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INTERNATIONAL STANDARD



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

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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Part 3-1: Particular requirements for RCDs devices with screwless-type terminals for external copper 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.
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This redline version of the official IEC Standard allows the user to identify the changes made to the previous edition. A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text.

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International Standard IEC 62873-3-1 has been prepared by subcommittee 23E: Circuit-breakers and similar equipment for household use, of IEC technical committee 23: Electrical accessories.

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 cover screwless-type terminals up to 40 A;
- b) Modification of scope to address other devices in addition to RCDs;
- c) Modification of Table 1 to cover rated currents up to 40 A;
- d) Modification of 8.1 so that IEC 62873-3-1 can be referred to by other product standards in addition to those for RCDs:
- e) Modification of 9.1 so that IEC 62873-3-1 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:

FDIS	Report on voting
23E/1190/FDIS	23E/1200/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document is intended to be referred to by a product standard of subcommittee IEC SC23E (e.g. from the IEC 61008 series, IEC 61009 series, IEC 62606, and IEC 63052).

This document 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 document will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
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- amended.

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 document using a colour printer.

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 3-1: Particular requirements for RCDs devices with screwless-type terminals for external copper conductors

1 Scope

This part of IEC 62873 applies to RCDs equipped with screwless terminals, for current not exceeding 20 A primarily suitable for connecting unprepared (see 3.5) copper conductors of cross-section up to 4 mm².

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 screwless terminals.

NOTE-In AT, CZ, DK, NL, NO, PO, PT and CH, the upper limit of current for use of screwless terminals is 16 A.

This document applies to devices equipped with screwless-type terminals for current not exceeding 40 A, primarily suitable for connecting unprepared copper conductors of cross-section up to 10 mm^2 .

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

NOTE 1 In CZ, DK, NL, PO and CH, the upper limit of current for use of screwless-type terminals is 16 A.

NOTE 2 In JP, the upper limit of current for use of screwless-type terminals is 30 A.

NOTE 3 The manufacturer can declare in its documentation specific conditions permitting the use of prepared conductors.

In this document, screwless-type terminals are referred to as terminals, and copper conductors are referred to as conductors.

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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