SLOVENSKI STANDARD
SIST HD 21.5 S3:1998/A1:2000

01-september-2000

Kabli s polivinilkloridno izolacijo za naznačene napetosti do vključno 450/750 V - 5. del: Zvijavi kabli (vrvice)

Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V - Part 5: Flexible cables (cords)

Polyvinylchlorid-isolierte Leitungen mit Nennspannungen bis 450/750 V - Teil 5: Flexible Leitungen

Conducteurs et câbles isolés au polychlorure de vinyle, de tension assignée au plus égale à 450/750 V - Partie 5: Câbles souples

Ta slovenski standard je istoveten z: **HD 21.5 S3:1994/A1:1999**

ICS:

29.060.20 Kabli Cables

SIST HD 21.5 S3:1998/A1:2000 **en**

HARMONIZATION DOCUMENT

DOCUMENT D'HARMONISATION

HARMONISIERUNGSDOKUMENT

HD 21.5 S3/A1

October 1999

ICS 29.060.20
UDC 621.315.342.027.43/.45-036.743.22-181.1.001.4.002.2

English version

Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V
Part 5: Flexible cables (cords)

Conducteurs et câbles isolés au polychlorure de vinyle, de tension assignée au plus égale à 450/750 V
Partie 5: Câbles souples

Polyvinylchlorid-isolierte Leitungen mit Nennspannungen bis 450/750 V
Teil 5: Flexible Leitungen

This amendment A1 modifies the Harmonization Document HD 21.5 S3:1994; it was approved by CENELEC on 1999-08-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for implementation of this amendment on a national level.

Up-to-date lists and bibliographical references concerning such national implementation may be obtained on application to the Central Secretariat or to any CENELEC member.

This amendment exists in three official versions (English, French, German).

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, 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 amendment was prepared by the Technical Committee CENELEC TC 20, Electric cables.

This amendment has been prepared within the regular maintenance programme which covers all Parts of HD 21.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as amendment A1 to HD 21.5 S3:1994 on 1999-08-01.

The following dates were fixed:

- latest date by which the existence of the amendment has to be announced at national level (doa) 2000-02-01
- latest date by which the amendment has to be implemented at national level by publication of a harmonized national standard or by endorsement (dop) 2000-08-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2001-08-01

Tables II to VIII

Delete existing Tables II to VIII and replace as attached.

Table II

Tests for Type H03VH-Y

1	2	3	4	5
Ref. No.	Tests	Category of test	Test method described in	
			HD/EN	Clause
1.	Electrical tests			
1.1	Resistance of conductors	T, S	21.2	2.1
1.2	Voltage test on completed cable at 2000V	T, S	21.2	2.2
1.3	Insulation resistance at 70°C	T, S	21.2	2.4
1.4	Long term resistance of insulation to d.c.	T	21.2	2.5
1.5	Absence of faults on insulation	R	21.2	2.6
2.	Provisions covering constructional and dimensional characteristics			
2.1	Checking of compliance with constructional provisions	T, S	21.1	Inspection and manual tests
2.2	Measurement of thickness of insulation	T, S	21.2	1.9
2.3	Measurement of overall dimensions	T, S	21.2	1.11
3.	Mechanical properties of insulation			
3.1	Tensile test before ageing	T	60811-1-1	9.1
3.2	Tensile test after ageing	T	60811-1-2	8.1.3.1
3.3	Loss of mass test	T	60811-3-2	8.1
4.	Pressure test at high temperature	T	60811-3-1	8.1
5.	Test at low temperature			
5.1	Bending test for insulation	T	60811-1-4	8.1
6.	Heat shock test	T	60811-3-1	9.1
7.	Mechanical strength of completed cable			
7.1	Bending test	T	21.2	3.2
7.2	Snatch test	T	21.2	3.3
8.	Test under fire conditions	T	50265-2-1	-

Table III

General data for Type H03VH-H

1	2	3	4	5
Nominal cross-sectional area of conductors	Thickness of insulation Specified value	Mean overall dimensions		Minimum insulation resistance at 70°C
		lower limit	upper limit	
(mm^2)	(mm)	(mm)	(mm)	(MΩ.km)
0,5 0,75	0,8 0,8	2,4 x 4,9 2,6 x 5,2	3,0 x 5,9 3,1 x 6,3	0,015 0,014

Table IV

Tests for Type H03VH-H

1	2	3	4	5
Ref. No.	Tests	Category of test	Test method described in	
			HD/EN	Clause
1.	Electrical tests			
1.1	Resistance of conductors	T, S	21.2	2.1
1.2	Voltage test on completed cable at 2000V	T, S	21.2	2.2
1.3	Voltage test on cores at 2000V	T	21.2	2.3
1.4	Insulation resistance at 70°C	T, S	21.2	2.4
1.5	Long term resistance of insulation to d.c.	T	21.2	2.5
1.6	Absence of faults on insulation	R	21.2	2.6
2.	Provisions covering constructional and dimensional characteristics			
2.1	Checking of compliance with constructional provisions	T, S	21.1	Inspection and manual tests
2.2	Measurement of thickness of insulation	T, S	21.2	1.9
2.3	Measurement of overall dimensions	T, S	21.2	1.11
3.	Mechanical properties of insulation			
3.1	Tensile test before ageing	T	60811-1-1	9.1
3.2	Tensile test after ageing	T	60811-1-2	8.1.3.1
3.3	Loss of mass test	T	60811-3-2	8.1
4.	Pressure test at high temperature	T	60811-3-1	8.1
5.	Tests at low temperature			
5.1	Bending test for insulation	T	60811-1-4	8.1
5.2	Impact test for insulation	T	60811-1-4	8.5
6.	Heat shock test	T	60811-3-1	9.1
7.	Mechanical strength of completed cable			
7.1	Flexing test	T	21.2	3.1 and 2.3
7.2	Test of separation of cores	T	21.2	3.4
8.	Test under fire conditions	T	50265-2-1	-

Table V

General data for Types H03VV-F and H03VVH2-F

1	2	3	4	5	6
Number and nominal cross-sectional area of conductors	Thickness of insulation Specified value	Thickness of sheath Specified value	Mean overall dimensions		Minimum insulation resistance at 70°C
			lower limit	upper limit	
(mm^2)	(mm)	(mm)	(mm)	(mm)	(MΩ.km)
2 x 0,5	0,5	0,6	4,6 or 3,0 x 4,9	5,9 or 3,7 x 5,9	0,011
2 x 0,75	0,5	0,6	4,9 or 3,2 x 5,2	6,3 or 3,8 x 6,3	0,010
3 x 0,5	0,5	0,6	4,9	6,3	0,011
3 x 0,75	0,5	0,6	5,2	6,7	0,010
4 x 0,5	0,5	0,6	5,4	6,9	0,011
4 x 0,75	0,5	0,6	5,7	7,3	0,010