



SLOVENSKI STANDARD

SIST EN 62271-207:2012

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SIST EN 62271-207:2008

Visokonapetosne stikalne naprave - 207. del: Seizmična (potresna) kvalifikacija plinsko izoliranih stikalnih sestavov za naznačene vrednosti nad 52 kV (IEC 62271-207:2012)

High-voltage switchgear and controlgear - Part 207: Seismic qualification for gas-insulated switchgear assemblies for rated voltages above 52 kV (IEC 62271-207:2012)

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Hochspannungs-Schaltgeräte und -Schaltanlagen - Teil 207: Erdbebenqualifikation für gasisolierte Schaltgerätekombinationen mit Bemessungsspannungen über 52 kV (IEC 62271-207:2012)

[SIST EN 62271-207:2012](https://standards.itih.ai/catalog/standards/sist/58f06954-e6d2-49df-b064-14952207e010/en/62271-207-2012)

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Appareillage à haute tension - Partie 207: Qualification sismique pour ensembles d'appareillages à isolation gazeuse pour des niveaux de tension assignée supérieurs à 52 kV (CEI 62271-207:2012)

Ta slovenski standard je istoveten z: EN 62271-207:2012

ICS:

29.130.10	Visokonapetostne stikalne in krmilne naprave	High voltage switchgear and controlgear
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SIST EN 62271-207:2012 en

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 62271-207

July 2012

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English version

**High-voltage switchgear and controlgear -
Part 207: Seismic qualification for gas-insulated switchgear assemblies
for rated voltages above 52 kV
(IEC 62271-207:2012)**

Appareillage à haute tension -
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ensembles d'appareillages à isolation
gazeuse pour des niveaux de tension
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Hochspannungs-Schaltgeräte und -
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gasisolierte Schaltgerätekombinationen
mit Bemessungsspannungen über 52 kV
(IEC 62271-207:2012)

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This European Standard was approved by CENELEC on 2012-06-01. 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 17C/542/FDIS, future edition 2 of IEC 62271-207, prepared by SC 17C "High-voltage switchgear and controlgear assemblies", of IEC/TC 17 "Switchgear and controlgear", was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62271-207:2012.

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) 2013-03-01
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2015-06-01

This document supersedes EN 62271-207:2007.

EN 62271-207:2012 includes the following significant technical changes with respect to EN 62271-207:2007:

- modification of the minimum voltage rating from 72,5 kV to above 52 kV;
- harmonisation of qualification procedures for GIS with IEEE 693:2005 Annex A and P by modifying the response spectra;
- modification of the test procedures;
- addition of criteria of allowed stresses;
- addition of dynamic analysis CQC.

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

Endorsement notice

The text of the International Standard IEC 62271-207:2012 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 61462	NOTE	Harmonized as EN 61462.
IEC 62155	NOTE	Harmonized as EN 62155.
IEC 62231	NOTE	Harmonized as EN 62231.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-2-47	-	Environmental testing - Part 2-47: Tests - Mounting of specimens for vibration, impact and similar dynamic tests	EN 60068-2-47	-
IEC 60068-2-57	-	Environmental testing - Part 2-57: Tests - Test Ff: Vibration - Time- history method	EN 60068-2-57	-
IEC 60068-3-3	1991	Environmental testing - Part 3: Guidance - Seismic test methods for equipments	EN 60068-3-3	1993
IEC 62271-1	-	High-voltage switchgear and controlgear - Part 1: Common specifications	EN 62271-1	-
IEC 62271-203	-	High-voltage switchgear and controlgear - Part 203: Gas-insulated metal-enclosed switchgear for rated voltages above 52 kV	EN 62271-203	-

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INTERNATIONAL STANDARD

NORME INTERNATIONALE



**High-voltage switchgear and controlgear –
Part 207: Seismic qualification for gas-insulated switchgear assemblies for rated
voltages above 52 kV**

**Appareillage à haute tension –
Partie 207: Qualification sismique pour ensembles d'appareillages à isolation
gazeuse pour des niveaux de tension assignée supérieurs à 52 kV**

