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Elektronikkomponenter – Fasta kondensatorer – Del 14: Gruppspecifikation för fasta kondensatorer för avstörning och nätanslutning

Fixed capacitors for use in electronic equipment –

Part 14: Sectional specification –

Fixed capacitors for electromagnetic interference suppression and connection to the supply mains

Som svensk standard gäller europastandarden EN 60384-14:2013. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60384-14:2013.

Nationellt förord

Europastandarden EN 60384-14:2013

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 60384-14, Four edition, 2013 - Fixed capacitors for use in electronic equipment - Part 14: Sectional specification - Fixed capacitors for electromagnetic interference suppression and connection to the supply mains**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 60384-14, utgåva 1, 2005, gäller ej fr o m 2016-07-10.

ICS 31.060.10

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English version

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

Condensateurs fixes utilisés dans les équipements électroniques - Partie 14: Spécification intermédiaire - Condensateurs fixes d'antiparasitage et raccordement à l'alimentation
(CEI 60384-14:2013)

Festkondensatoren zur Verwendung in Geräten der Elektronik - Teil 14: Rahmenspezifikation - Festkondensatoren zur Unterdrückung elektromagnetischer Störungen, geeignet für Netzbetrieb
(IEC 60384-14:2013)

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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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

CENELEC
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

Foreword

The text of document 40/2199/FDIS, future edition 4 of IEC 60384-14, 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 60384-14:2013.

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) 2014-04-10
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2016-07-10

This document supersedes EN 60384-14:2005.

EN 60384-14:2013 includes the following significant technical changes with respect to EN 60384-14:2005:

All changes that have been agreed upon can be categorized as minor revisions.

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 60384-14:2013 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 60335-1	NOTE	Harmonised as EN 60335-1.
IEC 60384-14-3	NOTE	Harmonised as EN 60384-14-3.
IEC 60950-1	NOTE	Harmonised as EN 60950-1.
IEC 61140	NOTE	Harmonised as EN 61140.

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60060-1	2010	High-voltage test techniques - Part 1: General definitions and test requirements	EN 60060-1	2010
IEC 60063		Preferred number series for resistors and capacitors	-	-
IEC 60065 (mod) + corr. August + A1 (mod) + A2 (mod)	2001 2002 2005 2010	Audio, video and similar electronic apparatus - Safety requirements	EN 60065 + corr. August + A1 + A2	2002 2007 2006 2010
-	-		+ A11	
-	-		+ A12	
IEC 60068-1 + corr. October	1988 1988	Environmental testing - Part 1: General and guidance	EN 60068-1 ¹⁾	1994
IEC 60068-2-17		Environmental testing - Part 2: Tests - Test Q: Sealing	EN 60068-2-17	
IEC 60384-1 + corr. November	2008 2008	Fixed capacitors for use in electronic equipment - Part 1: Generic specification	EN 60384-1	2009
IEC 60417	Data base	Graphical symbols for use on equipment	HD 243 S12 ²⁾ ³⁾	
IEC 60664-1		Insulation coordination for equipment within low-voltage systems - Part 1: Principles, requirements and tests	EN 60664-1 ⁴⁾ ⁵⁾	
IEC 60695-11-10		Fire hazard testing - Part 11-10: Test flames - 50 W horizontal and vertical flame test methods	EN 60695-11-10	
IEC 60940		Guidance information on the application of capacitors, resistors, inductors and complete filter units for radio interference suppression	-	-
IEC 61193-2		Quality assessment systems - Part 2: Selection and use of sampling plans for inspection of electronic components and packages	EN 61193-2	

¹⁾ EN 60068-1 includes A1 to IEC 60068-1
+ corr. October .

²⁾ HD 243 S12 includes supplement(s) M to K to IEC 60417.

³⁾ HD 243 S12 is superseded by EN 60417-2:1999, which is based on IEC 60417-2:1998.

⁴⁾ EN 60664-1 includes A1 + A2 to IEC 60664-1.

