

## SEADMETE KAITSELÜLITID

Circuit breakers for equipment (CBE)

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN IEC 60934:2019 sisaldab Euroopa standardi EN IEC 60934:2019 ingliskeelset teksti.	This Estonian standard EVS-EN IEC 60934:2019 consists of the English text of the European standard EN IEC 60934:2019.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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English Version

**Circuit breakers for equipment (CBE)  
(IEC 60934:2019)**

Disjoncteurs pour équipement (DPE)  
(IEC 60934:2019)

Geräteschutzschalter (GS)  
(IEC 60934:2019)

This European Standard was approved by CENELEC on 2019-03-06. 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.

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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**

## European foreword

The text of document 23E/1084/FDIS, future edition 4 of IEC 60934, prepared by SC 23E "Circuit-breakers and similar equipment for household use" of IEC/TC 23 "Electrical accessories" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60934:2019.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2020-03-20
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-09-20

This document supersedes EN 60934:2001 and all of its amendments and corrigenda (if any).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

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

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

## Endorsement notice

The text of the International Standard IEC 60934:2019 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60038:2009	NOTE	Harmonized as EN 60038:2011
IEC 60112:2003	NOTE	Harmonized as EN 60112:2003 (not modified)
IEC 60112:2003/A1:2009	NOTE	Harmonized as EN 60112:2003/A1:2009 (not modified)
IEC 60269 (series)	NOTE	Harmonized as EN 60269 (series)
IEC 60664 (series)	NOTE	Harmonized as EN 60664 (series)
IEC 60947-1:2007	NOTE	Harmonized as EN 60947-1:2007 (not modified)
IEC 61543:1995	NOTE	Harmonized as EN 61543:1995 (not modified)
IEC 61543:1995/A2:2005	NOTE	Harmonized as EN 61543:1995/A2:2006 (not modified)

## Annex ZA

(normative)

### Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cenelec.eu](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60060-1	2010	High-voltage test techniques - Part 1: General definitions and test requirements	EN 60060-1	2010
IEC 60068-2-20	-	Environmental testing - Part 2-20: Tests - Test T: Test methods for solderability and resistance to soldering heat of devices with leads	EN 60068-2-20	2008
IEC 60227	series	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V		-
IEC 60417	1973 <sup>1</sup>	Graphical symbols for use on equipment. - Index, survey and compilation of the single sheets.		-
IEC 60529	2013 <sup>1</sup>	Degrees of protection provided by enclosures (IP Code)		-
IEC 60664-1	2007	Insulation coordination for equipment within low-voltage systems - Part 1: Principles, requirements and tests	EN 60664-1	2007
IEC 60664-3	-	Insulation coordination for equipment within low-voltage systems - Part 3: Use of coating, potting or moulding for protection against pollution	EN 60664-3	2017
IEC 60695-2-10	-	Fire hazard testing - Part 2-10: Glowing/hot-wire based test methods - Glow-wire apparatus and common test procedure	EN 60695-2-10	2013
IEC 60898-1 (mod)	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

<sup>1</sup> Dated as no equivalent European Standard exists.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61000-4-2	-	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	EN 61000-4-2	2009
IEC 61000-4-3	2008 <sup>1</sup>	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	-	-
IEC 61000-4-4	-	Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test	EN 61000-4-4	2012
IEC 61000-4-5	-	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test	EN 61000-4-5	2014
			+ A1	2017
IEC 61000-6-1	-	Electromagnetic compatibility (EMC) - Part 6-1: Generic standards - Immunity standard for residential, commercial and light-industrial environments	EN IEC 61000-6-1	2019
CISPR 32	-	Electromagnetic compatibility of multimedia equipment - Emission requirements	EN 55032	2015

## Annex ZZ

(informative)

### Coverage of Essential Requirements of EU Directives

This European Standard has been prepared under a Commission's standardization request relating to harmonized standards in the field of the Low Voltage Directive, M/511, to provide one voluntary means of conforming to safety objectives of Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonization of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits [2014 OJ L96].

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZZ.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding essential requirements of that Directive, and associated EFTA regulations.

**Table ZZ.2 – Correspondence between this European standard and Article 3 of Directive 2014/35/EU [2014 OJ L153]**

Safety Objectives of Directive 2014/35/EU	Clause(s) / sub-clause(s) of this EN	Remarks / Notes
(1)(a)	1, 2, 3, 4, 5, 6 – 9.3	
(1)(b)	8.1.1, 8.1.2, 8.1.5, 8.1.6, 8.1.7, 9.1, 9.2, 9.3, 9.4.1, 9.4.2, 9.4.3, Annex E	
(1)(c)	7 – 9.1 and 9.2, Annex J	
(2) (a)	8.2, 8.5, 8.6, 8.7, 9.6, 9.8, 9.9, 9.10, 9.11, 9.12, Annex C	
(2) (b)	8.3, 8.5, 8.6, 8.7, 9.8, 9.9, 9.10, 9.11, 9.12, Annex C	
(2) (c)	6, 8.1.2, 9.11.4.1, 9.12.4.2	
(2) (d)	8.1.3, 8.4, 9.7, Annex B	
(3) (a)	8.8, 8.12, 9.13, 9.17	
(3) (b)	8.9, 8.10, 9.14, 9.15, Annex G	
(3) (c)	8.5, 8.6, 8.7, 9.10, 9.11 9.12	

**WARNING 1** — Presumption of conformity stays valid only as long as a reference to this European standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

**WARNING 2** — Other Union legislation may be applicable to the product(s) falling within the scope of this standard.

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# INTERNATIONAL ELECTROTECHNICAL COMMISSION

## CIRCUIT-BREAKERS FOR EQUIPMENT (CBE)

### 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 60934 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 International Standard is based on the following documents:

FDIS	Report on voting
23E/1084/FDIS	23E/1104/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.

This fourth edition cancels and replaces the third edition published in 2000, Amendment 1:2007 and Amendment 2:2013. This edition constitutes a technical revision.