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Optokablar –

Del 4: Gruppsspecifikation för kablar för förläggning på kraftledning

Optical fibre cables –

Part 4: Sectional specification –

Aerial optical cables along electrical power lines

Som svensk standard gäller europastandarden EN 60794-4:2003. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60794-4:2003.

Nationellt förord

Europastandarden EN 60794-4:2003^{*)}

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 60794-4, First edition, 2003 - Optical fibre cables - Part 4: Sectional specification - Aerial optical cables along electrical power lines**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 187200, utgåva 1, 2001, gäller ej fr o m 2012-08-23.

^{*)} EN 60794-4:2003 ikraftsattes 2004-02-23 som SS-EN 60794-4 genom offentliggörande, d v s utan utgivning av något svenskt dokument.

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EUROPEAN STANDARD

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NORME EUROPÉENNE

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Optical fibre cables
Part 4: Sectional specification –
Aerial optical cables along electrical power lines
(IEC 60794-4:2003)

Câbles à fibres optiques
Partie 4: Spécification intermédiaire -
Câbles optiques aériens le long des lignes
électriques de puissance
(CEI 60794-4:2003)

Lichtwellenleiterkabel
Teil 4: Rahmenspezifikation -
Lichtwellenleiter-Luftkabel
auf Starkstrom-Freileitungen
(IEC 60794-4:2003)

This European Standard was approved by CENELEC on 2003-11-01. 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, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, 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 86A/851/FDIS, future edition 1 of IEC 60794-4, prepared by SC 86A, Fibres and cables, of IEC TC 86, Fibre optics, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60794-4 on 2003-11-01.

This European Standard supersedes EN 187200:2001.

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) 2004-08-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2006-11-01

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 60794-4:2003 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 60104 ¹⁾	1987	Aluminium-magnesium-silicon alloy wire for overhead line conductors	-	-
IEC 60304	1982	Standard colours for insulation for low-frequency cables and wires	HD 402 S2	1984
IEC 60708-1	1981	Low-frequency cables with polyolefin insulation and moisture barrier polyolefin sheath Part 1: General design details and requirements	-	-
IEC 60794-3	2001	Optical fibres cables Part 3: Sectional specification - Outdoor cables	EN 60794-3	2002
IEC 60811-4-2 (mod)	1990	Insulating and sheathing materials of electric and optical fibre cables - Common test methods Part 4: Methods specific to polyethylene and polypropylene compounds – Section 2: Tensile strength and elongation at break after pre-conditioning - Wrapping test after thermal ageing in air - Measurement of mass increase - Long-term stability test - Test method for copper-catalysed oxidative degradation	EN 60811-4-2	1999
IEC 60811-5-1 (mod)	1990	Part 5-1: Methods specific to filling compounds - Drop point - Separation of oil - Lower temperature brittleness - Total acid number - Absence of corrosive components - Permittivity at 23 °C - D.C. resistivity at 23 °C and 100 °C	EN 60811-5-1	1999

¹⁾ EN 50183:2000, which is related to IEC 60104:1987, applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60888	1987	Zinc-coated steel wires for stranded conductors	-	-
IEC 60889	1987	Hard-drawn aluminium wire for overhead line conductors	EN 60889	1997
IEC 61089 ²⁾	1991	Round wire concentric lay overhead electrical stranded conductors	-	-
IEC 61232 (mod)	1993	Aluminium-clad steel wires for electrical purposes	EN 61232	1995
IEC 61394	1997	Overhead lines - Characteristics of greases for aluminium, aluminium alloy and steel bare conductors	-	-
IEC 61395	1998	Overhead electrical conductors - Creep test procedures for stranded conductors	EN 61395	1998

²⁾ EN 50182:2001, which is related to IEC 61089:1991, applied.

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OPTICAL FIBRE CABLES –

Part 4: Sectional specification – Aerial optical cables along electrical power lines

1 Scope

This part of IEC 60794 specifies the electrical, mechanical and optical requirements and test methods for aerial optical cables including OPGW (optical ground wire), OPPC (optical phase conductor), MASS (metallic aerial self-supported cable), ADSS (all-dielectric self-supporting cable) and OPAC (optical attached cable).

2 Normative references

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

They complete the normative references already listed in the generic specification (IEC 60794-1-1, Clause 2, and IEC 60794-1-2, Clause 2) and in the sectional specification (IEC 60794-3, Clause 2).

IEC 60104:1987, *Aluminium-magnesium-silicon alloy wire for overhead line conductors*

IEC 60304:1982, *Standard colours for insulation for low-frequency cables and wires*

IEC 60708-1:1981, *Low-frequency cables with polyolefin insulation and moisture barrier polyolefin sheath – Part 1: General design details and requirements*

IEC 60794-3:2001, *Optical fibre cables – Part 3: Sectional specification – Outdoor cables*

IEC 60811-4-2:1990, *Common test methods for insulating and sheathing materials of electric cables – Part 4: Methods specific to polyethylene and polypropylene compounds – Section Two: Elongation at break after pre-conditioning – Wrapping test after pre-conditioning – Wrapping test after thermal ageing in air – Measurement of mass increase – Long-term stability test (Appendix A) – Test method for copper-catalysed oxidative degradation (Appendix B)*

IEC 60811-5-1:1990, *Common test methods for insulating and sheathing materials of electric cables – Part 5: Methods specific to filling compounds – Section one: Drop point – Separation of oil – Lower temperature brittleness – Total acid number – Absence of corrosive components – Permittivity at 23 °C – DC resistivity at 23 °C and 100 °C*

IEC 60888:1987, *Zinc-coated steel wires for stranded conductors*

IEC 60889:1987, *Hard-drawn aluminium wire for overhead line conductors*

IEC 61089:1991, *Round wire concentric lay overhead electrical stranded conductors*

IEC 61232:1993, *Aluminium-clad steel wires for electrical purposes*

IEC 61394:1997, *Overhead lines – Characteristics of greases for aluminium, aluminium alloy and steel bare conductors*

IEC 61395:1998, *Overhead electrical conductors – Creep test procedures for stranded conductors*