⁵⁾ EN 60664-1 is superseded by EN 60664-1:2007, which is based on IEC 60664-1:2007.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61210 (mod)		Connecting devices - Flat quick-connect terminations for electrical copper conductors - Safety requirements	EN 61210	
CISPR 17		Methods of measurement of the suppression characteristics of passive EMC filtering devices	EN 55017	
ISO 7000		Graphical symbols for use on equipment - Registered symbols	-	-

CONTENTS

1	General	8
1.1	Scope.....	8
1.2	Object	8
1.3	Normative references	8
1.4	Information to be given in a detail specification	9
1.4.1	Outline drawing and dimensions	9
1.4.2	Mounting	9
1.4.3	Ratings and characteristics.....	10
1.4.4	Marking	10
1.5	Terms and definitions	10
1.6	Marking	15
1.6.1	Marking of capacitors	15
1.6.2	Marking of packaging.....	15
1.6.3	Additional marking	16
1.7	Classification of Class X and Class Y capacitors	16
1.7.1	Classification of X capacitors.....	16
1.7.2	Classification of Y capacitors	16
2	Preferred ratings and characteristics	17
2.1	Preferred characteristics	17
2.1.1	Preferred climatic categories	17
2.2	Preferred values of ratings	18
2.2.1	Nominal capacitance (C_N)	18
2.2.2	Tolerance on nominal capacitance.....	18
2.2.3	Rated voltage (U_R).....	18
2.2.4	Nominal resistance (R_N)	18
2.2.5	Rated temperature.....	18
2.2.6	Passive flammability	18
2.3	Requirements for sleeving, tape, tubing and wire insulation.....	18
3	Assessment procedures	19
3.1	Primary stage of manufacture.....	19
3.2	Structurally similar components	19
3.3	Certified records of released lots	19
3.4	Approval testing	19
3.4.1	Safety tests only approval.....	19
3.4.2	Qualification approval	19
3.4.3	Qualification approval on the basis of the fixed sample size procedure	19
3.5	Quality conformance inspection	30
3.5.1	Formation of inspection lots	30
3.5.2	Test schedule	31
3.5.3	Delayed delivery	31
3.5.4	Assessment level.....	31
4	Test and measurement procedures.....	32
4.1	Visual examination and check of dimensions	32
4.1.1	Creepage distances and clearances	32

4.2	Electrical tests.....	33
4.2.1	Voltage proof.....	33
4.2.2	Capacitance	35
4.2.3	Tangent of loss angle	35
4.2.4	Resistance (Equivalent Series Resistance (ESR)) (for RC units only)	36
4.2.5	Insulation resistance.....	36
4.3	Robustness of terminations	37
4.4	Resistance to soldering heat	37
4.4.1	Test conditions	37
4.4.2	Final inspection, measurements and requirements	38
4.5	Solderability	38
4.5.1	Test conditions	38
4.5.2	Requirements	38
4.6	Rapid change of temperature	38
4.6.1	Final inspection	38
4.7	Vibration.....	38
4.7.1	Test conditions	39
4.7.2	Final inspection	39
4.8	Bump	39
4.8.1	Test conditions	39
4.8.2	Final inspection, measurements and requirements	39
4.9	Shock	39
4.9.1	Test conditions	39
4.9.2	Final inspection, measurements and requirements	40
4.10	Container sealing	40
4.10.1	Test conditions	40
4.10.2	Requirements	40
4.11	Climatic sequence	40
4.11.1	Initial measurements	40
4.11.2	Dry heat	41
4.11.3	Damp heat, cyclic, test Db, first cycle	41
4.11.4	Cold	41
4.11.5	Damp heat, cyclic, test Db, remaining cycles	41
4.11.6	Final inspection, measurements and requirements	41
4.12	Damp heat, steady state.....	41
4.12.1	Initial measurements	42
4.12.2	Test conditions	42
4.12.3	Final inspection, measurements and requirements	42
4.13	Impulse voltage	42
4.13.1	Initial measurements	42
4.13.2	Test conditions	43
4.13.3	Requirements	43
4.14	Endurance	44
4.14.1	Test conditions	44
4.14.2	Initial measurements	44
4.14.3	Endurance for Class X capacitors and RC units containing Class X capacitors.....	44
4.14.4	Endurance for Class Y capacitors and RC units containing Class Y capacitors.....	45

