



SLOVENSKI STANDARD SIST EN 61071-2:1999

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Power electronic capacitors -- Part 2: Requirements for disconnecting test on fuses, destruction test, self-healing test and endurance test

Kondensatoren der Leistungselektronik -- Teil 2: Anforderungen an Ausschaltprüfungen von Sicherungen, Zerstörungsprüfung, Selbstheilungsprüfung und Lebensdauerprüfung
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Condensateurs pour l'électronique de puissance -- Partie 2: Prescriptions pour l'essai de déconnexion des coupe-circuit, essai de destruction, essai d'autorégénération et essai d'endurance
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Ta slovenski standard je istoveten z: EN 61071-2:1996

ICS:

31.060.70 T [] [• ç ã [] å ^ } : æ [] ð Power capacitors

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EUROPEAN STANDARD

EN 61071-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 1996

ICS 31.060.70

Descriptors: Electronic equipment, power capacitors, circuit breakers, tests, classifications, quality, performance tests, electrical endurance tests

English version

Power electronic capacitors
Part 2: Requirements for disconnecting test on fuses,
destruction test, self-healing test and endurance test
(IEC 1071-2:1994)

Condensateurs pour l'électronique de puissance

Partie 2: Prescriptions pour l'essai de déconnexion des coupe-circuit, essai de destruction, essai d'autorégénération et essai d'endurance
 (CEI 1071-2:1994)

Kondensatoren der Leistungselektronik
 Teil 2: Anforderungen an

Ausschaltprüfungen von Sicherungen, Zerstörungsprüfung, Selbstheilungsprüfung und Lebensdauerprüfung
 (IEC 1071-2:1994)

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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, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of the Technical Report IEC 1071-2:1994, prepared by IEC TC 33, Power capacitors, was submitted to the formal vote and was approved by CENELEC as EN 61071-2 on 1995-11-28 without any modification.

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) 1996-12-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 1996-12-01

For products which have complied with the relevant national standard before 1996-12-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2001-12-01.

Annexes designated "normative" are part of the body of the standard.

Annexes designated "informative" are given for information only.

In this standard, annexes B, C and ZA are normative and annexes A and D are informative.


Annex ZA has been added by CENELEC.

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Endorsement notice

The text of the Technical Report IEC 1071-2:1994 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**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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 68	series	Environmental testing	HD 323 EN 60068	series series
IEC 1071-1	1991	Power electronic capacitors Part 1: General	-	-

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RAPPORT
TECHNIQUE
TECHNICAL
REPORT

CEI
IEC
1071-2

Première édition
First edition
1994-04

**Condensateurs pour l'électronique
de puissance –**

Partie 2:

Prescriptions pour l'essai de déconnexion
des coupe-circuit, essai de destruction,
essai d'autorégénération et essai d'endurance

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Part 2:

Requirements for disconnecting
test on fuses, destruction test,
self-healing test and endurance test



Numéro de référence
Reference number
CEI/IEC 1071-2: 1994

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

POWER ELECTRONIC CAPACITORS -

Part 2: Requirements for disconnecting test on fuses,
destruction test, self-healing test
and endurance test

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international cooperation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. 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. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters, prepared by technical committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 3) They have the form of recommendations for international use published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.

The main task of IEC technical committees is to prepare International Standards. In exceptional circumstances, a technical committee may propose the publication of a technical report of one of the following types:

- type 1, when the required support cannot be obtained for the publication of an International Standard, despite repeated efforts;
- type 2, when the subject is still under technical development or where for any other reason there is the future but not immediate possibility of an agreement on an International Standard;
- type 3, when a technical committee has collected data of a different kind from that which is normally published as an International Standard, for example "state of the art".

Technical reports of types 1 and 2 are subject to review within three years of publication to decide whether they can be transformed into International Standards. Technical reports of type 3 do not necessarily have to be reviewed until the data they provide are considered to be no longer valid or useful.

IEC 1071-2, which is a technical report of type 2, has been prepared by IEC technical committee 33: Power capacitors.

The text of this technical report is based on the following documents:

Committee draft	Report on voting
33(SEC)143	33(SEC)156

Full information on the voting for the approval of this technical report can be found in the report on voting indicated in the above table.

This document is issued in the type 2 technical report series of publications (according to G.4.2.2 of part 1 of the IEC/ISO Directives) as a "prospective standard for provisional application" in the field of power electronic capacitors because there is an urgent requirement for guidance on how standards in this field should be used to meet an identified need.

This document is not to be regarded as an "International Standard". It is proposed for provisional application so that information and experience of its use in practice may be gathered. Comments on the content of this document should be sent to the IEC Central Office.

A review of this type 2 technical report will be carried out not later than three years after its publication, with the options of either extension for a further three years or conversion to an International Standard or withdrawal.

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Annexes B and C form an integral part of this technical report.

Annexes A and D are for information only.

POWER ELECTRONIC CAPACITORS –

Part 2: Requirements for disconnecting test on fuses, destruction test, self-healing test and endurance test

Section 1: General

1.1 Scope

This technical report applies to power electronic capacitors according to IEC 1071-1 and gives the requirements for:

- disconnecting test on fuses,
 - destruction test,
 - self-healing test,
 - endurance test
- of these capacitors.

1.2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this technical report. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this technical report are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 68: *Environmental testing*

IEC 1071-1: 1991, *Power electronic capacitors – Part 1: General*

1.3 Definitions

1.3.1 internal disconnecter: A disconnecting device inside a capacitor, designed to interrupt the current path in case of capacitor failure.

NOTE – This device is normally used in capacitors of the self-healing type.

1.3.2 external overpressure detector: A device designed to detect abnormal increase of the internal pressure by an electrical switch/signal and indirectly interrupt the current path.

1.3.3 Internal (element) fuse: A device incorporated in the capacitor which disconnects an element or a group of elements in the event of breakdown.

1.3.4 external fuse: A device to be connected in series with the capacitor which disconnects the unit in the event of breakdown.