SLOVENSKI STANDARD
SIST EN 61138:2008

01-junij-2008

Nadomeģļ a:
SIST EN 61138:1999
SIST EN 61138:1999/A11:2004

Kabli za prenosno ozemljilno in kratkostiļ no opremo (IEC 61138:2007, spremenjen)

Cables for portable earthing and short-circuiting equipment

Leitungen für ortsveränderliche Erdungs- und Kurzschließ-Einrichtungen

Câbles d'équipements portables de mise à la terre et de court-circuit

Ta slovenski standard je istoveten z: **EN 61138:2007**

ICS:

29.060.20 Kabli Cables

SIST EN 61138:2008 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61138

December 2007

ICS 29.060.20

Supersedes EN 61138:1997 + A11:2003

English version

Cables for portable earthing and short-circuiting equipment
(IEC 61138:2007, modified)

Câbles d'équipements portables
de mise à la terre et de court-circuit
(CEI 61138:2007, modifiée)

Leitungen für ortsveränderliche
Erdungs- und Kurzschließ-Einrichtungen
(IEC 61138:2007, modifiziert)

This European Standard was approved by CENELEC on 2007-10-01. 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, Bulgaria, 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 and the 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

Ref. No. EN 61138:2007 E

Foreword

The text of document 20/881/FDIS, future edition 3 of IEC 61138, prepared by IEC TC 20, Electric cables, was submitted to the IEC-CENELEC parallel vote.

A draft amendment containing common modifications to the future IEC 61138 was prepared by the Technical Committee CENELEC TC 20, Electric cables, and was submitted to formal vote.

The combined text was approved by CENELEC as EN 61138 on 2007-10-01.

This European Standard supersedes EN 61138:1997 + A11:2003.

The significant technical changes with respect to EN 61138:1997 are as follows:

– extension of the scope to cover silicone rubber as an insulation material;

– introduction of a new normative annex for clashing test.

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)	2008-10-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2009-10-01

Annex ZA has been added by CENELEC.

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Endorsement notice

The text of the International Standard IEC 61138:2007 was approved by CENELEC as a European Standard with agreed common modifications as given below.

COMMON MODIFICATIONS

1 Scope

In paragraph 4, **delete** IEC 60227-2 and IEC 60245-2 and **add** EN 50395 and EN 50396.

2 Normatives references

Delete IEC 60227-1, IEC 60227-2 and IEC 60245-2.

Add the following:

EN 50363-2-1, *Insulating, sheathing and covering materials for low voltage energy cables – Part 2-1: Cross-linked elastomeric sheathing compounds*

EN 50363-4-1, *Insulating, sheathing and covering materials for low voltage energy cables – Part 4-1: PVC sheathing compounds*

EN 50395, *Electrical test methods for low voltage energy cables*

EN 50396, *Non-electrical test methods for low voltage energy cables*

4 General requirements for the construction of cables

In 4.3.4, last paragraph, **replace** “1.9 of IEC 60227-2 or IEC 60245-2” by “4.1 of EN 50396”.

In 4.3.5, **replace** the second, third and fourth indents with the following:

– EN 50363-4-1, Table 2, TM 2 as a general purpose PVC compound;

– EN 50363-4-1, Table 2, TM 6 as a cold-resistant PVC compound; in addition cables covered with this type of compound shall be subjected to a cold impact test at -35 °C;

– EN 50363-2-1, Table 2, EM 9 as a cross-linked silicone rubber compound.

In 4.4.4, **replace** “1.8 of IEC 60227-2 or IEC 60245-2” by “5.1 of EN 50396”.

5 Tests on completed cables

In 5.2, last paragraph, **replace** “1.11 of IEC 60227-2 or IEC 60245-2” by “4.4 of EN 50396”.

In 5.3.2, first paragraph, **replace** “3.2 of IEC 60245-2” by “6.1 of EN 50396”.

In 5.3.2, third paragraph, **replace** “Figure 2 in IEC 60245-2” by **“**Figure 3 of EN 50396”.

In 5.3.3, first paragraph, **replace** "see also IEC 60227-2 or IEC 60245-2” by “see also EN 50396”.

6 Particular specifications

In 6.2, **replace** the code designation for the following types with the CENELEC code designation according to HD 361:

PVC/ST 5 – Copper	H00V-D
PVC/ST 5 – Aluminium	H00V-AD
PVC/ST 11 – Copper	H00V3-D
PVC/ST 11 – Aluminium	H00V3-AD
SiR – Copper	H00S-D
SiR – Aluminium	H00S-AD

7 Guide to the use of the cables

Replace the second paragraph by the following.

These cables are suitable for indoor and outdoor use within the following temperature limits:

EPR:	–40 °C to + 70 °C
TM 2:	–5 °C to + 70 °C
TM 6:	–25 °C to + 55 °C
EM 9:	–40 °C to + 70 °C

Table 3

Replace the title by:

Table 3 – General data for Type 61138 IEC 60110, and types H00V-D, H003V-D, H00S-D

Table 4

Replace the title by:

Table 4 – General data for Type 61138 IEC 60210, and types H00V-AD, H003V-AD, H00S-AD

Table 5

In the heading of column 4, **replace** "IEC publication" by "IEC publication or EN where shown".

