



CSA C22.2 No. 60335-2-69:22
(IEC 60335-2-69:2016, MOD)
National Standard of Canada



CSA C22.2 No. 60335-2-69:22
Household and similar electrical appliances — Safety —
Part 2-69: Particular requirements for wet and dry vacuum
cleaners, including power brush, for commercial use
(IEC 60335-2-69:2016, MOD)



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CSA C22.2 No. 60335-2-69:22
March 2022

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CSA C22.2 No. 60335-2-69:22

***Household and similar electrical appliances — Safety —
Part 2-69: Particular requirements for wet and dry
vacuum cleaners, including power brush,
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(IEC 60335-2-69:2016, MOD)***

Note: For brevity, this Standard will be referred to as “CSA C22.2 No. 60335-2-69” throughout.

MARCH 25, 2022

This national standard is based on publication IEC 60335-2-69, Edition 5.0 (2016).

*Prepared by
International Electrotechnical Commission*



Reviewed by



CSA Group
CSA C22.2 No. C22.2 No. 60335-2-69:22
Third Edition
(IEC 60335-2-69:2016, MOD)



**Underwriters Laboratories
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UL 60335-2-69
First Edition

ICS 27 080



ANSI/UL 60335-2-69-2022

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PREFACE

This is the harmonized CSA Group and UL standard for Household and similar electrical appliances – Safety – Part 2-69: Particular requirements for wet and dry vacuum cleaners, including power brush, for commercial use. It is the third edition of CSA C22.2 No. 60335-2-69, and the first edition of UL 60335-2-69. This edition of CSA C22.2 No. 60335-2-69 supersedes the previous edition published in 2001 as CAN/CSA-E60335-2-69 (adopted IEC 60335-2-69:1997, including Amendment 1:2000).

This harmonized standard is based on IEC Publication 60335-2-69, Fifth edition, Household and similar electrical appliances – Safety – Part 2-69: Particular requirements for wet and dry vacuum cleaners, including power brush, for commercial use, issued June 2016. IEC 60335-2-69 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 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. 60335-2-69 is to be used in conjunction with the second edition of CAN/CSA-C22.2 No. 60335-1. The requirements for wet and dry vacuum cleaners, including power brush, 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. 60335-2-69, the CAN/CSA-C22.2 No. 60335-1 subclause applies.

UL 60335-2-69 is to be used in conjunction with the sixth edition of UL 60335-1. The requirements for wet and dry vacuum cleaners, including power brush, 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 60335-2-69, the UL 60335-1 subclause applies.

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.

Reasons for differences from IEC

Differences from the IEC are being added in order to address regulatory and safety situations present in the US and Canada.

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.

IEC Copyright

For CSA Group, the text, figures, and tables of International Electrotechnical Commission Publication 60335-2-69 Household and similar electrical appliances – Safety – Part 2-69: Particular requirements for wet and dry vacuum cleaners, including power brush, for commercial use, copyright 2016, are used in this standard with the consent of the International Electrotechnical Commission. The IEC Foreword and Introduction are not a part of the requirements of this standard but are included for information purposes only.

These materials are subject to copyright claims of IEC and UL. No part of this publication may be reproduced in any form, including an electronic retrieval system, without the prior written permission of UL. All requests pertaining to the Household and similar electrical appliances – Safety – Part 2-69: Particular requirements for wet and dry vacuum cleaners, including power brush, for commercial use, UL 60335-2-69 Standard should be submitted to UL.

NATIONAL DIFFERENCES

National Differences from the text of International Electrotechnical Commission (IEC) Publication 60335-2-69, Household and similar electrical appliances – Safety – Part 2-69: Particular requirements for wet and dry vacuum cleaners, including power brush, for commercial use, copyright 2016, 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

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY – Part 2-69: Particular requirements for wet and dry vacuum cleaners, including power brush, for commercial use

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.

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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.

International Standard IEC 60335-2-69 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.

This fifth edition cancels and replaces the fourth edition published in 2012. It constitutes a technical revision.

The principal changes in this edition as compared with the third edition of IEC 60335-2-69 are as follows (minor changes are not listed):

- 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 have been made to Clauses 15, 22 and 25;
- the standard has been aligned with the newest amendment of IEC 60335-1:2010+A1:2013;
- Annex AA was revised and restructured;
- Annex CC was revised;
- general additions for vacuum cleaners with blowing functions have been introduced;
- a new Annex GG ‘Particular requirements for mobile wet vacuum cleaners for rescue and firefighting services (MWF)’ was added.

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

FDIS	Report on voting
61J/637/FDIS	61J/646/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.

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 wet and dry vacuum cleaners, including power brush, 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:

- sub clauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;
- unless notes are in a new sub clause or involve notes in Part 1, they are numbered starting from 101, including those in a replaced clause or sub clause;
- additional annexes are lettered AA, BB, etc.

NOTE 3 The following print types are used:

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

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 this publication be adopted for implementation nationally not earlier than 12 months or later than 36 months from the date of publication.

The following differences exist in the countries indicated below.

- 22.207: A mobile power generator in accordance with DIN 14685 is required (Germany)
- 25.6: A safety plug in accordance with DIN 49443 is required. (Germany)

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.

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.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

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 (2nd Ed.) / UL 60335-1 (6th Ed.)

This part 2 supplements or modifies the corresponding clauses in CAN/CSA-C22.2 No. 60335-1 Ed 2: 2016-10-31 / UL 60335-1 Ed. 6: 2016-10-31 (based on IEC 60335-1 Ed. 5.1:2013) (Ed. 5:2010 including corrigendum 1:2010, corrigendum 2:2011, and amendment 1:2013), so as to convert that publication into the CSA/UL standard: *Safety requirements for wet and dry vacuum cleaners, including power brush, for COMMERCIAL USE.*

102DV DE Modify the fifth paragraph following Note 4 in 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 *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.

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.

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HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY – Part 2-69: Particular requirements for wet and dry vacuum cleaners, including power brush, for commercial use

1 Scope

This clause of Part 1 is replaced by the following.

This part of IEC 60335 deals with the safety of electrical motor-operated vacuum cleaners, including BACK-PACK VACUUM CLEANERS, and DUST EXTRACTORS, for wet suction, dry suction, or wet and dry suction, intended for commercial indoor or outdoor use with or without attachments. They may be provided with a blowing or inflating function.

It also deals with the safety of CENTRALLY-SITED VACUUM CLEANERS, excluding the installation of the system.

1DV.1 DR Modification to add the following:

Clause 1DV.1 of the Part 1 applies.

NOTE 101 Attention is drawn to the fact that additional requirements on the safe installation of CENTRALLY-SITED VACUUM CLEANERS are not addressed by this standard but need to be taken into account.

NOTE 102 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;
- 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.2 DE Modification to replace the paragraph and dashed list following note 102 with following:

They are not equipped with a traction drive. Machines equipped with traction drive are under the scope of CSA C22.2 No. 60335-2-72 / UL 60335-2-72. 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,**