



IEC 62813

Edition 2.0 2025-01
REDLINE VERSION

INTERNATIONAL STANDARD



Lithium-ion capacitors for use in electric and electronic equipment –
Test methods for electrical characteristics

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 31.060.99

ISBN 978-2-8327-0150-8

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**LITHIUM-ION CAPACITORS FOR USE
IN ELECTRIC AND ELECTRONIC EQUIPMENT –
TEST METHODS FOR ELECTRICAL CHARACTERISTICS****FOREWORD**

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IEC 62813 has been prepared by IEC technical committee 40: Capacitors and resistors for electronic equipment. It is an International Standard.

This second edition cancels and replaces the first edition published in 2015. This edition constitutes a technical revision.

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

- a) The document has been restructured to comply with the ISO/IEC Directives, Part 2.

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

Draft	Report on voting
40/3178/FDIS	40/3195/RVD

Full information on the voting for its approval 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/publications.

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LITHIUM-ION CAPACITORS FOR USE IN ELECTRIC AND ELECTRONIC EQUIPMENT – TEST METHODS FOR ELECTRICAL CHARACTERISTICS

1 Scope

This International Standard specifies the electrical characteristics (capacitance, internal resistance, discharge accumulated electric energy, and voltage maintenance rate) test methods of lithium-ion capacitors (LIC) for use in electric and electronic equipment.

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 60068-1:2013, *Environmental testing – Part 1: General and guidance*

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Lithium-ion capacitors for use in electric and electronic equipment –
Test methods for electrical characteristics**

**Condensateurs au lithium-ion destinés à être utilisés dans les équipements
électriques et électroniques – Méthodes d'essai relatives aux caractéristiques
électriques**



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

LITHIUM-ION CAPACITORS FOR USE IN ELECTRIC AND ELECTRONIC EQUIPMENT – TEST METHODS FOR ELECTRICAL CHARACTERISTICS

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COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

CONDENSATEURS AU LITHIUM-ION DESTINÉS À ÊTRE UTILISÉS DANS LES ÉQUIPEMENTS ÉLECTRIQUES ET ÉLECTRONIQUES – MÉTHODES D'ESSAI RELATIVES AUX CARACTÉRISTIQUES ÉLECTRIQUES

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L'IEC 62813 a été établie par le comité d'études 40 de l'IEC: Condensateurs et résistances pour équipements électroniques. Il s'agit d'une Norme internationale.

Cette deuxième édition annule et remplace la première édition parue en 2015. Cette édition constitue une révision technique.

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

- a) Le document a été restructuré pour être conforme aux Directives ISO/IEC, Partie 2.

Le texte de cette Norme internationale est issu des documents suivants:

Projet	Rapport de vote
40/3178/FDIS	40/3195/RVD

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

La langue employée pour l'élaboration de cette Norme internationale est l'anglais.

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**CONDENSATEURS AU LITHIUM-ION DESTINÉS À ÊTRE UTILISÉS
DANS LES ÉQUIPEMENTS ÉLECTRIQUES ET ÉLECTRONIQUES –
MÉTHODES D'ESSAI RELATIVES AUX CARACTÉRISTIQUES
ÉLECTRIQUES**

1 Domaine d'application

La présente Norme internationale spécifie les méthodes d'essai applicables aux caractéristiques électriques (capacité, résistance interne, énergie électrique cumulée de décharge et taux de maintien de la tension) des condensateurs au lithium-ion (LIC – Lithium-Ion Capacitor) destinés à être utilisés dans les équipements électriques et électroniques.

2 Références normatives

Les documents suivants sont cités dans le texte de sorte qu'ils constituent, pour tout ou partie de leur contenu, des exigences du présent document. 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 60068-1:2013, *Essais d'environnement – Partie 1: Généralités et lignes directrices*