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Responsible committee: W/- Miscellaneous Standards # Consumer Products and Services

Interested committees:

Title: BS EN IEC 62813 Lithium ion capacitors for use in electric and electronic equipment - Test methods for electrical characteristics

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- ii) affects other national standard(s)
- iii) requires additional national guidance or information

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

For national standards, comments will be reviewed by the relevant UK national committee and the resulting standards published as a British Standard.

UK Vote

Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

- **Annotated drafts are not acceptable and will be rejected.**
- All comments should be submitted online at <https://standardsdevelopment.bsigroup.com/>. You will need to register in order to comment.

Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/Figure/ Table/Note	Type of comment	Commend (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	



40/3073/CD

COMMITTEE DRAFT (CD)

PROJECT NUMBER:

IEC 62813 ED2

DATE OF CIRCULATION:

2023-08-04

CLOSING DATE FOR COMMENTS:

2023-10-27

SUPERSEDES DOCUMENTS:

40/3029/RR

IEC TC 40 : CAPACITORS AND RESISTORS FOR ELECTRONIC EQUIPMENT

SECRETARIAT:

Netherlands

SECRETARY:

Mr Ronald Drenthen

OF INTEREST TO THE FOLLOWING COMMITTEES:

PROPOSED HORIZONTAL STANDARD:

☐

Other TC/SCs are requested to indicate their interest, if any, in this CD to the secretary.

FUNCTIONS CONCERNED:

☐ EMC

☐ ENVIRONMENT

☐ QUALITY ASSURANCE

☐ SAFETY

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Recipients of this document are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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TITLE:

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

NOTE FROM TC/SC OFFICERS:

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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 includes the following changes with respect to the previous edition:

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

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

Draft	Report on voting
XX/XX/FDIS	XX/XX/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

92 The language used for the development of this International Standard is English.

93 This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance
94 with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at
95 www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in
96 greater detail at www.iec.ch/publications.

97 The committee has decided that the contents of this document will remain unchanged until the stability
98 date indicated on the IEC website under webstore.iec.ch in the data related to the specific document.
99 At this date, the document will be

- 100 • reconfirmed,
- 101 • withdrawn,
- 102 • replaced by a revised edition, or
- 103 • amended.

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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*

3 Terms and definitions

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

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- IEC Electropedia: available at <https://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

3.1

upper category temperature

highest ambient temperature including internal heating in which a LIC is designed to operate continuously

[SOURCE: IEC 61881-3:2012, 3.17, modified – The note to entry has been deleted.]

3.2

rated voltage

U_R

maximum direct current (DC) 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 62576:2018, 3.20, modified]

3.3

rated lower limit voltage

U_L

minimum DC 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