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NSAI Standards

Irish Standard
I.S. EN 60312:2008

Vacuum cleaners for household use - Methods of measuring the performance (IEC 60312:2007 (EQV))

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I.S. EN 60312:2008

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60312

February 2008

ICS 97.080

Supersedes EN 60312:1998 + A1:2000 + A2:2004

English version

Vacuum cleaners for household use - Methods of measuring the performance
(IEC 60312:2007)

Aspirateurs de poussière à usage domestique - Méthodes de mesure de l'aptitude à la fonction
(CEI 60312:2007)

Staubsauger für den Hausgebrauch - Prüfverfahren zur Bestimmung der Gebrauchseigenschaften
(IEC 60312:2007)

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

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

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Foreword

The text of document 59F/163/FDIS, future edition 4 of IEC 60312, prepared by SC 59F, Floor treatment appliances, of IEC TC 59, Performance of household electrical appliances, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60312 on 2008-02-01.

This European Standard supersedes EN 60312:1998 + A1:2000 + A2:2004.

The following subclauses have been updated:

– 2.9 on performance with partly filled receptacle;

– 2.10 on determination of dust emission of the vacuum cleaners;

– 4.14 on energy consumption.

The following dates were fixed:

– latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2008-11-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2011-02-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60312:2007 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60335-1 + A1 + A2	NOTE Harmonized as EN 60335-1:2002 (modified) + A11:2004 + A1:2004 + A12:2006 + A2:2006
IEC 60335-2-2 + A1 + A2	NOTE Harmonized as EN 60335-2-2:2003 (modified) + A1:2004 + A2:2006 (modified)

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Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application of this document. 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.

Publication	Year	Title	EN/HD	Year
IEC 60704-1	1982	Test code for the determination of airborne acoustical noise emitted by household and similar electrical appliances - Part 1: General requirements	EN 60704-1[1)]	1994
IEC 60704-2-1	1984	Test code for the determination of airborne acoustical noise emitted by household and similar electrical appliances - Part 2-1: Particular requirements for vacuum cleaners	EN 60704-2-1[2)]	1994
ISO 554	1976	Standard atmospheres for conditioning and/or testing - Specifications	-	-
ISO 679	1989	Methods of testing cements - Determination of strength	-	-
ISO 2439	1997	Flexible cellular polymeric materials - Determination of hardness (indentation technique)	EN ISO 2439	2000
ISO 3386-1	1986	Polymeric materials, cellular flexible - Determination of stress-strain characteristics in compression - Part 1: Low-density materials	EN ISO 3386-1	1997
ISO 5167	Series	Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full	EN ISO 5167	Series
CIE 15.2	1986	Colorimetry	-	-

[1)] EN 60704-1 is superseded by EN 60704-1:1997, which is based on IEC 60704-1:1997.

[2)] EN 60704-2-1 is superseded by EN 60704-2-1:2001, which is based on IEC 60704-2-1:2000.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

VACUUM CLEANERS FOR HOUSEHOLD USE – METHODS OF MEASURING THE PERFORMANCE

FOREWORD

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International Standard IEC 60312 has been prepared by subcommittee 59F: Floor treatment appliances, of IEC technical committee 59: Performance of household electrical appliances.

This fourth edition cancels and replaces the third edition published in 1998, amendment 1 (2000) and amendment 2 (2004). The following subclauses have been updated:

– 2.9 on performance with partly filled receptacle;
– 2.10 on determination of dust emission of the vacuum cleaners;
– 4.14 on energy consumption.

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

FDIS	Report on voting
59F/163/FDIS	59F/164/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.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site 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.

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VACUUM CLEANERS FOR HOUSEHOLD USE – METHODS OF MEASURING THE PERFORMANCE

Section 1: General

1.1 Scope

This International Standard is applicable to vacuum cleaners for household use in or under conditions similar to those in households.

The purpose of this standard is to specify essential performance characteristics of vacuum cleaners being of interest to the users and to describe methods for measuring these characteristics.

NOTE Due to the influence of environmental conditions, variations in time, origin of test materials and proficiency of the operator, most of the described test methods will give more reliable results when applied for comparative testing of a number of appliances at the same time, in the same laboratory and by the same operator.

For safety requirements, reference is made to IEC 60335-1 and IEC 60335-2-2.

1.2 Normative references

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

IEC 60704-1:1982, *Test code for the determination of airborne acoustical noise emitted by household and similar electrical appliances – Part 1: General requirements*

IEC 60704-2-1:1984, *Test code for the determination of airborne acoustical noise emitted by household and similar electrical appliances – Part 2-1: Particular requirements for vacuum cleaners*

ISO 554:1976, *Standard atmospheres for conditioning and/or testing – Specifications*

ISO 679:1989, *Methods of testing cements – Determination of strength*

ISO 2439:1997, *Flexible cellular polymeric materials – Determination of hardness (indentation technique)*

ISO 3386-1:1986, *Polymeric materials, cellular flexible – Determination of stress-strain characteristics in compression – Part 1: Low-density materials*

ISO 5167:2003 (all parts), *Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full*

CIE 15.2:1986, *Colorimetry*

1.3 Definitions

For the purposes of this International Standard, the following definitions apply:

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