SLOVENSKI STANDARD
SIST EN 60252-2:2011

01-april-2011

Nadomešča:
SIST EN 60252-2:2003

Izmenični kondenzatorji za motorje - 2. del: Zaganjalni kondenzatorji (IEC 60252-2:2010)

AC motor capacitors - Part 2: Motor start capacitors (IEC 60252-2:2010)

Wechselspannungsmotorkondensatoren - Teil 2: Motoranlaufkondensatoren (IEC 60252-2:2010)

Condensateurs des moteurs à courant alternatif - Partie 2: Condensateurs de démarrage de moteurs (CEI 60252-2:2010)

Ta slovenski standard je istoveten z: **EN 60252-2:2011**

ICS:

31.060.70 Močnostni kondenzatorji Power capacitors

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EUROPEAN STANDARD

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Supersedes EN 60252-2:2003

English version

AC motor capacitors - Part 2: Motor start capacitors

(IEC 60252-2:2010)

Condensateurs des moteurs à courant alternatif -
Partie 2: Condensateurs de démarrage de moteurs
(CEI 60252-2:2010)

Wechselspannungsmotorkondensatoren -
Teil 2: Motoranlaufkondensatoren
(IEC 60252-2:2010)

This European Standard was approved by CENELEC on 2011-01-19. 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.

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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 33/476/FDIS, future edition 2 of IEC 60252-2, prepared by IEC TC 33, Power capacitors, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60252-2 on 2011-01-19.

This European Standard supersedes EN 60252-2:2003.

The main changes with respect to EN 60252-2:2003 are listed below:

– definition of segmented film capacitors;

– clearer definition of the purpose of d.c. conditioning in destruction test.

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)	2011-10-19
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2014-01-19

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60252-2:2010 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 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.

Publication	Year	Title	EN/HD	Year
IEC 60062	-	Marking codes for resistors and capacitors	EN 60062	-
IEC 60068-2	Series	Environmental testing - Part 2: Tests	EN 60068-2	Series
IEC 60068-2-6	-	Environmental testing - Part 2-6: Tests - Test Fc: Vibration (sinusoidal)	EN 60068-2-6	-
IEC 60068-2-14	-	Environmental testing - Part 2-14: Tests - Test N: Change of temperature	EN 60068-2-14	-
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	2001	Environmental testing - Part 2-78: Tests - Test Cab: Damp heat, steady state	EN 60068-2-78	2001
IEC 60112	-	Method for the determination of the proof and the comparative tracking indices of solid insulating materials	EN 60112	-
IEC 60309-1	1999	Plugs, socket-outlets and couplers for industrial purposes - Part 1: General requirements	EN 60309-1	1999
IEC 60529	-	Degrees of protection provided by enclosures (IP Code)	-	-
IEC 60695-2-10	2000	Fire hazard testing - Part 2-10: Glowing/hot-wire based test methods - Glow-wire apparatus and common test procedure	EN 60695-2-10	2001
IEC 60695-2-11	2000	Fire hazard testing - Part 2-11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products	EN 60695-2-11	2001

Publication	Year	Title	EN/HD	Year
ISO 4046	-	Paper, board, pulp and related terms - Vocabulary	-	-

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

AC motor capacitors –
Part 2: Motor start capacitors

Condensateurs des moteurs à courant alternatif –
Partie 2: Condensateurs de démarrage de moteurs

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AC MOTOR CAPACITORS –

Part 2: Motor start capacitors

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 60252-2 has been prepared by IEC technical committee 33: Power capacitors and their applications.

This second edition cancels and replaces the first edition of IEC 60252-2, published in 2003, and constitutes a technical revision.

The main changes with respect to the previous edition are listed below:

– definition of segmented film capacitors;
– clearer definition of the purpose of d.c. conditioning in destruction test.

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

FDIS	Report on voting
33/476/FDIS	33/480/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.

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

A list of all parts of IEC 60252 series, published under the general title *AC motor capacitors*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site 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.

AC MOTOR CAPACITORS –

Part 2: Motor start capacitors

1 Scope

This part of IEC 60252 applies to motor start capacitors intended for connection to windings of asynchronous motors supplied from a single-phase system having the frequency of the mains.

This standard covers impregnated or unimpregnated metallized motor start capacitors having a dielectric of paper or plastic film, or a combination of both and electrolytic motor start capacitors with non-solid electrolyte, with rated voltages up to and including 660 V.

2 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 60062, *Marking codes for resistors and capacitors*

IEC 60068-2 (all parts), *Environmental testing – Part 2: Tests*

IEC 60068-2-6, *Environmental testing – Part 2-6: Tests – Test Fc: Vibration (sinusoidal)*

IEC 60068-2-14, *Environmental testing – Part 2-14: Tests – Test N: Change of temperature*

IEC 60068-2-20, *Environmental testing – Part 2-20: Tests – Test T: Soldering*

IEC 60068-2-21, *Environmental testing – Part 2-21: Tests – Test U: Robustness of terminations and integral mounting devices*

IEC 60068-2-78:2001, *Environmental testing – Part 2-78: Tests – Test Cab: Damp heat, steady state*

IEC 60112, *Method for determining the comparative and the proof tracking indices of solid insulating materials under moist conditions*

IEC 60309-1:1999, *Plugs, socket-outlets and couplers for industrial purposes – Part 1: General requirements*

IEC 60529, *Degrees of protection provided by enclosures (IP Code)*

IEC 60695-2-10:2000, *Fire hazard testing – Part 2-10: Glowing/hot-wire based test methods – Glow-wire apparatus and common test procedure*

IEC 60695-2-11:2000, *Fire hazard testing – Part 2-11: Glowing/hot-wire based test methods – Glow-wire flammability test method for end-products*

ISO 4046, *Paper, board, pulps and related terms – Vocabulary*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
motor running capacitor
power capacitor which, when used in conjunction with an auxiliary winding of a motor, assists the motor to start and improves the torque under running conditions

NOTE The running capacitor is usually connected permanently to the motor winding and remains in circuit throughout the running period of the motor. During the starting period, if it is in parallel with the starting capacitor, it helps to start the motor.

3.2
motor starting capacitor
power capacitor which provides a leading current to an auxiliary winding of a motor and which is switched out of circuit once the motor is running

3.3
metal foil capacitor
capacitor, whose electrodes consist of metal foils or strips separated by a dielectric

3.4
metallized capacitor
capacitor, in which the electrodes consist of a metallic deposit on the dielectric

3.5
self-healing capacitor
capacitor, whose electrical properties, after local breakdown of the dielectric, are rapidly and essentially self-restored

3.6
segmented film capacitor
metallised capacitor with a repeating pattern on the metallic deposit on at least one layer, designed to isolate sections of the capacitor in the event of localised faults occurring in the dielectric

3.7
discharge device of a capacitor
device which may be incorporated in a capacitor, capable of reducing the voltage between the terminals effectively to zero, within a given time, after the capacitor has been disconnected from a network

3.8
continuous operation

operation with no time limit within the normal life of the capacitor

3.9
intermittent operation
operation in which periods with the capacitor energized are followed by intervals during which the capacitor is unenergized

3.10
starting operation
special type of intermittent operation in which the capacitor is energized for only a very short period while the motor is accelerating to rated speed