SVENSK STANDARD

SS-EN IEC 60384-1-1, utg 1:2023

Fastställd	Sida	Ansvarig kommitté
2023-03-22	1 (24)	SEK TK 40

Elektronikkomponenter – Fasta kondensatorer – Del 1: Allmän förlaga till detaljspecifikation

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

Som svensk standard gäller europastandarden EN IEC 60384-1-1:2022. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 60384-1-1:2022.

Nationellt förord

Europastandarden EN IEC 60384-1-1:2022

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC
– **IEC 60384-1-1, First edition, 2022 - Fixed capacitors for use in electronic equipment – Part 1-1: Generic blank detail specification**

utarbetad inom International Electrotechnical Commission, IEC.

ICS 31.060.10

Denna standard är fastställd av SEK Svensk Elstandard,
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Telefon: 08 - 444 14 00.
E-post: sek@elstandard.se. Internet: www.elstandard.se

Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler för bl a mätning, säkerhet och provning och för utförande, skötsel och dokumentation av elprodukter och elanläggningar.

Genom att utforma sådana standarder blir säkerhetsfordringar tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

SEK är Sveriges röst i standardiseringsarbetet inom elområdet

SEK Svensk Elstandard svarar för standardiseringen inom elområdet i Sverige och samordnar svensk medverkan i internationell och europeisk standardisering. SEK är en ideell organisation med frivilligt deltagande från svenska myndigheter, företag och organisationer som vill medverka till och påverka utformningen av tekniska regler inom elektrotekniken.

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Stora delar av arbetet sker internationellt

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Standardiseringsarbetet inom SEK är organiserat i referensgrupper bestående av ett antal tekniska kommittéer som speglar hur arbetet inom IEC och CENELEC är organiserat.

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Var med och påverka!

Den som deltar i SEKs tekniska kommittéarbete har möjlighet att påverka framtida standarder och får tidig tillgång till information och dokumentation om utvecklingen inom sitt teknikområde. Arbetet och kontakterna med kollegor, kunder och konkurrenter kan gynnsamt påverka enskilda företags affärsutveckling och bidrar till deltagarnas egen kompetensutveckling.

Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

SEK Svensk Elstandard
Box 1284
164 29 Kista
Tel 08-444 14 00
www.elstandard.se

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 60384-1-1

September 2022

ICS 31.060.10

English Version

Fixed capacitors for use in electronic equipment - Part 1-1: Generic blank detail specification (IEC 60384-1-1:2022)

Condensateurs fixes utilisés dans les équipements électroniques - Partie 1-1: Spécification particulière-cadre générique
(IEC 60384-1-1:2022)

Festkondensatoren zur Verwendung in Geräten der Elektronik - Teil 1-1: Allgemeiner Vordruck für Bauartspezifikation
(IEC 60384-1-1:2022)

This European Standard was approved by CENELEC on 2022-08-24. 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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. EN IEC 60384-1-1:2022 E

SEK Svensk Elstandard SS-EN IEC 60384-1-1, utg 1:2023

European foreword

The text of document 40/2951/FDIS, future edition 1 of IEC 60384-1-1, 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 IEC 60384-1-1:2022.

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) 2023-05-24
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2025-08-24

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

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 60384-1-1:2022 was approved by CENELEC as a European Standard without any modification.

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

IEC 60027 series	NOTE	Harmonized as EN 60027 series
IEC 60286 series	NOTE	Harmonized as EN 60286 series
IEC 61760-1	NOTE	Harmonized as EN IEC 61760-1
ISO 80000 series	NOTE	Harmonized as EN ISO 80000 series
ISO 80000-1	NOTE	Harmonized as EN ISO 80000-1

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where 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 60062	-	Marking codes for resistors and capacitors	EN 60062	-
IEC 60384-1	2021	Fixed capacitors for use in electronic equipment - Part 1: Generic specification	EN IEC 60384-1	2021
IEC 60384-X	XXXX	[Related sectional specification]	EN 60384-X	XXXX
IEC 61193-2	-	Quality assessment systems - Part 2: Selection and use of sampling plans for inspection of electronic components and packages	EN 61193-2	-
IEC 61760-2	-	Surface mounting technology - Part 2: Transportation and storage conditions of surface mounting devices (SMD) - Application guide	EN IEC 61760-2	-
IEC 62090	-	Product package labels for electronic components using bar code and two dimensional symbologies	EN 62090	-

IEC 60384-1-1

Edition 1.0 2022-07

INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

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

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

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT –

Part 1-1: Generic blank detail 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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8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

IEC 60384-1-1 has been prepared by technical committee 40: Capacitors and resistors for electronic equipment. It is an International Standard.

