Test requirements for accessories for use on power cables of rated voltage from 3,6/6(7,2) kV up to 20,8/36(42) kV - Part 2: Cables with impregnated paper insulation

EESTI STANDARDIMIS- JA AKREDITEERIMISKESKUS
ESTONIAN CENTRE FOR STANDARDISATION AND ACCREDITATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-HD 629.2 S3:2024 sisaldab Euroopa standardi HD 629.2 S3:2024 ingliskeelset teksti.	This Estonian standard EVS-HD 629.2 S3:2024 consists of the English text of the European standard HD 629.2 S3:2024.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 19.01.2024.	Date of Availability of the European standard is 19.01.2024.
Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.	The standard is available from the Estonian Centre for Standardisation and Accreditation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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HARMONIZATION DOCUMENT

DOCUMENT D'HARMONISATION

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HD 629.2 S3

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Supersedes HD 629.2 S2:2006 (PART); HD 629.2 S2:2006/A1:2008 (PART)

English Version

Test requirements for accessories for use on power cables of rated voltage from 3,6/6(7,2) kV up to 20,8/36(42) kV - Part 2: Cables with impregnated paper insulation

Prescriptions relatives aux essais sur les accessoires des câbles d'énergie pour des tensions assignées de 3,6/6(7,2) kV à 20,8/36(42) kV - Partie 2: Câbles isolés au papier imprégné

Prüfanforderungen für Kabelgarnituren für Starkstromkabel mit einer Nennspannung von 3,6/6(7,2) kV bis 20,8/36(42) kV - Teil 2: Kabel mit massegetränkter Papierisolierung

This Harmonization Document was approved by CENELEC on 2023-12-11. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for implementation of this Harmonization Document at national level.

Up-to-date lists and bibliographical references concerning such national implementations may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This Harmonization Document exists in three official versions (English, French, German).

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents

Page

Tables

European foreword

This document (HD 629.2 S3:2024) has been prepared by CLC/TC 20 “Electric cables”.

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2024-12-11
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2026-12-11

This document partially supersedes HD 629.2 S2:2006 and all of its amendments and corrigenda (if any).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

Any feedback and questions on this document should be directed to the users’ national committee. A complete listing of these bodies can be found on the CENELEC website.

Introduction

This document defines the requirements which can be called up for joints, stop ends, separable connectors, indoor and outdoor terminations when used with impregnated paper insulated power cables covered by HD 621. The equivalent requirements for extruded power cables are given in HD 629.1 S3.

The equivalent requirements for transition joints, when used between extruded insulated power cables and impregnated paper insulated power cables covered by HD 620 and HD 621 or other relevant standards are given in HD 629.3 S1.

Formerly, approvals of such products have been achieved on the basis of national standards and specifications and/or the demonstration of satisfactory service performance. The publication of this document does not invalidate existing approvals. However, products approved to such earlier standards or specifications cannot claim approval to this document unless specifically tested to it.

1 Scope

1.1 General

This document specifies performance requirements for type tests for cable accessories for use on impregnated paper insulated power cables as specified in HD 621.

It is not necessary to repeat these tests, once successfully completed, unless changes are made in the materials, design or manufacturing process, which might affect the performance characteristics.

Accessories for special applications such as submarine cables, ships cables or hazardous situations (explosive environments, fire resistant cables or seismic conditions) are not included.

Test methods are included in EN 61442:2005.

NOTE It might be possible, subject to agreement between supplier and purchaser, and/or the relevant conformity assessment body, to demonstrate that conformity to the earlier standard can be used to claim conformity to this document, provided an assessment is made of any additional type testing that might need to be carried out. Any such additional testing that is part of a sequence of testing cannot be done separately.

1.2 Type of accessories

The accessories covered by this document are listed below:

— indoor and outdoor terminations of all designs, including terminal boxes;

— straight joints, branch joints and stop end joints of all designs, suitable for use underground or in air;

— screened or unscreened plug-in type or bolted-type separable connectors capable of interfacing with bushing profiles as specified in EN 50180 series and EN 50181.

1.3 Rated voltage

The rated voltages $U_0/U(U_m)$ of the accessories covered by this document are 3,6/6(7,2) - 3,8/6,6(7,2) - 6/10(12) - 6,35/11(12) - 8,7/15(17,5) - 12/20(24) - 12,7/22(24) - 18/30(36) - 19/33(36) - 20,8/36(42) kV.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN IEC 61238-1-3, *Compression and mechanical connectors for power cables - Part 1-3: Test methods and requirements for compression and mechanical connectors for power cables for rated voltages above 1 kV (Um = 1,2 kV) up to 36 kV (Um = 42 kV) tested on non-insulated conductors (IEC 61238-1-3)*

EN 61442:2005, *Test methods for accessories for power cables with rated voltages from 6 kV (Um = 7,2 kV) up to 36 kV (Um = 42 kV) (IEC 61442:2005)*

HD 621.S1, *Medium voltage impregnated paper insulated distribution cables*

EN 50655 series, *Electrical cables - Accessories - Material characterization*

IEC 60050-461, *International Electrotechnical Vocabulary - Part 461: Electric cables*