



SLOVENSKI STANDARD
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Električni pribor - Odklopniki za nadtokovno zaščito za gospodinske in podobne inštalacije - 3. del: Odklopniki za enosmerni tok (IEC 60898-3:2019)

Electrical accessories - Circuit-breakers for overcurrent protection for household and similar installations - Part 3: Circuit-breakers for DC operation (IEC 60898-3:2019)

Elektrisches Installationsmaterial - Leitungsschutzschalter für Hausinstallationen und ähnliche Zwecke - Teil 3: Leitungsschutzschalter für Gleichstrom (DC) (IEC 60898-3:2019)

Petit appareillage électrique - disjoncteurs pour la protection contre les surintensités pour installations domestiques et analogues - Partie 3: Disjoncteurs pour le fonctionnement en courant continu (IEC 60898-3:2019)

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ICS:

29.120.50	Varovalke in druga nadtokovna zaščita	Fuses and other overcurrent protection devices
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**Electrical accessories - Circuit-breakers for overcurrent
protection for household and similar installations - Part 3: Circuit-
breakers for DC operation
(IEC 60898-3:2019)**

Petit appareillage électrique - disjoncteurs pour la protection
contre les surintensités pour installations domestiques et
analogues - Partie 3: Disjoncteurs pour le fonctionnement
en courant continu
(IEC 60898-3:2019)

Elektrisches Installationsmaterial - Leitungsschutzschalter
für Hausinstallationen und ähnliche Zwecke - Teil 3:
Leitungsschutzschalter für Gleichstrom (DC)
(IEC 60898-3:2019)

This draft European Standard is submitted to CENELEC members for enquiry.
Deadline for CENELEC: 2023-10-20.

The text of this draft consists of the text of IEC 60898-3:2019 (23E/1122/FDIS).

If this draft becomes a European Standard, 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.

This draft European Standard was established by CENELEC in three official versions (English, French, German).
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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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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

prEN IEC 60898-3:2023 (E)**European foreword**

This document (prEN IEC 60898-3:2023) consists of the text of document IEC 60898-3:2019, prepared by SC 23E "Circuit-breakers and similar equipment for household use" of IEC/TC 23 "Electrical accessories".

This document is currently submitted to the Enquiry.

The following dates are proposed:

- latest date by which the existence of this document (doa) dor + 6 months
has to be announced at national level
- latest date by which this document has to be (dop) dor + 12 months
implemented at national level by publication of an
identical national standard or by endorsement
- latest date by which the national standards (dow) dor + 36 months
conflicting with this document have to be withdrawn
(to be confirmed or
modified when voting)

This document is read in conjunction with prEN IEC 60898-3:2023/prA1:2023 and prEN IEC 60898-3:2023/prAA:2023.

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 relationship with EU Directive(s) / Regulation(s), see informative Annex ZZ, which is an integral part of prEN IEC 60898-3:2023/prAA:2023.



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INTERNATIONAL STANDARD

Electrical accessories – Circuit-breakers for overcurrent protection for household and similar installations – Part 3: Circuit-breakers for DC operation

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 3: Circuit-breakers for DC operation

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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International Standard IEC 60898-3 has been prepared by sub-committee 23E: Circuit-breakers and similar equipment for household use, of IEC technical committee 23: Electrical accessories.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
23E/1122FDIS	23E/1126/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 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.

In this document, the following print types are used:

- Requirements proper: in roman type.
- *Test specifications: in italic type.*
- Explanatory matter: in smaller roman type.

The following differences exist in the countries indicated below.

- 4.7, Note 2: In China, other ranges of instantaneous tripping defined by the manufacturer are allowed.
- Clause 6, Notes 1 and 2: In the following countries: DK, FI, NO, SE and ZA the marking of the symbol on the circuit-breaker is mandatory to indicate that the device provides isolation for the installation downstream. In Australia this marking on the circuit-breaker is mandatory but is not required to be visible after installation.
- H.1, Note: In CZ, DK, NL, NO and CH, the upper limit of current for use of screwless terminals is 16 A.
- H.3.3, Note 1 to entry: In the following countries only universal screwless type terminals are accepted: AT, BE, CN, DK, DE, ES, FR, IT, PT and SE.
- Clause I.1, Note: The use of circuit-breakers with flat quick-connect terminations for rated currents up to and including 20 A is accepted in BE, FR, IT, ES, PT and US.
- I.8.2.2, Note 1: The use for rated currents up to and including 20 A is accepted in BE, FR, IT, PT, ES and US.
- Clause J.1, Note: In Austria, Australia and Germany, the use of aluminium screw-type terminals for use with copper conductors is not allowed.
- In Austria and Germany, terminals for aluminium conductors only are not allowed.
- In Spain, the use of aluminium conductors is not allowed for final circuits in household and similar installations e.g. offices, shops.
- In Denmark, the minimum cross-sectional area for aluminium conductors is 16 mm².

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.

A bilingual version of this publication may be issued at a later date.

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

Part 3: Circuit-breakers for DC operation

1 Scope

This part of IEC 60898 applies to DC circuit-breakers, having a rated DC voltage not exceeding 440 V, a rated current not exceeding 125 A and a rated short-circuit capacity not exceeding 10 000 A.

These circuit-breakers are intended for the protection against overcurrents of wiring installations of buildings and similar applications; they are designed for use by uninstructed people and for not being maintained.

They are intended for use in an environment with pollution degree 2.

They are suitable for isolation.

Circuit-breakers in compliance with this document are suitable for use in TN, TT, and, under specific conditions, IT systems.

This document also applies to circuit-breakers having more than one rated current, provided that the means for changing from one discrete rating to another is not accessible in normal service and that the rating cannot be changed without the use of a tool.

This document does not apply to

- circuit-breakers intended to protect motors;
- circuit-breakers, the current setting of which is adjustable by means accessible to the user.

For circuit-breakers having a degree of protection higher than IP20 according to IEC 60529, for use in locations where arduous environmental conditions prevail (e.g. excessive humidity, heat or cold or deposition of dust) and in hazardous locations (e.g. where explosions are liable to occur), special constructions can be required.

For an environment with a higher pollution degree, enclosures giving the appropriate degree of protection are used.

This document does not apply to circuit-breakers for AC operation, which is covered by IEC 60898-1.

This document does not apply to circuit-breakers for AC and DC operation, which is covered by IEC 60898-2.

Circuit breakers according to this document have a high resistance against unwanted tripping, regardless whether caused by in-rush currents through loading of electronic loads or by switching operations in the circuit.

NOTE Circuit-breakers within the scope of this document can also be used for protection against electric shock in case of a fault, depending on their tripping characteristics and on the characteristics of the installation. The criterion of application for such purposes is dealt with by installation rules.