



TECHNICAL REPORT



**High-voltage switchgear and controlgear –
Part 305: Capacitive current switching capability of air-insulated disconnectors
for rated voltages above 52 kV**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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IEC 62271-305, which is a technical report, has been prepared by subcommittee 17A: High-voltage switchgear and controlgear, of IEC technical committee 17: Switchgear and controlgear.

The text of this technical report is based on the following documents:

Enquiry draft	Report on voting
17A/872/DTR	17A/885/RVC

Full information on the voting for the approval of this technical report 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 parts of the IEC 62271 series, published 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 maintenance result 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- withdrawn,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 305: Capacitive current switching capability of air-insulated disconnectors for rated voltages above 52 kV

1 Scope

This technical report applies to high-voltage air-insulated disconnectors for rated voltages above 52 kV. The report describes the capacitive current switching duty and provides guidance on laboratory testing to demonstrate the switching capability. Air-insulated disconnectors equipped with auxiliary interrupting devices are included under this scope.

NOTE For manually operated disconnectors, the in-service safety of the operator should be considered and it should be recognized that the results of the switching tests described herein (performed using motor-operated disconnectors) are not necessarily representative of the performance of such disconnectors in actual service. Due diligence should be exercised if the switching tests indicate that prolonged arc durations are probable.

2 Normative references

The following referenced documents are indispensable for the application 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 62271-1: *High-voltage switchgear and controlgear – Part 1: Common specifications*

IEC 62271-102:2001 *High-voltage switchgear and controlgear – Part 102: Alternating current disconnectors and earthing switches*