

SLOVENSKI STANDARD SIST HD 22.2 S2:1998/A8:1998

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Rubber insulated cables of rated voltages up to and including 450/750 V - Part 2: Test methods - Amendment A8

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

Gummi-isolierte Leitungen mit Nennspannungen bis 450/750 V -- Teil 2: Prüfverfahren iTeh STANDARD PREVIEW

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

SIST HD 22.2 S2:1998/A8:1998

Ta slovenski standard je istoveten z:/standards.iteh.ai/catalog/standards/cist/d513aef1-6cc5-4ade-a54f.

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<u>SIST HD 22.2 S2:1998/A8:1998</u> https://standards.iteh.ai/catalog/standards/sist/d513aef4-6cc5-4ade-a54f-c234034fe040/sist-hd-22-2-s2-1998-a8-1998 HARMONIZATION DOCUMENT

HD 22.2 S2/A8

DOCUMENT D'HARMONISATION

HARMONISIERUNGSDOKUMENT

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Descriptors: See HD 22.2 S2:1992

REPUBLIKA SLOVENIJA MINISTRSTVO ZA ZNANOST IN TEHNOLOGIJO Urad RS za standardizacijo in meroslovje LJUBLJANA

ENGLISH VERSION

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Rubber insulated cables of rated voltages up METODI RAZGLASITVE 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 Deuxième partie: Méthodes d'essais

Isolierte Starkstromleitungen mit einer Isolierung aus Gummi mit Nennspannungen bis 450/750 V Teil 2: Prüfverfahren

ileh STANDARD PREVIEW

This amendment A8 modifies the Harmonization Document HD 22.2 S2:1992. It was approved by CENELEC on 1993-07-06.2 CENELEC members are bound to comply with the CEN/CENELEC Inernal Regulations which stipulate the conditions for implementation of this amendment on a national-lieve E2:1998/A8:1998

https://standards.iteh.ai/catalog/standards/sist/d513aef4-6cc5-4ade-a54f-

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 amendment exists in three official versions (English, French and 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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Ref. No. HD 22.2 S2:1992/A8:1993 E

Page 2 HD 22.2 S2:1992/A8:1993

FOREWORD

Following a decision taken by CENELEC Technical Committee TC 20, Electric cables, an amendment to HD 22.2 S2:1992 was submitted to the CENELEC Unique Acceptance Procedure (UAP) in October 1992 for acceptance as an amendment to the Harmonization Document.

The text of the draft was approved by CENELEC as amendment A8 to HD 22.2 S2 on 6 July 1993.

The following dates were fixed:

- latest date of announcement
 of the amendment at national level

(doa) 1994-03-01

 latest date of publication of a harmonized national standard

(dop) 1994-09-01

- latest date of withdrawal of conflicting national standards iTeh STANDARD PREVIEV

(dow) 1994-09-01

For products which have complied with HD 221232:1992 and its amendments before 1994-09-01, as shown by the manufacturer or by a certification body, this previous standards may continue to apply for production untilps1995a09m01a/catalog/standards/sist/d513acf4-6cc5-4ade-a54f-

c234034fe040/sist-hd-22-2-s2-1998-a8-1998

Page 3 HD22.2 S2:1992/A8:1993

Delete the existing sub-clause 3.1 and insert the following:

3.1 <u>Flexing test</u>

3.1.1 General

The requirements are given in Part 1, sub-clause 5.6.3.1.

This test is not applicable to flexible cables with cores of nominal cross sectional area greater than 4mm² and also not to cables having more than 18 cores laid up in more than two concentric layers.

3.1.2 Apparatus

This test shall be carried out by means of the apparatus shown in Part 2, Figure 1. This apparatus consists of a carrier C, a driving system for the carrier and four pulleys for each sample of cable to be tested. The carrier C supports two pulleys A and B, which are of the same diameter. The two fixed pulleys, at either end of the apparatus, may be of a different diameter from pulleys A and B, but all four pulleys shall be so arranged that the sample is horizontal between them. The carrier makes cycles (forward and backward movements) over a distance of Im at an approximately constant speed of 0.33m/s between each reversal of the direction of movement.

The pulleys shall be made of metal and have a semi-circular shaped groove for circular cables and a flat groove for flat cables. The restraining clamps D shall be fixed so that the pull is always applied by the weight from which the carrier is moving away. The distance from one restraining clamp to its support, while the other clamp is resting on its support, shall be maximum 5cm.

The driving system shall be such that the carrier turns smoothly and without jerks when it reverses from one direction to another.

3.1.3 Sample preparation

A sample of flexible cable about 5m long shall be stretched over the pulleys, as shown in Figure 1, each end being loaded with a weight. The mass of this weight and the diameter of pulleys A and B are given in Table A. Page 4 HD22.2 S2:1992/A8:1993

3.1.4 Current loading of cores

During the flexing test the cable sample shall be loaded with the current specified in Table B as follows:

* 2 and 3 core cables: All cores to be loaded fully.

* 4 and 5 core cables: Three cores to be loaded fully

or all cores to be loaded according to the following

formula:

$$I_n = I_3 \sqrt{\frac{3}{n}}$$

where n = number of cores $I_3 = full current according to Table B$

For the current loading either a low voltage or a voltage about 230/400V may be used. On cores which are not loaded, a signal current shall be applied. Cables having more than five cores shall not be loaded.

(standards.iteh.ai) 3.1.5 Voltage between cores

For two-core cables the voltage between the conductors shall be about 230V A.C. For all other cables having three or more cores, a three-phase A.C. voltage of about 400V shall be applied to three conductors, any additional conductors being connected to the neutral.

This also applies when a low voltage current loading system is used.

3.1.6 Fault detection (Construction of the flexing apparatus)

The flexing apparatus shall be constructed so that it will detect and stop if the following occurs during the flexing test:

- * Interruption of the current load.
- * Short circuit between the conductors.
- * Short circuit between the test sample and the pulleys (flexing apparatus).