

Nederlandse norm

# **NEN-EN-IEC 60335-2-69**

(en)

Household and similar electrical appliances - Safety - Part 2-69: Particular requirements for wet and dry vacuum cleaners, including power brush, for commercial use (IEC 60335-2-69:2012,MOD)

Vervangt NEN-EN-IEC 60335-2-69:2009

ICS 97.080  
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Als Nederlandse norm is aanvaard:

- EN 60335-2-69:2012 IDT
- IEC 60335-2-69:2012,MOD

Voorbeeld  
 Preview

Nederlands Elektrotechnisch Comité  
 Normcommissie 361061 "Veiligheid van huishoudelijke toestellen (NEC 61)"



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## Nederlands voorwoord

Voor de in deze norm vermelde normatieve verwijzingen bestaan in Nederland de volgende equivalenten:

<u>vermelde norm</u>	<u>Nederlandse norm</u>	<u>titel</u>
IEC 60312-1	-	-
ISO 2602	-	-
ISO 6344-2	-	-
ISO 7731	NEN-EN-ISO 7731	Ergonomie - Gevaarsignalen voor openbare- en werkkruimten - Akoestische gevaarsignalen
ISO 11428	-	-

Voorbeeld  
Preview

Voorbeeld  
Preview

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 60335-2-69:2012, modified)**

Appareils électrodomestiques et  
 analogues -  
 Sécurité -  
 Partie 2-69: Règles particulières pour les  
 aspirateurs fonctionnant en présence  
 d'eau ou à sec à usage commercial  
 (CEI 60335-2-69:2012, modifiée)

Sicherheit elektrischer Geräte für den  
 Hausgebrauch und ähnliche Zwecke -  
 Teil 2-69: Besondere Anforderungen für  
 Staub- und Wasserauger für den  
 gewerblichen Gebrauch  
 (IEC 60335-2-69:2012, modifiziert)

This European Standard was approved by CENELEC on 2012-03-28. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre 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

**Management Centre: Avenue Marnix 17, B - 1000 Brussels**

## Foreword

The text of document 61J/481/FDIS, future edition 4 of IEC 60335-2-69, prepared by IEC/SC 61J "Electrical motor-operated cleaning appliances for commercial use", of IEC/TC 61, "Safety of household and similar electrical appliances" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60335-2-69:2012.

A draft amendment, which covers common modifications to IEC 60335-2-69, was prepared by CLC/TC 61, "Safety of household and similar electrical appliances" and approved by CENELEC.

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2013-03-28
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2015-03-28

This document supersedes EN 60335-2-69:2009.

EN 60335-2-69:2012 includes the following significant technical changes with respect to EN 60335-2-69:2009:

- the scope has been revised editorially to avoid misunderstandings;
- terms and definitions have 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;
- Annex AA was revised and restructured;
- Annex CC was made informative;
- a new Annex EE 'Emission of acoustical noise' was added; and
- a new Annex FF 'Emission of vibration' was added.

This part 2 is to be used in conjunction with EN 60335-1:2012.

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

This part 2 supplements or modifies the corresponding clauses in EN 60335-1, so as to convert that publication 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 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.

Clauses, subclauses, notes, tables, figures and annexes which are additional to those in IEC 60335-2-69:2012 are prefixed "Z".

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive(s) see informative Annex ZZ, which is an integral part of this document.

## Endorsement notice

The text of the International Standard IEC 60335-2-69:2012 was approved by CENELEC as a European Standard with agreed common modifications.

### COMMON MODIFICATIONS

## 1 Scope

Add the following paragraph before the last paragraph:

"This European Standard deals with the reasonably foreseeable hazards presented by machines that are encountered by all persons.

However, in general, it does not take into account:

- **children** playing with the machine;
- the use of the machine by **children**;
- the use of the machine by **vulnerable people** or **very vulnerable people**."

## 3 Terms and definitions

### 3.6.3

#### accessible part

Modification:

Delete "and probe 18".

## 7 Marking and instructions

7.10 Delete the following paragraphs:

"Devices used to start/stop operational functions of the appliance, if any, shall be distinguished from other manual devices by means of shape, or size, or surface texture, or position, etc.

An indication that the device has been operated shall be given by:

- A tactile feedback or
- An audible and visual feedback.

