



CSA C22.2 No. 60335-2-68:20
(IEC 60335-2-68:2012+A1:2016, MOD)
National Standard of Canada



CSA C22.2 No. 60335-2-68:20
Household and similar electrical appliances — Safety —
Part 2-68: Particular requirements for spray extraction
machines, for commercial use
(IEC 60335-2-68:2012+A1:2016, MOD)



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National Standard of Canada

CSA C22.2 No. 60335-2-68:20

***Household and similar electrical appliances —
Safety — Part 2-68: Particular requirements for
spray extraction machines, for commercial use
(IEC 60335-2-68:2012+A1:2016, MOD)***

Note: For brevity, this Standard will be referred to as “CSA C22.2 No. 60335-2-68” throughout.

MAY 8, 2020

This national standard is based on publication IEC 60335-2-68, Edition 4.1
(edition 4:2012 consolidated with Amendment 1:2016).

*Prepared by
International Electrotechnical Commission*



Reviewed by



CSA Group
CSA C22.2 No. 60335-2-68:20
First Edition
(IEC 60335-2-68:2012+A1:2016, MOD)



Underwriters Laboratories Inc.
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ANSI/UL 60335-2-68-2020

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PREFACE

This is the harmonized CSA Group and UL standard for Household and Similar Electrical Appliances – Safety – Part 2-68: Particular Requirements for Spray Extraction Machines, for Commercial Use. It is the first edition of CSA C22.2 No. 60335-2-68, and the first edition of UL 60335-2-68. This edition of CSA C22.2 No. 60335-2-68 replaces CAN/CSA-E60335-2-68:01 (adopted IEC 60335-2-68:1996), Safety of Household and Similar Electrical Appliances – Part 2: Particular Requirements for Spray Extraction Appliances, for Industrial and Commercial Use.

This harmonized standard is based on IEC Publication 60335-2-68: Fourth edition, Household and Similar Electrical Appliances – Safety – Part 2-68: Particular Requirements for Spray Extraction Machines, for Commercial Use, issued March 2012, as revised by Amendment 1, issued April 2016. IEC 60335-2-68 is copyrighted by the IEC.

This harmonized standard was prepared by CSA Group and Underwriters Laboratories Inc. (UL). The efforts and support of the Technical Harmonization Committee, 335K 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 Subcommittee on Electrical Motor and Battery-Operated Cleaning Appliances for Industrial and Commercial Use, under the jurisdiction of the CSA Technical Committee on Consumer and Commercial 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 of Canada 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.

CSA C22.2 No. 60335-2-68 is to be used in conjunction with the First edition of CAN/CSA-C22.2 No. 60335-1. The requirements for spray extraction machines for commercial use are contained in this Part 2 Standard and CAN/CSA-C22.2 No. 60335-1. Requirements of this Part 2 Standard, where stated, amend the requirements of CAN/CSA-C22.2 No. 60335-1. Where a particular subclause of CAN/CSA-C22.2 No. 60335-1 is not mentioned in CSA C22.2 No. 60335-2-68, the CAN/CSA-C22.2 No. 60335-1 subclause applies.

UL Standard 60335-2-68 is to be used in conjunction with the Fifth edition of UL 60335-1. The requirements for spray extraction machines for commercial use are contained in this Part 2 Standard and UL 60335-1. Requirements of this Part 2 Standard, where stated, amend the requirements of UL 60335-1. Where a particular subclause of UL 60335-1 is not mentioned in UL 60335-2-68, the UL 60335-1 subclause applies.

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This standard adopts the IEC text with national differences.

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NATIONAL DIFFERENCES

National Differences from the text of International Electrotechnical Commission (IEC) Publication 60335-2-68, *Household and similar electrical appliances – Safety – Part 2-68: Particular requirements for spray extraction machines, for commercial use*, copyright 2016, are indicated by notations (differences) and are presented in bold text. The national difference type is included in the body.

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.

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FOREWORD

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This Consolidated version of IEC 60335-2-68 bears the edition number 4.1. It consists of the fourth edition (2012-03) [documents 61J/490/FDIS and 61J/499/RVD] and its amendment 1 (2016-04) [documents 61J/629/FDIS and 61J/639/RVD]. The technical content is identical to the base edition and its amendment.

This Final version does not show where the technical content is modified by amendment 1. A separate Redline version with all changes highlighted is available in this publication.

International Standard IEC 60335-2-68 has been prepared by subcommittee 61J: Electrical motor-operated cleaning appliances for commercial use, of IEC technical committee 61: Safety of household and similar electrical appliances.

The principal changes in this edition as compared with the third edition of IEC 60335-2-68 are as follows (minor changes are not listed):

- the title has been changed for better distinction with regard to IEC 60335-2-72;
- the scope has been revised editorially to avoid misunderstandings;
- terms and definitions has been revised with regard to the requirements revised;
- the standard has been revised in general and updated regarding state-of-the-art, as far as necessary, in particular some changes has been made to Clauses 15, 22 and 25;
- the markings and instructions (Clause 7) have been revised basically;
- a new Annex AA 'Emission of acoustical noise' was added; and
- a new Annex BB 'Emission of vibration' was added.

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

This part 2 is to be used in conjunction with the latest edition of IEC 60335-1 and its amendments. It was established on the basis of the fifth edition (2010) of that standard.

NOTE 1 When "Part 1" is mentioned in this standard, it refers to IEC 60335-1.

This part 2 supplements or modifies the corresponding clauses in IEC 60335-1, so as to convert that publication into the IEC standard: Safety requirements for spray extraction machines for commercial use.

