



**NSAI**  
Standards

Irish Standard  
I.S. EN 60384-14-2:2016

Fixed capacitors for use in electronic equipment - Part 14-2: Blank detail specification - Fixed capacitors for electromagnetic interference suppression and connection to the supply mains - Safety tests only

**I.S. EN 60384-14-2:2016**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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*This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):*

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*This document is based on:*

EN 60384-14-2:2016

*Published:*

2016-05-27

*This document was published  
under the authority of the NSAI  
and comes into effect on:*

2016-06-14

ICS number:

31.060.10

NOTE: If blank see CEN/CENELEC cover page

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## National Foreword

I.S. EN 60384-14-2:2016 is the adopted Irish version of the European Document EN 60384-14-2:2016, Fixed capacitors for use in electronic equipment - Part 14-2: Blank detail specification - Fixed capacitors for electromagnetic interference suppression and connection to the supply mains - Safety tests only

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*In line with international standards practice the decimal point is shown as a comma (,) throughout this document.*

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EUROPEAN STANDARD

**EN 60384-14-2**

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2016

ICS 31.060.10

Supersedes EN 60384-14-2:2004

English Version

**Fixed capacitors for use in electronic equipment - Part 14-2:  
Blank detail specification - Fixed capacitors for electromagnetic  
interference suppression and connection to the supply mains -  
Safety tests only  
(IEC 60384-14-2:2016)**

Condensateurs fixes utilisés dans les équipements  
électroniques - Partie 14-2: Spécification particulière cadre -  
Condensateurs fixes d'antiparasitage et raccordement à  
l'alimentation - Essais de sécurité uniquement  
(IEC 60384-14-2:2016)

Festkondensatoren zur Verwendung in Geräten der  
Elektronik - Teil 14-2: Vordruck für Bauartspezifikation -  
Kondensatoren zur Unterdrückung elektromagnetischer  
Störungen, geeignet für Netzbetrieb - Nur  
Sicherheitsprüfungen  
(IEC 60384-14-2:2016)

This European Standard was approved by CENELEC on 2016-05-12. 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.

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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 60384-14-2:2016**

**European foreword**

The text of document 40/2446/FDIS, future edition 2 of IEC 60384-14-2, 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 60384-14-2:2016.

The following dates are fixed:

- latest date by which the document has to be (dop) 2017-02-12  
implemented at national level by  
publication of an identical national  
standard or by endorsement
- latest date by which the national (dow) 2019-05-12  
standards conflicting with the  
document have to be withdrawn

This document supersedes EN 60384-14-2:2004.

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.

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The text of the International Standard IEC 60384-14-2:2016 was approved by CENELEC as a European Standard without any modification.

## 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](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60384-1	2016	Fixed capacitors for use in electronic equipment - Part 1: Generic specification	EN 60384-1	2016
IEC 60384-14	2013	Fixed capacitors for use in electronic equipment -- Part 14: Sectional specification - Fixed capacitors for electromagnetic interference suppression and connection to the supply mains	EN 60384-14	2013
IEC 60384-14-1	-	Fixed capacitors for use in electronic equipment - Part 14-1: Blank detail specification: Fixed capacitors for electromagnetic interference suppression and connection to the supply mains - Assessment level DZ	EN 60384-14-1	-
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

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**IEC 60384-14-2**

Edition 2.0 2016-04

# **INTERNATIONAL STANDARD**

## **NORME INTERNATIONALE**

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**Fixed capacitors for use in electronic equipment –  
Part 14-2: Blank detail specification – Fixed capacitors for electromagnetic  
interference suppression and connection to the supply mains – Safety tests only**

**Condensateurs fixes utilisés dans les équipements électroniques –  
Partie 14-2: Spécification particulière cadre – Condensateurs fixes  
d'antiparasitage et raccordement à l'alimentation – Essais de sécurité  
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**IEC 60384-14-2**

Edition 2.0 2016-04

# **INTERNATIONAL STANDARD**

## **NORME INTERNATIONALE**

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**Fixed capacitors for use in electronic equipment –  
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Partie 14-2: Spécification particulière cadre – Condensateurs fixes  
d'antiparasitage et raccordement à l'alimentation – Essais de sécurité  
uniquement**

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ICS 31.060.10

ISBN 978-2-8322-3273-6

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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### **FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT –**

#### **Part 14-2: Blank detail specification – Fixed capacitors for electromagnetic interference suppression and connection to the supply mains – Safety tests only**

### FOREWORD

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International Standard IEC 60384-14-2 has been prepared by IEC technical committee 40: Capacitors and resistors for electronic equipment.

This second edition cancels and replaces the first edition published in 2004 and constitutes a technical revision.

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

- The permitted number of non-conforming items in Table 2 is always zero following the sectional specification IEC 60384-14:2013.

