

© Copyright SEK Svensk Elstandard. Reproduction in any form without permission is prohibited.

## Strömställare för bruksföremål – Del 2-6: Särskilda fordringar på strömställare för handhållna och transportabla elverktyg samt trädgårdsmaskiner

*Switches for appliances –*

*Part 2-6: Particular requirements for switches used in electric motor-operated hand-held tools,  
transportable tools and lawn and garden machinery*

Som svensk standard gäller europastandarden EN IEC 61058-2-6:2019. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 61058-2-6:2019.

### Nationellt förord

Europastandarden EN IEC 61058-2-6:2019

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 61058-2-6, Second edition, 2018 - Switches for appliances - Part 2-6: Particular requirements for switches used in electric motor-operated hand-held tools, transportable tools and lawn and garden machinery**

utarbetad inom International Electrotechnical Commission, IEC.

Standarden ska användas tillsammans med SS-EN IEC 61058-1, utgåva 4, 2018.

Tidigare fastställd svensk standard SS-EN 61058-2-6, utgåva 1, 2016, gäller ej fr o m 2021-12-28.

---

ICS 29.120.40

---

Denna standard är fastställd av SEK Svensk Elstandard,  
som också kan lämna upplysningar om **sakinnehållet** i standarden.  
Postadress: Box 1284, 164 29 KISTA  
Telefon: 08 - 444 14 00.  
E-post: sek@elstandard.se. Internet: www.elstandard.se

---

### *Standarder underlättar utvecklingen och höjer elsäkerheten*

Det finns många fördelar med att ha gemensamma tekniska regler för bl a mätning, säkerhet och provning och för utförande, skötsel och dokumentation av elprodukter och elanläggningar.

Genom att utforma sådana standarder blir säkerhetsfordringar tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

### *SEK är Sveriges röst i standardiseringsarbetet inom elområdet*

SEK Svensk Elstandard svarar för standardiseringen inom elområdet i Sverige och samordnar svensk medverkan i internationell och europeisk standardisering. SEK är en ideell organisation med frivilligt deltagande från svenska myndigheter, företag och organisationer som vill medverka till och påverka utformningen av tekniska regler inom elektrotekniken.

SEK samordnar svenska intressenters medverkan i SEKs tekniska kommittéer och stödjer svenska experters medverkan i internationella och europeiska projekt.

### *Stora delar av arbetet sker internationellt*

Utformningen av standarder sker i allt väsentligt i internationellt och europeiskt samarbete. SEK är svensk nationalkommitté av International Electrotechnical Commission (IEC) och Comité Européen de Normalisation Electrotechnique (CENELEC).

Standardiseringsarbetet inom SEK är organiserat i referensgrupper bestående av ett antal tekniska kommittéer som speglar hur arbetet inom IEC och CENELEC är organiserat.

Arbetet i de tekniska kommittéerna är öppet för alla svenska organisationer, företag, institutioner, myndigheter och statliga verk. Den årliga avgiften för deltagandet och intäkter från försäljning finansierar SEKs standardiseringsverksamhet och medlemsavgift till IEC och CENELEC.

### *Var med och påverka!*

Den som deltar i SEKs tekniska kommittéarbete har möjlighet att påverka framtida standarder och får tidig tillgång till information och dokumentation om utvecklingen inom sitt teknikområde. Arbetet och kontakterna med kollegor, kunder och konkurrenter kan gynnsamt påverka enskilda företags affärsutveckling och bidrar till deltagarnas egen kompetensutveckling.

Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

### **SEK Svensk Elstandard**

Box 1284  
164 29 Kista  
Tel 08-444 14 00  
[www.elstandard.se](http://www.elstandard.se)

English Version

**Switches for appliances - Part 2-6: Particular requirements for  
switches used in electric motor-operated hand-held tools,  
transportable tools and lawn and garden machinery  
(IEC 61058-2-6:2018)**

Interrupteurs pour appareils - Partie 2-6: Exigences  
particulières pour les interrupteurs utilisés sur les outils  
électroportatifs à moteur, les outils portables et les  
machines pour jardins et pelouses  
(IEC 61058-2-6:2018)

Geräteschalter - Teil 2-6: Besondere Anforderungen für  
Schalter zur Anwendung in elektromotorisch betätigten  
handgeführten Werkzeugen, transportablen Werkzeugen  
und Rasen- und Gartenmaschinen  
(IEC 61058-2-6:2018)

This European Standard was approved by CENELEC on 2018-12-28. 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 3J/450/FDIS, future edition 2 of IEC 61058-2-6, 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 IEC 61058-2-6:2019.

