

STN	Dielektrické a odporové vlastnosti tuhých izolačných materiálov Časť 2-2: Relatívna permitivita a faktor strát Vysoké frekvencie (1 MHz – 300 MHz), striedavé AC metódy	STN EN IEC 62631-2-2 34 6460
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Dielectric and resistive properties of solid insulating materials - Part 2-2: Relative permittivity and dissipation factor - High frequencies (1 MHz to 300 MHz) - AC methods

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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NORME EUROPÉENNE
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EN IEC 62631-2-2

May 2022

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English Version

**Dielectric and resistive properties of solid insulating materials -
Part 2-2: Relative permittivity and dissipation factor - High
frequencies (1 MHz to 300 MHz) - AC methods
(IEC 62631-2-2:2022)**

Propriétés diélectriques et résistives des matériaux isolants
solides - Partie 2-2: Permittivité relative et facteur de
dissipation - Hautes fréquences (1 MHz à 300 MHz) -
Méthodes en courant alternatif
(IEC 62631-2-2:2022)

Dielektrische und resistive Eigenschaften fester
Elektroisolerstoffe - Teil 2-2: Relative Permittivität und
Verlustfaktor - Hohe Frequenzen (1 MHz bis 300 MHz) -
Wechselspannungsverfahren
(IEC 62631-2-2:2022)

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EN IEC 62631-2-2:2022 (E)**European foreword**

The text of document 112/562/FDIS, future edition 1 of IEC 62631-2-2, 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 62631-2-2:2022.

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IEC 60247 NOTE Harmonized as EN 60247

IEC 62631-2-1:2018 NOTE Harmonized as EN IEC 62631-2-1:2018 (not modified)

Annex ZA (normative)

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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IEC 62631-2-2

Edition 1.0 2022-04

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Dielectric and resistive properties of solid insulating materials –
Part 2-2: Relative permittivity and dissipation factor – High frequencies
(1 MHz to 300 MHz) – AC methods**

**Propriétés diélectriques et résistives des matériaux isolants solides –
Partie 2-2: Permittivité relative et facteur de dissipation – Hautes fréquences
(1 MHz à 300 MHz) – Méthodes en courant alternatif**

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Edition 1.0 2022-04

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Dielectric and resistive properties of solid insulating materials –
Part 2-2: Relative permittivity and dissipation factor – High frequencies
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Partie 2-2: Permittivité relative et facteur de dissipation – Hautes fréquences
(1 MHz à 300 MHz) – Méthodes en courant alternatif**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**DIELECTRIC AND RESISTIVE PROPERTIES OF
SOLID INSULATING MATERIALS –**
**Part 2-2: Relative permittivity and dissipation factor –
High frequencies (1 MHz to 300 MHz) – AC methods**
FOREWORD

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Draft	Report on voting
112/562/FDIS	112/565/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

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INTRODUCTION

Permittivity and dissipation factor ($\tan \delta$) are basic parameters for the quality of insulating materials. The dissipation factor depends on several parameters, such as environmental factors, moisture, temperature, applied voltage, and highly depends on frequency, the accuracy of measuring apparatus and other parameters applied to the measured specimen.

The frequency range measurable for permittivity and dissipation factor is highly limited by the design of the electrode system, dimension of the sample and impedance of the wiring lead. Special consideration should be given to the measurement in the high frequency range. This document focuses on the method for measurements of permittivity and dissipation factor in the high frequency range from 1 MHz to 300 MHz.

DIELECTRIC AND RESISTIVE PROPERTIES OF SOLID INSULATING MATERIALS –

Part 2-2: Relative permittivity and dissipation factor – High frequencies (1 MHz to 300 MHz) – AC methods

1 Scope

This part of IEC 62631 specifies test methods for the determination of permittivity and dissipation factor properties of solid insulating materials in a high frequency range from 1 MHz to 300 MHz.

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.

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