Dielectric and resistive properties of solid insulating materials - Part 3-4: Determination of resistive properties (DC methods) - Volume resistance and volume resistivity at elevated temperatures

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN IEC 62631-3-4:2019 sisaldab Euroopa standardi EN IEC 62631-3-4:2019 ingliskeelset teksti.	This Estonian standard EVS-EN IEC 62631-3-4:2019 consists of the English text of the European standard EN IEC 62631-3-4:2019.
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.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 10.05.2019.	Date of Availability of the European standard is 10.05.2019.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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

ICS 17.220.99, 29.035.01

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 62631-3-4

May 2019

ICS 17.220.99; 29.035.01

English Version

Dielectric and resistive properties of solid insulating materials - Part 3-4: Determination of resistive properties (DC methods) - Volume resistance and volume resistivity at elevated temperatures (IEC 62631-3-4:2019)

Propriétés diélectriques et résistives des matériaux isolants solides - Partie 3-4: Détermination des propriétés résistives (méthodes en courant continu) - Résistance transversale et résistivité transversale aux températures élevées (IEC 62631-3-4:2019)

Dielektrische und resistive Eigenschaften fester Isolierstoffe - Teil 3-4: Bestimmung resistiver Eigenschaften (Gleichspannungsverfahren) - Durchgangswiderstand und spezifischer Durchgangswiderstand bei erhöhten Temperaturen (IEC 62631-3-4:2019)

This European Standard was approved by CENELEC on 2019-05-02. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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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

Ref. No. EN IEC 62631-3-4:2019 E

European foreword

The text of document 112/406/CDV, future edition 1 of IEC 62631-3-4, prepared by IEC/TC 112 "Evaluation and qualification of electrical insulating materials and systems" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62631-3-4:2019.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2020-02-02
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-05-02

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.

Endorsement notice

The text of the International Standard IEC 62631-3-4:2019 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 62631-1	NOTE	Harmonized as EN 62631-1

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 60212	2010	Standard conditions for use prior to and during the testing of solid electrical insulating materials	EN 60212	2011
IEC 62631-3-1	-	Dielectric and resistive properties of solid insulating materials - Part 3-1: Determination of resistive properties (DC methods) - Volume resistance and volume resistivity - General method	EN 62631-3-1	-

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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DIELECTRIC AND RESISTIVE PROPERTIES OF SOLID INSULATING MATERIALS –

Part 3-4: Determination of resistive properties (DC methods) – Volume resistance and volume resistivity at elevated temperatures

FOREWORD

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International Standard IEC 62631-3-4 has been prepared by IEC technical committee 112: Evaluation and qualification of electrical insulating materials and systems.

This edition of IEC 62631-3-4 cancels and replaces IEC 60345 "Method of test for electrical resistance and resistivity of insulating materials at elevated temperatures", published in 1971. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to IEC 60345:

a) The revised standard becomes part of the series IEC 62631-3-x. Title of the standard is changed and adapted to the series as Part 3-4.
b) Clauses 2 "Normative references", 3 "Terms and definitions", and 4 "Significance" are added.

c) Subclauses 5.2 "Power supply, Voltage", 5.3.1.2 "Number of test specimens" and 5.3.1.3 "Conditioning and pre-treatment of test specimens" are added.

d) In 5.3.5 "Special precautions during measurements", errors analysis in the measurement of current are modified, and aligned with IEC 62631-3-1.

e) In 6.2 "Increasing the temperature by steps (method B)", the method for more than one specimen is removed.

f) The standard atmospheric conditions for testing and conditioning, especially the temperature, are replaced according to IEC 60212.

g) The circuit diagram of test apparatus is modified, and the structure diagram and pictures of test apparatus are added in Annex A.

h) The orders of part clauses are adjusted.

The text of this International Standard is based on the following documents:

CDV	Report on voting
112/406/CDV	112/445/RVC

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 62631 series, published under the general title *Dielectric and resistive properties of solid insulating materials*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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