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) 2019-09-28
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2021-12-28

This document supersedes EN 61058-2-6:2016.

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.

## **Endorsement notice**

The text of the International Standard IEC 61058-2-6:2018 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 60745-1	NOTE	Harmonized as EN 60745-1
IEC 62841-1	NOTE	Harmonized as EN 62841-1

## 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 61058-1	2016	Switches for appliances - Part 1: General requirements	EN IEC 61058-1	2018

Clause 2 of IEC 61058-1:2016 is applicable.

## CONTENTS

FOREWORD.....	3
1 Scope.....	5
2 Normative references .....	5
3 Terms and definitions .....	5
4 General requirements.....	5
5 General information on tests.....	5
6 Rating .....	5
7 Classification.....	6
8 Marking and documentation.....	6
9 Protection against electric shock .....	7
10 Provision for earthing .....	7
11 Terminals and terminations.....	7
12 Construction .....	7
13 Mechanism .....	7
14 Protection against ingress of solid foreign objects, ingress of water and humid conditions.....	8
15 Insulation resistance and dielectric strength .....	8
16 Heating.....	9
17 Endurance – Mechanical switches .....	9
18 Mechanical strength .....	14
19 Screws, current-carrying parts and connections.....	14
20 Clearances, creepage distances, solid insulation and coatings of rigid printed board assemblies .....	14
21 Fire hazard.....	14
22 Resistance to rusting.....	15
23 Abnormal operation and fault conditions for switches.....	15
24 Components for switches.....	15
25 EMC requirements.....	16
Annexes .....	17
Annex D (informative) Switch application guide.....	18
Annex H (normative) Altitude correction factors .....	19
Annex N (informative) Dimensions of tabs forming part of a switch .....	20
Bibliography.....	21
Table 3 – Switch information.....	6
Table 201 – Test loads for electrical endurance tests for AC circuits.....	12
Table 202 – Test loads for electrical endurance tests for DC circuits .....	12

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

---

**SWITCHES FOR APPLIANCES –****Part 2-6: Particular requirements for switches used  
in electric motor-operated hand-held tools, transportable  
tools and lawn and garden machinery**

## 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.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 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 61058-2-6 has been prepared by subcommittee 23J: Switches for appliances, of IEC technical committee 23: Electrical accessories.

This second edition cancels and replaces the first edition published in 2016. It constitutes a technical revision.

This edition includes the following significant change with respect to the previous edition:

Overall format to support IEC 61058-1, IEC 61058-1-1 and IEC 61058-1-2.

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

FDIS	Report on voting
3J/450/FDIS	23J/452/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 document is to be used in conjunction with IEC 61058-1:2016.

This document supplements or modifies the corresponding clauses in IEC 61058-1, so as to convert that publication into the IEC standard: *Particular requirements for switches used in electric motor-operated hand-held tools, transportable tools and lawn and garden machinery.*

When a particular subclause of IEC 61058-1 is not mentioned in this document, that subclause applies as far as reasonable. Where this document states "addition", "modification" or "replacement", the relevant text of IEC 61058-1 is to be adapted accordingly.

In this standard:

- 1) the following print types are used:
  - requirements proper: in roman type;
  - test specifications: *in italic type*;
  - notes/explanatory matter: in small roman type.
- 2) subclauses, notes, figures and tables which are additional to those in IEC 61058-1 are numbered starting from 101.

A list of all the parts in the IEC 61058 series, under the general title *Switches for appliances*, can be found on the IEC website.

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.

## SWITCHES FOR APPLIANCES –

### Part 2-6: Particular requirements for switches used in electric motor-operated hand-held tools, transportable tools and lawn and garden machinery

#### 1 Scope

Clause 1 of IEC 61058-1:2016 is applicable except as follows.

*Addition:*

This part of IEC 61058 is a subset based on IEC 61058-1. The clauses outlined below are intended to address the specific requirements for switches incorporated into or integrated with electric motor-operated hand-held tools, transportable tools and lawn and garden machinery.

This document is intended for switches with an ambient temperature up to and including 55 °C. Switches tested according to IEC 61058-1 are considered to comply with this document and additional testing is not required provided ratings, loads, and endurance are correct.

NOTE This document takes into account the fact that tests are conducted as part of the end-product evaluation (e.g. products tested according to the IEC 60745 and IEC 62841 series, and lawn and gardening equipment tested according to the IEC 60335 series), and that tests are not conducted on the component switch.

#### 2 Normative references

Clause 2 of IEC 61058-1:2016 is applicable except as follows.

*Addition:*

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