

# INTERNATIONAL STANDARD

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

IEC 62873-3-2:2016

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IEC 62873-3-2

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**STANDARD PREVIEW**  
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INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**RESIDUAL CURRENT OPERATED CIRCUIT-BREAKERS  
FOR HOUSEHOLD AND SIMILAR USE –**
**Part 3-2: Particular requirements for RCDs  
with flat quick-connect terminations**

## FOREWORD

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International Standard IEC 62873-3-2 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/965/FDIS	23E/983/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- withdrawn,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.

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## INTRODUCTION

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

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

## Part 3-2: Particular requirements for RCDs with flat quick-connect terminations

### 1 Scope

This part of IEC 62873 applies to RCDs equipped with flat quick-connect terminations consisting of a male tab (see 3.2) with nominal width 6,3 mm and thickness 0,8 mm, to be used with a mating female connector for connecting electrical copper conductors according to the manufacturer's instructions, for rated currents up to and including 16 A.

NOTE The use of RCDs with flat quick-connect terminations for rated currents up to and including 20 A is accepted in BE, FR, IT, ES, PT and US.

This part of IEC 62873 cannot be used alone but is intended to be applied together with an RCD product standard (IEC 61008-1 or IEC 61009-1) if an RCD is equipped with flat quick-connect terminations.

The connectable electrical copper conductors are flexible, having a cross-sectional area up to and including 4 mm<sup>2</sup>, or rigid stranded, having a cross-sectional area up to and including 2,5 mm<sup>2</sup> (AWG equal to or greater than 12).

This part of IEC 62873 applies exclusively to RCDs having male tabs as an integral part of the device.

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### 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 61210, *Connecting devices – Flat quick-connect terminations for electrical copper conductors – Safety requirements*

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

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 62873-2 and the following apply.



**3.1****flat quick-connect termination**

electrical connection consisting of a male tab and a female connector which can be pushed into and withdrawn with or without the use of a tool

**3.2****male tab**

portion of a quick-connect termination which receives the female connector

**3.3****female connector**

portion of a quick-connect termination which is pushed onto the male tab

**3.4****detent**

dimple (depression) or hole in the male tab which engages a raised portion on the female connector to provide a latch for the mating parts

**4 Classification**

Clause 4 of the RCD product standard applies.

**5 Characteristics of RCDs**

Clause 5 of the RCD product standard applies.

**6 Marking and other product information**

In addition to Clause 6 of the RCD product standard, the following requirements apply.

The following information regarding the female connector according to IEC 61210 and the type of conductor to be used shall be given in the manufacturer's instructions:

- manufacturer's name or trade mark;
- type reference;
- information on cross-sections of conductors and colour codes of insulated female connectors (see examples in Table 1 below);
- the use of only silver- or tin-plated copper alloys.

**Table 1 – Colour code of female connectors in relationship with the cross-section of the conductor**

Cross-section of the conductor mm <sup>2</sup>	Colour code of the female connector
1	Red
1,5	Red or blue
2,5	Blue or yellow
4	Yellow

**7 Standard conditions for operation in service and for installation**

Clause 7 of the RCD product standard applies.