In column 4, **replace** the references to IEC 60245-2 in accordance with the following:

Subclause 2.1	EN 50395	5
Subclause 2.2	EN 50395	6
Subclause 1.9	EN 50396	4.1
Subclause 1.11	EN 50396	4.4

Table 6

Replace the title by:

Table 6 – Tests for types H00V-D, H00V-AD, H00V3-D and H00V3-AD (PVC insulation)

In the heading of column 4, **replace** "IEC publication" by "IEC publication or EN where shown".

In column 4, **replace** the references to IEC 60227-2 in accordance with the following:

Subclause 2.1	EN 50395	5
Subclause 2.2	EN 50395	6
Subclause 1.9	EN 50396	4.1
Subclause 1.11	EN 50396	4.4

For reference number 3, **replace** the complete entry by:

3	***Insulation material tests***			
3.1	- TM 2 (cable types H00V-D and H00V-AD)	T	EN 50363-4-1	Table 2 [a]
3.2	- TM 6 (cable types H00V3-D and H00V3-AD)	T	EN 50363-4-1	Table 2 [a]

Table 7

Delete the table and **insert** “Spare”

Table 8

Replace the title by:

Table 8 – Tests for types H00S-D and H00S-AD (SiR insulation)

In the heading of column 4, **replace** "IEC publication" by "IEC publication or EN where shown".

In column 4, **replace** the references to IEC 60245-2 in accordance with the following:

Subclause 2.1	EN 50395	5
Subclause 2.2	EN 50395	6
Subclause 1.9	EN 50396	4.1
Subclause 1.11	EN 50396	4.4

For reference number 3, **replace** the complete entry by:

3	***Insulation material tests***	T	EN 50363-2-1	Table 2 [a]

Table 9

Delete the table.

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

Publication	Year	Title	EN/HD	Year
–	–	Insulating, sheathing and covering materials for low voltage energy cables – Part 2-1: Cross-linked elastomeric sheathing compounds	EN 50363-2-1	2005[2)]
–	–	Insulating, sheathing and covering materials for low voltage energy cables – Part 4-1: PVC sheathing compounds	EN 50363-4-1	2005[2)]
–	–	Electrical test methods for low voltage energy cables	EN 50395	2005[2)]
–	–	Non-electrical test methods for low voltage energy cables	EN 50396	2005[2)]
IEC 60228	–[1)]	Conductors of insulated cables	EN 60228 + corr. May	2005[2)] 2005
IEC 60502-1	–[1)]	Power cables with extruded insulation and their accessories for rated voltages from 1 kV (U_m = 1,2 kV) up to 30 kV (U_m = 36 kV) – Part 1: Cables for rated voltages of 1 kV (U_m = 1,2 kV) and 3 kV (U_m = 3,6 kV)	-	-
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)]	Insulating and sheathing materials of electric and optical cables - Common test methods - Part 1: Methods for general application - Section 2: Thermal ageing methods	EN 60811-1-2	1995[2)]

1) Undated reference.

2) Valid edition at date of issue.

Publication	Year	Title	EN/HD	Year
IEC 60811-1-3	–[1)]	Insulating and sheathing materials of electric and optical cables - Common test methods – 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)]	Insulating and sheathing materials of electric and optical cables - Common test methods - Part 1: Methods for general application - Section 4: Tests at low temperature	EN 60811-1-4	1995[2)]
IEC 60811-2-1	–[1)]	Insulating and sheathing materials of electric and optical cables - Common test methods – Part 2-1: Methods specific to elastomeric compounds - Ozone resistance, hot set and mineral oil immersion tests	EN 60811-2-1	1998[2)]
IEC 60811-3-1	–[1)]	Insulating and sheathing materials of electric and optical cables - Common test methods - Part 3: Methods specific to PVC compounds - Section 1: Pressure test at high temperature - Tests for resistance to cracking	EN 60811-3-1	1995[2)]
IEC 60811-3-2	–[1)]	Insulating and sheathing materials of electric and optical cables - Common test methods - Part 3: Methods specific to PVC compounds - Section 2: Loss of mass test - Thermal stability test	EN 60811-3-2	1995[2)]
IEC 61230 (mod)	–[1)]	Live working - Portable equipment for earthing or earthing and short-circuiting	EN 61230 + A11	1995[2)] 1999
IEC 62230	–[1)]	Electric cables - Spark-test method	EN 62230	2007[2)]

INTERNATIONAL STANDARD

NORME INTERNATIONALE

IEC
CEI
61138

Third edition
Troisième édition
2007-07

Cables for portable earthing and short-circuiting equipment

Câbles d'équipements portables de mise à la terre et de court-circuit

Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

PRICE CODE
CODE PRIX T

For price, see current catalogue
Pour prix, voir catalogue en vigueur

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