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## **Kablar – Provning av ickemetalliska material – Del 100: Allmänt**

*Electric and optical fibre cables –  
Test methods for non-metallic materials –  
Part 100: General*

Som svensk standard gäller europastandarden EN 60811-100:2012. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60811-100:2012.

### **Nationellt förord**

Europastandarden EN 60811-100:2012

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 60811-100, First edition, 2012 - Electric and optical fibre cables - Test methods for non-metallic materials - Part 100: General**

utarbetad inom International Electrotechnical Commission, IEC.

Ersätter delvis tidigare fastställd svensk standard SS-EN 60811-1-1, utgåva 1, 1997, SS-EN 60811-1-1/A1, utgåva 1, 2001, SS-EN 60811-1-2, utgåva 1, 1997, SS-EN 60811-1-2/A2, utgåva 1, 2001, SS-EN 60811-1-3, utgåva 1, 1997, SS-EN 60811-1-3/A1, utgåva 1, 2001, SS-EN 60811-1-4, utgåva 1, 1997, SS-EN 60811-1-4/A2, utgåva 1, 2001, SS-EN 60811-2-1, utgåva 1, 1999, SS-EN 60811-2-1/A1, utgåva 1, 2001, SS-EN 60811-3-1, utgåva 1, 1997, SS-EN 60811-3-1/A1, utgåva 1, 1997, SS-EN 60811-3-1/A2, utgåva 1, 2001, SS-EN 60811-3-2, utgåva 1, 1997, SS-EN 60811-3-2/A2, utgåva 1, 2004, SS-EN 60811-4-1, utgåva 2, 2004, SS-EN 60811-4-2, utgåva 2, 2004, SS-EN 60811-5-1, utgåva 1, 1999 och SS-EN 60811-5-1/A1, utgåva 1, 2004, gäller ej fr o m 2015-04-16.

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ICS 29.035.01; 29.060.20

## *Standarder underlättar utvecklingen och höjer elsäkerheten*

Det finns många fördelar med att ha gemensamma tekniska regler för bl a säkerhet, prestanda, dokumentation, utförande och skötsel av elprodukter, elanläggningar och metoder. Genom att utforma sådana standarder blir säkerhetskraven 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.

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Utdriften 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).

Standardiseringssarbetet 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 standardiseringssverksamhet och medlemsavgift till IEC och CENELEC.

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Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

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**EUROPEAN STANDARD**  
**NORME EUROPÉENNE**  
**EUROPÄISCHE NORM**

**EN 60811-100**

June 2012

ICS 29.035.01; 29.060.20

Supersedes EN 60811-1-1:1995 (partially) + A1:2001 (partially), EN 60811-1-2:1995 (partially) + A2:2000 (partially), EN 60811-1-3:1995 (partially) + A1:2001 (partially), EN 60811-1-4:1995 (partially) + A2:2001 (partially), EN 60811-2-1:1998 (partially) + A1:2001 (partially), EN 60811-3-1:1995 (partially) + A1:1996 (partially) + A2:2001 (partially), EN 60811-3-2:1995 (partially) + A2:2004 (partially), EN 60811-4-1:2004 (partially), EN 60811-4-2:2004 (partially), EN 60811-5-1:1999 (partially) + A1:2004 (partially)

English version

**Electric and optical fibre cables -  
Test methods for non-metallic materials -  
Part 100: General  
(IEC 60811-100:2012)**

Câbles électriques et à fibres optiques -  
Méthodes d'essai pour les matériaux non-  
métalliques -  
Partie 100: Généralités  
(CEI 60811-100:2012)

Kabel, isolierte Leitungen und  
Glasfaserkabel -  
Prüfverfahren für nichtmetallene  
Werkstoffe -  
Teil 100: Allgemeines  
(IEC 60811-100:2012)

This European Standard was approved by CENELEC on 2012-04-16. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

**CENELEC**

European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

**Management Centre: Avenue Marnix 17, B - 1000 Brussels**

## Foreword

The text of document 20/1279/FDIS, future edition 1 of IEC 60811-100, prepared by IEC/TC 20 "Electric cables" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60811-100:2012.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2013-01-16
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2015-04-16

This document supersedes EN 60811-1-1:1995 (partially) + A1:2001 (partially), EN 60811-1-2:1995 (partially) + A2:2000 (partially), EN 60811-1-3:1995 (partially) + A1:2001 (partially), EN 60811-1-4:1995 (partially) + A2:2001 (partially), EN 60811-2-1:1998 (partially) + A1:2001 (partially), EN 60811-3-1:1995 (partially) + A1:1996 (partially) + A2:2001 (partially), EN 60811-3-2:1995 (partially) + A2:2004 (partially), EN 60811-4-1:2004 (partially), EN 60811-4-2:2004 (partially), EN 60811-5-1:1999 (partially) + A1:2004 (partially).

EN 60811-100:2012 collects together general matters that apply to the restructured EN 60811 series. A detailed explanation is provided in the Introduction. Annex A provides full information on the relation between the current and the previous series.

This revised series of EN 60811 is based upon the principle of "one test – one part". One significant technical change that now applies throughout the series is a defined minimum scheme for the presentation of test reports.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2006/95/EC)

## Endorsement notice

The text of the International Standard IEC 60811-100:2012 was approved by CENELEC as a European Standard without any modification.

**Annex ZA**  
(normative)

**Normative references to international publications  
with their corresponding European publications**

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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 60050-461	-	International Electrotechnical Vocabulary - Part 461: Electric cables	-	-
IEC 60502-1	-	Power cables with extruded insulation and their accessories for rated voltages from 1 kV ( $U_m = 1,2 \text{ kV}$ ) up to 30 kV ( $U_m = 36 \text{ kV}$ ) - Part 1: Cables for rated voltages of 1 kV ( $U_m =$ 1,2 kV) and 3 kV ( $U_m = 3,6 \text{ kV}$ )	-	-

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## INTRODUCTION

The IEC 60811 series specifies the test methods to be used for testing non-metallic materials of all types of cables. These test methods are intended to be referenced in standards for cable construction and for cable materials.

NOTE 1 Non-metallic materials are typically used for insulating, sheathing, bedding, filling or taping within cables.

NOTE 2 These test methods are accepted as basic and fundamental and have been developed and used over many years principally for the materials in all energy cables. They have also been widely accepted and used for other cables, in particular optical fibre cables, communication and control cables and cables for ships and offshore applications.

Each test method is contained in a separately numbered part. These respective parts are identified in Table A.1 of Annex A, with the corresponding clauses from the previous version of this part given for information. Table A.2 of Annex A lists the clauses of the previous version, to facilitate location of the corresponding part in the current version.

## ELECTRIC AND OPTICAL FIBRE CABLES – TEST METHODS FOR NON-METALLIC MATERIALS –

### Part 100: General

#### 1 Scope

This Part 100 of IEC 60811 describes general requirements and considerations that are applicable to all the test methods given in the particular parts, unless otherwise specified.

#### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60050-461, *International Electrotechnical Vocabulary – Part 461: Electric cables*

IEC 60502-1, *Power cables with extruded insulation and their accessories for rated voltages from 1 kV ( $U_m = 1,2 \text{ kV}$ ) up to 30 kV ( $U_m = 36 \text{ kV}$ ) – Part 1: Cables for rated voltages of 1 kV ( $U_m = 1,2 \text{ kV}$ ) and 3 kV ( $U_m = 3,6 \text{ kV}$ )*