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Standards

Irish Standard
I.S. EN 62813:2015

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

I.S. EN 62813:2015

Incorporating amendments/corrigenda/National Annexes issued since publication:

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EUROPEAN STANDARD

EN 62813

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2015

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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 électroniques - 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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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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

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
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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.

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

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IEC 62813

Edition 1.0 2015-01

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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Edition 1.0 2015-01

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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

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CONTENTS

FOREWORD.....	3
1 Scope.....	5
2 Normative references.....	5
3 Terms and definitions	5
4 Test methods.....	7
4.1 Test requirements	7
4.1.1 Standard atmospheric conditions for tests	7
4.1.2 Standard atmospheric conditions for measurements	8
4.1.3 Pre-conditioning.....	8
4.2 Measurement	8
4.2.1 Capacitance, discharge accumulated electric energy, and internal resistance	8
4.2.2 Measurement for voltage maintenance rate.....	11
4.3 Calculation.....	12
4.3.1 Calculation of capacitance and discharge accumulated electric energy.....	12
4.3.2 Calculation of internal resistance.....	13
4.3.3 Calculation of voltage maintenance rate	13
Annex A (informative) Endurance test (continuous application of rated voltage at high temperature).....	14
A.1 General.....	14
A.2 Test procedure.....	14
A.2.1 Test conditions	14
A.2.2 Test procedure.....	14
A.2.3 Requirements	14
Annex B (informative) Calculation of the measuring currents based on the propagated error	15
B.1 General.....	15
B.2 Measurement propagated error and measuring currents.....	15
Annex C (informative) Procedures for defining the measuring current of LIC with uncertain nominal internal resistance	17
C.1 General.....	17
C.2 Defining procedures of measuring current for LIC	17
Bibliography	18
Figure 1 – Basic circuit for measuring capacitance, discharge accumulated electric energy, and internal resistance	9
Figure 2 – Voltage profile for measuring capacitance, discharge accumulated electric energy, and internal resistance	10
Figure 3 – Basic circuit for measuring the voltage maintenance rate	11
Figure 4 – Voltage profile for measuring voltage maintenance rate.....	12
Figure C.1 – Flowchart of current setting procedures	17

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

FOREWORD

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

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

FDIS	Report on voting
40/2322/FDIS	40/2341/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.

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

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

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