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

FDIS	Report on voting
40/2446/FDIS	40/2459/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.

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.

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

This International Standard is to be used in conjunction with IEC 60384-1:2016.

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.

## INTRODUCTION

### 0 Blank detail specification

#### 0.1 General

This blank detail specification forms the basis for a uniform procedure for a common International Safety Mark. It implements the approval schedule for safety tests in IEC 60384-14:2013, 1.4.2, requires a declaration of design for parameters relevant to safety and indicates conformance tests to be conducted on every lot prior to its release and requalification tests depending on changes to the declared design.

In comparison with IEC 60384-14-1 which provides quality conformance and safety tests, this specification is restricted to safety tests only.

The use of IEC 60384-14-1 may be more appropriate for components manufactured in mass production, whereas the employment of this specification may be necessary in those cases where approval and requalification tests contribute considerably to the costs of the product.

A blank detail specification is a supplementary document to the sectional specification and contains requirements for style, layout and minimum content of detail specifications. Detail specifications not complying with these requirements may not be considered as being in accordance with IEC specifications, nor should they so be described.

In the preparation of detail specifications the content of 1.4 of the sectional specification should be taken into account.

#### 0.2 Identification of the detail specification

The first page of the detail specification should have the layout recommended on the next page of this blank detail specification. The numbers between square brackets correspond to the following information which should be inserted at the position indicated:

- [1] The "International Electrotechnical Commission" or the National Standards Organization under whose authority the detail specification is drafted.
- [2] The IEC or National Standards number of the detail specification, date of issue and any further information required by the national system.
- [3] The number and issue number of the IEC, or national, generic, or sectional specification, as relevant.
- [4] If different from the IEC number, the national number of the detail specification, date of issue and any further information required by the national system, together with any amendment numbers.

#### 0.3 Identification of the capacitor

- [5] A short description of the type of capacitor or range of capacitors. The text should be suitable for an entry in the IECQ Register of approvals.
- [6] Information on typical construction (when applicable). The text should be suitable for an entry in the IECQ Register of approvals.
- [7] Outline drawing with main dimensions which are of importance for interchangeability and/or reference to the appropriate national or international documents for outlines. Alternatively, the drawing may be given in an annex to the detail specification, but [7] should always contain an illustration of the general outer appearance of the component.
- [8] The level(s) of quality assessment covered by the detail specification, as appropriate.
- [9] Reference data giving information on the most important properties of the component which allow comparison between the various component types intended for the same or similar applications.

	[1]	IEC 60384-14-2-XXX	[2]
ELECTRONIC COMPONENTS OF ASSESSED QUALITY IN ACCORDANCE WITH:	[3]	IEC 60384-14-2	[4]
IEC 60384-1		FIXED CAPACITORS FOR ELECTROMAGNETIC INTERFERENCE SUPPRESSION AND CONNECTION TO THE SUPPLY MAINS (SAFETY TESTS ONLY)	[5]
IEC 60384-14			
Outline drawing: [see Table 1]	[7]		
[first angle projection]		TYPICAL CONSTRUCTION (examples)	[6]
		Class/subclass	[8]
		Safety tests only	
[Other shapes are permitted within the dimensions given]			
NOTE For [1] to [9], see 0.2 and 0.3.			

Information on the availability of components qualified to this detail specification is given in the Qualified products list	[9]
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## **FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT –**

### **Part 14-2: Blank detail specification – Fixed capacitors for electromagnetic interference suppression and connection to the supply mains – Safety tests only**

#### **1 General data**

##### **1.1 Recommended method(s) of mounting (to be inserted)**

See IEC 60384-14:2013, 1.4.2.

##### **1.2 Dimensions**

The dimensions expressed as maximum dimensions or as nominal dimensions with a tolerance shall be given in the manufacturer's specification.

##### **1.3 Ratings and characteristics**

Ratings and characteristics are as listed below:

- a) Capacitance range
- b) Tolerance on nominal capacitance
- c) Rated voltage
- d) Rated current (if applicable)
- e) Climatic category
- f) Rated temperature
- g) Tangent of loss angle
- h) Insulation resistance
- i) Category of passive flammability

Values of capacitance related to the rated voltage, dimensions and ordering code/type designation shall be given in the manufacturer's specification.

##### **1.4 Normative references**

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.

IEC 60384-1:2016, *Fixed capacitors for use in electronic equipment – Part 1: Generic specification*

IEC 60384-14:2013, *Fixed capacitors for use in electronic equipment – Part 14: Sectional specification – Fixed capacitors for electromagnetic interference suppression and connection to the supply mains*

IEC 60384-14-1, *Fixed capacitors for use in electronic equipment – Part 14-1: Blank detail specification – Fixed capacitors for electromagnetic interference suppression and connection to the supply mains – Assessment level D*

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