SVENSK STANDARD SS 428 08 34, utg 4:2024

Fastställd	Sida	Ansvarig kommitté
2024-05-22	1 (243)	SEK TK 23

Stickproppar och uttag för allmänbruk - Särskilda fordringar på stickproppar och uttag använda i Sverige

Plugs and socket-outlets for household and similar purposes – Particular requirements for plugs and socket-outlets used in Sweden

Orientation

This standard covers requirements and descriptions of a number of plugs and sockets for general use and is based on IEC 60884-1:2022 including IEC 60884-1:2022/COR1:2023.

The foreword gives information on identification of Swedish differences related to IEC 60884-1.

NOTE – The National Electrical Safety Board (Elsäkerhetsverket) has regulations regarding these products.

The previous published Swedish standard SS 428 08 34, utg 3:2013 and SS-IEC 60884-1, utg 3:2013 with any additions, changes and corrections do not apply from 2027-05-22.

Tidigare fastställd svensk standard SS 428 08 34, utg 3:2013 och SS-IEC 60884-1, utg 3:2013 med eventuella tillägg, ändringar och rättelser gäller ej fr o m 2027-05-22.

ICS 29.120.30

Denna standard är fastställd av SEK Svensk Elstandard,
som också kan lämna upplysningar om **sakinnehållet** i standarden.
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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.

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Contents

Foreword

This is a stand alone standard. It is based on IEC 60884-1. Edition 4.0, 2022.

Additions to and deletions from IEC 60884-1 is marked with a vertical line in the margin. Replaced or modified text is collected in Annex NB, except where otherwise stated, e.g. where a whole Annex is deleted.

Please note that all country notes (national deviations) are deleted without mentioning in Annex NB.

This edition of SS 428 08 34 includes the following significant technical changes with respect to the previous edition:

a) plugs and socket-outlets incorporating pilot lights;

b) crimped connections in accessories;

c) insulation piercing terminals (IPT);

d) accessories used in T° below −5 °C down to and including −45 °C;

e) accessories used in T° above +40 °C up to and including +70 °C (informative);

f) plugs and socket-outlets for high load (HL) as described in IEC 60884-1, Annex I is not included in this SS, but can be seen in Annex NB;

g) requirements for shutters in portable socket-outlets;

h) test walls for the verification of ingress of water;

i) rewriting of the temperature rise clause;

j) This edition consists of relevant parts of IEC 60884-1 with national differences for Sweden. The previous construction with an SS-IEC 60884-1 amended with national differences in the national standard SS 428 08 34 is abandoned.

k) Deleted or replaced text in the IEC 60884-1 has been collected in the national Annex NB.

l) Standard sheets VIII, IX, X, XVIII and XIX has changed numbering to follow historic numbering.

m) The previous Annex NB for portable socket outlets according to IEC 60884-2-7 has been deleted from this standard and will be moved to a separate standard, future SS 428 08 36. That standard will be developed after the next revision of IEC 60884-2-7.

The following print types are used:

– requirements: in roman type;

– test specifications: in *italic type*;

– notes: in small roman type.

PLUGS AND SOCKET-OUTLETS FOR HOUSEHOLD AND SIMILAR PURPOSES –

Part 1: General requirements

1 Scope

This part of IEC 60884 applies to plugs and fixed or portable socket-outlets for AC only, with or without earthing contact, with a rated voltage greater than 50 V but not exceeding 440 V and a rated current not exceeding 32 A, intended for household and similar purposes, either indoors or outdoors.

Compatible plugs and socket-outlets, when combined, form a plug and socket-outlet system. Standardized systems used around the world are reported in IEC/TR 60083.

The rated current is limited to 16 A maximum for accessories provided with screwless-type terminals.

This document covers only those requirements for mounting boxes which are necessary for the tests on the socket-outlet.

NOTE 1 Requirements for general purpose mounting boxes are given in SS-EN IEC 60670-1 and SS 430 06 17.

This standard applies to:

– plugs and socket-outlets according to standard sheets shown in Annex NA.

This document also applies to:

– plugs which are a part of cord sets;
– plugs and portable socket-outlets which are a part of cord extension sets;
– plugs and socket-outlets which are a component of an appliance, unless otherwise stated in the standard for the relevant appliance; and
– plugs and socket-outlets incorporating pilot lights.

This document does not apply to:

– plugs, socket-outlets and couplers for industrial purposes;
– appliance couplers;
– plugs, fixed and portable socket-outlets for extra low voltage (ELV);

NOTE 2 ELV values are specified in IEC 60364-4-41.

