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Kraftkondensatorer – Seriekondensatorer för kraftanläggningar – Del 3: Inre säkringar

*Series capacitors for power systems –
Part 3: Internal fuses*

Som svensk standard gäller europastandarden EN 60143-3:2015. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60143-3:2015.

Nationellt förord

Europastandarden EN 60143-3:2015

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 60143-3, Second edition, 2015 - Series capacitors for power systems - Part 3: Internal fuses**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 60143-3, utgåva 1, 1998, gäller ej fr o m 2018-07-14.

Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler för bl a mätning, säkerhet och provning och för utförande, skötsel och dokumentation av elprodukter och elanläggningar.

Genom att utforma sådana standarder blir säkerhetsfordringar tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

SEK är Sveriges röst i standardiseringsarbetet inom elområdet

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SEK samordnar svenska intressenters medverkan i SEKs tekniska kommittéer och stödjer svenska experters medverkan i internationella och europeiska projekt.

Stora delar av arbetet sker internationellt

Utformningen av standarder sker i allt väsentligt i internationellt och europeiskt samarbete. SEK är svensk nationalkommitté av International Electrotechnical Commission (IEC) och Comité Européen de Normalisation Electrotechnique (CENELEC).

Standardiseringsarbetet inom SEK är organiserat i referensgrupper bestående av ett antal tekniska kommittéer som speglar hur arbetet inom IEC och CENELEC är organiserat.

Arbetet i de tekniska kommittéerna är öppet för alla svenska organisationer, företag, institutioner, myndigheter och statliga verk. Den årliga avgiften för deltagandet och intäkter från försäljning finansierar SEKs standardiseringsverksamhet och medlemsavgift till IEC och CENELEC.

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Den som deltar i SEKs tekniska kommittéarbete har möjlighet att påverka framtida standarder och får tidig tillgång till information och dokumentation om utvecklingen inom sitt teknikområde. Arbetet och kontakterna med kollegor, kunder och konkurrenter kan gynnsamt påverka enskilda företags affärsutveckling och bidrar till deltagarnas egen kompetensutveckling.

Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

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English Version

Series capacitors for power systems - Part 3: Internal fuses (IEC 60143-3:2015)

Condensateurs série destinés à être installés sur des
réseaux - Partie 3: Fusibles internes
(IEC 60143-3:2015)

Reihenkondensatoren für Starkstromanlagen - Teil 3:
Eingebaute Sicherungen
(IEC 60143-3:2015)

This European Standard was approved by CENELEC on 2015-07-14. 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.

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.



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

European foreword

The text of document 33/577/FDIS, future edition 2 of IEC 60143-3, prepared by IEC/TC 33 "Power capacitors and their applications" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60143-3:2015.

The following dates are fixed:

- latest date by which the document has to be (dop) 2016-04-14
implemented at national level by
publication of an identical national
standard or by endorsement
- latest date by which the national (dow) 2018-07-14
standards conflicting with the
document have to be withdrawn

This document supersedes EN 60143-3:1998.

EN 60143-3:2015 includes the following significant technical changes with respect to EN 60143-3:1998:

The test procedure has been largely simplified

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 60143-3:2015 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 60549:2013	NOTE	Harmonized as EN 60549:2013.
IEC 60871-4:2014	NOTE	Harmonized as EN 60871-4:2014.
IEC 60931-3:1996	NOTE	Harmonized as EN 60931-3:1996.

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60143-1	2004	Series capacitors for power systems -- Part 1: General	EN 60143-1	2004
IEC 60143-2	2012	Series capacitors for power systems -- Part 2: Protective equipment for series capacitor banks	EN 60143-2	2013

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SERIES CAPACITORS FOR POWER SYSTEMS –**Part 3: Internal fuses****FOREWORD**

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International Standard IEC 60143-3 has been prepared by IEC technical committee 33: Power capacitors and their applications.

This second edition cancels and replaces the first edition published in 1998. This edition constitutes a technical revision.

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

The test procedure has been largely simplified.

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

FDIS	Report on voting
33/577/FDIS	33/579/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 in the IEC 60143 series, published under the general title *Series capacitors for power systems*, 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 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.

SERIES CAPACITORS FOR POWER SYSTEMS –

Part 3: Internal fuses

1 Scope

This part of IEC 60143 applies to internal fuses designed to isolate faulty capacitor elements, to allow operation of the remaining parts of that capacitor unit and the bank in which the capacitor unit is connected. Such fuses are not a substitute for a switching device such as a circuit-breaker, or for external protection of the capacitor bank, or any part thereof.

The object of this part of IEC 60143 is:

- to formulate requirements regarding performance and testing;
- to provide a guide for coordination of fuse and bank protection.

NOTE External fuses for series capacitors are treated in IEC 60143-1:2004, Annex A: "Test requirements and application guide for external fuses and units to be externally fused".

2 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 60143-1:2004, *Series capacitors for power systems – Part 1: General*

IEC 60143-2:2012, *Series capacitors for power systems – Part 2: Protective equipment for series capacitor banks*