines de l'électricité et de l'électronique. A cet effet, l'IEC – entre autres activités – publie des Normes internationales, des Spécifications techniques, des Rapports techniques, des Spécifications accessibles au public (PAS) et des Guides (ci-après dénommés "Publication(s) de l'IEC"). Leur élaboration est confiée à des comités d'études, aux travaux desquels tout Comité national intéressé par le sujet traité peut participer. Les organisations internationales, gouvernementales et non gouvernementales, en liaison avec l'IEC, participent également aux travaux. L'IEC collabore étroitement avec l'Organisation Internationale de Normalisation (ISO), selon des conditions fixées par accord entre les deux organisations.
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La Norme internationale IEC 60086-3 a été établie par le comité d'études 35 de l'IEC: Piles, et par le comité technique 114 de l'ISO: Horlogerie.

Cette quatrième édition annule et remplace la troisième édition parue en 2011. Cette édition constitue une révision technique.

Cette édition inclut les modifications techniques majeures suivantes par rapport à l'édition précédente:

a) Harmonisation des tailles des éléments et des essais de capacité avec l'IEC 60086-2;
b) Clarification des Articles 6: Echantillonnage et assurance de la qualité, 7: Méthodes d'essai, et 8: Examen visuel et conditions d'acceptation;
c) Harmonisation des conditions de température et d'humidité avec celles de l'IEC 60086-1.

La présente norme est une norme double logo.

Le texte de cette norme est issu des documents suivants:

FDIS	Rapport de vote
35/1359/FDIS	35/1362/RVD

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à l'approbation de cette norme.

Cette publication a été rédigée selon les Directives ISO/IEC, Partie 2.

Une liste de toutes les parties de la série IEC 60086, publiées sous le titre général *Piles électriques,* peut être consultée sur le site web de l'IEC.

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INTRODUCTION

La présente partie de l'IEC 60086 donne les exigences et les informations spécifiques aux piles électriques pour montres. Cette partie de l'IEC 60086 a été élaborée conjointement par l'IEC et l'ISO dans l'intérêt des utilisateurs de piles électriques, des concepteurs de montres et des fabricants de piles en assurant la meilleure compatibilité possible entre les piles et les montres.

La présente partie de l'IEC 60086 fera l'objet d'un suivi permanent pour en permettre la mise à jour au fur et à mesure des progrès technologiques dans le domaine des piles et des montres.

NOTE Les informations concernant la sécurité sont données dans l'IEC 60086-4 et dans l'IEC 60086-5.

PILES ÉLECTRIQUES –

Partie 3: Piles pour montres

1 Domaine d'application

La présente partie de l'IEC 60086 spécifie les dimensions, la désignation, les méthodes d'essai et les exigences applicables aux piles électriques pour montres. Dans certains cas, un choix de méthodes d'essai est proposé. Lorsque le fabricant présente les caractéristiques électriques et/ou les performances de la pile, il précise la méthode d'essai qui a été utilisée.

2 Références normatives

Les documents suivants sont cités en référence de manière normative, en intégralité ou en partie, dans le présent document et sont indispensables pour son application. Pour les références datées, seule l'édition citée s'applique. Pour les références non datées, la dernière édition du document de référence s'applique (y compris les éventuels amendements).

IEC 60086-1:2015, *Primary batteries – Part 1: General* (disponible en anglais seulement)

IEC 60086-2:2015, *Piles électriques – Partie 2: Spécifications physiques et électriques*

IEC 60086-4:2014, *Piles électriques – Partie 4: Sécurité des piles au lithium*

IEC 60086-5:-[1], *Piles électriques – Partie 5: Sécurité des piles à électrolyte aqueux*

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1 Publication à venir.