

**Polüvinüülkloriidisolatsiooniga kaablid
nimipingega 450/750 V. Osa 13:
õlikindlad kahe või mitme juhiga PVC
mantelkaablid**

Polyvinyl chloride insulated cables of rated voltages up to and including 450/750V - Part 13: Oil resistant PVC sheathed cables with two or more conductors

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-HD 21.13 S1:2001 sisaldab Euroopa standardi HD 21.13 S1:1995 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 10.10.2001 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-HD 21.13 S1:2001 consists of the English text of the European standard HD 21.13 S1:1995.</p> <p>This document is endorsed on 10.10.2001 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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Descriptors: Insulated conductor, insulated cable, flexible cable, insulation, protective sheath, polyvinyl chloride, specification, dimension, test

English version

**Polyvinyl chloride insulated cables of rated voltages up to
and including 450/750 V
Part 13: Oil resistant PVC sheathed cables with two or
more conductors**

Conducteurs et câbles isolés au
polychlorure de vinyle, de tension
assignée au plus égale à 450/750 V
Partie 13: Câbles souples avec gaine de
polychlorure de vinyle, résistant à
l'huile, à deux âmes ou plus

Polyvinylchlorid-isolierte Leitungen mit
Nennspannungen bis 450/750 V
Teil 13: Ölbeständige
PVC-Steuerleitungen mit zwei oder mehr
Adern

This Harmonization Document was approved by CENELEC on 1995-07-04. 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, 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

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Foreword

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

Edition 2 of HD 21 was implemented on 1st January 1984, and at that time contained five parts.

Since 1984, new parts have been published, original parts amended and in addition HD 505 has superseded HD 385 as the cross-reference for test methods.

This new Part 13 to HD 21 introduces oil-resistant PVC sheathed cables, and was approved by TC 20 at its London meeting in October 1993 to go forward to UAP.

HD 21 now has the following parts:

- HD 21.1 S2 - General requirements (with A1 to A4 inclusive)
- HD 21.2 S2 - Test methods (with A1 inclusive)
- 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 S1 - Single core non-sheathed cables for decorative chains (with A1 inclusive)
- HD 21.9 S2 - Single core non-sheathed cables for installation at low temperatures
- HD 21.10 S1 - 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

This Harmonization Document was prepared by the Technical Committee CENELEC TC 20, Electric cables.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as HD 21.13 S1 on 1995-07-04.

The following dates were fixed:

- latest date by which the existence of the HD has to be announced at national level (doa) 1996-01-01
- latest date by which the HD has to be implemented at national level by publication of a harmonized national standard or by endorsement (dop) 1996-07-01
- latest date by which the national standards conflicting with the HD have to be withdrawn (dow) 1996-07-01

For products which have complied with the relevant national standard before 1996-07-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 1997-07-01.

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1. Scope

This part (part 13) of the HD details the particular specifications for oil resistant polyvinyl chloride insulated and sheathed flexible cables, of rated voltage (U_0/U) up to and including 300/500V, for a maximum conductor temperature in normal operation of 70°C.

All cables shall comply with the appropriate requirements given in Part 1 and the individual types of cable shall comply with the particular requirements of this Part.

NOTE: The limits for the overall diameter of the cables have been calculated in accordance with EN 60719.

2. Normative references

HD 21.13 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 HD 21.13 only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

- HD 186 Marking by inscription for the identification of cores of electric cables having more than five cores
- HD 383 Conductors of insulated cables (Endorsing IEC 228 and 228A)
- HD 405.1 Tests on electric cables under fire conditions. Part 1: Test on a single vertical cable (Endorsing IEC 332-1)
- HD 505 Common test methods for insulating and sheathing materials of Electric Cables (Endorsing IEC 811)
- EN 60719 Calculation of the lower and upper limits for the average outer dimensions of cables with circular copper conductors and of rated voltages up to and including 450/750V
- IEC 502 Extruded solid dielectric insulated power cables for rated voltages from 1kV up to 30kV

3. Oil resistant polyvinyl chloride sheathed, unscreened cables with two or more conductors

3.1 Code designation

H05VV5-F

3.2 Rated voltage

300/500V

3.3 Construction

3.3.1 Conductor

Number of conductors: 2 to 60
Preferred number of conductors: 2, 3, 4, 5, 6, 7, 12, 18, 27, 36, 48 and 60.

The conductors shall comply with the requirements given in HD 383 for class 5 conductors.

3.3.2 Insulation

The insulation shall be polyvinyl chloride compound of Type TI 2 applied around each conductor.