4.14.5 Endurance for the lead-through arrangements	45
4.14.6 Test conditions – Combined voltage/current tests	45
4.14.7 Final inspection, measurements and requirements	46
4.15 Charge and discharge	46
4.15.1 Initial measurements	46
4.15.2 Test conditions	46
4.15.3 Final measurements and requirements	47
4.16 Radiofrequency characteristics.....	47
4.17 Passive flammability test	47
4.17.1 Testing according to IEC 60384-1.....	47
4.17.2 Alternative passive flammability test.....	48
4.18 Active flammability test.....	49
4.18.3 Adjustment of U_i	50
4.18.4 Requirements	50
4.19 Component solvent resistance (if applicable).....	50
4.20 Solvent resistance of the marking	51
Annex A (normative) Circuit for the impulse voltage test	52
Annex B (normative) Circuit for the endurance test	54
Annex C (normative) Circuit for the charge and discharge test.....	55
Annex D (normative) Declaration of design (confidential to the manufacturer and the certification body)	56
Annex E (informative) Pulse test circuits	57
Annex F (normative) Particular requirements for safety test of surface-mounting capacitors	59
Annex G (informative) Capacitance ageing of fixed capacitors of ceramic dielectric, Class 2	62
Bibliography.....	64
 Figure 1 – Two-terminal EMI suppression capacitor	11
Figure 2 – RC unit.....	11
Figure 3 – Lead-through capacitor (coaxial)	11
Figure 4 – Lead-through capacitors.....	12
Figure 5 – By-pass capacitors	13
Figure 6 – Test duration (s).....	30
Figure 7 – Impulse wave form	43
Figure 8 – Typical circuit for pulse loading of capacitors under a.c. voltage	49
Figure 9 – Fundamental a.c. wave with randomly, not synchronized, superimposed high-voltage pulse.....	50
Figure A.1 – Impulse voltage test circuit	52
Figure B.1 – Endurance test circuit	54
Figure C.1 – Charge and discharge test circuit.....	55
Figure F.1 – Example of test substrate for safety test according to Table F.1.....	61
 Table 1 – Classification of Class X capacitors.....	16
Table 2 – Classification of Class Y capacitors	17
Table 3 – Sampling plan – Tests concerning safety requirements only	21

Table 4 – Sampling plan – Safety and performance tests qualification approval – Assessment level DZ	22
Table 5 – Test schedule and sampling plan for lot-by-lot tests	23
Table 6 – Test schedule for safety tests only (1 of 2)	24
Table 7 – Test schedule for safety and performance tests qualification approval – Assessment level DZ	26
Table 8 – Assessment level	32
Table 9 – Creepage distances and clearances	33
Table 10 – Voltage proof.....	35
Table 11 – Insulation resistance – Safety tests only	36
Table 12 – Insulation resistance – Safety and performance tests	37
Table 13 – Resistance to soldering heat – Requirements	38
Table 14 – Climatic sequence – Requirements.....	41
Table 15 – Damp heat, steady state – Requirements	42
Table 16 – Endurance – Requirements	46
Table 17 – Charge and discharge – Requirements	47
Table A.1 – Values of C_X , C_T , R_P , R_S , C_p	52
Table A.2 – Values and tolerances of C_X , t_r , t_d	53
Table F.1 – Test schedule and sampling plan for safety test of surface mount capacitors	60

FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT –

Part 14: Sectional specification – Fixed capacitors for electromagnetic interference suppression and connection to the supply mains

1 General

1.1 Scope

This part of IEC 60384 applies to capacitors and resistor-capacitor combinations which will be connected to an a.c. mains or other supply with nominal voltage not exceeding 1 000 V a.c. (r.m.s.) or 1 000 V d.c. and with a nominal frequency not exceeding 100 Hz.

1.2 Object

The principal object of this part of IEC 60384 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 will be of equal or higher performance level; lower performance levels are not permitted.

This standard also provides a schedule of safety tests to be used by national testing stations in countries where approval by such stations is required.

The overvoltage categories in combination with the a.c. mains voltages for the capacitors classified in this standard should be taken from IEC 60664-1.

1.3 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 60060-1:2010, *High-voltage test techniques – Part 1: General definitions and test requirements*

IEC 60063, *Preferred number series for resistors and capacitors*

IEC 60065:2001, *Audio, video and similar electronic apparatus – Safety requirements*
Amendment 1:2005
Amendment 2:2010

IEC 60068-1:1988, *Environmental testing – Part 1: General and guidance*

IEC 60068-2-17, *Environmental testing – Part 2-17: Tests – Test Q: Sealing*

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

IEC 60417, *Graphical symbols for use on equipment*

IEC 60664-1, *Insulation coordination for equipment within low-voltage systems – Part 1: Principles, requirements and tests*

IEC 60695-11-10, *Fire hazard testing – Part 11-10: Test flames – 50 W horizontal and vertical flame test methods*

IEC 60940, *Guidance information on the application of capacitors, resistors, inductors and complete filter units for radio interference suppression*

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

IEC 61210, *Connecting devices – Flat quick-connect terminations for electrical copper conductors – Safety requirements*

CISPR 17, *Methods of measurement of the suppression characteristics of passive EMC filtering devices*

ISO 7000, *Graphical symbols for use on equipment – Index and synopsis*