

**Termoplastilise isolatsiooniga kaablid
nimipingega kuni 450/750 V. Osa 1:
Üldnõuded**

Cables of rated voltages up to and including 450/750 V and having thermoplastic insulation - Part 1:
General requirements

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-HD 21.1 S4:2003 sisaldab Euroopa standardi HD 21.1 S4:2002 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 12.03.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-HD 21.1 S4:2003 consists of the English text of the European standard HD 21.1 S4:2002.</p> <p>This document is endorsed on 12.03.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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English version

**Cables of rated voltages up to and including 450/750 V
and having thermoplastic insulation
Part 1: General requirements**

Conducteurs et câbles isolés
avec des matériaux thermoplastiques
de tension assignée au plus égale
à 450/750 V
Partie 1 : Prescriptions générales

Starkstromleitungen mit thermoplastischer
Isolierhülle für Nennspannungen
bis 450/750 V
Teil 1: Allgemeine Anforderungen

This Harmonization Document was approved by CENELEC on 2002-09-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for implementation of this Harmonization Document 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 Harmonization Document 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, Hungary, Iceland, Ireland, Italy, 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

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Foreword

This edition 4 of HD 21.1 has been prepared by the Technical Committee CENELEC TC 20, Electric cables.

HD 21 was originally adopted by CENELEC on 9th July 1975.

Edition 2 of HD 21 was implemented on 1st January 1984. A third edition of Part 1 was published in September 1997.

This 4th edition provides a full updating, including incorporation of amendments ratified during the maintenance of Part 3 onwards of HD 21, and introduces other improvements.

HD 21.1 S4 is related to IEC 60227-1:1993, but is not directly equivalent.

HD 21 now has the following parts:

HD 21.1 S4	General requirements
HD 21.2 S3	Test methods
HD 21.3 S3	Non-sheathed cables for fixed wiring
HD 21.4 S2	Sheathed cables for fixed wiring (Reprint)
HD 21.5 S3	Flexible cables (cords)
HD 21.6	(Spare)
HD 21.7 S2	Single core non-sheathed cables for internal wiring for a conductor temperature of 90 °C
HD 21.8 S2	Single core non-sheathed cables for decorative chains (with A1 inclusive)
HD 21.9 S2	Single core non-sheathed cable for installation at low temperatures
HD 21.10 S2	Extensible leads
HD 21.11 S1	Cables for luminaires
HD 21.12 S1	Heat-resistant flexible cables (cords)
HD 21.13 S1	Oil resistant PVC sheathed cables with two or more conductors
HD 21.14 S1	Flexible cables (cords), insulated and sheathed with halogen-free thermoplastic compounds

In order that this revision of Part 1 of HD 21 does not introduce unnecessary changes to long-established clause numbers, the normative references (which would otherwise be inserted as clause 2 are given in annex A.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as HD 21.1 S4 on 2002-09-01.

The following dates were fixed:

-	latest date by which the existence of the HD has to be announced at national level	(doa)	2003-03-01
-	latest date by which the HD has to be implemented at national level by publication of a harmonized national standard or by endorsement	(dop)	2003-09-01
-	latest date by which the national standards conflicting with the HD have to be withdrawn	(dow)	2003-09-01

Annexes designated "normative" are part of the body of the standard.

Annexes designated "informative" are given for information only.

In this standard, annex A is normative and annex B is informative.

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1 General

1.1 Scope

HD 21 applies to rigid and flexible cables with insulation and sheath, if any, based on thermoplastic materials, of rated voltages U_o/U up to and including 450/750 V, used in power installations.

NOTE For some types of flexible cables, the term "cord" is used.

This Part 1 specifies the General Requirements applicable to these cables.

The test methods specified are given in Part 2 of this Harmonisation Document (HD), or in the common test methods for cables given in EN 50265, EN 50267, EN 50268 and EN 60811.

The particular types of cables are specified in Part 3 onwards of this HD, which are hereafter referred to as "the particular specifications".

The code designations of these types of cables are in accordance with HD 361.

1.2 Object

The objects of this HD are to standardise cables and cords that are safe and reliable when properly used, to state the characteristics and manufacturing requirements directly or indirectly bearing on safety, and to specify methods for checking conformity with those requirements.

1.3 Common Marking

1.3.1 General

The Common Marking (<HAR>) signifies that the manufacturer has been assessed and his production is subjected to continuing surveillance in accordance with the technical procedures by a recognised national Approval Organisation which is a signatory to the "Agreement on the use of a Commonly Agreed Marking for Cables and Cords complying with Harmonised Specifications."

Compliance with this HD may be certified by the application of the agreed technical procedures for granting the Common Marking¹⁾, which are the recognised means of ensuring that a manufacturer is competent and takes all reasonable care to produce cables complying with this HD.

The Common Marking may be used, under these conditions, by manufacturers in countries which have implemented this HD and in which the national Approval Organisations are signatories to the Agreement.

NOTE See annex B to Part 1 for guidance on national marking.

¹⁾ These are given in Appendices 4 and 5 of the 'Agreement on the use of a Commonly Agreed Marking for Cables and Cords complying with Harmonised Specifications'.