Fixed capacitors for use in electronic equipment - Part 2: Sectional specification - Fixed metallized ith. polyethylene terephthalate film dielectric d.c. capacitors



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See Eesti standard EVS-EN 60384-2:2012 sisaldab	This Estonian standard EVS-EN 60384-2:2012
Euroopa standardi EN 60384-2:2012 ingliskeelset	consists of the English text of the European standard
teksti.	EN 60384-2:2012.
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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ICS 31.060.30

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# **EUROPEAN STANDARD**

# EN 60384-2

# NORME EUROPÉENNE EUROPÄISCHE NORM

March 2012

ICS 31.060.30

Supersedes EN 60384-2:2005

English version

# Fixed capacitors for use in electronic equipment Part 2: Sectional specification Fixed metallized polyethylene terephthalate film dielectric d.c. capacitors (IEC 60384-2:2011)

Condensateurs fixes utilisés dans les équipements électroniques - Partie 2: Spécification intermédiaire - Condensateurs fixes pour courant continu à diélectrique en film de téréphtalate de polyéthylène métallisé (CEI 60384-2:2011)

Festkondensatoren zur Verwendung in Geräten der Elektronik -Teil 2: Rahmenspezifikation -Festkondensatoren mit metallisierter Kunststofffolie aus Polyethylen-Terephthalat für Gleichspannung (IEC 60384-2:2011)

This European Standard was approved by CENELEC on 2012-01-13. 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.

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

#### **Foreword**

The text of document 40/2129/FDIS, future edition 4 of IEC 60384-2, 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 60384-2:2012.

The following dates are fixed:

•	latest date by which the document has	(dop)	2012-10-13
	to be implemented at national level by		
	publication of an identical national		
	standard or by endorsement		
•	latest date by which the national	(dow)	2015-01-13
	standards conflicting with the		
	document have to be withdrawn		

This document supersedes EN 60384-2:2005.

EN 60384-2:2012 includes the following significant technical changes with respect to EN 60384-2:2005:

- Table 1, Sampling plan together with numbers of permissible non-conformance for qualification approval test, has been adjusted.
- Table 3, Lot-by-lot inspection, has been changed, highlighting assessment level EZ only.
- Table 4, Periodic inspection, has been changed, highlighting assessment level EZ only.
- The preferred values of rated voltages have been updated in conformance with the basic series of preferred values R5 and R10 given in ISO 3.

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 60384-2:2011 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 60068-1	NOTE	Harmonized as EN 60068-1.
IEC 60384-2-1	NOTE	Harmonized as EN 60384-2-1.
IEC 60384-14	NOTE	Harmonized as EN 60384-14.
IEC 60384-19	NOTE	Harmonized as EN 60384-19.

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

Publication IEC 60063	<u>Year</u> 1963	<u>Title</u> Preferred number series for resistors and	EN/HD -	<u>Year</u> -
+ A1 + A2	1967 1977	capacitors		
IEC 60384-1 + corr. November	2008 2008	Fixed capacitors for use in electronic equipment - Part 1: Generic specification	EN 60384-1	2009
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	1973			

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## FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT -

# Part 2: Sectional specification – Fixed metallized polyethylene terephthalate film dielectric d.c. capacitors

#### 1 General

### 1.1 Scope

This part of IEC 60384 applies to fixed capacitors for direct current, with metallized electrodes and polyethylene-terephthalate dielectric for use in electronic equipment.

These capacitors may have "self-healing properties" depending on conditions of use. They are primarily intended for applications where the a.c. component is small with respect to the rated voltage. Two performance grades of capacitors are covered, Grade 1 for long-life application and Grade 2 for general application.

Capacitors for electromagnetic interference suppression and surface mount fixed metallized polyethylene-terephthalate film dielectric d.c. capacitors are not included, but are covered by IEC 60384-14 and IEC 60384-19 respectively.

#### 1.2 Object

The object of this standard is to prescribe preferred ratings and characteristics and to select from IEC 60384-1 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 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.

IEC 60063:1963, *Preferred number series for resistors and capacitors*Amendment 1 (1967)
Amendment 2 (1977)

IEC 60384-1:2008, Fixed capacitors for use in electronic equipment – Part 1: General specification

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

ISO 3:1973, Preferred numbers – Series of preferred numbers

#### 1.4 Information to be given in a detail specification

Detail specifications shall be derived from the relevant blank detail specification.

Detail specifications shall not specify requirements inferior to those of the generic, sectional or blank detail specification. When more severe requirements are included, they shall be