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Strömställare för bruksföremål – Del 1: Allmänna fordringar

*Switches for appliances –
Part 1: General requirements*

Som svensk standard gäller europastandarden EN IEC 61058-1:2018. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 61058-1:2018.

Nationellt förord

Europastandarden EN IEC 61058-1:2018

består av:

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- **IEC 61058-1, Fourth edition, 2016 - Switches for appliances - Part 1: General requirements**

utarbetad inom International Electrotechnical Commission, IEC.

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Tidigare fastställd svensk standard SS-EN 61058-1, utgåva 3, 2002 och SS-EN 61058-1/A2, utgåva 1, 2008, gäller ej fr o m 2021-05-25.

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English Version

Switches for appliances - Part 1: General requirements (IEC 61058-1:2016)

Interrupteurs pour appareils - Partie 1: Exigences générales
(IEC 61058-1:2016)

Geräteschalter - Teil 1: Allgemeine Anforderungen
(IEC 61058-1:2016)

This European Standard was approved by CENELEC on 2016-08-24. 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.

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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 23J/401/FDIS, future edition 4 of IEC 61058-1, prepared by SC 23J "Switches for appliances", of IEC/TC 23 "Electrical accessories" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61058-1:2017.

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) 2018-11-25
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2021-05-25

This document supersedes EN 61058-1:2002.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] 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 Directives 2014/30/EU and 2014/35/EU, see informative Annexes ZZA and ZZB, which are an integral part of this document.

Endorsement notice

The text of the International Standard IEC 61058-1:2016 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 60034-1:2010	NOTE	Harmonized as EN 60034-1:2010 (modified).
IEC 60068-2-20:2008	NOTE	Harmonized as EN 60068-2-20:2008 (not modified).
IEC 60085:2007	NOTE	Harmonized as EN 60085:2008 (not modified).
IEC 60228:2004	NOTE	Harmonized as EN 60228:2005 (not modified).
IEC 60335-1	NOTE	Harmonized as EN 60335-1.
IEC 60335-2	NOTE	Harmonized in EN 60335-2 series.
IEC 60664-1:2007	NOTE	Harmonized as EN 60664-1:2007 (not modified).
IEC 60893-1:2004	NOTE	Harmonized as EN 60893-1:2004 (not modified).

IEC 60998-2-3:2002	NOTE	Harmonized as EN 60998-2-3:2004 (modified).
IEC 61000	NOTE	Harmonized in EN 61000 series.
IEC 61140	NOTE	Harmonized as EN 61140.

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 When 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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60038	-	IEC standard voltages	EN 60038	2011
IEC 60060-1	-	High-voltage test techniques - Part 1: General definitions and test requirements	EN 60060-1	2010
IEC 60065 (mod)	2014	Audio, video and similar electronic apparatus - Safety requirements	EN 60065	2014
			+ A11	2017
IEC 60068-2-75	-	Environmental testing - Part 2-75: Tests - Test Eh: Hammer tests	EN 60068-2-75	2014
IEC 60112 + A1	2003	Method for the determination of the proof and the comparative tracking indices of solid insulating materials	EN 60112	2003
	2009		+ A1	2009
IEC 60127	series	Miniature fuses	EN 60127	series
IEC 60127-2	-	Miniature fuses - Part 2: Cartridge fuse-links	EN 60127-2	2014
IEC 60269-3	-	Low-voltage fuses - Part 3: Supplementary requirements for fuses for use by unskilled persons (fuses mainly for household or similar applications) - Examples of standardized systems of fuses A to F	HD 60269-3	2010
			+ A1	2013
IEC 60384-14	-	Fixed capacitors for use in electronic equipment - Part 14: Sectional specification - Fixed capacitors for electromagnetic interference suppression and connection to the supply mains	EN 60384-14	2013
			+ A1	2016
IEC 60417	-	Graphical symbols for use on equipment	-	-

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529	1991
-	-		+ corr. May	1993
+ A1	1999		+ A1	2000
+ A2	2013		+ A2	2013
IEC 60617	-	Graphical symbols for diagrams	-	-
IEC 60664-3	2003	Insulation coordination for equipment within low-voltage systems - Part 3: Use of coating, potting or moulding for protection against pollution	EN 60664-3	2003
+ A1	2010		+ A1	2010
IEC 60691	-	Thermal-links - Requirements and application guide	EN 60691	2016
IEC 60695-2-11	-	Fire hazard testing - Part 2-11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products (GWEPT)	EN 60695-2-11	2014
IEC 60695-10-2	-	Fire hazard testing - Part 10-2: Abnormal heat - Ball pressure test method	EN 60695-10-2	2014
IEC 60695-11-10	-	Fire hazard testing - Part 11-10: Test flames - 50 W horizontal and vertical flame test methods	EN 60695-11-10	2013
IEC 60695-11-20	-	Fire hazard testing - Part 11-20: Test flames - 500 W flame test methods	EN 60695-11-20	2015
			+ AC	2014
IEC 60730	series	Automatic electrical controls	EN 60730	series
IEC 60730-1 (mod)	2013	Automatic electrical controls - Part 1: General requirements	EN 60730-1	2016
			+ A1	2016
IEC 60730-2-9	2015	Automatic electrical controls - Part 2-9: Particular requirements for temperature sensing controls	EN 60730-2-9	2016
IEC 60738-1	-	Thermistors - Directly heated positive temperature coefficient - Part 1: Generic specification	EN 60738-1	2006
			+ A1	2009
IEC 61000-3-2	-	Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)	EN 61000-3-2	2014
IEC 61000-3-3	-	Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection	EN 61000-3-3	2013
IEC/TS 61000-3-5	-	Electromagnetic compatibility (EMC) - Part 3-5: Limits - Limitation of voltage fluctuations and flicker in low-voltage power supply systems for equipment with rated current greater than 75 A	-	-

