BS EN 60898-2:2021

BSI Standards Publication

Electrical accessories – Circuit-breakers for overcurrent protection for household and similar installations

Part 2: Circuit-breakers for a.c. and d.c. operation

bsi.

National foreword

This British Standard is the UK implementation of EN 60898-2:2021. It is derived from IEC 60898-2:2016. It supersedes BS EN 60898-2:2006, which will be withdrawn on 13 July 2024.

The CENELEC common modifications have been implemented at the appropriate places in the text. The start and finish of each common modification is indicated in the text by tags 〈C〉 〈C〉.

The UK participation in its preparation was entrusted to Technical Committee PEL/23/1, Circuit breakers and similar equipment for household use.

A list of organizations represented on this committee can be obtained on request to its committee manager.

This publication has been prepared under a mandate given to the European Standards Organizations by the European Commission and the European Free Trade Association. It is intended to support requirements of the EU legislation detailed in the European Foreword. A European Annex, usually Annex ZA or ZZ, describes how this publication relates to that EU legislation.

For the Great Britain market (England, Scotland and Wales), if UK Government has designated this publication for conformity with UKCA marking (or similar) legislation, it may contain an additional National Annex. Where such a National Annex exists, it shows the correlation between this publication and the relevant UK legislation. If there is no National Annex of this kind, the relevant Annex ZA or ZZ in the body of the European text will indicate the relationship to UK regulation applicable in Great Britain. References to EU legislation may need to be read in accordance with the UK designation and the applicable UK law. Further information on designated standards can be found at www.bsigroup.com/standardsandregulation.

For the Northern Ireland market, UK law will continue to implement relevant EU law subject to periodic confirmation. Therefore Annex ZA/ZZ in the European text, and references to EU legislation, are still valid for this market.

UK Government is responsible for legislation. For information on legislation and policies relating to that legislation, consult the relevant pages of www.gov.uk.

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Amendments/corrigenda issued since publication

Date	Text affected

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60898-2

August 2021

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English Version

Electrical accessories - Circuit-breakers for overcurrent protection for household and similar installations - Part 2: Circuit-breakers for a.c. and d.c. operation (IEC 60898-2:2016, modified)

Petit appareillage électrique - Disjoncteurs pour la protection contre les surintensités pour installations domestiques et analogues - Partie 2: Disjoncteurs pour le fonctionnement en courant alternatif et en courant continu (IEC 60898-2:2016, modifiée)

Elektrisches Installationsmaterial - Leitungsschutzschalter für Hausinstallationen und ähnliche Zwecke - Teil 2: Leitungsschutzschalter für Wechsel- und Gleichstrom (AC und DC) (IEC 60898-2:2016, modifiziert)

This European Standard was approved by CENELEC on 2021-07-13. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

This document (EN 60898-2:2021) consists of the text of IEC 60898-2:2016 prepared by SC 23E “Circuit-breakers and similar equipment for household use” of IEC/TC 23 “Electrical accessories”, together with the common modifications prepared by CLC/TC 23E “Circuit breakers and similar devices for household and similar applications”.

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2022-07-13
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2024-07-13

This Part 2 is to be used in conjunction with EN 60898-1:2019 referred hereafter as Part 1.

Clauses, subclauses, notes, tables, figures and annexes which are additional to those in IEC 60898-2:2016 are prefixed “Z”.

This document has been prepared under a Standardization Request given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

For the relationship with EU Directive(s) see informative Annex ZZ, which is an integral part of this document.

Any feedback and questions on this document should be directed to the users’ national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 60898-2:2016 was approved by CENELEC as a European Standard with agreed common modifications.

〖C〉 *Annex ZB of Part 1 applies with the following addition:*

IEC 60898-1	2015	Electrical accessories - Circuit-breakers for overcurrent protection for household and similar installations - Part 1: Circuit-breakers for a.c. operation	EN 60898-1	2019 〈C〗

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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ELECTRICAL ACCESSORIES – CIRCUIT-BREAKERS FOR OVERCURRENT PROTECTION FOR HOUSEHOLD AND SIMILAR INSTALLATIONS –

Part 2: Circuit-breakers for AC and DC operation

FOREWORD

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International Standard IEC 60898-2 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 2000 and Amendment 1:2003. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) alignment with second edition of IEC 60898-1;
b) introduction of test I_{cn1}.

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

FDIS	Report on voting
23E/951A/FDIS	23E/976/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 in the IEC 60898 series, published under the general title *Electrical accessories – Circuit-breakers for overcurrent protection for household and similar installations*, can be found on the IEC website.

This Part 2 is to be used in conjunction with IEC 60898-1.

Where a particular subclause of Part 1 is not mentioned in this Part 2, that subclause applies as far as is reasonable. Where this Part 2 states “addition”, “deletion” or “replacement”, the corresponding requirement, test specification or explanatory material in Part 1 should be adapted accordingly.

In this standard, the following print types are used:

– Requirements proper: in roman type.

– *Test specifications: in italic type.*

– Explanatory matter: in smaller roman type.

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.

ELECTRICAL ACCESSORIES – CIRCUIT-BREAKERS FOR OVERCURRENT PROTECTION FOR HOUSEHOLD AND SIMILAR INSTALLATIONS –

Part 2: Circuit-breakers for AC and DC operation

1 Scope

〖C〗 Clause 1 of Part 1 is applicable except as follows: 〖C〗

Addition at the end of the first paragraph:

This standard gives additional requirements for single- and two-pole circuit-breakers which, in addition to the above characteristics, are suitable for operation with direct current, and have a rated DC voltage not exceeding 220 V for single-pole and 440 V for two-pole circuit-breakers, a rated current not exceeding 125 A and a rated DC short-circuit capacity not exceeding 10 000 A.

NOTE This standard applies to circuit-breakers able to make and break both alternating current and direct current.

Delete the last two paragraphs.

2 Normative references

〖C〗 Clause 2 of Part 1 is applicable except as follows: 〖C〗

Addition:

IEC 60898-1:2015, *Electrical accessories – Circuit-breakers for overcurrent protection for household and similar installations – Part 1: Circuit-breakers for a.c. operation*

〖C〗 NOTE See Annex ZB for corresponding European publications. 〖C〗

3 Terms and definitions

〖C〗 Clause 3 of Part 1 is applicable except as follows: 〖C〗

Addition:

3.5.10.3
time constant
T
rise time of a prospective direct current to reach a value of 0,63 times the maximum peak current

$T = L/R$ (ms)

4 Classification

〖C〗 Clause 4 of Part 1 is applicable except as follows: 〖C〗