

**Majapidamis- ja muud taolised elektriseadmed. Ohutus.  
Osa 2-69: Erinõuded kommertskasutamiseks ettenähtud  
märg- ja kuivtolmuimejatele, sealhulgas elektriharjadele**

Household and similar electrical appliances - Safety - Part  
2-69: Particular requirements for wet and dry vacuum  
cleaners, including power brush, for commercial use

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 60335-2-69:2009 sisaldab Euroopa standardi EN 60335-2-69:2009 ingliskeelset teksti.

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English version

**Household and similar electrical appliances -  
Safety -  
Part 2-69: Particular requirements for wet and dry vacuum cleaners,  
including power brush, for commercial use  
(IEC 60335-2-69:2002 + A1:2004 + A2:2007, modified)**

Appareils électrodomestiques  
et analogues -  
Sécurité -  
Partie 2-69: Règles particulières  
pour les aspirateurs fonctionnant  
en présence d'eau ou à sec,  
y compris les brosses motorisées,  
à usage commercial  
(CEI 60335-2-69:2002 + A1:2004 +  
A2:2007, modifiés)

Sicherheit elektrischer Geräte  
für den Hausgebrauch  
und ähnliche Zwecke -  
Teil 2-69: Besondere Anforderungen  
für Staub- und Wasserauger  
einschließlich kraftbetriebener Bürsten  
für den gewerblichen Gebrauch  
(IEC 60335-2-69:2002 + A1:2004 +  
A2:2007, modifiziert)

This European Standard was approved by CENELEC on 2009-09-01. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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**CENELEC**

European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

**Central Secretariat: Avenue Marnix 17, B - 1000 Brussels**

## Foreword

In the light of the necessity to adapt EN 60335-2-69 with regard to the requirements of the Machinery Directive 2006/42/EC, a draft was prepared by CENELEC TC61/WG6/J in co-operation with the MD Consultant, taking also into account the results of CENELEC TC61/WG6 work on EN 60335-1.

The approach to amend EN 60335-2-69:2003 aiming toward listing the standard under the MD was discussed and approved during the Kista meeting of CENELEC TC 61 in June 2008 (see CLC/TC 61/SEC/1649), when it was decided to submit a draft for an amendment to the Unique Acceptance Procedure.

The draft was circulated as FprAC in December 2008 and was approved by CENELEC as a new edition of EN 60335-2-69 on 2009-09-01.

This European Standard supersedes EN 60335-2-69:2003 + A1:2004 + A2:2008.

In this European Standard the common modifications to the International Standard IEC 60335-2-69:2002 + A1:2004 + A2:2007 are indicated by a vertical line in the left margin of the text.

The following dates are applicable:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2009-12-29
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2009-12-29

This Part 2 has to be used in conjunction with EN 60335-1, Household and similar electrical appliances – Safety – Part 1: General requirements. It was established on the basis of the 2002 edition of that standard. Amendments and revisions of Part 1 have also to be taken into account and the dates when such changes become applicable will be stated in the relevant amendment or revision of Part 1.

This Part 2 supplements or modifies the corresponding clauses of EN 60335-1, so as to convert it into the European 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. When this standard states "addition", "modification" or "replacement", the relevant text of Part 1 is to be adapted accordingly.

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and covers essential requirements of EC Directive 2006/42/EC. See Annex ZZ.

NOTE 1 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.;
- subclauses, notes and annexes that are additional to those in the IEC standard are prefixed with the letter Z.

NOTE 2 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.

Special national conditions causing a deviation from this European Standard are listed in Annex ZA and are in addition to those in EN 60335-1.

There are no national deviations from this European Standard, other than those listed in Annex ZB to EN 60335-1.

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## Introduction

It has been assumed in the drafting of this European 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 machines 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 machines.

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 machine is connected to the supply mains. However, national wiring rules may differ.

If a machine within the scope of this standard also incorporates functions that are covered by another Part 2 of EN 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.

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

A machine 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.

