

# INTERNATIONAL STANDARD

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**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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INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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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**

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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),

- 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<sub>6</sub>, 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<sub>6</sub>-mixtures and other gases than SF<sub>6</sub>,
  - 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](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/publications](http://www.iec.ch/publications).

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