

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

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**Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs) – Part 1: General rules**

**Interrupteurs automatiques à courant différentiel résiduel sans dispositif de protection contre les surintensités incorporé pour usages domestiques et analogues (ID) – Partie 1: Règles générales**





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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**RESIDUAL CURRENT OPERATED CIRCUIT-BREAKERS  
WITHOUT INTEGRAL OVERCURRENT PROTECTION  
FOR HOUSEHOLD AND SIMILAR USES (RCCBs) –**
**Part 1: General rules**

## FOREWORD

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International Standard IEC 61008-1 has been prepared by subcommittee 23E: Circuit-breakers and similar equipment for household use, of IEC technical committee 23: Electrical accessories.

This third edition cancels and replaces the second edition published in 1996, amendment 1 (2002) and amendment 2 (2006). This edition constitutes a technical revision.

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

- complete revision of EMC sequences, including the new test T.2.6 already approved in IEC 61543;
- clarification of RCDs current/time characteristics reported in Tables 1 and 2;
- revision of test procedure for  $I_{\Delta n}$  between 5 A and 200 A;

- testing procedure regarding the 6mA d.c. current superimposed to the fault current;
- improvement highlighting RCDs with multiple sensitivity;
- tests for the use of RCCBs in IT systems.

The text of this standard is based on the following documents:

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Full information on the voting for the approval of this standard 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 61008 series, published under the general title, *Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs)*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability 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

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## INTRODUCTION

This part includes definitions, requirements and tests, covering all types of RCCBs. For the applicability to a specific type this part applies in conjunction with the relevant part, as follows:

Part 2-1: Applicability of the general rules to RCCBs functionally independent of line voltage.

Part 2-2: Applicability of the general rules to RCCBs functionally dependent on line voltage.