BS EN 62813:2015

BSI Standards Publication

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

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National foreword

This British Standard is the UK implementation of EN 62813:2015. It is identical to IEC 62813:2015.

The UK participation in its preparation was entrusted to Technical Committee EPL/40X, Capacitors and resistors for electronic equipment.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Compliance with a British Standard cannot confer immunity from legal obligations.

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EUROPEAN STANDARD

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English Version

Lithium ion capacitors for use in electric and electronic equipment - Test methods for electrical characteristics (IEC 62813:2015)

Condensateurs au lithium-ion destinés à être utilisés dans les équipements électriques et electroniques - Méthodes d'essai relatives aux caractéristiques électriques (IEC 62813:2015)

Lithium-Ionen-Kondensatoren zur Verwendung in elektrischen und elektronischen Geräten - Prüfverfahren für die elektrischen Kennwerte (IEC 62813:2015)

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

The text of document 40/2322/FDIS, future edition 1 of IEC 62813, prepared by IEC TC 40, "Capacitors and resistors for electronic equipment" was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62813:2015.

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)	2015-11-12
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2018-02-12

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The text of the International Standard IEC 62813:2015 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 62391-1:2006	NOTE	Harmonised as EN 62391-1:2006.
IEC 62576:2009	NOTE	Harmonised as EN 62576:2010.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 When 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.

Publication	Year	Title	EN/HD	Year
IEC 60068-1	2013	Environmental testing -- Part 1: General and guidance	EN 60068-1	2014

CONTENTS

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

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

NOTE The terms printed in italics are those which are defined in this Clause 3.

3.1
upper category temperature
highest ambient temperature that a LIC is designed to operate continuously

[SOURCE: IEC 62576:2009, 3.3, modified]

3.2
rated voltage
U_R
maximum direct current (d.c.) voltage that may be applied continuously for a certain time under the *upper category temperature* (3.1) to a LIC so that it can exhibit specified demand characteristics

Note 1 to entry: This voltage is the setting voltage in LIC design.

Note 2 to entry: The endurance test using the rated voltage is described in Annex A.

[SOURCE: IEC 62576:2009, 3.6, modified]

3.3
rated lower limit voltage
U_L
minimum d.c. voltage such that a LIC can exhibit specified demand characteristics

Note 1 to entry: The rated lower limit voltage is designated by manufacturer.

3.4
charging current
current required to charge a LIC