



BSI Standards Publication

Switches for household and similar fixed-electrical installations

Part 1: General requirements

National foreword

This British Standard is the UK implementation of EN 60669-1:2018, incorporating corrigendum November 2018. It is derived from IEC 60669-1:2017, incorporating corrigendum January 2020. It supersedes BS EN 60669-1:1999+A2:2008, which will be withdrawn on 13 February 2021.

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 start and finish of text introduced or altered by corrigendum is indicated in the text by tags. Text altered by IEC corrigendum January 2020 is indicated in the text by **[AC1]** **[AC1]**.

The UK participation in its preparation was entrusted to Technical Committee PEL/23, Electrical accessories.

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

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Compliance with a British Standard cannot confer immunity from legal obligations.

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Amendments/corrigenda issued since publication

Date	Text affected
30 November 2018	Implementation of CENELEC corrigendum November 2018: dow corrected
31 December 2018	UK Technical Committee details corrected in the national foreword
29 February 2020	Implementation of IEC corrigendum January 2020

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60669-1

February 2018

ICS 29.120.40

Supersedes EN 60669-1:1999, EN 60669-1:1999/IS1:2009

English Version

**Switches for household and similar fixed electrical installations -
Part 1: General requirements
(IEC 60669-1:2017 , modified)**

Interrupteurs pour installations électriques fixes
domestiques et analogues - Partie 1: Exigences générales
(IEC 60669-1:2017 , modifiée)

Schalter für Haushalt und ähnliche ortsfeste elektrische
Installationen - Teil 1: Allgemeine Anforderungen
(IEC 60669-1:2017 , modifiziert)

This European Standard was approved by CENELEC on 2017-02-13. 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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, 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

The text of document 23B/1235/FDIS, future edition 4 of IEC 60669-1, prepared by IEC/SC 23B "Plugs, socket-outlets and switches" of IEC/TC 23 "Electrical accessories" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60669-1:2018.

A draft amendment, which covers common modifications to IEC 60669-1 (23B/1235/FDIS), was prepared by CLC/TC 23BX "Switches, boxes and enclosures for household and similar purposes, plugs and socket outlets for d.c. and for the charging of electrical vehicles including their connectors" and approved by CENELEC.

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) 2018-08-16
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2021-02-13

EN 60669-1:2018 supersedes EN 60669-1:1999.

Clauses, subclauses, notes, tables, figures and annexes which are additional to those in IEC 60669-1:2017 are prefixed "Z".

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.

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

Endorsement notice

The text of the International Standard IEC 60669-1:2017 was approved by CENELEC as a European Standard with agreed common modifications.

Annex ZA
(normative)**Normative references to international publications
with their corresponding European publications**

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.

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 (mod)	2009	IEC standard voltages	EN 60038	2011
IEC 60068-2-75	2014	Environmental testing - Part 2-75: Tests - Test Eh: Hammer tests	EN 60068-2-75	2014
IEC 60112	2003	Method for the determination of the proof and the comparative tracking indices of solid insulating materials	EN 60112	2003
+A1	2009		+A1	2009
IEC 60212	2010	Standard conditions for use prior to and during the testing of solid electrical insulating materials	EN 60212	2011
IEC 60227-5	2011	Polyvinyl chloride insulated cables of rated - voltages up to and including 450/750 V - Part 5: Flexible cables (cords)	-	-
IEC 60228	2004	Conductors of insulated cables	EN 60228 + corr. May	2005 2005
IEC 60245-4	2011	Rubber insulated cables - Rated voltages up to and including 450/750 V - Part 4: Cords and flexible cables	-	-
IEC 60417-DB	-	Graphical symbols for use on equipment	-	-
IEC 60529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529 + corr. May	1991 1993
+A1	1999		+A1	2000
+A2	2013		+A2	2013
IEC 60669-2-1 (mod)	2002	Switches for household and similar fixed electrical installations - Part 2-1: Particular requirements - Electronic switches	EN 60669-2-1 + corr. December	2004 2007
			+A12	2010
+A1 (mod)	2008		+A1	2009
+A2	2015		+A2	201X ¹⁾

¹⁾ To be published.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60695-2-10	2000	Fire hazard testing - Part 2-10: Glowing/hot-wire based test methods - Glow-wire apparatus and common test procedure	EN 60695-2-10	2001 ²⁾
IEC 60695-2-11	2014	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 60998-1 (mod)	2002	Connecting devices for low-voltage circuits for household and similar purposes - Part 1: General requirements	EN 60998-1	2004
IEC 60998-2-1 (mod)	-	Connecting devices for low-voltage circuits for household and similar purposes - Part 2-1: Particular requirements for connecting devices as separate entities with screw-type clamping units	EN 60998-2-1	-
IEC 60998-2-2	-	Connecting devices for low-voltage circuits for household and similar purposes - Part 2-2: Particular requirements for connecting devices as separate entities with screwless-type clamping units	EN 60998-2-2	-
IEC 60998-2-3	-	Connecting devices for low-voltage circuits for household and similar purposes - Part 2-3: Particular requirements for connecting devices as separate entities with insulation-piercing clamping units	EN 60998-2-3	-
IEC 60998-2-4	-	Connecting devices for low voltage circuits for household and similar purposes - Part 2-4: Particular requirements for twist- on connecting devices	EN 60998-2-4	-
IEC 61032	1997	Protection of persons and equipment by enclosures - Probes for verification	EN 61032	1998
ISO 1456	2009	Metallic and other inorganic coatings - Electrodeposited coatings of nickel, nickel plus chromium, copper plus nickel and of copper plus nickel plus chromium	EN ISO 1456	2009
ISO 2081	2008	Metallic and other inorganic coatings - Electroplated coatings of zinc with supplementary treatments on iron or steel	EN ISO 2081	2008
ISO 2093	1986	Electroplated coatings of tin; Specification and test methods	-	-

²⁾ Superseded by EN 60695-2-10:2013 (IEC 60695-2-10:2013).