A machine 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 2-69: 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 European Standard deals with the safety of electrical motor-operated vacuum cleaners, including **back-pack vacuum cleaners**, for wet suction, dry suction, or wet and dry suction, intended for commercial indoor or outdoor use with or without attachments.

NOTE Z101 **Commercial use** of these vacuum cleaners is for example their use in hotels, schools, hospitals, factories, shops and offices for other than normal housekeeping purposes.

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.

This standard also applies to machines handling **hazardous dust**, such as asbestos.

NOTE Z102 Additional requirements for machines handling **hazardous dust** are given in Annex AA. Attention is drawn to the fact that in many countries additional requirements on hazardous substances might apply.

NOTE Z103 Radioactive substances are not covered by definition of **hazardous dust** for the purpose of this standard.

NOTE Z104 Attention is drawn to the fact that in many countries additional requirements on the safe use of the equipment covered may be specified by the national health authorities, the national authorities responsible for the protection of labour, the national water supply authorities and similar authorities.

This standard does not apply to

- machines designed to be part of a production process;
- machines designed for use in corrosive environments;
- machines designed for picking up liquids with a flash point below 55 °C;
- machines designed for use in explosive environments (dust, vapour or gas), except those designed for use in **zone 22**;

NOTE Z105 Additional requirements for vacuum cleaners designed for collecting combustible dust in zone 22 are given in Annex CC.

- vacuum cleaners and water-suction cleaning appliances for household use as covered by IEC 60335-2-2;
- spray extraction machines as covered by IEC 60335-2-68;
- floor treatment machines for commercial use;

NOTE Z106 IEC 60335-2-67 covers floor cleaning and floor treatment machines for industrial and commercial use. IEC 60335-2-72 covers automatic floor treatment machines for industrial and commercial use.

- hand-held mains-operated electrical garden blowers, vacuums and blower vacuums as covered by IEC 60335-2-100;
- centrally sited stationary vacuum cleaning systems;
- **hand-held appliances**;

- hand-held and transportable motor-operated electric tools.

NOTE Z107 The IEC 60745 series covers hand-held motor-operated electric tools; the IEC 61029 series covers transportable motor-operated electric tools.

## 2 Normative references

This clause of Part 1 is applicable except as follows.

*Addition:*

IEC 60312, *Vacuum cleaners for household use – Methods of measuring the performance*

IEC 60335-2-2, *Household and similar electrical appliances – Safety – Part 2-2: Particular requirements for vacuum cleaners and water suction cleaning appliances*

IEC 60335-2-68, *Household and similar electrical appliances – Safety – Part 2-68: Particular requirements for spray extraction appliances, for industrial and commercial use*

IEC 60335-2-100, *Household and similar electrical appliances – Safety – Part 2-100: Particular requirements for hand-held mains-operated garden blowers, vacuums and blower vacuums*

IEC 60704-2-1, *Household and similar electrical appliances – Test code for the determination of airborne acoustical noise – Part 2-1: Particular requirements for vacuum cleaners*

IEC 61241-1-1, *Electrical apparatus for use in the presence of combustible dust – Part 1-1: Electrical apparatus protected by enclosures and surface temperature limitation – Specification for apparatus*

IEC 61241-10:2004, *Electrical apparatus for use in the presence of combustible dust – Part 10: Classification of areas where combustible dusts are or may be present*

ISO 2602, *Statistical interpretation of test results – Estimation of the mean – Confidence interval*

ISO 6344-2, *Coated abrasives – Grain size analysis – Part 2: Determination of grain size distribution of macrogrits P12 to P220*

ISO 7731, *Ergonomics - Danger signals for public and work areas - Auditory danger signals*

ISO 11428, *Ergonomics – Visual danger signals – General requirements, design and testing*

## 3 Definitions

This clause of Part 1 is applicable except as follows.

### 3.1.9 Replacement:

#### normal operation

conditions under which the machine is operated in normal use, obtained at the following power input  $P_m$  of the vacuum motor:

$$P_m = 0,5 (P_f + P_i)$$

where

$P_f$  is the input, in watts, when the machine has been operated for 3 min, fitted with the nozzle and hose giving the highest input;