



# INTERNATIONAL STANDARD

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**Residual current operated circuit-breakers for household and similar use –  
Part 3-3: Specific requirements for RCDs 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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ICS 29.120.50

ISBN 978-2-8322-3615-4

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

## FOREWORD

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International Standard 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.

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

|              |                  |
|--------------|------------------|
| FDIS         | Report on voting |
| 23E/966/FDIS | 23E/984/RVD      |

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 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 committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website 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- withdrawn,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.

A bilingual version of this publication may be issued at a later date.

## INTRODUCTION

This document is part of the 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 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 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.

In this part of IEC 62873, copper-clad and nickel-clad aluminium conductors are considered as aluminium conductors.

NOTE 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, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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*