

**SLOVENSKI STANDARD**  
**SIST EN 60383-1:1997****01-november-1997**

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**Izolatorji za nadzemne vode za nazivne napetosti nad 1 kV - 1. del: Keramični ali stekleni izolatorji za izmenične sisteme - Definicije, preskusne metode in prevzemna merila (IEC 60383-1:1993)**

Insulators for overhead lines with a nominal voltage above 1 kV -- Part 1: Ceramic or glass insulator units for a.c. systems - Definitions, test methods and acceptance criteria

Isolatoren für Freileitungen mit einer Nennspannung über 1 kV -- Teil 1: Keramik- oder Glas-Isolatoren für Wechselstromsysteme - Begriffe, Prüfverfahren und Annahmekriterien

Isolateurs pour lignes aériennes de tension nominale supérieure à 1 kV -- Partie 1: Éléments d'isolateurs en matière céramique ou en verre pour systèmes à courant alternatif - Définitions, méthodes d'essai et critères d'acceptation

**Ta slovenski standard je istoveten z: EN 60383-1:1996**

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29.080.10	Izolatorji	Insulators
29.240.20	Daljnovodi	Power transmission and distribution lines

**SIST EN 60383-1:1997****en**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 60383-1**

November 1996

ICS 01.040.29; 29.080.10

Descriptors: Insulators, overhead lines, ceramic, glass

English version

**Insulators for overhead lines with a nominal voltage above 1 kV  
Part 1: Ceramic or glass insulator units for a.c. systems  
Definitions, test methods and acceptance criteria  
(IEC 383-1:1993)**

Isolateurs pour lignes aériennes de tension nominale supérieure à 1 kV  
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(CEI 383-1:1993)

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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.

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**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 International Standard IEC 383-1:1993, prepared by SC 36B, Insulators for overhead lines, of IEC TC 36, Insulators, was submitted to the formal vote and was approved by CENELEC as EN 60383-1 on 1996-10-01 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) 1997-06-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 1997-06-01

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

### Endorsement notice

The text of the International Standard IEC 383-1:1993 was approved by CENELEC as a European Standard without any modification.

In the official version, for annex C, List of normative documents given for information, the following notes have to be added for the standards indicated:

- <https://standards.iteh.ai/catalog/standards/sist/a970df9e-45dd-4c58-a83b-4c6926256a73/sist-en-60383-1-1996>
- IEC 168 NOTE: IEC 168:1994 is harmonized as EN 60168:1994 (not modified).
- IEC 383-2 NOTE: Harmonized as EN 60383-2:1995 (not modified).
- IEC 507 NOTE: Harmonized as EN 60507:1993 (not modified).
- IEC 672-1 NOTE: Harmonized as HD 426.1 S1:1983, which is superseded by EN 60672-1:1995 (IEC 672-1:1995, not modified).
- IEC 672-3 NOTE: Harmonized as HD 426.3 S1:1987 (not modified).
- ISO 9000 NOTE: ISO 9000-1:1994 is harmonized as EN ISO 9000-1:1994 (not modified).
- ISO 9001 NOTE: ISO 9001:1994 is harmonized as EN ISO 9001:1994 (not modified).
- ISO 9002 NOTE: ISO 9002:1994 is harmonized as EN ISO 9002:1994 (not modified).
- ISO 9003 NOTE: ISO 9003:1994 is harmonized as EN ISO 9003:1994 (not modified).
- ISO 9004 NOTE: ISO 9004-1:1994 is harmonized as EN ISO 9004-1:1994 (not modified).

## 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 50(471)	1984	International electrotechnical vocabulary (IEV) Chapter 471: Insulators	-	-
IEC 60-1	1989	High-voltage test techniques Part 1: General definitions and test requirements	HD 588.1 S1	1991
IEC 120	1984	Dimensions of ball and socket couplings of string insulator units	HD 474 S1	1986
IEC 305	1978 <sup>1)</sup>	Characteristics of string insulator units of the cap and pin type	-	-
IEC 372	1984	Locking devices for ball and socket couplings of string insulator units Dimensions and tests	-	-
IEC 433	1980	Characteristics of string insulator units of the long rod type	-	-
IEC 471	1977	Dimensions of clevis and tongue couplings of string insulator units	-	-
IEC 720	1981	Characteristics of line post insulators	-	-
IEC 1211	1994	Insulators of ceramic material or glass for overhead lines with a nominal voltage greater than 1 kV - Puncture testing	-	-
ISO 1459	1973	Metallic coatings - Protection against corrosion by hot dip galvanizing - Guiding principles	-	-

