



IEC 62873-3-3

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REDLINE VERSION

# INTERNATIONAL STANDARD



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**Residual current operated circuit-breakers for household and similar use –  
Part 3-3: Specific requirements for ~~RCDs~~ devices with screw-type terminals for  
external untreated aluminium conductors and with aluminium screw-type  
terminals for use with copper or with aluminium conductors**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**RESIDUAL CURRENT OPERATED CIRCUIT-BREAKERS  
FOR HOUSEHOLD AND SIMILAR USE –****Part 3-3: Specific requirements for ~~RCDs~~ devices with screw-type terminals for external untreated aluminium conductors and with aluminium screw-type terminals for use with copper or with aluminium conductors**

## FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as “IEC Publication(s)”). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
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**This redline version of the official IEC Standard allows the user to identify the changes made to the previous edition IEC 62873-3-3:2016. A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text.**

IEC 62873-3-3 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 2016. This edition constitutes a technical revision.

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

- a) Modification of scope to address other devices in addition to RCDs;
- b) Modification of Clause 8 so that IEC 62873-3-3 can be referred to by other product standards in addition to those for RCDs;
- c) Modification of 9.1 so that IEC 62873-3-3 can be referred to by other product standards in addition to those for RCDs.

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

| Draft         | Report on voting |
|---------------|------------------|
| 23E/1274/FDIS | 23E/1306/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.

A list of all parts of the IEC 62873 series published under the general title *Residual current operated circuit-breakers for household and similar use* can be found on the IEC website.

The following differing practices of a less permanent nature exist in the countries indicated below:

- NOTE 2 of Clause 1: the use of aluminium screw-type terminals for use with copper conductors is not allowed (Austria, Australia and Germany);
- NOTE 2 of Clause 1: terminals for aluminium conductors only are not allowed (Austria and Germany);
- NOTE 2 of Clause 1: the use of aluminium conductors is not allowed for final circuits in household and similar installations e.g. offices, shops (Spain);
- NOTE 2 of Clause 1: the minimum cross-sectional area for aluminium conductors is 16 mm<sup>2</sup> (Denmark).

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/standardsdev/publications](http://www.iec.ch/standardsdev/publications).

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

## INTRODUCTION

This document is part of the IEC 62873 series described in the outline document IEC 62873-1.

## RESIDUAL CURRENT OPERATED CIRCUIT-BREAKERS FOR HOUSEHOLD AND SIMILAR USE –

### Part 3-3: Specific requirements for ~~RCDs~~ devices with screw-type terminals for external untreated aluminium conductors and with aluminium screw-type terminals for use with copper or with aluminium conductors

#### 1 Scope

This part of IEC 62873 applies to ~~RCDs~~ devices equipped with screw-type terminals of copper – or of alloys containing at least 58 % of copper (if worked cold) or at least 50 % of copper (if worked otherwise), or of other metal or suitably coated metal, no less resistant to corrosion than copper and having mechanical properties no less suitable – for use with untreated aluminium conductors, or with screw-type terminals of aluminium material for use with copper or aluminium conductors.

~~This part of IEC 62873 cannot be used alone but it is intended to be applied together with an RCD product standard (IEC 61008-1 or IEC 61009-1) if an RCD is equipped with screw type terminals for external untreated aluminium conductors and with aluminium screw-type terminals for use with copper or with aluminium conductors.~~

This document does not cover the use of aluminium conductors or aluminium terminals for DC applications.

Flexible aluminium conductors are not covered by this document.

NOTE 1 Flexible aluminium conductors are under consideration.

This document cannot be used alone but it is intended to be applied together with the applicable product standard.

In this document, copper-clad and nickel-clad aluminium conductors are considered as aluminium conductors.

NOTE 2 In AT, AU and DE, the use of aluminium screw-type terminals for use with copper conductors is not allowed.

- In AT and DE, terminals for aluminium conductors only are not allowed;
- In ES, the use of aluminium conductors is not allowed for final circuits in household and similar installations e.g. offices, shops;
- In DK, the minimum cross-sectional area for aluminium conductors is 16 mm<sup>2</sup>.

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

~~IEC 61009-1, Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCBOs) – Part 1: General rules~~

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



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