

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs) –  
Part 2-2: RCCBs according to classification 4.1.2, 4.1.3, 4.1.4, 4.1.5 and 4.1.6**

**Interrupteurs automatiques à courant différentiel résiduel sans dispositif de protection contre les surintensités incorporé pour usages domestiques et analogiques (ID) –  
Partie 2-2: ID conformes à la classification en 4.1.2, 4.1.3, 4.1.4, 4.1.5 et 4.1.6**



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**Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs) –  
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## CONTENTS

FOREWORD.....	4
1 Scope.....	6
2 Normative references.....	6
3 Terms and definitions.....	7
4 Classification.....	7
4.1 According to the supply conditions.....	7
5 Characteristics of RCCBs.....	8
5.1 Summary of characteristics.....	8
5.2 Rated quantities and other characteristics.....	8
5.3 Standard and preferred values.....	8
6 Marking and other product information.....	8
7 Standard conditions for operation in service and for installation.....	9
8 Requirements for construction and operation.....	9
9 Tests.....	11
9.1 General.....	11
Annex A (normative) Test sequence and number of samples to be submitted for certification purposes.....	32
A.1 Test sequences.....	32
A.2 Number of samples to be submitted for full test procedure.....	33
A.3 Number of samples to be submitted for simplified test procedures if submitting simultaneously a range of RCCBs of the same fundamental design.....	34
Annex D (normative) Routine tests.....	38
D.3 Dielectric strength test.....	38
Bibliography.....	39
Figure 22 – Example for test circuit for verification of ageing of electronic components.....	24
Figure 26 – Gauges of Form A and Form B.....	24
Figure 28 – Test circuit for the verification of operating characteristics and trip-free mechanism for RCCBs classified according to 4.1.2 to 4.1.6.....	25
Figure 29 – Test circuit for the verification of the correct operation in the event of residual pulsating direct currents.....	26
Figure 30 – Test circuit for the verification of the correct operation in the event of residual pulsating direct currents in the presence of a standing smooth direct current of 0,006 A.....	27
Figure 31 – Test circuit for verification of the standing current in the FE.....	28
Figure 33 – Typical diagram for all short circuit tests except for 9.11.2.3 c) for RCCBs according to 4.1.3.....	30
Figure 34 – Typical diagram for short circuit tests according to 9.11.2.3 c) for RCCBs according to 4.1.3.....	31
Table 33 – Requirements for RCCBs classified according to 4.1.2 to 4.1.6.....	23
Table 200 – Gauges for the verification of the rated connecting capacity of the FE terminal.....	23
Table 201 – Additional withstand values and duration of temporary overvoltages for RCCBs classified according to 4.1.3.....	23

Table A.1 – Test sequences..... 32

Table A.2 – Number of samples for full test procedure ..... 34

Table A.3 – Number of samples for simplified test procedure ..... 35

Table A.4 – Test sequences for RCCBs of different classification according to IEC 61008-1:2024, 4.3 ..... 37

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**RESIDUAL CURRENT OPERATED CIRCUIT-BREAKERS  
WITHOUT INTEGRAL OVERCURRENT PROTECTION  
FOR HOUSEHOLD AND SIMILAR USES (RCCBs) –****Part 2-2: RCCBs according to classification  
4.1.2, 4.1.3, 4.1.4, 4.1.5 and 4.1.6**

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IEC 61008-2-2 has been prepared by subcommittee 23E: Circuit-breakers and similar equipment for household use, of IEC technical committee 23: Electrical accessories. It is an International Standard.

This second edition cancels and replaces the first edition published in 1990. This edition constitutes a technical revision.

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

- a) harmonization of all clauses between the IEC 61008, IEC 61009 and IEC 60755 series using blocks and modules approach;

- b) harmonization of all tables and figures between the IEC 61008, IEC 61009 and IEC 60755 series;
- c) terms and definitions are now referred to IEC 62873-2;
- d) modification of 4.1 for classification according to supply conditions;
- e) modification of Clause 6 for markings of RCCBs with a functional earth (FE);
- f) specific tests for operating characteristics of RCCBs according to classifications 4.1.2, 4.1.3, 4.1.4, 4.1.5 and 4.1.6;
- g) specific test conditions for dielectric properties (9.7), temperature rise (9.8), electrical and mechanical endurance (9.10), short-circuit tests (9.11), verification of trip-free (9.15) behaviour in case of loss of the supply voltage (9.17), surge current tests (9.19), reliability (9.20), ageing (9.21) and temporary overvoltage (TOV) (9.24);
- h) additional tests for RCCBs with a terminal connected to the FE: connecting capacity of FE terminal (9.200) and limitation of standing current in the FE (9.201).

The text of this International Standard is based on the following documents:

Draft	Report on voting
23E/1370/FDIS	23E/1387/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 International Standard is to be used in conjunction with IEC 61008-1:2024.

Where this document states "addition", "deletion" or "replacement", the corresponding requirement, test specification or explanatory material in IEC 61008-1:2024 is adapted accordingly.

Where this document defines a new subclause, this subclause number starts at 200 (for example an additional definition in this part would read 3.200).

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).

A list of all parts in 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 document will remain unchanged until the stability date indicated on the IEC website under [webstore.iec.ch](http://webstore.iec.ch) in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

# RESIDUAL CURRENT OPERATED CIRCUIT-BREAKERS WITHOUT INTEGRAL OVERCURRENT PROTECTION FOR HOUSEHOLD AND SIMILAR USES (RCCBs) –

## Part 2-2: RCCBs according to classification 4.1.2, 4.1.3, 4.1.4, 4.1.5 and 4.1.6

### 1 Scope

IEC 61008-1:2024, Clause 1 is applicable except for the first paragraph, which is replaced by the first paragraph below, and the last paragraph, which is replaced by the second paragraph and note below:

This document applies to residual current operated circuit-breakers, without integral overcurrent protection, for household and similar uses (hereafter referred to as RCCBs), classified according to IEC 61008-1:2024, 4.1.2, 4.1.3, 4.1.4, 4.1.5 and 4.1.6. RCCBs according to this document are intended for voltages not exceeding 440 V AC with frequencies of 50 Hz, 60 Hz or 50/60 Hz and currents not exceeding 125 A, intended principally for protection against shock hazard.

This document applies in conjunction with IEC 61008-1:2024. It specifies requirements, tests and test sequences to verify compliance and is used for certification purposes.

NOTE Devices according to this part are not permitted in: D

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 61008-1:2024, *Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs) – Part 1: General rules*

IEC 61543:2022, *Residual current-operated protective devices (RCDs) for household and similar use – Electromagnetic compatibility*

IEC 62873-2, *Residual current operated circuit-breakers for household and similar use – Part 2: Residual current devices (RCDs) – Vocabulary*

IEC 62873-3-1, *Residual current operated circuit-breakers for household and similar use – Part 3-1: Particular requirements for devices with screwless-type terminals for external copper conductors*

IEC 62873-3-2, *Residual current operated circuit-breakers for household and similar use – Part 3-2: Particular requirements for devices with flat quick-connect terminations*