

Gospodinjski in podobni električni aparati - Varnost - 2-67. del: Posebne zahteve za stroje za nego in čiščenje tal za industrijsko in komercialno uporabo (IEC 60335-2-67:2002; spremenjen)

Household and similar electrical appliances - Safety - Part 2-67: Particular requirements for floor treatment and floor cleaning machines, for industrial and commercial use

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EUROPEAN STANDARD

EN 60335-2-67

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 2003

ICS 23.080; 91.140.65

Supersedes EN 60335-2-67:1998 + A1:2000

English version

**Household and similar electrical appliances –
Safety
Part 2-67: Particular requirements for floor treatment and
floor cleaning machines, for industrial and commercial use
(IEC 60335-2-67:2002, modified)**

Appareils électrodomestiques
et analogues –
Sécurité
Partie 2-67: Règles particulières
pour les machines de traitement
et de nettoyage des sols à usage
industriel et commercial
(CEI 60335-2-67:2002, modifiée)

Sicherheit elektrischer Geräte für den
Hausgebrauch und ähnliche Zwecke
Teil 2-67: Besondere Anforderungen für
Bodenbehandlungs- und
Bodenreinigungsmaschinen für
industrielle und gewerbliche Zwecke
(IEC 60335-2-67:2002, modifiziert)

SIST EN 60335-2-67:2003

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This European Standard was approved by CENELEC on 2003-03-01. 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 61J/127/FDIS, future third edition of IEC 60335-2-67, prepared by SC 61J of the IEC Technical Committee 61, was submitted to the IEC-CENELEC parallel vote.

As a result of the Kista meeting of CENELEC TC 61 in May 2002, a draft amendment prAA containing the relevant existing common modifications was submitted to the formal vote.

The texts of the FDIS and the prAA were approved by CENELEC as a new edition of EN 60335-2-67 on 2003-03-01.

This European Standard replaces EN 60335-2-67:1998 + A1:2000.

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) 2004-03-01
- date on which national standards conflicting with the EN have to be withdrawn (dow) 2006-03-01

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 electric floor treatment and floor cleaning machines, for industrial and 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 of Part 1 is to be adapted accordingly.

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.

p NOTE In this document, p is used in the margin to indicate instructions for preparing the printed version.

Introduction

p Add:

An investigation by CENELEC TC 61 has shown that all risks from products within the scope of this standard are fully covered by the Low Voltage Directive, 73/23/EEC. For products having mechanical moving parts, a risk assessment in accordance with the Machinery Directive, 98/37/EC, has shown that the risks are mainly of electrical origin and consequently this directive is not applicable. However, the relevant essential safety requirements of the Machinery Directive are covered by this standard together with the principal objectives of the Low Voltage Directive.

Endorsement notice

The text of the International Standard IEC 60335-2-67:2002 was approved by CENELEC as a European Standard with agreed common modifications as given below.

COMMON MODIFICATIONS

2 Normative references

p Add:

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

7 Marking and instructions

[SIST EN 60335-2-67:2003](https://standards.iteh.ai/catalog/standards/sist/a5e7b518-85ff-4054-b95e-22151d381312/sist-en-60335-2-67-2003)

p 7.12 Replace the text by:

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The front cover of the instructions shall include the substance of the following:

CAUTION Read the instructions before using the appliance.

This wording may be replaced by symbols 0434 and 1641 of ISO 7000. If these symbols are used, their meaning is to be explained in the instructions.

The instructions shall include the substance of the following warnings, as applicable:

- CAUTION This appliance is not suitable for picking up hazardous dust;
- CAUTION This appliance is for dry use only and is not to be used or stored outdoors in wet conditions;
- WARNING Only use the brushes provided with the appliance or those specified in the instructions. The use of other brushes may impair safety;

The instructions shall give details regarding the following, as applicable:

- the precautions to be taken when using the appliance under specific conditions such as handling flammable liquids or dust, and dust hazardous to health;
- a statement that the appliance is to be disconnected from its power source during cleaning or maintenance and when replacing parts or converting the appliance to another function,
 - for mains operated appliances, the plug is to be removed from the socket-outlet,
 - for battery operated appliances, the key of the supply switch is to be removed or an equivalent disconnection is to be made;

- a statement that doors and covers are to be positioned as indicated in the instructions before using the appliance;
- the precautions to be taken when changing brushes or other attachments which require the appliance to be energized;
- the intended use of brushes which are specified for the appliance;
- a warning that large diameter brushes provided specifically for dry buffing are not intended for general polishing.

