SVENSK STANDARD SS-EN 60384-18

Fastställd	Utgåva	Sida	Ansvarig kommitté
2016-11-17	2	1 (1+35)	SEK TK 40

Elektronikkomponenter – Fasta kondensatorer – Del 18: Gruppspecifikation för aluminiumelektrolytkondensatorer med fast elektrolyt av mangandioxid eller flytande elektrolyt, för ytmontering

Fixed capacitors for use in electronic equipment – Part 18: Sectional specification – Fixed aluminium electrolytic surface mount capacitors with solid (MnO_2) and non-solid electrolyte

Som svensk standard gäller europastandarden EN 60384-18:2016. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60384-18:2016.

Nationellt förord

Europastandarden EN 60384-18:2016

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC

– **IEC 60384-18, Third edition, 2016 - Fixed capacitors for use in electronic equipment - Part 18: Sectional specification - Fixed aluminium electrolytic surface mount capacitors with solid (MnO_2) and non-solid electrolyte**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 60384-18, utgåva 1, 2007, gäller ej fr o m 2019-06-29.

ICS 31.060.50

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60384-18

September 2016

ICS 31.060.50

Supersedes EN 60384-18:2007

English Version

Fixed capacitors for use in electronic equipment - Part 18: Sectional specification - Fixed aluminium electrolytic surface mount capacitors with solid (MnO2) and non-solid electrolyte (IEC 60384-18:2016)

Condensateurs fixes utilisés dans les équipements électroniques - Partie 18: Spécification intermédiaire - Condensateurs fixes électrolytiques à l'aluminium pour montage en surface à électrolyte solide (MnO2) et non solide
(IEC 60384-18:2016)

Festkondensatoren zur Verwendung in Geräten der Elektronik - Teil 18: Rahmenspezifikation - Oberflächenmontierbare Aluminium-Elektrolyt-Kondensatoren mit festen (MnO2) und flüssigen Elektrolyten
(IEC 60384-18:2016)

This European Standard was approved by CENELEC on 2016-06-29. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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

Ref. No. EN 60384-18:2016 E

SEK Svensk Elstandard

European foreword

The text of document 40/2460/FDIS, future edition 3 of IEC 60384-18, prepared by IEC/TC 40 "Capacitors and resistors for electronic equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60384-18:2016.

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)	2017-03-29
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2019-06-29

This document supersedes EN 60384-18:2007.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

The text of the International Standard IEC 60384-18:2016 was approved by CENELEC as a European Standard without any modification.

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 60063	-	Preferred number series for resistors and capacitors	EN 60063	-
IEC 60068-1	2013	Environmental testing -- Part 1: General and guidance	EN 60068-1	2014
IEC 60068-2-58	2015	Environmental testing - Part 2-58: Tests - Test Td: Test methods for solderability, resistance to dissolution of metallization and to soldering heat of surface mounting devices (SMD)	EN 60068-2-58	2015
IEC 60384-1	2016	Fixed capacitors for use in electronic equipment - Part 1: Generic specification	EN 60384-1	2016
IEC 60417	-	Graphical symbols for use on equipment. Index, survey and compilation of the single sheets.	-	-
IEC 61193-2	2007	Quality assessment systems -- Part 2: Selection and use of sampling plans for inspection of electronic components and packages	EN 61193-2	2007
ISO 3	-	Preferred numbers; Series of preferred numbers	-	-

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT –

Part 18: Sectional specification – Fixed aluminium electrolytic surface mount capacitors with solid (MnO_2) and non-solid electrolyte

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 60384-18 has been prepared by IEC technical committee 40: Capacitors and resistors for electronic equipment.

This third edition cancels and replaces the second edition published in 2007 and constitutes a technical revision.

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

a) Revision of the structure in accordance with ISO/IEC Directives, Part 2:2011 (sixth edition) to the extent practicable, and harmonization between other similar kinds of documents.

b) In addition, Clause 4 and all the tables have been reviewed in order to prevent duplications and contradictions.

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

FDIS	Report on voting
40/2460/FDIS	40/2466/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.

The list of all parts of the IEC 60384 series, under the general title *Fixed capacitors for use in electronic equipment*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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

FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT –

Part 18: Sectional specification – Fixed aluminium electrolytic surface mount capacitors with solid (MnO_2) and non-solid electrolyte

1 General

1.1 Scope

This part of IEC 60384 applies to fixed aluminium electrolytic surface mount capacitors with solid (MnO_2) and non-solid electrolyte primarily intended for d.c. applications for use in electronic equipment.

These capacitors are primarily intended for use in electronic equipment to be mounted directly on substrates for hybrid circuits or to printed boards.

Capacitors for special-purpose applications may need additional requirements.

1.2 Object

The object of this standard is to prescribe preferred ratings and characteristics and to select from IEC 60384-1:2016 the appropriate quality assessment procedures, tests and measuring methods and to give general performance requirements for this type of capacitor. Test severities and requirements prescribed in detail specifications referring to this sectional specification should be of equal or higher performance level, because lower performance levels are not permitted.

1.3 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 60063, *Preferred number series for resistors and capacitors*

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

IEC 60068-2-58:2015, *Environmental testing – Part 2-58: Tests – Test Td: Test methods for solderability, resistance to dissolution of metallization and to soldering heat of surface mounting devices (SMD)*

IEC 60384-1:2016, *Fixed capacitors for use in electronic equipment – Part 1: Generic specification*

IEC 60417, *Graphical symbols for use on equipment*

IEC 61193-2:2007, *Quality assessment system – Part 2: Selection and use of sampling plans for inspection of electronic components and packages*

ISO 3, *Preferred numbers – Series of preferred numbers*