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Isolatorer – Kedjeisolatorer av kompositmaterial för friledningar med systemspänning över 1000 V – Del 2: Mått och tekniska data

*Composite string insulator units for overhead lines with a nominal voltage greater than 1 000 V –
Part 2: Dimensional and electrical characteristics*

Som svensk standard gäller europastandarden EN 61466-2:1998. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61466-2:1998.

Nationellt förord

Europastandarden EN 61466-2:1998^{*)}

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 61466-2, First edition, 1998 - Composite string insulator units for overhead lines with a nominal voltage greater than 1 000 V - Part 2: Dimensional and electrical characteristics**

utarbetad inom International Electrotechnical Commission, IEC.

^{*)} EN 61466-2:1998 ikraftsattes 1999-03-26 som SS-EN 61466-2 genom offentliggörande, d v s utan utgivning av något svenskt dokument.

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

SEK Svensk Elstandard svarar för standardiseringen inom elområdet i Sverige och samordnar svensk medverkan i internationell och europeisk standardisering. SEK är en ideell organisation med frivilligt deltagande från svenska myndigheter, företag och organisationer som vill medverka till och påverka utformningen av tekniska regler inom elektrotekniken.

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.

Var med och påverka!

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.

SEK Svensk Elstandard

Box 1284
164 29 Kista
Tel 08-444 14 00
www.elstandard.se

English version

**Composite string insulator units for overhead lines
with a nominal voltage greater than 1 kV
Part 2: Dimensional and electrical characteristics
(IEC 61466-2:1998)**

Isolateurs composites destinés aux
lignes aériennes de tension nominale
supérieure à 1 kV
Partie 2: Caractéristiques
dimensionnelles et électriques
(CEI 61466-2:1998)

Verbund-Kettenisolatoren für
Freileitungen mit einer Nennspannung
über 1 kV - Teil 2: Maße und elektrische
Kenngrößen
(IEC 61466-2:1998)

This European Standard was approved by CENELEC on 1998-10-01. 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, Czech Republic, 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/179/FDIS, future edition 1 of IEC 61466-2, 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 61466-2 on 1998-10-01.

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) 1999-07-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2001-07-01

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 annex A is informative.

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61466-2:1998 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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60071-1	1993	Insulation co-ordination Part 1: Definitions, principles and rules	EN 60071-1	1995
IEC 60071-2	1976	Part 2: Application guide	HD 540.2 S1 ¹⁾	1991
IEC 61109	1992	Composite insulators for a.c. overhead lines with a nominal voltage greater than 1 kV Definitions, test methods and acceptance criteria	-	-
IEC 61466-1	1997	Composite string insulator units for overhead lines with a nominal voltage greater than 1 kV Part 1: Standard strength classes and end fittings	EN 61466-1	1997

1) HD 540.2 S1 is superseded by EN 60071-2:1997, which is based on IEC 60071-2:1996.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**COMPOSITE STRING INSULATOR UNITS FOR OVERHEAD LINES
WITH A NOMINAL VOLTAGE GREATER THAN 1 000 V –****Part 2: Dimensional and electrical characteristics**

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.
- 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.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61466-2 has been prepared by subcommittee 36B: Insulators for overhead lines, of IEC technical committee 36: Insulators.

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

FDIS	Report on voting
36B/179/FDIS	36B/183/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.

Annex A is for information only.

COMPOSITE STRING INSULATOR UNITS FOR OVERHEAD LINES WITH A NOMINAL VOLTAGE GREATER THAN 1 000 V –

Part 2: Dimensional and electrical characteristics

1 Scope

This part of IEC 61466 is applicable to composite string insulators with a specified mechanical load (SML) of 40 kN and 70 kN for a.c. overhead distribution 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 or on electric traction lines.

This standard applies to string insulator units of composite type with couplings in accordance with IEC 61466-1.

This standard prescribes specified values for electrical and dimensional characteristics of composite string insulator units for overhead distribution lines with a highest lightning impulse level of 325 kV and a specified mechanical load (SML) of 40 kN and 70 kN.

NOTE – General definitions and methods of testing are given in IEC 61109.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 61466. At the time of publication, the editions indicated were valid. All normative documents are subjected to revision, and parties to agreements based on this part of IEC 61466 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 60071-1:1993, *Insulation co-ordination – Part 1: Definitions, principles and rules*

IEC 60071-2:1976, *Insulation co-ordination – Part 2: Application guide*

IEC 61109:1992, *Composite insulators for a.c. overhead lines with a nominal voltage greater than 1 000 V – Definitions, test methods and acceptance criteria*

IEC 61466-1:1997, *Composite string insulator units for overhead lines with a nominal voltage greater than 1 000 V – Part 1: Standard strength classes and end fittings*