Covered conductors for overhead lines and the related accessories for rated voltages above 1 kV a.c. and not exceeding 36 kV a.c. - Part 2: Accessories for covered conductors - Tests and acceptance criteria

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 50397-2:2022 sisaldab Euroopa standardi EN 50397-2:2022 ingliskeelset teksti.	This Estonian standard EVS-EN 50397-2:2022 consists of the English text of the European standard EN 50397-2:2022.
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 29.07.2022.	Date of Availability of the European standard is 29.07.2022.
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.

ICS 29.240.20

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 50397-2

July 2022

ICS 29.240.20

Supersedes EN 50397-2:2009

English Version

Covered conductors for overhead lines and the related accessories for rated voltages above 1 kV a.c. and not exceeding 36 kV a.c. - Part 2: Accessories for covered conductors - Tests and acceptance criteria

Conducteurs gainés pour lignes aériennes et accessoires associés pour des tensions assignées supérieures à 1 kV en courant alternatif et ne dépassant pas 36 kV en courant alternatif - Partie 2: Accessoires pour conducteurs gainés - Essais et critères d'acceptation

Kunststoffumhüllte Leiter und zugehörige Armaturen für Freileitungen mit Nennspannungen über 1 kV und nicht mehr als 36 kV Wechselspannung - Teil 2: Armaturen für kunststoffumhüllte Freileitungsseile - Prüfungen und Anforderungen

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

Ref. No. EN 50397-2:2022 E

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European foreword

This document (EN 50397-2:2022) 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)	2023-06-27
• latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2025-06-27

This document will supersede EN 50397-2:2009 and all of its amendments and corrigenda (if any).

EN 50397-2:2022 has been updated editorially with respect to EN 50397-2:2009.

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

Covered conductors consist of a conductor surrounded by a covering made of insulating material as protection against accidental contacts with other covered conductors and with grounded parts such as tree branches, etc. In comparison with insulated conductors, this covering has reduced properties, but is able to withstand the phase-to-earth voltage temporarily.

Since covered conductors are unscreened, they are not touch-proof, i.e. they must be treated as bare conductors with respect to electric shock.

This document does not cover aspects related to the installation of overhead lines such as determination of clearances, spans, sags, etc.

1 Scope

This document contains the requirements for accessories that are for use with covered conductors, see EN 50397-1. They are for applications in overhead lines with rated voltages *U* above 1 kV a.c. and not exceeding 36 kV a.c.

NOTE This document describes the requirements and tests only for the accessories installed on the covered conductor itself.

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 50397-1:2020, *Covered conductors for overhead lines and the related accessories for rated voltages above 1 kV AC and not exceeding 36 kV AC — Part 1: Covered conductors*

EN 50483-5, *Test requirements for low voltage aerial bundled cable accessories — Part 5: Electrical ageing test*

EN 50483-6:2009, *Test requirements for low voltage aerial bundled cable accessories — Part 6: Environmental testing*

EN 61284:1997, *Overhead lines — Requirements and tests for fittings*

EN 61467, *Insulators for overhead lines - Insulator strings and sets for lines with a nominal voltage greater than 1 000 V — AC power arc tests*

EN ISO 1461, *Hot dip galvanized coatings on fabricated iron and steel articles — Specifications and test methods (ISO 1461)*

ISO 2859-1, *Sampling procedures for inspection by attributes — Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection*

ISO 2859-2, *Sampling procedures for inspection by attributes — Part 2: Sampling plans indexed by limiting quality (LQ) for isolated lot inspection*

ISO 3951 (series), *Sampling procedures for inspection by variables*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
type test
test required to be made before supplying a type of product covered by this document on a general commercial basis in order to demonstrate satisfactory performance characteristics to meet the intended application

Note 1 to entry: Symbol T.

Note 2 to entry: These tests are of such nature that, after they have been made, they need not be repeated unless changes are made in the material, design or manufacturing process, which might change the performance characteristics.