



BSI Standards Publication

# Appliance couplers for household and similar general purposes

---

Part 1: General requirements

This is a preview of "BS EN IEC 60320-1:20...". Click here to purchase the full version from the ANSI store.

## National foreword

This British Standard is the UK implementation of EN IEC 60320-1:2021. It is identical to IEC 60320-1:2021. It supersedes BS EN 60320-1:2015+A1:2021, which will be withdrawn on 31 August 2024.

The UK participation in its preparation was entrusted to Technical Committee PEL/23/3, Connectors for portable appliances.

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

This publication has been prepared under a mandate given to the European Standards Organizations by the European Commission and the European Free Trade Association. It is intended to support requirements of the EU legislation detailed in the European Foreword. A European Annex, usually Annex ZA or ZZ, describes how this publication relates to that EU legislation.

For the Great Britain market (England, Scotland and Wales), if UK Government has designated this publication for conformity with UKCA marking (or similar) legislation, it may contain an additional National Annex. Where such a National Annex exists, it shows the correlation between this publication and the relevant UK legislation. If there is no National Annex of this kind, the relevant Annex ZA or ZZ in the body of the European text will indicate the relationship to UK regulation applicable in Great Britain. References to EU legislation may need to be read in accordance with the UK designation and the applicable UK law. Further information on designated standards can be found at [www.bsigroup.com/standardsandregulation](http://www.bsigroup.com/standardsandregulation).

For the Northern Ireland market, UK law will continue to implement relevant EU law subject to periodic confirmation. Therefore Annex ZA/ZZ in the European text, and references to EU legislation, are still valid for this market.

UK Government is responsible for legislation. For information on legislation and policies relating to that legislation, consult the relevant pages of [www.gov.uk](http://www.gov.uk).

### Contractual and legal considerations

This publication has been prepared in good faith, however no representation, warranty, assurance or undertaking (express or implied) is or will be made, and no responsibility or liability is or will be accepted by BSI in relation to the adequacy, accuracy, completeness or reasonableness of this publication. All and any such responsibility and liability is expressly disclaimed to the full extent permitted by the law.

This publication is provided as is, and is to be used at the recipient's own risk.

The recipient is advised to consider seeking professional guidance with respect to its use of this publication.

This publication is not intended to constitute a contract. Users are responsible for its correct application.

This is a preview of "BS EN IEC 60320-1:20...". [Click here to purchase the full version from the ANSI store.](#)

ISBN 978 0 539 04246 7

ICS 29.120.30

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

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 November 2021.

**Amendments/corrigenda issued since publication**

Date

Text affected

---

This is a preview of "BS EN IEC 60320-1:20...". [Click here to purchase the full version from the ANSI store.](#)

This is a preview of "BS EN IEC 60320-1:20...". Click here to purchase the full version from the ANSI store.

## EUROPÄISCHE NORM

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**

This is a preview of "BS EN IEC 60320-1:20...". [Click here to purchase the full version from the ANSI store.](#)

## 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

This is a preview of "BS EN IEC 60320-1:20...". Click here to purchase the full version from the ANSI store.

(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 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

This is a preview of "BS EN IEC 60320-1:20...". [Click here to purchase the full version from the ANSI store.](#)

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 <sup>2</sup> up to 35 mm <sup>2</sup> (included)	EN 60999-1	2000
IEC 61058	series	Switches for appliances	EN 61058	series

This is a preview of "BS EN IEC 60320-1:20...". [Click here to purchase the full version from the ANSI store.](#)

(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 standardisation request relating to harmonised 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 harmonisation 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)	8	
(1)(b)	4, 9, 12, 20	
(1)(c)	See below detailed clauses	
(2)(a)	4, 8.6, 10, 11, 12, 13, 14, 15, 20, 21, 22, 23, 26, 27 9 in combination with EN 60320-3	
(2)(b)	17, 19, 20, 21, 25, 27	
(2)(c)	N.A.	
(2)(d)	10, 14, 15, 20, 22, 26	
(3)(a)	22, 23	
(3)(b)	14, 22, 24, 28	
(3)(c)	21, 22	

**WARNING 1** — Presumption of conformity stays valid only as long as a reference to this European standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

**WARNING 2** — Other Union legislation may be applicable to the product(s) falling within the scope of this standard.

This is a preview of "BS EN IEC 60320-1:20...". [Click here to purchase the full version from the ANSI store.](#)

This is a preview of "BS EN IEC 60320-1:20...". [Click here to purchase the full version from the ANSI store.](#)

