



SLOVENSKI STANDARD

oSIST prEN IEC 60335-2-68:2026

01-november-2026

Gospodinjski in podobni električni aparati - Varnost - 2-68. del: Posebne zahteve za pršilnike za komercialno uporabo

Household and similar electrical appliances - Safety - Part 2-68: Particular requirements for spray extraction machines, for commercial use

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke - Teil 2-68: Besondere Anforderungen für Sprühextraktionsmaschinen für den gewerblichen Gebrauch

Appareils électrodomestiques et analogues - Sécurité - Partie 2-68: Exigences particulières pour les machines de nettoyage par pulvérisation et aspiration, à usage commercial

Ta slovenski standard je istoveten z: prEN IEC 60335-2-68:2026

ICS:

97.080

Aparati za čiščenje

Cleaning appliances

oSIST prEN IEC 60335-2-68:2026

en

Sample Document

get full document from standards.iteh.ai

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
prEN IEC 60335-2-68

September 2026

ICS 97.020

Will supersede EN 60335-2-68:2012

English Version

**Household and similar electrical appliances - Safety - Part 2-68:
Particular requirements for spray extraction machines, for
commercial use
(IEC 60335-2-68:2021)**

Appareils électrodomestiques et analogues - Sécurité -
Partie 2-68: Exigences particulières pour les machines de
nettoyage par pulvérisation et aspiration, à usage
commercial
(IEC 60335-2-68:2021)

Sicherheit elektrischer Geräte für den Hausgebrauch und
ähnliche Zwecke - Teil 2-68: Besondere Anforderungen für
Sprühextraktionsmaschinen für den gewerblichen Gebrauch
(IEC 60335-2-68:2021)

This draft European Standard is submitted to CENELEC members for enquiry.
Deadline for CENELEC: 2026-11-27.

The text of this draft consists of the text of IEC 60335-2-68:2021.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CENELEC 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, Türkiye and the United Kingdom.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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

© 2026 CENELEC All rights of exploitation in any form and by any means reserved worldwide for CENELEC Members.

Project: 82793

Ref. No. prEN IEC 60335-2-68:2026 E

1 European foreword

2 This document (prEN IEC 60335-2-68:2026) consists of the text of IEC 60335-2-68:2021 prepared by
3 IEC/TC 61 "Safety of household and similar electrical appliances".

4 This document is currently submitted to the Enquiry.

5 The following dates are proposed:

- latest date by which the existence of this document has to be announced at national level (doa) dav + 6 months
- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) dav + 12 months
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) dav + 36 months (to be confirmed or modified when voting)

6 This document will supersede EN IEC 60335-2-68:2012 and all of its amendments and corrigenda (if any).

7 This document is read in conjunction with prEN IEC 60335-2-68:2026/prAA:2026.

8

9

Sample Document

get full document from standards.iteh.ai



IEC 60335-2-68

Edition 5.0 2021-05

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Household and similar electrical appliances – Safety –
Part 2-68: Particular requirements for spray extraction machines, for
commercial use**

**Appareils électrodomestiques et analogues – Sécurité –
Partie 2-68: Exigences particulières pour les machines de nettoyage par
pulvérisation et aspiration, à usage commercial**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 97.020

ISBN 978-2-8322-9838-1

**Warning! Make sure that you obtained this publication from an authorized distributor.
Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.**

CONTENTS

FOREWORD.....	4
INTRODUCTION.....	7
1 Scope.....	8
2 Normative references	9
3 Terms and definitions	9
4 General requirement.....	11
5 General conditions for the tests	11
6 Classification.....	12
7 Marking and instructions.....	12
8 Protection against access to live parts.....	15
9 Starting of motor-operated appliances	16
10 Power input and current.....	16
11 Heating.....	16
12 Charging of metal-ion batteries.....	16
13 Leakage current and dielectric strength at operating temperature	16
14 Transient overvoltages	16
15 Moisture resistance	16
16 Leakage current and electric strength.....	18
17 Overload protection of transformers and associated circuits	19
18 Endurance.....	19
19 Abnormal operation	19
20 Stability and mechanical hazards.....	20
21 Mechanical strength	21
22 Construction	24
23 Internal wiring.....	25
24 Components	25
25 Supply connection and external flexible cords	25
26 Terminals for external conductors.....	27
27 Provision for earthing	27
28 Screws and connections	27
29 Clearances, creepage distances and solid insulation	27
30 Resistance to heat and fire.....	27
31 Resistance to rusting.....	27
32 Radiation, toxicity and similar hazards.....	27
Annexes	32
Annex B (normative) Battery-operated appliances, separable batteries and detachable batteries for battery-operated appliances	33
Annex AA (informative) Emission of acoustical noise	34
Annex BB (informative) Emission of vibration.....	37
Bibliography.....	38
Index of defined terms	39

Figure 101 – Impact test apparatus.....	28
Figure 102 – Apparatus for testing the abrasion resistance of current-carrying hoses	29
Figure 103 – Apparatus for testing the resistance to flexing of current-carrying hoses	30
Figure 104 – Configuration of the hose for the freezing treatment	30
Figure 105 – Flexing positions for the hose after removal from the freezing cabinet.....	31
Figure AA.1 – Machine with cleaning head connected by hose and connecting tube	36
Table 12 – Pull force and torque	27

Sample Document

get full document from standards.iteh.ai

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES –
SAFETY –****Part 2-68: Particular requirements for spray
extraction machines, for commercial use****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 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. It is an International Standard.

This fifth edition cancels and replaces the fourth edition published in 2012 and its Amendment 1: 2016. It constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition (minor changes are not listed):

- editorial and technical alignment with IEC 60335-1:2020.

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

Draft	Report on voting
61J/736/CDV	61J/743A/RVC

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.

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.

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 sixth edition (2020) 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: Particular 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;
- 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.

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 this publication 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 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.

Sample Document

get full document from standards.iteh.ai

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.

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 part of IEC 60335 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.

These machines are not equipped with a traction drive.

NOTE 102 Machines for the same intended function but equipped with a traction drive are covered by IEC 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,
- **battery-operated machines**.

This standard applies to machines in which the pressure of the employed **cleaning agent** does not exceed 2,5 MPa, and in which the product of the pressure (in MPa) and the flow of **cleaning agent** (in litres per minute) does not exceed 100, and in which the temperature of the **cleaning agent** at the spray nozzle outlet does not exceed 85 °C.

This standard does not apply to

- vacuum cleaners and water-suction cleaning appliances for household use (IEC 60335-2-2);
- floor treatment machines for **commercial use** (IEC 60335-2-67, IEC 60335-2-72);
- wet and dry vacuum cleaners, including power brush, for **commercial use** (IEC 60335-2-69);

NOTE 103 IEC 60335-2-67 and IEC 60335-2-69 cover only machines without traction drive.

- hand-held and transportable motor-operated electric **tools** (IEC 60745 series, IEC 61029 series, IEC 62841 series).
- machines designed for use in corrosive or explosive environments (dust, vapour or gas);
- machines designed for picking up hazardous dusts (as defined in IEC 60335-2-69), inflammable substances, or glowing particles;