NOTE Z1 The sound of the motor or sound of an actuator switching ON/OFF is regarded as audible feedback. The stopping of the typical function (e.g. stopping of the vibration on the body of the appliance or of a part of it) is regarded as tactile means.

NOTE Z2 Devices used to start/stop operational functions mean devices that are operated by the user to start/stop the intended function of the appliance.

A selector switch with an off-position clearly identifiable is allowed.

An ON/OFF switch, if any, is considered a suitable device to stop operational functions. A plug is not considered a suitable device to stop operational functions, as it can be difficult to be reached by vulnerable persons."

**7.12** Add the following after the 4<sup>th</sup> paragraph:

"Children should be supervised to ensure that they do not play with the appliance."

Delete the paragraph beginning with "This appliance can be used...".

**7.12.Z1** Delete this paragraph.

### **7.12.102 Information on noise**

Replace the Note by the following requirement:

"The instructions shall provide information on airborne noise emission as indicated in EE.2.7."

### **7.12.103 Information on vibration**

Replace the Note by the following requirement:

"The instructions shall provide information on vibration emission as indicated in FF.2."

## **8 Protection against access to live parts**

**8.1.1** Replace the 3<sup>rd</sup> paragraph by the following:

"Test probe B of EN 61032 is applied with a force not exceeding 1 N, the appliance being in every possible position except that appliances normally used on the floor and having a mass exceeding 40 kg are not tilted. Through openings, the test probe is applied to any depth that the probe will permit and is rotated or angled before, during and after insertion to any position. If the opening does not allow the entry of the probe, the force on the probe in the straight position is increased to 20 N. If the probe then enters the opening, the test is repeated with the probe in the angled position."

### **8.2 Modification**

In the third sentence, replace "test probes of EN 61032" by "test probe B of EN 61032".

In the fourth sentence, replace "test probe B and probe 18 of EN 61032 are" by "test probe B of EN 61032 is".

## **20 Stability and mechanical hazards**

**20.2** Replace the 1<sup>st</sup> paragraph of compliance by:

"Compliance is checked by inspection, by the test of 21.1 and by applying a force not exceeding 5 N by means of a test probe that is similar to test probe B of EN 61032 but having a circular stop face with a diameter of 50 mm, instead of the non-circular face."

## **25 Supply connection and external flexible cords**

**25.7** Addition:

Add the following text before the last paragraph:

"

- Halogen-free thermoplastic compound sheathed.



Their properties shall be at least those of halogen-free thermoplastic compound sheathed cords (code designation H05Z1Z1H2-F or H05Z1Z1-F);

- Cross-linked halogen-free compound sheathed.

Their properties shall be at least those of cross-linked halogen-free thermoplastic compound sheathed cords (code designation H07ZZ-F).

NOTE Z1 The harmonized code designations corresponding to the IEC cord types are given in Annex ZD."

### **Modifications to Annexes EE and FF**

*In the titles of Annex EE and Annex FF, replace "(informative)" with "(normative)" so as to make these two annexes normative.*

### **Modifications to Annexes Z**

*The annexes of Part 1 are applicable except as follows:*

Preview

Add the following special national condition to Annex ZA of EN 60335-1:2012:

**Annex ZA**  
(normative)

**Special national conditions**

**Special national condition:** National characteristic or practice that cannot be changed even over a long period, e.g. climatic conditions, electrical earthing conditions.

NOTE If it affects harmonization, it forms part of the European Standard / Harmonization Document.

For the countries in which the relevant special national conditions apply these provisions are normative, for other countries they are informative.

<u>Clause</u>	<u>Special national condition</u>
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<b>7.12</b>	<b>Finland</b>
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	If a polyvinyl chloride sheathed cord is fitted, the instructions shall state that the appliance is not to be used outdoors at low temperature.
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Add the following references to Annex ZC of EN 60335-1:2012:

**Annex ZC**  
(normative)

**Normative references to international publications  
with their corresponding European publications**

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

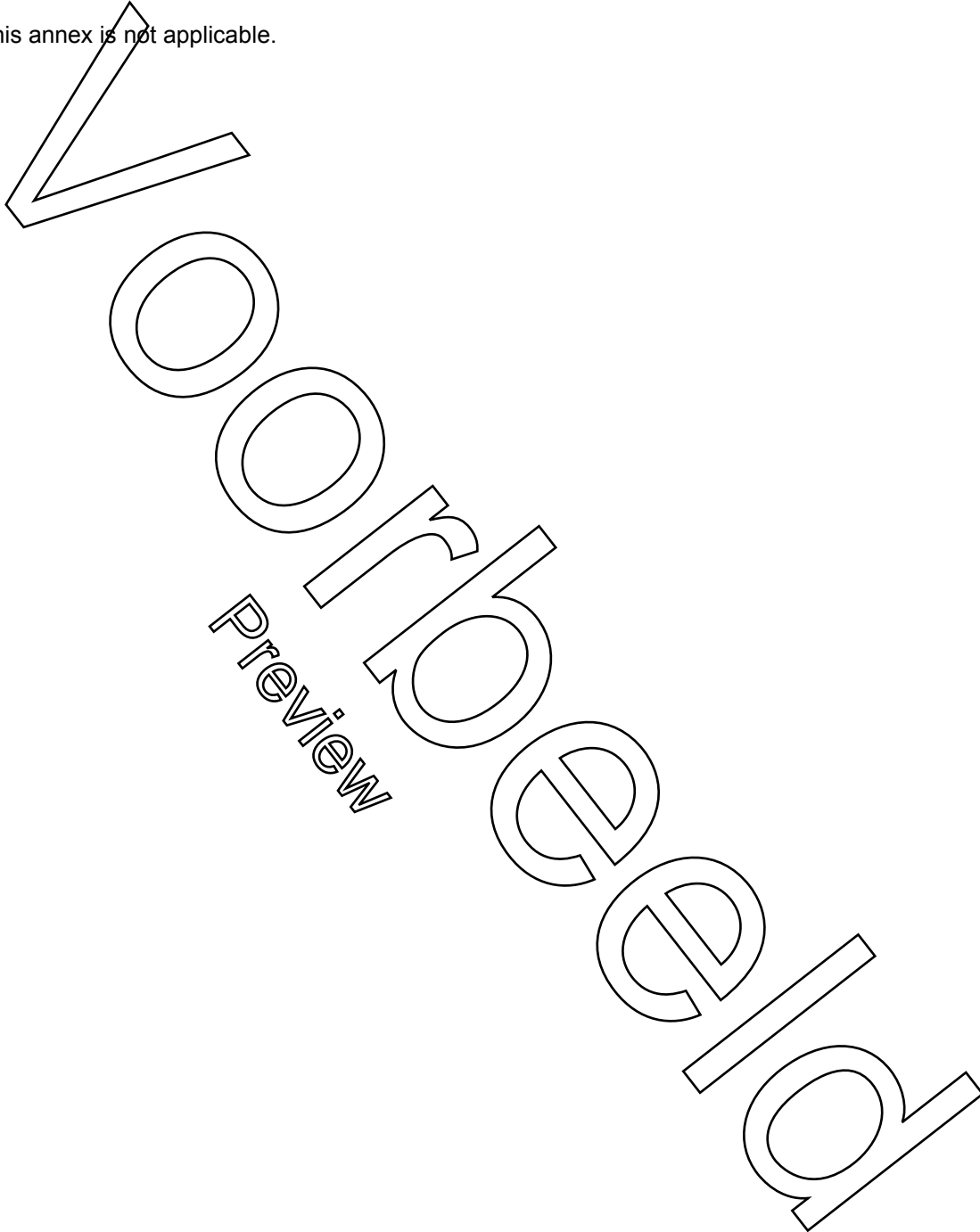
<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60312-1	-	Vacuum cleaners for household use - Part 1: Dry vacuum cleaners - Methods for measuring the performance	FprEN 60312-1 <sup>1)</sup>	-
ISO 2602	-	Statistical interpretation of test results - Estimation of the mean - Confidence 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	EN ISO 7731	-
ISO 11428	-	Ergonomics - Visual danger signals - General requirements, design and testing	-	-

<sup>1)</sup> At draft stage.

**Annex ZE**  
(informative)

**Specific additional requirements for appliances and machines intended  
for commercial use**

This annex is not applicable.



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