## CONTENTS

FOREWORD .....	7
1 Scope .....	9
2 Normative references .....	9
3 Terms and definitions .....	10
4 General requirements .....	13
5 General notes on tests .....	14
5.1 General.....	14
5.2 Test samples .....	14
5.3 Routine tests.....	14
6 Standard ratings .....	15
7 Classification of appliance couplers .....	15
8 Marking .....	15
8.1 General.....	15
8.2 Additional markings .....	15
8.3 Appliance couplers for class II equipment .....	16
8.4 Symbols or alphanumeric notations.....	16
8.5 Legibility of markings .....	16
8.6 Terminal markings and wiring instructions.....	16
8.7 Durability .....	17
8.8 Test and inspection.....	17
9 Dimensions and compatibility .....	17
9.1 General.....	17
9.2 Single-pole connections .....	17
9.3 Compatibility .....	17
9.4 Dimensions for standardized appliance couplers.....	18
9.5 Dimensions for non-standardized appliance couplers.....	18
10 Protection against electric shock .....	19
10.1 Accessibility of live parts.....	19
10.2 Protection against single pole connection .....	19
10.3 Protection against access to live parts .....	19
10.4 External parts .....	19
10.5 Shrouds .....	19
11 Provision for earthing .....	19
12 Terminals and terminations.....	20
12.1 General.....	20
12.2 Rewirable appliance couplers .....	20
12.3 Non-rewirable appliance couplers .....	20
13 Construction .....	20
13.1 Risk of accidental contact .....	20
13.2 Contact positions .....	20
13.3 Parts covering live parts .....	21
13.4 Pin construction .....	21
13.4.1 Prevention of rotation .....	21
13.4.2 Pin retention .....	21
13.4.3 Non-solid pins.....	22

This is a preview of "BS EN IEC 60320-1:20...". [Click here to purchase the full version from the ANSI store.](#)

13.4.4	Pins for appliance couplers for higher ambient temperatures up to +90 °C .....	22
13.5	Contact pressure .....	22
13.6	Enclosure .....	23
13.6.1	General .....	23
13.6.2	Rewirable connectors and rewirable plug connectors .....	23
13.6.3	Non-rewirable connectors and non-rewirable plug connectors .....	23
13.7	Earth connection .....	24
13.8	Location of terminals and terminations .....	24
13.8.1	General .....	24
13.8.2	Free wire test for rewirable accessories .....	24
13.8.3	Free wire test for non-rewirable non-moulded-on accessories .....	24
13.8.4	Free wire verification for non-rewirable moulded-on accessories .....	25
13.9	Connectors/plug connectors without earthing contact .....	25
13.10	Fuses, relays, thermostats, thermal cut-outs and switches .....	25
14	Moisture resistance .....	25
15	Insulation resistance and electric strength .....	26
15.1	General .....	26
15.2	Insulation resistance .....	28
15.3	Dielectric strength .....	28
16	Forces necessary to insert and to withdraw the connector/appliance outlet .....	29
16.1	General .....	29
16.2	Verification of the maximum withdrawal force .....	30
16.3	Verification of the minimum withdrawal force .....	31
17	Operation of contacts .....	32
18	Resistance to heating of appliance couplers for hot conditions or very hot conditions .....	32
18.1	General .....	32
18.2	Heating test for connectors/plug connectors .....	33
18.3	Heating test for appliance inlets/appliance outlets .....	34
19	Breaking capacity .....	34
20	Normal operation .....	36
21	Temperature rise .....	36
22	Cords and their connection .....	37
22.1	Cords for non-rewirable connectors/plug connectors .....	37
22.2	Cord anchorage .....	38
22.2.1	General .....	38
22.2.2	Additional requirements for rewirable connectors and rewirable plug connectors .....	39
22.2.3	Pull test for cable anchorage .....	39
22.3	Flexing test .....	41
23	Mechanical strength .....	43
23.1	General .....	43
23.2	Free fall test .....	44
23.3	Lateral pull test for contacts .....	44
23.4	Impact test .....	46
23.5	Deformation test .....	46
23.6	Pull tests for connectors/plug connectors with a separate front part .....	47

This is a preview of "BS EN IEC 60320-1:20...". [Click here to purchase the full version from the ANSI store.](#)

