SVENSK STANDARD SS-EN IEC 60320-1

Fastställd	Utgåva	Sida	Ansvarig kommitté
2021-11-17	4	1 (1+73)	SEK TK 23

Apparatanslutningsdon för allmänbruk – Del 1: Allmänna fordringar

Appliance couplers for household and similar general purposes – Part 1: General requirements

Som svensk standard gäller europastandarden EN IEC 60320-1:2021. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 60320-1:2021.

Nationellt förord

Europastandarden EN IEC 60320-1:2021

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC
– **IEC 60320-1, Fourth edition, 2021 - Appliance couplers for household and similar general purposes - Part 1: General requirements**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 60320-1, utgåva 3, 2015 med ändringarna SS-EN 60320-1/AC1:2016, SS-EN 60320-1/AC2:2019 och SS-EN 60320-1/A1:2021, gäller ej fr o m 2024-08-31.

ICS 29.120.30

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Telefon: 08 - 444 14 00.
E-post: sek@elstandard.se. Internet: www.elstandard.se

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Stora delar av arbetet sker internationellt

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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

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 60320-1

October 2021

ICS 29.120.30

Supersedes EN 60320-1:2015 and all of its amendments and corrigenda (if any)

English Version

Appliance couplers for household and similar general purposes - Part 1: General requirements (IEC 60320-1:2021)

Connecteurs pour usages domestiques et usages généraux analogues - Partie 1: Exigences générales (IEC 60320-1:2021)

Gerätesteckvorrichtungen für den Hausgebrauch und ähnliche allgemeine Zwecke - Teil 1: Allgemeine Anforderungen (IEC 60320-1:2021)

This European Standard was approved by CENELEC on 2021-08-31. 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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, 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

Ref. No. EN IEC 60320-1:2021 E

European foreword

The text of document 23G/464/FDIS, future edition 4 of IEC 60320-1, prepared by SC 23G "Appliance couplers" of IEC/TC 23 "Electrical accessories" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60320-1:2021.

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) 2022-05-31
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024-08-31

This document supersedes EN 60320-1:2015 and all of its amendments and corrigenda (if any).

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.

This document has been prepared under a Standardization Request given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

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

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 60320-1:2021 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 60320-2-1	NOTE	Harmonized as EN IEC 60320-2-1
IEC 60320-2-3	NOTE	Harmonized as EN IEC 60320-2-3
IEC 60320-2-4	NOTE	Harmonized as EN IEC 60320-2-4
IEC 60364-4-44	NOTE	Harmonized as HD 60364-4-444
IEC 61140	NOTE	Harmonized as EN 61140
ISO 1456	NOTE	Harmonized as EN ISO 1456
ISO 2081	NOTE	Harmonized as EN ISO 2081

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.

Publication	Year	Title	EN/HD	Year
IEC 60068-2-31	-	Environmental testing - Part 2-31: Tests - Test Ec: Rough handling shocks, primarily for equipment-type specimens	EN 60068-2-31	2008
IEC 60068-2-60	-	Environmental testing - Part 2-60: Tests - Test Ke: Flowing mixed gas corrosion test	EN 60068-2-60	2015
IEC 60068-2-75	-	Environmental testing - Part 2-75: Tests - Test Eh: Hammer tests	EN 60068-2-75	2014
IEC 60112	2020	Method for the determination of the proof and the comparative tracking indices of solid insulating materials	EN IEC 60112	2020
IEC 60227	series	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V -	EN 50525	series
IEC 60245	series	Rubber insulated cables - Rated voltages up to and including 450/750 V	EN 50525	series
IEC 60320-3 +A1	2014 2018	Appliance couplers for household and similar general purposes - Part 3: Standard sheets and gauges	EN 60320-3 + A1	2014 2021
IEC 60417	-	Graphical symbols for use on equipment. Index, survey and compilation of the single sheets.	-	-
IEC 60664-1	2020	Insulation coordination for equipment within low-voltage systems - Part 1: Principles, requirements and tests	EN IEC 60664-1	2020
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	EN 60695-2-11	2014
IEC 60695-10-2	2014	Fire hazard testing - Part 10-2: Abnormal heat - Ball pressure test method	EN 60695-10-2	2014
IEC 60730-2-11	2019	Automatic electrical controls for household and similar use - Part 2-11: Particular requirements for energy regulators	EN IEC 60730-2-11	2020

