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Elektriska friledningar över 45 kV (AC)

Overhead electrical lines exceeding AC 45 kV

Som svensk standard gäller europastandarden EN 50341-1:2001 med tillägget EN 50341-1:2001/A1:2009. Den svenska standarden innehåller den officiella engelska språkversionen av EN 50341-1:2001 och EN 50341-1:2001/A1:2009.

Nationellt förord

Europastandarden EN 50341:2001 består av tre delar:

EN 50341-1, som innehåller avsnitt gemensamma för hela CENELEC

EN 50341-2, som är en innehållsförteckning till del 3, och

EN 50341-3, som innehåller nationella normativa bilagor, vilka ger de fordringar som i respektive land gäller utöver eller istället för fordringarna i motsvarande avsnitt i del 1.

Denna SS-EN 50341-1 innehåller den officiella engelska språkversionen av EN 50341-1:2001 och tillägget EN 50341-1:2001/A1:2009.

Standarden ska användas tillsammans med SS-EN 50341-3-18, utgåva 1, 2013.

Innehållet i denna standard SS-EN 50341-1 gäller i Sverige tillsammans med den tillhörande svenska normativa bilagan som fastställts och utgivits separat som SS-EN 50341-3-18, utgåva 1, 2013.

EN 50341-1:2001 fastställdes 2007 som SS-EN 50341 (med den i EN 50341-3-18 ingående svenska normativa bilagan inarbetad i texten) och EN 50341-1:2001/A1:2009 fastställdes 2010 som SS-EN 50341-1/A1 (utan svensk normativ bilaga). Dessa tidigare fastställda svenska standarder SS-EN 50341, utgåva 1, 2007 och SS-EN 50341-1/A1, utgåva 1, 2010 och den separat utgivna rättelsen SS-EN 50341 C1, utgåva 1, 2010, gäller inte fr o m 2013-07-03.

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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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EUROPEAN STANDARD

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NORME EUROPÉENNE

EUROPÄISCHE NORM

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English version

**Overhead electrical lines exceeding AC 45 kV
Part 1: General requirements -
Common specifications**

Lignes électriques aériennes dépassant
AC 45 kV
Partie 1: Règles générales -
Spécifications communes

Freileitungen über AC 45 kV
Teil 1: Allgemeine Anforderungen -
Gemeinsame Festlegungen

This European Standard was approved by CENELEC on 2001-01-01. 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, Malta, 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

This European Standard was prepared by the Technical Committee CENELEC TC 11, Overhead electrical lines exceeding AC 1 kV (DC 1,5 kV).

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 50341-1 on 2001-01-01.

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) 2002-05-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2004-01-01

Annexes designated "normative" are part of the body of the standard.

Annexes designated "informative" are given for information only.

In this standard, annexes E, G, J & K are normative and annexes A, B, C, D, F, H, L, M, N, P, Q & R are informative.

As far as the overhead lines towers are concerned, the designer may refer to prEN 1993-7-1, currently referred to as ENV 1993-3-1, as prepared by TC 250 of CEN, if considered appropriate.

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Introduction

Detailed structure of the standard

The standard comprises three parts:

Part 1: General requirements - Common specifications

This part, also referred to as the Main Body, includes clauses common to all countries. These clauses have been prepared by Working Groups and approved by CLC/TC 11.

The Main Body is available in English, French and German.

Part 2: Index of National Normative Aspects

This index gives the list of all the National Normative Aspects (NNAs) - see signification and contents of NNAs hereafter under "Part 3: National Normative Aspects".

The index is available in English, French and German.

Part 3: National Normative Aspects

The National Normative Aspects (NNAs) reflect national practices. They generally include A-deviations, special national conditions and national complements.

A-deviations:

A-deviations are required by existing national laws or regulations, which cannot be altered at the time of preparation of the standard.

Reference is made to CENELEC Internal Regulations Part 2, definition 3.1.9.

Special national conditions (snc):

Special national conditions are national characteristics or practices that cannot be changed even over a long period, e.g. those due to climatic conditions, earth resistivity, etc.

Reference is made to CENELEC Internal Regulations, Part 2, definition 3.1.7/ 3.1.9.

National complements (NCPTs):

National complements reflect national practices, which are neither A-deviations, nor special national conditions. It has been agreed within CLC/TC 11 that NCPTs should be gradually adapted to the Main Body, aiming at the usual EN standard structure including only a Main Body, A-deviations and special national conditions.

Rules for the numbering of NNAs:

The NNAs are numbered as follows :

AT	Austria	EN 50341-3-1
BE	Belgium	EN 50341-3-2
CH	Switzerland	EN 50341-3-3
DE	Germany	EN 50341-3-4
DK	Denmark	EN 50341-3-5
ES	Spain	EN 50341-3-6
FI	Finland	EN 50341-3-7
FR	France	EN 50341-3-8
GB	Great Britain	EN 50341-3-9
GR	Greece	EN 50341-3-10
IE	Ireland	EN 50341-3-11
IS	Iceland	EN 50341-3-12
IT	Italy	EN 50341-3-13
LU	Luxembourg	EN 50341-3-14 (non existant)
NL	Netherlands	EN 50341-3-15
NO	Norway	EN 50341-3-16
PT	Portugal	EN 50341-3-17
SE	Sweden	EN 50341-3-18
CZ	Czech Republic	EN 50341-3-19
x	xxxx	EN 50341-3-xx, etc.

Language:

The NNAs are published in English and in the national language(s) of the respective country.

1 Scope

This standard applies to overhead electric lines with rated voltages exceeding 45 kV AC and with rated frequencies below 100 Hz.

This standard specifies the general requirements that shall be met for the design and construction of new overhead lines to ensure that the line is suitable for its purpose with regard to safety of persons, maintenance, operation and environmental considerations.

NOTE 1 The extent of the application of this standard by each country in respect of existing overhead lines is subject to the requirements of the National Normative Aspects (NNA) applicable to that country.

NOTE 2 Design and construction of overhead lines with insulated conductors, where internal and external clearances can be smaller than specified in the standard are not included. All other requirements of the standard may be applied to overhead lines with insulated conductors. When necessary, requirements for clearances can be given in the NNAs.

NOTE 3 This part of the standard is applicable for optical Ground Wires (OPGWs) and optical Conductors (OPCONs). However the standard is not applicable to telecommunication systems which are used on overhead transmission lines either attached to the transmission line conductor/earth wire system (for example wraparound,...) or as separate cables supported by the transmission supports for example All Dielectric Self Supporting (ADSS) or for telecommunication equipment mounted on individual transmission line structures. When necessary, requirements can be given in the NNAs.

This standard does not apply to :

- overhead electric lines inside closed electrical areas as defined in HD 637;
- catenary systems of electrified railways.