EN IEC 61058-1:2018 (E)

<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	-	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	EN 61000-4-3 + A1 + A2	2006 2008 2010
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
IEC 61000-4-8	-	Electromagnetic compatibility (EMC) - Part 4-8: Testing and measurement techniques - Power frequency magnetic field immunity test	EN 61000-4-8	2010
IEC 61000-4-11	-	Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests	EN 61000-4-11 + A1	2004 2017
IEC 61032	1997	Protection of persons and equipment by enclosures - Probes for verification	EN 61032	1998
IEC 61058-1-1	-	Switches for appliances - Part 1-1: Requirements for mechanical switches	EN 61058-1-1	2016
IEC 61058-1-2	-	Switches for appliances - Part 1-2: Requirements for electronic switches	EN 61058-1-2	2016
IEC 61210 (mod)	2010	Connecting devices - Flat quick-connect terminations for electrical copper conductors - Safety requirements	EN 61210	2010
CISPR 14-1	-	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission	EN 55014-1 + A1 + A2	2006 2009 2011
CISPR 15	2013	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment	EN 55015 + A1	2013 2015

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SWITCHES FOR APPLIANCES –**Part 1: General requirements****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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- 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.

International Standard IEC 61058-1 has been prepared by subcommittee 23J: Switches for appliances, of IEC technical committee 23: Electrical accessories.

This fourth edition cancels and replaces the third edition published in 2000, Amendment 1:2001 and Amendment 2:2007. This edition constitutes a technical revision.

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

- a) requirements for mechanical switches are now given in IEC 61058-1-1;
- b) requirements for electronic switches are now given in IEC 61058-1-2.

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

FDIS	Report on voting
23J/401/FDIS	23J/405/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 61058 series, published under the general title *Switches for appliances*, can be found on the IEC website.

In this part, the following print types are used:

- requirements proper: roman type;
- test specifications: *italic type*;
- notes: 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.

SWITCHES FOR APPLIANCES –

Part 1: General requirements

1 Scope

This part of IEC 61058 applies to switches for appliances. The switches are intended to control electrical appliances and other equipment for household or similar purposes with a rated voltage not exceeding 480 V and a rated current not exceeding 63 A.

Switches for appliances are intended to be operated by

- a person via an actuating member,
- indirect actuation,
- an actuating sensing unit.

Transmission of a signal between the actuating member or sensing unit and the switch may be connected by optical, acoustic, thermal, electrical or other relevant connection and may include remote controlled units.

This part of IEC 61058 applies to switches for appliances provided with additional control functions governed by the switch provided with electronic circuits and devices that are necessary for the intended and/or correct operation of the switch.

This part of IEC 61058 applies to circuitry when evaluated with a switch and necessary for the switching function.

This part of IEC 61058 applies in general to switches for appliances in conjunction with the following parts:

- *Part 1-1: Requirements for mechanical switches, and/or*
- *Part 1-2: Requirements for electronic switches.*

This part of IEC 61058 does not apply to devices covered by:

- IEC 60669 (all parts), *Switches for household and similar fixed-electrical installations*, and
- IEC 60730 (all parts), *Automatic electrical controls*.

This part of IEC 61058 does not contain requirements for safety isolating switches (IEC 60050-811:1991, 811-29-17).

NOTE 1 For switches used in tropical climates, additional requirements may be necessary.

NOTE 2 Attention is drawn to the fact that the end product standards for appliances may contain additional or alternative requirements for switches.

NOTE 3 Throughout this part of IEC 61058, the word "appliance" means "appliance or equipment".

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60038, *IEC standard voltages*

IEC 60060-1, *High-voltage techniques – Part 1: General definitions and test requirements*

IEC 60065:2014, *Audio, video and similar electronic apparatus – Safety requirements*

IEC 60068-2-75, *Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests*

IEC 60112:2003, *Method for the determination of the proof and the comparative tracking indices of solid insulating materials*
Amendment 1:2009

IEC 60127 (all parts), *Miniature fuses*

IEC 60127-2, *Miniature fuses – Part 2: Cartridge fuse-links*

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