



CSA C22.2 No. 60320-1:19
(IEC 60320-1:2015, MOD)
National Standard of Canada



CSA C22.2 No. 60320-1:19
Appliance couplers for household and similar
general purposes — Part 1: General requirements
(IEC 60320-1:2015, MOD)



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Revision History

CSA C22.2 No. 60320-1:19, Appliance couplers for household and similar general purposes — Part 1: General requirements — originally published February 2019

Note: For information about the **Standards Update Service** or if you are missing any updates go to store.csagroup.org or techsupport@csagroup.org.

Update No. 1 — February 2020	Revision symbol (in margin)
Title page, copyright page, Contents, Preface, and Clauses 5.3DV and 5.4DV Note: Only the revised pages have been provided.	

National Standard of Canada

CSA C22.2 No. 60320-1:19

***Appliance couplers for household and
similar general purposes — Part 1:
General requirements
(IEC 60320-1:2015, MOD)***

Note: For brevity, this Standard will be referred to as “CSA C22.2 No. 60320-1” throughout.

FEBRUARY 15, 2019

(Title Page Reprinted: February 17, 2020)

This national standard is based on publication IEC 60320-1, Third Edition (2015).

*Prepared by
International Electrotechnical Commission*



Reviewed by



CSA Group
CSA C22.2 No. 60320-1:19
Second Edition
(IEC 60320-1:2015, MOD)



Underwriters Laboratories Inc.
UL 60320-1
Third Edition

ICS 29.120.30



ANSI/UL 60320-1-2020

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Preface

This is the harmonized CSA Group and UL standard for Appliance Couplers for Household and Similar General Purposes - Part 1: General Requirements. It is the second edition of CSA-C22.2 No. 60320-1, and the third edition of UL 60320-1. This edition of CSA-C22.2 No. 60320-1 supersedes the previous edition published on May 12, 2011. This edition of UL 60320-1 supersedes the previous edition published on May 12, 2011. This harmonized standard has been jointly revised on February 17, 2020. For this purpose, CSA Group and UL are issuing revision pages dated February 17, 2020.

This harmonized standard is based on IEC Publication 60320-1: third edition, Appliance Couplers for Household and Similar General Purposes – Part 1: General Requirements issued June 2015, and revised by corrigendum 1 issued January 2016. IEC 60320-1 is copyrighted by the IEC.

This harmonized standard was prepared by the CSA Group and Underwriters Laboratories, Inc. (UL). The efforts and support of the Technical Harmonization Subcommittee, [THSC 23BC-9, Appliance Couplers] on the Harmonization of Electrotechnical Standards of the Nations of the Americas (CANENA), are gratefully acknowledged.

This standard is considered suitable for use for conformity assessment within the stated scope of the standard.

This standard was reviewed by the CSA Integrated Committee on Wiring Devices, under the jurisdiction of the CSA Technical Committee on Wiring Products and the CSA Strategic Steering Committee on Requirements for Electrical Safety, and has been formally approved by the CSA Technical Committee. This Standard has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard by CSA Group.

Application of Standard

Where reference is made to a specific number of samples to be tested, the specified number is to be considered a minimum quantity.

Note: Although the intended primary application of this standard is stated in its scope, it is important to note that it remains the responsibility of the users of the standard to judge its suitability for their particular purpose.

Level of Harmonization

This standard adopts the IEC text with national differences.

This standard is published as an equivalent standard for CSA Group and UL.

An equivalent standard is a standard that is substantially the same in technical content, except as follows: Technical national differences are allowed for codes and governmental regulations as well as those recognized as being in accordance with NAFTA Article 905, for example, because of fundamental climatic, geographic, technological, or infrastructural factors, scientific justification, or the level of protection that the country considers appropriate. Presentation is word for word except for editorial changes.

All national differences from the IEC text are included in the CSA Group and UL versions of the standard. While the technical content is the same in each organization's version, the format and presentation may differ.

- a) a failure occurs to one of the three test samples when tested in accordance with Clauses [19](#), [20](#) or [21](#), in which case the tests are repeated from Clause [16](#) onwards; or
- b) a failure occurs to one of the three test samples when tested in accordance with Clauses [22](#) or [23](#) (except [22.3](#)), in which case the tests are repeated from Clause [18](#) onwards.