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CONTENTS

FOREWORD.....	3
1 Scope.....	5
2 Normative references	5
3 Terms and definitions	5
4 Seismic qualification requirements	6
4.1 General	6
4.2 Qualification levels	6
5 Test procedures for qualification.....	6
5.1 General	6
5.2 Mounting	7
5.3 Measurements.....	7
5.4 Frequency range	7
5.5 Test severity	7
5.5.1 General	7
5.5.2 Parameters for time-history excitation.....	9
5.5.3 Test directions.....	9
5.5.4 Test sequence.....	9
6 Qualification by combined test and numerical analysis	10
6.1 General	10
6.2 Dynamic and functional data	11
6.3 Numerical analysis	11
6.3.1 General	11
6.3.2 Numerical analysis by the acceleration time-history method	11
6.3.3 Modal and spectrum analysis using the required response spectrum (RRS)	11
6.3.4 Static coefficient analysis	12
7 Evaluation of the seismic qualification	12
7.1 Combination of stresses	12
7.2 Acceptance criteria for the seismic waveform	13
7.3 Functional evaluation of the test results	13
7.4 Allowable stresses	13
8 Documentation	13
8.1 Information for seismic qualification.....	13
8.2 Test report	14
8.3 Analysis report	14
Annex A (normative) Characterisation of the test-set	15
Annex B (informative) Criteria for seismic adequacy of gas-insulated metal-enclosed switchgear	17
Bibliography.....	19
Figure 1 – Required response spectrum (RRS) for qualification level moderate	8
Figure 2 – Required response spectrum (RRS) for qualification level high	9
Figure A.1 – Monogram for the determination of equivalent damping ratio	16
Table 1 – Seismic qualification levels for switchgear assemblies – Horizontal severities	6

INTERNATIONAL ELECTROTECHNICAL COMMISSION

HIGH-VOLTAGE SWITCHGEAR AND CONTROLGEAR –

Part 207: Seismic qualification for gas-insulated switchgear assemblies for rated voltages above 52 kV

FOREWORD

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International Standard IEC 62271-207 has been prepared by subcommittee 17C: High-voltage switchgear and controlgear assemblies, of IEC technical committee 17: Switchgear and controlgear.

This second edition of IEC 62271-207 cancels and replaces the first edition published in 2007. It constitutes a technical revision.

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

- modification of the minimum voltage rating from 72,5 kV to above 52 kV;
- harmonisation of qualification procedures for GIS with IEEE 693:2005 Annex A and P by modifying the response spectra;
- modification of the test procedures;
- addition of criteria of allowed stresses;

- addition of dynamic analysis CQC.

The text of this standard is based on the following documents:

FDIS	Report on voting
17C/542/FDIS	17C/549/RVD

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

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

A list of all the parts in the IEC 62271 series, under the general title *High-voltage switchgear and controlgear*, can be found on the IEC website.

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

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

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HIGH-VOLTAGE SWITCHGEAR AND CONTROLGEAR –

Part 207: Seismic qualification for gas-insulated switchgear assemblies for rated voltages above 52 kV

1 Scope

This part of IEC 62271 applies to gas-insulated switchgear assemblies for alternating current of rated voltages above 52 kV for indoor and outdoor installations, including their supporting structure.

For switchgear devices, e.g. live tank circuit breakers, IEC/TR 62271-300 is applicable.

Guidance on interactions between the supporting structure and the soil / foundations is provided in Annex B.

The seismic qualification of the switchgear assemblies takes into account testing of typical switchgear assemblies combined with methods of analysis. Mutual interaction between directly mounted auxiliary and control equipment and switchgear assemblies are covered.

The seismic qualification of switchgear assemblies is only performed upon request.

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2 Normative references

SIST EN 62271-207:2012

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60068-2-47, *Environmental testing – Part 2-47: Tests – Mounting of specimens for vibration, impact and similar dynamic tests*

IEC 60068-2-57, *Environmental testing – Part 2-57: Tests – Test Ff: Vibration – Time-history method*

IEC 60068-3-3:1991, *Environmental testing – Part 3: Guidance – Seismic test methods for equipments*

IEC 62271-1, *High-voltage switchgear and controlgear – Part 1: Common specifications*

IEC 62271-203, *High-voltage switchgear and controlgear – Part 203: Gas-insulated metal-enclosed switchgear for rated voltages above 52 kV*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60068-3-3, IEC 62271-203 and IEC 62271-1 apply.