

SLOVENSKI STANDARD
SIST EN 60305:1997**01-november-1997**

Insulators for overhead lines with a nominal voltage above 1 kV - Ceramic or glass insulator units for a.c. systems - Characteristics of insulator units of the cap and pin type (IEC 305:1995)

Insulators for overhead lines with a nominal voltage above 1 kV - Ceramic or glass insulator units for a.c. systems - Characteristics of insulator units of the cap and pin type

Isolatoren für Freileitungen mit einer Nennspannung über 1 kV - Keramik- oder Glasisolatoren für Wechselspannungssysteme - Kenngrößen von Kappenisolatoren
(standards.iteh.ai)

Isolateurs pour lignes aériennes de tension nominale supérieure à 1 kV - Eléments d'isolateurs en matière céramique ou en verre pour systèmes à courant alternatif - Caractéristiques des éléments d'isolateurs du type capot et tige

Ta slovenski standard je istoveten z: EN 60305:1996

ICS:

29.080.10	Izolatorji	Insulators
29.240.20	Daljnovodi	Power transmission and distribution lines

SIST EN 60305:1997**en**

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60305

March 1996

ICS 29.080.10

Descriptors: Insulators, overhead lines, ceramic or glass insulators, insulator units of the cap and pin type

English version

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Ceramic or glass insulator units for a.c. systems
Characteristics of insulator units of the cap and pin type
(IEC 305:1995)**

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(CEI 305:1995)

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(IEC 305:1995)

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This European Standard was approved by CENELEC on 1996-03-05. 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

Foreword

The text of document 36B/139/DIS, future edition 4 of IEC 305, prepared by SC 36B, Insulators for overhead lines, of IEC TC 36, Insulators, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60305 on 1996-03-05.

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

Annexes designated "normative" are part of the body of the standard.
In this standard, annex ZA is normative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 305:1995 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 120	1984	Dimensions of ball and socket couplings of string insulator units	HD 474 S1	1986
IEC 383-1	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	-	-
IEC 471	1977	Dimensions of clevis and tongue couplings of string insulator units	-	-
IEC 815	1986	Guide for the selection of insulators in respect of polluted conditions	-	-

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**NORME
INTERNATIONALE
INTERNATIONAL
STANDARD**

**CEI
IEC
305**

Quatrième édition
Fourth edition
1995-12

**Isolateurs pour lignes aériennes de tension nominale supérieure à 1 000 V –
Eléments d'isolateurs en matière céramique ou en verre pour systèmes à courant alternatif –
Caractéristiques des éléments d'isolateurs du type capot et tige
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**Insulators for overhead lines with a nominal voltage above 1 000 V –
Ceramic or glass insulator units for a.c. systems –
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International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

**Ceramic or glass insulator units for a.c. systems –
Characteristics of insulator units of the cap and pin type**

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 co-operation 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, express as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
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- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 305 has been prepared by sub-committee 36B: Insulators for overhead lines, of IEC technical committee 36: Insulators. This fourth edition cancels and replaces the third edition published in 1978 of which it constitutes a technical revision in order to introduce characteristics of cap and pin insulators for polluted areas.

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

DIS	Report on voting
36B/139/DIS	36B/149/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.

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

Ceramic or glass insulator units for a.c. systems – Characteristics of insulator units of the cap and pin type

1 Scope and object

This International Standard applies to string insulator units of the cap and pin type with insulating parts of ceramic material or glass, intended for a.c. overhead lines with a nominal voltage greater than 1 000 V and a frequency not greater than 100 Hz. It also applies to insulators of similar design used in substations.

This standard applies to string insulator units of the cap and pin type either with ball and socket couplings or with clevis and tongue couplings.

This standard applies to string insulator units for use on overhead lines in clean areas and polluted areas. For use in areas characterized by very heavy pollution levels and for other particular or extreme environmental conditions, it may be necessary for certain dimensions to be changed and insulator units having different creepage distances, spacing and forms may be preferred (for example, flat profile, hemispherical etc.). Insulators for use on d.c. systems may also need different dimensions. In any case, it is recommended that the standardized mechanical characteristics of the present International Standard and coupling sizes are retained.

The object of this standard is to prescribe specified values for the mechanical characteristics and for the main dimensions of string insulator units of the cap and pin type.

The power frequency, lightning impulse and puncture withstand voltages of string insulator units are not specified in this standard. IEC 383-1 gives the electrical characteristics which define string insulator units; their values shall be agreed between purchaser and manufacturer.

Ball and socket couplings are covered by IEC 120, clevis and tongue couplings by IEC 471.

NOTE – For the definition of pollution levels see IEC 815.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this International Standard 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.