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## BS EN 60252-1:2011+A1:2013



BSI Standards Publication

# AC motor capacitors

Part 1: General — Performance, testing  
and rating — Safety requirements —  
Guidance for installation and operation

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This British Standard is the UK implementation of EN 60252-1:2011+A1:2013. It is identical to IEC 60252-1:2010. It supersedes BS EN 60252-1:2011 which is withdrawn.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to IEC text carry the number of the IEC amendment. For example, text altered by IEC amendment 1 is indicated by A1 A1.

The UK participation in its preparation was entrusted to Technical Committee PEL/33, Power capacitors.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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#### **Amendments/corrigenda issued since publication**

Date	Text affected
30 November 2013	Implementation of IEC amendment 1:2013 with CENELEC endorsement A1:2013. Annex ZA updated

English version

**AC motor capacitors -  
Part 1: General -  
Performance, testing and rating -  
Safety requirements -  
Guidance for installation and operation  
(IEC 60252-1:2010)**

Condensateurs des moteurs à courant  
alternatif -  
Partie 1: Généralités -  
Caractéristiques fonctionnelles, essais et  
valeurs assignées -  
Règles de sécurité -  
Lignes directrices pour l'installation et  
l'utilisation  
(CEI 60252-1:2010)

Motorkondensatoren -  
Teil 1: Allgemeines -  
Leistung, Prüfung und Bemessung -  
Sicherheitsanforderungen -  
Leitfaden für die Installation und den  
Betrieb  
(IEC 60252-1:2010)

This European Standard was approved by CENELEC on 2011-01-02. 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 Central Secretariat 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 Central Secretariat 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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

**CENELEC**

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

**Management Centre: Avenue Marnix 17, B - 1000 Brussels**

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## Foreword

The text of document 33/470/FDIS, future edition 2 of IEC 60252-1, prepared by IEC TC 33, Power capacitors, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60252-1 on 2011-01-02.

This European Standard supersedes EN 60252-1:2001.

This EN 60252-1:2011 includes the following significant technical changes with respect to EN 60252-1:2001:

- the definition of “segmented capacitors” has been added, in 3.6;
- the definition of “classes of operation” has been clarified, with the addition of the concept of “probable life” with reference to statistics, in 3.9;
- the following wording “Operation above the rated voltage will reduce the life expectancy of the capacitor” has been introduced in 6.1;
- some clarifications have been added to Clause 8, Marking, mainly for small capacitors.

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

The following dates were fixed:

- latest date by which the EN has to be implemented  
at national level by publication of an identical  
national standard or by endorsement (dop) 2011-10-02
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2014-01-02

Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 60252-1:2010 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 60110-1:1998	NOTE Harmonized as EN 60110-1:1998 (not modified).
IEC 60143-1:2004	NOTE Harmonized as EN 60143-1:2004 (not modified).
IEC 60252-2	NOTE Harmonized as EN 60252-2.
IEC 60871-1:2005	NOTE Harmonized as EN 60871-1:2005 (not modified).
IEC 60931-1:1996	NOTE Harmonized as EN 60931-1:1996 (not modified).
IEC 61048:2006	NOTE Harmonized as EN 61048:2006 (not modified).
IEC 61071:2007	NOTE Harmonized as EN 61071:2007 (not modified).

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### **Foreword to amendment A1**

The text of document 33/532/FDIS, future IEC 60252-1:2010/A1, prepared by IEC/TC 33, "Power capacitors and their applications" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60252-1:2011/A1:2013.

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) 2014-07-03
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2016-10-03

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.

This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2006/95/EC).

### **Endorsement notice**

The text of the International Standard IEC 60252-1:2010/A1:2013 was approved by CENELEC as a European Standard without any modification.

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**Annex ZA**  
(normative)

**Normative references to international publications  
with their corresponding European publications**

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.

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 60062	-	Marking codes for resistors and capacitors	EN 60062	-
IEC 60068	Series	Environmental testing	EN 60068	Series
IEC 60068-2-6	-	Environmental testing - Part 2-6: Tests - Test Fc: Vibration (sinusoidal)	EN 60068-2-6	-
IEC 60068-2-20	-	Environmental testing - Part 2-20: Tests - Test T: Test methods for solderability and resistance to soldering heat of devices with leads	EN 60068-2-20	-
IEC 60068-2-21	-	Environmental testing - Part 2-21: Tests - Test U: Robustness of terminations and integral mounting devices	EN 60068-2-21	-
IEC 60068-2-78	-	Environmental testing - Part 2-78: Tests - Test Cab: Damp heat, steady state	EN 60068-2-78	-
IEC 60112	-	Method for the determination of the proof and the comparative tracking indices of solid insulating materials	EN 60112	-
IEC 60309-1	-	Plugs, socket-outlets and couplers for industrial purposes - Part 1: General requirements	EN 60309-1	-
IEC 60529	2001	Degrees of protection provided by enclosures - (IP Code)	-	-
IEC 60695-2-10	-	Fire hazard testing - Part 2-10: Glowing/hot-wire based test methods - Glow-wire apparatus and common test procedure	EN 60695-2-10	-
IEC 60695-2-11	-	Fire hazard testing - Part 2-11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products	EN 60695-2-11	-
ISO 4046	2002	Paper, board, pulp and related terms - Vocabulary	-	-

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## CONTENTS

1	Scope and object.....	6
2	Normative references .....	6
3	Terms and definitions .....	7
4	Service conditions .....	10
4.1	Normal service conditions .....	10
4.2	Preferred tolerances on capacitance .....	10
5	Quality requirements and tests .....	11
5.1	Test requirements .....	11
5.1.1	General .....	11
5.1.2	Test conditions .....	11
5.2	Nature of tests.....	11
5.2.1	Type tests .....	11
5.2.2	Routine tests .....	11
5.3	Type tests .....	12
5.3.1	Test procedure .....	12
5.3.2	Extent of qualification .....	12
5.4	Routine tests .....	14
5.4.1	Test procedure .....	14
5.5	Tangent of loss angle .....	14
5.6	Visual examination .....	14
5.7	Voltage test between terminals.....	14
5.8	Voltage test between terminals and case.....	15
5.9	Capacitance measurement .....	15
5.10	Check of dimensions .....	15
5.11	Mechanical tests .....	15
5.11.1	Robustness of terminations .....	16
5.11.2	Soldering.....	16
5.11.3	Vibration.....	17
5.11.4	Fixing bolt or stud (if fitted).....	17
5.12	Sealing test .....	17
5.13	Endurance test .....	18
5.13.1	Testing in air with forced circulation.....	18
5.13.2	Endurance test procedure.....	18
5.13.3	Conditions of compliance.....	19
5.14	Damp-heat test.....	19
5.15	Self-healing test .....	19
5.16	Destruction test .....	20
5.16.1	Test specimens .....	20
5.16.2	Test apparatus .....	21
5.16.3	Test apparatus for sequential DC and AC test (capacitor type S1 and S2) ...	21
5.16.4	Test apparatus for simultaneous DC and AC test (capacitor type S3) .....	22
5.16.5	Test procedure for sequential DC and AC test (capacitor type S1 and S2) ...	23
5.16.6	Test procedure for simultaneous DC and AC test (capacitor type S3).....	24
5.16.7	Evaluation of the failure .....	24