

Fixed capacitors for use in electronic equipment - Part
17: Sectional specification - Fixed metallized
polypropylene film dielectric AC and pulse capacitors

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN IEC 60384-17:2019 sisaldab Euroopa standardi EN IEC 60384-17:2019 ingliskeelset teksti.	This Estonian standard EVS-EN IEC 60384-17:2019 consists of the English text of the European standard EN IEC 60384-17:2019.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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English Version

**Fixed capacitors for use in electronic equipment - Part 17:
Sectional specification - Fixed metallized polypropylene film
dielectric AC and pulse capacitors
(IEC 60384-17:2019)**

Condensateurs fixes utilisés dans les équipements
électroniques - Partie 17: Spécification intermédiaire -
Condensateurs fixes pour tension alternative et pour
impulsions à diélectrique en film de polypropylène métallisé
(IEC 60384-17:2019)

Festkondensatoren zur Verwendung in Geräten der
Elektronik - Teil 17: Rahmenspezifikation:
Festkondensatoren mit metallisierter Polypropylen-Folie als
Dielektrikum für Wechselspannungs- und Impulsbetrieb
(IEC 60384-17:2019)

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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

European foreword

The text of document 40/2654/FDIS, future edition 3 of IEC 60384-17, 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 60384-17:2019.

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) 2020-01-22
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-04-22

This document supersedes EN 60384-17:2005.

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.

Endorsement notice

The text of the International Standard IEC 60384-17:2019 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 60063	NOTE	Harmonized as EN 60063
IEC 60068 (series)	NOTE	Harmonized as EN 60068 (series)
IEC 60384-14	NOTE	Harmonized as EN 60384-14

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60062	-	Marking codes for resistors and capacitors	EN 60062	-
IEC 60068-1	2013	Environmental testing - Part 1: General and guidance	EN 60068-1	2014
IEC 60384-1	2016	Fixed capacitors for use in electronic equipment - Part 1: Generic specification	EN 60384-1	2016
IEC 60384-16	-	Fixed capacitors for use in electronic equipment - Part 16: Sectional specification: Fixed metallized polypropylene film dielectric d.c. capacitors	EN 60384-16	-
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

FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT –**Part 17: Sectional specification – Fixed metallized polypropylene film dielectric AC and pulse capacitors**

FOREWORD

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International Standard IEC 60384-17 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 2005. This edition constitutes a technical revision.

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

- a) all parts of the document have been revised based on the ISO/IEC Directives, Part 2:2016 (seventh edition) and harmonization between other similar kinds of documents;
- b) tables and Clause 4 have been revised so as to prevent duplications and contradictions;
- c) new damp heat steady-state robustness classes with test conditions have been added in text, in Clause 4 and in Annex A.

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

FDIS	Report on voting
40/2654/FDIS	40/2664/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document 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 web site.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://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.

FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT –

Part 17: Sectional specification – Fixed metallized polypropylene film dielectric AC and pulse capacitors

1 General

1.1 Scope

This part of IEC 60384 applies to fixed capacitors with metallized electrodes and polypropylene dielectric for use in electronic equipment.

NOTE Capacitors that have mixed film and metallized electrodes are also within the scope of this standard.

These capacitors may have "self-healing" properties depending on conditions of use.

Capacitors covered by this specification are mainly intended for use with alternating voltage and/or for pulse applications. The maximum reactive power applicable is 10 000 var and the maximum peak voltage is 3 000 V.

Capacitors for reactive power exceeding 500 var, and to which a maximum peak voltage of 2 500 V at 50 Hz can be applied, are not covered by this document, except when they are the highest part of a range of reactive power mainly situated below 500 var at 50 Hz.

This document is not intended to cover capacitance values higher than 20 μF .

Two performance grades of capacitors are covered, Grade 1 for long-life application and Grade 2 for general application.

Capacitors for electromagnetic interference suppression are not included, but are covered by IEC 60384-14.

Capacitors for electrical shock hazard protection (covered by IEC 60065 of IEC technical committee 61) and fluorescent lamp and motor capacitors (covered by IEC 60252-1 and IEC 60252-2 of IEC technical committee 33), and capacitors for use in tubular fluorescent and other discharge lamp circuits (covered by IEC 61048 and IEC 61049 of IEC technical committee 34) are also excluded.

1.2 Object

The object of this document 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 shall be of equal or higher performance level. Lower performance levels are not permitted.

1.3 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*