BS EN IEC 62271-211:2024

BSI Standards Publication

High-voltage switchgear and controlgear

Part 211: Direct connection between power transformers and gas-insulated metal-enclosed switchgear for rated voltages above 52 kV

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National foreword

This British Standard is the UK implementation of EN IEC 62271-211:2024. It is identical to IEC 62271-211:2024. It supersedes BS EN 62271-211:2014, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PEL/17, High voltage switchgear, controlgear and assemblies.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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English Version

High-voltage switchgear and controlgear - Part 211: Direct connection between power transformers and gas-insulated metal-enclosed switchgear for rated voltages above 52 kV (IEC 62271-211:2024)

Appareillage à haute tension - Partie 211: Raccordements directs entre transformateurs de puissance et appareillage sous enveloppe métallique à isolation gazeuse de tensions assignées supérieures à 52 kV
(IEC 62271-211:2024)

Hochspannungs-Schaltgeräte und -Schaltanlagen - Teil 211: Direkte Verbindungen zwischen Leistungstransformatoren und gasisolierten metallgekapselten Schaltanlagen für Bemessungsspannungen über 52 kV
(IEC 62271-211:2024)

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European Committee for Electrotechnical Standardization
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European foreword

The text of document 17C/935/FDIS, future edition 2 of IEC 62271-211, prepared by SC 17C "Assemblies" of IEC/TC 17 "High-voltage switchgear and controlgear" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62271-211:2024.

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) 2025-11-30
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2027-11-30

This document supersedes EN 62271-211:2014 and all of its amendments and corrigenda (if any).

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The text of the International Standard IEC 62271-211:2024 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 standard indicated:

IEC 62271-209:2019	NOTE Approved as EN IEC 62271-209:2019 (not modified)
IEC 62271-209:2019/AMD1:2022	NOTE Approved as EN IEC 62271-209:2019/A1:2022 (not modified)
ISO 17892-2:2014	NOTE Approved as EN ISO 17892-2:2014 (not modified)
IEC 60071-1:2019	NOTE Approved as EN IEC 60071-1:2019 (not modified)

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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.cencenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 60076	series	Power transformers	EN 60076	series
IEC 60076-1	2011	Power transformers - Part 1: General	EN 60076-1	2011
IEC 60137	2017	Insulated bushings for alternating voltages above 1000 V	EN 60137	2017
IEC 61936-1	2021	Power installations exceeding 1 kV AC and 1,5 kV DC - Part 1: AC	EN IEC 61936-1	2021
IEC 62271-1	2017	High-voltage switchgear and controlgear - Part 1: Common specifications for alternating current switchgear and controlgear	EN 62271-1	2017
+ AMD1	2021		+ A1	2021
IEC 62271-203	2022	High-voltage switchgear and controlgear - Part 203: AC gas-insulated metal-enclosed switchgear for rated voltages above 52 kV	EN IEC 62271-203	2022
IEC 62271-207	2023	High-voltage switchgear and controlgear - Part 207: Seismic qualification for gas-insulated switchgear assemblies, metal enclosed and solid-insulation enclosed switchgear for rated voltages above 1 kV	EN IEC 62271-207	2023

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

HIGH-VOLTAGE SWITCHGEAR AND CONTROLGEAR –

Part 211: Direct connection between power transformers and gas-insulated metal-enclosed switchgear for rated voltages above 52 kV

FOREWORD

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IEC 62271-211 has been prepared by subcommittee 17C: Assemblies, of IEC technical committee 17: High-voltage switchgear and controlgear. It is an International Standard.

This second edition cancels and replaces the first edition of IEC 62271-211:2014. This edition constitutes a technical revision.

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

a) re-numbering of clauses according to IEC 62271-1:2017,
b) Clause 3: updating definition about bushing (3.1), updating some pressure definitions (3.6, 3.7, 3.8, 3.9), rewording definition about proctor density (3.11), new term very-fast-front overvoltage (3.12),

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c) Clause 5 (former clause 4): add a subclause 5.1 General, according to IEC 62271-1:2017 and IEC 62271-203:2022,
   1) subclause 5.5: new first paragraph, rewording second paragraph,
   2) subclause 5.8: modify the term "Rated duration of thermal short-time current" of the bushing,
d) Clause 6 (former Clause 5): restructure and rewording of subclauses:
   1) 6.1 (former 5.3): requirements about gas and vacuum tightness of the transformer bushing
   2) 6.3 (former 5.2): harmonization with IEC 62271-203:2022 about typical maximum pressure in service for SF_6, other gases and gas mixtures,
   3) 6.4 (former 5.8), rewording
   4) 6.5 (former 5.1), some rewording and modification
   5) 6.6 (former 5.4), some rewording, updated references
   6) 6.7 (former 5.5), some rewording
   7) 6.8 (former 5.6), some rewording
   8) 6.9 (former 5.7), slight rewording,
e) Clause 7 (former clause 6) type tests: some rewording and clarifications about references,
f) Clause 8 (former clause 7) routine tests:
   1) 8.2 (former 7.2): add a paragraph about SF_6-mixtures and other gases than SF_6,
   2) 8.3 (former 7.3): update reference to relevant on-site test according to IEC 62271-203:2022,
g) Clause 9 Guide to the selection of switchgear and controlgear (new): informative, to have a reference to IEC 62271-203:2022,
h) Clause 11 (former 10): updated headline and updated reference according to IEC 62271-1:2017,
i) new Clauses 12 Safety and 13 Environmental aspects: Adding of references to safety and environmental aspects,
j) correction of errors in Corrigendum 2 of IEC 62271-211:2017,
k) modified orientation of Figure 1 to Figure 4 for easier reading of the tables,

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

Draft	Report on voting
17C/935/FDIS	17C/945/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/publications.

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

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