

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Residual current operated circuit-breakers with integral overcurrent protection
for household and similar uses (RCBOs) –
Part 1: General rules**

**Interrupteurs automatiques à courant différentiel résiduel avec dispositif de
protection contre les surintensités incorporé pour usages domestiques et
analogues (DD) –**

Partie 1: Règles générales

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**RESIDUAL CURRENT OPERATED CIRCUIT-BREAKERS
WITH INTEGRAL OVERCURRENT PROTECTION
FOR HOUSEHOLD AND SIMILAR USES (RCBOs) –****Part 1: General rules**

FOREWORD

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The technical content is therefore identical to the base edition and its amendment and has been prepared for user convenience. A vertical line in the margin shows where the base publication has been modified by amendment 1. Additions and deletions are displayed in red, with deletions being struck through.

International Standard IEC 61009-1 has been prepared by subcommittee 23E: Circuit-breakers and similar equipment for household use, of IEC technical committee 23: Electrical accessories.

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 2 and 3;
- revision of test procedure for $I_{\Delta n}$ between 5 A and 200 A;
- tests for the use of RCBOs in IT systems;
- testing procedure regarding the 6mA d.c. current superimposed to the fault current;
- improvement highlighting RCDs with multiple sensitivity;
- some alignments with IEC 60898-1.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all the parts in the IEC 61009 series, under the general title *Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCBOs)*, can be found on the IEC website.

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IMPORTANT – The “colour inside” logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this publication using a colour printer.

The contents of the corrigendum of August 2012 have been included in this copy.

INTRODUCTION

This part includes definitions, requirements and tests covering all types of RCBOs. For 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 RCBOs functionally independent of line voltage.

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

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