



SLOVENSKI STANDARD

SIST EN 60384-4:2016

01-december-2016

Nadomešča:
SIST EN 60384-4:2008

Nespremenljivi kondenzatorji za uporabo v elektronski opremi - 4. del: Področna specifikacija - Nespremenljivi aluminijски elektrolitski kondenzatorji s trdim (MnO₂) in netrdim elektrolitom (IEC 60384-4:2016)

Fixed capacitors for use in electronic equipment - Part 4: Sectional specification - Fixed aluminium electrolytic capacitors with solid (MnO₂) and non-solid electrolyt (IEC 60384-4:2016)

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Ta slovenski standard je istoveten z: EN 60384-4:2016

ICS:

31.060.50	Aluminijски elektrolitni kondenzatorji	Aluminium electrolytic capacitors
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EUROPEAN STANDARD

EN 60384-4

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2016

ICS 31.060.50

Supersedes EN 60384-4:2007

English Version

Fixed capacitors for use in electronic equipment - Part 4:
Sectional specification - Fixed aluminium electrolytic capacitors
with solid (MnO₂) and non-solid electrolyte
(IEC 60384-4:2016)

Condensateurs fixes utilisés dans les équipements
électroniques - Partie 4: Spécification intermédiaire -
Condensateurs électrolytiques à l'aluminium, à électrolyte
solide (MnO₂) et non solide
(IEC 60384-4:2016)

Festkondensatoren zur Verwendung in Geräten der
Elektronik - Teil 4: Rahmenspezifikation - Aluminium-
Elektrolyt-Kondensatoren mit festen (MnO₂) und flüssigen
Elektrolyten
(IEC 60384-4:2016)

This European Standard was approved by CENELEC on 2016-09-16. 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.

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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

EN 60384-4:2016**European foreword**

The text of document 40/2467/FDIS, future edition 5 of IEC 60384-4, 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 60384-4:2016.

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) 2017-06-16
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2019-09-16

This document supersedes EN 60384-4:2007.

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

IEC 60384-18

NOTE Harmonized as EN 60384-18.

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 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 60068-2-54	2006	Environmental testing - Part 2-54: Tests - Test Ta: Solderability testing of electronic components by the wetting balance method	EN 60068-2-54	2006
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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IEC 60384-4

Edition 5.0 2016-08

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Fixed capacitors for use in electronic equipment –
Part 4: Sectional specification – Fixed aluminium electrolytic capacitors with
solid (MnO₂) and non-solid electrolyte**

**Condensateurs fixes utilisés dans les équipements électroniques –
Partie 4: Spécification intermédiaire – Condensateurs électrolytiques à
l'aluminium, à électrolyte solide (MnO₂) et non solide**

INTERNATIONAL
ELECTROTECHNICAL
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INTERNATIONALE

ICS 31.060.50

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CONTENTS

FOREWORD.....	6
1 General.....	8
1.1 Scope.....	8
1.2 Object.....	8
1.3 Normative references.....	8
1.4 Information to be given in a detail specification.....	9
1.4.1 General.....	9
1.4.2 Outline drawing and dimensions.....	9
1.4.3 Mounting.....	9
1.4.4 Ratings and characteristics.....	9
1.4.5 Marking.....	10
1.5 Terms and definitions.....	10
1.6 Marking.....	10
1.6.1 General.....	10
1.6.2 Information for marking.....	10
1.6.3 Marking on capacitors.....	11
1.6.4 Marking on packaging.....	11
2 Preferred ratings and characteristics.....	11
2.1 Preferred characteristics.....	11
2.2 Preferred values of ratings.....	11
2.2.1 Nominal capacitance (C_N).....	11
2.2.2 Tolerance on nominal capacitance.....	12
2.2.3 Rated voltage (U_R).....	12
2.2.4 Category voltage (U_C).....	12
2.2.5 Ripple voltage.....	12
2.2.6 Reverse voltage.....	12
2.2.7 Surge voltage ratio.....	12
2.2.8 Rated ripple current.....	12
3 Quality assessment procedures.....	13
3.1 Primary stage of manufacture.....	13
3.2 Structurally similar components.....	13
3.3 Certified test records of released lots.....	13
3.4 Qualification approval (QA) procedures.....	13
3.4.1 General.....	13
3.4.2 Qualification approval on the basis of the fixed sample size procedure.....	13
3.4.3 Tests.....	14
3.5 Quality conformance inspection.....	26
3.5.1 Formation of inspection lots.....	26
3.5.2 Test schedule.....	26
3.5.3 Delayed delivery.....	26
3.5.4 Assessment levels.....	26
4 Test and measurement procedures.....	27
4.1 Pre-conditioning (for non-solid electrolyte capacitors only).....	27
4.2 Visual examination and check of dimensions.....	28
4.2.1 General.....	28
4.2.2 Visual examination and check of dimensions.....	28