23.6.1	General .....	47
23.6.2	Straight pull test .....	47
23.6.3	Lateral pull test.....	47
24	Resistance to heat and ageing.....	48
24.1	Resistance to heat .....	48
24.2	Resistance to ageing .....	48
24.2.1	General .....	48
24.2.2	Ageing test for elastomeric materials .....	49
24.2.3	Ageing test for thermoplastic materials .....	49
24.2.4	Ageing test assessment.....	49
25	Screws, current-carrying parts and connections.....	49
25.1	General.....	49
25.2	Electrical connections .....	50
25.3	Securement of connections .....	51
25.4	Metallic parts .....	51
26	Clearances, creepage distances and solid insulation .....	51
26.1	General.....	51
26.2	Clearances .....	52
26.2.1	Dimensioning.....	52
26.2.2	Minimum values for clearances.....	52
26.3	Creepage distances .....	53
26.3.1	Dimensioning.....	53
26.3.2	Minimum creepage distances.....	53
26.4	Solid insulation .....	54
27	Resistance of insulating material to heat, fire and tracking .....	55
27.1	Resistance to heat and fire .....	55
27.1.1	General .....	55
27.1.2	Objective of the test.....	55
27.1.3	General description of the test.....	55
27.1.4	Degree of severity .....	55
27.1.5	Evaluation of test results .....	55
27.2	Resistance to tracking.....	56
28	Resistance to rusting .....	56
29	Electromagnetic compatibility (EMC) requirements .....	56
29.1	Immunity – Accessories not incorporating electronic components .....	56
29.2	Emission – Accessories not incorporating electronic components .....	57
Annex A (normative)	Proof tracking test.....	58
Annex B (normative)	Routine tests for factory wired appliance couplers related to safety.....	59
B.1	General.....	59
B.2	Polarized systems: Line (L) and neutral (N) – Correct connection .....	59
B.3	Earth (PE) continuity.....	60
B.4	Short-circuit/wrong connection and reduction in creepage distance and clearance .....	60
B.4.1	Accessible surface safety check .....	60
B.4.2	Short-circuit/wrong connection.....	60
Annex C (normative)	Test schedule .....	61
Annex D (informative)	Comparison of typical conductor cross-sectional areas .....	63

This is a preview of "BS EN IEC 60320-1:20...". [Click here to purchase the full version from the ANSI store.](#)

Annex E (normative) Additional tests and requirements for appliance couplers intended to be used in ambient temperatures above +35 °C up to and including +90 °C.....	64
E.1 General.....	64
E.2 General requirements on tests .....	64
E.2.1 General .....	64
E.2.2 Test setup .....	64
E.2.3 Conditions of temperature measurement.....	64
E.2.4 Method of measurement .....	65
E.3 Markings .....	65
E.4 Determination of $t_a$ and the rated and derated current in relation to the ambient temperature .....	65
E.4.1 Determination of the maximum ambient temperature ( $t_a$ ) for operation of the accessory at the rated current.....	65
E.4.2 Determination of the derated operating currents for ambient temperatures above $t_a$ .....	66
E.5 Test to evaluate the long-term behaviour of the appliance couplers in ambient temperatures above +35 °C up to and including +90 °C .....	66
E.5.1 Resistance to heat.....	66
E.5.2 Resistance to ageing .....	67
E.5.3 Resistance to tracking .....	68
E.6 Cords and their connections.....	68
Bibliography.....	69
Figure 1 – Intended use of appliance couplers .....	11
Figure 2 – Device for testing non-solid pins .....	22
Figure 3 – Apparatus for checking the withdrawal force .....	30
Figure 4 – Gauge for verification of the minimum withdrawal force .....	31
Figure 5 – Example of an apparatus for heating test (see 18.2) .....	33
Figure 6 – Circuit diagram for breaking capacity and normal operation tests .....	35
Figure 7 – Apparatus for testing the cord anchorage .....	39
Figure 8 – Apparatus for the flexing test .....	42
Figure 9 – Example of apparatus for pulling test .....	45
Figure E.1 – Schematic drawing of a derating curve with an example of a derated current $I_d$ at the operating ambient temperature $t_d$ .....	66
Table 1 – Position of contacts .....	20
Table 2 – Maximum diameters of the cords .....	27
Table 3 – Minimum insulation resistance.....	28
Table 4 – Dielectric strength .....	29
Table 5 – Maximum and minimum withdrawal forces.....	30
Table 6 – Ratings for the tests of Clause 19.....	35
Table 7 – Ratings for the tests of Clause 20.....	36
Table 8 – Cords and conductors for the tests of Clause 21 .....	37
Table 9 – Type and nominal cross-sectional area of cords .....	38
Table 10 – Types of cord for the rewirable connector/plug connector test .....	40
Table 11 – Applicable tests.....	44
Table 12 – Values for the lateral pulls applied.....	46

This is a preview of "BS EN IEC 60320-1:20...". [Click here to purchase the full version from the ANSI store.](#)

Table 13 – Values for pull forces.....	47
Table 14 – Torque applied for the tightening and loosening test.....	50
Table 15 – Rated impulse withstand voltage for appliance couplers energized directly from the low voltage mains .....	52
Table 16 – Minimum clearances for basic insulation.....	53
Table 17 – Minimum creepage distances for basic and functional insulation .....	54
Table B.1 – Test overview.....	59
Table C.1 – Test schedule .....	61
Table D.1 – Comparison of conductor sizes .....	63

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**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.
- 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.

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;

This is a preview of "BS EN IEC 60320-1:20...". [Click here to purchase the full version from the ANSI store.](#)

- 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](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications](http://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](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.

This is a preview of "BS EN IEC 60320-1:20...". [Click here to purchase the full version from the ANSI store.](#)

## 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*