Mitte-iseparanevat tüüpi paralleel-jõukondensaatorid vahelduvvooolusüsteemidele nimipingega kuni 1 kV. Osa 1: Üldnõuded. Talitlus, katsetamine ja nimisuurused. Ohutusnõuded. Paigaldamise ja käidu juhis

Shunt power capacitors of the non-self-healing type for a.c. systems having a rated voltage up to and including 1 kV - Part 1: General - Performance, testing and rating - Safety requirements - Guide for installation and operation

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 60931-1:2001 sisaldab Euroopa standardi EN 60931-1:1996 ingliskeelset teksti.	This Estonian standard EVS-EN 60931-1:2001 consists of the English text of the European standard EN 60931-1:1996.
Standard on kinnitatud Eesti Standardikeskuse 16.04.2001 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 16.04.2001 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

ICS 31.060.70

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60931-1

December 1996

ICS 31.060.70

Supersedes EN 60931-1:1993

Descriptors: Power capacitors, shunt capacitors, non-self-healing capacitors, performance characteristics, safety requirements, installation, markings, service conditions

English version

Shunt power capacitors of the non-self-healing type for a.c. systems having a rated voltage up to and including 1 kV Part 1: General - Performance, testing and rating - Safety requirements Guide for installation and operation (IEC 931-1:1996)

Condensateurs shunt de puissance non autorégénérateurs pour réseaux à courant alternatif de tension assignée inférieure ou égale à 1 kV
Partie 1: Généralités - Caractéristiques fonctionnelles, essais et valeurs assignées - Règles de sécurité
Guide d'installation et d'exploitation
(CEI 931-1:1996)

Nichtselbstheilende Leistungs-Parallelkondensatoren für Wechselstromanlagen mit einer Nennspannung bis 1 kV
Teil 1: Allgemeines - Leistungsanforderungen, Prüfung- und Bemessung - Sicherheitsanforderungen
Anleitung für Errichtung und Betrieb
(IEC 931-1:1996)

This European Standard was approved by CENELEC on 1996-10-01. 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, 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

Ref. No. EN 60931-1:1996 E

Foreword

The text of document 33/235/FDIS and 33/235A/FDIS, future edition 2 of IEC 931-1, prepared by IEC TC 33, Power capacitors, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60931-1 on 1996-10-01.

This European Standard supersedes EN 60931-1:1993.

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) 1997-08-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 1997-08-01

Annexes designated "normative" are part of the body of the standard.
Annexes designated "informative" are given for information only.
In this standard, annexes A and ZA are normative and annex B is informative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 931-1:1996 was approved by CENELEC as a European Standard without any modification.

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.

Publication	Year	Title	EN/HD	Year
IEC 50(436)	1990	International Electrotechnical Vocabulary (IEV) Chapter 436: Power capacitors	-	-
IEC 60-1	1989	High-voltage test techniques Part 1: General definitions and test requirements	HD 588.1 S1	1991
IEC 110	1973	Recommendation for capacitors for inductive heat generating plants operating at frequencies between 40 Hz and 24 kHz	HD 207 S1	1977
IEC 143 (mod)	1992	Series capacitors for power systems Part 1: General - Performance, testing and rating - Safety requirements - Guide for installation	EN 60143 + corr. October	1993 1994
IEC 252 (mod)	1993	A.C. motor capacitors	EN 60252 + corr. May	1994 1994
IEC 269-1	1986	Low-voltage fuses Part 1: General requirements	EN 60269-1	1989
IEC 358	1990	Coupling capacitors and capacitor dividers	HD 597 S1 + corr. March	1992 1992
IEC 831-1	1996	Shunt power capacitors of the self-healing type for a.c. systems having a rated voltage up to and including 1 kV Part 1: General - Performance, testing and rating - Safety requirements - Guide for installation and operation	EN 60831-1	1996

Publication	Year	Title	EN/HD	Year
IEC 871-1	1987	Shunt capacitors for a.c. power systems having a rated voltage above 1 kV Part 1: General - Performance, testing and rating - Safety requirements - Guide for installation and operation	HD 525.1 S1	1989
IEC 931-2	1995	Shunt power capacitors of the non-self-healing type for a.c. systems having a rated voltage up to and including 1 kV Part 2: Ageing test and destruction test	EN 60931-2	1996
IEC 931-3	1996	Part 3: Internal fuses	EN 60931-3	1996
IEC 1000-2-2 (mod)	1990	Electromagnetic compatibility (EMC) Part 2: Environment Section 2: Compatibility levels for low-frequency conducted disturbances and signalling in public low-voltage power supply systems	ENV 61000-2-2	1993
IEC 1000-4-1	1992	Part 4: Testing and measurement techniques Section 1: Overview of immunity tests Basic EMC publication	EN 61000-4-1	1994
IEC 1048 (mod)	1991	Auxiliaries for lamps - Capacitors for use in tubular fluorescent and other discharge lamp circuits - General and safety requirements	EN 61048[1)]	1993
IEC 1049 (mod)	1991	Capacitors for use in tubular fluorescent and other discharge lamp circuits Performance requirements	EN 61049[2)]	1993
IEC 1071-1 (mod)	1991	Power electronic capacitors Part 1: General	EN 61071-1	1996

1) EN 61048 includes the corrigendum January 1992 to IEC 1048.