4.2.3	Requirements	28
4.3	Electrical tests	28
4.3.1	Leakage current	28
4.3.2	Capacitance	28
4.3.3	Tangent of loss angle ($\tan \delta$) or equivalent series resistance (ESR)	29
4.3.4	Impedance (if required)	29
4.3.5	Insulation resistance of the external insulation (if required)	30
4.3.6	Voltage proof of the external insulation (if required)	30
4.4	Robustness of terminations	31
4.4.1	General	31
4.4.2	Initial inspection	31
4.4.3	Final inspection	31
4.5	Resistance to soldering heat	31
4.5.1	General	31
4.5.2	Test conditions	31
4.5.3	Recovery	31
4.5.4	Final inspection and requirements	31
4.6	Solderability	31
4.6.1	General	31
4.6.2	Test conditions	31
4.6.3	Final inspection	32
4.7	Rapid change of temperature	32
4.7.1	General	32
4.7.2	Initial inspection	32
4.7.3	Test conditions	32
4.7.4	Recovery	32
4.7.5	Final inspections and requirements	32
4.8	Vibration	32
4.8.1	General	32
4.8.2	Test conditions	32
4.8.3	Final inspections and requirements	33
4.9	Bump (if required)	33
4.9.1	General	33
4.9.2	Test conditions	33
4.9.3	Final inspections and requirements	33
4.10	Shock (if required)	33
4.10.1	General	33
4.10.2	Test conditions	33
4.10.3	Final inspections and requirements	34
4.11	Climatic sequence	34
4.11.1	General	34
4.11.2	Initial inspection	34
4.11.3	Dry heat	34
4.11.4	Damp heat, cyclic, test Db, first cycle	34
4.11.5	Cold	34
4.11.6	Low air pressure (if required)	34
4.11.7	Damp heat, cyclic, test Db, remaining cycles	35
4.11.8	Sealing (if required)	35
4.11.9	Final inspections and requirements	35

4.12	Damp heat, steady state.....	35
4.12.1	General	35
4.12.2	Initial inspection	35
4.12.3	Test conditions	35
4.12.4	Recovery	35
4.12.5	Final inspections and requirements	35
4.13	Endurance	36
4.13.1	General	36
4.13.2	Initial inspection	36
4.13.3	Test conditions	36
4.13.4	Recovery	36
4.13.5	Final inspections and requirements	36
4.14	Surge voltage.....	36
4.14.1	General	36
4.14.2	Initial inspection	36
4.14.3	Test conditions	37
4.14.4	Recovery	37
4.14.5	Final inspections and requirements	37
4.15	Reverse voltage (if required)	37
4.15.1	Initial inspection	37
4.15.2	Test conditions	37
4.15.3	Recovery	38
4.15.4	Final inspections and requirements	38
4.16	Pressure relief (if required).....	38
4.17	Storage at high temperature.....	38
4.17.1	General	38
4.17.2	Initial inspection	38
4.17.3	Test conditions	38
4.17.4	Recovery	38
4.17.5	Final inspections and requirements	38
4.18	Storage at low temperature (if required).....	38
4.18.1	General	38
4.18.2	Initial inspection	38
4.18.3	Test conditions	38
4.18.4	Recovery	38
4.18.5	Final inspections and requirements	39
4.19	Characteristics at high and low temperature.....	39
4.19.1	General	39
4.19.2	Inspections and requirements.....	39
4.20	Charge and discharge (if required)	39
4.20.1	General	39
4.20.2	Initial inspection	39
4.20.3	Test conditions	39
4.20.4	Final inspections and requirements	39
4.21	High surge current (if required).....	40
4.21.1	General	40
4.21.2	Final inspections and requirements	40
4.22	Voltage transient overload (if required)	40
4.22.1	General	40

4.22.2	Initial inspection	40
4.22.3	Final inspections and requirements	40
	Bibliography	41
	Table 1 – Preferred values of tolerances	12
	Table 2 – Sampling plan for qualification approval, assessment level EZ.....	15
	Table 3 – Test schedule for qualification approval (<i>1 of 10</i>).....	16
	Table 4 – Lot-by-lot inspection	27
	Table 5 – Periodic inspection	27
	Table 6 – Amplitude and acceleration options.....	33
	Table 7 – Preferred severities	34

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SIST EN 60384-4:2016

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT –**Part 4: Sectional specification –
Fixed aluminium electrolytic capacitors
with solid (MnO₂) 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 60384-4 has been prepared by IEC technical committee 40: Capacitors and resistors for electronic equipment.

This fifth edition cancels and replaces the fourth edition published in 2007. This edition 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
40/2467/FDIS	40/2476/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.

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.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

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.

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