When a particular subclause of Part 1 is not mentioned in this part 2, that subclause applies as far as is reasonable. When this standard states "addition", "modification" or "replacement", the relevant text in Part 1 is to be adapted accordingly.

NOTE 2 The following numbering system is used:

- subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;
- unless notes are in a new subclause or involve notes in Part 1, they are numbered starting from 101, including those in a replaced clause or subclause;
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NOTE 3 The following print types are used:

- requirements: in roman type;
- *test specifications: in italic type;*
- notes: in small roman type.

Words in **bold** in the text are defined in Clause 3. When a definition concerns an adjective, the adjective and the associated noun are also in bold.

A list of all parts of the IEC 60335 series, under the general title: *Household and similar electrical appliances – Safety*, can be found on the IEC website.

NOTE 4 The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations may need a transitional period following publication of a new, amended or revised IEC publication in which to make products in accordance with the new requirements and to equip themselves for conducting new or revised tests.

It is the recommendation of the committee that the content of Amendment 1 be adopted for implementation nationally not earlier than 12 months or later than 36 months from the date of publication.

The committee has decided that the contents of the base publication and its amendment will remain unchanged until the stability date indicated on the IEC web site 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 Modify Note 1 and the paragraph following it in the Part 2 Foreword by replacing it with the following:

Note 1 When "Part 1" is mentioned in this Standard, it refers to CAN/CSA-C22.2 No. 60335-1 (1st Ed.) / UL 60335-1 (5th Ed.)

This Part 2 supplements or modifies the corresponding clauses in CAN/CSA-C22.2 No. 60335-1, Ed 1: 2011-10-31 / UL 60335-1, Ed. 5: 2011-10-31 (based on IEC 60335-1 Ed. 4.2:2006), so as to convert that publication into the CSA/UL standard: Particular requirements for spray extraction machines, for commercial use.

102DV DE Modify the last paragraph in Note 3 of the Part 2 Foreword by replacing it with the following:

Words in **SMALL ROMAN CAPS** in the text are defined in Clause 3. When a definition concerns an adjective, the adjective and the associated noun are also in **SMALL ROMAN CAPS**.

103DV DE Modification to add the following text at the end of the Part 2 Foreword:

The numbering system in this 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.

No Text on This Page

INTRODUCTION

It has been assumed in the drafting of this International Standard that the execution of its provisions is entrusted to appropriately qualified and experienced persons.

This standard recognizes the internationally accepted level of protection against hazards such as electrical, mechanical, thermal, fire and radiation of appliances when operated as in normal use taking into account the manufacturer's instructions. It also covers abnormal situations that can be expected in practice and takes into account the way in which electromagnetic phenomena can affect the safe operation of appliances.

This standard takes into account the requirements of IEC 60364 as far as possible so that there is compatibility with the wiring rules when the appliance is connected to the supply mains. However, national wiring rules may differ.

If an appliance within the scope of this standard also incorporates functions that are covered by another part 2 of IEC 60335, the relevant part 2 is applied to each function separately, as far as is reasonable. If applicable, the influence of one function on the other is taken into account.

When a part 2 standard does not include additional requirements to cover hazards dealt with in Part 1, Part 1 applies.

NOTE 1 This means that the technical committees responsible for the part 2 standards have determined that it is not necessary to specify particular requirements for the appliance in question over and above the general requirements.

This standard is a product family standard dealing with the safety of appliances and takes precedence over horizontal and generic standards covering the same subject.

NOTE 2 Horizontal and generic standards covering a hazard are not applicable since they have been taken into consideration when developing the general and particular requirements for the IEC 60335 series of standards. For example, in the case of temperature requirements for surfaces on many appliances, generic standards, such as ISO 13732-1 for hot surfaces, are not applicable in addition to Part 1 or part 2 standards.

An appliance that complies with the text of this standard will not necessarily be considered to comply with the safety principles of the standard if, when examined and tested, it is found to have other features that impair the level of safety covered by these requirements.

An appliance employing materials or having forms of construction differing from those detailed in the requirements of this standard may be examined and tested according to the intent of the requirements and, if found to be substantially equivalent, may be considered to comply with the standard.

No Text on This Page

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY – Part 2-68: Particular requirements for spray extraction machines, for commercial use

1 Scope

This clause of Part 1 is replaced by the following.

This International Standard deals with the safety of electrical portable, non-self-propelled motor-operated SPRAY EXTRACTION MACHINES with or without attachments and with or without electrical heating elements, intended for commercial indoor use.

NOTE 101 This standard applies to machines for COMMERCIAL USE. The following list, although not comprehensive, gives an indication of locations that are included in the scope:

- public use areas such as hotels, schools, hospitals;
- industrial locations, for example factories and manufacturing shops;
- retail outlets, for example shops and supermarkets;
- business premises, for example offices and banks;
- rental services for those machines;
- all uses other than normal housekeeping purposes.

They are not equipped with a traction drive. The following power systems are covered:

- mains powered motors up to a RATED VOLTAGE of 250 V for single-phase appliances and 480 V for other appliances,
- battery powered motors.

1DV.1 DE Modification to replace the preceding paragraph and dashed list in the Part 2 with the following:

They are not equipped with traction drive. They include the following energy sources or power systems, or combinations of them:

- mains up to a rated voltage of 250 V for single-phase appliances and 480 V for other appliances,
- batteries supplying 150 V or less.

NOTE 102DV Machines for the same intended function but equipped with a traction drive are covered by CAN/CSA-C22.2 No. 60335-2-72/UL 60335-2-72.

It is also possible for covered products to be powered by the following. Additional requirements related to these power sources are not included in this Standard.