The instructions shall state

- the A-weighted sound pressure level L_{PA} in dB(A) emitted by the appliance. If the A-weighted sound pressure level exceeds 85 dB(A), it shall also state the sound power level L_{WA} in dB(A) and that appropriate ear protection has to be used.

NOTE Z101 The sound level is measured in accordance with IEC 60704-1.

- the weighted r.m.s. acceleration value to which the operator's arms are subjected in m/s^2 .

NOTE Z102 The weighted r.m.s. acceleration value is measured in accordance with ISO 5349, the appliance being supplied at rated voltage and operated under normal operation.

The instructions shall include the substance of the following:

This appliance is suitable for commercial use, for example in hotels, schools, hospitals, factories, shops, offices and rental businesses.

The instructions for mains operated appliances shall include the substance of the following:

- do not allow the rotating brushes to come into contact with the supply cord;
- regularly examine the supply cord for damage, such as cracking or ageing. If damage is found, replace the cord before further use;
- only replace the supply cord with the type specified in the instructions;
- only use the socket outlet on the appliance for purposes specified in the instructions.

20 Stability and mechanical hazards

p Add:

20.Z101 Shaft ends and similar rotating parts shall be protected if they protrude by more than a quarter of their diameter, unless the end is rounded and less than 50 mm in length.

Injury due to unintentional closing or slamming of parts, such as movable side walls and covers, shall be prevented.

Wheels or rollers for the transport of appliances heavier than 20 kg shall be located or protected so that injury to the feet of the operator is prevented.

Compliance is checked by inspection, by measurement and by manual test.

p Add:

Annex ZA (informative)

Special national conditions

Addition:

Clause Special national condition

7.12 **Finland**

If a polyvinyl chloride sheathed cord is fitted, the instructions shall state that the appliance is not to be used outdoors at low temperatures.

Annex ZC (normative)

Normative references to international publications with their corresponding European publications

<u>Publication</u>	<u>Year</u>	<u>Title</u> (standards.iteh.ai)	<u>EN/HD</u>	<u>Year</u>
IEC 60312	– ¹⁾	Vacuum cleaners for household use – Methods of measuring the performance	EN 60312	1998 ²⁾
IEC 60335-2-69	– ¹⁾	Household and similar electrical appliances – Safety – Part 2-69: Particular requirements for wet and dry vacuum cleaners, including power brush, for industrial and commercial use	EN 60335-2-69	2003 ²⁾
IEC 60704-1	– ¹⁾	Household and similar electrical appliances – Test code for the determination of airborne acoustical noise – Part 1: General requirements	EN 60704-1	1997 ²⁾

¹⁾ undated reference

²⁾ valid edition at date of issue

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INTERNATIONAL STANDARD

IEC 60335-2-67

Third edition
2002-07

Household and similar electrical appliances – Safety –

Part 2-67: Particular requirements for floor treatment and floor cleaning machines, for industrial and commercial use

*Appareils électrodomestiques et analogues –
Sécurité* –
<https://standards.iteh.ai/catalog/standards/sist/a5e7b518-85ff-4054-b95e-22151d381312/sist-en-60335-2-67-2003>

*Partie 2-67:
Règles particulières pour les machines de traitement et de
nettoyage des sols, à usage industriel et commercial*

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES –
SAFETY –**Part 2-67: Particular requirements for floor treatment
and floor cleaning machines, for industrial and commercial use**

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The 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 the 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 National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
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- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

This part of International Standard IEC 60335 has been prepared by sub-committee 61J: Electrical motor-operated cleaning appliances for industrial use, of IEC technical committee 61: Safety of household and similar electrical appliances.

This third edition cancels and replaces the second edition published in 1997 and its amendment 1 (2000). It constitutes a technical revision.

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

FDIS	Report on voting
61J/127/FDIS	61J/132/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 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 fourth edition (2001) 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 electric floor treatment and floor cleaning machines, for industrial and commercial use.