Annex ZB
(normative)

Special national conditions

Special national condition: National characteristic or practice that cannot be changed over a long period, e.g. climatic conditions, electrical earthing conditions. If it affects harmonization, it forms part of the European Standard.

For the countries in which the relevant special national conditions apply these provisions are normative, for other countries they are informative.

<u>Clause</u>	<u>Special national condition</u>
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7.7	Belgium, Finland, Germany, Netherlands, Norway and Sweden
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Design B is not used due to installation practice.

8.1	United Kingdom
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Add after the first paragraph:

The marking of the type reference is not used.

Germany

Add at the index n:

n) the symbol that electrotechnical expertise is required (see IEC 60417-6182) is to be placed on the packaging.

8.3	United Kingdom
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Add at the end:

The marking of the type reference is not used.

10.2	Norway
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Add after the first paragraph:

Due to the lack of an earthing conductor in many existing old buildings, accessories requiring earth connection cannot normally be used.

Annex ZC
(informative)

A-Deviations

A-Deviation: National deviations due to regulation, the alteration of which is for the time being outside the competence of CENELEC member.

This European Standard falls under Directive 2014/35/EU.

NOTE (from CEN/CENELEC IR Part 2, 3.1.9): Where standards fall under EC Directives, it is the view of the Commission of the European Communities (OJ No C 59; 1982-03-09) that the effect of the decision of the Court of Justice in case 815/79 Cremonini/Vrankovich (European Court Reports 1980, p.3583) is that compliance with A-deviations is no longer mandatory and that the free movement of the products complying with such a standard should not be restricted except under the safeguard procedure provided for the relevant Directive.

A-deviations in an EFTA-country are valid instead of the relevant provisions of the European Standard in that country until they have been removed.

<u>Clause</u>	<u>Special national condition</u>
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11.2	Belgium (Reglement General sur les Installations Electriques, R.G.I.E. § 73.02).
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Replace the second paragraph by:

They shall have a capacity not less than that of the corresponding terminals for the supply conductors except that any additional external earthing terminal shall be of a size suitable for conductors of at least 4 mm².

Annex ZD
Routine test

(Under consideration)

Annex ZZ (informative)

Relationship between this European standard and the safety objectives of Directive 2014/35/EU [2014 OJ L96] aimed to be covered

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 safety objectives of that Directive, and associated EFTA regulations.

**Table ZZ.1 – Correspondence between this European standard and Annex I of Directive
2014/35/EU [2014 OJ L96]**

Safety objectives of Directive 2014/35/EU	Clause(s) / sub-clause(s) of this EN	Remarks / Notes
1(a) the <u>essential characteristics</u> , the recognition and observance of which will ensure that electrical equipment will be used safely and in applications for which it was made, <u>shall be marked on the electrical equipment, or, if this is not possible, on an accompanying document</u>	Clause 1 to 7 8 - Marking Annex D Annex E (See SNC)	
1.(b) <u>ensure that it can be safely and properly assembled and connected;</u>	Clause 1 to 7 8 - Marking 9 - Dimensions 10 - Protection against electrical shock 11 - Provision for earthing 12 - Terminals 13 - Constructional requirements 14 – Mechanism 22 – Screws, current-carrying parts and connections Annex A Annex D Annex E (See SNC)	

<p>1(c) protection against the hazards set out in points 2 and 3 is assured, providing that <u>the equipment is used in applications for which it was made and is adequately maintained</u></p>	<p>Clause 1 to 7 10 - Protection against electrical shock 11 - Provision for earthing 12 - Terminals 13 - Constructional requirements 14 - Mechanism 16 - Insulation resistance and electrical strength 17 - Temperature rise 18 - Making and breaking capacity 19 - Normal operation 23 - Creepage and clearance distances Annex A Annex D Annex E (See SNC)</p>	
<p>2(a) persons and domestic animals are adequately protected against the <u>danger of physical injury or other harm which might be caused by direct or indirect contact</u></p>	<p>Clause 1 to 7 10 - Protection against electrical shock 16 - Insulation resistance and electrical strength 17 - Temperature rise 20 - Mechanical strength 23 - Creepage and clearance distances 24 - Resistance of insulating material to abnormal heat, to fire and to tracking Annex A Annex E (See SNC)</p>	
<p>2(b) <u>temperatures, arcs or radiation</u> which would cause a danger, <u>are not produced</u></p>	<p>Clause 1 to 7 14 - Mechanism 16 - Insulation resistance and electrical strength 17 - Temperature rise 18 - Making and breaking capacity 19 - Normal operation 21 - Resistance to heat 24 - Resistance of insulating material to abnormal heat, to fire and to tracking 25 - Resistance to rusting 27 - EMF requirement Annex E (See SNC)</p>	