SLOVENSKI STANDARD
SIST EN 60708:2008

01-november-2008

Nizkofrekvenļ ni kabli s poliolefinsko izolacijo in poliolefinskim plaģļ em za zaģļ ito pred vlago (IEC 60708:2005)

Low-frequency cables with polyolefin insulation and moisture barrier polyolefin sheath

Niederfrequenzkabel mit Isolierung aus Polyolefin und mit Polyolefin-Schichtenmantel

Câbles pour basses fréquences à isolation polyoléfine et gaine polyoléfine à barrière d'étanchéité

Ta slovenski standard je istoveten z: EN 60708:2005

ICS:

29.060.20 Kabli Cables

SIST EN 60708:2008 **en,de**

EUROPEAN STANDARD **EN 60708**

NORME EUROPÉENNE

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ICS 29.060.20

English version

Low-frequency cables with polyolefin insulation and moisture barrier polyolefin sheath
(IEC 60708:2005)

Câbles pour basses fréquences
à isolation polyoléfine et gaine polyoléfine
à barrière d'étanchéité
(CEI 60708:2005)

Niederfrequenzkabel mit Isolierung
aus Polyolefin und mit Polyolefin-
Schichtenmantel
(IEC 60708:2005)

This European Standard was approved by CENELEC on 2005-09-13. 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.

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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

Ref. No. EN 60708:2005 E

Foreword

The text of document 46C/713/FDIS, future edition 1 of IEC 60708, prepared by SC 46C, Wires and symmetric cables, of IEC TC 46, Cables, wires, waveguides, R.F. connectors, R.F. and microwave passive components and accessories, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60708 on 2005-09-13.

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)	2006-07-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2008-10-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60708:2005 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 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.

NOTE Where an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC 60028	– [1)]	International standard of resistance for copper	-	-
IEC 60189-1	– [1)]	Low-frequency cables and wires with PVC insulation and PVC sheath Part 1: General test and measuring methods	-	-
IEC 60304	– [1)]	Standard colours for insulation for low-frequency cables and wires	HD 402 S2	1984 [2)]
IEC 60794-1-2	– [1)]	Optical fibre cables Part 1-2: Generic specification - Basic optical cable test procedures	EN 60794-1-2	2003 [2)]
IEC 60811-1-1	– [1)]	Insulating and sheathing materials of electric and optical cables - Common test methods Part 1-1: General application - Measurement of thickness and overall dimensions - Tests for determining the mechanical properties	EN 60811-1-1	1995 [2)]
IEC 60811-1-2	– [1)]	Part 1-2: General application - Thermal ageing methods	EN 60811-1-2	1995 [2)]
IEC 60811-1-3	– [1)]	Part 1-3: General application - Methods for determining the density - Water absorption tests - Shrinkage test	EN 60811-1-3	1995 [2)]
IEC 60811-1-4	– [1)]	Part 1-4: General application - Tests at low temperature	EN 60811-1-4	1995 [2)]

1) undated reference.

2) valid edition at date of issue.

Publication	Year	Title	EN/HD	Year
IEC 60811-4-1	– [1]	Part 4-1: Methods specific to polyethylene and polypropylene compounds - Resistance to environmental stress cracking - Measurement of the melt flow index - Carbon black and/or mineral filler content measurement in polyethylene by direct combustion - Measurement of carbon black content by thermogravimetric analysis (TGA) - Assessment of carbon black dispersion in polyethylene using a microscope	EN 60811-4-1	2004 [2]
IEC 60811-4-2	– [1]	Part 4-2: Methods specific to polyethylene and polypropylene compounds - Tensile strength and elongation at break after conditioning at elevated temperature - Wrapping test after conditioning at elevated temperature - Wrapping test after thermal ageing in air - Measurement of mass increase - Long-term stability test - Test method for copper-catalyzed oxidative degradation	EN 60811-4-2	2004 [2]
IEC 60811-5-1 (mod)	– [1]	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 [2]
IEC 61156-1	– [1]	Multicore and symmetrical pair/quad cables for digital communications Part 1: Generic specification	-	-
ITU-T L.3	– [1]	Armouring of cables	-	-

INTERNATIONAL STANDARD

IEC 60708

First edition
2005-06

Low-frequency cables with polyolefin insulation and moisture barrier polyolefin sheath

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Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

LOW-FREQUENCY CABLES WITH POLYOLEFIN INSULATION AND MOISTURE BARRIER POLYOLEFIN SHEATH

FOREWORD

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International Standard IEC 60708 has been prepared by subcommittee 46C: Wires and symmetric cables, of IEC technical committee 46: Cables, wires, waveguides, r.f. connectors, r.f. and microwave passive components and accessories.

IEC 60708 cancels and replaces IEC 60708-1 published in 1981 and amendment 3(1988). This edition constitutes a technical revision.

IEC 60708 has been completely revised technically and structurally. IEC 60708 now comprises only one single standard dealing with general design details and requirements. The old IEC 60708-2(1981), IEC 60708-3(1981) and IEC 60708-4(1983) have already been withdrawn because they are not used anymore. Although IEC 60708 addresses low frequency cables, these cables are often used for digital communications up to 2 Mbit/s or 1 MHz. Therefore a Subclause 7.8 has been added, which provides transmission characteristics for the cable when used for digital communication. Furthermore, Annex H of IEC 60708-1(1981) was deleted: The requirements for filling compounds are not needed anymore since they are covered by the cable performance requirements.

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

FDIS	Report on voting
46C/713/FDIS	46C/728/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.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

A bilingual version of this standard may be issued at a later date.

LOW-FREQUENCY CABLES WITH POLYOLEFIN INSULATION AND MOISTURE BARRIER POLYOLEFIN SHEATH

1 Scope

This standard is intended to define polyolefin-insulated cables for insertion into local outdoor networks.

This standard is applicable to polyolefin insulated and moisture barrier polyolefin sheathed telephone cables, filled or unfilled with copper conductors, and used as:

a) Cables suitable for installation in ducts.

b) Cables suitable for direct burial in the ground.

c) Cables with integral suspension strand for aerial installations.

This standard is in accordance with ITU-T Recommendations.

This standard includes general design details and requirements for dimensions and other constructional details as well as mechanical, electrical and environmental characteristics for all types of low-frequency cables with polyolefin insulation (solid or cellular), filled or unfilled, and moisture barrier polyolefin sheath (with integral suspension strand).

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.

IEC 60028, *International Standard of Resistance for Copper*

IEC 60189-1, *Low-frequency cables and wires with PVC Insulation and PVC sheath – Part 1: General test and measuring methods*

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

IEC 60794-1-2, *Optical fibre cables – Part 1-2: Generic specification – Basic optical cable test procedures*

IEC 60811-1-1, *Common test methods for insulating and sheathing materials of electric cables – Part 1: Methods for general application – Section 1: Measurement of thickness and overall dimensions – Tests for determining the mechanical properties*

IEC 60811-1-2, *Common test methods for insulating and sheathing materials of electric cables – Part 1: Methods for general application – Section Two: Thermal ageing methods*

IEC 60811-1-3, *Insulating and sheathing materials of electric cables – Part 1: General application – Section 3: Methods for determining the density – Water absorption tests – Shrinkage test*

IEC 60811-1-4, *Common test methods for insulating and sheathing materials of electric cables – Part 1: Methods for general application – Section Four – Test at low temperature*