

# INTERNATIONAL STANDARD

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

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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 devices  
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.

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 the scope to address other devices in addition to RCDs;
- b) Modification of 8.1 so that IEC 62873-3-2 can be referred to by other product standards in addition to those for RCDs;
- c) Modification of 9.1 so that IEC 62873-3-2 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/1195/FDIS	23E/1201/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- withdrawn,
- replaced by a revised edition, or
- amended.

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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 devices with flat quick-connect terminations

### 1 Scope

This document applies to devices equipped with flat quick-connect terminations consisting of a male tab 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 flat quick-connect terminations for rated currents up to and including 20 A is accepted in BE, FR, IT, ES, PT and US.

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

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 document applies exclusively to products having male tabs as an integral part of the device.

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### 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 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.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <http://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

#### 3.1

##### **flat quick-connect termination**

electrical connection consisting of a male tab (3.2) and a female connector (3.3) 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 product standard, in which this document is referred to, applies.

**5 Characteristics of products**

Clause 5 of the product standard, in which this document is referred to, applies.

**6 Marking and other product information**

In addition to Clause 6 of the product standard, in which this document is referred to, the following requirements apply.

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

- manufacturer's name or trademark;
- type reference;
- information on cross-sections of conductors and colour codes of insulated female connectors (see examples in Table 1);
- 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		Colour code of the female connector
mm <sup>2</sup>	AWG	
1	18	Red
1,5	16	Red or blue
2,5	14	Blue or yellow
4	12	Yellow

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

Clause 7 of the product standard, in which this document is referred to, applies.