Kummiisolatsiooniga kaablid nimipingega kuni 450/750 V. Osa 2: Katsetusmeetodid

Rubber insulated cables of rated voltages up to and including 450/750 V - Part 2: Test methods

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-HD 22.2 S3:2001 sisaldab Euroopa standardi HD 22.2 S3:1997 ingliskeelset teksti.	This Estonian standard EVS-HD 22.2 S3:2001 consists of the English text of the European standard HD 22.2 S3:1997.
Standard on kinnitatud Eesti Standardikeskuse 12.07.2001 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 12.07.2001 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

ICS 29.060.20

cable, compound, conductor, conductor material, elastomer, flat cable, flexible cable, insulation compound, mark, multicore cable, nominal voltage, polychloroprene, rigid cable, routine test, rubber, sample test, single core cable, type test

HARMONIZATION DOCUMENT HD 22.2 S3

DOCUMENT D'HARMONISATION

HARMONISIERUNGSDOKUMENT

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Supersedes HD 22.2 S2:1992 and its amendments

Descriptors: Conductor, cable, flexible cable, rigid cable, single core cable, multicore cable, conductor material, flat cable, compound, polychloroprene, rubber, elastomer, insulation compound, type test, sample test, routine test, rated voltage, mark, common marking, identification, colour scheme, construction, insulation, separator, filler, sheath, braid, inner layer, outer layer, thickness, mean value, specified value, electrical resistance, test, tensile strength, elongation at break, ageing, air oven, oxygen bomb, hot set, complete cable, overall dimensions, bending, flexing, voltage test, absence of short circuits, spark (test), insulation resistance, wear resistance, test (under) fire (conditions), guide to use, solderability test

English version

Rubber insulated cables of rated voltages up to and including 450/750 V Part 2: Test methods

Conducteurs et câbles isolés au caoutchouc, de tension assignée au plus égale à 450/750 V Partie 2: Méthodes d'essais

Gummi-isolierte Starkstromleitungen mit Nennspannungen bis 450/750 V Teil 2: Prüfverfahren

This Harmonization Document was approved by CENELEC on 1997-07-01. 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, 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

This edition 3 of HD 22.2 has been prepared by Technical Committee CLC/TC20, Electric cables.

HD 22 was originally adopted by CENELEC on 9th July 1975.

Edition 2 of HD 22 was implemented on 1st January 1984, and at that time contained four parts.

Since 1984, new parts have been published and original parts amended. This new edition provides a full updating, and amalgamation of amendments since 1984.

HD 22.2 S3 is related to IEC 60245-2 (1994), but is not directly equivalent.

HD 22 now has the following parts:

HD 22.1 S3	-	General requirements
HD 22.2 S3	-	Test methods
HD 22.3 S3	-	Heat resistant silicone rubber insulated cables
HD 22.4 S3	-	Cords and flexible cables
HD 22.5	-	(Spare)
HD 22.6 S2	-	Arc welding cables
HD 22.7 S2	-	Cables with increased heat resistance for internal wiring for a conductor temperature of 110 °C
HD 22.8 S2	-	Polychloroprene or equivalent synthetic elastomer sheathed cable for decorative chains
HD 22.9 S2	-	Single core non-sheathed cables for fixed wiring having low emission of smoke and corrosive gases
HD 22.10 S1	-	EPR insulated and polyurethane sheathed flexible cables
HD 22.11 S1	-	EVA cords and flexible cables
HD 22.12 S1	-	Heat resistant EPR cords and flexible cables
HD 22.13 S1	-	Single and multicore flexible cables, insulated and sheathed with crosslinked polymer and having low emission of smoke and corrosive gases
HD 22.14 S1	-	Cords for applications requiring high flexibility

In order that this revision of Part 2 of HD 22 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 draft Harmonisation Document was submitted to the Unique Acceptance Procedure and approved by CENELEC as HD 22.2 S3 on 1997-07-01.

The following dates were fixed:

- latest date by which the existence of the HD has to be announced at national level	(doa)	1997-12-01
- latest date by which the HD has to be implemented at national level by publication of a harmonized national standard or by endorsement	(dop)	1998-06-01
- latest date by which the national standards conflicting with the HD have to withdrawn	(dow)	1998-06-01

For products which have complied with HD 22.2 S2:1992 and its amendments A5:1992, A6:1992, A7:1992, A8:1993, A9:1993, A10:1995 and A11:1995 before 1998-06-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 1999-06-01.

CONTENTS

RUBBER INSULATED CABLES OF RATED VOLTAGES UP TO AND INCLUDING 450/750V

Part 2 : Test Methods

1. General

1.1 Scope

HD 22 applies to rigid and flexible cables with insulation and sheath, if any, based on vulcanised rubber, of rated voltages U_0/U up to and including 450/750V used in power installations of nominal voltage not exceeding 450/750V a.c.

This Part 2 specifies the methods of carrying out the tests specified in HD 22 in conjunction with HD 405 and EN 60811. General Requirements are specified in HD 22.1.

Particular types of cable are specified in HD 22 Part 3 onwards, and are hereafter referred to as "the particular specifications".

1.2 Applicable tests

The tests applicable to the types of cables are given in the particular specifications.

1.3 Classification of tests according to the frequency with which they are carried out

The tests specified are type tests (Symbol T) and/or sample tests (Symbol S) and/or routine tests (Symbol R) as defined in Part 1, Sub-clause 2.2. The Symbols T, S and R are used in the relevant tables of the particular specifications.

1.4 Sampling

If a marking is indented in the insulation or sheath, the samples used for the tests shall be taken so as to include such marking.

For multicore cables, except for the test specified in Part 2, sub-clause 1.9, not more than three cores (of different colours, if available) shall be tested unless otherwise specified.

1.5 Pre-conditioning

All the tests shall be carried out not less than 16 h after completion of processing of the insulating or sheathing compounds.

1.6 Test temperature

Unless otherwise specified, tests shall be made at ambient temperature.

1.7 Test voltage

Unless otherwise specified, the test voltages shall be a.c. 49Hz to 61Hz of approximately sine-wave form, the ratio peak value/r.m.s. value being equal to $\sqrt{2}$ with a tolerance of $\pm 7\%$

The values quoted are r.m.s. values.