

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

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 62271-207:2012 sisaldab Euroopa standardi EN 62271-207:2012 ingliskeelset teksti.	This Estonian standard EVS-EN 62271-207:2012 consists of the English text of the European standard EN 62271-207:2012.
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.
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**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 -
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)

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

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

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- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2015-06-01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

2 Normative references

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.