Publication	Year	Title	EN/HD	Year
IEC 60999-1	1999	Connecting devices - Electrical copper conductors - Safety requirements for screw-type and screwless-type clamping units - Part 1: General requirements and particular requirements for clamping units for conductors from 0,2 mm² up to 35 mm² (included)	EN 60999-1	2000
IEC 61058	series	Switches for appliances	EN 61058	series

IEC 60320-1

Edition 4.0 2021-07

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Appliance couplers for household and similar general purposes – Part 1: General requirements

Connecteurs pour usages domestiques et usages généraux analogues – Partie 1: Exigences générales

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 29.120.30

ISBN 978-2-8322-1001-2

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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APPLIANCE COUPLERS FOR HOUSEHOLD AND SIMILAR GENERAL PURPOSES –

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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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.
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IEC 60320-1 has been prepared by subcommittee 23G: Appliance couplers, of IEC technical committee 23: Electrical accessories. It is an International Standard.

This fourth edition cancels and replaces the third edition published in 2015 and Amendment 1:2018. This edition constitutes a technical revision.

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

a) introduction of necessary tolerances throughout this document;
b) the heating test from edition 2 is reintroduced in 18.2;
c) temperature rise added for plug connectors in Clause 21;
d) change for better readability in 23.3;
e) updated lateral pull test in 23.6 for connectors/plug connectors with separate front parts;

f) revision of 24.1 for ball pressure test;

g) Clause 27 for glow wire test is updated;

h) revision of Annex C for test sequences;

i) additional Annex E for additional tests and requirements for appliance couplers intended to be used in ambient temperatures above +35 °C.

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

FDIS	Report on voting
23G/464/FDIS	23G/467/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

A list of all the parts in the IEC 60320 series, under the general title *Appliance couplers for household and similar general purposes*, can be found on the IEC website.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under 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.

APPLIANCE COUPLERS FOR HOUSEHOLD AND SIMILAR GENERAL PURPOSES –

Part 1: General requirements

1 Scope

This part of IEC 60320 sets the general requirements for appliance couplers for two poles and two poles with earth contact and for the connection of electrical devices for household and similar onto the mains supply.

This document is also valid for appliance inlets/appliance outlets integrated or incorporated in appliances.

The rated voltage does not exceed 250 V (AC) and the rated current does not exceed 16 A.

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

Annex E provides test requirements for derating the operating current of an accessory when used in ambient temperatures above +35 °C up to and including +90 °C.

Appliance couplers are not suitable for:

– use in place of plug and socket-outlet systems according to IEC 60884-1;
– use in place of devices for connecting luminaires (DCLs) according to IEC 61995 or luminaire supporting couplers (LSCs);
– use in place of installation couplers according to IEC 61535.

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.

IEC 60068-2-31, *Environmental testing – Part 2-31: Tests – Test Ec: Rough handling shocks, primarily for equipment-type specimens*

IEC 60068-2-60, *Environmental testing – Part 2-60: Tests – Test Ke: Flowing mixed gas corrosion test*

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

IEC 60112:2020, *Method for the determination of the proof and the comparative tracking indices of solid insulating materials*

IEC 60227 (all parts), *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V*

IEC 60245 (all parts), *Rubber insulated cables – Rated voltages up to and including 450/750 V*

IEC 60320-3:2014, *Appliance couplers for household and similar general purposes – Part 3: Standard sheets and gauges*
IEC 60320-3:2014/AMD1:2018

IEC 60417, *Graphical symbols for use on equipment* (available from: http://www.graphical-symbols.info/equipment)

IEC 60664-1:2020, *Insulation coordination for equipment within low-voltage systems – Part 1: Principles, requirements and tests*

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)*

IEC 60695-10-2:2014, *Fire hazard testing – Part 10-2: Abnormal heat – Ball pressure test method*

IEC 60730-2-11:2019, *Automatic electrical controls – Part 2-11: Particular requirements for energy regulators*

IEC 60999-1:1999, *Connecting devices – Electrical copper conductors – Safety requirements for screw-type and screwless-type clamping units – Part 1: General requirements and particular requirements for clamping units for conductors from 0,2 mm^2 up to 35 mm^2 (included)*

IEC 61032:1997, *Protection of persons and equipment by enclosures – Probes for verification*

IEC 61058 (all parts), *Switches for appliances*