1) IEC 305:1995 is harmonized as EN 60305:1996.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 1460	1973 <sup>2)</sup>	Metallic coatings - Hot dip galvanized coatings on ferrous metals - Determination of the mass per unit area - Gravimetric method	-	-
ISO 1461	1973	Metallic coatings - Hot dip galvanized coatings on fabricated ferrous products - Requirements	-	-
ISO 1463	1982	Metallic and oxide coatings - Measurement of coating thickness - Microscopical method	EN ISO 1463	1994
ISO 2064	1980	Metallic and other non-organic coatings - Definitions and conventions concerning the measurement of thickness	EN ISO 2064	1994
ISO 2178	1982	Non-magnetic coatings on magnetic substrates - Measurement of coating thickness - Magnetic method	EN ISO 2178	1994

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2) ISO 1460:1992 is harmonized as EN ISO 1460:1994.

**Annex ZB** (informative)**A-deviations**

**A-deviation:** National deviation due to regulations, the alteration of which is for the time being outside the competence of the CEN/CENELEC member.

This European Standard does not fall under any Directive of the EC.

In the relevant CENELEC countries these A-deviations are valid instead of the provisions of the European Standard until they have been removed.

<u>Clause</u>	<u>Deviation</u>
18, 19.2, 19.4, 20 Annex A	<b>Austria</b> (Elektrotechnikverordnung 1996, BGBl. N° 105 of March 7th, 1996)  The mechanical dimensioning of the insulators is defined by the section 12 of ÖVE-L11 "Errichtung von Starkstromfreileitungen über 1 kV".

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**NORME  
INTERNATIONALE  
INTERNATIONAL  
STANDARD**

**CEI  
IEC  
383-1**

Quatrième édition  
Fourth edition  
1993-04

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**Isolateurs pour lignes aériennes  
de tension nominale supérieure à 1 000 V**

**Partie 1:**

Eléments d'isolateurs en matière céramique  
ou en verre pour systèmes à courant alternatif –  
Définitions, méthodes d'essai et  
critères d'acceptation

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<https://standards.iteh.ai/catalog/standards/sist/a970df9e-45dd-4c58-a83b->

**Insulators for overhead lines  
with a nominal voltage above 1 000 V**

**Part 1:**

Ceramic or glass insulator units for a.c. systems –  
Definitions, test methods  
and acceptance criteria

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Международная Электротехническая Комиссия

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For price, see current catalogue

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**INSULATORS FOR OVERHEAD LINES  
WITH A NOMINAL VOLTAGE ABOVE 1 000 V**

**Part 1: Ceramic or glass insulator units  
for a.c. systems –  
Definitions, test methods and acceptance criteria**

## 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.

International Standard IEC 383-1 has been prepared by sub-committee 36B: Insulators for overhead lines, of IEC technical committee 36: Insulators.

Part 1, together with Part 2, replaces the third edition of IEC 393 (1983) and constitutes a technical revision.

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

Six Months' Rule	Report on Voting	Two Months' Procedure	Report on Voting
36B(CO)87-I and II 36B(CO)89	36B(CO)91 36B(CO)93	36B(CO)95	36B(CO)97 and 97A

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

IEC 383 consists of the following parts, under the general title: Insulators for overhead lines with a nominal voltage above 1 000 V.

- Part 1: Ceramic or glass insulator units for a.c. systems – Definitions, test methods and acceptance criteria
- Part 2: Insulator strings and insulator sets for a.c. systems – Definitions, test methods and acceptance criteria

Annexes A, B and C are for information only.

## INTRODUCTION

This part of IEC 383 is divided into nine sections.

The first five sections cover general clauses, including general requirements and relevant test procedures.

Sections six to nine deal with four different types of insulators:

Section 6: Pin insulators

Section 7: Line post insulators

Section 8: String insulator units

Section 9: Insulators for overhead electric traction lines.

Sections 6, 7 and 8 begin with a cross-reference table giving the tests applicable to the insulators and the quantity of insulators to be tested.

Section 9, dealing with traction insulators, does not have a cross-reference table as traction insulators can be referenced to one of the three other types of insulator dealt with by this part of IEC 383.

The user of this part need only refer to the section dealing with the type of insulator to be tested and to the general requirements and relevant test procedures contained in sections one to five.

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