IEC 62873-1

Edition 1.1 2020-11
CONSOLIDATED VERSION

FINAL VERSION

VERSION FINALE

**Residual current operated circuit-breakers for household and similar use –
Part 1: Outline of blocks and modules for residual current device standards**

**Interrupteurs automatiques à courant différentiel résiduel pour usage domestique et analogue –
Partie 1: Présentation des blocs et modules pour les normes des dispositifs différentiels résiduels**

IEC 62873-1:2011+AMD1:2020-11 CSV(en-fr)

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

_____

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

Part 1: Outline of blocks and modules for residual current device standards

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.
3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
6) All users should ensure that they have the latest edition of this publication.
7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

This consolidated version of the official IEC Standard and its amendment has been prepared for user convenience.

IEC 62873-1 edition 1.1 contains the first edition (2017-01) [documents 23E/945/CDV and 23E/988/RVC] and its amendment 1 (2020-11) [documents 23E/1196/FDIS and 23E/1202/RVD].

This Final version does not show where the technical content is modified by amendment 1. A separate Redline version with all changes highlighted is available in this publication.

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

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 the base publication and its amendment will remain unchanged until the stability date indicated on the IEC web site 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.

INTRODUCTION

When revising standards within the same group of standards (e.g. RCCBs, RCBOs), it can be clearly seen that there are some common clauses (e.g. reliability of terminals, markings), some clauses with limited differences and some clauses that are completely different (e.g. short-circuit test clauses for RCCBs and RCBOs).

In many cases, there are some mistakes or inconsistencies in clauses which should be identical. Moreover, during each revision, some modifications are made in a document and not systematically introduced in the other documents of the same group of standards, thus leading to new inconsistencies or mistakes. In addition, there are also some significant differences between IEC TR 60755 and IEC 61008-1 or IEC 61009-1, although these three standards should be consistent.

In consultation with the IEC Central Office, SC 23E developed a new approach allowing the production of short papers dealing with only one topic (e.g. one clause of a standard) in order to improve the efficiency of the work and to avoid the many mistakes and discrepancies introduced within the standards over the years. A template was agreed for producing this work.

This approach was launched with several clauses in order to avoid the mistakes and the discrepancies within clauses which should be similar or identical.

This document defines the objectives of this approach, the scope, the methodology and the processes. This document constitutes also a summary of the blocks and modules.

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

Part 1: Outline of blocks and modules for residual current device standards

1 Scope

The IEC 62873 series covers available common standards intended to be used in conjunction with or for the preparation of RCD (residual current device) standards.

This part of IEC 62873 defines the methodology and processes used when producing standards based on a new approach (hereafter referred to as blocks and modules) aiming at harmonizing a family of standards, thus avoiding mistakes, inconsistencies or discrepancies within this family of standards. The family of standards considered in this document consists of standards for RCCBs (Residual Current Circuit-Breakers without overcurrent protection), RCBOs (Residual Current Circuit-Breakers with overcurrent Protection), and general safety requirements for residual current operated protective devices (namely IEC 61008-1, IEC 61009-1 and IEC TR 60755).

The prepared modules may be used for the preparation of standards other than those for RCCBs, RCBOs and IEC 60755, provided that the relevance of content of the module is carefully verified.

This approach defines a way to optimize drafting of standards, aiming to keep a common or similar structure, to have common clauses (as far as possible), to avoid inconsistencies, to do editorial work only once, to speed up production of standards, to ensure that a comment on one clause in one standard is also taken into account in other standards, if needed.

The principles of the blocks and modules approach are:

– to identify those parts of the standards which need to be identical (or with limited differences), and those parts of the standards which should remain different;
– to set a library of those common parts;
– to identify the parts which should be published as stand-alone standards;
– to draft product standards, using the library;
– to keep track of the common parts used in a product standard when revision will be needed in the future.

This document also lists the available blocks and modules which were prepared for RCD product standards.

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 TR 60755, *General requirements for residual current operated protective devices*