The applicant may submit, together with the first set of test samples, the additional set which may be wanted should one test sample fail. The testing station will then, without further request, test the additional test samples and will only reject if a further failure occurs. If the additional set of test samples is not submitted at the same time, a failure of one test sample will entail a rejection.

5.3DV D1 Delete Clause 5.3:

This clause is not applicable.

5.4 Routine tests

Routine tests are specified in Annex [B](#).

5.4DV D1 National Difference Deleted

6 Standard ratings

6.1 The maximum permitted rated voltage is 250 V.

6.2 The maximum permitted rated current is 16 A.

Preferred rated currents for appliance couplers are 0,2 A, 2,5 A, 6 A, 10 A and 16 A.

NOTE For details of standard type ratings refer to IEC 60320-3.

6DV D1 Modify Clause 6.2 by replacing it with the following:

The standard rated voltage and current shall be the North American rating in accordance with [Table 1A](#). Furthermore, references throughout this standard to configuration sheets shall be associated with the North American ratings in [Table 1ADV](#). This applies to all standard sheets and figures.

Compliance with this requirement shall be determined by visual inspection of the marking.

Standards Update Service

CSA C22.2 No. 60320-1:19 February 2019

Title: *Appliance couplers for household and similar general purposes — Part 1: General requirements*

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FEBRUARY 15, 2019

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Preface

This is the harmonized CSA Group and UL standard for Appliance Couplers for Household and Similar General Purposes - Part 1: General Requirements. It is the second edition of CSA-C22.2 No. 60320-1, and the third edition of UL 60320-1. This edition of CSA-C22.2 No. 60320-1 supersedes the previous edition published on May 12, 2011. This edition of UL 60320-1 supersedes the previous edition published on May 12, 2011.

This harmonized standard is based on IEC Publication 60320-1: third edition, Appliance Couplers for Household and Similar General Purposes – Part 1: General Requirements issued June 2015, as revised by corrigendum 1 issued January 2016. IEC 60320-1 is copyrighted by the IEC.

This harmonized standard was prepared by the CSA Group and Underwriters Laboratories Inc. (UL). The efforts and support of the Technical Harmonization Subcommittee, [THSC 23BC-9, Appliance Couplers] on the Harmonization of Electrotechnical Standards of the Nations of the Americas (CANENA), are gratefully acknowledged.

This standard is considered suitable for use for conformity assessment within the stated scope of the standard.

This standard was reviewed by the CSA Integrated Committee on Wiring Devices, under the jurisdiction of the CSA Technical Committee on Wiring Products and the CSA Strategic Steering Committee on Requirements for Electrical Safety, and has been formally approved by the CSA Technical Committee. This Standard has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard by CSA Group.

Application of Standard

Where reference is made to a specific number of samples to be tested, the specified number is to be considered a minimum quantity.

Note: Although the intended primary application of this standard is stated in its scope, it is important to note that it remains the responsibility of the users of the standard to judge its suitability for their particular purpose.

Level of Harmonization

This standard adopts the IEC text with national differences.

This standard is published as an equivalent standard for CSA Group and UL.

An equivalent standard is a standard that is substantially the same in technical content, except as follows: Technical national differences are allowed for codes and governmental regulations as well as those recognized as being in accordance with NAFTA Article 905, for example, because of fundamental climatic, geographical, technological, or infrastructural factors, scientific justification, or the level of protection that the country considers appropriate. Presentation is word for word except for editorial changes.

All national differences from the IEC text are included in the CSA Group and UL versions of the standard. While the technical content is the same in each organization's version, the format and presentation may differ.

Interpretations

The interpretation by the standards development organization of an identical or equivalent standard is based on the literal text to determine compliance with the standard in accordance with the procedural rules of the standards development organization. If more than one interpretation of the literal text has been identified, a revision is to be proposed as soon as possible to each of the standards development organizations to more accurately reflect the intent.

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For CSA Group, the text, figures, and tables of International Electrotechnical Commission Publication 60320-1 Appliance Couplers for Household and Similar General Purposes – Part 1: General Requirements, copyright 2015, are used in this standard with the consent of the International Electrotechnical Commission. The IEC Foreword is not a part of the requirements of this standard but is included for information purposes only.