– fixed socket-outlets combined with fuses, automatic switches, etc.

Plugs of this document are intended to be energised by socket-outlets.

Plugs and socket-outlets complying with this document are suitable for use at ambient temperatures not normally exceeding +40 °C, but their average temperature over a period of 24 h does not exceed +35 °C, with a lower limit of the ambient air temperature of −5 °C.

In locations where special conditions prevail, such as in ships, vehicles and the like and in hazardous locations, for example where explosions are liable to occur, additional requirements can be applicable.

This document gives additional tests to be applied during the production of crimped connections in accessories, see Annex E (informative).

This document gives additional requirements for accessories provided with insulation-piercing terminals, see Annex F (normative).

This document gives additional specifications for accessories intended to be used in ambient temperatures below −5 °C down to and including −45 °C, see Annex G (normative).

This document gives additional specifications for accessories intended to be used in ambient temperatures above +40 °C up to and including +70 °C, see Annex H (informative).

2 Normative references

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.

Where an IEC standard is mentioned in this publication, the corresponding national standard, if any, is used.

IEC designation	Corresponding national designation
IEC 60068-2-30, *Environmental testing – Part 2-30: Tests – Test Db: Damp heat, cyclic (12 + 12 h cycle)*	SS-EN 60068-2-30
IEC 60068-2-31, *Environmental testing – Part 2-31: Tests – Test Ec: Rough handling shocks, primarily for equipment-type specimens*	SS-EN 60068-2-31
IEC 60068-2-75, *Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests*	SS-EN 60068-2-75
IEC 60112, *Method for the determination of the proof and the comparative tracking indices of solid insulating materials*	SS-EN IEC 60112
IEC 60227 (all parts), *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V*	SS-EN 50525-series
IEC 60245 (all parts), *Rubber insulated cables – Rated voltages up to and including 450/750 V*	SS-EN 50525-series
IEC 60417, *Graphical symbols for use on equipment* (available at http://www.graphical-symbols.info/equipment)	
IEC 60423:2007, *Conduit systems for cable management – Outside diameters of conduits for electrical installations and threads for conduits and fittings*	SS-EN 60423:2007
IEC 60529:1989, *Degrees of protection provided by enclosures (IP Code)* IEC 60529:1989/AMD1:1999 IEC 60529:1989/AMD2:2013	SS-EN 60529:2014

IEC 60669 (all parts), *Switches for household and similar fixed-electrical installations*	SS-EN 60669-series
IEC 60669-2-1:2021, *Switches for household and similar fixed electrical installations – Part 2-1: Particular requirements – Electronic control devices*	S*S-EN IEC 60669-2-1:2023*
IEC 60695-2-10:2021, *Fire hazard testing – Part 2-10: Glowing/hot-wire based test methods – Glow-wire apparatus and common test procedure*	SS-EN IEC 60695-2-10:2021
IEC 60695-2-11:2021, *Fire hazard testing – Part 2-11: Glowing/hot-wire based test methods – Glow-wire flammability test method for end products (GWEPT)*	SS-EN IEC 60695-2-11:2022
IEC 60884-2-1, *Plugs and socket-outlets for household and similar purposes – Part 2-1: Particular requirements for fused plugs*	
IEC 61032:1997, *Protection of persons and equipment by enclosures – Probes for verification*	SS-EN 61032:1998
IEC 61058 (all parts), *Switches for appliances*	SS-EN IEC 61058-series
IEC 61545, *Connecting devices – Devices for the connection of aluminium conductors in clamping units of any material and copper conductors in aluminium bodied clamping units*	SS-EN 61545
IEC 62821-series*, Electric cables - Halogen-free, low smoke, thermoplastic insulated and sheathed cables of rated voltages up to and including 450/750 V*	SS-EN 50525-series
IEC 63010-series, *Halogen-free thermoplastic insulated and sheathed flexible cables of rated voltages up to and including 300/300 V*	
ISO/IEC Guide 51, *Safety aspects – Guidelines for their inclusion in standards*	
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*	SS-EN ISO 1456:2009
ISO 2081:2018, *Metallic and other inorganic coatings – Electroplated coatings of zinc with supplementary treatments on iron or steel*	SS-EN ISO 2081:2018
ISO 2093:1986, *Electroplated coatings of tin – Specification and test methods*	SS-ISO 2093