2) EN 61049 includes the corrigendum January 1992 to IEC 1049.

NORME INTERNATIONALE

INTERNATIONAL STANDARD

CEI
IEC
931-1

Deuxième édition
Second edition
1996-11

Condensateurs shunt de puissance non autorégénérateurs pour réseaux à courant alternatif de tension assignée inférieure ou égale à 1 000 V –

Partie 1: Généralités – Caractéristiques fonctionnelles, essais et valeurs assignées – Règles de sécurité – Guide d'installation et d'exploitation

Shunt power capacitors of the non-self-healing type for a.c. systems having a rated voltage up to and including 1 000 V –

Part 1: General – Performance, testing and rating – Safety requirements – Guide for installation and operation

Numéro de référence
Reference number
CEI/IEC 931-1: 1996

Validité de la présente publication

Le contenu technique des publications de la CEI est constamment revu par la CEI afin qu'il reflète l'état actuel de la technique.

Des renseignements relatifs à la date de reconfirmation de la publication sont disponibles auprès du Bureau Central de la CEI.

Les renseignements relatifs à ces révisions, à l'établissement des éditions révisées et aux amendements peuvent être obtenus auprès des Comités nationaux de la CEI et dans les documents ci-dessous:

- **Bulletin de la CEI**
- **Annuaire de la CEI**
  Publié annuellement
- **Catalogue des publications de la CEI**
  Publié annuellement et mis à jour régulièrement

Terminologie

En ce qui concerne la terminologie générale, le lecteur se reportera à la CEI 50: *Vocabulaire Electrotechnique International* (VEI), qui se présente sous forme de chapitres séparés traitant chacun d'un sujet défini. Des détails complets sur le VEI peuvent être obtenus sur demande. Voir également le dictionnaire multilingue de la CEI.

Les termes et définitions figurant dans la présente publication ont été soit tirés du VEI, soit spécifiquement approuvés aux fins de cette publication.

Symboles graphiques et littéraux

Pour les symboles graphiques, les symboles littéraux et les signes d'usage général approuvés par la CEI, le lecteur consultera:

– la CEI 27: *Symboles littéraux à utiliser en électro-technique;*

– la CEI 417: *Symboles graphiques utilisables sur le matériel. Index, relevé et compilation des feuilles individuelles;*

– la CEI 617: *Symboles graphiques pour schémas;*

et pour les appareils électromédicaux,

– la CEI 878: *Symboles graphiques pour équipements électriques en pratique médicale.*

Les symboles et signes contenus dans la présente publication ont été soit tirés de la CEI 27, de la CEI 417, de la CEI 617 et/ou de la CEI 878, soit spécifiquement approuvés aux fins de cette publication.

Publications de la CEI établies par le même comité d'études

L'attention du lecteur est attirée sur les listes figurant à la fin de cette publication, qui énumèrent les publications de la CEI préparées par le comité d'études qui a établi la présente publication.

Validity of this publication

The technical content of IEC publications is kept under constant review by the IEC, thus ensuring that the content reflects current technology.

Information relating to the date of the reconfirmation of the publication is available from the IEC Central Office.

Information on the revision work, the issue of revised editions and amendments may be obtained from IEC National Committees and from the following IEC sources:

- **IEC Bulletin**
- **IEC Yearbook**
  Published yearly
- **Catalogue of IEC publications**
  Published yearly with regular updates

Terminology

For general terminology, readers are referred to IEC 50: *International Electrotechnical Vocabulary* (IEV), which is issued in the form of separate chapters each dealing with a specific field. Full details of the IEV will be supplied on request. See also the IEC Multilingual Dictionary.

The terms and definitions contained in the present publication have either been taken from the IEV or have been specifically approved for the purpose of this publication.

Graphical and letter symbols

For graphical symbols, and letter symbols and signs approved by the IEC for general use, readers are referred to publications:

– IEC 27: *Letter symbols to be used in electrical technology;*

– IEC 417: *Graphical symbols for use on equipment. Index, survey and compilation of the single sheets;*

– IEC 617: *Graphical symbols for diagrams;*

and for medical electrical equipment,

– IEC 878: *Graphical symbols for electromedical equipment in medical practice.*

The symbols and signs contained in the present publication have either been taken from IEC 27, IEC 417, IEC 617 and/or IEC 878, or have been specifically approved for the purpose of this publication.

IEC publications prepared by the same technical committee

The attention of readers is drawn to the end pages of this publication which list the IEC publications issued by the technical committee which has prepared the present publication.

NORME INTERNATIONALE

INTERNATIONAL STANDARD

CEI
IEC
931-1

Deuxième édition
Second edition
1996-11

Condensateurs shunt de puissance non autorégénérateurs pour réseaux à courant alternatif de tension assignée inférieure ou égale à 1 000 V –

Partie 1: Généralités – Caractéristiques fonctionnelles, essais et valeurs assignées – Règles de sécurité – Guide d'installation et d'exploitation

Shunt power capacitors of the non-self-healing type for a.c. systems having a rated voltage up to and including 1 000 V –

Part 1: General – Performance, testing and rating – Safety requirements – Guide for installation and operation

Bureau Central de la Commission Electrotechnique Internationale 3, rue de Varembé Genève, Suisse

Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE V

Pour prix, voir catalogue en vigueur
For price, see current catalogue

SOMMAIRE

CONTENTS