

**Mineraalisolatsiooniga kaablid nimipingega kuni 750 V.
Osa 1: Kaablid**

Mineral insulated cables with a rated voltage not exceeding
750 V - Part 1: Cables

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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EVS

HARMONIZATION DOCUMENT

HD 586.1 S1

DOCUMENT D'HARMONISATION

HARMONISIERUNGSDOKUMENT

January 1994

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Descriptors: Electric installation, insulated conductor, insulated cable, mineral material, specification, dimension, test, marking

ENGLISH VERSION

Mineral insulated cables with a rated voltage not exceeding 750 V
Part 1: Cables

Câbles à isolant minéral, de tension assignée ne dépassant pas 750 V
Partie 1: Câbles

Mineralisolierte Leitungen mit einer Nennspannung bis 750 V
Teil 1: Leitungen

This Harmonization Document was approved by CENELEC on 1993-09-22. 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 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).

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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FOREWORD

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

The text of the draft was submitted to the CENELEC Unique Acceptance Procedure (UAP) in January 1993 and was approved by CENELEC as HD 586.1 S1 on 22 September 1993.

The following dates were fixed:

- latest date of announcement
of the HD at national level (doa) 1994-02-01
- latest date of publication of
a harmonized national standard (dop) 1994-08-01
- latest date of withdrawal of
conflicting national standards (dow) 1994-08-01

For products which have complied with the relevant national standard before 1994-08-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 1995-08-01.

NOTE: Requirements for terminations for use with the cables described in this Part 1 of HD 586 are given in Part 2: Terminations.

NORMATIVE REFERENCES

References are made, in this HD 586.1 to other Harmonisation Documents and International Standards as follows:

- HD21 Polyvinyl chloride insulated cables of voltages up to and including 450/750V
- HD405.1 Tests on Electric Cables Under Fire Conditions. Part 1: Test on a single vertical cable (Endorsing IEC 332-1)
- HD505 Common test methods for insulating and sheathing materials of Electric Cables (Endorsing IEC 811)
- HD602 Test on gases evolved during combustion of materials from cables: Determination of Degree Acidity (Corrosivity) of gases by measuring pH and conductivity (Endorsing IEC 754-2)
- HD606 Measurement of smoke density of electric cables burning under defined conditions (Endorsing IEC 1034)
- IEC331 Fire resisting characteristics of electric cables.

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MINERAL INSULATED CABLES WITH A RATED VOLTAGE NOT EXCEEDING 750V

1. **Scope**

This standard applies to mineral insulated general wiring cables with copper sheath and copper conductors with rated voltages up to 750V. Provision is made for a corrosion resistant outer covering over the sheath, when required. This outer covering is not specified for the purposes of electrical insulation of the metal sheath.

2. **Object**

The object of this standard is to specify mineral insulated cables that are safe and reliable when properly used, to state the manufacturing requirements and characteristics to achieve this, and to specify methods for checking conformity with those requirements.

3. **Voltage Rating**

Cables shall be rated as follows:

3.1 **500V mineral insulated cable (light duty grade)**

For use where the voltage between conductors and sheath and between conductors does not exceed 500V r.m.s. or 500V d.c.

3.2 **750V mineral insulated cable (heavy duty grade)**

For use where the voltage between conductors and sheath and between conductors does not exceed 750V r.m.s. or 750V d.c.

4. **Conductors**

4.1 **Material and Form**

Conductors shall be of plain, annealed high conductivity copper. The cross section shall be approximately circular.

4.2 **Resistance**

The resistance of all conductors of each finished cable, corrected if necessary to 20°C shall not be greater than the appropriate values given in Tables 1 and 2.

Compliance shall be checked by measuring the resistance of each conductor of each complete coil of completed cable and measuring the length of the cable.