

SLOVENSKI STANDARD
SIST EN IEC 61643-331:2020**01-julij-2020****Nadomešča:****SIST EN IEC 61643-331:2018**

Sestavni deli za nizkonapetostne naprave za zaščito pred prenapetostnimi udari - 311. del: Zahteve za lastnosti in preskusne metode za kovinsko-oksidne varistorje (MOV)

Components for low-voltage surge protective devices - Part 331: Performance requirements and test methods for metal oxide varistors (MOV)

Bauelemente für Überspannungsschutzgeräte für Niederspannung – Teil 331: Leistungsanforderungen und Prüfverfahren für Metalloxidvaristoren (MOV)

Composants pour parafoudres basse tension - Partie 331: Exigences de performance et méthodes d'essai pour les varistances à oxyde métallique (MOV)

Ta slovenski standard je istoveten z: EN IEC 61643-331:2020

ICS:

29.120.50	Varovalke in druga nadtokovna zaščita	Fuses and other overcurrent protection devices
31.040.20	Potenciometri, spremenljivi upori	Potentiometers, variable resistors

SIST EN IEC 61643-331:2020**en**

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EUROPEAN STANDARD

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NORME EUROPÉENNE

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May 2020

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Supersedes EN IEC 61643-331:2018 and all of its amendments and corrigenda (if any)

English Version

Components for low-voltage surge protection - Part 331:
Performance requirements and test methods for metal oxide
varistors (MOV)
(IEC 61643-331:2020)

Composants pour parafoudres basse tension - Partie 331:
Exigences de performance et méthodes d'essai pour les
varistances à oxyde métallique (MOV)
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Bauelemente für Überspannungsschutzgeräte für
Niederspannung - Teil 331: Leistungsanforderungen und
Prüfverfahren für Metalloxidvaristoren (MOV)
(IEC 61643-331:2020)

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Europäisches Komitee für Elektrotechnische Normung

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

EN IEC 61643-331:2020 (E)**European foreword**

The text of document 37B/211/FDIS, future edition 3 of IEC 61643-331, prepared by SC 37B "Components for low-voltage surge protection" of IEC/TC 37 "Surge arresters" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61643-331:2020.

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) 2021-01-23
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-04-23

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The text of the International Standard IEC 61643-331:2020 was approved by CENELEC as a European Standard without any modification.

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-1	2013	Environmental testing - Part 1: General and guidance	EN 60068-1	2014
IEC 60068-2-6	2007	Environmental testing - Part 2-6: Tests - Test Fc: Vibration (sinusoidal)	EN 60068-2-6	2008
IEC 60068-2-14	2009	Environmental testing - Part 2-14: Tests - Test N: Change of temperature	EN 60068-2-14	2009
IEC 60068-2-20	2008	Environmental testing - Part 2-20: Tests - Test T: Test methods for solderability and resistance to soldering heat of devices with leads	EN 60068-2-20	2008
IEC 60068-2-21	2006	Environmental testing - Part 2-21: Tests - Test U: Robustness of terminations and integral mounting devices	EN 60068-2-21	2006
IEC 60068-2-27	2008	Environmental testing - Part 2-27: Tests - Test Ea and guidance: Shock	EN 60068-2-27	2009
IEC 60068-2-52	2017	Environmental testing - Part 2-52: Tests - Test Kb: Salt mist, cyclic (sodium chloride solution)	EN IEC 60068-2-52	2018
IEC 61000-4-2	2008	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	EN 61000-4-2	2009
IEC 61643-11 (mod)	2011	Low-voltage surge protective devices - Part 11: Surge protective devices connected to low-voltage power systems - Requirements and test methods	EN 61643-11	2012
			+ A11	2018

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INTERNATIONAL STANDARD



**Components for low-voltage surge protection –
Part 331: Performance requirements and test methods for metal oxide varistors
(MOV)**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMPONENTS FOR LOW-VOLTAGE SURGE PROTECTION –**Part 331: Performance requirements and test methods
for metal oxide varistors (MOV)**

FOREWORD

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International Standard IEC 61643-331 has been prepared by subcommittee 37B: Components for low-voltage surge protection, of IEC technical committee 37: Surge arresters.

This third edition cancels and replaces the second edition published in 2017. This edition constitutes a technical revision.

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

- a) a Varistor MCOV rating assurance test;
- b) an energy rating test (2ms);
- c) revised Dielectric strength and insulation resistance tests.

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

FDIS	Report on voting
37B/211/FDIS	37B/214/RVD

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 of IEC 61643 series, under the general title *Components for low-voltage surge protective devices*, 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

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COMPONENTS FOR LOW-VOLTAGE SURGE PROTECTION –

Part 331: Performance requirements and test methods for metal oxide varistors (MOV)

1 Scope

This part of IEC 61643 is a test specification for metal oxide varistors (MOV), which are used for applications up to 1 000 V AC or 1 500 V DC in power lines, or telecommunication, or signalling circuits. They are designed to protect apparatus or personnel, or both, from high transient voltages.

This document applies to MOVs having two electrodes and hybrid surge protection components. This document also does not apply to mountings and their effect on the MOV's characteristics. Characteristics given apply solely to the MOV mounted only in the ways described for the tests.

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.

- IEC 60068-1:2013, *Environmental testing – Part 1: General and guidance*
- IEC 60068-2-6:2007, *Environmental testing – Part 2-6: Tests – Test Fc: Vibration (sinusoidal)*
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- IEC 60068-2-21:2006, *Environmental testing – Part 2-21: Tests – Test U: Robustness of terminations and integral mounting devices*
- IEC 60068-2-27:2008, *Environmental testing – Part 2-27: Tests – Test Ea and guidance: Shock*
- IEC 60068-2-52:2017 *Environmental testing – Part 2-52: Tests – Test Kb: Salt mist, cyclic (sodium chloride solution)*
- IEC 61643-11:2011, *Low-voltage surge protective devices – Part 11: Surge protective devices connected to low-voltage power systems – Requirements and test methods*
- IEC 61000-4-2:2008, *Electromagnetic compatibility (EMC) – Part 4-2: Testing and measurement techniques – Electrostatic discharge immunity test*