

TECHNICAL REPORT

RAPPORT TECHNIQUE

**High-voltage switchgear and controlgear –
Part 208: Methods to quantify the steady state, power-frequency electromagnetic
fields generated by HV switchgear assemblies and HV/LV prefabricated
substations**

**Appareillage à haute tension –
Partie 208: Méthodes de quantification des champs électromagnétiques à
fréquence industrielle en régime établi générés par les ensembles
d'appareillages HT et les postes préfabriqués HT/BT**





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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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IEC 62271-208, which is a technical report, has been prepared by subcommittee 17C: High-voltage switchgear and controlgear assemblies, of IEC technical committee 17: Switchgear and controlgear.

In this technical report the word "shall" is used as a conditional "shall", in the event that this technical report is applied.

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

| | |
|---------------|------------------|
| Enquiry draft | Report on voting |
| 17C/450/DTR | 17C/462/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 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 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- withdrawn,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.

INTRODUCTION

Manufacturers of electricity supply equipment may be asked to provide information about the electromagnetic field characteristics to enable the user to

- assess the electromagnetic field conditions to assist with planning, installation, operating instructions and service,
- take measures to meet requirements or regulations on electromagnetic fields,
- compare different products as far as their level of electromagnetic fields is concerned.

The purpose of this technical report is to describe a methodology for the evaluation (measurement or calculation) of generated electromagnetic fields.

The electromagnetic field characteristic of the equipment comprises the values of the electric and the magnetic fields around its accessible surfaces.

The electromagnetic field characteristic defined in this technical report refers to a single product as defined in the scope. In real installations, several field sources can superimpose, so the resulting electromagnetic fields on site may differ significantly from the single product characteristics.

This technical report does not define a mandatory test for the products mentioned in the scope.

Neither the establishment of limits for the electromagnetic fields generated by equipment, nor the establishment of assessment methods for the human exposure to electromagnetic fields is within the content or intent of this technical report.