

Svenska Elektriska Kommissionen, SEK

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**Strömställare för fasta installationer
(installationsströmställare) i hushåll och liknande –
Tilläggsstandard –
Strömställare med tillbehör för anslutning
till installationsbuss**

*Switches for household and similar fixed electrical installations –
Collateral standard –
Switches and related accessories for use in
home and building electronic systems (HBES)*

Som svensk standard gäller europastandarden EN 50428:2005. Den svenska standarden innehåller den officiella engelska språkversionen av EN 50428:2005.

Nationellt förord

Standarden skall användas tillsammans med SS-EN 60669-1 och SS-EN 60669-2-1.

Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler för bl a säkerhet, prestanda, dokumentation, utförande och skötsel av elprodukter, elanläggningar och metoder. Genom att utforma sådana standarder blir säkerhetskraven 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

Svenska Elektriska Kommissionen, SEK, 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

Box 1284
164 29 Kista
Tel 08-444 14 00
www.sekom.se

**Switches for household and similar fixed electrical installations –
Collateral standard –
Switches and related accessories for use
in home and building electronic systems (HBES)**

Interrupteurs pour installations électriques
fixes domestiques et analogues –
Norme collatérale –
Interrupteurs et appareils associés
pour usage dans les systèmes
électroniques des foyers domestiques
et bâtiments (HBES)

Schalter für Haushalt und ähnliche
orts feste elektrische Installationen –
Ergänzungsnorm –
Schalter und ähnliches Installations-
material in elektronischer Systemtechnik
für Heim und Gebäude (ESHG)

This European Standard was approved by CENELEC on 2004-12-07. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

This European Standard has been prepared by the Technical Committee CENELEC TC 23B: Switches for household and similar fixed electrical installations.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 50428 on 2004-12-07.

The following dates were fixed:

- | | | |
|--|-------|------------|
| – latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement | (dop) | 2006-01-01 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn | (dow) | 2008-01-01 |

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and covers essential requirements of EC Directive 89/336/EEC. See Annex ZZ.

This standard has to be used in conjunction with EN 60669-1 and EN 60669-2-1. It lists the additional changes necessary to convert it into the European Standard: *Switches for household and similar fixed electrical installations - Collateral standard - Switches and related accessories for use in home and building electronic systems (HBES)*

When this standard states "addition", "modification" or "replacement", the relevant text of EN 60669-1 or EN 60669-2-1 (hereinafter called Part 1 and Part 2-1 respectively) is to be adapted accordingly.

NOTE The following numbering system is used:

- subclauses, tables and figures that are numbered starting from 201 are additional to those in Part 2-1;
 - additional annexes to Part 1 are lettered AA, BB, etc.
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1 Scope

This clause of Part 2-1 is replaced by the following:

This collateral standard applies to HBES switches with a working voltage not exceeding 250 V a.c. and a rated current up to and including 16 A. for household and similar fixed electrical installations either indoors or outdoors and to associated electronic extension units.

It applies

- to HBES switches for the operation of lamp circuits and the control of the brightness of lamps (dimmers) as well as the control of the speed of motors (e.g. those used in ventilating fans) and for other purposes (e.g. heating installations),
- to sensors, actuators, switched-socket-outlets, associated electronic extension units, etc

In the following document the word " HBES switch " is applied to describe all kind of HBES devices e.g. switches, sensors, actuators, switched-socket-outlets, associated electronic extension units, etc.

The operation and control are performed

- intentionally by a person via an actuating member, a key, a card, etc., via a sensing surface or a sensing unit, by means of touch, proximity, turn, optical, acoustic, thermal,
- by physical means, e.g. light, temperature, humidity, time, wind velocity, presence of people,
- by any other influence;

and transmitted

- by an electronic signal via several media, e.g. powerline (mains), twisted pair, optical fibre, radio frequency, infra-red, etc...

HBES Switches complying with this standard are suitable for use at ambient temperatures not normally exceeding 25 °C, but occasionally reaching 35 °C.

There is no need for functional safety requirements in this standard. Functional safety requirements shall be covered by the standards of the devices which are controlled by the HBES.

In locations where special conditions prevail, such as higher temperature special constructions may be required.

NOTE 1 This annex is not intended to cover devices falling within the scope of IEC 60730.

NOTE 2 Electronic switches without a mechanical switch in the main circuit do not provide a "full off-state". Therefore, the circuit on the load side should be considered to be live.

NOTE 3 HBES-switches to be connected to telecommunication networks should fulfil the relevant standard.

2 Normative references

Annex ZA of Part 2-1 is applicable with the following additions:

EN 50065-1, Signalling on low-voltage electrical installations in the frequency range 3 kHz to 148,5 kHz – Part 1: General requirements, frequency bands and electromagnetic disturbances

EN 50065-2-1, Signalling on low-voltage electrical installations in the frequency range 3 kHz to 148,5 kHz -- Part 2-1: Immunity requirements for mains communications equipment and systems operating in the range of frequencies 95 kHz to 148,5 kHz and intended for use in residential, commercial and light industrial environments

EN 50065-2-3, Signalling on low-voltage electrical installations in the frequency range 3 kHz to 148,5 kHz -- Part 2-3: Immunity requirements for mains communications equipment and systems operating in the range of frequencies 3 kHz to 95 kHz and intended for use by electricity suppliers and distributors