



SLOVENSKI STANDARD

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Fiksni kondenzatorji za elektronsko opremo - 1. del: Rodovna specifikacija (IEC 60384-1:2008 (EQV) + corrigendum Nov. 2008)

Fixed capacitors for use in electronic equipment - Part 1: Generic specification (IEC 60384-1:2008 (EQV) + corrigendum Nov. 2008)

Festkondensatoren zur Verwendung in Geräten der Elektronik - Teil 1:
Fachgrundspezifikation

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Condensateurs fixes utilisés dans les équipements électroniques - Partie 1: Spécification
générique

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Ta slovenski standard je istoveten z: EN 60384-1:2009

ICS:

31.060.10 Fiksni kondenzatorji Fixed capacitors

SIST EN 60384-1:2010 **en**

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60384-1

December 2009

ICS 31.060

Supersedes EN 60384-1:2001 + corr. Oct. 2001

English version

**Fixed capacitors for use in electronic equipment -
Part 1: Generic specification**
(IEC 60384-1:2008 + corrigendum 2008)

Condensateurs fixes utilisés
dans les équipements électroniques -
Partie 1: Spécification générique
(CEI 60384-1:2008 +
corrigendum 2008)

Festkondensatoren zur Verwendung
in Geräten der Elektronik -
Teil 1: Fachgrundspezifikation
(IEC 60384-1:2008 +
Corrigendum 2008)

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This European Standard was approved by CENELEC on 2009-10-01. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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CENELEC

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

Central Secretariat: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 40/1915/FDIS, future edition 4 of IEC 60384-1, 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 60384-1 on 2009-10-01.

This European Standard supersedes EN 60384-1:2001.

EN 60384-1:2009 constitutes a technical revision, including minor revisions related to tables, figures and references.

It contains the following significant technical changes with respect to EN 60384-1:2001:

- implementation of Annex Q which replaces Clause 3.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2010-07-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2012-10-01

Annex ZA has been added by CENELEC.

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Endorsement notice

The text of the International Standard IEC 60384-1:2008, corrigendum November 2008 was approved by CENELEC as a European Standard without any modification.

ECSS 60384-1:2008-01-01
4-1657-46b6-b428-2d6bb5fa0f0a/sist-en-60384-1-2010

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application 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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60027	Series	Letter symbols to be used in electrical technology	EN 60027	Series
IEC 60050	Series	International Electrotechnical Vocabulary (IEV)		-
IEC 60062	- ¹⁾	Marking codes for resistors and capacitors	EN 60062 + corr. January	2005 ²⁾ 2007
IEC 60063	- ¹⁾	Preferred number series for resistors and capacitors	-	-
IEC 60068-1	1988	Environmental testing - Part 1: General and guidance	EN 60068-1 ³⁾	1994
IEC 60068-2-1	2007	Environmental testing - Part 2-1: Tests - Test A: Cold	EN 60068-2-1	2007
IEC 60068-2-2	2007	Environmental testing - Part 2-2: Tests - Test B: Dry heat	EN 60068-2-2	2007
IEC 60068-2-6	2007	Environmental testing - Part 2-6: Tests - Test Fc: Vibration (sinusoidal)	EN 60068-2-6	2008
IEC 60068-2-13	1983	Environmental testing - Part 2-13: Tests - Test M: Low air pressure	EN 60068-2-13	1999
IEC 60068-2-14	2009	Environmental testing - Part 2-14: Tests - Test N: Change of temperature	EN 60068-2-14	2009
IEC 60068-2-17	1994	Environmental testing - Part 2-17: Tests - Test Q: Sealing	EN 60068-2-17	1994
IEC 60068-2-20	1979	Environmental testing - Part 2-20: Tests - Test T: Soldering	HD 323.2.20 S3 ⁴⁾	1988
IEC 60068-2-21	2006	Environmental testing - Part 2-21: Tests - Test U: Robustness of terminations and integral mounting devices	EN 60068-2-21	2006
IEC 60068-2-27	2008	Environmental testing - Part 2-27: Tests - Test Ea and guidance: Shock	EN 60068-2-27	2009

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

³⁾ EN 60068-1 includes corrigendum October 1988 + A1:1992 to IEC 60068-1.

⁴⁾ HD 323.2.20 S3 includes A2:1987 to IEC 60068-2-20; it is superseded by EN 60068-2-20:2008, which is based on IEC 60068-2-20:2008.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-2-29	1987	Environmental testing - Part 2-29: Tests - Test Eb and guidance: Bump	EN 60068-2-29 ⁵⁾	1993
IEC 60068-2-30	2005	Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle)	EN 60068-2-30	2005
IEC 60068-2-45	1980	Environmental testing - Part 2-45: Tests - Test Xa and guidance: Immersion in cleaning solvents	EN 60068-2-45	1992
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 60068-2-58	2004	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 + corr. December	2004 2004
IEC 60068-2-69	2007	Environmental testing - Part 2-69: Tests - Test Te: Solderability testing of electronic components for surface mounting devices (SMD) by the wetting balance method	EN 60068-2-69	2007
IEC 60068-2-78	2001	Environmental testing - Part 2-78: Tests - Test Ca: Damp heat, steady state	EN 60068-2-78	2001
IEC 60294	- ¹⁾	Measurement of the dimensions of a cylindrical component having two axial terminations	-	-
IEC 60410	1973	Sampling plans and procedures for inspection - by attributes	-	-
IEC 60617	Data- base	Graphical symbols for diagrams	-	-
IEC 60695-11-5	2004	Fire hazard testing - Part 11-5: Test flames - Needle-flame test method - Apparatus, confirmatory test arrangement and guidance	EN 60695-11-5	2005
IEC 60717	- ¹⁾	Method for the determination of the space required by capacitors and resistors with unidirectional terminations	-	-
IEC 61193-2	- ¹⁾	Quality assessment systems - Part 2: Selection and use of sampling plans for inspection of electronic components and packages	EN 61193-2	2007 ²⁾
IEC 61249-2-7	2002	Materials for printed boards and other interconnecting structures - Part 2-7: Reinforced base materials, clad and unclad - Epoxide woven E-glass laminated sheet of defined flammability (vertical burning test), copper-clad	EN 61249-2-7 + corr. September	2002 2005

⁵⁾ EN 60068-2-29 is superseded by EN 60068-2-27:2009, which is based on IEC 60068-2-27:2008.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC QC 001002-3	- ¹⁾	IEC Quality Assessment System for Electronic Components (IECQ) - Rules of Procedure - Part 3: Approval procedures	-	-
ISO 3	- ¹⁾	Preferred numbers - Series of preferred numbers	-	-
ISO 1000	- ¹⁾	SI units and recommendations for the use of their multiples and of certain other units	-	-
ISO 9000	- ¹⁾	Quality management systems - Fundamentals and vocabulary	EN ISO 9000	2005 ²⁾

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Edition 4.0 2008-07

INTERNATIONAL STANDARD

QC 300000

Fixed capacitors for use in electronic equipment –
Part 1: Generic specification

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT –

Part 1: Generic specification

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 60384-1 has been prepared by IEC technical committee 40: Capacitors and resistors for electronic equipment

This fourth edition cancels and replaces the third edition issued in 1999 and constitutes a technical revision, including minor revisions related to tables, figures and references.

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

- implementation of Annex Q which replaces Clause 3.

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

FDIS	Report on voting
40/1915/FDIS	40/1924/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.