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

Draft	Report on voting
40/2951/FDIS	40/2964/RVD

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

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

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

A list of all parts in the IEC 60384 series, published 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 document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

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

IMPORTANT – The "colour inside" logo on the cover page of this document indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

This introduction is not intended to be copied into the drafted detail specification. Therefore, it is positioned in front of the conventional document structure and clause numbering range. It nevertheless contains normative requirements to the drafted detail specification.

Scope of this generic blank detail specification

This part of IEC 60384-1 is applicable to the drafting of detail specifications for fixed capacitors for use in electronic equipment.

Function of this generic blank detail specification

This generic blank detail specification is a supplementary document to the sectional specifications and contains requirements for style, layout and minimum contents of detail specifications. Detail specifications not complying with these requirements shall not be considered as being in accordance with IEC specifications nor shall they be described as such.

The detail specification should contain a table of contents prior to the first page of the actual specification.

In the preparation of the detail specification, the relevant content of the related sectional specification IEC 60384-X shall be taken into account.

Units, graphical symbols and letter symbols should be chosen, wherever possible, from the various parts of the IEC 60027 series, the ISO 80000 series and ISO/IEC Guide 99.

This blank detail specification uses for its purpose two different kinds of notes:

For notes which give additional information intended to assist the understanding or use of the resulting document and therefore shall be copied as NOTE into the drafted detail specification. As outlined in the ISO/IEC directives, these notes shall not contain any requirement, instruction, recommendation or permission.

For instructions to the specification writer, *COMMENTS* are used instead of NOTES. For a clear distinction, these comments are formatted as IEC-Instructions, as shown in the example below:

> *COMMENTS For editorial notes which are intended to aid and direct the specification writer and therefore shall not be copied into the drafted detail specification. In order to accomplish their function, editorial notes require the use of instructions, recommendations and permissions addressed to the writer of the detail specification.*

Identification of the detail specification and the capacitor

The first page of the detail specification should have a layout starting with a title block as recommended on the following page.

The numbers in square brackets are editorial references, which are not intended to be copied into the drafted detail specification, and which correspond to the following information on the contents which shall be inserted in the indicated positions.

[1] "International Electrotechnical Commission" or the name of the standardization organization under whose authority the detail specification is published and, if applicable, the organization from whom the detail specification is available.

[2] The number allocated to the detail specification by the IEC or by the responsible standardisation organisation, together with the date of issue and issue number, as applicable. Further reference details required by the responsible standardisation organisation or quality assessment system may be given here, including an established mark of conformity, as applicable.

[3] The number and issue date and number, as applicable, of the relevant generic specification, sectional specification and blank detail specification, where the referenced issues shall be the most recent issues of the respective specifications.

[4] The title of the detail specification, providing a short description of the type of capacitors. This entry should support the discrimination between similar specifications and should be suitable for an entry in a register of approvals or in a catalogue of standards. It may duplicate information given in the textual scope in Clause 1.

[5] An outline drawing or illustration of the products. This entry should aid the easy recognition of the capacitors and, if possible, support the discrimination between similar specifications. It may duplicate information given in Figure 1.

[6] Information on the typical construction of the capacitors (where applicable). This entry may duplicate information given in the textual scope in Clause 1.

[7] The classification level of the capacitors covered by this detail specification, the level of quality assessment (Assessment level EZ). This information may duplicate information given in the textual scope in Clause 1.

[8] Optional field for table notes.

[9] Statement(s) about the availability of information on components qualified to this detail specification, if applied within a full quality assessment system.

Example for the use within the IECQ system:

Information about components qualified to this detail specification is available in the approvals section of the website http://www.iecq.org.

Specification available from: [1]	**IEC 60384-X-1xx:xxxx** [2]
Electronic components of assessed quality in accordance with: [3]	**Title** [4]
[5]	[6]
	[7] Information about capacitor classification, quality assessment, etc.
[8]	
[9]	

COMMENT The remainder of this page is intentionally left empty in order to start Clause 1 on top of the next page.

FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT –

Part 1-1: Generic blank detail specification

1 Scope

This part of IEC 60384-1 establishes a generic template and specifies requirements to the content of detail specifications for capacitors within the IEC 60384-X series.

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 60062, *Marking codes for resistors and capacitors*

IEC 60384-1:2021, *Fixed capacitors for use in electronic equipment – Part 1: Generic specification*

IEC 60384-X:XXXX, [*Related sectional specification*]

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

IEC 61760-2, *Surface mounting technology – Part 2: Transportation and storage conditions of surface mounting devices (SMD) – Application guide*

IEC 62090, *Product package labels for electronic components using bar code and two dimensional symbologies*