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National Differences from the text of International Electrotechnical Commission (IEC) Publication 60320-1, Appliance Couplers for Household and Similar General Purposes – Part 1: General Requirements, copyright 2015, are indicated by notations (differences) and are presented in bold text.

There are five types of National Differences as noted below. The difference type is noted on the first line of the National Difference in the standard. The standard may not include all types of these National Differences.

DR – These are National Differences based on the ***national regulatory requirements***.

D1 – These are National Differences which are based on ***basic safety principles and requirements***, elimination of which would compromise safety for consumers and users of products.

D2 – These are National Differences from IEC requirements based on existing ***safety practices***. These requirements reflect national safety practices, where empirical substantiation (for the IEC or national requirement) is not available or the text has not been included in the IEC standard.

DC – These are National Differences based on the ***component standards*** and will not be deleted until a particular component standard is harmonized with the IEC component standard.

DE – These are National Differences based on ***editorial comments or corrections***.

Each national difference contains a description of what the national difference entails. Typically one of the following words is used to explain how the text of the national difference is to be applied to the base IEC text:

Addition / Add - An addition entails adding a complete new numbered clause, subclause, table, figure, or annex. Addition is not meant to include adding select words to the base IEC text.

Modification / Modify - A modification is an altering of the existing base IEC text such as the addition, replacement or deletion of certain words or the replacement of an entire clause, subclause, table, figure, or annex of the base IEC text.

Deletion / Delete - A deletion entails complete deletion of an entire numbered clause, subclause, table, figure, or annex without any replacement text.

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FOREWORD

INTERNATIONAL ELECTROTECHNICAL COMMISSION

APPLIANCE COUPLERS FOR HOUSEHOLD AND SIMILAR GENERAL PURPOSES – Part 1: General requirements

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

This third edition cancels and replaces the second edition published in 2001 and Amendment 1:2007. This edition constitutes a technical revision.

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

- a) Standard sheets moved from IEC 60320-1 to IEC 60320-3.
- b) Clarification of requirements for non-standardized appliance couplers.

The text of this standard is based on the following documents:

FDIS	Report on voting
23G/345/FDIS	23G/346/RVD

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

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.

Part 1 is to be used in conjunction with the following parts of the IEC 60320 series, if applicable.

IEC 60320-2-1, *Appliance couplers for household and similar general purposes – Part 2-1: Sewing machine couplers*

IEC 60320-2-3, *Appliance coupler for household and similar general purposes – Part 2-3: Appliance coupler with a degree of protection higher than IPX0*

IEC 60320-2-4, *Appliance couplers for household and similar general purposes – Part 2-4: Couplers dependent on appliance weight for engagement*

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

NOTE If these standards are referring to another edition of IEC 60320-1, that edition is applicable.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

101DV DE Modification: Add the following to the IEC Foreword:

The numbering system in the standard uses a space instead of a comma to indicate thousands and uses a comma instead of a period to indicate a decimal point. For example, 1 000 means 1,000 and 1,01 means 1.01.

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 part of IEC 60320 is also valid for appliance inlets/appliance outlets integrated or incorporated in appliances.

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

Appliance couplers complying with this part of IEC 60320 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.

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).

NOTE Requirements for d.c. are under consideration.

1DV.1 D1 *Modify Clause 1, third paragraph, by replacing with the following:*

The rated voltage does not exceed 250 V (a.c.) and the rated current does not exceed 20 A.

This standard does not apply directly to the following devices, but supplements the standards applying to such devices:

- devices produced integrally with flexible cord or cable, which are covered by CSA C22.2 No. 21 and UL 817.

1DV.2 D1 *Modify Clause 1 by replacing the text of the NOTE with the following:*

Requirements for d.c. are under consideration and do not apply.

1DV.3 DR *Modification to add the following after the first paragraph:*

This standard covers the above-noted products that are intended to be installed or used in accordance with:

- CSA C22.1, Canadian Electrical Code, Part 1, in Canada
- NFPA 70, National Electrical Code (NEC), in the United States.